SPILL CONTINGENCY PLAN

For Camps and Remote Operations

Shear Minerals Ltd.

Revised: November 2004

1.0 Introduction

The Shear Minerals Ltd. Spill Contingency Plan shall be in effect from November 01, 2004 to November 2008. All future amendments will be posted and recorded on the attached amendment record form.

This Shear Minerals Ltd. Spill Contingency Plan encompasses all its present camps and active remote sites in Canada.

This Spill Contingency Plan is posted at operational remote sites.

Shear Minerals Ltd. endeavors to take every reasonable precaution toward ensuring the protection and conservation of the natural environment, the safety and health of Shear Minerals Ltd. employees and contractors and (protecting) the community (at large) from any harmful effects of its materials and operations.

2.0 Facilities

Proposed location: (UTM Nad 27, Zone 15V)

2004 FUEL CACHES (Churchill + Churchill West)

Fuel Cache	Project	UTM (m) NAD27, Zone 15V	
		Easting	Northing
5	Churchill	611536	6987511
6	Churchill	569197	7025075
7	Churchill	580047	7012240
1	Churchill	599702	7007489
9	Churchill West	531755	7017720
10	Churchill West	550361	7015973
11	Churchill West	528705	7032732
13	Churchill	582081	6993433
14	Churchill	600794	6990753
Big Star	Churchill	393215	7056198
Happy Lake	Churchill	429555	6928571
Derby Lake	Churchill	435948	6968616

3.0 Responding to Failures and Spills

3.1 Spill Response Contact List

DIAND Water Resources Inspector
Nunavut
(867) 975-4298

Environment Canada
Nunavut
(867) 975-4639

Shear Minerals Ltd.
#200, 9797-45 Avenue, Edmonton, AB T6E 5V8
Pamela Strand, President
Bus: (780) 435-0045
Cell: (780) 903-0820

APEX Geoscience Ltd.
Suite 200, 9797-45 Avenue, Edmonton, AB T6E 5V8
Dean Besserer, Vice-President and Project Supervisor
Bus: (780) 439 5380
Cell: (780) 916 5782

3.2 Basic Steps — Spill Procedure

In the case of any spill or other environmental emergency, it is necessary to react in the most immediate, safe, and environmentally responsible manner. No spill or incident is so minor that it can be ignored.

The basic steps of the response plan are as follows:

1. *Ensure* the safety of all persons at all times.

2. *Identjfy* and find the spill substance and its source, and, if possible, stop the process or shut off the source.

3. *Inform* the immediate supervisor or his/her designate at once, so that he/she may take appropriated action. (Appropriate action includes the notification of a government official, if required, Spill Report forms are included in Appendix 3.

4. *Contain* the spill or environmental hazard, as per its nature, and as per the advice of the Spill Line as required.

5. *Implement* any necessary cleanup or remedial action.

3.3 Reporting

1. ***Immediately*** notify Shear Minerals Ltd. and APEX Geoscience. Spills will be reported to the 24-Hour Spill Line at (867) 920-8130, the DIAND Water Resources Inspector in Nunavut at (867) 975-4298, and Environment Canada personnel at 867-975-4639 immediately.

2. ***A Spill Report Form (Appendix 2)*** is filled out as completely as possible before or after contacting the 24 Hour Spill Line.

3. Other members of the team are notified as deemed necessary.

3.4 Other contacts for spill response/assistance if required

Environment Canada:
Environmental Protection Yellowknife: 867-669-4728

Indian and Northern Affairs

Land Use Inspection:	Ken Dahl:	867-669-2757
Water Licence Inspection	Phillipe di Pizzo:	867-360 6338
Fisheries and Oceans Canada	Ron Allen:	867-669-6641
GNWT Environmental Protection Service	Ken Hall:	867-876-7654

4.0 Responding to the spill

1. First steps to take when a spill occurs:
   - Ensure your own safety and that of others around you, beginning with those nearest to the scene.
   - Control danger to human life, if necessary.
   - Identify the source of the spill.
   - Notify your supervisor.
   - Assess whether or not the spill can be readily stopped.
   - Contain or stop the spill at the source, if possible, by following these actions:

   If filling is in progress, STOP AT ONCE.
   Close or shut off valves.
   Place plastic sheeting at the foot of the tank, barrel, or piece of equipment to prevent seepage into the ground or runoff of fuel
   Use absorbent materials (sheets, pads, booms) to absorb and contain the fuel spill.

2. Next steps to take:

   - Determine status of the spill event.
   - If necessary, pump fuel from a damaged and/or leaking tank or drum into a refuge container.
   - Notify the 24-hour Spill Report Line, and receive further instructions from the appropriate contact agencies
   - Complete and Fax a copy of the Spill Report Form *(Appendix 3).*
   - Notify permitting authorities.
   - If possible, resume cleanup and containment.

4.1 Fuel Spills on Land

"Land" may be defined as soil, gravel, sand, rock, and vegetation. Advice on spill containment and cleanup may be obtained from the 24-Hour Spill Line.

Procedure for Spills on Rock

For hydrocarbon spills on rock outcrops, boulder fields, etc.:

1) First responder or his designate obtains plastic tarp(s) and absorbent sheeting on-site.
2) A berm of peat, native soil or snow is constructed down slope of the seepage or spill.
3) The tarp is placed in such a way that the fuel can pool for collection and removal (e.g. at the foot of the berm). If there is a large volume of spilled product, pump the liquid into spare empty drums for sealing and disposal.

4) Absorbent sheeting is placed on the rock to soak up spilled oil, fuel, etc.
5) Multi Sorb (crushed lava rock) can be used to scrub the rock surface.
6) Saturated material is disposed of in an empty drum, which is then labeled and sealed. Alternatively, the pads may be wrung out into the empty drum(s), the drums marked and then secured for eventual disposal.

