SPILL CONTINGENCY PLAN

KIKERK/KNIFE LAKE EXPLORATION PROJECT

KNIFE LAKE, WEST KITIKMEOT, NU

DE BEERS CANADA EXPLORATION INC.

Initial Submission: 30 October 2003

First Revision: 08 April 2004

Second Revision: 16 November 2004

TABLE OF CONTENTS

APPENDIX

LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION

"De Beers Canada will … conduct all activities in compliance with applicable legislation and other requirements, providing for the protection of the environment, employees and the public." – De Beers Canada Environmental Policy

The Kikerk/Knife Lake Spill Contingency Plan of De Beers Canada Exploration Inc. (DBCE), which is found on the following pages, shall be in effect from the current date (end of October 2003) until the end of March 2005, and is subject to such revisions as may be necessitated by future programmes. The *Kikerk/Knife Lake Project*, which, in its current form, commenced in Spring 2000, is comprised of four *KL* claims and the adjoining *TREE 1* claim (*Figures 1a* and *1b*); all five claims are being taken to lease. DBCE is geological Operator of the project on behalf of a joint venture between DBCE and Rhonda Diamond Corp.. Previous drill programmes occurred at Knife Lake in 2000 and 2001; the currently-planned 10-drillhole programme is scheduled to occur between March and May 2004. Although a potential campsite was selected nearby (*Figure 1a*), there will be no camp associated with the spring 2004 drill programme. Instead, two survival tents will be erected on the west shore of the north end of Knife Lake (Figure 1b) and the crew (drillers and geologists) will commute by helicopter from the closest community, Kugluktuk, approximately 140km northwest.

Co-ordinates of the property are: latitude 66° 40’ 00” – 67° 30’ 00” and longitude 113° 04’ 00” – 113° 20’ 00”. The claims are contained within NTS mapsheets 86I/14 and 86P/03.

It also must be noted that the property is remote; no communities are located nearby, and thus no persons other than up to three DBCE personnel, a helicopter pilot and engineer, and two shift-drillers and a drill foreman would be affected in the event of an incident.

The comprehensive De Beers Canada Environmental Management System (EMS), already provided to regulators as *Appendix 1d* of the current land- and water-use applications, is in force in Nunavut, the NWT and in all provinces where DBCE is conducting exploration activities. This system, informed by the national De Beers Canada (DBC) Environmental Policy (*Figure 3*), is the key component of this Contingency Plan. All employees, whether permanent or casual, and programme contractors, are required to be trained in DBC policies and procedures prior to engaging in work at a DBC site.

DBCE is keenly aware that planning for an emergency situation is not an option but an obligatory activity, equal in importance to the exploration programme itself. This Contingency Plan will be posted in the

coreshack/survival tent area, at the drillshack and is being distributed to supervisory personnel for dissemination to staff and the drilling contractor.

2.0 PERMITS AND AUTHORISATIONS

The Kikerk/Knife Lake property, comprised of 11 268.11 acres, is located entirely on Crown land in the West Kitikmeot and is governed by the following authorisations: (1) a Class A land-use permit from Indian and Northern Affairs Canada (INAC) – *#N2003C0037;* (2) a Type B water licence from the Nunavut Water Board – *#NWB2KIK0405* and Nunavut Impact Review Board File *#03EN128*; (3) other authorisations – a drilling authorisation from the Workers' Compensation Board (valid until 31 December 2004, and renewable thereafter) and an Extended-Hours Permit from Nunavut Labour Standards – *#50-063-158*. Former authorisations, now expired, include Rhonda's INAC Class A Land-Use Permit *#N2001C0007* (transferred to DBCE in 2003), DBCE's former INAC Class A Land-Use Permit *#N97C753* and DBCE's former Type B Water Licence *#NWB2KIK0002.*

3.0 CAMP FACILITIES (SURVIVAL TENTS AND DRILLSHACK)

3.1 Facility Description

No camp is planned to support the spring 2004 drill programme. Instead, several survival tents – one for miscellaneous drilling supplies and one for a core-logging shack – will be set up for the duration of the six-week programme, then completely removed. The drilling-supplies tent will be equipped with two cots, a small Coleman stove and rations, in case of whiteout, as well as *Schedule 1* and *Schedule 2* first-aid supplies, as required by the Nunavut and Northwest Territories Mine Health and Safety Regulations, as well as a small spill kit (*Table 3*), and extra absorbents for catch pails at the heating-fuel drums at the survival tents, and wherever fuel is transferred. Copies of this Contingency Plan, Material Safety Data Sheets (MSDS), DBC's Environmental Policy and the DBCE EMS will be present at both the coreshack and at drillside.

