FORT RUCKER
Environmental Document

ENV-SW002: Used Battery Management
(30 AUGUST 2025)

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1.0 PURPOSE

This procedure defines the requirements for the 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-HWCAA	Less Than 90-Day Hazardous Waste Central Accumulation Area
Accumulation Start Date (ASD)	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, 334-255-0487.
HMCC	Hazardous Material Control Center, located in Bldg. 1315, 334-255-1470.
HWMP	The Fort Rucker Hazardous Waste Management Plan documents 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 the 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.
HWSAA	Hazardous Waste Satellite Accumulation Area
IAW	In Accordance With

Term	Definition
Recycling Center	Recycling Center, located in Bldg. 9322, 334-255-0468. DPW-ENRD Recycling program manager: 334-255-2080.
Universal Waste	Universal wastes are hazardous wastes that are subject to less stringent hazardous waste management regulations, particularly by allowing more time for accumulation of these wastes in order to facilitate appropriate recycling or disposal. Five types of waste are covered under the universal waste regulations: batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans. DPW-ENRD Hazardous Waste program manager: 334-255-0487.
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: ▪ Alkaline (e.g., 9-volt, D, C, AA, AAA, alkaline button) – Managed as Non-Hazardous Waste, recycled when possible. • 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, recycled when possible. Lead-acid batteries that are removed from service must be managed by one of the following programs: • Within an approved one-for-one exchange program. • Under 40 CFR 266, Subpart G (this type of management does not apply to new batteries). • As Universal Waste (40 CFR 261.9, 273). • As Hazardous Waste, if the battery is cracked or leaking.

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 batteries rated up to 9-volts (e.g., 9-volt, D, C, AA, AAA, alkaline button) will be managed as Non-Hazardous Waste.

5.1.2 Non-Hazardous used dry cell Alkaline 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 dry cell Alkaline batteries in a DOT approved container with a closing lid.

5.1.3.2 The spent, dry cell Alkaline batteries are not required to be individually segregated. They may simply be containerized in a DOT approved container. See U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration clarification letters dated 25 November 2009 (Ref. No. 09-0194 and Ref. No. 09-0090R) for additional information.

5.1.3.3 The unit, organization or contractor will ensure each container of Used Non-Hazardous Batteries is properly labeled. The label must identify the contents of the container. The label must meet the following requirements:

- All labels must be visible on the container
- All labels must be right side up
- All labels must contain the words:
  - “Non-Hazardous Waste”
  - “Used Batteries”

5.1.4 The unit, organization or contractor is to coordinate turn-in of used batteries with the HMCC Customer Service Representative at 334-255-1470.

5.1.5 HMCC personnel will remove the lid of each container before accepting batteries.

Used batteries that have not been properly segregated 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, Nickel Cadmium (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 The following example common battery types and uses were described in a DOT interpretation letter dated 14 October 2008 (Ref. No. 08-0202).

- Lithium-manganese dioxide batteries - phones and digital cameras
- Lithium-ion button batteries - watches and calculators
- Nickel-Cadmium batteries (dry) - power tools, toys, and cordless phones
- Nickel-Cadmium batteries (wet) - portable electronics, toys, flashlights
- Silver Oxide batteries - common in watches

5.2.3 Accumulating Universal Waste Batteries

5.2.3.1 Universal Waste batteries (e.g., Lithium, NiCd, Mercuric-Oxide, Nickel Metal-Hydride (NiMH), Silver Oxide, Silver-Zinc, Zinc-Carbon, and Zinc Air batteries) will be collected in DOT approved containers with a closing lid.

5.2.3.2 Units, organizations or contractors are responsible for ensuring that all used batteries are properly segregated to prevent short-circuiting during storage and transportation. Additional details are available in 49 CFR 173. Universal Waste batteries will be segregated 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

5.2.3.3 The unit, organization or contractor will ensure each container has the proper label affixed. The label shall meet the following requirements:

- All labels must be visible on the container
- All labels must be right side up
- All labels must contain:
    - the words "UNIVERSAL WASTE",
    - the words “Used Battery(ies)”, or “Universal Waste Battery(ies)”, or “Waste Battery(ies)”, and
    - the accumulation start date (ASD) (the date the first used battery was placed in the container).

