



S&W READY MIX CONCRETE COMPANY	March
CORPORATE ENVIRONMENTAL / SAFETY PROGRAM	
Hazards of the Chemical - MONTHLY TRAINING TOPIC	

At one time or other, you and your co-workers have received training on the "Hazard Communication Standard" alerting you to the chemicals in use at your worksite. But everyone should review this information now and then, as a reminder of the need to be cautious.

Hazards from chemicals and other materials are everywhere we look-at work and at home. To protect yourself, you should know what type of exposure a particular chemical or material presents. Hazardous materials or chemicals can be classified into two groups, based upon their characteristics, *physical* hazards and *health* hazards. Examples of each follow:

Physical Hazards

- Explosives - This product has the ability to quickly and violently release extraordinary amounts of energy through chemical reaction due to heat, shock or other source. An example of an explosive is *dynamite*.
- Corrosives - Corrosives can cause severe skin tissue damage such as deterioration, burns, etc. Examples include *hydrochloric and sulfuric acids*.
- Reactive - Certain chemicals or materials react or change their properties or composition if exposed to other chemicals, products, or just air or water. Reaction can result in hazardous conditions or situations resulting in fire, explosions or the creation of other hazardous by-products. Examples include certain metals such as *sodium or potassium*.
- Flammable - Items that catch fire relatively easy can be considered as flammable. Generally speaking, a flammable product has a flashpoint of 100 degrees Fahrenheit or below. Examples include certain *solvents and fuels*.



Health Hazards



- Toxic - Toxic materials or chemicals are generally considered as poisons that can cause short-term or long-term sickness or even death. Exposure can be through inhalation, physical contact, etc. The degree of danger is dependent upon the level of exposure. Examples of toxic substances include gases like *hydrogen cyanide and carbon monoxide*.
- Radioactive - Exposure to harmful levels of ionizing radiation can cause adverse health effects. Biological damage to cell tissue can result from overexposure.

When the specific type of chemical or material hazard is identified, proper planning and precautions should be taken to prevent exposure and address emergencies. Precautions may include eliminating the hazard by not using it or by substituting a safer material. People can stay away from the hazard to prevent exposure or provide physical barriers as a safeguard. Emergency planning includes action plans for reporting, containing and disposing of chemical spills.



If you have questions about hazardous chemicals or materials: Review the specific chemical Material Safety Data Sheet (MSDS), which describes the physical and health hazards, or ask your supervisor. Only when you *identify* hazards can proper precautions be taken to minimize exposure.

Few of us are chemists, but we all need to learn about the chemicals we work with.