Environmental Standard Operating Procedures (ESOP)

Title: ESOP 9.8-MANAGEMENT AND STORAGE OF BATTERIES

<u>Purpose</u>: This ESOP establishes management and storage requirements for batteries on Marine Corps Base Camp Lejeune (MCB CAMLEJ). This ESOP must be placed into the unit's/department's environmental binder.

<u>Applicability</u>: This title applies to all organizations on MCB CAMLEJ to include: any command, active or reserve component; staff organization, or supporting agency which is affiliated with the United States Marine Corps, Department of the Navy, or Department of Defense.

Responsibility: All units/departments storing, using, and accumulating batteries.

Responsibilities: In addition to unit/department personnel handling batteries, Environmental Compliance Officers and their assistants, Environmental Compliance Coordinators and their assistants, Hazardous Material (HM) Site Managers, and HM Handlers assigned duties within MCIEAST-MCB CAMLEJ subordinate commands on MCB CAMLEJ and tenant organizations and contractors on MCB CAMLEJ shall comply with the following procedures:

a. General Storage Requirements for Serviceable Batteries

- (1) Batteries should be stored in cool, well-ventilated, and dry storage areas. If temperatures exceed 130 degrees Fahrenheit, flammable or reactive gas and other dangerous vapors can be generated.
- (2) Batteries should be protected against being damaged or creating an unintended electrical discharge. If communication batteries are damaged, they shall be turned in to the less than 90-day HM Consolidation Site, or prepared for pick-up at the unit's next scheduled Curbside Service appointment by Environmental Management Division (EMD)/Resource Conservation and Recovery Section (RCRS).
- (3) Do not eat, drink, or smoke in battery storage areas. Smoking can ignite dangerous vapors which may be present in the storage areas.
- (4) Batteries shall be stored separately from all other HM. HM can interact with a venting battery and cause an adverse reaction, such as a fire or explosion.
- (5) The following types of batteries are not required to be tracked in the Enterprise Application Software (EAS):
 - (a) Rechargeable communication batteries;
 - (b) Alkaline batteries; and
 - (c) Vehicle batteries weighing under 99 pounds.

b. Communication Battery Management

- (1) All communication batteries must remain in storage in their original packaging ("bagged and boxed") until used.
- (2) All Lithium batteries must be segregated from any other batteries. Due to the reactivity of lithium batteries, they shall be kept dry and stored away from water.
- (3) Battery charging shall be conducted on a non-flammable surface and only in an area the unit/department designates for charging.
- (4) Communication batteries come from the manufacturers marked with either expiration dates or a manufacturer's test date on the original containers. An EAS shelf/service-life inspection label must also be placed on each container before storage. If a battery remains in its original container (case, box), only one EAS label is required for the container. When batteries are removed from their original containers for individual storage, a new EAS shelf/service-life label must be requested for each battery. To request a new EAS shelf/service-life label for each battery, the original EAS shelf/service-life label must be turned in to the issue point and used as justification for each new label.
- (5) Environmental Compliance Coordinators and/or HM Site Managers or HM Handlers shall conduct monthly inspections of unit/department HM storage areas, including battery storage areas, in part, to determine adequate battery shelf/service-life. Units/departments with batteries that will reach their manufacturers' test dates or expiration dates before the next quarterly inspection shall turn them in to the Environmental Management Division/Resource Conservation and Recovery Section (EMD/RCRS).
- (6) When managing spent, unserviceable or expired communication batteries not in their original containers, unit/department personnel must immediately cover the battery terminals with electrical or duct tape to preclude an electrical discharge. The tape cannot cover any of the identifying markings on the battery.

