

Environmental Standard Operating Procedure			
Originating Office: Environmental Management Department	Revision: Original	Prepared By: Waste Management Division	Approved By: William Moog
File Name: BRE-ESOP	Effective Date: 17 April 2007	Document Owner: Kevin McGuinness	

Title: Battery Recharging (Non Vehicle, Comm., Electric)

1.0 PURPOSE

The purpose of this Standard Operating Procedure is to provide environmental guidelines for the use of non-vehicle, communications and electric batteries.

2.0 APPLICATION

This guidance applies to those individuals working with non-vehicle, communications and electric batteries aboard MCAS Miramar.

3.0 REFERENCES

- 40 CFR 273
- 22 CCR 66273
- 29 CFR 1910
- Battery Disposition and Disposal PCN# 31255030600
- MCAS Miramar Hazardous Waste Management Plan

4.0 PROCEDURE

4.1 Discussion:

Batteries may be hazardous to human health and the environment if not properly handled.

4.2 Operational Controls:

Most of all non-vehicle, communications and electric batteries aboard MCAS MIRAMAR are considered maintenance free. A small percentage of the batteries are considered rechargeable. Regardless of type, all non-vehicle, communications and electric batteries aboard MCAS MIRAMAR must be recycled. Used batteries are turned into the Waste Management Division (WMD) after being properly packaged for recycling.

The following procedures apply to unit level operators:

1. During charging operations, monitor voltage and heat generation from the charging battery; shut-down all charging when voltage exceeds required level or the battery is excessively hot.
2. Lithium batteries shall be stored in a dry secure well ventilated area.
3. Lithium batteries must be double wrapped in plastic and taped then placed in a metal drum and properly labeled in accordance with the Waste Protocol Sheet for Universal Waste Batteries.
4. Unit personnel shall not discharge lithium batteries.
5. Batteries shall be segregated by chemistry (i.e., Li, NiCad, etc.)
6. NiCad batteries should be store in a secure, dry area away from flammables.
7. Nickel Cadmium batteries must be placed in a poly drum and properly labeled in accordance with the Waste Protocol Sheet for Universal Waste Batteries.
8. Alkaline batteries such as AA or D Cell and 1.5 or 9 Volt batteries must be placed in a poly drum and properly labeled in accordance with the Waste Protocol Sheet for Universal Waste Batteries.
9. Mercury batteries must be placed in a poly drum and properly labeled in accordance with the Waste Protocol Sheet for Universal Waste Batteries.
10. All batteries must be separated by chemistry. Only commingle like batteries in the same container.
11. Damaged batteries must be individually sealed in plastic bags and segregated from non-damaged batteries.
12. Other than AAA, AA, C, or D alkaline batteries, all batteries with protruding terminals must be insulated to prevent short circuiting.
13. All batteries must be turned over to the WMD for proper recycling. The transferring of the batteries from the unit to the WMD must be documented on the unit's waste transfer logbook.
14. Turn in batteries within 270 days of the Accumulation Start Date (ASD) or when the container is full, whichever occurs first.
15. Turnover folder information must be kept for this Standard Operating Procedure.
16. If there are any specific situations or other concerns not addressed by this procedure, contact MCAS Miramar Environmental Department.

4.3 Documentation and Record Keeping:

The following records must be maintained:

1. MSDS for batteries.

2. Training and inspection records.
3. Waste Transfer Logbook.

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.
3. Hazardous Material Business Plan training topics 1-4.

4.5 Emergency Preparedness and Response Procedures:

Refer to the Hazardous Material Business Plan, Emergency Response Plan and Marine Corps Air Station Miramar Oil And Hazardous Substance Spill Contingency Plan Spill Response Procedures.

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.

Non-vehicle Battery – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Are MSDSs available for all batteries being used? <i>(29 CFR 1910.1200, Appendix E, Section 3)</i>			
2. Are lithium batteries properly stored in a dry secure area? <i>(40 CFR 273.13(a), 40 CFR 273.33(a))</i>			
3. Are used lithium batteries stored in the SAA in a properly labeled poly container? <i>(40 CFR 273.13(a)(1), 40 CFR 273.14(a), 40 CFR</i>			

273.33(a)(1), 40 CFR 273.34(a)			
4. Is discharging of lithium batteries by personnel prohibited? (PCN# 31255030600)			
5. Are nickel cadmium batteries properly stored in a dry secure area, away from flammables? (40 CFR 273.13(a), 40 CFR 273.33(a))			
6. Are used nickel cadmium batteries stored in a properly labeled poly container? (40 CFR 273.13(a)(1), 40 CFR 273.14(a), 40 CFR 273.33(a)(1), 40 CFR 273.34(a))			
7. Are used alkaline batteries stored in a properly labeled poly container? (40 CFR 273.13(a)(1), 40 CFR 273.14(a), 40 CFR 273.33(a)(1), 40 CFR 273.34(a))			
8. Are batteries segregated by chemistry? (PCN# 31255030600)			
9. Are training records maintained and available for inspection? (HWMP)			

ADDITIONAL COMMENTS:

CORRECTIVE ACTION TAKEN:

Environmental Compliance Coordinator

Name: _____

Signature: _____

Date: _____