

Environmental Standard Operating Procedure			
Originating Office:  <b>Environmental Management Department</b>	Revision:  Original	Prepared By:  Engineering Division	Approved By:  William Moog
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## Title: Diesel Power Generation

### 1.0 PURPOSE

The purpose of this Standard Operating Procedure (SOP) is to provide environmental guidelines for the proper procedures of dealing with diesel power generation.

### 2.0 APPLICATION

This guidance applies to those individuals who are working with diesel power generation (generators) aboard Marine Corps Air Station (MCAS) Miramar.

### 3.0 REFERENCES

- 40 CFR 70 (Code of Federal Regulations)
- CCR Title 17 (California Code of Regulations)
- Fire Safety Regulations (FSR)
- MCAS Miramar Station Orders 10345.2 (Fuel Division Operation Manual)
- MCAS Miramar Air Quality Management Plan (AQMP)
- MCAS Miramar Waste Management Plan (HWMP)
- MCAS Miramar Storm Water Discharge Management Plan (SWDMP)
- MCAS Miramar Spill Prevention Control and Counter Measure (SPCC)
- MCAS Miramar Spill Contingency Plan (SCP)

### 4.0 PROCEDURE

#### 4.1 Discussion:

Diesel powered generators provide emergency or standby electricity to tenant aboard MCAS Miramar in event of a power outage. State and federal regulations regulate the discharge of substances into the air. Diesel powered generators discharge air pollutants which have the potential to impact air quality. Therefore, diesel powered generators aboard MCAS Miramar, at all times, be operated and maintained in accordance with applicable federal, state, and local regulations and Permits to Operate (PTO).

#### 4.2 Operational Controls:

The Public Works Division (PWD) shall provide the Environmental Management Department (EMD) office with timely notification of the proposed installation of any new or modified generators that exceed 50 BHP. Prior to installation or modification of any generator(s), PWD shall ensure that, the contractor installing the generator(s) has:

1. Obtained an Authority to Construction or applied for a Permit to Operate (PTO).
2. Applied particulate matter (PM10) air toxic control measures when required.
3. Emergency generators have other specifications and requirements that are addressed in the Emergency Generator ESOP.

Generally, all diesel / bio-diesel fueled generators 50 bhp (brake horsepower) and above are required to meet new, strict PM emissions standards (0.15 gram/bhp-hr) for portable compression ignition (CI) engines and (0.01 g/bhp-hr) for stationary engines. Control devices are required if engines do not meet this standard. Stationary generator particulate control devices may be necessary regardless of the engines installed.

The following procedures apply:

1. MSDSs (Material Safety Data Sheets) for all hazardous material being utilized within the work site must be available and current.
2. The manufacturer, model/serial numbers, and rated horsepower of the generator's internal combustion engine must match those specified on the PTOs.
3. The PTO shall be posted on-site within 25 feet of the permitted engine.
4. The generator emissions opacity shall be less than 20% (i.e., 20% equals' clear visibility through the engine exhaust).
5. An operation log shall be maintained and kept on-site or at the engine test equipment. It must include:
  - a. Date of each duration of hours
  - b. Reason for use
  - c. Calendar year operations recorded in terms of fuel consumption or elapsed engine operating time
6. As of January 2005, no person shall purchase, sell, or lease for use in California a new diesel-fueled internal combustion engine rated at 50 or more bhp.
7. A non-resetting four-digit (9999) hour timer will be installed and maintained on each unit to indicate elapsed engine operating time.
8. Hazardous material liquids will be placed in the proper container or aboveground storage tank (AST) provided and properly labeled with the contents of the hazardous material.
9. Ensure PPE (personal protective equipment) and spill kits are readily available.

10. Spills must be properly cleaned up when identified. Keep fire extinguisher near any potentially flammable material.
11. Ensure safety signage is posted such as "Hazardous Noise".
12. Follow all PTO conditions that pertain to diesel generators aboard the installation.
13. PWD and/or contractors shall provide EMD with timely notification of the proposed installation of any new or modified generators. PWD and/or contractors shall ensure that the contractor installing the generator(s) has obtained an Authority To Construct prior to installation of a new generator(s), and/or modification of an existing generator(s).
14. Turnover folder information must be kept for this Standard Operating Procedure.
15. If there are any specific situations or other concerns not addressed by this procedure, contact the EMD office.

#### **4.3 Documentation and Record Keeping:**

The following records must be maintained:

1. MSDSs for Hazardous Material being utilized.
2. Permit to Operate (PTO).
3. Log of total hours of operation, per day.
4. Log of all repairs, replacements and maintenance.
5. Log of each diesel fuel delivery and sulfur content of delivered fuel.
6. Monthly fuel usage.
7. Weekly Inspection Sheets.
8. Inspection and training records.

#### **4.4 Training:**

All affected personnel must be trained in this Standard Operating Procedure and the following:

1. Hazard Communication training.
2. General Environmental Awareness training.

**4.5 Emergency Response Procedures:**

**CALL 9-1-1**

**4.6 Inspection and Corrective Action:**

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

Diesel Power Generation – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector’s Name:	Signature:

Inspection Items	Yes	No	Comments
1. Is the Permit to Operate (PTO) posted on site? (AQMP)			
2. Is the manufacturer, model/serial numbers, and rated horsepower of the generator’s ICE the same as that specified on the PTO? (AQMP)			
3. Is the fuel system free of any leaks? (SPCC, HWMP, AQMP, FSR, Station Orders 10345.2 )			
16. Is the generator emissions opacity less than 20% ((i.e., 20% equals’ clear visibility through the engine exhaust)? (AQMP)			
4. Is an operation log maintained and kept on-site or at the engine test equipment? It must include:  <div style="margin-left: 20px;">                     a. Date of each use and duration of run time hours                      b. Reason for use                      c. Calendar year operations in terms of fuel consumption and run time hours                 </div> (AQMP, 17 CCR 93115 (e)(4)(L))			
5. Does the log list all repairs, replacement, and maintenance? (AQMP)			

6. Does the log specify the amount of the fuel and sulfur content used/delivered monthly? <i>(AQMP, 17 CCR 3\1\7.5\93115(e)(4)(I)(1),</i>			
7. Is the log kept current and maintained on-site for a minimum of 3 years? <i>(SPCC, HWMP, AQMP)</i>			
8. Is the equipment operated per the ATCM? <i>(AQMP)</i>			
9. Is a spill kit kept near any potential spill hazardous areas? <i>((SPCC, HWMP,FSR, 29 CFR 1910)</i>			
10. Is a fire extinguisher kept near potentially flammable materials? <i>(29 CFR 1910)</i>			
11. Is a non-resetting, four-digit (9999) hour timer installed and maintained on this unit to indicate elapsed engine operating time? <i>(17 CCR 93115(e)(g)(1)) AQMP</i>			
2. Are training and inspection records maintained and available for inspection? <i>(MCO P5090.2A 9104.1(k)(5)- inspection only)</i>			

**ADDITIONAL COMMENTS:**

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**CORRECTIVE ACTION TAKEN:**

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**Environmental Compliance Coordinator**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_