Kennecott Canada Exploration Inc.

Exploration Operations Document

Northwest Territories and Nunavut

BRODEUR PROJECT

CONTINGENCY PLAN

for Material Spills,

in Exploration Camps & Remote Sites,

and Drilling Operations

October 2005

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Preamble

This Contingency Plan is effective from date of entry to date of closing for all field locations and drilling operations in the Northwest Territories and Nunavut. The Plan is submitted as an attachment to Kennecott's Nunavut Water Board Application for water use on the Brodeur Peninsula Project.

The Plan is intended to cover all exploration activities and camps to be operated by Kennecott Exploration in the Northwest Territories and Nunavut. The Plan covers all operations, including drilling, if applicable, and aircraft operations, wherein the handling of substances able to be spilt are involved.

This Plan will be distributed to Kennecott site managers and site contractors working within the permit area. Regular site safety meetings are held whilst exploration sites are occupied, and include reviews of this Plan and other safety/environmental issues. The Plan will remain posted and available at site, and will be posted at any future camps.

This Plan was prepared and approved by Kennecott Canada Exploration Inc. Additional information or copies are available from Kennecott Canada Exploration Inc. at (604) 696-3400, Susan Ball.

1.0 INTRODUCTION

1.1 Plan Purpose

The purpose of Kennecott Canada Exploration Inc's Contingency Plan is to provide a plan of action for potential spill events that might occur at Exploration sites of activity. The Plan addresses any unintentional releases of petroleum products and other hazardous chemicals. It defines the responsibilities of key response personnel and outlines procedures to be taken to minimise the impact of a spill. The Plan has been prepared to provide to management and field staff the necessary information to deal with a spill.

1.2 Kennecott Policy on Cleanup

It is Kennecott Canada Exploration Inc. policy to comply with all existing laws and regulations for the areas in which the company operates and to ensure protection of the environment in these areas. This Contingency Plan has been developed to comply with the Company's policy statement and to fulfil specific Canadian and Northwest Territories/ Nunavut regulatory requirements.

1.3 Facility Description

A seasonally occupied camp, established during 2002 near the Jackson River, is located at 16W472026E/ 8128006N (87° 52" 10.4' and 73° 14" 49.4'). The camp area in total is approximately 100m x 50m with frame tents, helicopter pad, fuel storage and incinerator toilet. A 2000 gallon holding tank for water is filled from the nearby stream and average usage is approximately 500 gallons per day during times the camp is occupied. The water is pumped by hose and the intake is covered with a mesh screen. All gray water is being discharged into a sump located in a sand bar near the camp.

1.4 Petroleum Product Transport and Storage

The petroleum products required for project work on site will be transported by air from Resolute and or Nanisivik, or, where available, will be purchased from Nunavut communities.

Helicopters using fuel slings affect fuel movement once delivered by fixed wing aircraft. All fuel on site remains in standard fuel drums, and is stored in designated areas appropriate for the refuelling of aircraft, generating plant, snow machines and drills.

It is anticipated that the total petroleum product requirements for a season will not exceed 10 gasoline, 75 diesel and 300 Jet-B.

Where applicable, petroleum storage areas at the camp and drill sites are visually inspected on a daily basis to check for leakage or damage to any of the containers. Spill kits are available on site.

All fuel is stored a minimum of 30 metres from any high water mark, and transfer of fuel from supply vehicles to tanks and from tanks to vehicular equipment is performed with the aid of fuel pumps. Material Safety Data Sheets (MSDS) for all fuels and chemicals are kept on site for reference, should they be required.

If any fuel products are required in other areas within the permit area appropriate amendments to the Land Use License will be applied for and fuel products will be stored and handled at the specific site in accordance with applicable Land Use Permit conditions.

1.5 Chemical Use and Storage

Only a few litres of cleaning and maintenance compounds (including household type cleaners, degreasers, lubricating oils, etc.), often referred to as household hazardous materials, will also be used on site. However, the potential for spills of these materials to the environment is considered insignificant.