Procedure for Spills on Land

1) First responder or his designate obtains plastic tarp(s), absorbent sheeting, Multi Sorb or other ultra-dry absorbent and any other necessary spill containment equipment, pump, hoses, etc.
2) A berm of peat, native soil or snow is constructed down slope of the seepage or spill.
3) The tarp is placed in such a way that the fuel can pool for collection and removal (e.g. at the foot of the berm). If there is a large volume of spilled product, pump the liquid into spare empty drums, and dispose of product as advised by the 24-Hour Spill Line.
4) Petroleum-product sheen on vegetation may be controlled by applying a thin dusting of Multi Sorb or other ultra-dry absorbent to the groundcover.
5) Contact the 24-Hour Spill Line, Receive instructions from the appropriate contact agencies listed in Section 5.4 regarding collection of the contaminated soil or vegetation, its removal and site cleanup/restoration.

4.2 Fuel Spills on Water

It is important to immediately limit the extent of spill. The following is the procedure to be implemented when an incident occurs:

1) If the spill is small, deploy hydrophobic (water repellent) absorbent pads on the water. Hydrophobic pads readily absorb hydrocarbons. Alternatively, an ultra-dry absorbent designed for use on water-based spills may be deployed.
2) If the spill is larger, ready several empty drums to act as refuge containers for the spill.
3) Deploy *containment* booms on the water surface to “fence in” the spill area gradually and to prevent it from spreading. Keep in mind those environmental factors such as high winds and wave action can adversely affect attempts at spill cleanup.
4) *Absorbent* booms can then be deployed to encircle and then absorb any hydrocarbon spillage that may have escaped the *containment* boom.
5) Once a boom has been secured, a skimmer may be brought on-scene to aid in capture of the hydrocarbon; once captured, the product should be pumped to the empty fuel drums and held for disposal.

4.3 Fuel spills on Snow and Ice

By its nature, snow is an absorbent, and fuel spilled on snow is collected with relative ease, either by shovel, in the case of small-range spills, and by loader, in the case of more extensive spills.

Procedure for spills on Snow

1) Assess the nature of the spill. Necessary equipment might include shovels, plastic tarp(s), empty drums, and wheeled equipment.
2) Shovel or scrape contaminated snow and deposit in empty refuge drums. If the spill is

more extensive, use spill containment berms or compacted snow berms with plastic over top, around the affected area.

Procedure for spills on Ice

Spills on ice are handled in similar fashion as those on snow. However, as ice presents the added danger of immediate access to water, care must be taken to respond quickly to such spills. Should fuel seep or flow through cracks or breaks in the ice, despite all precautions, assistance should be sought immediately.

1) Construct a compacted-snow berm around the edge of the spill area.
2) Although hard ice will retard or prevent fuel entry to the receiving waters below, all contaminated snow and ice, as well as objects embedded in the ice (such as gravel or frozen absorbent pads) must be scraped from the ice surface and disposed of in an appropriated manner.
3) Contact the 24-Hour Spill Line. Receive disposal instructions (e.g. sealing in drums, burn off, etc.) from the appropriate contact agencies listed in *Section 5.4.*

4.4 Procedure for Chemical Spills

1) Assess the hazard of the spilled material. REFER TO THE MSDS SHEETS NOW. Members of the emergency response team who might be susceptible in certain situations, (such as asthmatics, where fumes or airborne particles are evident), should be replaced with alternates.
2) Assemble the necessary safety equipment before response (e.g. latex or other protective gloves, goggles, or safety glasses, masks or breathers, etc.)
3) Apply absorbents to soak up liquids.
4) Place plastic sheeting over solid chemicals, such as dusts and powders, to prevent their disbursement by wind or investigation by birds or other mammals.
5) Neutralize acids or caustics. Place spilled material and contaminated cleanup supplies in an empty refuge drum and seal for disposal.
6) Contact the 24-Hour Spill Line. Receive instructions on disposal methods and designated locations from the appropriate contact agencies listed in *Section 5.4.*

4.5 Procedure for Loss of External Load

The loss of external loads of fuel, oil, or chemicals from aircraft almost certainly results in complete and catastrophic failure of the container that once held the product. Immediate response is imperative.

1) Mark the loss target with GPS coordinates and relay to camp or base ASAP. Include quantity and type of load loss.
2) Base or camp will contact 24-Hour Spill Line, and receive direction and instruction.
3) Administer the appropriate procedure for Spills on Land, Water, Snow, or Ice.

5.0 Spill Equipment

Complete spill kits, oil absorbent kits, are kept on hand at all camps. Spill kits contain Multi Sorb, crushed lava rock, hydrophobic absorbant matting, goggles, plastic sheeting, protective gloves, shovel, garbage bags, empty drum.

6.0 Training and Practice Drills

Training

All members of the Response Team will be familiar with the spill response resources at hand, this Contingency Plan, and appropriate spill response methods. Involvement of other employees may be required, from time to time.

This familiarity will be acquired through:

1) Initial or refresher training, as appropriate, provided once per season.

2) Regular inventory updates are provided in list form to all team members. Information to be reported includes listing of all resources, number of items, their location, condition, date of last inspection and any special comments (such as expiry dates, under whose authority they may be accessed and special handling instructions).

Practice Drills

Shear Minerals Ltd. is aware that without practice, no Contingency Plan has value.

At least one practice drill will be held per season to give personnel a chance to practice emergency response skills. Each practice will be evaluated and a report prepared with the objective of learning where gaps and deficiencies (either in skills or physical resources) exist, and in what areas more practice is required.