Policy

In order to reduce hazards to employees, property and the environment in the event there is an incident involving hazardous waste materials at the University of Tennessee, Knoxville (UTK), the following contingency plan has been developed.

Scope

This plan will be implemented in the event of a fire, explosion, or release of hazardous material or waste that occurs at UTK, and which threatens public health or the environment. The appendices to the plan list the EHS emergency coordinators and the emergency equipment available for response.

Acronyms

EHS – Environmental Health and Safety
RSO – Radiation Safety Officers
SERF – Science and Engineering Research Facility
WLS- Walters Life Science

Emergency Response Actions Facility Personnel Will Take

Spill Procedures

The following procedures should be followed in the event of a hazardous material or waste spill:

1. If possible, shut off any sources of ignition and/or the source of the spill without endangering yourself.

2. Evacuate the immediate area, closing doors.

3. If building evacuation is necessary, pull the emergency pull station as you exit the building. Call 911. Be prepared to provide the following information: your name, the specific location of the spill, the name of the substance spilled (if known), and the quantity spilled (if known).

4. Wait outside the affected area for UT Police, Knoxville Fire Department, or representatives from EHS or the RSO.
**Fire/Explosion Procedure**

The following procedures should be followed in the event of a fire or explosion:

1. Rescue anyone in immediate danger, if it is safe to do so.
2. Pull the nearest pull station.
3. Proceed to the nearest available exit by following exit signs.
4. Close doors as you leave.
5. Call 911
6. Do not return for any reason once you have exited the building.
7. Assemble with other building occupants at your designated area.
8. Once the building or area is considered safe, you will be allowed to re-enter the building or area.

**EHS Emergency Responsibilities**

When a hazardous substance/waste emergency has been identified, one of the EHS emergency coordinators should be contacted immediately using the safety one-call number (974-9586).

**EHS Emergency Duties**

The following is a list of the EHS emergency duties during a fire, explosion or chemical spill involving hazardous waste:

1. Available 24 hours a day to respond to an emergency within a short period of time.
2. Responsible for coordinating all emergency response measures.
3. Familiar with:
   a. all aspects of the facility’s contingency plan
   b. all facility operations and activities
   c. locations and characteristics of wastes handled
   d. location of all hazardous waste records within the facility
e. facility layout

f. community and facility resources that can be used to manage a release

4. Authority to commit the resources needed to carry out the contingency plan.

**Emergency Procedure**

The emergency procedures which the EHS emergency coordinators will follow in case of a fire, explosion or chemical spill:

1. Activate internal facility alarms and communications systems if necessary.

2. Consult the university’s Spill Prevention Control and Countermeasures (SPCC) plan notification and associated requirements.

3. If facility personnel cannot contain the release of hazardous material, notify the Knoxville Fire Department HAZMAT Team by calling 911. If needed, contact Tennessee Department of Environmental Conservation at 594-6035. Contact EnSafe Inc. at 888-590-8885, or other qualified vendor on contract with the state or UT if site clean-up will be necessary.

4. If a release has occurred, identify the source; characterize the amount and extent of any released material by record review or chemical analysis.

5. Assess the hazards to human health and the environment, considering all direct and indirect effects.

6. If it is determined that the facility has had a fire, explosion or release which could threaten human health or the environment outside the facility:
   
   a. Determine if local evacuation may be necessary, and if so, notify the appropriate local authorities and be available to assist local authorities with evacuation measures.

   b. Determine if a reportable threshold has been exceeded. Contact the EHS Director or Team Leader if a reportable threshold has been exceeded.

   c. Notify the National Response Center (800-424-8802) with the following information if a reportable threshold has been exceeded:

      - Emergency Coordinator’s and name and phone number
      - Facility name and address
      - Time and type of incident

**Hazardous Waste Contingency Plan  EC 3**
- Quantity of material(s) involved to the extent known
- Extent of any injuries
- Possible hazards to human health and the environment outside the facility

7. Take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste or chemicals at the facility. These measures will include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

8. If the facility stops operations in response to a fire, explosion, or chemical release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

9. Immediately after the emergency, the EHS emergency coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soils, or surface water, or any other material that results from a release, fire, or explosion at the facility.

10. Ensure that in the affected areas of the facility, no waste that may be incompatible with the release material is stored until the cleanup procedures are completed and all emergency equipment is cleaned and restored to a usable condition.

**Notification and Recordkeeping**

1. Within 15 days after the incident, complete a written report including the following information:
   a. Date
   b. Name and quantity of material(s) involved
   c. Extent of injuries, if any
   d. Assessment of actual or potential hazards to human health or the environment, if applicable
   e. Estimated quantity and disposition of the recovered material that resulted from the incident.

