

Emergency Response Procedure - Fact Sheet



University of North Carolina at Charlotte ❖ Office of Research ❖ Safety and Environmental Health Office

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Based on Title 29 of the Code of Federal Regulations (29 CFR) 1910.120, Hazardous Waste Operations and Emergency Response.

Chemical Spills that you can handle Yourself (Incidental Spills)

Principal investigators, employees, and students working in research labs should be aware that required safety training for lab workers includes Emergency Response Training. The OSHA Hazard Communication Standard and the OSHA Standard for *Hazardous Waste Operations and Emergency Response* (HAZWOPER) mandate such training.

Emergency training applies to building evacuation procedures during fires and explosions, recognition of system alarms, and appropriate action in the event of spills of hazardous materials in the lab. **Lab workers must receive training to distinguish between the types of spills they can handle on their own (INCIDENTAL) and those spills that are more severe in nature (MAJOR). Major spills dictate the need for outside help.**

Lab workers are qualified to clean-up spills that are "incidental." OSHA defines an incidental spill as a spill that does not pose a significant safety or health hazard to employees in the immediate vicinity nor does it have the potential to become an emergency within a short time frame. The period that constitutes a short time is not defined. Lab workers can handle incidental spills because they are expected to be familiar with the hazards of the chemicals they routinely handle during an "average" workday. If the spill exceeds the scope of the lab workers' experience, training or willingness to respond, the workers must be able to determine that the spill cannot be dealt with internally.

Emergency assistance is provided by the Safety and Environmental Health Office (S & EH) and Charlotte – Mecklenburg Fire Department or designated outside contractor. **Spills requiring the involvement of individuals outside the lab are those exceeding the exposure one would expect during the normal course of work.** Spills in this category are those which have truly become emergency situations in that lab workers are overwhelmed beyond their level of training. Their response capability is compromised by the magnitude of the incident. **OSHA elaborates that outside agency/contractor help is needed when emergencies dictate:**

- the need to evacuate employees in the area
- the need for response from outside the immediate release area
- the release poses, or has potential to pose, conditions that are immediately dangerous to life and health
- the release poses a serious threat of fire and explosion
- the release requires immediate attention due to imminent danger
- the release may cause high levels of exposure to toxic substances
- there is uncertainty that the worker can handle the severity of the hazard with the personal protective equipment (PPE) and equipment that has been provided and the exposure limit could be exceeded easily
- the situation is unclear or data is lacking regarding important factors.

Depending on the circumstances, what begins as an incidental spill could at some point escalate into an emergency. Responding lab workers must monitor changing conditions. Again, lab-specific training must cover how to tell the difference!

Charlotte – Mecklenburg Fire Department HAZMAT response crews have received in-depth training qualifying them for emergency response beyond the level of incidental spills. With the input of UNC-Charlotte Lab Managers and S & EH they are prepared to answer calls which exceed the training scope of lab workers. Lab workers are encouraged to play it safe and alert campus police about the occurrence and contact S & EH for clean-up assistance when in doubt about the status of a spill.

Chemical Spills that Require Outside Intervention (Major Spills)

A. Emergency Response Procedures. Call 911 to report fires, explosions, medical emergencies, and hazardous material spills (dial 7-2200 for non-emergencies). The S & EH office can be reached at 7-4291.

B. Hazardous Materials Response. The S & EH personnel are knowledgeable in biological and chemical spills and releases. When conditions dictate, S & EH works closely with University Police and the Charlotte – Mecklenburg Fire Department and other local emergency responders in the assessment and cleanup of a spill/leak.

Following a "MAJOR" incident, S & EH responders may determine, based on the circumstances of the spill or release, that clean-up of the site can be handled by lab workers or other University employees (under the direction of the Lab Manager/Supervisor or S & EH). The emergency response incident commander (IC) will evaluate the magnitude, training requirements, and potential hazard of post-emergency response operations. If the IC determines that the clean-up will comprise an "incidental" exposure the responsibility for clean-up may be delegated to the lab principal investigator/supervisor to assign.

In the event that S & EH is called to an "incidental" spill (i.e., lab workers have been conservative in assessing hazard and assumed worst case), S & EH representatives will participate in or oversee the clean-up to support the lab workers. In both of these cases where clean-up becomes a lab responsibility, The Chemistry stockroom (Burson Room 221, Extension 7- 4912 or 7-4826) or S & EH (King Building, extension 7-4291) can provide clean-up supplies and equipment, personal protective equipment (to the level of training of the workers).

General University Emergency Information

A. University Emergency Response Plan. The Office of Business Continuity planning maintains the University Emergency Response Plan (ERP). The ERP addresses incidents that range from a single person, single facility accident/incident through and including catastrophic incidents (involving multiple people and/or fatalities) which may require large scale evacuation of the campus. Emergency incidents occurring on campus will be managed (in turn) by the Director of Campus Police and Public Safety, the Commander of the first responder units (CM Fire Department, CM Police Department, and EMS under the Incident Command System). As the situation develops, and as emergency units arrive on the scene, the senior commander assumes control of the incident site, emergency procedures and evacuation. For large scale emergencies, the Charlotte-Mecklenburg Emergency Management Office will take command and control of the incident. UNC Charlotte will provide support to those agencies as deemed necessary.

B. Building Emergency and Evacuation. The senior officials of S & EH, University Police and Facilities Management are authorized to initiate evacuation of buildings. The University's ERP requires that facility marshals establish and appoint building safety wardens and alternates. The facility marshals shall develop emergency and evacuation plans for each building. The plans shall include a telephone tree for notifying key persons in case of emergency. All building occupants shall receive training in their respective emergency plan.

C. Incident (Accident) Reporting. Laboratory incidents shall be investigated when deemed "major" by the S & EH department and PI/Laboratory Manager/Supervisor. The laboratory PI, Manager or Supervisor shall be responsible completing the investigation and implementing corrective action/s to prevent repeat incidents. **In the event of University Employee injury, the S & EH Office requires that an investigation be completed through the use of the S & EH accident investigation form. Additionally, if non-emergency medical treatment is completed by Student Health Services, an Employee Treatment Authorization form must be completed and submitted to Student Health Services at the start of treatment.**

D. Signs. The following signs and labels are required for all laboratories in University facilities:

- An "Emergency Information" sign shall be posted outside laboratories, either on the outside of the door or on the wall beside the door. This sign provides emergency information concerning the lab and telephone numbers of responsible faculty and staff. The information shall be updated as necessary.
- This response training fact sheet should be posted at a highly visible location within the laboratory. Additionally, all laboratory personnel should be made aware of the contents and application of this emergency response fact sheet.