

Revision Responsibility: Director of Facility Services and Safety
Responsible Executive Officer: Vice President for Financial & Administrative Services

Source / Reference: Tennessee Division of Waste Management Policy

PURPOSE

The purpose of this Waste Management Plan is to ensure that all hazardous waste, universal waste, used oil, medical waste, PCB waste, consumer electronic waste, special waste, and any additional wastes encountered at Columbia State are properly and safely managed from its generation through handling, storage, and preparation for transportation. This program has also been written to define responsibility and procedures for disposal of Hazardous Waste and Universal Waste in accordance with all Federal and State statues promulgated by the United States Environmental Protection Agency (EPA) and the Tennessee Department of Environment & Conservation (TDEC).

POLICY

I. General Information

This plan has been developed by Columbia State Community College to establish a program to comply with the regulations set forth by the Tennessee Department of Environment and Conservation, the U.S. Environmental Protection Agency, as well as local authorities.

Columbia State Community College is currently operating as a Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste and maintains Environmental Protection Agency (EPA) Facility ID: TNR000008276. As such, the hazardous waste management procedures detailed in this plan have been prepared to define the requirements of a Conditionally Exempt Small Quantity Generator of Hazardous Waste.

Columbia State manages some of its applicable hazardous waste as Universal Waste. This allows for longer storage times and the reduced burden of regulations on wastes such as used lamps, used batteries, used mercury-containing equipment, and paint and paint-related material. Columbia State is a Small Quantity Handler of Universal Waste.

This Waste Management Plan addresses the total life cycle of hazardous waste generated at and disposed by Columbia State. Within this plan is guidance on classifying and analyzing waste, storing hazardous waste, inspecting hazardous waste storage areas, disposing of hazardous waste, complying with a waste minimization program, training employees on hazardous waste, establishing contingency plans, and preparing any state or federal required reporting.

This Waste Management Plan also documents procedures and practices for the management of universal waste, used oil, medical waste, polychlorinated biphenyl (PCB) waste, aerosol cans, and consumer electronic waste.

II. Scope/Responsibility

All campuses and all departments shall coordinate all waste disposal activities through the Facility Services Department. All questions in regards to proper disposal of waste shall be directed to the Facility Services Department.

III. Laboratory Chemical Waste Handling and Disposal

A. Hazardous Waste Determination

1. When a member of the faculty determines that a new chemical waste will be generated, it is the faculty member's responsibility to notify the Director of Facility Services and Safety of the new waste being generated.
2. The Director of Facility Services and Safety will coordinate with the faculty member to determine the contents, quantity, and physical state of the chemicals that have been deemed waste.
3. The Director of Facility Services and Safety will be responsible for determining if the waste meets the regulatory definition of being a hazardous waste as defined in the Resource Conservation and Recovery Act.

B. Handling of Waste

1. Wastes Generated on Continuous Basis
 - a. If a faculty member determines that any chemical waste will be generated on an ongoing basis, the faculty member should contact

- the Director of Facility Services and Safety to determine if a satellite accumulation area can be designated for that laboratory or area.
- b. The Director of Facility Services and Safety will determine the appropriate regulatory containerization for that waste, the proper labeling of the container, and any appropriate safe handling procedures for the collection of this waste.
 - c. The waste generating faculty member will be responsible for procuring the correct disposal containers for that waste and obtaining any required safety equipment.
 - d. The waste generating faculty member will be responsible for ensuring that the disposal container is properly labeled.
 - e. Only one container less than fifty-five (55) gallons may be kept in the designated satellite accumulation area. The waste generating faculty member will be responsible for ensuring that no more than one container is stored in this satellite area.
 - f. Once the container in the satellite accumulation area is filled, the waste generating faculty member will be responsible to immediately submit a work order to the Facility Services Office to pick-up this filled container.
2. Waste Generated Infrequently
- a. If a faculty member determines that a waste has been generated due to surpassing an expiration date, contamination, laboratory cleanup, or for any other reason, the waste generating faculty member shall contact the Director of Facility Services and Safety to evaluate this chemical.
 - b. The Director of Facility Services and Safety will determine the appropriate regulatory containerization for that waste, the proper labeling of the container, and any appropriate safe handling procedures for the collection of this waste.
 - c. The waste generating faculty member shall immediately submit a work order to the Facility Services Office to pick-up the chemical.

