

# SILVERMET CORPORATION OIL AND HAZARDOUS MATERIAL SPILL CONTINGENCY PLAN

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## Oil and Hazardous Material Spill Contingency Plan

The Spill Contingency plan is in effect for the Silvermet Corporation Silvermet Lake camp operating under a Class A or Class B Land Use Permit where barrel fuel storage is used. This plan is for the :

Camp : Silvermet Lake

Location: 66° 59' 09.7" N and 114° 53' 51.4" W Camp Phone: 011-8816-314-65094 (24 hour line)

#### Introduction

This Spill Plan has been developed to formalize the actions taken in the event of an Oil or Hazardous Material Spill. The responsibilities of key personnel and the procedures to be followed in responding to a spill are outlined. This spill contingency plan is to minimize the health and safety hazards, environmental damage and clean up costs. The plan has been prepared to provide easy access to all the information needed in dealing with a spill.

Aurora Geosciences Ltd. (and its precursor Covello, Bryan and Associates) have been active in the Territories over the past 30 years. Plans for the program include exploration geophysics (max Min, Mag and Protem) to follow up drill results from last year. Equipment most likely to be used during this land use permit will be a Bell 206B Jet Ranger helicopter, an 11kW generator for camp and small water pump with a water meter for obtaining water for camp. P 50 heating oil will be used in oil stoves and the generator while Jet B will be used for the helicopter, regular unleaded gas will be used for water pump and propane for cooking and heating water.

The main fuel cache is at camp, over 300 m from Silvermet Lake and the fuel is contained within 205 litre sealed containers. Barrels will generally be moved by helicopter or by rolling on the ground. Any lubricants left over from last year along with the diesel and Jet B will be stored within an acceptable field berm. We must ensure absorbent padding underlies the fuel transfer areas and the smaller areas for storage of lubricants and diesel. All fuel drums will be inspected on a daily basis for leaks.

The most likely source for spillage and leakage include poor seals on drums or punctures, leaky valves, mishandled drums, improper storage, heat expansion due to overfilling, accidental puncture of fuel lines (either by wear or animals) and/or poor transfer method.

# **INITIAL RESPONSE**

Procedure to be followed upon discovering a spill of oil or hazardous material:

- i) Be alert and ensure personal safety first
- ii) Assess the hazard and attempt to identify product spilled
- iii) Control danger to human life
- iv) Assess whether spill can be stopped or brought under control
- v) Alert appropriate personnel (Camp Supervisor)
- vi) If safe, and possible to do so, stop the flow of hazardous material
- vii) Record pertinent information on spill status on Spill Report Form
- viii) Report spill immediately to NWT 24 Hour Spill Report Line (867) 920-8130
- ix) Resume or continue effective action to contain, clean up, or stop flow of spilled material

## **ACTION PLAN**

#### CAMP SPILLS

## **Procedure**

- 1. The person who first discovers a spill of hazardous material should follow the procedures set out in the section entitled "Initial Response".
- 2. Together with the field operations Supervisor, the situation will be reassessed and effective actions will be carried out in order to contain, clean up and stop the flow of spillage. Such actions may include:
  - a) evaluating Material Safety Data Sheets for types of health and safety hazards from the spill,
  - b) determining the origin of the spill, if fuel drums have been punctured or are leaking due to unsatisfactory seal, the fuel should be transferred into competent drums and/or seals should be replaced,
  - c) absorbents and booms should be placed in order to recover all the free fuel before it is allowed to seep into the environment. Special care should be taken to prevent spills from entering fish habitat,
  - d) construction of containment dikes and recovery trenches using available hand tools to divert and control runoff,
  - e) continual monitoring of the site to ensure no subsequent spills have occurred,
  - f) safe and proper disposal of any materials used during the containment and clean up of spilled fuel,
  - g) continued assessment of soils and waterways within the area to determine if further remediation is required,
  - h) any actions required by appropriate government authority.

#### **CONTAINMENT ISSUES**

- 1) All fuel caches and hazardous materials storage areas should be underlain by thick, impermeable plastic material to retard the possible leakage through seals or punctures (very minimal). The edges of the plastic containment area should be burmed up so leakage cannot happen outside of the burm area.
- 2) All fuel transfer areas should be underlain by thick impermeable plastic material and absorbent padding to eliminate the need for concern.

