Hazardous Communications

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The Hazardous Communication Standard, (HAZ-COM) published into law in 1987, can be found in the Oregon Administrative Rules 437 Division 2 Subdivision Z, Toxics and Hazardous Substances. The main purpose of the law coming into effect was the high number of incidents and injuries that were related to handling of hazardous chemicals. In the early years, businesses were not aware of the effects that small exposures from hazardous chemicals had on employees, particularly the long term or chronic consequences. Until the time that workers had begun to correlate not feeling so well with exposures to chemicals, had anyone given any thought that the two may be connected. Even after some of the hearsay and evidence had proven otherwise, businesses were reluctant to acknowledge the facts for fear of dealing with litigation or worse yet, bad publicity.

Yours truly, had been around the chemical industry prior to 1987 and a common sight was a shop towel hanging from the rear pocket, that being the only means of clean up, decontamination and personal protective equipment. Wow, have we come along way! As standards emerge and develop along with technology, we can see crystal clear just how ignorant we were in regard to chemical safety.

As regulations governing hazardous materials become more main stream, not a lot of changes in the past decade, a familiarity with procedures have allowed us to be complacent to the point that forgetfulness may cause injury to strike out like a desert rattler. That old saying that "Familiarity breeds contempt", should also be applied "Familiarity breeds injuries."

In today's industrialized communities, more and more products are being reformulated to make them less harmful to people and the environment, yet we still hear of the harmful effects thrust onto someone while on the job. A perfect example of product substitution is that of sodium hypochlorite in place of chlorine gas. It is a belief of many that the greatest thing since the napkin was the discovery of a powder / granular type chlorine substance. In all actuality the working effects of a powder compared to a gas cannot be assessed. The true force behind the reformulation was the severity of consequences when dealing with chlorine gas in a wrong manner. The liability and regulations associated with a gaseous material, particularly in large quantities has become a nightmare for those in position to implement plans such as, process safety management (PSM), training and documentation. Unless the financial resources are of abundance, the commitment usually falls short.

When dealing with hazardous materials, many aspects of the health and safety programs are dealt with on the surface, due to time constraints, lack of funding or turn-over in personnel. People are often the key to a successful program and many times are the reason for the failure of such programs. How bad would we feel if we realized a short cut taken on our part injured someone or worse yet terminated a life?

Successful programs begin with a review of a needs assessment from filling out a Job Hazards Analysis (JHA). This analysis will methodically carry a manager through the unique process that helps prioritize hazards, breaks hazardous jobs into individual required steps and shed light on the areas of concern or pinpoint the areas of weakness. A JHA can also develop procedures to reduce or eliminate hazards associated with a particular task. Learning to perform a correct JHA is an art that stands on its own. Remember that as a person becomes all too familiar with the ongoing processes or practices of such an industry, they through automatic sequence of brain thoughts, may become habitual and often forget a crucial step, a step that may bring harm to them or a co-worker.

Hazardous Communication is one such program, that when reviewed through a JHA, may become more confusing than prior to the review. The elementary points of the HAZ-COM plan focus on ensuring workers who use hazardous chemicals know ***why*** the chemicals can harm them and ***how*** to handle the chemicals safely. Chemicals which pose either a physical or health hazard are classified per se in the rules.

What exactly is a physical and / or health hazard? To put it quite simply, a **physical** hazard can be closely related to a chemical that will show an indication to catch fire. A liquid that will burn, compressed gas, explosive / water reactive powder

or a material that promotes fire are all considered a physical hazard. A chemical that poses a **health** hazard is a little more complex to determine due to the fact; we as individuals are as different as night and day. Health hazards encompass effects that vary from person to person ranging from temporary uneasiness to permanent damage. A less toxic substance may have a long lasting effect when exposure has occurred over a long period of time. One should consider a substance such a hydrogen sulfide gas, that when exposed to very minute doses, a person becomes desensitized, therefore not realizing exposure is continuing. Twelve hours later that same person may be going into convulsions, unbeknownst to his / her family as to why. Some chemicals are classified according to their affect on tissues, targeted organs and internal systems, i.e. nervous system, respiratory system.

The HAZ-COM regulation is implemented by first, compiling a list of hazardous chemicals in the workplace. This list will raise the awareness level of the employees as to hazards, generally speaking. When an employee begins to understand the properties of the hazardous chemicals in use at their facility; their level of safety increases dramatically.

Vaporization, solubility, and flammability are some properties of chemicals that indicate their characteristic. Acknowledging properties of chemicals used throughout the company is the first step to raising the safety bar. Conveying information regarding the chemicals can be as simple as displaying a large poster board with a book of material safety data sheets located on a shelf. This key component of the HAZ-COM ruling (under employee training) is one area that a safety inspector can determine to what effect the written plan is implemented. A conversation with and/or questions to an employee from a safety inspector can be proof in the pudding as to the extent in which the employee has been trained.
For the majority of the businesses, there are five (5) key components to the HAZ-COM plan. 1) Hazardous Chemical List; 2) Labeling; 3) Material safety data sheet(s); 4) Employee Training and 5) Hazardous Non-Routine Tasks. Other elements of the HAZ-COM standard should be recognized in your written plan, and stated as "Not- Applicable." Hazardous Communications programs are those that are subject to high scrutiny ONLY when a cause of an injury has been linked to a hazardous substance. Millions of exposures occur each day without any harmful effects, or measurable harmful effects. Does this mean that the program should be lowered on the priority list of importance? Should we write our plan based on the probability of being caught or with a genuine concern for the people with whom we work?

The HAZ-COM program much like personal protective equipment or a respirator program, are typically put into practice based on a dollar cost or savings. How much can insurance premiums be lowered if all health and safety programs are carried out? Without a doubt, the above programs should be put into effect due to the concern that all employees should return home after their shift without a concern of exposure. Proactively, workers should want to participate in such programs, keeping an eye out for co-workers. Employees ought to feel encouraged from management to keep higher standards when dealing with health and safety issues.

The above such programs performance can be conducive with a first-rate organized calendar. A time tracking tool will aid in reminding those in charge of the managing of health and safety programs to conduct awareness meetings and training. Large corporations can school a few managers which can relate the training to the rest of the staff, or outside trainers can be brought into service for training. The most effective training is that which is formatted around everyday work procedures. Whoever conducts the training classes, insure a thorough discussion with management on the standard operating procedures of the facility is reviewed. This will assist in designing the class specifically for the intended audience.

Last, but not least, documentation of the training and the employees in attendance is crucial to the program. A program will particularly fall short when a health and safety officer visits the facility and the paperwork is incomplete. This adds fuel to the fire of suspicion and a more in depth review of the health and safety programs will likely occur. If you are feeling a little overwhelmed by all the health and safety programs and would like some assistance, please call on our association. We would be glad to assist in all areas. The best of everything that life has to offer! Mr. OpTIMist.