

DEPARTMENT OF THE ARMY
 DEVENS RESERVE FORCES TRAINING AREA
 Devens, Massachusetts 01434-4424
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Environmental Protection and Enhancement
UNIVERSAL WASTE STANDARD OPERATING PROCEDURE

HISTORY. This is the initial publication of this procedure under the Devens Reserve Forces Training Area (Devens RFTA).

SUMMARY. This procedure covers the management of universal waste at Devens RFTA.

APPLICABILITY. This procedure applies to all Devens RFTA directorates, staff activities, military and civilian organizations, government agencies, contractors, and individuals training, doing business, conducting research, or otherwise using Devens RTFA facilities. It is both informative and directive in nature.

SUGGESTED IMPROVEMENTS. The proponent of this memorandum is the Directorate of Public Works (DPW) Environmental Division. Users are invited to send comments and suggested improvements on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, Devens RFTA, ATTN: IMNE-DEV-PWE, Devens, MA 01434-4424.

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CHAPTER 1. INTRODUCTION

1-1. Purpose. The purpose of this regulation is to discuss the regulatory requirements that comply with Army, state, and federal universal waste regulations.

1-2. Applicability. Intended users of this guidance are the managers and operators of universal waste generating operations located on the Devens Reserve Forces Training Area (Devens RFTA).

1-3. Scope. Implementing regulations for this procedure are found in Title 40 of the Code of Federal Regulations (CFR), Part 273, and Title 310 of the Code of Massachusetts Regulations (CMR), Chapter 30.

1-4. Acronyms.

Acronyms	Terms
CFR	Code of Federal Regulations
CMR	Code of Massachusetts Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HWAA	Hazardous Waste Accumulation Areas
OSHA	Occupational Safety and Health Administration

CHAPTER 2. OVERVIEW OF UNIVERSAL WASTE

a. Environmental Protection Agency (EPA) established a program for governing generation, handling, and transportation of certain hazardous wastes, which are so common and seemingly innocuous that dangers associated with them were often ignored. The agency called these “universal” wastes. The term universal waste applies only to four types of hazardous wastes: batteries, pesticides, mercury thermostats, and lamps. In the State of Massachusetts, this list also includes mercury-containing devices. The listed item must meet characteristics of a hazardous waste before it can be designated a universal wastes; not all batteries, pesticides, or lamps are included as universal wastes.

b. A facility, which accumulates less than 5000 kilograms of universal waste in one year, is considered a small quantity handler. A large quantity handler is defined as one, which accumulates more than 5000 kilograms within one year. Devens RFTA is considered a small quantity handler of universal wastes.

c. A universal handler must maintain separate containers for each type of waste. For example, batteries cannot be placed in a container with pesticides or lamps. Each container of universal waste must be marked with a date the first discarded waste (battery, pesticide, mercury thermostat, mercury containing device, or mercury containing lamp) was placed into the container. Regulations require this container be shipped off-site within one year from the date waste was placed in the container.

d. Each of the following chapters explains the procedure for storage and shipment of each type of universal wastes so as to prevent releases to the environment.

CHAPTER 3. STORAGE AND SHIPMENT OF WASTE BATTERIES

a. Universal waste regulations do not apply to batteries, which are not considered to be hazardous waste. Spent lead-acid batteries are not considered universal waste and must be managed according to 40 CFR 266 Subpart G requirements.

b. Batteries shall be placed in a closed, structurally sound container compatible with battery contents.

c. Sort and collect the following batteries by type in Department of Transportation (DOT)-approved containers:

(1) Alkaline and zinc-carbon dry cell batteries can be placed in the same container.

(2) Nickel-cadmium batteries must be placed in a separate container.

(3) Mercuric- and silver-oxide batteries shall be managed as hazardous waste and placed in separate DOT-approved containers with a "Hazardous Waste" label affixed to the side of the container. The container should be dated and relocated to a Hazardous Waste Accumulation Area (HWAA).

(4) Damaged or leaking wet-type, lead-acid batteries must be handled as hazardous waste and placed in a separate DOT-approved container with a "Hazardous Waste" label affixed to the side of the container. The container should be dated and relocated to a HWAA.

(5) Containers of universal waste batteries shall be labeled with one of the following phases: "Universal Waste-Batteries" or "Waste Batteries" or "Used Batteries."

CHAPTER 4. STORAGE AND SHIPMENT OF PESTICIDES

a. Pesticides, which will be managed as universal waste are those unused pesticides collected as part of a waste pesticide collection program and pesticides that may be part of a recall. Some pesticides are not included as universal waste, such as those which are not considered to be hazardous waste and pesticides, which are used and managed by farmers.

b. The universal waste pesticide shall be placed in a container that remains closed, structurally sound, and is compatible with the pesticide.

c. The container shall be marked or labeled with the label that was on the accompanied product as sold or distributed and the words "Universal Waste-Pesticide(s)" or "Waste Pesticide(s)."

