

UNIVERSAL WASTE HANDLING FACT SHEET

UNC-Charlotte Environmental Health & Safety Office



Introduction

The US EPA finalized the *Universal Waste Rule (UWR)* in the May 1995 Federal Register. Many states have since adopted it, including North Carolina.

Universal Waste (UW) is a general term used to describe wastes that are generated by a large, diverse population, including businesses and unregulated households. This term is intended to be broad so that a wider range of wastes may be managed under less stringent requirements. The **UWR** is intended to promote recycling as well as the proper disposal of wastes, if recycling is not a viable option, by easing certain regulatory requirements. The collection of universal wastes will keep these wastes out of the municipal waste streams. The different categories include spent batteries, mercury containing fluorescent bulbs and lamps, used oils, mercury containing equipment including thermostats, and some used pesticides.



Procedures

Each particular UW stream has a state mandated procedure for management while in storage as well as methods of disposal. Once accumulation begins on a particular UW waste stream, the University has one year to dispose of it.

For information on the procedure for a particular waste stream please see below.

Used fluorescent light bulbs that are to be crushed are to be kept in closed containers and must be labeled with the words “USED LIGHT BULBS – HAZARDOUS WASTE”, dated when full and the department name placed on the container. The hazardous waste bulbs are then to be immediately transported to the bulb crusher for crushing.



All other used intact Hg lamps NOT to be crushed are to be labeled as “USED LIGHT BULBS – UNIVERSAL WASTE”. Types of universal waste bulbs collected are: high pressure sodium/mercury bulbs, projector bulbs, instrument bulbs that contain mercury, CFL’s, and halogen bulbs that contain mercury. **Bulbs are NOT to be broken – keep them intact within the containers.** Used light bulbs must be checked in at the Facilities Management (FM) building’s old automotive shop (gray metal building) across from parking services. Zone 6 supervisor is the coordinator for Used Light bulb crushing.

Used oil collection is completed by the Automotive shop and the Duke Hall Motorsports Departments. Collection and storage



containers containing used oil must be prominently marked with the words “**USED OIL**” on the container. ***DO NOT Label the containers as “Waste Oil” due to it being a direct violation of EPA regulations.*** Hazardous wastes, such as solvents, brake cleaner, etc. must not be placed into used oil containers. Do not place refrigerant oil (from chillers, etc) into the used oil containers. Oil containing refrigerant is handled as a hazardous waste due to the halogen (chlorine and fluorine) ingredients in refrigerants.



Note that these collection areas are for the respective departments only. If you require disposal of used oil, please contact EH&S at 7-1111 for guidance.

Light ballasts are to be disposed of through the University Recycling Office, other than PCB ballasts. All Non PCB ballasts have the words “NON PCB” or “NO PCB’s” on the ballast housing. Generally, all pre-1978 ballasts contain PCB’s unless otherwise marked. Place all PCB ballasts in a secondary container and contact the EH&S Office at 7-1111 for disposal.



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Alkaline, Ni-cad and Lithium nickel hydride batteries should be separated by battery type whenever possible. Nicad and Lithium Hydride batteries need to have the battery terminals taped to prevent short circuiting during transport. 9 volt alkaline batteries also need to have the battery terminals taped to prevent short circuiting during transport. AA, AAA, C and D alkaline batteries DO NOT require the battery terminals to be taped. The Recycling Office coordinates collection of this group of batteries.



Lead Acid batteries (car/truck/golf cart) these larger size batteries are to be taken to the University Annex 1 ("J" Building) – Automotive and Grounds Shops for shipment to the recycler. Small lead acid (computer power backup, fire panel, exit sign, etc) batteries are handled by EH&S. Tape the Positive and Negative terminals on small lead acid batteries with packing/electrical/duct tape to prevent short circuiting. Place small lead acid batteries in a sturdy container, mark the words "used battery" and "universal waste" on the container. The batteries can be placed at the Solvent Storage bunker behind McEniry AFTER coordinating with the EH&S department to let them know that you are dropping them off by calling 7-1111.



Mercury containing pressure switches/gauges/thermostats are handled as a Universal Waste. Do Not break the mercury glass bulb (ampoule)...to do so will let mercury leak out. Contact the EH&S Office at 7-1111 when these type of items are to be disposed. DO NOT dispose of Mercury switches in the regular trash.



Keyboards and other computer equipment are NOT considered hazardous or Universal wastes and have to be surplus through UNC-Charlotte.