SeaBRIGHT INSURANCE COMPANY

Supervisors' Safety Update

Ideas and Strategies for Leaders

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H*A*Z*Y ABOUT HAZCOM & HAZMAT???

By SeaBright Insurance Loss Control

How much do you know about hazardous chemicals at the workplace and your responsibility to protect the environment and those you supervise? This update is meant to fill in a few gaps that occur in many people's understanding.

AT LAST REPORT OSHA estimates that more than 32 million workers are exposed to 650,000 hazardous chemical products in more than 3 million American workplaces. Each year thousands of new chemical compounds, and adaptations of these, enter U.S. production facilities as well. Dupont's one-time advertising slogan, "Better Living Through Chemistry," was only partly right. Many people have suffered serious health problems from exposure to hazardous materials. Many areas of our environment have been critically damaged by accidental chemical releases. Companies must take the lead in *preventing* such misfortune, for both ethical and financial reasons.

THE GOVERNMENT'S ATTEMPT to protect the public from hazardous substances began seriously in the mid 1980's. Subsequently, numerous federal and state agencies were formed to regulate the manufacture, distribution, use and disposal of chemicals and to establish training requirements for workers. The government expects employers to be in compliance with these safety and health regulations. But to do so, employers must *understand* their responsibilities. Many do not—for good reason.

CONFUSION ABOUNDS. Despite good intentions, jurisdictions often overlap, rules and procedures are complex and often issued in different documents, by different officials, for the same or similar purposes. This article will not discuss specific agencies or their regulations to any extent, or rant and rave at government requirements. But it will attempt to clarify some misconceptions on this topic, and will describe employers' basic responsibilities for chemical control.

CRIMINAL PENALTIES—including jail terms and fines in the millions of dollars—have been given to companies, individual managers and supervisors who failed to protect employees and the community from hazardous substances. So, it is important for everyone on the management team to understand their personal liability, as well as their company's responsibilities in this matter.

"HAZMAT" IS A CONFUSING TERM. This commonly used abbreviation for "hazardous materials," covers a lot of territory and adds to everyone's confusion. The word "Hazmat," for example can refer to any *aspect* of chemical production, transport, use, disposal, cleanup or emergency response. It doesn't really explain what anyone is talking about, so we will try to avoid using the term.

WE CAN REDUCE THE CONFUSION by classifying hazardous materials in terms of six different phases of evolution. These phases are summarized on a table at the end of this article. Once managers and supervisors identify which phase (sometimes more than one) applies to their own operations, our review may help clarify their responsibilities. Our concern is not *which* government agencies regulate these materials, but *what* basically must be accomplished from the employer's point of view in terms of regulation. As you will see, we have placed an emphasis upon training, since this is often part of the supervisor's role. The six phases are as follows:

1. When hazardous substances are produced, sold and distributed:

Chemical producers and distributors are required to properly label their merchandise and to provide customers with Material Safety Data Sheets (MSDS) for each product. *If the supplier does not provide these, the employer must request them.* The MSDS basically identifies the hazardous elements in the product, explains potential safety and health effects, and includes advice on how to avoid or respond to exposure. Virtually every potentially hazardous product that is used in the workplace as part of assigned work tasks must have an MSDS. *The MSDS is an important part of employee training sessions on hazardous materials.*

2. When hazardous materials are transported:

The U.S. Departments of Transportation and Commerce report that more than 1.5 billion tons of hazardous materials are transported annually in the U.S., over the road or rail, by aircraft or vessel. Several state and federal agencies are concerned with the safety aspects of this. Firms whose operations involve handling, storing and/or transporting hazardous materials must comply with a variety of regulations for the protection of the community, the environment and employees. Training needs will vary, depending upon the size of the operation, number and type of employees and in some cases, proximity to emergency response teams. References at the end of this article provide links that give further specific details. Required employee training may involve:

(1) Personal, task-related use of hazardous materials. This refers to the Hazard Communication Standard discussed below, and provides education about job-related chemical exposures in addition to the hazardous materials handled in transport.

(2) Basic, defensive "awareness" training for employees who dispense, load or unload hazardous substances by hand, forklift or vehicle during the shipping process. This includes information about the correct packaging, labeling, handling, storing and transporting of such products. Training every two years may covers those with limited emergency responsibilities, including instruction on how to correctly summon help in case of emergency. Training may sometimes be accomplished in-house with available resources.

(3) Emergency response training is usually provided only for selected employees at an operation. How many workers are "Hazwopper" trained (discussed more fully below) depends upon the potential likelihood and severity of a chemical release or spill, and the proximity to local, trained emergency response personnel. This training is to be provided by experts in the field.

Material Safety Data Sheets are a necessary element in all these training events.

