

Chapter 17: [Hazardous Waste](#)

Used Automotive Battery Requirements

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URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/hazwasteReqBattery.pdf>

1 Purpose

The purpose of these requirements is to ensure that used lead-acid batteries are safely managed. They cover handling, labeling, storage, and transport. They apply to workers (as *hazardous waste generators* and *custodians*), supervisors, Fleet Services, and Waste Management.

2 Requirements

Automotive-type lead-acid wet-cell and gel-cell batteries include those typically used in cars, trucks, forklifts, electric carts, and in certain type of emergency lighting. These batteries are available in a range of sizes and have a capacity of six volts or more. Such batteries, when used, must be handled, labeled, stored, and transported according to the following requirements.

Note *Lead-acid gel-cell batteries not originating from automotive or emergency lighting applications are managed as universal waste. Arrange a pickup by Waste Management for such batteries by completing a [Hazardous Waste Pick-Up and Empty Container Request Form](#).*

2.1 Undamaged Batteries

Fleet Services, part of the Facilities Division, manages all undamaged used lead-acid batteries and arranges for their transport to an off-site recycling facility.

2.1.1 Handling

Wet-cell batteries contain hazardous materials, including lead electrodes and acid in liquid or gel form. Used batteries may be damaged or missing a cap, so safety glasses and acid-resistant gloves must be worn when handling them to protect from potentially leaking acid, which can severely damage eyes and skin.

Missing caps must be replaced the immediately, if possible. If no replacement is available, the battery must be treated as damaged (see Section 2.2”).

2.1.2 Labeling

To make sure used lead-acid batteries are not stored on-site for more than a year, each must be marked with the date (mm/dd/yyyy) it was taken out of service, written in large letters with a weather-resistant marker (such as indelible ink or paint).

2.1.3 Storing

Used lead-acid batteries must be stored

- In a designated area, apart from other types of batteries
- In a single layer (stacking increases the risk of short circuits and acid leaks)
- With secondary containment that is resistant to acid (such as polyethylene)
- For no more than a year, within which they must be shipped off-site for recycling (see Section 2.1.5)

An eyewash station must be located in the area (or a sign posted indicating the location of the nearest one).

The following supplies must be kept on hand in the area:

- Acid-resistant gloves
- Polyethylene plastic bags (six millimeter or thicker, sized to contain the largest battery expected for storage)
- A weather-resistant pen or paint pen (for marking used batteries)
- Rags or disposable wipes (for acid leak cleanup)
- Appropriate absorbent (for spill cleanup)

A copy of this exhibit must be posted in the area.

2.1.4 Transporting On-site

For transportation on-site of used lead-acid batteries, contact Fleet Services by submitting a service request through the [Facilities Service Request System](#).

2.1.5 Shipping Off-site for Recycling

Used lead-acid batteries must be shipped off-site for recycling within a year. Used batteries are picked up periodically by the vendor that supplies batteries to Fleet Services, usually every 45 days. The following requirements pertain to this off-site transport.

2.1.5.1 Transporter Requirements

The transporter must agree that

- No other hazardous material will be transported in the same vehicle with lead-acid batteries
- The lead-acid batteries must be loaded or secured to prevent damage and short circuits during transit
- Other material (such as a dolly or spare tire) in the vehicle must also be secured to prevent damage to the batteries
- The transport vehicle may not carry material shipped by any other person other than the shipper of the batteries

2.1.5.2 Fleet Services Requirements

Fleet Services must

- Have the transporter read and sign a document describing the transporter requirements listed above, acknowledging that he will understand and comply
- Ensure that the transporter complies
- Inspect the transporter vehicle after the batteries have been loaded and secured
- Attach the signed document to the SLAC copy of the bill-of-lading and retain for a minimum of three years.

Note *The bill of lading must include the names and addresses of the generator, transporter, and receiving location, and also the number of batteries transported.*

2.2 Damaged Batteries / Spills

Waste Management manages damaged batteries. To prepare damaged batteries to be picked up by Waste Management:

1. At a minimum, wear safety glasses and acid-resistant gloves to protect skin and eyes.
2. Clean up any spilled battery acid with rags or disposable wipes and appropriate absorbent.
3. Double-bag the damaged or leaking battery, as well as all material used to clean up any battery spill, in six-millimeter polyethylene bags. (Or place in an acid debris waste accumulation container provided by Waste Management, if available.)
4. Mark the bag with the date (mm/dd/yyyy) taken out of service, written in large letters with a weather-resistant marker (such as indelible ink or paint). (Damaged batteries that are not leaking acid also qualify to be returned to the vendor.)
5. Contact Waste Management to initiate a pickup by submitting a completed [Hazardous Waste Pick-Up and Empty Container Request Form](#). If battery acid has been spilled contact Waste Management within a day.

3 Forms

The following forms and systems are required by these requirements:

- [Hazardous Waste Pick-Up and Empty Container Request Form](#) (SLAC-I-800-0A08R-001). Form used to request delivery and pickup of waste containers from Waste Management
- [Facilities Service Request System](#). System used to request services from Facilities

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- Fleet Services must maintain records for off-site battery shipments, attaching the signed transporter document to the SLAC copy of the bill-of-lading and retaining for a minimum of three years.

5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 17, “Hazardous Waste”](#)
 - [Hazardous Waste: Management Requirements](#) (SLAC-I-750-0A08S-001)