The drillshack will be sited at each drilling location, then removed by the drilling contractor, Boart Longyear. A full-sized spill-kit drum (*Table 3*) will be available at the drillshack and at the fuel-storage area, near the survival tents. Fuels will be stored in groups no larger than 25 drums (diesel) and 15 drums (Jet-B). Extra absorbent pads will be on hand wherever fuel is transferred, as well as under stationary equipment.

DBCE personnel will be present at mobilisation and demobilisation to ensure supply/replenishment of items in the spill-response inventory (*Table 4*) and to ensure final site cleanup and removal of all materials.

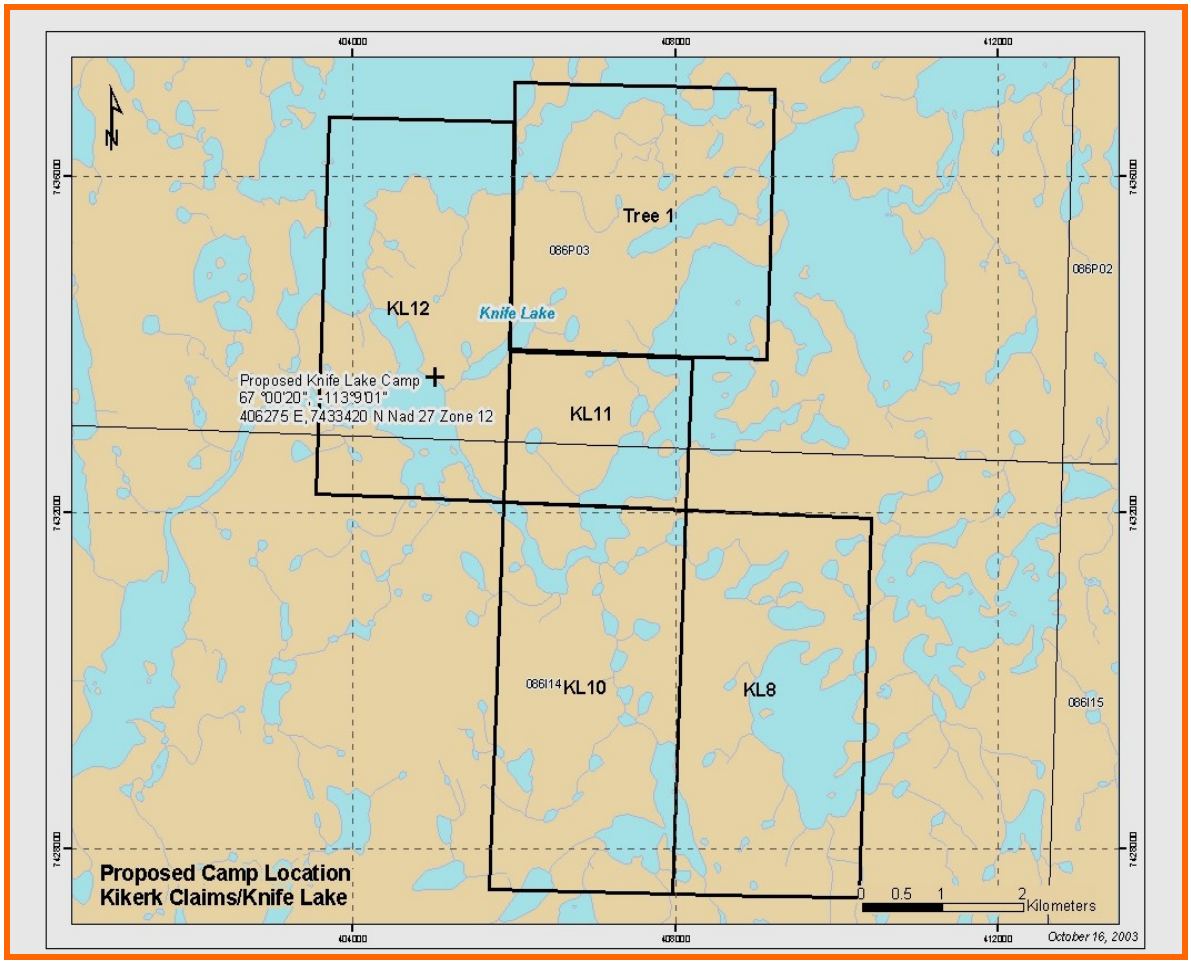

Figure 1a

Kikerk/Knife Lake Project claimblock, consisting of 4 *KL* claims and the *TREE 1* claim, all of which are being taken to lease. A potential campsite was selected in autumn 2003 but will not be utilised for the 2004 drill programme.