2. A record of all reported hazardous waste emergencies is kept on file in the EHS Office. The files includes the date, name of person reporting the incident, the name and amount of material involved, and actions taken. The files will be maintained a minimum of three years from the date of occurrence.

3. The contingency plan will be reviewed and will be revised under the following conditions:

**Hazardous Waste Contingency Plan  EC 3**
a. Applicable regulations change

b. The plan fails during an emergency

c. The facility changes in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency

d. The list of emergency coordinators or equipment changes

e. Periodically (e.g. annually)

f. Upon request from regulatory agency

**Building Evacuations**

When a building has an emergency evacuation, the UT Police will direct the movement of evacuees to a safe location.

**Plan Posting**

The Contingency Plan for Hazardous Materials and Waste Releases shall be kept on the EHS website, posted at the SERF and WLS waste chemical storage rooms, and in the EHS emergency management one-call notebook.
Appendix I

**EHS Emergency Coordinators (HAZWOPER Certified)**

Mr. Charles Payne, Health and Safety Team Leader  
Department of Environmental Health and Safety  
Office - (865)974-5084  
Primary

Ms. April Case, Sr. Environmental Coord.  
Department of Environmental Health and Safety  
Office - (865)974-5084  
Secondary

Ms. Pamela Koontz, Sr. Lab Safety Coord.  
Department of Environmental Health and Safety  
Office - (865)974-5084  
Secondary

Mr. James Cantu-Sr. Lab Safety Specialist  
Department of Environmental Health and Safety  
Office - (865)974-5084  
Secondary

Mr. James Walker, Sr. Safety Coord.  
Department of Environmental Health and Safety  
Office - (865)974-5084  
Secondary

For emergencies after hours, please contact UT Police at 974-3111, or 911.

**Emergency Notification Contacts:**

University of Tennessee Police Department  
974-3111, 974-3114 or 911

Department of Environmental Health and Safety  
974-5084  After Hours One-Call (865) 974-9586

UT Radiation Safety Officer – Marsha Smith  
974-5580  After Hours One-Call (865) 974-9586

UT Biosafety Officer – Brian Ranger  
974-1938  After Hours One-Call (865) 974-9586

Knoxville Fire Department  
911

Tennessee Emergency Management Agency  
1-800-424-3300

**Hazardous Waste Contingency Plan  EC 3**
Knoxville-Knox County Emergency Management Agency
215-2297

**Campus Wide Emergency Coordinators**

Chief Troy Lane- University Emergency Coordinator
University of Tennessee Police Department
(865)-974-3111 or (865)-974-6631

Mr. Mark Smith, Director
Department of Environmental Health and Safety
   Office - (865) 974-5084
   Home Phone - (865)588-8445

Brian Gard-UT Director of Emergency Management
   Office:(865)-974-3061
   Cell#: (865)-250-4714
Appendix II
List of Emergency Equipment

Emergency Equipment Available

1. Personal Protective Equipment
   Located in EHS truck #2701
   and EHS office 916 22nd Street
   
   A. A variety of N95 and chemical cartridge air purifying respirators
   B. A variety of body protective coveralls
   C. A variety of impermeable gloves, including nitriles
   D. Boots and boot covers
   E. Eye and Face Protection to include:
      - safety glasses
      - chemical goggles
      - face shields
      - respirator masks
   F. An assortment of additional personal protective equipment

2. Monitoring Equipment
   Located in EHS Office 916 22nd Street
   
   4 gas meter for monitoring oxygen, carbon monoxide, hydrogen sulfide, and flammability

3. Chemicals Control Equipment

   A. Mercury spill clean-up vacuum
      Located in EHS Office 2111 Terrace Ave.
   
   B. Spill management agents to include:
      Located in EHS office 2111 Terrace Ave.
      and in Hazardous Waste Storage Rooms
      - oil dry
      - vermiculite
      - absorbent pillows and pads
      - sodium bicarbonate

Hazardous Waste Contingency Plan  EC 3
C. Containment equipment to include:
   Located in hazardous waste storage rooms
   - plastic buckets
   - large, heavy duty plastic bags
   - sealing tape
   - 55 gallon drums
   - over-pack containers

D. Spill pick-up equipment to include:
   Located in SERF hazardous waste storage room
   - brooms
   - shovel - spark resistant
   - dust pans

E. Fire suppression equipment to include:
   Located in EHS office 2111 Terrace Ave, EHS truck #2701
   and in Hazardous Waste Storage Rooms
   - dry powder extinguishers

All emergency equipment will be inspected and thoroughly cleaned after each usage. All necessary maintenance will be performed before the equipment is placed back into storage. A routine, periodic inspection of the equipment will be performed.

All satellite accumulation areas should be equipped with the following:
   - Fire alarm system
   - Portable fire extinguisher (ABC type)
   - Safety shower (within 10 seconds access)
   - Eye wash (within 10 seconds access)