Hazard Communication and Health Hazards – Construction



Key Takeaways:

– Learning the purpose and importance of a hazard communication program
– Understanding common physical and health hazards associated with hazardous chemicals
– Acknowledging chemicals and their hazards, through labeling, markings, pictograms, and warning practices
– Learning the purpose and components of a Safety Data Sheet

Course Description

The Occupational Safety & Health Administration (OSHA) estimates that the Globally Harmonized System (GHS) covers more than 43 million workers who produce or handle hazardous chemicals in over 5 million workplaces across the nation. As well, the GHS is estimated to prevent more than 500 workplace injuries and illnesses and 43 fatalities every year, and save American businesses of over $475 million in productivity improvements, fewer safety data sheet and label updates, and simpler new hazard communication training.

The GHS is meant to standardize our communication about chemical hazards in the workplace. This is why OSHA has adapted its Hazard Communication Standard to align with the globally harmonized system.

Hazard Communication Standard
Identifies types of physical hazards:
– Flammables
– Explosives
– Reactives
– Corrosives
– Oxidizers
– Gases under pressure

Industrial businesses must have a written hazard communication program and provide workers with additional training regarding site-specific chemicals.

Hazard communication programs should consist of three key areas:
Chemical Inventories and Safety Data Sheets (SDS)
– Updated stock of the dangerous chemicals in the workplace.

– Every hazardous chemical needs to have a Safety Data Sheet (SDS).
– Safety Data Sheets need to record required information and be easily understandable and accessible.

Labels and Warnings
– Connect chemicals and corresponding hazards through labels and warning information.

Hazard Communication Training
– Solidifies safety practices through a hazard communication training program.
– Teaches employees of the hazards of non-routine tasks.

Safety Data Sheets (SDS)
The greatest information source about a hazardous chemical is the SDS; a technical bulletin of the chemical's hazards. For everyone's safety, OSHA requires this information to be consistent between manufacturers. Both chemical manufacturers and distributors alike are required by federal law to supply SDS for hazardous products and then OSHA requires employers to ensure they are easily available to workers.

Good precautions for safe handling of hazardous chemicals include general hygiene, like not eating and drinking in the work areas. Safe storage conditions include best practices like ventilation needs, storage room designs and packaging requirements.

In the case that employees are assigned to respond to accidents and spills, they must be trained in related responsibilities and properly equipped; part of being properly equipped is to have easy access to the Safety Data Sheet collection.

Always, workers need to read the SDS prior to working with any new chemical. OSHA standards require that SDS are readily available throughout all work shifts, to every employee. A central location may hold your facility's SDS binders, or there may be electronic SDS provided through computer terminals. All safety professionals must know where the SDS are located and make this location clear to the workforce.

Business protocols might allot the cleanup of small amounts of specific chemicals by people not part of a spill response team. Although, trained and properly equipped individuals who have access to spill response kits should be the only ones to clean up even the smallest of spills. They can ensure that no accidents will happen.

The Hazard Communication Standard ensures that pictograms are used on manufacturer and supplier labels of chemical containers to warn of potential hazards of exposure. Such pictograms are globally harmonized symbols and each individually represent a distinct hazard. As well as the original manufacturers' label, employers must use in-house labels, which can be referred to as secondary labels. However, these labels need to meet the Hazard Communication Standard requirements.

Alternatively, the National Fire Protection Association and the Workplace Hazardous Material Information System offer acceptable labeling systems and are often used for workplace containers. When an in-house label is used on a container previously labeled by the manufacturer, it is cannot block out any portion of the manufacturer's label.

Whenever in-house labels are used, you must understand the labels' coding and information.

Best practices for employers:
– It is recommended that employers review the new SDS in a timely fashion upon receipt.
– In the case that the employer does not receive the SDSs in a timely fashion, the manufacturer should be promptly communicated with to obtain the SDSs. When the

employer does not receive the SDS, OSHA has indicated that it will not cite employers who show “good faith efforts” to obtain the SDS.
– It is recommended that employers regularly evaluate the workplace using the SDS to identify hazardous chemicals and how their employees can be exposed.
– It is required that employers whose employees work with or around hazardous chemicals ensure that they review the updated SDS and evaluate all the employer’s underlying compliance programs (e.g., emergency action plan, storage of flammable and combustible materials, PPE, respiratory protection, etc.) which may be impacted by the SDS.
– Employers need to guarantee that employees working with or around hazardous chemicals are trained to recognize the pictograms and hazard warnings required under the new Hazard Communication Standard. It is also recommended that employers document this training and develop mechanisms to guarantee employees understand the hazards of working with or around hazardous chemicals.