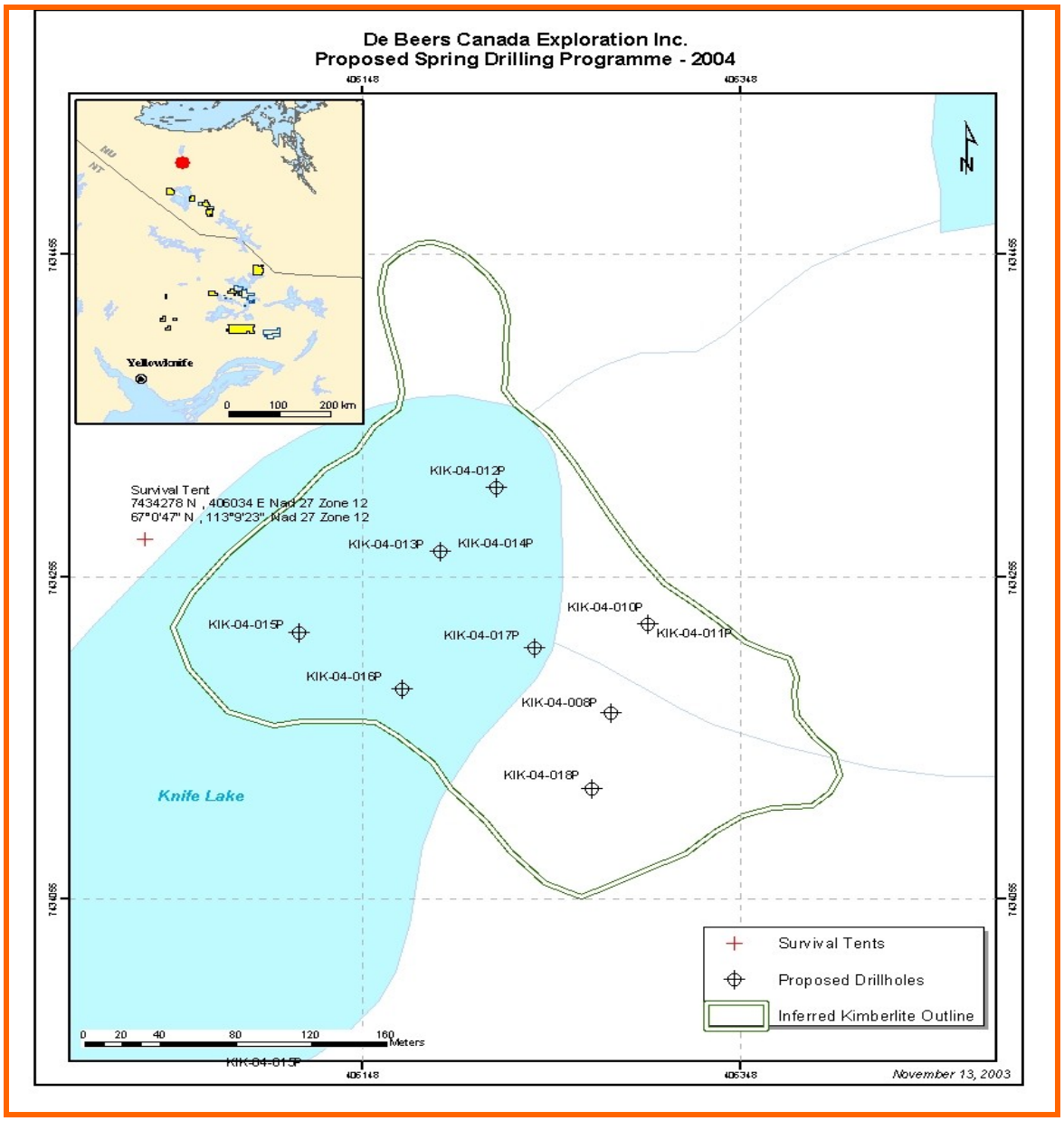

Figure 1b

Area of Kikerk/Knife Lake Project. Spring drill programme 2004 will be centred on the north end of Knife Lake, with only 2 temporary survival tents erected near the worksite. The crew will commute from Kugluktuk. Prominent features in the region include Kikerk Lake (Kikkiktalik) to the north and Inulik Lake to south; the Tree River crosses the small claimblock. Several seasons of archaeological activity have resulted in the identification of a total of 7 sites in the Knife Lake area, none of which is in jeopardy from planned activities. There is no known sensitive wildlife habitat in the area.

