Environmental Standard Operating Procedure			
Originating Office: **MCAS Miramar Environmental Management Department**	Revision: Original	Prepared By: Environmental Management Department.	Approved By: LtCol T. C. Fries
File Name: Engine Operation and Maintenance (Non-Emergency Generator)	Effective Date: 12 DEC 2010	Document Owner: EMD	

Title: Engine Operation and Maintenance (Non-Emergency Generator

1.0 PURPOSE

This Environmental Standard Operating Procedure (ESOP) identifies responsibilities and requirements for engine operation and maintenance for non-emergency generators at Marine Corps Air Station (MCAS) Miramar.

2.0 APPLICATION

This guidance applies to those individuals who use or have the potential to operate or maintain any internal combustion engines when not connected to an emergency generator at Marine Corps Air Station (MCAS) Miramar.

3.0 PROCEDURE

3.1 Discussion:
In the course of supporting the training mission, personnel must operate or maintain various internal combustion engines aboard the installation. These operations have the potential to impact air, water and soil quality, as well as natural and cultural resources and wildlife management areas. Engine operation and maintenance has the potential to result in a hazardous substance spill that could overwhelm or bypass Oil/Water Separator (OWS), impact surface waters, and impact soil and/or groundwater. MCAS Miramar is home to a large variety of sensitive and endangered plants and, animals as well as natural and cultural resources. Strict adherence to signs and guidance is required when operating engines. Engine operations and maintenance require the use and storage of petroleum, oils, lubricant (POL), antifreeze and other hazardous materials that must be properly handled in order to lessen impacts to human health and the environment.

3.2 Operational Controls:
The following procedures apply:

1. Ensure that records of all required training and certifications are current and available for inspection.

2. Use the appropriate personal protective equipment (PPE).

3. Conduct and document regular inspections of all engines and check for signs of leaks.

4. Conduct and document regular maintenance on all engines according to manufacturer's specifications.

5. Maintain fully-stocked spill kits nearby engine maintenance areas in designated locations (which may be within equipment) and known to all unit personnel as applicable.

6. Store and transfer all petroleum, oils, lubricant (POL), antifreeze and other hazardous materials using secondary containment (e.g. containment liners)

7. Properly contain, clean up, and report any spills or leaks as soon as they occur to your immediate supervisor and/or follow procedures in the MCAS Miramar Spill contingency Plan. Ensure that a spill report is submitted to MCAS Miramar Environmental Management Department (EMD) as soon as possible, but no later than 24 hours of the spill. The report should contain details about the spill date, time, product spilled, quantity, location, cleanup actions taken, and name of the person reporting the spill.

8. Maintain fire extinguishers in known locations within equipment as applicable.

9. Properly dispose of all used hazardous material containers.

10. Place approved drip pans underneath engines when necessary to prevent drips or potential leaks as engines sit idle (not in use).

11. Do not idle engines for extended periods (5 minutes) without shutting down and restarting.

12. Do not operate engines at peak throttle for extended periods when not actively utilizing system for which it was designed.

13. Place used rags and waste from spill clean-up in approved containers.

14. If there are any specific situations or other concerns not addressed by this procedure, contact MCAS Miramar EMD.

3.3 Documentation and Record Keeping:
The following records must be maintained:

1. MSDS for all fuels, oil, antifreeze, and any other material associated with this operation.
2. Training records and certifications for personnel.
3. Spill reports.
4. Inspection records.

3.4 Training:
All personnel must be trained in this Standard Operating Procedure, as well as the following, as applicable:

1. Hazard Communication (HazCom) training.
2. On the job (OJT) training.

3.5 Emergency Preparedness and Response Procedures:
Refer to Marine Corps Order (MCO) P5090.2A, Subject: Oil/Hazardous Substance Spills (OHSS) and Spill Prevention, Control & Countermeasures (SPCC) Plan

3.6 Inspection and Corrective Action:

The Environmental Coordinator (EC) shall perform or designate personnel to perform inspections. The EC shall ensure deficiencies noted during the inspections are corrected immediately. Actions taken to correct each deficiency shall be recorded on the inspection sheet.

4.0 REFERENCES

- 29 CFR 1910 (Code of Federal Regulations)
- 40 CFR 262
- 40 CFR 112 (Oil Pollution Prevention)
- MCO P5090.2A (Marine Corps Order)
- MCAS Miramar Spill Contingency Plan
- MCAS Miramar Spill Prevention, Control and Countermeasures Plan

Engine Operation and Maintenance – Non-Generator – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Are training and inspection records maintained and available for inspection? *(MCO P5090.2A)*			
2. Is the proper PPE worn when appropriate? *(29 CFR 1910)*			
3. Are fully-stocked spill kits maintained within vehicles as applicable? *(29 CFR 1910, MCO P5090.2A)*			
4. Are fire extinguishers maintained in known locations within equipment or nearby as applicable? *(29 CFR 1910, MCO P5090.2A)*			
5. Are spills and leaks properly cleaned up, contained and reported as soon as they are discovered? *(40 CFR 262, MCO P5090.2A)*			
6. Is hazardous waste placed in approved, properly labeled containers? *(40 CFR 262, MCO P5090.2A)*			

ADDITIONAL COMMENTS:

_____
_____
_____
_____
_____

CORRECTIVE ACTION TAKEN:

_____
_____
_____
_____
_____

Hazardous Waste Coordinator

Name: _____
Signature: _____
Date: _____