

## Hazardous Materials Response on Campus

by Tom McGowan, Sr. Specialist-Emergency Services



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It is not uncommon for a hazardous materials response to occur at a college or university. The location may vary from a research laboratory, maintenance facility, pool, cafeteria, parking lot or dormitory. The type of product or hazardous material can be just as diverse. A Hazardous Material Emergency Response Plan (HMERP) is intended for the campus community members whose responsibility it is to analyze, plan, implement and evaluate a release of a hazardous material that could negatively affect the health and safety of people, places and things. The plan should account for both small and large scale incidents.

HMERP is designed to assist the college community response personnel and emergency response agencies with an organized approach to any incident that may involve the release of a chemical, biological or radioactive material in a restricted and secure research facility or laboratory or go as far as to meeting the needs of the entire campus community setting.

The plan should be a guideline for response and action and should include releases and spills, fires, personal injury, and potential damage to property. Administration, facility, staff support and supervisors should be informed and have a working knowledge of the plan.

What is a hazardous materials incident? In simple terms it is any solid, liquid or gas that escapes or jumps out of its container and causes harm to people, places and things.

Typical incidents at colleges and universities include spills involving fluids from vehicles in the student or facility parking lots, release of natural gas or propane used for infrastructure heating and cooling, and incidents of minor concern in laboratories. But hazardous material incident can involve a significant biological or chemical incident, fire, medical emergency or other occurrences that could overwhelm campus and community resources instantly.

Situational awareness, even on the part of students, can help in the miti-

gation process. Guidelines regarding an emergency response should be part of any student handbook and lab safety program and right-to-know policy. The idea that if someone encounters an emergency incident involving hazardous materials would be that they could provide immediate information to response personnel and at the same time protect themselves. With just a little knowledge and skill a potentially serious situation can be averted. Here is a quick four step procedure:

- Step 1 - Recognize the potential for a hazardous materials incident,
- Step 2 - Protect yourself and others,
- Step 3 - Call for help, and
- Step 4 - Secure the area.

So, you are in the chem lab. It's late at night. You are working to complete a project and working with your lab partner. Suddenly, the chemical experiment you are working on has reacted differently from the way you thought it was supposed to. There was a violent reaction and the

## Hazardous Materials on Campus ... continued



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containers used for the experiment have broken and a spill has occurred on the table and onto the floor. The chemicals still appear to both of you that they are reacting badly! Congratulations, you've just initiated Step 1-- you've just analyzed the situation and determined the presence of hazardous materials. Step 2, Get Out! Protect yourself, be somewhere else; in another room, on a different floor, or outside the building as examples. Step 3, notify emergency response personnel; use the campus security number, pull the fire alarm system, or dial 9-1-1. Step 4, secure the area; try not to let anyone who is not in authority into the room or into the building if at all possible. Your safety and the safety of those around you is the priority.

Depending on the size of the college or university, the type of lab or research center, the facility used including a parking lot, the types of products that are stored and used are all considerations school administration and local emergency response teams will need to take into ac-

count. They can then consider the factors as they determine how best to implement a level of response based on the initial notification. The plan should be part of an ongoing assessment of the total community risk reduction assessment plan.

Implementing a response will be based on school protocol or memorandums of understanding with emergency response agencies developed through the Hazardous Materials Emergency Response Plan. It may be limited to faculty and staff, on-campus response teams, campus fire department or notification of local and state fire and emergency response team assets. The implementation of the plan will likely come from the parties who you have already contacted as part of your situational awareness and the description you gave them.

Typically the success or failure of a hazardous materials emergency response is measured not only as it unfolds and is mitigated but more im-

portantly with an after action review. Whether the incident is small and confined, large and expanding, or inside or outside, a review and critique should be supported. The critique will take a best practices approach, improve the plan for the next time, and include a discussion of valuable lessons to be learned. This after action meeting will be arranged by the leadership of the college and/or emergency response agencies.

Your safety and that of others is your first line of defense at a potential incident involving hazardous materials. You may go your entire college career and not see or be involved in a situation. If you are, you will now know the four simple steps that you can follow which will aid in your safety.

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Tom McGowan is a Senior Specialist to the Public Fire Protection Division at the National Fire Protection Association (NFPA). He is also the staff liaison for the NFPA professional qualifications project which includes nineteen documents, sixteen technical committees and the Correlating Committee on Professional Qualifications. McGowan was formerly the Director of Certification for the State of Connecticut Commission on Fire Prevention and Control. Tom was the NIMS/ICS Coordinator for fire service training in the

State of Connecticut and the Commonwealth of Massachusetts. Tom also served as a consultant at the Massachusetts Department of Fire Services where he was an instructor, Western and Central Massachusetts Coordinator of the Fire and Life Safety Education Program, Assistant Coordinator for Hazardous Materials/Weapons of Mass Destruction and the Coordinator of Curriculum and Special Projects. Tom also served on the Massachusetts Department of Fire Services Hazardous Materials Regional Response Team

District Four which serves Hampden, Hampshire and Franklin counties. Tom was formerly a career Firefighter/EMT in Longmeadow, MA and a call Firefighter/EMT in East Longmeadow, MA. Tom is a national certified Fire Fighter I/II, Hazardous Materials Technician, Fire Service Instructor II and Fire Officer IV. Tom holds two Master's degrees in School Administration and Early Childhood Education.

## History of Campus Fire Forums



- 1999 - Quincy (invitation only by USFA & NFPA)
- 2000 - Orlando (in conjunction w/ NFPA)
- 2001 - Dallas (in conjunction w/ NFPA)
- 2002 - Atlanta (in conjunction w/ NFPA)
- 2003 - Tempe
- 2004 - Boulder
- 2005 - Boulder
- 2006 - Chapel Hill
- 2007 - Austin
- 2008 - Providence
- 2009 - cancelled
- 2010 - Indianapolis
- 2011 - Indianapolis
- 2012 - San Antonio

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