3.2 Facility Personnel Obligations

The obligations and responsibilities of Contingency Plan awareness, maintenance and preparedness begin with the arrival of DBCE employees and contractors. Particularly in the case of new arrivals, supervisors are obliged to acquaint worksite staff with Company policies and procedures, e.g., DBCE's EMS policies and procedures as provided in CD-ROM and (where requested) in paper copies; the EMS also contains governing legislation. The comprehensive EMS contains guidance on topics ranging from fuel-handling to aircraft and equipment safety and fire procedures. Training and re-training of staff and contractors in environmental awareness, petroleum-handling and spills, and the DBC 5-Point Safety System occurs before each programme. To further ensure safety, camps and worksites such as Kikerk/Knife Lake operate under a strictly enforced dry-camp rule (drug and alcohol-free).

In advance of exploration programmes, personnel are required to familiarise themselves with the Contingency Plan and their respective assigned roles, if applicable. Site personnel are trained in the areas of environmental awareness, site safety, and petroleum-handling and spill response (which course includes discussion of emergency procedures for fire and spill response, as well as distribution of laminated cards with action steps for fire and spill response). In addition, DBCE requires that programme personnel and contractors be trained in basic first-aid and CPR. All supervisors are trained in/certified in Transport of Dangerous Goods and hold either Supervisor Level I or Level II certificates from Nunavut/NWT Mine Health and Safety.

In the case of the Kikerk/Knife Lake spring 2004 drill programme, arrangements were made in advance with the Kugluktuk Health Centre to fly a health-care practitioner to site, should such services be required.

4.0 FUEL AND CHEMICAL PRODUCT TRANSPORT AND STORAGE

As the Kikerk/Knife Lake Project is being conducted at a remote site without either ice route or all-weather road access, fuel to be used in the 2004 spring drill programme will be flown to the site (*Figure 1b*). Empties will be backhauled at least weekly.

A cache of 205L drums of diesel, Jet-B and gasoline (petrol) will be stored on land near the survival tents, with each fuel group kept discrete and in sealed containers clearly marked. Drums of Jet-B will be positioned close to the Hughes 500D helicopter landing area, and will be monitored by the pilot, who has been trained in DBCE's fuel-handling and spills-prevention procedures; a full-size spill kit will be present at the heli area (*Table 3*). Diesel drums will be inspected daily by DBCE and Boart Longyear personnel for container and bung soundness, and there will be daily monitoring of drums supplying the survival tents and drill.

It is anticipated that a total of 150 drums of diesel, 100 drums of Jet-B and 20 45kg cylinders of propane will be required; 5 drums of petrol for the skidoos will be required, and absorbent padding will be kept on hand for fuel transfers. Usage of engine oil (for stationary and mobile equipment such as the helicopter and skidoos), along with gear lubricants, cleaners and drill-equipment greases is expected to total less than 140 containers (< 280L). A proposed inventory is shown below (Table 1).

TABLE 1

Projected Fuel and Oil Use for 2004 Exploration Activities

Inventory Items	# Items	Volume
Diesel and Aviation Turbine Fuel	250	51,250
Unleaded Petrol (Gasoline)	5	1,025
Oils/Lubricants/Cleaners	140	280
Propane	20	900kg
Oxygen (Welding and Medical)	2	90kg
Acetylene	4	180kg
Total Volume – Litres:		52,555
Total # of Cylinders:	26	

5.0 BASIC STEPS – SPILL PROCEDURE

De Beers Canada Exploration Inc. (DBCE) believes that, in the case of a spill or 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.

According to the DBCE Environmental Management System –Operating Procedure #036, the basic steps of a response plan are as follows:

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

2. Find and identify 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 appropriate action. (Appropriate action includes the notification of a government official, if required).

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

5. Implement any necessary cleanup or remedial action.

5.1 BASIC STEPS - CHAIN OF COMMAND

1. Immediately notify the Project Geologist, Paulo Pereira **(867) 776-7350** (office) or **(867) 873-4552** (home), or Acting Project Geologist (office # above, or at worksite) of any spill. He/she then notifies the Response Co-ordinator (if a different individual). Project personnel for the spring 2004 programme also may be reached at the temporary DBCE office in Kugluktuk: **(867) 982-5866**.

2. Response Co-ordinator or his/her designate then contacts the **24-Hour Spill Line**, if warranted, as follows:

   Phone: **(867) 920-8130**

   FAX: (867) 873-6924

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

Other members of the Northern team are notified, such as the Lands Manager (Shirley Standafer-Pfister) and Regional Manager (Peter Holmes), both based in Yellowknife – **(867) 766-7350** (phone), **(867) 766-7351** (FAX). (Lands Manager cell is **(867) 444-1239**; Regional Manager cell is **(867) 873-1597**).