5.2.3.4 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.

5.2.4 Turning In Universal Waste Batteries

5.2.4.1 Universal Waste batteries must be turned in within six months of the ASD Containers must be properly labelled and in good condition with all batteries segregated as described above.

5.2.4.2 HMCC personnel will remove the lid of each container before accepting batteries. Used batteries that have not been properly segregated or properly packaged will not be taken.

5.2.4.3 The unit, organization or contractor is to coordinate the turn-in of Universal Waste batteries with the HMCC Customer Service Representative at 334-255-1470.

5.3 LEAD-ACID BATTERIES

5.3.1 Managing used lead-acid batteries within an approved one-for-one exchange program.

5.3.1.1 Units, organizations or contractors can manage their used lead-acid batteries within an approved one-for-one exchange program when possible. This program provides a one-for-one exchange of new lead-acid batteries for unserviceable lead-acid batteries.

5.3.1.2 Both new and used lead-acid batteries should be stored in covered areas on

pallets, battery storage racks or in a covered spill containment pallet.

5.3.1.3 New and used lead-acid batteries are not to be stored directly on the floor or foundation.

5.3.1.4 The one-for-one exchange program vendor supplies new batteries to organizations and picks up any used batteries that have been collected.

5.3.1.5 The vendor takes the entire lead-acid battery (including the electrolyte solution).

5.3.1.6 Lead-acid batteries in the one-for-one exchange program do not need to be labeled.

5.3.1.7 Draining batteries before collection is not necessary.

5.3.1.8 Units, organizations, and contractors should not accumulate 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.

5.3.1.9 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.

5.3.2 Managing used lead-acid batteries under 40 CFR 266, Subpart G.

5.3.2.1 The management of lead-acid batteries under 40 CFR 266, Subpart G does not apply to new lead-acid batteries.

5.3.2.2 Units, organizations or contractors are responsible for ensuring that used lead-acid batteries are properly managed.

5.3.2.3 The unit, organization or contractor is to coordinate the turn-in of used lead-acid batteries with the HMCC Customer Service Representative at 334-255-1470.

5.3.2.4 Used lead-acid batteries should be stored in covered areas on pallets, battery storage racks or in a covered spill containment pallet.

5.3.2.5 Used lead-acid batteries are not to be stored directly on the floor or foundation.

5.3.2.6 Lead-acid batteries managed under 40 CFR 266, Subpart G do not need to be labeled.

5.3.2.7 Units, organizations, and contractors should not accumulate 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.

5.3.2.8 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.

5.3.3 Managing used lead-acid batteries as Universal Waste.

5.3.3.1 Units, organizations or contractors are responsible for ensuring that used lead-acid batteries are properly managed.

5.3.3.2 The unit, organization or contractor is to coordinate the turn-in of used lead-acid batteries with the HMCC Customer Service Representative at 334-255-1470.

5.3.3.3 Both new and used lead-acid batteries should be stored in covered areas on pallets or in a covered spill containment pallet.

5.3.3.4 New and used lead-acid batteries are not to be stored directly on the floor or foundation.

5.3.3.5 The unit, organization or contractor will ensure each container has the proper label affixed to each battery or to the pallet containerizing the lead-acid batteries. The label shall meet the following requirements:

- All labels must be visible on the container
- All labels must be right side up
- All labels must contain:
  - the words "UNIVERSAL WASTE",
  - the words “Used Battery(ies)”, or “Universal Waste Battery(ies)”, or “Waste Battery(ies)”, and
  - the accumulation start date (ASD) (the date the first used battery was placed in the container).

5.3.3.6 Universal Waste lead-acid batteries must be turned in within six months of the ASD.

5.3.3.7 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 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 HWSAA and turned into the 90-HWCAA 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
40 CFR 261.9
40 CFR 266, Subpart G
40 CFR 273
49 CFR 171 thru180
US DOT Battery Clarification Letters dated 14 October 2008 (Ref. No. 08-0202), 25 November 2009 (Ref. No. 09-0194 and Ref. No. 09-0090R)
DOD 4160.21-M, Chapters 4 and 10
Hazardous Waste Management Plan (HWMP)
Installation Spill Contingency Plan (ISCP)