

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

TECHNICAL ASSISTANCE

OFFICE OF SOLID WASTE REDUCTION AND RECYCLING

DEFINITIONS

UNIVERSAL WASTE is any of the following hazardous waste that is subject to the universal waste requirements of RCRA (40 CFR Part 273): nickel-cadmium (ni-cd) batteries, pesticides, thermostats and **lamps**.

UNIVERSAL WASTE LAMP is defined as the bulb or tube portion of an electric light. Examples include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high-pressure sodium and metal halide lamps.

UNIVERSAL WASTE HANDLER is (1) an entity that generates universal waste, i.e., the person, business or school that generates or manages universal waste or (2) the person or entity that receives, stores or sends the waste to other universal waste handlers, recyclers or treatment and disposal facilities, e.g., a contractor hired to remove universal waste from a local government. NOTE: Universal waste includes lamps, ni-cd batteries, pesticides and thermostats.

SMALL-QUANTITY HANDLER (SQH) of universal waste means a handler that accumulates less than 11,000 pounds (about 20,000 lamps) of universal waste including lamps, batteries, pesticides or thermostats.

LARGE-QUANTITY HANDLER (LQH) of universal waste means a handler that accumulates 11,000 pounds or more of universal waste including lamps, batteries, pesticides or thermostats.

UNIVERSAL WASTE TRANSPORTER is a person or entity engaged in the off-site transportation of universal waste by air, rail, highway or water.

UNIVERSAL WASTE DESTINATION FACILITY is a facility that treats, disposes of or recycles universal waste.



Office of Solid Waste Reduction
& Recycling

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PROPER MANAGEMENT OF UNIVERSAL WASTE LAMPS

The U.S. Environmental Protection Agency (U.S. EPA) and the S.C. Department of Health and Environmental Control (DHEC) are promoting the safe recycling and/or management of lamps that contain mercury – especially **fluorescent** and **high intensity discharge** lamps. The U.S. EPA and DHEC believe that these lamps can be managed best under the Universal Waste Rule (UWR).

BACKGROUND

The UWR, finalized by the U.S. EPA in 1995, is designed to reduce the amount of hazardous waste in the municipal solid waste (MSW) stream. The rule encourages recycling and proper disposal of certain common types of hazardous waste by reducing and streamlining the regulatory requirements on businesses that generate this type of waste (and saving businesses money to properly manage this type of waste). Before the UWR, lamps that contained mercury had to be managed as hazardous waste.

Mercury containing lamps were added to the U.S. EPA's list of universal waste that is regulated under the Resource Conservation and Recovery Act (RCRA). Regulating these lamps under the UWR rule (R.61-79-273) provides better management of them and facilitates compliance with RCRA hazardous waste requirements.

It is important to note that although handlers and transporters must meet less stringent standards for storing, transporting and collecting universal waste (including mercury containing lamps) under the UWR, the facility that recycles, treats or disposes of the universal waste must comply with all hazardous waste requirements. This management structure is designed to prevent universal waste from going to MSW landfills or incinerators and potentially being released into the environment. Mercury poses a significant threat to human health and the environment.

SOUTH CAROLINA'S MANAGEMENT OF MERCURY CONTAINING LAMPS

South Carolina has adopted the U.S. EPA's UWR. The information below discusses the requirements that need to be followed for the handling of mercury containing lamps.

SMALL QUANTITY HANDLERS (SQHs) REQUIREMENTS

- SQHs must not treat, dispose or recycle universal waste. Crushing of spent lamps is considered treatment.
- SQHs must accumulate **less than 11,000 pounds of all types of universal waste** including batteries, pesticides, thermostats and lamps at **any time in a calendar year**. If accumulation is greater than 11,000 pounds at any time, Large Quantity Handler requirements will start immediately and remain for the rest of the calendar year.
- SQHs should package lamps in a way that will minimize breakage and release of lamp fragments and residues to the environment. Broken lamps must be placed in an enclosed container (e.g., 55-gallon drum). If the broken lamps are determined to be a hazardous waste, the lamps must be managed according to all applicable hazardous waste regulations.

- SQHs must store lamps so that they are protected against the elements (cannot store lamps on the ground).
- SQHs must label stored lamps as appropriate: “Universal Waste Lamp(s)” or “Waste Lamp(s)” or “Used Lamp(s).”
- SQHs must be able to demonstrate the length of time universal waste was stored and accumulated and that these items were sent for proper recycling, treatment or disposal.
- SQHs will record recycling activities and amounts.
- SQHs will train or have trained **all** employees that handle and/or are responsible for managing universal waste. Training should include emergency procedures and responses. RCRA and/or Occupational Safety and Health Administration (OSHA) employee training generally will satisfy these requirements.
- SQHs must follow U.S. Department of Transportation (U.S. DOT) shipping requirements if universal waste is transported.
- SQHs may reject a shipment, but must ensure that the shipment will be taken or sent to a destination facility. If the shipment is not universal waste and found to be hazardous waste, DHEC’s Division of Compliance and Enforcement (C&E) must be notified by calling **(803) 896-4136**.
- SQHs are transporters if they transport universal waste.

LARGE QUANTITY HANDLERS (LQHs) REQUIREMENTS

Must follow the above requirements for Small Quantity Handlers and the following:

- LQHs accumulate 11,000 pounds or more of **all types of universal waste at any time in a calendar year**. LQHs can re-evaluate handler status each new calendar year.
- LQHs need to provide notification of universal waste activities to DHEC’s Division of C&E and get a U.S. EPA identification (ID) number. An ID number must be obtained before the accumulation reaches the 11,000-pound limit. Call DHEC’s Division of C&E at **(803) 896-4136** for more information.
- LQHs need to have **all** facility employees thoroughly familiar with emergency procedures and responses to releases/spills. Employee training under RCRA/OSHA generally will satisfy these requirements.
- LQHs are required to keep records of shipments of universal received or shipped (invoices or other documents). Keep records for at least three years from date of receipt of shipment.

TRANSPORTERS REQUIREMENTS

- Transporters must only transport between handlers or to a destination facility.
- Transporters must not treat, dispose or recycle universal waste. Crushing of spent lamps is considered treatment.
- Transporters have a 10-day limit for universal waste at a transfer facility. After this 10-day limit, the transporter becomes a handler.
- Transporters must store lamps so that they are protected against the elements and not stored directly on the ground.
- Transporters must comply with all U.S. DOT requirements.
- Transporters must package lamps in a way that will minimize breakage and releases of lamp fragments and residues to the environment. Broken lamps must be placed in an enclosed container (e.g., 55-gallon drum). If the broken lamps are determined to be a hazardous waste then they must be managed according to all applicable regulations. Call DHEC’s Division of C&E at **(803) 896-4136**.

NOTE: Any interstate transport of universal waste through states that have not adopted the UWR must follow **that state’s regulations**, which may include manifesting. The generator or initiating facility must provide the manifest to the first hazardous waste transporter.

DESTINATION FACILITIES (DFs) REQUIREMENTS

- DFs may treat, dispose or recycle universal waste.
- DFs are subject to all current applicable requirements for a hazardous waste treatment, storage and disposal facility under RCRA, which may include having a RCRA permit.
- DFs may be exempt from permitting if the lamps are recycled without storing. These facilities still need to comply with all other regulations. For information, call DHEC’s Division of C&E at **(803) 896-4136**.
- DFs are prohibited from sending or carrying universal waste to other handlers and destination facilities.
- DFs must keep records of universal waste received for at least three years.
- DFs are subject to all applicable land disposal restrictions.

NOTE: Universal waste lamps **do not** have to be included in a facility’s determination of hazardous waste generator status.