If the spill is minor (such as dripping of fuel during transfer, which can be absorbed by padding, absorbent crystals, etc.), then the Lands Manager in Yellowknife is notified by phone **(867) 766-7350**, FAX **(867) 766-7351**, cell **(867) 444-1239** or e-mail: **shirley.standaferpfister@ca.debeersgroup.com**

(For additional contact information, see *Appendix*).

6.0 TAKING ACTION

6.1 BEFORE THE FACT: PREVENTIVE MEASURES

The following actions illustrate the proactive approach of DBCE to environmental care. In addition, they minimise the potential for spills during fuel handling, transfer or storage:

1. Fuel transfer hoses with camlock mechanisms are to be used.

2. Carefully monitor fuel content in the receiving vessel during transfer.

3. Clean up drips and minor spills immediately.

4. Regularly inspect drums, tanks and hoses for leaks or potential to leak. (For example, fabric-sheathed hose, such as fire hose or petrol-transfer hoses may develop pinholes or surficial cracks from normal weathering out of doors.

5. Drip pans are to be used at all sites where fuel is transferred and under stationary machinery (e.g., gen-sets).

6. Train personnel, especially those who will be operators, in proper fuel-handling and spill response procedures.

6.2 AFTER THE FACT: MITIGATIVE MEASURES

1. First steps to take when a spill occurs:

    a) Ensure your own safety and that of others around you, beginning with those nearest to the scene.

    b) Control danger to human life, if necessary.

    c) Identify the source of the spill.

    d) Notify the Project Geologist, as soon as is practical; he in turn notifies the Response Co-ordinator (if a different individual).

    e) Assess whether or not the spill readily can be stopped.

    f) Contain or stop the spill at the source, if possible, by following these actions:

        i. If filling is in progress, STOP AT ONCE.

        ii. Close or shut off valves.

iii. Place plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground or runoff of fuel.

iv. Use a patch kit to seal leaks, if practical to do so.

2. Secondary steps to take:

a) Determine status of the spill event.

b) If not reported under *1. d)*, report incident and steps taken to the Project Geologist, who in turn informs the Response Co-ordinator (if a different individual).

c) If necessary, pump fuel from a damaged and/or leaking tank or drum into a refuge container.

d) Notify the 24-hour Spill Report Line, and receive further instructions from the appropriate contact agencies listed in *Appendix* (e.g., disposal of contaminated soil or ice/snow in sealed containers for removal from site, etc.).

e) Complete and FAX a copy of the Spill Report Form (present in each DBCE camp and at the Yellowknife office).

f) Notify permitting authorities and the Lands Manager.

g) If possible, resume cleanup and containment.

6.3 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 and/or from the two DBCE environmental advisers.

6.3.1 Procedure for spills on rock

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

1. Response Co-ordinator or his designate obtains plastic tarp(s) and absorbent sheeting on-site.

2. A berm of peat, native soil or snow is constructed downslope 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 later off-site.

4. Absorbent sheeting is placed on the rock to soak up spilled oil, petrol, etc.

5. Saturated sheeting is disposed of in an empty drum, which is then labelled and sealed. Alternatively, the pads may be wrung out into the empty drum(s); the drums marked and then secured for eventual disposal off-site. The pads may be reused.

6. The disposal container is then transported off-site.

7. Depending on the nature and volume of the spill, the 24-Hour Spill Line may be contacted after Step 4 or after Step 5.

6.3.2 Procedure for spills on land

1. Response Co-ordinator or his designate obtains plastic tarp(s), absorbent sheeting, Spagh-zorb 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 downslope 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 drums, and dispose of product by transporting to a solid-waste disposal facility.

4. Petroleum-product sheening on vegetation may be controlled by applying a thin dusting of Spagh-Zorb or other ultra-dry absorbent to the groundcover.

5. Contact the 24-Hour Spill Line. Receive instruction from the appropriate contact agencies listed in *Appendix* regarding collection of the contaminated soil or vegetation, its removal and site cleanup/restoration.

6. Depending on the nature and volume of the spill, Response Co-ordinator or his designate implements the spill action plan.

6.4 FUEL SPILLS ON WATER

6.4.1 Procedure for spills on water

It is important to limit immediately the extent of spills. 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 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 that environmental factors such as high winds and wave action can adversely affect attempts at spill cleanup.

