CHEMICAL HAZARDS AND THE WORKPLACE

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Thousands of workers use chemicals in their workplaces and homes every day. At work, chemicals are used for a number of processes throughout the day and at times, can be very hazardous due to the demands of the processes involved. Many people are aware that some chemicals can cause acute and chronic short and/or long-term health problems. Acute problems happen immediately after an exposure, while chronic, long-term health problems stem from repeated chemical exposure over a period of days, weeks, months or even years. As a result of long-term exposure, chronic health problems may not be seen for years because of the time required for damage to develop. Both acute and chronic health effects can result in permanent injuries such as skin damage, respiratory or nervous system ailments and even cancer.

For years, companies have continued using many of the same chemicals, neglecting to source other chemicals that may be safer for their employees. Some are concerned that altering a process could affect the quality of work, or that the product will be less-effective.

With today's resources, it has become easier to seek alternatives. In Massachusetts, the Toxics Use Reduction Act (TURA) drives the issue and offers a wide range of services for employers and employees to help them reduce their use of toxic chemicals. The businesses that take advantage of TURA program services often find ways to reduce toxic chemical use while saving money, improving product quality and getting ahead of the regulatory curve. The Massachusetts Office of Technical Assistance (OTA) provides onsite confidential assistance free of charge to Massachusetts businesses. The Toxics Use Reduction Institute (TURI) provides training, grants and other resources.

The role of workers in defining safer alternatives is a very important part of bringing a new perspective to the table and understanding just how chemicals are used in the workplace, sometimes in a manner that isn't suggested. Benefits for companies range from improved worker health, to the overall bottom line, impacting productivity and cost.

There is a growing concern about the effects of chemicals on workers' health and the environment because of the unknown long-term effects of chemicals seen as safe. The health of people is determined by their circumstances as much as it is their environment. It's understood that the world cannot be risk-free, but we know that there are safer alternatives to many of the toxic chemicals and products in use today. Industrial progress has brought us many advantages but we can work toward a healthier environment by following toxic use reduction policies and by developing policies to reduce the use of toxic chemicals.

Man-made chemicals are not only a problem in the wider environment, they are more often closer to the workplace and home. Everyday uses of consumer items such as cleaning products, cleaning solvents and metalworking fluids, as well as items that might appear less likely to contain hazardous substances, such as adhesives, sealants and work clothes, can all be hazardous to a person's health if used improperly, or if used in a way that the manufacturer never intended for a chemical to be used.

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Oftentimes, warning labels and instructions do not anticipate that cleaning product A and sealant B will be used in the same space at the same time. Unfortunately, this unwittingly exposes people to the negative effects of using different safe chemicals together. Even if employees are taking every precaution recommended by the manufacturer and may be working safely, a chemical interaction may occur that was never anticipated because the intent was never for these chemicals to be used at the same time. Many major illnesses can be caused by interacting exposures.

The most helpful ways to avoid health-related issues from exposures is to engage the workforce in the education of chemical-related health and safety programs by offering meaningful ways for them to be part of the effort to mitigate improper and unintended chemical use. Training should provide employees with background information including:

- Types of chemical hazards found in the workplace
- How chemicals can harm you
- How to obtain and understand information about chemicals used at work
- Workers' right-to-know policy
- The role of the health and safety representative in ensuring the safe use of chemicals found in the workplace

Addressing chemical-related health and safety issues shouldn't be seen as a regulatory burden; it offers significant opportunities to improve your worksite by reducing short and long-term healthcare costs of your workers, reduction in injuries and illnesses, reduction in productivity loss and an increase in morale.

An effective way to begin is by creating a chemical review committee, a group of people that will focus on the work environment and applying the hierarchy of control to a site. The hierarchy of control consists of the elimination, substitution, engineering controls, administrative controls and personal protective equipment (PPE) related to standard processes involved in reducing hazards.

By reviewing the many chemicals in use today, your company will help create a more sustainable environment.

We all have a responsibility to make sure that our actions do not harm others or our shared environment. Whenever possible, the employer should set goals for reducing and/or eliminating toxic chemicals. The rewards achieved are far-reaching and beneficial.

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