

## Prevent Fuel Spills with Regular Training

Operations and maintenance personnel at a fuel facility can often turn-over quickly. The failure to provide adequate training for new employees can potentially lead to problems, such as fuel leakages and spills. All fuel facility staff should be able to respond safely, quickly and effectively to any fuel spill incident. To help achieve this, an up-to-date emergency plan needs to be maintained and practiced. In addition, compliance with the new environmental regulations for fuel systems and a comprehensive maintenance program will help to prevent leaks and spills. Personnel should be familiar with operations and maintenance procedures, and they should know where safety features (such as the emergency stop switch) are located and how to operate them.



Photos: Robyn Weisner, FNESS



Every fuel facility should have a spill kit. All staff should know where it is located, what it contains, and how to properly use the equipment in the event of a spill.



Photos: Brenda Maguire, FNESS

A comprehensive maintenance program and regular training of facility staff can help prevent fuel leaks and spills.



Potential damage from gasoline and diesel spills includes soil, groundwater and surface water contamination, harmful impacts on human health and safety, harmful impacts on animals and plants, and damage to property. Leaks and spills from storage tank systems containing petroleum products and allied petroleum products are responsible for approximately 60% of contaminated sites on federal and aboriginal lands in Canada (Federal Contaminated Sites Inventory, Treasury Board Secretariat). Most spills occur during fuel handling and use.

If a fuel spill does occur in the community, seven general fuel spill response actions include:

1. Ensuring safety
2. Stopping the product flow
3. Securing the area
4. Conducting a situation assessment
5. Notification
6. Containment
7. Recovery and disposal

Remember that if the risk of fire is considered high, clear the area around the spill and wait for the fire department to arrive on the scene and confirm that the spill can be approached safely.

To help prevent spills, ensure that employees have access to appropriate operational and spill response training on a regular basis, and don't forget to involve your local fire department in the development and practice of an emergency plan.

by Brenda Maguire

# New Fuel Tank Regulations – Emergency Plans Required

In an effort to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal land, Environment Canada implemented new regulations on June 12, 2008.

The new *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* apply to all outside aboveground, underground and partially buried storage tank systems containing petroleum and allied petroleum products; exceptions include above-ground storage tank systems that have a capacity of 2,500 L or less and are connected to a heating appliance or emergency generator. Under these regulations, owners or operators of these systems must develop an emergency plan for each of their storage tank systems.

Compliance with the new regulations is mandatory, but the deadline for having a plan depends on when your system became operational. Those systems already in operation when the regulations came into affect on June 12, 2008, have until June 12, 2010, to prepare an emergency plan. New systems must have an emergency plan before they can receive their first transfer of product.

When preparing an emergency plan, the key is to keep it as simple as possible while making sure the contents of the plan meet the requirements listed in the regulations. Here is some of the specific information required in your emergency plan:

- Product information (properties and characteristics) on what is being stored in each of your system's tanks and each tank's maximum capacity. The Materials Safety Data Sheet (MSDS) you receive from your product supplier and the manufacturer's suggested fill-limit (i.e. a certain percentage of the tank's nominal capacity) should help answer the above respectively.
- Characteristics and sensitivity of the site and surrounding area, such as location of nearby hazards, underground utilities, populated areas, ecologically significant areas or geographical features. Maps and additional information, such as aerial photographs or bore-hole logs, may prove useful.
- Step-by-step descriptions of response measures and actions that can be used to prevent, prepare for, respond to and recover from emergencies (man-made or natural) that may result in human or environmental harm.
- A list of names, contact numbers, roles and training required for emergency team members who are responsible for carrying out the emergency plan. This information may be sorted in a table.

- A list of emergency response equipment and their locations. Depending on how much equipment is needed, the format of the list can range from a simple text description to a diagram or map of the site.

In order to reduce the chance of causing immediate harm to humans, the plan must include measures that will be taken to notify the public in the case of an emergency. Methods can range from emergency e-mails and local radio or television broadcasts to door-to-door warnings.

There should be a copy of the emergency plan available to all team members who are required to respond in emergencies, plus one where the storage tank system is located. Your emergency plan should be treated like a living document. Keep it up to date and ensure that those working around the system are able to respond quickly in an urgent situation.

At FNESS we believe it is important to create and follow an emergency plan, not only to fulfill requirements, but to reduce risks to humans and the environment everyone depends on. By constructing a carefully thought-out plan, it is hoped that owners and operators will learn to foresee and prevent accidents, as well as respond effectively if one occurs.

**A quick response can reduce clean-up costs...**

by Shari Ikoma



Make sure proper signage and safety measures are in place.



Photo: Brenda Maguire, FNESS

Prepare everyone for a quick and effective response through the regular training and practice of your facility's emergency plan.



Photos: Rex Jerome, JIBC