4. *Absorbent* booms then can 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.

6. As soon as possible either during or after the incident, contact the 24-Hour Spill Line. (This will ensure government agencies are informed.)

7. If the spill is sufficiently large, and cannot be contained by rapid action of personnel present, contact the Mobile Environmental Response Unit for assistance. (Weather permitting, this unit can be flown to an emergency spill site within several hours.)

6.5 FUEL SPILLS ON SNOW AND ICE

6.5.1 Procedure for spills on snow and ice

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

Drilling from ice: Best practice

Driving the casing invariably is a messy (visually untidy) but benign operation. Although drilling from ice is accomplished by means of a closed-circuit system, wet sediments brought to surface may drip onto the ice surrounding the drill. Dribblings of fuel and oil from the drill, heater, compressor(s), etc., occasionally may collect on ice during a shift, even when drip pans are placed under equipment, but easily are absorbed by snow, and, if required, by ultra-dry commercial absorbent. Drillsites are marked with flags and pickets prior to drilling, and this enables easy visual location of drillsites after move-off. Scraping and/or steaming removes all such material, and removed material is then bagged and transported by snowmachine or other vehicle to a containment area (sump or depression) on shore. After drillsite cleanup, no débris will remain on the ice.

No material or equipment not required for immediate use is to be stored by the company or its contractors on the surface ice of lakes or other waterbeds. Material or equipment so placed (e.g., survey stakes, fuel, timbers, pipe racks, drill sheds, and the like) is to be placed on ice of sufficient thickness (*see attached Table 2)* and removed promptly once temporary use has ceased.

6.5.1.1 SPILLS ON SNOW

1. Assess the nature of the spill. Necessary equipment might include shovels, plastic tarp(s), empty drums.

2. Shovel or scrape contaminated snow and deposit in empty refuge drums. If the spill is more extensive, build peat-bale berms, or compacted-snow berms with plastic over top, around the affected area.

3. Either during or immediately after the incident, notify the 24-Hour Spill Line. Receive instructions on the preferred disposal method (e.g., storage in sealed drums, transport off-site for disposal) from the appropriate contact agencies listed in *Appendix*.

6.5.1.2 SPILLS ON ICE

Spills on ice are handled in similar fashion as those on snow. However, as ice presents the potential 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) must be scraped from the ice surface and disposed of in an appropriate manner.

3. Contact the 24-Hour Spill Line. Receive disposal instructions (e.g., sealing in drums, transport off-site, etc.) from the appropriate contact agencies listed in *Appendix*.

4. Where fuel or oil has escaped to the receiving waters, also contact the 24-hour emergency line of the Mobile Environmental Response Unit.

6.6 PROCEDURE FOR CHEMICAL SPILLS

1. Assess the hazard of the spilled material. Members of the camp 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 or powders, to prevent their disbursement by wind, or investigation by birds or other mammals.

5. Neutralise 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 *Appendix*.

NUNAVUT SPILL REPORT FORM

Figure 2

Northwest Territories

NUNAVUT SPILL REPORT (Oil, Gas, Hazardous Chemicals or other Materials)

24-Hour Spill Report Line
Phone (403) 920-8130
Fax (403) 873-6924

A Report date and time	B Date and time of spill (if known)	C ☐ Original report ☐ Update no. ____	Spill number

D Location and map coordinates (if known) and direction (if moving)

E Party responsible for spill

F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible)

G Cause of spill

H Is spill terminated? ☐ yes ☐ no	I If spill is continuing, give estimated rate	J Is further spillage possible? ☐ yes ☐ no	K Extent of contaminated area (in square metres if possible)

L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.)	M Containment (natural depression, dykes, etc.)

N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials

O Do you require assistance? ☐ no ☐ yes, describe:	P Possible hazards to persons, property, or environment; eg: fire, drinking water, fish or wildlife

Q Comments and/or recommendations

FOR SPILL LINE USE ONLY

Lead Agency

Spill significance

Lead Agency contact and time

Is this file now closed? ☐ yes ☐ no

Reported by	Position, Employer, Location	Telephone
Reported to	Position, Employer, Location	Telephone

NOTE: Area code has not yet been changed on this government form; it should be (867), NOT (403).

