APPENDIX 14

EMERGENCIES

(Excerpted from Purdue Chemical Hygiene Plan)

Plan in advance for an emergency. What are the possible emergencies which could occur during your work, e.g., fire, spill, high level chemical exposure? Are systems available to alert you to an emergency situation, e.g., chemical exposure monitoring systems? What supplies and equipment should you maintain in your area to assist you or emergency response personnel in the event of an emergency, e.g., eyewash and safety shower, spill control materials, personal protective clothing? What training do you need to handle an emergency in your area, e.g., emergency first aid or respirator use training? Is it safe for you to work alone?

BASIC STEPS FOR EMERGENCY RESPONSE

Determine the nature of the emergency.

High hazard emergency. If the emergency is immediately dangerous to life and health, involves a large area, major injury to personnel, is a treat to personnel and the public, involves radioactive material, involves an infectious agent; or involves a highly toxic corrosive, ore reactive hazardous material, then proceed with **Plan A** below.

Low hazard emergency. If the emergency is small, there is no fire hazard, involves low to moderately toxic materials in small amounts, or involves a readily treatable injury, proceed with **Plan B** below.

Fire and fire-related emergencies. If the emergency involves a fire or fire-related situation such as abnormal heating of material, hazardous gas leaks, flammable liquid spill, smoke, or odor of burn, proceed with steps in the **"FIRE AND FIRE-RELATED EMERGENCIES"** section below.

If the emergency involves a mercury spill, see section headed **"MERCURY SPILLS."**

Unknown. If you do not know the nature of the emergency or are in any way uncertain as to how to handle the emergency, proceed with **Plan A** below.

PLAN A: HIGH HAZAARD EMERGENCIES

Isolate the area, if possible, and evacuate.

Call **emergency response** numbers and activate the building fire systems.

All Emergencies	911
Radiological and Enrivonmental Management	49-46371

When you call:

Identify yourself and the reason you are calling.
Identify the exact location of the emergency.
Identify the nature of the emergency, any injuries or symptoms involved, and any hazardous materials involved if you know them.

Keep others out of the area and take action to protect life and limb

Provide rescue **only** if you are properly protected from the hazard. **Never attempt to rescue someone who is unconscious unless you know what the problem is and you know you are properly protected from the hazard.**

- Do not move a seriously injured person unless he/she is in further danger.
- Anyone overcome with smoke or chemical gases or vapors should be removed to uncontaminated air and treated for shock.
- Provide first aid if you have the capability.

For chemical splash in the eyes or on the skin, remove contact lenses and rinse affected area for at least 15 minutes in emergency eyewash or shower, or use other water source. Remove any contaminated clothing, including undergarments and jewelry. Call an ambulance (see above).

Identify yourself and be available to provide emergency response personnel information when they arrive. If possible, collect Material Safety Data Sheets for chemicals involved and provide these to the emergency response personnel.

PLAN B: LOW HAZARD EMERGENCIES

For a **minor injury**, report to the Purdue University Student Hospital or local emergency room for treatment. All injuries which occur on the job should be treated at the hospital.

For a **small spill,** use an absorbent material that will neutralize the spill, if available. Spill kits are available from safety equipment supply companies, or the following materials can be maintained:

- trisodium phosphate (a soap)
- sand (not for use with hydrofluoric acid)
- sodium bicarbonate for acids
- powdered citric acid for bases
- "Oil-Dri," "Zorb-All," "Speedi-Dri," etc.
- absorbent paper towels
- bentonite, kitty litter, sand, and soda ash mixture

A dustpan and brush should be used, and protective clothing (e.g., rubber gloves and goggles) should be worn. The area should be decontaminated with soap and water after clean-up. Residue should be placed in an appropriate contained for waste collection. Contact REM (49-40121) for disposal information. Stockroom personnel can assist you if necessary.

FIRE AND FIRE-RELATED EMERGENCIES

If you discover a fire or fire-related emergency such as abnormal heating of material, hazardous gas leaks, hazardous material or flammable liquid spill, smoke, or odor of burning, immediately follow these procedures:

Activate the building fire alarm system (fire pull station). If not available or operational, verbally notify persons in the building.

Notify the Fire Department by dialing 911.

Isolate the area and evacuate the building:

Shut down equipment in the immediate area, if possible.
Close doors to isolate the area.
Use a portable fire extinguisher to:
Assist oneself to evacuate.
Assist another to evacuate.
Control a small fire, if possible.
Follow the instructions on the extinguisher.

Provide the fire/police teams with the details of the problem upon their arrival. Special hazard information you may know is essential.

If fire alarms are ringing in your building:

- Evacuate the building;
- Move at least 200 feet away from the building;
- Stay clear of driveways, sidewalks, or other access ways to the building.
- If you are a supervisor, try to account for your employees and report any missing persons to the emergency personnel at the scene.
- Assist emergency personnel, as requested.
- Do not re-enter the building until directed to do so.

Follow any special procedures established for your unit.

MERCURY SPILLS

For small spills, such as a thermometer break, use a trapped vacuum line attached to a tapered glass tube, similar to a medicine dropped, to pick up mercury droplets.

Do not use a domestic or commercial vacuum cleaner.

Cover small droplets in accessible areas with one of the following;

- Sodium polysulfide solution
- Powdered sulfur
- Silver metal compounds
- Dry ice to freeze the mercury droplets

Place residue in container for hazardous waste collection.

For **large spills,** i.e. greater than 1 ounce, contact REM for spill clean-up, instructions or assistance (49-40121).

INJURY AND ILLNESS

GENERAL

Employees and students must notify their immediate supervisor or instructor of all illnesses and injuries related to exposure to hazardous chemicals.

Employees and students should report to the Purdue University Student Hospital if medical attention is required. Students should be accompanied by a friend, teaching assistant or supervisor.

If transportation is necessary, the University Police at 911 should be called to get transportation for the victim.

Do not move a seriously injured person unless he/she is in further danger.

In cases of serious injury or illness, it is imperative that appropriate actions be followed immediately. When in doubt as to what should be done, telephone the University Police at 911 for assistance.

Give emergency and medical personnel the following information.

Your name, location and nature of the emergency
- The name of the chemical involved
- The amount involved
- Area of the body affected
- Symptoms

The supervisor of instructor must ensure the appropriate injury report forms are completed. Contact your Business Office for additional information.

If you have any questions regarding injury and illness procedures, contact your supervisor, instructor of the University Police.

MINOR FIRST-AID

First Aid Kits. First aid kits are not recommended except for remote operations where emergency care is not readily available. If a department desires s first aid kit, it must be maintained with essential supplies at all time. See the General Stores Catalog for a list of essential supplies. First aid kit supplies can be purchased from General Stores.

First aid kits must be readily accessible. If the kit is not visible, the area where it is stored must be clearly marked.

Do not dispense or administer any medications, including aspirin.

Do not put any ointments or creams on wounds or burns. Use cool water.

The MSDS contains special first aid information.

After giving first aid, call the ambulance at 911 to transport the victim to a medical facility for evaluation.

Student and employee first aid cases are treated at the Purdue University Student Hospital. Visitor first aid cases are treated at the nearest off-campus hospital.

For specific first aid information, contact your supervisor, instructor or the University Police.