

Health and Safety Committee

The AIC Board has asked the Health and Safety Committee to report on OSHA changes that influence the membership. For that reason, the committee has asked Monona Rossol to write an article on the important OSHA "Right-to-Know" laws. Monona lectures widely on health and safety issues, is Director of Arts, Crafts, and Theater Safety, is an industrial hygienist, as well as being on the Health and Safety Committee.—Patricia Hamm, Chair, Health and Safety Committee.

Art Conservation and the Right-To-Know

Concerns about health and our environment have resulted in the enactment of more regulations to control and restrict our use and disposal of products and chemicals. This article will concentrate on those health, safety and environmental laws which affect our jobs, especially "Right-to-Know" laws.

OCCUPATIONAL HEALTH AND SAFETY LAWS—

Both the United States and Canada have very complex regulations governing the relationship between employer and employee. However, whether the regulations are called the Occupational Safety and Health Act (OSHA in the U.S.) or Occupational Health and Safety Act (OHS in Canada), their main purpose is very simple—to protect workers.

The OSHA general duty clause reads, in part, that the "employer shall furnish...employment and a place of employment which are free from recognized hazards." The Canadian OHS Act requires employers and supervisors to "take every precaution reasonable in the circumstances for the protection of a worker."

These brief general statements serve as the foundation for complex regulatory structures. The regulations address chemical exposures, noise, ladder and scaffold safety, machinery guarding, and a host of other subjects. Although the regulations are not very reader-friendly, all of us should become as familiar with them as possible.

If you do not have the regulations at hand, call your nearest Department of Labor and obtain a free copy. Ask for the General Industry Standards (CFR 1900-1910) in the U.S., and the Regulations for Industrial Establishments in Canada. If you do large restoration jobs on site in the U.S., ask for the Construction Industry Standards (29 CFR 1926/1910).

THE RIGHT-TO-KNOW—Among these federal regulations in the U.S. and Canada are the recently instituted "Right-to-Know" laws. In the U.S., the federal right-to-know law is called the OSHA Hazard Communication Standard (HAZCOM). Originally covering only manufacturers, this federal law was extended to cover all employers (including non-manufacturing) in September 1987. This happened only after a number of states had already enacted similar regulations. As a result, essentially ALL employees in the United States now are covered by either a state or federal right-to-know law. Even federal workers, so long exempt from OSHA regulations, come under HAZCOM.

There is a similar history in Canada with the resulting enactment of the federal Workplace Hazardous Materials Information System (WHMIS) on October 31, 1988. (About a year later, the United Kingdom also instituted similar laws.)

For the most part, these U.S. and Canadian federal and state/provincial laws require employers to:

1. institute hazard communication programs (often these must include a formally written plan);
2. make a complete inventory of and evaluate all chemicals;
3. ensure that all containers of chemicals in the workplace are properly labeled;
4. obtain Material Safety Data Sheets (MSDSs) on all potentially hazardous products;
5. provide workers access to the inventories and MSDSs;
6. formally train all employees who are potentially exposed to toxic chemicals.

WHO IS AFFECTED?—ALMOST ALL EMPLOYEES in the U.S.* are covered by state right-to-know laws or federal HAZCOM. All employees in Canada are covered by a federal or provincial Workplace Hazardous Materials Information System (WHMIS). All employers in workplaces where hazardous materials are present, therefore, are required to develop programs and train their employees. (The employer is the person or entity that takes the deductions out of the paycheck.)

*Employees of state and local governments in those states (about 25 states) without an OSHA-approved state plan are still exempt.

SELF-EMPLOYED CONSERVATORS/TEACHERS are NOT covered, but may be affected by the laws. For example, if they work as independent contractors or teach at a site where there are employees, all the products and materials they bring onto the premises must conform to the employer's right-to-know program labeling requirements. The way these products are used must also conform.

TEACHERS IN THE U.S. have a unique obligation arising from the fact that they usually can be held liable for any harm classroom activities cause their students. To protect their liability, teachers should formally transmit to students right-to-know training about the dangers of classroom materials and processes.

On the ethical side, schools and universities should be leading the right-to-know movement. The art conservation curriculum should include formal health and safety training at levels far above the basic training required by law.

COMMUNITIES IN THE U.S. are also affected because these laws interconnect with the community right-to-know laws, also known as the Superfund Amendments and Reauthorization Act (SARA). SARA is administered by the Environmental Protection Agency. SARA affects the way schools, museums, businesses, and other organizations store toxic substances, handle waste, and many other activities. In fact, certain federal or state right-to-know data such as chemical inventories must be made available to individuals in the community if they request it.

STEPS TO ACHIEVE HAZCOM/WHMIS COMPLIANCE—First, find out which law applies to you. Call your local Department of Labor and ask them whether you must comply with a state/provincial or federal right-to-know.

Then, ask your Department of Labor for a copy of the law and the regulations which apply to you. Also ask for explanatory materials. Some of the government agencies have prepared guidelines to take you through compliance, step by step.

