Section B - 7

UNO HAZARDOUS MATERIALS EMERGENCY PLANNING

A. Overview

UNO has developed hazardous material emergency procedures to protect human health, facilities and the environment. Collectively, these procedures are known as the "Emergency Response Plan."

One part of the Emergency Response Plan is called the "Contingency Plan" and deals only with hazardous waste. The Contingency Plan is a freestanding document that is utilized by EHS personnel when responding to EPA regulated hazardous waste incidents.

Authorized Users should follow the procedures described in the Emergency Response Plan. The Emergency Response Plan deals with all types of hazardous material, not just hazardous waste.

If a material is spilled or released, it is a waste. The only question is whether it is a hazardous waste or a solid waste. If Authorized Users follow the Emergency Plan procedures, EHS personnel will automatically make this waste determination.

B. Emergency Response Plan

1. The Emergency Response Plan outlines the criteria for responding to and mitigating hazardous material emergency incidents, protecting UNO equipment, protecting the health and safety of UNO personnel and members of the general public, and protecting the environment. The Emergency Response Plan has been developed to identify the following:

a. Emergency Coordinator (EC) - provides rapid assessment of the emergency situation and decides appropriate remedial actions. The EC develops the overall strategy for mitigation and assigns tasks, duties and responsibilities. The EC allows for the immediate implementation of an integrated emergency scene management system for all hazardous material events.

b. The Spill Response Team (SRT) - provides immediate response to an emergency incident. The SRT establishes incident command, removes endangered occupants, stops the release and/or mitigates the emergency condition, and conserves property after incident control is achieved.

c. Off-Site Response Organizations - at the request of the Emergency Coordinator or Campus Security, assistance and equipment is available from a variety of off-site agencies. This includes the Omaha Fire Department and the Local Emergency Planning Commission.

d. Hazard Assessments - Pre-incident evaluations of chemical storage locations that have a potential to pose a health hazard to employees, environment or the general public in the event of a hazardous material incident.

2. The Emergency Plan does NOT apply to the following:

a. Routine releases which are authorized by local, state, or federal regulations, except when the provisions of those regulations are exceeded and emergency actions are required.

b. Responses to incidental releases of hazardous materials where hazardous material does not pose a threat to human health or the environment and that can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area.

3. The responsibilities of individuals in the emergency response organization include the following:

a. All UNO Employees

1) Report any spill, release, explosion or fire involving hazardous material to Campus Security at extension 4-2911. This does not include small incidents which pose no threat to human health or the environment and which can be mitigated (absorbed or contained) at the time of the release by the employee in the immediate release area.

2) When calling in an emergency, be prepared to state:

- exact location
- your name
- hazardous material and quantities involved
- brief description of incident
- call back number where you may be reached

3) Notify others in the immediate area that a release has occurred.

b. Campus Security Dispatcher

1) Contact Emergency Coordinator and alternates if necessary.

2) Dispatch Campus Security personnel to the perimeter of the scene.

c. Campus Security

1) Isolate the immediate area at a safe distance. This includes restricting and/or rerouting all nonessential activities from the affected area.

2) Assist in evacuating individuals to safe locations.

3) Expedite access to the scene for off-site emergency response vehicles and personnel who may be called upon for back-up.

d. Emergency Coordinator

1) Immediately assess and identify:

- the exact source and location of release
- the hazardous material and quantity
- the extent and direction of any on-site or off-site release

2) Coordinate emergency medical treatment, including the removal of endangered occupants, and providing first aid.

3) Assess the potential effects of the incident.

i) If the event involves hazardous waste, determine if the "Contingency Plan" should be activated according to Figure 10.

ii) If the event involves hazardous material (other than hazardous waste) which could threaten human health or the environment, determine an assembly location for the Spill Response Team and activate the Emergency Plan.

iii) Coordinate activation of local alarms if applicable.

iv) Determine evacuation routes based on release projections and notify security to assist in evacuation.

v) Coordinate off-site notifications.

vi) Ensure reporting requirements are followed. See Table 7.

vii) Provide an incident summary to the Environmental Health & Safety Manager in order to assess the effectiveness of the plan and determine if changes are needed.

e. Spill Response Team (usually Omaha Fire Department HAZMAT Unit)- Under the Direction of the Emergency Coordinator

1) Assist in the recovering of injured personnel or first aid procedures.

2) Stop the spill or release if it is easily achievable.

3) Contain the spill or release to the extent possible.

f. UNMC Spill Response Team - Under the Direction of the UNO Emergency Coordinator

1) Perform clean-up and decontamination.

2) Ensure all waste generated during clean-up activities is properly disposed of according to EPA or NRC regulations.

NOTE: The UNMC Spill Response Team entered an agreement with UNO EHS, to assist in spill response and mitigation, to make the best use of State resources.

