#### KENNECOTT CANADA EXPLORATION INC.

Granville Square #354 – 200 Granville Street Vancouver, British Columbia V6C 1S4

December 9, 2003

NUNAVUT WATER BOARD P.O. Box 119 Gjoa Haven, Nunavut X0B 1J0 Nunavut Water Board E0 1 5 2003 Public Registry INTERNAL PC

Telephone: (604) 669-1880

Facsimile: (604) 669-5255

Attention:

Licensing Administrator

Re: Application for Water Licence Renewal NWB2BR00203, Brodeur Project, Nunavut

Please find attached the requested supplemental information to accompany our application for a water license renewal for the above noted permit. There have been no significant changes to our water requirements under this permit.

I have enclosed an updated spill contingency plan, a fold-out map of the license area, and a project summary for upcoming work.

Sections 1.4 and 1.5 of the Spill Plan outline, in greater detail, the types, quantities, and methods of storage of fuel and chemicals on-site, which correspond to requested additional information (Q24) from the supplementary questionnaire

If you have any questions or require further information, please let me know.

Yours truly,

KENNEGOTT CANADA-EXPLORATION INC.

Susan Ball

Project Geologist: Land, Community and Business

cc. Greg Rogers

DBIZISNUBZBRO Supp Info Requested - ILAE

INTERNAL



## **Kennecott Canada Exploration Inc.**

**Exploration Operations Document** Northwest Territories and Nunavut

# **CONTINGENCY PLAN** for Material Spills, in Exploration Camps & Remote Sites, and Drilling Operations

TA ED CH

December 2003

## **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 (if any) 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 spillable substances 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) 669-1880, Susan Ball.

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Appendix A - Spill Reporting Form

#### 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 fulfill specific Canadian and Northwest Territories/ Nunavut regulatory requirements.

#### 1.3 Facility Description

It is anticipated that the regional sampling program across the eastern arctic will be based out of established communities including Hall Beach, Igloolik and Nanisivik/Arctic Bay, thus eliminating the need to cache large amounts of fuel at remote sites.

#### 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 communities listed in section 1.3.

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 the regional sampling project will not exceed 10 gasoline plus 100 Jet-B during the field season.

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.

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.

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Should any fuel products be 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:

- Leaking or ruptured fuel drums.
- 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.

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#### 3.0 RESPONSE ORGANIZATION

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

| Response Team Member   | Title/Company  |
|------------------------|--|
| On-scene Co-ordinator  | Greg Rogers  |
|                        | Senior Geologist   |
|                        | Kennecott Canada Exploration Inc.  |
| On-scene Co-ordinator  | Jamie McLennan   |
| (Alternate)            | Health, Safety and Environmental Coordinator   |
|                        | Kennecott Canada Exploration Inc.  |
| Project Manager        | Buddy Doyle  |
|                        | Exploration Manager, Diamonds  |
|                        | Kennecott Canada Exploration Inc.  |
| Project Manager        | Katya Masun  |
| (Alternate)            | Geologist  |
|                        | Kennecott Canada Exploration Inc.  |
| Environmental Advisors | Erik Madsen & Murray Swyripa   |
|                        | Managers Environmental Affairs   |
|                        | Diavik Diamond Mines Inc.  |
| Project Personnel      | There will be between 3 and 5 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.
- ✓ 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.

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- ✓ 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 District office 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:

- 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.
- 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.

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#### 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  |
|---|--|
| On-Scene Co-ordinator   | Greg Rogers or Jamie McLennan<br>Project Geologist/HSE Coordinator<br>Kennecott Canada Exploration Inc.<br>Phone: 604-669-1880<br>Fax: 604-669-5255  |
| Government 24 Hour Spill Reporting Line<br>(To be contacted by the Environmental<br>Advisor, On-Scene Co-ordinator, Project<br>Manager or his designee) | So ffigs on toloribus ("Federal et ) but toloribus (Bental et ) but tolorib |
| phone fax   | (867) 920-8130<br>(867) 873-6924   |

NOTE: A "Spill Report" form (Attached to Appendix 1) should be filled out as completely as possible prior to or after calling the 24-Hour Spill Reporting Line.

#### 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.

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- (3) Stop a leak from a barrel by:
  - ceasing filling operations if leaking vessel is receiving fuel
  - checking valves and seals, and ceasing use of these valves if leaking
  - ✓ transfer all fuels from leaking barrels
  - 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:

- ✓ 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 is especially important to prevent fuel from entering a body of water where it will have a greater environmental impact.
- ✓ 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.
- ✓ A light covering of Sphag Sorb<sup>TM</sup> or alternate absorbent material can be used to absorb films of petroleum products from arctic vegetation.
- 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.
- ✓ 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

Implementing the following steps can control spills of petroleum products on water:

- ✓ Floating 'boom(s)' can be deployed to contain the floating product.
- 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.
- ✓ 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.
- ✓ In the event of a larger spill on water, it will be necessary to limit the extent of the

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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 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 too.