TABLE 2

GUIDE TO REQUIRED ICE THICKNESS

ICE STRENGTH FOR TRAVEL

(expressed in inches and centimetres)

(weights and ice thickness measures rounded to nearest whole)

242,500lb.	**(121t)**	**= 50 inches (127cm)**
154,000lb.	**(77t)**	**= 40 inches (102cm)**
100,000lb.	**(50t)**	**= 32 inches (81cm)**
55,000lb.	**(28t)**	**= 25 inches (64cm)**
22,000lb.	**(11t)**	**= 15 inches (38cm)**
17,600lb.	**(9t)**	**= 14 inches (36cm)**
7,700lb.	**(4t)**	**= 10 inches (25cm)**

ICE STRENGTH FOR STATIONARY LOADS

(expressed in inches and centimetres)

(weights and ice thickness measures rounded to nearest whole)

242,500lb.	**(121t)**	**= 90 inches (229cm)**
154,000lb.	**(77t)**	**= 70 inches (178cm)**
100,000lb.	**(50t)**	**= 60 inches (152cm)**
55,000lb.	**(28t)**	**= 43 inches (109cm)**
22,000lb.	**(11t)**	**= 30 inches (76cm)**
17,600lb.	**(9t)**	**= 24 inches (61cm)**
7,700lb.	**(4t)**	**= 18 inches (46cm)**

TABLE 3

REQUIRED ICE THICKNESS FOR TYPICAL AIRCRAFT WEIGHTS

Transport Canada Industrial Standard

Table 3 below presents a numerical summary of the Transport Canada (1974) required fresh water ice thickness versus aircraft load from the AK-68-14-001 standard.

TABLE 3

AK-68-14-001 Transport Canada Standard

Weight – lb/kg	Weight - kN	Required Fresh-Water Ice Thickness (m/in)
10 000/4 545	44.5	0.33/13
30 000/13 640	133.5	0.58/23
67 000/30 400	300.0	0.90/35.5
135 000/61 360	600.0	1.27/50
800 000/364 000	3 570.0	3.20/126

(Source: Winter Operations Report 1995/96, Kennecott/Aber, Lac de Gras, by 669107 Alberta Ltd.)

TABLE 4

CONTENTS OF SPILL KITS – SPRING 2004

DRILLSITE – KNIFE LAKE

Drillshack – Spill-Kit Drums – 1

Location: Moves with drillshack: 136L CanRoss #90-06200 Oil-Specific Spill Kit drum with the following contents: 5 large-capacity printed disposal bags; 2 pairs – disposable gloves; 4 oil-only socks (7cm x 3m long); 50 oil-only absorbent pads, double weight (42cm x 47cm); 1 bag of Peat Sorb PS2 (0.6m^3, loose filled); 454g pre-mixed plugging compound; 1 instruction book.

Fuel Storage Area – Spill-Kit Drums – 1

(Same136L CanRoss kit and contents as above).

Movable Small Spill Kits – 2

Location: Can be deployed, where required: 22L CSKU5 Custom Kit (plastic removable-head pail) with the following contents: 10 absorbent pads (42cm x 47cm); 2 all-purpose socks (7cm x 3cm long); 1 pair goggles; 1 pair – disposable gloves; large-capacity disposal bag.

TABLE 5

GENERAL Response Inventory – KNIFE WORKSITE – SPRING 2004

- Fire extinguishers (valid/recharged) in each structure: Survival tents, drillshack.

- Water pump and spare at drillshack; hoses and fittings

- Hammers, assorted weights, at drillshack

- Assorted 10L-20L plastic pails; galvanised metal pails (approx. 10L each)

- Ice auger (gas-powered) c/w extensions

- 127L plastic garbage bags (boxes of 20 each) – Survival tents

- Plastic tarps – assorted sizes

- Extra bundles of absorbents

- Fuel-transfer pump at survival tents, and 1 at drillshack

7.0 GENERAL RESPONSE AND MAINTENANCE INFORMATION

7.1. GENERAL EQUIPMENT AND PROXIMITY

Equipment available to aid in spill response and remediation includes:

1. A helicopter, which can be dispatched to a drillsite from the survival tents/coreshack within minutes, or in approximately 1 hour from the programme's base in Kugluktuk. Contractors ready to assist with aircraft are: Great Slave Helicopters (867-873-2081), who have a pilot and engineer attached to the programme and based in Kugluktuk, or, for fixed wing, Air Tindi (867-669-8200), based in Yellowknife.

2. Spill-response equipment is available from Kugluktuk, 1 hour away by air, or from Yellowknife, 2 hours away by air. Miscellaneous equipment at the Knife worksite (*cf. Table 4 above)* also will be made available for spill response and cleanup, including hand tools, shovels (earth and snow), fire extinguishers, fuel transfer pumps, water pumps, miscellaneous hoses and fittings.