# **CLEAN-UP TECHNIQUES**

- 1) Consult the appropriate Material Safety Data Sheet (posted in Field Office Tent) to determine the types of health and safety hazards associated with the product or material.
- 2) Wear appropriate protective clothing working near or around the spill.
- 3) If safe to do so, stop the leak and avoid being sprayed.
- 4) Try to contain the spill with dykes, pits, absorbent material or using an impermeable polymil plastic to contain spill directly.
- 5) Clean up the SPILLED materials using methods and materials recommended by the On-Scene-Coordinator.
- **6)** Dispose of hazardous waste materials in impermeable containers at a location approved by the On-Site Project Manager.
- 7) Remove hazardous waste from site upon clearance from Nuanvut/NWT and Environment Canada officials to an accepted site.

#### **Reporting Procedure**

All spills of petroleum products or other hazardous materials must be reported to the 24 Hour Spill Report Line to ensure that an investigation may be undertaken by the appropriate government authority.

The following outlines the procedure to be taken when reporting a spill to the appropriate authority:

#### SPILL REPORTING PROCEDURE

- 1) Fill out the "Spill Report Form" as completely as possible before making the report.
- 2) Report immediately to Yellowknife using the 24 Hour Spill Report Line:

#### 24 HOUR SPILL REPORT LINE: 867-920-8130

3) Where Telex is available, follow up immediately by sending a copy of the Spill Report Chart

Facsimile: 867 – 873 - 6924

4) RCMP communications may be used if other means are not available

Additional Information or Assistance:

**Environmental Protection Services, YK**Phone: 867-873-7654

Fax : 867-873-0221

KIA Lands, Kugluktuk Phone: 867-982-3310

Fax: 867-982-3311

**Environment Canada, YK** Phone: 867-766-3737

Fax: 867-873-8185

**Environment Canada, Nunavut** (Jim Noble) Phone: 867-975-4644

In preparation of making a report to the appropriate officials, the reporting person must have specific information regarding the spill. Please fill out the following "Spill Report Form" prior to making a report.

#### RESOURCE INVENTORY

The personnel make-up of the field camp will be relatively stable as the field program may be as long as 3 months and rotations will occur every 5-6 weeks. The numbers will vary from 11 - 13 people. The camp will have a First Aid Attendant, a WCB Supervisor and/or trained Camp Man on site while in operation.

#### **Resources Available at Any Time During Operation:**

Hand Tools (shovels, picks, rakes)
Wheel Barrow (summer)
Snow mobile sleighs (winter)
Absorbent Pads
Water
Protective Gloves, footwear and eyewear
First Aid Station
Satellite Phone Communication
Water Pump

## **Resources Available Periodically:**

Helicopter Fixed Wing

#### HAZARDOUS MATERIAL INFORMATION

Name of Chemical	Chemical Supplier	Potential Hazards
Heating Oil – Diesel Fuel	Matonabee Petroleum or	Fire, explosion or leakage
	Bassett Petroleum	
Jet B fuel	As Above	Fire, explosion or leakage
Regular Unleaded Gas	As Above	Fire, explosion or leakage
Propane	Superior Propane	Fire or explosion
Battery Acid	Home Hardware or C Tire	Limited; eating plastics or
		clothing

#### TRAINING AND EXERCISES

To ensure the effectiveness of our Contingency and Emergency Spill Response Plan, we implement the following procedures:

- a) Prepare and up-date the Plan as required
- **b)** Distribute the Plan to personnel on site and meet to discuss the Plan.
- c) Commitment to training the on-site personnel regarding the location of all storage areas containing hazardous materials.
- d) Commitment to ensuring all on-site personnel know the MSDS for all hazardous materials are kept on the wall in the on-site "Office Tent" and making sure these sheets are properly explained.
- e) To maintain an annual review of the Plan to ensure the objectives and methods of the Plan are being met.
- f) Site personnel will be trained on how to initiate a first response once a spill is noted. This training will include how to identify a spill, identify the seriousness of the spill and to recognize and respond to the Plan as identified.
- g) It is imperative to train the on-site personnel in the techniques and materials which can be used in spill containment and clean up activities. Particular emphasis on early detection will be a priority. Training will be initiated as part of the on-site introduction to the project.