#### 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 Nanisivk 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

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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<sup>TM</sup> 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<sup>TM</sup>

#### 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              |
|-----------------------------------|-----------------------------|
| Canadian Northern Oil             | Matthew Wasserman           |
| Distributors, Ltd.                | (867) 873-3337              |
| Mobil equipment Response Unit     | [Not available after hours] |
| Yellowknife                       |                             |
| Government of the NWT             | (867) 873-7654              |
| Environmental Protection Division | fax: (867) 873-0221         |
| Yellowknife                       |                             |
| Dept. of Indian Affairs           | (867) 669-2760              |
| & Northern Development            | fax: (867) 669-2720         |
| Yellowknife                       |                             |
| Environment Canada                | (867) 920-6060              |
| Yellowknife                       | fax: (867) 873-8185         |
| G &G Expediting                   | Glen McCara / Greg Works    |
| Yellowknife                       | (867) 669-9705              |
| RCMP Yellowknife                  | (867) 920-8311              |
| BHP Ekati Diamond Mine            | (867) 669-0213              |
|                                   | fax: (867) 669-0714         |

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#### 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.

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#### KENNECOTT CANADA EXPLORATION INC.

#### YEAR 2003-5 EXPLORATION PROGRAM

Non-Technical Project Summary

#### Brodeur Peninsula, Baffin Island

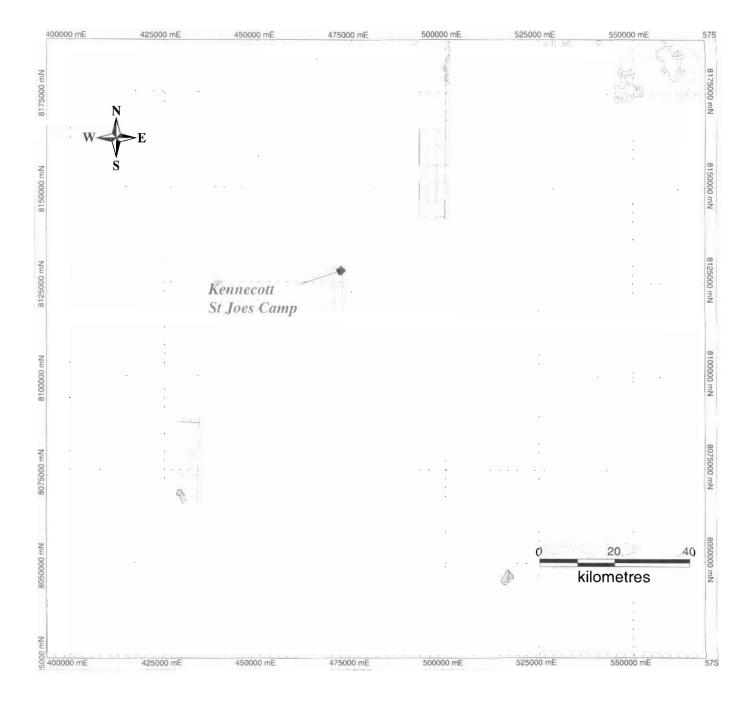
Kennecott Canada Exploration Inc. (Kennecott) is continuing surface mineral exploration for diamonds on the Brodeur Peninsula, Baffin Island, Nunavut in 2004-5 from approximately May 15<sup>th</sup> to September 30<sup>th</sup> each year. The program is regional in scope, and will cover an area contained by Latitude 72° and 74°, and Longitude 85° and 90° (NTS map sheets 048, 57 and 58). Kennecott has 16 Prospecting Permits and 156 crown mineral claims (some under application) upon which most of the work will be done.

During 2003, Kennecott conducted surface exploration consisting of geochemical sampling of tills and limited stream sediment samples in order to locate anomalies related to diamond exploration. There was also a core-drilling program on Kennecott held crown land (10 shallow holes) based on results from 2002. In the 2004 season it envisaged that a similar program to that conducted during 2003 will be carried out and will include further till sample collection and geophysical surveying, followed by subsequent drilling of anomalies when discovered. The company may also plan further activities on IOL's where surface exploration indicates the potential for diamond mineralisation. This may include core drilling. Given positive results it may become important to conduct the collection of larger samples from certain areas. Though this is not current anticipated at this stage.

Planned surface exploration will include work on and around the following concession areas:

The field survey crews will consist of a Kennecott Canada Exploration project geologist with seasonal field assistants. It is our hope to employ residents of Nunavut on these field crews, as we have on other exploration programs within Nunavut.

Kennecott Canada Exploration is committed to developing and maintaining excellent relationships with the communities affected by our exploration activities. Our company also has strict environmental policies for our own employees as well as for contractors who report to us. Protection of the land is an essential part of our exploration programs.



Watercourse

Permanant Ice

Kennecott Camp location Waterbody

Kennecott held land
(includes mineral claims and prospectinms permits)

Kennecott Canada Exploration Inc

Map showing location of all KEX claims, prospecting permits, camp location, and waterbodies/courses

Date: November 2003 Drawn By: Greg Rogers
Plan No: GPR029 Scale: 1: 1,000,000