C. Contingency Plan

Emergency response planning is required by all facilities that store EPA-regulated hazardous waste. Hazardous waste is stored only in the Durham Science Center (DSC) and Allwine Hall (AH). This plan must be designed to cover all foreseeable types of contingencies, and for this reason, it is called the "Contingency Plan." This plan must be updated whenever changes are made in procedures or personnel. The Contingency Plan identifies the duties and phone numbers of the Emergency Coordinator, alternate emergency coordinators and other HAZWOPER-trained individuals. The UNO Contingency Plan is submitted to the Local Emergency Planning Committee (LEPC), the Omaha Police Department, the Omaha Fire Department, the UNMC Emergency Medical Department, the UNMC Spill Response Team, Methodist Hospital and UNO Campus Security.

D. How is a Potential Threat to Human Health or the Environment Determined?

The Emergency Coordinator has full authority to make this decision. The decision may be based on one or more of the following conditions:

1. A potential threat to human health includes:

a. The release of a hazardous material, which according to the MSDS sheet or other reference, can have adverse effects at the concentration levels being estimated or measured.

b. Personnel exposure from the release of a reportable quantity (RQ) of a hazardous substance (HS) or extremely hazardous substance (EHS) listed in Title III "List of Lists." This assumes the concentration is unknown.

NOTE: *The use of RQ's does not mean that a clear-cut determination has been made that levels below RQ values are safe and that levels above RQ values are hazardous or life-threatening. Each incident has unique circumstances, making risk determinations time consuming and complicated. In an emergency situation, if actual exposure levels or concentrations are unavailable (which is very likely), the RQ is a conservative and quick method for decision making.*

2. A potential threat to the environment includes:

a. <u>Federal Interpretation</u>

1) The release of any reportable quantity (RQ) of a hazardous substance (HS) or extremely hazardous substance (EHS) listed in Title III "List of Lists" into any environmental media (land, air, surface or ground water) during a 24 hour period.

2) This does not apply to a release which results in exposure to persons solely within the boundaries of the facility (i.e., release was wholly contained within a UNO building or structure).

NOTE: *For mixtures of chemicals that may be released, the fractions of each RQ are not additive. For example, if two chemicals are released in amounts one-half of the RQ (0.5 + 0.5), this is not considered one RQ. The exception to this is radionuclides whose fractions must be summed.*

b. State Interpretation

1) The NDEQ Title 126 defines "land" as any natural or manmade surface of the earth excluding water. The release of a hazardous substance upon the surface of the land in a quantity which equals or exceeds 100 pounds, or its federal reportable quantity or the release of 25 gallons of oil onto the land, would constitute a potential threat to the environment and would require notification.

NOTE: *Some releases not federally reportable are reportable under State law*.

2) Notification is not required for a release if either of the following conditions are met:

- The release is confined and expected to stay confined within a building or otherwise wholly enclosed structure, in which the floors and walls are of non-earthen materials which are adequately impervious to the released substance and the release is cleaned up within 24 hours

  or

- The release is in compliance with conditions established in State statutes, regulations or permits.

3) The release of a hazardous substance or oil which imparts or threatens waters of the state, regardless of the quantity, would constitute a potential threat to the environment and would require notification.

4) If a release is not cleaned up within 24 hours, it must be reported regardless of whether the release is below the reportable quantity or occurs within a building.

E. Pre-planning for Hazardous Material Incidents

A prompt, safe and effective response to a hazardous material incident minimizes exposure to employees and the general public. It may also limit property damage and clean-up costs.

The best way to ensure an effective response is to be familiar with the UNO Emergency Plan as contained in this Section. Knowing the proper emergency response procedures can save valuable time and lessen the consequences of a release.

F. Chemical Spill Clean-up Guidelines

Laboratory personnel will be involved with spill clean-up only if the spill is small (does not pose a hazard to human health or the environment) and capable of being absorbed or otherwise controlled by the employee in the immediate release area. Small spills do not require activation of the Emergency Plan; however, the Emergency Coordinator can provide guidance for any spill clean-up when requested. Remember that any waste generated during spill clean-up should be treated as EPA regulated hazardous waste, unless or until deemed non-hazardous by EHS.

- General spill clean-up guidelines include the following:

For All Spills or Releases

1. Access to the area should be restricted to individuals involved in the clean-up. Evacuate if conditions warrant it. Post warning signs or guards at points of entry to prevent unauthorized access.

2. The spilled material should be identified, and the scope of the release and the potential for hazard should be assessed. Use the MSDS and additional resources if necessary.

3. Always use appropriate personal protective equipment (PPE); decontaminate or discard equipment afterwards.

4. Contact EHS for waste disposal guidelines.

For Liquid Spills

1. Contain the spill as quickly as possible using appropriate absorbent/neutralizing agents.

2. When cleaning up, always start at the outer edges of the spill and work toward the middle of the spill.

3. Once the whole spill has been absorbed/neutralized, pick up the absorbent, any other clean-up material, and place into an appropriate container; securely seal and label the container.

4. Remember, if the material was absorbed only and was not neutralized (or otherwise chemically changed), the waste material can still have the hazardous properties of the original spilled material and so must be handled with caution.

For Solid Spills

1. Low hazard materials, or materials that have been neutralized, can be cautiously swept up.

2. High hazard materials should be cleaned up by the UNMC Spill Response Team under the direction of the UNO Emergency Coordinator.