3. Personal use of hazardous materials:

OSHA's Hazard Communication Standard is also known as the "Workers' Right To Know" program and is commonly referred to as "HazCom." Its basic purpose is to educate employees about potential work-related exposures to toxic or hazardous substances and how to avoid personal harm. Solvents, paints, fuels, adhesives, cleaners, lubricants and copy machine chemicals are but a very few of the potentially hazardous substances of concern. Though office firms are not closely monitored, virtually all employers fall under the "HazCom" standard and are required to have a written program, to inventory and label all chemicals in use, to acquire MSDS for each of these, and to train all employees who are exposed to hazardous substances. Basic elements of training for new or transferred employees include:

(1) An overview of the Standard and the written program
(2) Identification of the chemicals present and in use
(3) The physical and health effects of hazardous substances
(4) How to lessen or prevent exposure with care and Personal Protective Equipment
(5) How to read and understand MSDS
(6) Basic emergency procedures
(7) Training updates as new chemicals are introduced into the workplace

Employers often mistakenly believe that if they have met the requirements of D.O.T. or E.P.A. regarding the transport or dispensing of hazardous materials, they are in compliance with HazCom (which is an OSHA regulation). Not necessarily so! Terminals and ports involved in the shipping of chemicals may also have employees who face jobsite chemical exposures in warehouses and shops, in addition to the transported materials, so they must have training that alerts them to these potential dangers and safeguards.

NOTE: On the list of OSHA's Most Frequently Cited Standards for all industries in Fiscal 2002, failure to comply with the Hazard Communication Standard was the **number two** citation, exceeded only by citations pertaining to scaffolding. This lack of compliance is surprising considering that the Standard was finalized way back in 1983. A partial explanation for this is surely due to employers' confusion about various requirements.

4. Disposal of hazardous wastes:

Firms that specialize in handling hazardous waste products employ well-trained technicians who know the code requirements. But this category also involves other types of firms, such as maintenance shops and construction projects that generate used chemicals, waste oils and cleaning solvents, or leftover building materials that are considered to be potentially hazardous to people or the environment. Someone at these sites must receive training in handling such wastes. All employees must be aware of these procedures and receive HazCom training for any hazardous materials or wastes they handle. Disposal procedures vary, depending upon the amount of hazardous waste generated.

5. Hazardous waste cleanup:

This may involve removal or recovery of contaminated soils, which have been permeated by chemicals in the past, or clean up of current chemical spills at any location. The job is usually contracted out to a company, which, like the above specialists, are well trained and fully aware of exposures and prepared to deal with them. An important

thing for the average business owner to realize is, if they allow their property to become contaminated with chemicals, law requires the condition to be corrected—which is costly—before a sale can be completed.

6. Emergency response to release of hazardous substances

The critical aspect of this phase is "HAZWOPER" training, which prepares trainees to deal with unplanned chemical releases into the air, water or soil. The acronym stands for Hazardous Waste Operations and Emergency Response. It is regulated by a variety of state and federal agencies, principally OSHA and EPA, depending upon the site of the activity. If there are large amounts of hazardous materials at a worksite, several on-site personnel may be given training and receive certification. More than one level of instruction can be provided by expert trainers, for example:

(1) *Hazwoper First Responders-Operations: Involves how to assess chemical dangers, contain or control hazardous releases, evacuate populations in danger and contact technicians who can mitigate the spill. 24 hours of training is provided, plus 8 hours of annual refresher training to maintain certification.*

(2) Hazwoper Technicians: Training of technicians is identical to that of Responders, plus an additional 12-hours of classroom provides skill in stopping and mitigating a chemical release. Refresher training is also required.

(3) Hazwoper Specialists: These technicians become experts regarding particular hazardous substances and are called in during specific emergency response or cleanup operations.

Why Do Supervisors Need To Know About All This? Young supervisors may not realize that exposure to hazardous materials is much more prevalent today than it was only a decade or two ago. Older, more experienced supervisors may ignore practices such as washing one's hands in solvents, or breathing noxious fumes because "we've been doing it for years." Yet we have learned that repeated exposure to a chemical, or a variety of chemicals, can accumulate to cause serious physical problems. Often, these are irreversible. Personal suffering and financial costs can be staggering. Front line supervisors are the most important people in controlling these exposures.

Production is a supervisor's primary job, but protecting the safety and health of the work force and safeguarding the environment is a vital responsibility of the management team. Helping to protect the company from citations, legal costs and bad publicity is also part of the supervisor's role. This is a big job! It's difficult to accomplish without an understanding of the responsibilities and training needs associated with hazardous materials.

Perhaps this Supervisors' Safety Update has confirmed that you understand this matter pretty well and are doing everything necessary in your operation. If not, we hope we've helped define some training needs. This has, of course, been only an overview. The multitude of Federal Acts, statutes and regulations is mind-boggling, but if you're patient, government agencies are available for advice. If further information about Hazard Communication programs is desired, the SeaBright Loss Control Consultant in your area will be happy to provide it, and references at the end of this article are suggested as well.