c. Vehicle Wet Cell, Gel Cell, and Sealed Lead-Acid Battery Management

- (1) Upon receipt by the end user, wet cell batteries shall be filled with the electrolyte that accompanies the kit. Any excess electrolyte shall be maintained in the original packaging and turned in via the curbside pickup service.
- (2) Refilling or "topping off" batteries with electrolyte is not authorized.
- (3) Batteries shall not be stacked more than two tiers high during storage due to the potential for physical damage to the batteries.
- (4) Battery charging shall be conducted on a non-flammable surface and only in an area the Marine Depot Maintenance Command (MDMC) Battery Shop designates for vehicle battery charging.
- (5) Cracks, voids/missing filler caps, or other damaged areas of a battery that may result in a release of acid or other hazardous substances will be sealed with silicone and placed into a rubber or plastic container

for transport. The battery shall not be comingled with other batteries and will be transported by the unit/department to the MDMC Battery Shop located at building 901, Sneads Ferry Road, 451-7724.

d. Battery Turn-In Procedures

- (1) Spent vehicle (wet cell, gel cell, and sealed lead-acid batteries) will be transported to the MDMC Battery Shop. All wing nuts, bolts, and terminal ends or connectors will be removed from the spent battery posts by unit/department personnel before loading. The batteries shall not be stacked more than two high on a pallet. Each tier of batteries shall be separated by a layer of plywood or thick/heavy cardboard. The pallet shall be secured to avoid the battery load from shifting during transport.
- (2) Spent taped communication batteries shall be placed in compatible containers for transport to EMD/RCRS. All battery types shall be segregated for curbside pickup.
 - (3) Spent batteries shall not be placed into plastic bags.
- (4) The Complete Discharge Device switch on spent lithium sulfur dioxide batteries will not be activated.
- (5) Damaged communication batteries will be segregated from other batteries and will be identified to the EMD/RCRS staff as damaged during the unit's Curbside Service appointment.
 - (6) Spent single-use alkaline batteries such as AAA, AA, C, D, and 9-volt batteries produced by manufacturers like Energizer and Duracell, as well as less common and/or generic manufacturers, now fall below Federal and state hazardous waste disposal standards. Regardless of these standards, units/departments requiring disposal of alkaline batteries will turn them in during their Curbside Service appointment.

e. Spill Reporting and Response Requirements

- (1) All units/departments are required to have a Unit-Level Contingency Plan (ULCP). ECCs must ensure the unit/department ULCP contains information necessary to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden releases of HM or HW constituents into air, soil, or surface water. The ULCP must be prominently posted throughout the unit/department on or near environmental-related sites.
- (2) All leaks, releases, or spills into the environment shall be reported to 911. In addition, Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.91/18, must be completed and forwarded to the command Environmental Compliance Officer (ECO) via the unit ECC or Alternate Environmental Compliance Coordinator (AECC). A copy of the completed Spill Report must also be maintained in the unit's/department's environmental Binder. Forms can be obtained by the unit ECC or command ECO and may also be downloaded at https://www.lejeune.marines.mil/Offices-Staff/Environmental-Mgmt/emd-approved-Forms/. The Unit-Level Contingency Plan shall be activated.
- (3) Units/departments must stock appropriate amounts of spill cleanup equipment onsite for use in the event of HM/HW leaks, releases, or spills. However, units/departments may not be authorized to respond to hazardous substance releases from batteries. In such cases, the unit/department must dial 911.

(4) Signs are to be posted in the vicinity of the used oil, off specification fuel, used antifreeze, hazardous material, or pollution abatement facilities that will indicate the following information:

IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL CALL FIRE and EMERGENCY SERVICES DIVISION AT 911 NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY

The signs must have yellow background and black lettering. Information to purchase the signs can be acquired from the cognizant ECO.

References:

- (a) MCO 5090.2
- (b) MCIEAST-MCB CAMLEJO 5090.9A
- (c) MCIEAST-MCB CAMLEJO 5090.4B

Training:

- 1. All personnel assigned battery storage and management duties should attend EM101 training and the associated annual EM102 refresher training. Documentation of this training must be available for review. As required, they shall also attend other EMD-sponsored training that encompasses the requirements of environmental media within the unit/department; refer to the EMD training schedule to determine when these classes are offered.
- 2. As requires, attend MCIEAST-MCB CAMLEJ EMD-sponsored meetings, seminars, evaluations and functions.
- 3. All environmental compliance training must be documented in each individual's environmental training record and available for review.

Record of Revision

Revision	Date	Summary of Change	Signature
Number			
Update	1213/2022	Restructured ESOP	