2.0 SPILL RISK ASSESSMENT

2.1 Petroleum Products

Potential sources of petroleum product spills could involve the following:

1. Leaking or ruptured fuel drums.

2. Fuel transfer operations between storage drums, and mobile equipment including aircraft. This could include broken supply pipes, hoses, and associated valves during fuel transfer operations.

3. Aircraft, snow-vehicles or equipment involved in accidents.

4. Leaks and drips from machinery, pumps, motors, and other equipment

The potential for spills to occur directly on a watercourse is low at project sites because fuel storage and transfer points are located away from watercourses. However, if a spill occurred during the winter on lake ice, it will be contained and cleaned up without contaminating the under – ice lake

waters.

2.2 Chemicals

Any chemicals brought to the project site in drums or bags will be stored indoors. Spillage may occur from accidental breakage of containers or during handling operations.

Practising safe handling and storage procedures, ensuring proper training in handling of the products, and conducting regular inspections of stored chemicals will minimise spills from chemicals.

3.0 RESPONSE ORGANIZATION

The members of the spill response team and their duties are listed below:

Response Team Member	Title/Company
	Ben Pezaro Geologist Kennecott Canada Exploration Inc.
	Jamie McLennan Health, Safety and Environmental Coordinator Kennecott Canada Exploration Inc.
	Ian Graham Exploration Manager, Diamonds Kennecott Canada Exploration Inc.
	Troy Gill Geologist Kennecott Canada Exploration Inc.
	Erik Madsen & Murray Swyripa Managers Environmental Affairs Diavik Diamond Mines Inc.
	There will be between 3 and 15 people on site(s) to aid in any spill response activities.

The responsibilities of the On-Scene Co-ordinator include the following:

- ✓ Assume complete authority over the spill scene and personnel involved.
- ✓ Activate the Contingency Plan.
- ✓ Evaluate the initial situation and assesses the magnitude of the spill.
- ✓ Report the spill to the Project Manager or an Environmental Advisor, who in turn will report it to NWT 24-hour Spill Report Line at (867) 920-8130 and DIAND Water Resources Inspector at (867) 975-4298.
- ✓ Develop an overall plan of action.

- ✓ Report to the Project Manager and provide recommendations on resource requirements (additional manpower, equipment, material, etc.) to complete the cleanup effort. The responsibility of the co-ordinator is to mobilise personnel and equipment to implement the cleanup.

The Responsibilities of the Project Manager include the following:

- ✓ Provide liaison with Kennecott Exploration management to keep them informed of cleanup activities.
- ✓ Obtain additional required resources not available on-site for spill response and cleanup.
- ✓ Act as the spokesperson with government agencies as well as the public and the media as appropriate.
- ✓ Document the cause of the spill and effectiveness of the cleanup effort, and implement the appropriate measures to prevent a recurrence of the spill.
- ✓ Prepare and submit follow-up documentation required by appropriate regulators.
- ✓ Ensure that the spill is cleaned up and all follow-up communication and reports are filed with the DIAND Water Resources and Environment Canada offices in Iqaluit.

The Environmental Advisors' duties include the following:

- ✓ Provide technical advice on probable environmental impacts of the spill.
- ✓ Advise the On-Scene Co-ordinator on spill countermeasures and recommend the most appropriate options.
- ✓ Assist in developing any required sampling, testing, or monitoring program associated with the spill.
- ✓ As required, assist the Project Manager in dealing with appropriate government agencies as well as public and the media.
- ✓ Provide recommendations on spill prevention.

4.0 INITIAL ACTIONS

In the event of a spill, the first person on the scene is responsible for the following actions:

1. Maintain alertness and ensure personal safety and that of others who are on the scene prior to the arrival of the Spill Response On-Scene Co-ordinator.
2. Assess the hazard to persons in the vicinity of the spill.
3. If possible, without further assistance, control any danger to human health.
4. Assess whether the spill can be readily stopped or brought under control.
5. Where safe to do so, stop the flow of the spilled product.

