Many chemicals and dangerous substances are used on construction sites. These substances can pose a threat to workers, the public, as well as the environment including plant and animal life when not handled correctly. Mother Nature does not have her own personal protective equipment and it is everybody’s responsibility to safeguard and protect our environment.

The best strategy for environmental safety is to prevent the release of contaminants into the environment. All construction projects should have some form of environmental impact assessment completed in the development stages. Company policies, procedures and training should then be put in place for the safe handling of toxic substances.

The Saskatchewan Ministry of Environment classifies pollutants in the following categories:

- **Environmental Contaminants**: Mirex and PCBs
- **Petroleum Products**: Gasoline, Diesel Fuel, and Lubricants
- **Pesticides**: Glyphosate and DDT
- **Acids and Basis**: Sulphuric Acid and Caustic Soda
- **Miscellaneous Organic and Inorganic Substances**: Methanol and Ammonia
- **Metals**: Lead, Mercury, and Arsenic
- **Radioactive Materials**
- **Waste Water**: Domestic, Industrial and Agricultural

While you may not work with all of these types of materials, it is important to be familiar with the substance you commonly use and how to prevent their release into the environment. There are many common sources of contaminants found on construction sites both small and large. Common worksite contaminants include:

- **Chemicals**: Always check WHMIS labels for proper disposal of chemicals. Refer to Material Safety Data Sheets (MSDS) information to protect yourself before handling any chemical.
- **Garbage**: Not all garbage goes to the landfill. Many construction products can be reused or recycled.
- **Exhaust**: Winter conditions warrant many of us to leave vehicles and machines running to keep engines and cabs warm. Exhaust contributes to air pollution.
- **Fuels and Fluids**: Overrunning machines leads to increased incidents of hose leaks. Always have a spill kit on site or in the vehicle to deal with common spills and leaks.

If a contaminant release occurs, regardless of the size or volume, a plan must be put into place to deal with the situation and prevent permanent damage to the environment and protect employees and the public from exposure.

An emergency plan should be in place by employers as part their Occupational Health and Safety requirements under the Regulations. Workers should have adequate training in this plan, have and know how to use the appropriate PPE to protect themselves, as well as necessary evacuation procedures. The emergency plan should also include procedures to:

- Prevent further discharge of the pollutant
- Contain the spilled pollutant
- Minimize the effects of the spill

Remember, when a spill occurs, responder safety is first priority. Do not touch or go near spills unless you are trained in the hazards and have the proper protective gear to safely handle the spill.

Public protection is the next priority. Contact authorities immediately if a major spill occurs, and safe guard the area from the public and people on site.

When the danger to personnel and public is mitigated then the protection of the environment will be undertaken by using containment and disposal methods set out in the Spill Control Regulations of Saskatchewan. If a spill occurs on infrastructure that could pose a risk or hazard to that infrastructure, report it to project managers and engineers and local authorities.

You must report dangerous chemicals and large spills if they exceed levels in the Table of Reportable Quantities determined by the Ministry to the SaskSpills Provincial Enforcement Centre Spill Report Line: 1-800-667-7525.