

<b>UT Health Science Center:</b> <b>EC5400 – HAZARDOUS WASTE DISPOSAL</b>	
<b>Version 1</b>	<b>Publication Date: 06/14/2022</b>

<b>No./Title:</b> EC5400 – HAZARDOUS WASTE DISPOSAL	<b>Resp. Office:</b> Campus Safety and Emergency Management / Research Safety	<b>Effective Date:</b> 6/30/2017
<b>Category:</b> ENVIRONMENTAL COMPLIANCE	<b>Last Review:</b> New	<b>Next Review:</b> 6/30/2020
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<b>Related Policies:</b> <a href="#">UT System Safety Policy SA0100</a> <a href="#">UT System Safety Policy SA0700</a>		
<b>Forms:</b> UTHSC Hazardous Waste Minimization Plan UTHSC Hazardous Waste Disposal Plan UTHSC Laboratory Close Out Plan UTHSC Spill Prevention and Response Plan UTHSC Hazardous Waste Contingency Plan		

### **Purpose, Applicability, and Scope:**

It shall be the policy of the University of Tennessee Health Science Center to comply with all State and Federal Regulations dealing with the safe transport and disposal of Hazardous Waste and Chemicals.

The Resource Conservation and Recovery Act (RCRA) regulations establish basic hazardous waste management standards for persons who produce hazardous waste, called hazardous waste generators. These standards are found in title 40 of the Code of Federal Regulations (CFR) in part 262 and at 40 CFR §261.5. The generator regulations ensure that hazardous waste is appropriately identified and handled safely to protect human health and the environment, while minimizing interference with daily business operations.

This policy is applicable to all students, faculty, staff, and contracted entities within University of Tennessee Health Science Center Facilities department, clinics, labs, patient care units, Colleges and departments, and any entity that generates a waste stream.

### **ABBREVIATIONS, ACRONYMS, and DEFINITIONS:**

- 1) **Lab Closing** – Lab is closing and/or everything being removed for renovation due to retirement, loss of funding, death, etc.
- 2) **Lab Securing** – Lab space and contents are changing ownership due to retirement, loss of funding, death, etc.
- 3) **Lab Moving** – Lab is relocating to another room, building, UT campus or other University

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- 4) **Lab Expansion** – Lab is acquiring new space and keeping the original space
- 5) **Hazardous Waste** - Waste that is dangerous or potentially harmful to our health or the environment. Hazardous wastes can be liquids, solids, gases, or sludges. They can be discarded commercial products, like cleaning fluids or pesticides, or the by-products of manufacturing processes. Hazardous materials in cleaning products are encountered on a daily basis, and excess or expired materials may be treated as hazardous wastes. Whenever there is a question regarding a chemical product being used by the custodial staff, it should be directed to the immediate supervisor for resolution. Campus Safety will assist in this process. Does not include *biohazardous wastes or radioactive wastes*.
- 6) **Chemical Wastes:** - Any chemical that exhibits hazardous characteristics as defined by federal and Tennessee rules and regulations, is unusable or unwanted in any way and poses a potential hazard to individuals, the environment or public health is a chemical waste. Examples:
- Waste and opened surplus chemicals
  - Expired or off-specification chemicals •
  - Carcinogens and cytotoxic (antineoplastic) agents
  - Prescription drugs and controlled substances
  - Empty chemical drums and other chemical containers with a capacity of 10 gallons and greater
  - Thermometers and other items containing mercury
  - Non-returnable gas cylinders and lecture bottles or pressurized chemicals
  - Residue of spill clean-up materials-contaminated rags and absorbents
  - Non-radioactive lead shielding, lead blocks and lead scrap • Photographic film processing solutions
  - Used oil --- motor, vacuum pump, lubricating
  - Pesticides
  - Used solvents
  - Batteries
  - Paint, paint thinners, brush cleaners, linseed oil, thinner contaminated rags
  - Heavy metal containing waste or products (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver)
- 7) **Radiological Wastes:** Radioactive waste can be classified as solid, liquid, gaseous or biological. In addition to being classified as radioactive waste, some wastes may also meet the definition of an EPA hazardous waste. This type of waste is considered a

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"mixed waste" and must be properly disposed of according to both radiation safety and hazardous waste regulations.

Each type of radioactive waste requires different procedures for handling, reporting and disposal. The Radiation Safety Committee must approve all waste disposal procedures. The definitions and disposal procedures for radioactive waste can be found in the UTHSC *Radiation Safety Handbook*.

Naturally-Occurring-Radioactive-Materials (NORM) for example uranium, thorium, samarium compounds must be disposed of through the radioactive waste program.

- 8) **Regulated Medical Wastes (RMW)**: Regulated medical waste (RMW), also known as 'biohazardous' waste or 'infectious medical' waste, is the portion of the waste stream that may be contaminated by blood, body fluids or other potentially infectious materials, thus "***posing a significant risk of transmitting infection***".

The definitions and disposal procedures for potentially infected waste, and bloodborne pathogens can be found under the UTHSC Regulated Medical Waste Policy.