C. General Laboratory Chemical Waste Handling Rules

1. Accumulate waste in containers that are clean, in good condition, chemically compatible, and appropriate for the quantity accumulated.
2. If small quantities are accumulated in larger containers, do not combine different kinds of waste unless you know that they are compatible and are acceptable for disposal in the combined form.
3. Flammables must be stored away from oxidizers, water reactive chemicals away from moisture, acids away from bases, etc.
4. Containers must be within a secure area where any leak will not cause harm to the environment.
5. Containers must be closed at all times unless waste is being actively added to or removed from the container.
6. Label the waste container with the date accumulation started, identity of the contents with no abbreviations, quantity of each constituent, and the words "Hazardous Waste."
7. Use Hazardous Waste tags to properly identify your hazardous waste.
8. Install and maintain emergency equipment to be used in case of a spill.

IV. Biological and Medical Waste Handling and Disposal

A. Definition of Biological and Medical Wastes

For purposes of this policy, biological and medical waste materials include but are not limited to:

1. Cultures (e.g., culture dishes and devices used to transfer, inoculate, and mix cultures);
2. Bulk Human Blood and blood products or other body fluids;
3. Contaminated sharps (e.g., needles, syringes, pipettes, broken glass, scalpel blades);
4. Contaminated animal carcasses.

B. Proper Handling and Packaging of Sharps Waste

1. The Health Science Department generates contaminated sharps, which must be properly handled and packaged to be safely handled for disposal.

2. The waste generating faculty member shall ensure that all waste sharps are placed in sharps containers, which are specifically designed for the safe handling of contaminated sharps. These containers must be labeled with the standard biological waste symbol.
3. When sharps container are full, the waste generating Health Sciences Faculty member shall submit a work order to the Facilities Office to pick-up the sharps container.
4. The Facility Office will load these containers into appropriate shipping containers, which are provided by the biological and medical waste disposal contractor.

C. Proper Handling of Medical Biological Waste

1. Medical Biological Waste may be generated by one of the Colleges Academic Departments for instructional reasons or by the Facilities Office due to clean up of first aid accidents. This waste must be appropriately packaged and labeled to be safely handled.
2. All non-sharp Medical Biological Waste shall be placed in the red disposal bags, which are labeled biohazard. These bags shall be placed in labeled containers specifically designed for containing medical and biological waste.
3. When these labeled containers are filled, the generator of this waste shall submit a work order to the facilities office to pick up this waste.

V. Photographic Chemicals

- A. Used photographic fixer has been determined to be a hazardous waste and should be collected for disposal.
- B. The Facilities Offices has provided a fifteen (15) gallon drum to collect waste photographic fixer for disposal. This drum must be labeled with the words:
 1. Hazardous Waste
 2. Liquid, N.O.S, (Silver)
- C. Once the waste collection drum is filled, the waste generating faculty member shall immediately put the date that the drum was completely filled on the drum label.

- D. The waste generating faculty member shall then submit a work order to the Facilities Office to pick-up this waste collection drum.

VI. Used Batteries

A. General Information

- 1. Used batteries are considered universal waste if properly recycled.
- 2. Columbia State will properly recycle all used batteries, which are used on-site.
- 3. All used batteries shall be taken to the Facilities office for proper recycling.

B. Proper Handling and Packaging

- 1. All used batteries brought to the Facilities Office will be properly stored in designated storage containers.
- 2. All designated storage containers will be labeled with the words "Waste Batteries", and the accumulation state date will be written on the container label.

VII. Consumer Electronics (computer monitors, CPUs, printers, copiers, facsimiles, televisions, VCR, stereos, etc.)

- A. The disposal of consumer electronics is regulated by the Tennessee Department of Environment and Conservation.
- B. These items may not be disposed of in the regular trash.
- C. Computer related equipment classified as waste will be disposed of by the Information Technology Department. This equipment is disposed of through an approved electronic waste disposal company. The Information Technology Department will collect and maintain certificates of disposal for any computer related electronic waste disposed of through their department. Copies of these certificates will be submitted to the Facility Services Department for recordkeeping.
- D. The waste generating faculty or staff member for all other consumer electronic waste shall submit a work order to pick-up waste consumer electronics.