- General guidelines for decontamination of **individuals** include the following:

1. Protect employees performing decontamination through proper procedures, training and protective equipment.

2. Remove any source of contamination (e.g., clothing); any contaminated material should be placed in a plastic bag and sealed for later decontamination or disposal.

3. Immediately flush the contaminated area with ample flowing water, unless the chemical is water reactive, for at least 15 minutes. Use soap on skin only if there are no visible burns; if large areas of skin are affected, use an emergency shower to flush entire contaminated area.

4. Consult the MSDS for special treatment of delayed effects; medical attention is always advisable.

5. Seek medical attention if any reddening or pain develops.

6. **Chemical splashes in the eye** should be flushed with flowing tepid water for at least 15 minutes. The eyelids should be held away from the eye, while the eye is being flushed. Do not rub eyes. Immediate medical attention should be sought for all incidents involving the eyes.

7. Report and document all personal exposure to EHS.

G. Protecting Yourself in a Hazardous Material Incident

If an incident involving a hazardous material release occurs in your area, you will be notified by others in the area or by a local alarm if available. You may be asked to evacuate a section of the building, the entire building or even the surrounding area.

If you are evacuated to an outside area, it is advisable to stay upwind of the release. If you are in the release area, move in a crosswind direction so the wind is blowing either from the right or left but not in your face or at your back.

The Emergency Coordinator will designate evacuation routes and the distance where safe levels are found.

Table 7

REPORTING REQUIREMENTS FOR UNO HAZARDOUS SUBSTANCE INCIDENTS

EVENT [1]	NOTIFICATION [2]	REFERENCE [3]
1. Release of any Quantity of a Hazardous Substance	UN - AGC	126 NAC Chapter 18, Section

Beneath the Surface of the Land or Water	UNO - University Relations NDEQ	002
2.* Release of a Hazardous Substance upon the Surface of the Land that Equals or Exceeds 10 pounds (100 pounds beginning in 1996) or its RQ under CERCLA (40 CFR 302) or SARA Title III (40 CFR 355), whichever is less or Release of an Oil in a quantity that exceeds 25 gallons	UN - AGC UNO - University Relations NDEQ LEPC	126 NAC Chapter 18, Section 002 NOTE: This is the same as those in the Title III "List of Lists"
3.* Release in Excess of a Reportable Quantity (RQ) of a Hazardous Substance (HS) or Extremely Hazardous Substance (EHS) as specified in Title III "List of Lists" into the environment (i.e., Outside a UNO Building)	UN - AGC UNO - University Relations NDEQ LEPC National Response Center (only for exceeding CERCLA RQ in "List of Lists")	EPCRA 40 CFR 304
4. Release of Oil or Hazardous Substance from an Underground Storage Tank (UST) to the Environment	UN - AGC UNO - University Relations NDEQ; SFM	159 NAC, Chapter 8, Section 004
5. a. Release of any Hazardous Material During Transportation (including loading, unloading and temporary storage) b. Release of a Reportable Quantity (RQ) from a Transport Vehicle	UN - AGC UNO - University Relations DOT UN - AGC UNO - University Relations National Response Center "911"	49 CFR 171.15 49 CFR 171.15
6. Release of 10 pounds or more of Materials Containing 50 ppm or more of PCB's into the Environment	UN - AGC UNO - University Relations NDEQ National Response Center	40 CFR 761 Subpart G
7. Release of a Bloodborne Pathogen which poses a substantial Risk to Human Health or the Environment	UN - AGC UNO - University Relations Mgr. EHS CDC	29 CFR 1910.1030
8. Release of a Carcinogen which Exposes an Employee as Specified in 29 CFR 1910, Subpart Z	UN - AGC UNO - University Relations Mgr. EHS	29 CFR 1910.1003-.1016

NOTE 1:
An "*" indicates activation of the Contingency Plan if the hazardous substance is a hazardous waste.

NOTE 2:
UN - AGC: University of Nebraska, Office of the Associate General Counsel
(402) 472-1201

UNO University Relations
(402) 554-2358

National Response Center
(800) 424-8802

NDEQ: Nebraska Department of Environmental Quality
(402) 471-4545

LEPC: Local Emergency Planning Commission
(402) 444-5040

CDC: Center for Disease Control
(404) 633-5313

DOT: Department of Transportation
Contact Through NRC
(800) 424-8802

SFM: State Fire Marshal (402) 471-2027
Omaha Fire Department 911

NAC: Nebraska Administrative Code

Mgr. EHS: Stan Schleifer
(402) 554-3596
After hours contact through Campus Security (402) 554-2648

NOTE 3: The Title III "List of Lists" includes the CERCLA RQ's (40 CFR 302). The 189 CAA substances which were added to CERCLA in 1990 had a statutory RQ of one pound assigned. It also includes extremely hazardous substances (EHS) added as part of SARA Title III. Some of the 360 EHS's were not on the CERCLA list and these were also assigned an RQ of one.

RQ's may be changed based on current knowledge. When they are changed, they are shown as Final RQ's.

EMERGENCY RESPONSE INITIAL ACTIONS

FIGURE 10