6. Report the spill without delay to the Spill Response On-Scene Co-ordinator.

7. Resume any action to contain, clean up, or stop the flow of spilled product until the On-Scene Co-ordinator takes control of the scene.

5.0 REPORTING PROCEDURE

The On-Scene Co-ordinator must be notified immediately of any spill. The following chain of command must be followed in the reporting process. Immediately contact:

Reporting Hierarchy	Title/Company/Phone/Fax
	Ben Pezaro or Jamie McLennan Project Geologist/HSE Coordinator Kennecott Canada Exploration Inc. Phone: 604-696-3400 Fax: 604-696-3401
	(867) 975-4298
	(867) 920-8130 (867) 873-6924

NOTE: A "Spill Report" form should be filled out, including the GPS location of each occurrence, no later than 30 days after initially reporting the event. The report should be filed with DIAND Water Resources Inspector in Iqaluit.

6.0 ACTION PLAN

The following actions have been incorporated to minimise the potential for spills to occur during fuel handling, transfer, or storage operations:

- Immediately cleanup minor spills.
- Conduct regular inspections of fuel barrel storage areas and hoses for evidence of leaks.
- Use drip pans and/or olephilic environmental blanket at all petroleum transfer sites and under stationary machinery.
- Train personnel in proper fuel handling and spill response procedures.

6.1 Spills on Land

Response to spills on land will include the Initial Actions listed in Section 4.0 and the following specific steps:

1) Identify the source of the leak or spill.

2) Contain the spill at the source if possible.

3) Stop a leak from a barrel by:
   i. Ceasing filling operations if leaking vessel is receiving fuel
   ii. Checking valves and seals, and ceasing use of these valves if leaking
   iii. Transfer all fuels from leaking barrels
   iv. Placing plastic sheeting at the foot of the leak to minimise seepage of the spilled material to the environment.

Spills on land (gravel, rock, vegetation) can be contained and cleaned up by the following methods:

1) Place a soil berm down slope of the running or seeping fuel. Plastic tarps can be placed at the foot of and over the berm to permit the fuel to pool on the plastic for easy capture. Berms can be made of snow and lined with plastic in the winter. Absorbent sheeting can be used to soak up the fuel. The fuel can be squeezed from the pads into drums or plastic pails, and the pads can then be re-used. Larger pools of fuel can be pumped into empty drums. It will be especially important to prevent fuel from entering a body of water where it will have a greater environmental impact.

2) Absorbent sheeting can be used to soak up petroleum products from rocks. The sheeting should be placed in the empty drums for eventual disposal by incineration.

3) A light covering of Sphag Sorb™ or alternate absorbent material can be used to absorb films of petroleum products from arctic vegetation.

4) Contaminated soil and vegetation may have to be removed for disposal. Kennecott will contact the appropriate DIAND regional office for approval before undertaking this action.

5) Snow can work well as natural absorbent, and it can be compacted and used as a berm. Plastic sheeting then can be placed over the snow berm.

6.2 Spills on Water

The likelihood of a spill on or over water is remote however in the event it does occur the following steps will be implemented to control spills of petroleum products on water:

1) Floating 'boom(s)' can be deployed to contain the floating product.

2) Absorbent pads and similar materials can be used to capture small spills on water. Absorbent booms can be drawn in slowly to encircle spilled fuel and then absorb it. These materials are hydrophobic, and therefore, absorb hydrocarbons but repel water. Absorbent booms are often relied on to recover any hydrocarbons that escape containment booms.

3) A skimmer may be deployed once a boom has been secured to capture the spilled product, and then pump it through hoses to empty fuel drums.

4) In the event of a larger spill on water, it will be necessary to limit the extent of the spill by using booms and it may be necessary to seek the assistance of the Mobil Environmental Response Unit. The 24-Hour Spill Report Line should be used to keep government agencies informed of the situation.