- E. The Facilities Office will prepare the units for proper disposal or sale.
- VIII. Lamps (fluorescent, high intensity discharge, neon, mercury vapor, metal halide, and high pressure sodium)
- A. Fluorescent light tubes contain a small amount of mercury and are regulated as a universal waste. In order to ensure proper disposal, campus policy requires all lamps, except for regular incandescent bulbs, including 'green-tipped' fluorescent tubes to be recycled. Under no circumstance are they to be disposed in the regular trash.
 - B. The Facilities Office is responsible for changing and maintaining the lighting systems throughout the campus.
 - C. The Facilities Office will collect all used lamps.
 - D. Below outlines the procedures to manage these wastes in order to comply with federal, state and local regulations:
 - 1. Package the lamps in proper containers (i.e. original boxes or boxes/tubes purchased from the disposal vendor)
 - 2. Packages must be kept securely closed (i.e. taped shut).
 - 3. Do not stack or lean fluorescent tubes prior to packaging; this may cause them to break and release mercury.
 - 4. Maintain all lamps, new and used, in a manner that will not jeopardize packaging integrity.
 - 5. Label packages of spent lamps with a universal waste label.
 - 6. Check the type of waste box on the label, and mark the date accumulation begins.
 - 7. Universal waste lamps may not be stored for more than one year.
 - 8. Universal waste lamps shall be stored in secure, designated areas.
 - 9. Assigned facilities personnel transport lamps from campus buildings to a centralized location.
 - 10. Lamps must be disposed of through an approved vendor that utilizes a bill of lading, not a hazardous waste manifest. The Director of Facility Services and Safety will be required to sign the bill of lading.
 - 11. Paperwork associated with universal waste lamps pick-ups must be maintained by Facilities Office for a minimum of three years. This includes the original bill of lading, a copy of the bill of lading signed by

the vendor stating that they received the shipment and a certificate of destruction/recycling.

IX. Light Ballasts

- A. Light ballasts are divided into two categories PCB and Non-PCB (i.e. mineral oil).
- B. Light ballast disposal is dependent on the presence of polychlorinated biphenyls (PCB) in the ballast oil. In 1979 the Toxic Substance Control Act prohibited the manufacturing of light ballasts containing PCBs.
- C. Ballasts manufactured after 1979 should have a "Non-PCB" label affixed to the outside of the ballast. Any ballast manufactured prior to 1980 must be classified as PCB regardless of labels. If ballast is not dated or labeled, it must be considered PCB.
- D. Below outlines the procedures to manage waste ballasts in order to comply with federal, state, and local regulations:
 - 1. Always wear latex or nitrile gloves when handling ballasts.
 - 2. Package PCB and Non-PCB ballasts separately.
 - 3. Place ballasts in containers approved by the Director of Facilities Services and Safety.
 - 4. Mark the outside container with a Non-RCRA regulated waste label. If the container contains PCB ballasts, a yellow "PCB" shipping label must be applied to the ballasts containing PCBs.
 - 5. Keep containers closed at all times except when being filled.
 - 6. Store ballasts in secure, designated areas that are properly marked.
 - 7. The Facilities Office is responsible for disposing of ballasts using a Columbia State approved vendor
 - 8. Paperwork associated with ballasts pick-ups are maintained by Director of Facility Services and Safety for a minimum of three years.
 - 9. This includes the original ballast manifest, a copy of the ballast manifest signed by the vendor stating that they received the shipment.

X. Mercury Thermostats, Thermometers, or Mercury Containing Equipment

A. Intact Equipment

- 1. DO NOT attempt to disassemble the device/equipment.

2. Collect mercury-containing devices and equipment in an appropriate container (i.e. screw-top jar or zip-lock bag). Do not mix broken mercury apparatus with intact items.
3. Keep container securely closed.
4. The waste generating faculty or staff member shall submit a work order to the Facility Services Office to pick-up these devices.
5. The Facilities Office shall place the equipment in a container approved by the Director of Facility Services and Safety. This container shall be labeled with a Universal Waste Label.
6. The mercury containing equipment shall be kept in the College's waste collection area located in the Facility Services Building.
7. The Facilities Office will dispose of the mercury containing equipment through an approved vendor.

B. Broken Equipment

1. Collect broken mercury-containing devices and equipment in an appropriate container (i.e. screw-top jar or zip-lock bag). Do not mix broken mercury apparatus with intact items.
2. Keep container securely closed.
3. The waste generating faculty or staff member shall submit a work order to the Facility Services Office to pick-up these devices.
4. The Facilities Office shall place the equipment in a container approved by the Director of Facility Services and Safety. This container shall be labeled with a Universal Waste Label.
5. The mercury containing equipment shall be kept in the College's waste collection area located in the Facility Services Building.
6. The Facilities Office will dispose of the mercury containing equipment through an approved vendor.

