# CHEMICALS CAN BECOME A COSTLY AND HAZARDOUS WASTE

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Many industrial processes employ chemicals and because they can be hazardous, care is required in the workplace to ensure they are utilized appropriately. In fact it is the law that this be done. Workplace Hazardous Materials Information Systems (WHMIS), including material safety data sheets (MSDS), require that employees be trained in the use, storage and disposal of chemicals to prevent injuries to workers. Furthermore, the information, i.e. the data sheets, should be posted so that employees can easily find it. Do you know where your MSDS sheets are located? Do employees know how to interpret them?

While accidents will always happen, workplace safety has improved with the use of proper management systems. We are improving the health and safety of our employees but what about the health and safety of our environment? The situation is advancing there as well, albeit more slowly. There are regulations regarding the disposal and transport of hazardous wastes in most, if not all, jurisdictions in Canada. But the training requirements established by WHMIS for workplace safety haven't been extended to environmental risks. In larger industries, that might be the responsibility of the environmental coordinator but in small and many medium sized businesses, there is no environmental coordinator. When industries have environmental management systems in place, training will be undertaken to make certain that all employees are on the same page and working to the same goals and targets. But few businesses have formal environmental management systems in Nova Scotia. Do you know where the chemicals from your processes are going?

Hazardous wastes can encompass a wide variety of chemical wastes in industries. And depending on the nature of the hazards, the cost of managing and disposing of them can be quite high. Most of the hazardous waste produced in Nova Scotia has to be transported elsewhere for treatment and ultimate disposal or destruction. That accounts for much of the cost. If these costs are high, it becomes worthwhile to consider a couple of things: First, improve the efficiency of your processes to ensure that less waste is generated; this might involve discussion with your suppliers who may have been modifying formulations over time and they may be more concentrated or more dilute. Second, consider modifying the processes in a manner that less toxic or hazardous alternatives could be employed. In this case, you might consult your suppliers or the industrial association. Accessing a university research using the Industrial Research Assistance Program (IRAP) might also be helpful. This could have benefits for your employees and the environment as well as the bottom line.

In the past, we have seen cases in which a chemical input had been modified and the process operator had not been aware of the change. In that case the business was spending twice as much on the input and the waste than was necessary. In other cases, alternatives were available and the supplier didn't think the business was interested because they had never inquired. So don't make assumptions, ask questions of your supplier, your industry association and / or your waste manager. They may have solutions that will benefit you and the environment.

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