CHAPTER 5. STORAGE AND SHIPMENT OF MERCURY THERMOSTATS

- a. Universal waste regulations do not apply to thermostats that are not hazardous waste or to those thermostats that have not yet become wastes.
- b. All universal waste mercury thermostats shall be placed in a container, which is to be kept closed, vapor tight, structurally sound, and compatible with the contents of the thermostats.
- c. The universal waste handler may remove mercury-containing ampoules from the thermostats providing provisions of 310 CMR 30.1034(3)(b) are followed.
- d. A universal waste handler removing mercury-containing ampoules from thermostats shall determine if mercury or clean up residues from spills or leaks or other waste generated as a result of the removal of mercury-containing ampoules, will exhibit a characteristic of hazardous waste. If so, this waste must be managed as hazardous.
- e. Containers of universal waste mercury thermostats shall be labeled or marked clearly with one of the following phases: “Universal Waste—Mercury-thermostat(s)” or “Waste Mercury-thermostat(s).”

CHAPTER 6. STORAGE AND SHIPMENT OF MERCURY-CONTAINING DEVICES

- a. Universal waste regulations do not apply to those mercury-containing devices, which have not yet been declared wastes.
- b. All broken mercury-containing devices shall be placed in a container, which is to be kept closed, vapor tight, structurally sound, and compatible with the contents of the mercury-containing lamps.
- c. A universal waste handler may mix different types of universal waste mercury-containing devices or universal waste mercury-containing devices and thermostats in one container.
- d. The universal waste handler may remove mercury-containing ampoules from the mercury-containing devices provided the provisions of 310 CMR 30.1034(3)(b) and (4)(c) are followed.
- e. A universal waste handler removing mercury-containing ampoules from mercury-containing devices shall determine if mercury or clean up residues from spills or leaks or other waste generated as a result of the removal of mercury-containing ampoules, will exhibit a characteristic of hazardous waste. If so, this waste must be managed as hazardous.
- f. Containers of universal waste mercury-containing lamps shall be labeled or marked clearly with one of the following phases: “Universal Waste—Mercury-containing device(s)” or “Waste Mercury-containing Device(s)” or “Used Mercury-containing Device(s).”

CHAPTER 7. STORAGE AND SHIPMENT OF MERCURY-CONTAINING LAMPS

a. Universal waste regulations do not apply to those mercury-containing lamps, which are not hazardous and have not yet been declared wastes.

b. All broken mercury-containing lamps shall be placed in a container, which is to be kept closed, vapor tight, structurally sound, and compatible with the contents of the mercury-containing lamps.

c. The universal waste handler may remove mercury-containing ampoules from the mercury-containing lamps provided the provisions of 310 CMR 30.1034(3)(b) and (5)(d) are followed.

d. The universal waste handler intending to dismantle or crush mercury-containing lamps generated on-site may do so only if the following conditions are met:

(1) Dismantling and/or crushing are done in such a manner that components are separated into individual waste streams.

(2) Separated components are recycled/reused.

(3) A Class A recycling permit is obtained for crushing of lamps and off-site reclamation of mercury-phosphor powder.

e. If a universal waste handler intends to dismantle or crush mercury-containing lamps off of the generation site, a Class C permit must be obtained.

f. A universal waste handler crushing or dismantling mercury-containing lamps shall also do the following:

(1) Ensure a mercury cleanup system is available.

(2) Immediately transfer any mercury resulting from spills or leaks from the containment device to the proper type container.

(3) Ensure the lamp crushing or dismantling area is monitored to ensure compliance with applicable Occupational Safety and Health Administration (OSHA) exposure levels to mercury.

(4) Ensure employees removing mercury-contaminated material are thoroughly familiar with proper handling and emergency procedures.

(5) Comply with proper procedures whether the mercury is a recyclable material or hazardous waste.

g. Containers of universal waste mercury-containing lamps shall be labeled or marked clearly with one of the following phases: “Universal Waste—Mercury-containing lamp(s)” or “Waste Mercury-containing Lamp(s)” or “Used Mercury-containing lamp(s).”

CHAPTER 8. RESPONSE TO RELEASES

a. A universal waste handler is required to immediately contain all releases of universal wastes and other residues from universal wastes.

b. Should there be a release the handler is required to determine if any material resulting from the release is hazardous. If so, the material is to be handled in accordance with the Devens RFTA Hazardous Waste Management Plan.

CHAPTER 9. OFF-SITE SHIPMENT AND TRACKING OF UNIVERSAL WASTES

a. A universal waste handler is prohibited from sending or taking universal wastes to a place other than another universal waste handler, a destination facility, or a foreign destination.

b. A universal waste handler generating more than 5000 kilograms of universal waste in a one-year period is required to keep a record of each shipment of universal waste sent off-site. This record can be in the form of a log, invoice, manifest, bill of lading, or any other shipping document. This record shall include the following information:

(1) Name and address of the universal waste handler, destination facility, or foreign destination to which the universal waste was sent.


(2) Quantity of each type of universal waste sent.

(3) Date the shipment left the site.

c. The universal waste handler shall retain these records for at least three years from the date shipment left the facility.

d. Contact the hazardous waste manager at 978-796-2747 for any questions on setting up a universal waste accumulation area or universal waste shipments.

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