XI. Used Oil

- A. The Facilities Office sporadically generates Used Oil.
- B. These oils include: motor oil, heating oil, refrigerator oil, hydraulic oil, transformer oil, and lubricating oils.
- C. These oils are regulated both by the United States Environmental Protection Agency and the Tennessee Department of Environment and Conservation.

- D. Below outlines the proper procedure for managing these used oils.
1. The Facilities Office will collect used oil in Department of Transportation (DOT) approved containers such as 5 and 30 gallon drums. These drums shall never exceed 30 gallons due to the fact that a 55 gallon drum would require a formal modification to the Columbia State Spill Prevention Control and Countermeasures (SPCC) plan.
 2. Different types of oil should not be co-mingled (i.e. don't mix refrigeration oil and motor oil.)
 3. Label containers with a used oil label.
 4. Complete label with the date used oil accumulation began and location information.
 5. Store containers on secondary containment such as a spill pallet.
 6. Keep container securely closed except for when adding or removing used oil.
 7. Transformer, mineral, and refrigerant oils must be disposed of through the director of Facility Services and Safety.
 8. Motor, hydraulic, and heating oils must be sent for recycling if free of PCBs through an approved vendor.
 9. Paperwork for oils recycled through a vendor must be kept on file in the Director of Facility Services and Safety's Office for a minimum of three years. This includes bill of lading.

XII. Used Oil Filters

- A. The Facilities Office generates used oil filters in the process of maintaining grounds equipment.
- B. The proper handling of used oil filters must be implemented to appropriately manage these used oil filters.
- C. Used Oil Filter Handling Procedure
1. Drain filters into appropriate used oil container. A hot drain procedure should be utilized.
 2. The filter should be drained for a minimum of 12 hours.
 3. Once fully drained, the filters shall be placed in the metal recycling container.
 4. These filters shall be recycled by an approved recycling vendor.

XIII. Aerosol Cans (not completely empty)

- A. Waste aerosol cans that are not completely empty are collected in the Facilities Building. Aerosol cans may be dropped off at the Facilities Building during normal weekdays between the hours of 7:00 A. M. and 3:30 P. M.
- B. If a waste generating faculty or staff member has multiple waste aerosol cans, that faculty or staff member shall submit a Facility Services work order to have the cans picked up.
- C. The Facility Services Office will collect these cans in a container approved by the Director of Facility Services and Safety.
- D. This container shall be marked with the words "Hazardous Waste".
- E. The Facility Services Office shall dispose of through cans through an approved vendor.
- F. Note: If the aerosol is completely empty, it may be disposed of in the regular trash. However, aerosols may not be intentionally emptied in order to dispose of in the regular trash.

XIV. Antifreeze

- A. Collect antifreeze in Department of Transportation (DOT) approved 5- or 55-gallon containers.
- B. Label as "Waste Antifreeze."
- C. Keep containers securely closed and in secondary containment in the Facility Services Building.
- D. The Director of Facility Services and Safety will dispose of waste antifreeze through an approved vendor for waste antifreeze.

XV. Other Discarded Materials

- A. If it is determined that a material not addressed in this document will require disposal, the waste generating faculty or staff member shall contact the Director of Facility Services and Safety.

- B. The Director of Facility Services and Safety will determine what regulatory category shall be applied to the waste.
- C. The Director of Facility Services and Safety will determine the proper containerization of the waste as well as the proper labeling.
- D. The Director of Facility Services and Safety will identify the proper disposal method for this waste.

XVI. Personnel Training

- A. The Director of Facility Services and Safety in conjunction with each functional department of the College have made a determination of the required regulatory training.
- B. This assessment identifies individuals that will require annual waste training.
- C. Additionally, some individuals identified during this assessment will receive training on the Department of Transportation Hazardous Materials regulations. Only those individuals who have completed this training requirement are to sign hazardous waste manifests on behalf of CSCC.
- D. Copies of the training certificates will be retained for at least a period of three years in the Director of Facility Services and Safety's Office.
- E. A copy of this training assessment is maintained in the Director of Facility Services and Safety's Office.

Revised: February 3, 1993; May 28, 2001 (new policy format); January 30, 2012 (new policy format and updated titles); August 10, 2015 (modification of entire procedure; addition of universal waste, laboratory chemical waste, biological and medical waste, photographic chemicals, used batteries, consumer electronics, lamps, light ballast, mercury containing equipment, used oil and oil filters, antifreeze, aerosol cans, and other waste disposal)