

FUEL SPILL CONTINGENCY PLAN

Fuel Storage

The four main types of fuel used in exploration are: Diesel, gasoline, Jet-B and propane. Diesel is used for machinery and vehicles in camp and the drill site. Gasoline is for vehicles, small machinery and equipment. Jet-B fuel is used by helicopters or turbine powered aircraft. Propane is used in appliances in camp and heating at the drill site.

Diesel, gasoline and Jet-B are stored in sealed 45 gallon drums. Propane is stored in 100 pound cylinders. The total number of barrels or cylinders kept on site will vary depending on requirements and will comply with the limit set by the appropriate governing body.

Fuel spill kits are located at each fuel cache, and contain absorbent materials and other safety equipment that may be needed to contain a spill.

This Contingency Plan will be posted on-site for easy reference in the event of an unplanned discharge of fuels.

Sources of Potential Fuel Spills:

Potential fuel spills could be a result of the following:

- Accidental damage to barrels or cylinders;
- Vehicles involved in accidents;
- Damaged pumping system.

These scenarios will be minimized by regular visual inspection, proper training for fuel handling and spill response training for all personnel associated with fuel handling.

If a Fuel Spill Occurs:

The following steps are to be taken in the event of a fuel spill, a leak at a storage facility, or a vehicle accident.

- 1) Identify the source of the leak or spill.
- 2) Contain the spill and the source if possible.
- 3) Leaks from a tank or barrel can be stopped by:
 - turning off valves;
 - utilizing patching kits to seal leaks; and
 - Place plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground.
- 4) In the worst case, the contents of the leaking barrel can be pumped to an empty barrel.
- 4) Contact the Spill Response Coordinator or supervisor.

Fuel Spills on Land

- Contact the Spill Response Coordinator.
- Hydrocarbon on rock will be soaked up with absorbent sheeting. The hydrocarbon-saturated sheeting will be placed in empty drums for disposal.
- Contaminated soil and vegetation may have to be removed and disposed of. The Spill Response Coordinator or supervisor will contact the government authority identified by the 24-Hour Spill Reporting Line for approval before undertaking this.

Fuel Spills on Snow

- Snow works well as a natural absorbent and collects spilled fuel.

- Berms can be made from snow by compacting and lining the snow-berm with plastic.
- The snow-fuel mixture will be scraped up and stored in a lined area or in drums for future disposal, or burned with approval (contact the NWT 24-Hour Spill Line). Remaining contaminated snow will be placed in drums or on a lined berm (on land).

Fuel Spills on Water

It is important to immediately limit the area of the spill on water. The following steps should be followed.

- Booms will be deployed to contain the spill area. Winds, waves, and other factors will limit the effectiveness of this action.
- Absorbent pads and similar materials will be used to capture small spills on water. The absorbent pads are hydrophobic (absorb hydrocarbons and repel water).

Fuel Spills on Ice

- Where a spill occurs on ice, snow will be compacted around the edge of the spill to serve as a berm. The ice will prevent (or reduce the rate of) seepage of fuel into the water, but the contaminated snow/ice must be immediately scraped up. Permission may be given from the government to burn off fuel, as with fuel spills on snow (contact the NWT 24-Hour Spill Line).
- Fuel that escapes under the ice through breaks or cracks is extremely difficult to collect. Expertise should be sought immediately. A Mobile Environmental Response Unit can be made available in a matter of hours if spills are extreme.

RESPONSE TO SYSTEM FAILURES AND SPILLS

Initial Actions

In the event of a spill or system failure, personnel at the spill site will follow the following procedures:

- 1) Ensure safety of yourself and others.
- 2) Assess any hazards to persons in the vicinity of the spill.
- 3) Control danger to human life.
- 4) Assess if spill can be readily stopped or brought under control.
- 5) If safe to do so, contain and stop flow of spilled material.
- 6) Gather information on the status of the situation.
- 7) Report spill or system failure to the On-Scene Coordinator immediately so they can ensure the responsible regulator is notified by contacting the NWT 24 hour Spill Line.
- 8) If safe, resume action for cleanup and containment.