Although there are small differences between the U.S. and Canadian laws (e.g. the definition of "hazardous" varies, and the Canadian law requires information in French), the two laws require employers to take similar steps toward compliance:

1. Inventory all workplace chemicals. Remember, even products such as bleach and cleaning materials may qualify as hazardous products. List everything. (This is an excellent time to cut down paper work by trimming your inventory; dispose of old, unneeded or seldom-used products.)
2. Identify hazardous products in your inventory. Apply the definition of "hazardous" in the law which applies to you. Generally, this means any chemical which poses either a physical or health hazard. Physically hazardous materials include combustible liquids, compressed gases, flammables, organic peroxides, oxidizers, and unstable/reactive chemicals. Health hazards include chemicals which have either acute or chronic health effects.**
3. Assemble Material Safety Data Sheets (MSDSs) on all hazardous products. Write to manufacturers, distributors and importers of all products on hand for MSDSs. Require MSDSs as a condition of purchase for all new materials.
4. Check all product labels to be sure they comply with the law's labeling requirements. Labels must include: identity of the chemical and hazard information in the form of words, pictures and/or symbols. Consult labeling requirements for your specific federal or state/provincial regulation. Products which do not comply must be eliminated or relabeled. An unlabeled or improperly labeled container is a violation.
5. Prepare and apply proper labels to all containers into which chemicals have been transferred. Chemicals in unlabeled containers which are used up within one shift need not be labeled.
6. Consult MSDSs to identify all operations which use or generate hazardous materials. Be aware that non-hazardous materials when reacted, heated or burned may produce toxic emissions.
7. Make all lists of hazardous materials, collections of MSDSs, and other required written materials readily available to employees. (HAZCOM also requires a written program which details all procedures.)
8. Implement a training program (see Training below.)
9. Check to see if you are responsible for additional state and provincial requirements. In the U.S., the Supreme Court recently upheld (July 3, 1989) the right of states to enforce certain amendments (additions) to the federal HAZCOM law.

**Excluded from this rule under HAZCOM are articles which are not deemed hazardous or which are regulated under other laws. These include: hazardous waste; tobacco and tobacco products; wood or wood products (however wood dust comes under HAZCOM); articles (defined as manufactured items); consumer packaged food, drugs, cosmetics, or alcoholic beverages (for sale or for personal consumption in the workplace); drugs to be administered to patients; and consumer products which are to be used in the same manner as a normal consumer would use them. WHMIS and some state right-to-know laws may differ slightly.

TRAINING—All employees in both the U.S. and Canada should already have been trained. If this is not the case, it is imperative to begin as soon as possible. Additional training

should take place whenever new employees are hired or new materials or processes are introduced. Some state laws require yearly retraining as well.

The amount of time the training should take is not specified. This is because the law intends the training requirements to be performance oriented—that is, the employees must be given whatever information they need to understand the hazards of their specific jobs and how to work safely. Often short quizzes are used to verify that the employees have understood the presentation.

Basic training for conservators and teachers usually can be accomplished in a full day. The information which must be communicated includes:

1. The details of the hazard communication program that the employer is conducting, including an explanation of the labeling system, the MSDSs and how employees can obtain and use hazard information.
2. The physical and health hazards of the chemicals in the work area. This should include an explanation of physical hazards, such as fire and explosions, and health hazards, such as how the chemical enters the body and the effects of exposure. Employees should be taught those basic concepts needed to evaluate chemical hazards such as Threshold Limit Values, evaporation rates, and the meaning of other terms found on MSDSs.
3. How employees can protect themselves. This should include information on safe work practices, emergency procedures, use of personal protective equipment, and explanation of the ventilation system and other engineering controls to reduce exposure.
4. How the employer and employees can detect the presence of hazardous chemicals in the work area. This should include training about environmental and medical monitoring conducted by the employer, use of monitoring devices, the visual appearance and odor of chemicals, and any other detection or warning methods.

ENFORCEMENT—Many art conservation businesses and schools still may not comply with the right-to-know. Some may hesitate to comply because they are concerned about the cost. It's true. Budgets can be stretched when staff time is allocated to taking the inventory, collecting MSDSs and training employees. OSHA is aware of these expenses and has estimated the cost of compliance for various industries including museums and art galleries (Standard Industrial Code 84) and educational services (SIC 82). OSHA expects the cost of compliance to be budgeted.

Today, OSHA gives more citations for hazard communication violations than for any other rule infraction. (*Outlook: Occupational Safety and Health*, Bureau of National Affairs Special Report, January 10, 1990.) I have participated in program development and training in two cited museums. I can assure you, it is better to set up your program before you are cited, than to do it "under the gun."

Once right-to-know laws are in place, it usually is not difficult or expensive to maintain them. And, in my opinion, the right-to-know laws are creating a much-needed uniform and professional system of chemical awareness, storage and handling in conservation.—Monona Rossol, M.S., M.F.A., Industrial Hygienist.