6.3 Spills on Snow and Ice

Where a spill occurs on ice, snow should be compacted around the edge of the spill and lined with plastic sheeting to serve as a berm. The ice will prevent seepage of fuel into the water, but contaminated snow and ice must be scraped up immediately. The contaminated snow can then be placed in drums or on plastic and within plastic lined berms on land. Permission may be granted from appropriate Government departments to burn off pools of fuel (contact the 24 hour Spill Reporting Line). Should fuel get below the ice, assistance may be requested from the Canadian Northern Oil Distributors Ltd. Mobil Environmental Response Unit.

Kennecott Canada Exploration Inc. and Diavik Diamond Mines Inc. have agreements in principal with Canadian Northern Oil Distributors, to access their resources 24 - hours per day, should these services be required.

7.0 SEWAGE DISCHARGE

Type of treatment: At a Kennecott exploration camp, domestic sewage is not treated except by direct application of lime solution to permafrost contained sewage pits. Digester or incinerator systems are generally employed at Kennecott exploration camps of any long-term duration of the camp occupation, and a typically high number of occupants in the camp.

Should other smaller exploration camps be required within the permit area, appropriate amendments to current Land Use Permits would be applied for and all applicable clauses dealing with sewage disposal in the Land Use Permits would be adhered to.

8.0 RESOURCE INVENTORY

A. Personnel

In addition to the Spill Response Co-ordinator, at least two persons are available on site to assist in spill response and clean up activities. During helicopter refuelling operations, at least three people are at site. At least two people are stationed at drill sites during drilling operations.

B. General Equipment

Rotary and fixed wing aircraft can be flown to the sites from Resolute or Iqaluit. Heavy earth moving equipment, hand tools, and miscellaneous equipment, such as plastic sheeting, are available from competitors' exploration sites and from Nanisivik or Resolute, and are available for use in the event of a spill.

C. Spill Kits

One kit is located at each drill site during drilling operations. Similar kits would be utilised at any other exploration camps within the permit area, where applicable. All kits are inspected on a monthly basis to ensure they are fully equipped and usable. Each Kit contains:

- 1-45 gal, 16 gauge Open Top Drum, c/w Bolting Ring & Gasket,
- 1-48"X 48"x 1/16" Neoprene Pad (drain stop),
- Plug N/Dike™ Granular, 1-gal U.S. (3.8 litres)
- Splash Protective Goggles
- 2-PVC Oil Resistant Gloves
- 1-pkg Polyethylene Disposable Bags (5 mil) 10 per Pack
- 1-Shovel (Spark Proof)
- 1-case T-12 3"x 12' Mini Boom, 4 booms / case
- 1-bale HP-256 17"x 19"x 1/2" Pads, 100 Pads/bail
- 1 bale of Sphag Sorb™

D. Mobil Environmental Response Unit

Canadian Northern Oil Distributors, Ltd. in Yellowknife will make the Mobil Environmental Response Unit available to Diavik upon immediate notice. This unit could be transported to the site from Yellowknife, though mobilisation is potentially dependent on weather.

E. Environmental Advisors

Advisors from the Diavik Diamond Mines Inc. Environmental Division are available to site personnel to address environmental issues related to a spill.

As well, additional Information or assistance is available from the following sources:

Organisation Location	Name/Phone/Fax
	Matthew Wasserman (867) 873-3337 [Not available after hours]
	(867) 873-7654 fax: (867) 873-0221
	(867) 669-2760 fax: (867) 669-2720
	(867) 920-6060 fax: (867) 873-8185
	Glen McCara / Greg Works (867) 669-9705
	(867) 920-8311
	(867) 669-0213 fax: (867) 669-0714

9.0 TRAINING

All persons in camp are familiarised with procedures in this document upon arrival in camp. Drilling contractors are familiarised with the contents of this document in camp, and details of the Contingency Plan are posted at the drill. The nominated on-site co-ordinators are responsible for the updating of the contents of the Contingency Plan, including specified reporting requirements.

Camp managers are employed at most camps, and form an integral part of spill response planning. The camp manager will be the primary person responsible for physical clean up at the direction of the on-site co-ordinator. In the event the co-ordinator is absent from site, the camp manager will act as the cleanup co-ordinator.