



The National Park Service EnviroFact Sheet

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Managing Universal Waste (SW-12)

DRAFT

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Universal Waste is a type of hazardous waste that can usually be recycled. NPS facilities generate many potentially hazardous wastes, much of which can now be recycled, instead of handled and disposed of as hazardous waste.

In 1995 EPA finalized its Universal Waste Rule. The new rule streamlined hazardous waste regulations regarding the collection and management of certain widely generated wastes identified as universal wastes.

The goal of the Universal Waste Rule is to separate universal waste from the municipal waste stream and lessen the regulatory burden on hazardous waste generators.

Currently, EPA considers pesticides, mercury-containing equipment, batteries and hazardous waste lamps (such as fluorescent tubes and high intensity discharge lamps) as "universal waste."

NPS recommends that these hazardous wastes be treated as universal wastes, regardless of the amount of hazardous waste generated at your facility.

FOR MORE INFO...

EPA website: "The Universal Waste Rule":
<http://www.epa.gov/epaoswer/hazwaste/id/univwast.htm>

EPA list of state and regional environmental agency web-sites:
<http://www.epa.gov/epapages/statelocal/envrolst.htm>

APPLICABLE REGULATIONS

EPA regulates the management of universal waste under 40 CFR 273. EPA identifies the following materials as *universal wastes*:

- Batteries – All batteries having hazardous characteristics including, but not limited to, nickel-cadmium (NiCad), nickel metal hydride (NiMH), and lithium batteries;
- Pesticides – Unused or recalled pesticides;
- Mercury-Containing Equipment – Thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches; and
- Lamps – Mercury-containing fluorescent tubes, high intensity discharge (HID) lamps, and neon lights.

Individual states must adopt the Universal Waste Rule before the waste can be managed as such. States that have adopted the Universal Waste Rule may include more or fewer of the waste categories adopted by EPA. For instance, some states do not allow fluorescent tubes to be managed as universal waste (i.e., they may still be recycled, but will count towards the generator's monthly hazardous waste totals) while other states allow paint and ink wastes to be managed as a universal waste.

HANDLING AND STORAGE

Universal waste must be stored in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the waste. If the container breaks, leaks, or shows signs of damage that may cause a leak, the hazardous material must be immediately cleaned up and placed in another container to control the release of any hazardous constituent to the environment (e.g., mercury).

LABELING

Handlers of universal waste (generators) are allowed to accumulate the waste for up to one year. Handlers must develop a mechanism to demonstrate that they do not exceed the allowed accumulation period. This may include labeling individual waste items or the containers in which they are being stored.

Containers holding universal waste must also be labeled to indicate the type of waste contained inside. Regulations state that containers should be labeled with the words "Universal Waste—(INSERT WASTE TYPE)" or "Used—(INSERT WASTE TYPE)."

TRAINING

Employees who handle or have responsibility for managing universal waste must be informed of proper handling and emergency response procedures applicable to the universal waste they may handle. For instance, maintenance staff should be trained to understand that spent fluorescent tubes cannot be removed and placed in the trash or simply returned to their original box (unless the original container meets the storage container requirements specified above and contains only spent tubes).



DISPOSAL

Universal wastes must be recycled to avoid hazardous waste management requirements. All handlers of universal waste are required to send their universal wastes to an authorized "destination facility" for recycling. If your state has adopted the universal waste rule, go to your state's environmental agency website. Many state websites list approved destination facilities.

Some manufacturers now produce low mercury content tubes (e.g., Philips Lighting ALTO or "Green Tips") that may be advertised as mercury-free. **However, many states and the NPS encourage recycling these lamps because they still contain small amounts of mercury.** Mercury, even in small amounts, can have a devastating impact on the environment and on human health, so recycling these lamps is an opportunity to prevent environmental contamination.

POLLUTION PREVENTION

- Use a turnkey battery recycling program (one-for-one). Do not stockpile used batteries.
- Properly maintain batteries to assure the longest possible life.
- Store spent tubes to prevent breakage.
- Purchase low-mercury fluorescent tubes to reduce the amount of hazardous materials in the waste stream.

UNIVERSAL WASTE COMPLIANCE CHECKLIST

Checklist Item	Notes
1. Determine whether your state has implemented an EPA-approved Universal Waste Program and, if so, what types of wastes are included or excluded from the list of wastes that can be treated as universal waste. Also, determine if state universal waste management requirements differ from (i.e., are more stringent than) the federal requirements listed under checklist items 3-8 below.	
2. Ensure that all state-recognized universal waste generated at the park is being recycled in accordance with the universal waste program requirements.	
3. Ensure that containers holding spent universal waste are: <ul style="list-style-type: none"> • Labeled to identify the type of waste inside (e.g. "Universal Waste—Tubes" or "Used—Bulbs"); • Labeled with the accumulation start date; • Closed, structurally sound and compatible with the contents of the waste; and • Lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. 	
4. Ensure that park staff that handle universal waste (e.g., maintenance staff that change fluorescent tubes) are trained on the proper waste handling and emergency procedures appropriate to the type(s) of universal waste handled at the park.	
5. Ensure that training records are maintained to indicate the appropriate staff have been identified and trained appropriately.	
6. Ensure that universal waste is managed and accumulated/stored in a way that prevents release of any amount to the environment (e.g., fluorescent tubes are handled and stored in a manner that they will not be broken by returning them to their original shipping container).	
7. Ensure that universal waste is sent only to a state-approved "destination facility" or to another universal waste handler.	
8. As a best management practice, ensure that records of off-site shipments of all universal waste are properly maintained. The records should include the following: <ul style="list-style-type: none"> • Quantity of shipments; • Date of shipments; • Name of transporter and destination facility; and • Certificates of recycling, if provided by the destination facility. 	