Environmental Standard Operating Procedure

Originating Office: **Natural Resources and Environmental Affairs Office**	Revision: 22 September 2014 Supersedes: 01 October 2013	Prepared By: NREA Subject Matter Expert (SME)	Approved By: Branch Head, P2 ELLITT.PLESSIE.JR.1144697720 Digitally signed by ELLITT.PLESSIE.JR.1144697720 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USMC, cn=ELLITT.PLESSIE.JR.1144697720 Date: 2014.12.04 10:30:19 -08'00'
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Title: Battery Replacement (Replacement/Recharging, Vehicle)

1.0 PURPOSE

The purpose of this Environmental Standard Operating Procedure is to provide environmental guidelines for the management of lead acid batteries.

2.0 APPLICATION

This guidance applies to those individuals working with lead acid batteries aboard Marine Corps Air Ground Combat Center (MCAGCC), Marine Air Ground Task Force Training Command (MAGTFTC) Twentynine Palms.

3.0 REFERENCES

- Code of Federal Regulations – Title 40, (40 CFR)
- Hazardous Waste Operations Manual, MCAGCC
  Combat Center Order 5090.5C, Integrated Contingency and Operations Plans (ICOP) for MCAGCC.

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 vehicle and equipment batteries aboard MCAGCC are considered maintenance free lead acid batteries. A small percentage of the vehicle and equipment batteries require the mixing of sulfuric acid and water, prior to being placed on a battery charger. Regardless of type all lead acid batteries aboard MCAGCC must be recycled. Used batteries are turned into the Hazardous Waste Accumulation Management Section (HWMS) after being properly packaged for recycling.

The following procedures apply to unit level operators:

1. Add water and sulfuric acid to batteries according to manufacturers' instructions.

2. 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.

3. Label non leaking lead acid batteries with a “Non-Regulated Waste” label with the words “Used Battery” and the date taken out of service, with indelible ink on a piece of tape.

4. All terminals and caps shall be taped to prevent short-circuiting.

5. For batteries that are missing caps or are damaged or leaking, then batteries must be managed as a hazardous waste and placed in a plastic container/drum, sealed, and labeled with the wording, “Hazardous waste, Cracked Lead Acid Battery” and the date the battery was placed in the container.

6. Used batteries, cracked batteries, and empty sulfuric acid containers shall be placed at the unit Satellite Accumulation Area (SAA) for pick-up by HWMS personnel.

7. If the unit does not have a designated SAA, contact the HWMS at 830-7244 for special pick-up requirements.

8. Ensure spill kits with two one-pound boxes of baking soda are available for emergencies.

9. Turnover folder information must be kept for this Standard Operating Procedure.

10. If there are any specific situations or other concerns not addressed by this procedure, contact MCAGCC Natural Resources and Environmental Affairs (NREA) at 830-7244 or 830-5403.

4.3 Documentation and Record Keeping:
The following records must be maintained:
1. MSDS/SDS for batteries.
2. Training and inspection 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 Preparedness and Response Procedures:
Combat Center Order 5090.5C, Integrated Contingency and Operations Plans (ICOP) for MCAGCC.

4.6 Inspection and Corrective Action:
The Environmental Compliance Coordinator (ECC) shall designate personnel to perform inspections. The ECC shall ensure any deficiency noted during the inspection is corrected immediately. Actions taken to correct each deficiency shall be recorded on the inspection sheet.

Battery, Lead Acid – ECC/Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Are lead acid batteries labeled with the date when taken out of service?			
2. Are lead acid batteries labeled with the words "Used Battery"?			
3. Are lead acid batteries free of leaks and cracks?			
4. Are cracked or damaged lead acid batteries stored in a plastic container/ poly drum and marked accordingly?			
5. Are used, cracked or damaged lead acid batteries and empty acid containers stored properly at the SAA site?			
6. Is baking soda available for emergencies?			
7. Are training records maintained and available for inspection?			

ADDITIONAL COMMENTS:

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CORRECTIVE ACTION TAKEN:

_____

_____

_____

_____

_____

Environmental Compliance Coordinator

Name: _____

Signature: _____

Date: _____