

FORT RUCKER

Environmental Document

ENV-SW002: Used Battery Management
(1 October 2017)

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1.0 PURPOSE

This procedure defines the requirements for management of used batteries on Fort Rucker.

Control of environmental procedures is addressed in procedure ENV-P002, *Document Control*.

2.0 SCOPE

This procedure applies to all operations that generate, transport, and temporarily store used batteries prior to turn-in for recycling, including those activities located at facilities outside the contiguous boundary of Fort Rucker. The requirements of this procedure are applicable to all military, civilian and contract personnel at Fort Rucker.

3.0 DEFINITIONS

Term	Definition
90-HWAS	Less Than 90-Day Hazardous Waste Accumulation Site
Accumulation Start Date (ASD)	The accumulation start date is the date the first item is placed in the container.
DOT	Department of Transportation
DPW-ENRD	Directorate of Public Works, Environmental and Natural Resources Division, located in Bldg 1121, telephone number 334-255-1024.
HMCC	Hazardous Material Control Center, located in Building 1315, telephone number 334-598-1311.
HWMP	The Fort Rucker Hazardous Waste Management Plan documents personnel and procedures to ensure each step in the "cradle-to-grave" management of wastes with hazardous characteristics is carried out in a consistent manner and in accordance with (IAW) regulatory requirements. Procedures are either referenced or included in this HWMP, as necessary, to provide documented hazardous waste management instructions, from the time of waste generation until it is transported offsite for reuse or disposal.
HWSAP	Hazardous Waste Satellite Accumulation Point
IAW	In Accordance With
Universal Waste	Universal wastes are hazardous wastes that are subject to less stringent hazardous waste management regulations,

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Term	Definition
	particularly by allowing more time for accumulation of these wastes in order to facilitate appropriate recycling or disposal. Four types of waste are covered under the universal waste regulations: batteries, lamps, mercury-containing equipment, and pesticides.
Used Battery	A device that produced electricity and may have several primary or secondary cells arranged in parallel or series. The typical batteries that are used at Fort Rucker are: <ul style="list-style-type: none">• Alkaline and Carbon-Zinc (e.g., 9-volt, D, C, AA, AAA, alkaline button) – Managed as Non-Hazardous Waste• Lithium, Nickel-Cadmium (NiCd), Mercuric-Oxide (button and other), Nickel-Metal Hydride (NiMH), Silver Oxide, Silver-Zinc, Zinc-Carbon, Zinc Air – Managed as Universal Waste• Lead-Acid – Managed as one-for-one exchange for recycling.

4.0 RESPONSIBILITIES

It is the responsibility of each unit, organization or contractor working on Fort Rucker to follow these procedures.

5.0 PROCEDURE

5.1 Non-Hazardous Used Batteries

5.1.1 Used single-use dry cell Alkaline and Carbon-Zinc batteries (e.g., 9-volt, D, C, AA, AAA, alkaline button) will be managed as Non-Hazardous Waste.

5.1.2 Non-Hazardous used single-use dry cell Alkaline and Carbon-Zinc batteries (e.g., nine-volt, D, C, AA, AAA, alkaline button) batteries will be collected and segregated from Universal Waste batteries (e.g., Lithium, Mercury, NiCd) and Lead-Acid Batteries in separate containers.

5.1.3 Accumulating Used Non-Hazardous Batteries

5.1.3.1 Each unit, organization or contractor must collect the used single-use dry cell Alkaline and Carbon-Zinc batteries in a DOT approved container with a closing lid.

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- 5.1.3.2 The individual, spent, dry cell Alkaline and Carbon-Zinc batteries are not required to be separated. They may simply be containerized in a DOT approved container. See U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration clarification letter dated 23 Jun 2009 for additional information regarding this Non-Hazardous/Non-Regulated Waste.
- 5.1.3.3 The unit, organization or contractor will ensure each container has the proper label affixed. The label must identify the specific type of battery to be accumulated in the container (e.g., Non-Hazardous Waste Used Alkaline Batteries). The label must meet the following requirements:
- all labels must be visible on the container; and
 - all labels must contain:
 - the words "Non-Hazardous Waste", and
 - the words "Used Alkaline/Carbon Zinc Batteries", and
 - the accumulation start date (ASD) (the date the first used battery was placed in the container).
- 5.1.4 The unit, organization or contractor is to coordinate the turn-in of the used batteries with the HMCC Customer Service Representative at 598-1311.
- 5.1.5 HMCC personnel will remove the lid of each container before accepting batteries to ensure co-mingling of battery types has not occurred. Used batteries that have not been properly segregated or properly packaged will not be taken.
- 5.1.6 All containers holding used batteries are to be maintained, closed (as defined by the container manufacturer), labeled, and in good condition. Spill equipment is to be near the used battery accumulation site. Management of these used battery accumulation areas is to be IAW the Installation's HWMP at all times.
- ## 5.2 Universal Waste Batteries
- 5.2.1 Used Lithium, NiCd, Mercuric-Oxide (button and other), NiMH, Silver Oxide, Silver-Zinc, Zinc-Carbon, and Zinc Air batteries will be managed as Universal Waste.
- 5.2.2 Accumulating Universal Waste Batteries
- 5.2.2.1 Universal Waste batteries (e.g., Lithium, NiCd, Mercuric-Oxide, NiMH, Silver Oxide, Silver-Zinc, Zinc-Carbon, and Zinc Air) will be collected and segregated in separate DOT approved containers with a closing lid.
- 5.2.2.2 Units, organizations or contractors are responsible for ensuring that all used batteries are properly separated by Universal Waste Battery types to

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prevent short-circuiting during storage and transportation. Universal Waste batteries will be separated by one of the following methods:

- placing batteries in the original inner package;
- taping the positive end of the batteries; or,
- by using plastic "baggies" to separate individual batteries.