- 9) **Universal Waste** - a category of waste materials designated as "hazardous waste", but containing materials that are very common. It is defined in 40 C.F.R. 273.9, by the United States Environmental Protection Agency but states may also have corollary regulations regarding these materials. Includes batteries, pesticides, mercury-containing equipment and bulbs (lamps).

## REPORTING OF ABUSE

The inappropriate disposal of potentially hazardous chemicals is illegal and can have serious repercussions. The University of Tennessee Health Science Center is firmly committed to the safe and proper disposal of all its hazardous wastes. Moreover, the University is committed to promoting waste minimization and pollution prevention in all aspects of its activities.

Under no circumstances should hazardous wastes be discharged into the environment in an effort to "save money," as a matter of "convenience," or due to carelessness in planning, preparation, operations or design. Assistance in preventing or resolving such issues is always available from UTHSC Campus Safety or UTHSC Research Safety.

If you suspect or have knowledge of the inappropriate disposal of potentially hazardous materials or deviations from the advice and guidance set forth in this policy, you should immediately report these concerns to Director Campus Safety or Director Research Safety.

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No employee or student of UT Health Science Center shall be discriminated against or be subject to any reprisal for reporting suspected violations of the University's policies on the disposal of potentially hazardous materials.

UTHSC Campus Safety or Research Safety will always take waste (regardless of age) if it is offered in the course of routine operations. Campus Safety/Research Safety will push back and seek budget relief from the Department if:

- 1) A lab suddenly closes due to a PI departure and leaves a mess
- 2) A lab in transition to closure (often retirement) does not divest themselves of waste over time toward the last day-leaving a mess.
- 3) The lab has been holding on to problematic items (toxic gases, for example) where it has been documented that this a liability (yet they have been unresponsive) and then suddenly decide to relegate the cleanup and cost to Campus Safety.

## **REQUIRED PLANS, GUIDELINES, and STANDARD OPERATING PROCEDURES**

The University of Tennessee Health Science Center manages all waste in accordance with federal, state, and local regulations. Disposal procedures for specific waste streams generated must have procedures in conjunction with policy in order to meet regulations.

The University of Tennessee Health Science Center, and any entity that generates a waste stream must have a plan for handling wastes. The below is a set of examples of required plans.

1. **Preparedness and Prevention Contingency Plan** - To plan and provide effective response by waste oil generators and burners to emergencies and accidents for any situation dealing with the public health, safety, and the environment. Generated by Campus Safety and Research Safety
2. **Hazardous Waste Disposal Plan** – This plan will be generated by Campus Safety
3. **Laboratory Close Out Plan** – This plan consists of Closeout, and Move in/out procedures and requirements. Generated from Research Safety
4. **Waste Minimization Plan** -Certify steps taken to reduce or eliminate the generation of hazardous waste. Generated by Campus Safety and Research Safety
5. **Spill Prevention and Response Plan** - The spill plan is designed to handle the requirements for associated hazardous substances and prevent their release. The general spill response procedure is to stop the source of the spill, contain any spilled material and clean up the spill in a timely manner to prevent accidental injury or other damage. Generated by Campus Safety, Research Safety.

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## **WASTE MINIMIZATION:**

The Environmental Protection Agency's (EPA's) policy for hazardous waste management places the highest priority on waste minimization. The University must annually report to the government on efforts it has made to reduce hazardous wastes.

Waste reduction information and procedures can be found in the UTHSC Hazardous Waste Minimization Plan.

## **Recordkeeping:**

All Hazardous Waste plans and procedures are to be held onsite, and available to all faculty, staff, and students that request them for familiarization and review. Plans are to be reviewed and updated at least annually.

Training certificates shall be held locally with the generator. These certificates shall be available for review by Campus Safety or Research Safety.

## **Training and Information Requirements**

- A. University entities are to ensure training compliances are current and up to date. The University will provide resources for training, and any future guidance on regulatory change.
- B. Training will be assigned by Campus Safety or Research Safety depending on need, and role of anyone that uses or handles hazardous wastes/radiological wastes

## **Attachments:**

- UTHSC Hazardous Waste Minimization Plan
- UTHSC Hazardous Waste Disposal Plan
- UTHSC Laboratory Close Out Plan
- UTHSC Spill Prevention and Response Plan
- UTHSC Hazardous Waste Contingency Plan

## **Associated Standards:**

- *Spill Prevention, Control, and Countermeasure (SPCC) Regulations* - Section 311(j)(1)(C) of the Clean Water Act as amended by the Oil Pollution Act of 1990, 33 U.S.C. §1251-1387
- *Protection of the Environment* - 40 CFR 112

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- *Hazardous Materials, OSHA General Industry- 29 CFR 1910 subpart H*
- *Toxic and Hazardous Substances, OSHA General Industry – 29 CFR 1910 subpart Z*
- *Hazardous Waste Operations and Emergency Response, OSHA Final Rule, 29 CFR Parts 1910 and 1926.*
- *National Oil and Hazardous Substances Pollution Contingency Plan, 59 FR 47384*
- *Tennessee Department of Environment and Conservation, Special Waste Guidance State of Tennessee, (TDEC Rule 0400-11-01-.04(2)(k)(4)),*