5.2.2.3 The unit, organization or contractor will ensure each container has the proper label affixed. The label must identify the specific type of battery to be accumulated in the container (e.g., Universal Waste for Lithium, Mercury, NiCd). The label must meet the following requirements:

- all labels must be visible on the container; and,
- all labels must contain:
 - the words "UNIVERSAL WASTE", and
 - the words describing the type of battery (e.g., "Lithium Batteries", and
 - the accumulation start date (ASD) (the date the first used battery was placed in the container).

5.2.2.4 All containers holding used batteries are to be maintained, kept closed (as defined by the container manufacturer), labeled, and in good condition. Spill equipment is to be near the used battery accumulation site. Management of these used battery accumulation areas is to be IAW the Installation's HWMP at all times.

5.2.3 Turning In Universal Waste Batteries

5.2.3.1 Universal Waste batteries must be turned in for disposal within six months of the ASD, regardless if full or not. Containers of Universal Waste batteries for turn in are to be accompanied by a completed DD Form 1348-1A.

5.2.3.2 The unit, organization or contractor is to coordinate the turn-in of Universal Waste batteries with the HMCC Customer Service Representative at 598-1311.

5.2.4 HMCC personnel will remove the lid of each container before accepting batteries to ensure co-mingling of battery types has not occurred. Used batteries that have not been properly segregated or properly packaged will not be taken.

5.2.5 The HMCC will not accept batteries that have not been segregated or properly packaged to prevent short-circuiting.

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5.3 Lead-Acid Batteries

- 5.3.1 Units, organizations or contractors will recycle used Lead-Acid Batteries using the one-for-one exchange program. This program provides a one-for-one exchange of new Lead-Acid Batteries for unserviceable Lead-Acid Batteries.
- 5.3.2 Accumulating Lead-Acid Batteries for Recycling
 - 5.3.2.1 Both new and used Lead-Acid Batteries should be stored in covered areas on pallets or in a covered spill containment pallet.
 - 5.3.2.2 Lead-Acid Batteries do not need to be labeled.
 - 5.3.2.3 Draining batteries before collection is not necessary.
 - 5.3.2.4 Although Lead-Acid Batteries are not managed as Universal Waste, the unit, organization or contractor should not accumulate the batteries for an extended period of time and should implement a method to demonstrate how long the Lead-Acid Batteries have been stored between shipments.
- 5.3.3 Recycling Used Lead-Acid Batteries
 - 5.3.3.1 Units, organizations or contractors are responsible for ensuring that used Lead-Acid Batteries are properly recycled using the one-for-one exchange program.
 - 5.3.3.2 The one-for-one exchange program vendor supplies new batteries to organizations and picks up any used batteries that have been collected.
 - 5.3.3.3 The vendor takes the entire Lead-Acid Battery (including the electrolyte solution) and transports the batteries to a battery recycler for recycling.
 - 5.3.3.4 If the vendor does not have a particular facility on their pickup route, the unit, organization or contractor may turn in their used Lead-Acid Batteries to the HMCC.
 - 5.3.3.5 The unit, organization or contractor is to coordinate the turn-in of used Lead-Acid Batteries with the HMCC Customer Service Representative at 598-1311.
- 5.3.4 A battery acid spill kit is to be near the used Lead-Acid Battery accumulation site. Management of these used battery accumulation areas is to be IAW the Installation's HWMP at all times.

5.4 Leaking or Damaged Batteries

- 5.4.1 Leaking or damaged Non-Hazardous and Universal Waste batteries will be segregated from intact used batteries by placing the leaking or damaged battery in a sealed plastic bag or wrapped with plastic and sealed using tape. Once

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sealed, the leaking or damaged battery may be placed in the appropriate collection container.

- 5.4.2 Lead-Acid Batteries that are leaking or are damaged (e.g., cracked case) cannot be returned to the vendor as part of the one-for-one exchange program. These batteries will be accumulated in a HWSAP and turned in to the 90-HWAS for disposal as hazardous waste.
- 5.4.3 Units, organizations and contractors will have spill equipment and training to safely and efficiently clean up minor spills and releases of battery electrolyte solutions IAW the Installation Spill Contingency Plan.
- 5.4.4 Personnel should collect the clean-up wastes in an approved non-metal container or a metal container with an appropriate liner. Wastes from the clean-up of electrolyte solution will be managed and disposed of as hazardous waste IAW the HWMP.

6.0 FORMS AND RECORDS

DD Form 1348-1A, *Issue Release/Receipt Document*
Inspection Records

7.0 REFERENCES

ENV-P002, *Document Control*

49 CFR Parts 171-180

US DOT Battery Clarification Letters Dated: April 3, 2009; June 23, 2009; and, November 25, 2009

DOD 4160.21-M, Chapters 4 and 10

Hazardous Waste Management Plan (HWMP)

Installation Spill Contingency Plan (ISCP)