3. Because there is no camp associated with the current 6-week spring drill programme – only a drillshack and several temporary survival tents and temporary fuel storage areas for diesel and Jet-B (limited to approximately 25 drums of the former and 15 drums of the latter per week) – the opportunity for a spill is greatly reduced; daily maintenance checks are conducted by the pilot (there also is an engineer attached to the programme), as well as by DBCE personnel and drilling personnel. Should a camp be erected and operational in future, a team of experienced personnel, comprised of several of the following (a Camp Manager/Project Manager, Lands Manager, Camp Attendant/ Handyman, a First-Aid Attendant/Cook and potentially one or more field personnel) will reopen and inspect the camp, check inventories, effect any repairs, and replace and order any parts or safety supplies that may be required. At demobilisation, a similarly-qualified team will clean up and secure the camp, complete a final inventory check, drain lines (fuel and water), shut off/disconnect/disengage fuel and power sources and file a final inventory list. Further cleanup/repairs would occur in summer, if necessary.

8.0 TRAINING AND PRACTICE

8.1 TRAINING AND PRACTICE DRILLS

All members of the Knife programme response team – as well as members of the general Northern team, such as the Lands Manager and

DBCE Expeditor – will be familiar with the spill-response resources at the Knife worksite (including their location and how to access them), this Contingency Plan, and appropriate spill-response methods. Involvement of other personnel may be required, from time to time. This familiarity will be acquired through:

1. Initial or refresher training (practice drills), as appropriate, provided once per field season.

2. Regular inventory updates, provided in list form to all team members and to the Yellowknife office. 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, if any).

9.0 RESPONDING TO FAILURES AND SPILLS

9.1 SPILL-RESPONSE TEAM

Following is a list of personnel trained to respond to spill incidents, and their respective responsibilities:

Project Manager

Paulo Pereira
Knife Worksite - 67° 0' 47" N and 113° 9' 23" W (Zone 12)

MSAT Telephone	(600) 700-3100
Globalstar Telephone	(403) 987-0805
Coppermine Inn	(867) 982-3333
DBCE phone	(867) 766-7350 (Yellowknife)
DBCE FAX	(867) 766-7351 (Yellowknife)
DBCE Temp. Office-Kugluktuk	(867) 982-5866

Responsibilities

Assume authority over the spill scene and personnel involved.
Activate the Contingency Plan.
Report, or direct Response Co-ordinator (if a different individual) to report, the spill to the NWT 24-Hour Spill Report Line **(867) 920-8130**.
Report to Regional Manager, provide recommendations on resource requirements (*e.g.*, additional personnel or equipment in order to complete cleanup, if required.

Response Co-ordinator	Project Manager or his designate Knife Worksite - 67° 0’ 47” N and 113° 9’ 23” W (Zone 12) MSAT Telephone (600) 700-3100 Globalstar Telephone (403) 987-0805
Responsibility	Assume all duties of co-ordinating on-site response, including mobilisation of additional personnel, equipment and materials, as delegated by the Project Manager.
(Alternate) Project Manager (when on site)	Gabrièle Lemieux – Spring 2004 Knife Worksite - 67° 0’ 47” N and 113° 9’ 23” W (Zone 12) MSAT Telephone (600) 700-3100 Globalstar Telephone (403) 987-0805 DBCE phone (867) 766-7350 (Yellowknife) DBCE FAX (867) 766-7351 (Yellowknife) DBCE Temp. Office-Kugluktuk (867) 982-5866
Responsibility	Perform response duties of Project Manager, in his absence.
Regional Manager	Peter Holmes DBCE phone (867) 766-7350 (Yellowknife) DBCE FAX (867) 766-7351 (Yellowknife) Cell phone (867) 873-1597 (Yellowknife)
Responsibilities	Occasionally, Regional Manager may fill in for Project Manager on site. In such case, assumes all responsibilities of that role. Co-ordinates Yellowknife office involvement. Acts as chief spokesperson with government agencies, media and public, as appropriate; government contact delegated to Lands Manager. Ensures documentation of cause of the spill and effectiveness of the cleanup, and ensures implementation of the appropriate measures to prevent a recurrence.
Lands Manager	Shirley Standafer-Pfister *shirley.standaferpfister @ca.debeersgroup.com* DBCE direct-line (867) 766-7356 (Yellowknife) DBCE FAX (867) 766-7351 (Yellowknife) Cell phone (867) 444-1239 (Yellowknife)
Responsibilities	Co-ordinates with regulators, environmental advisers, aboriginal communities, and may order/organise response, as required, to ensure compliance with regulatory requirements. Advises on land-use matters.

Environmental Advisers	EBA Engineering Ltd.	
	EBA phone	(867) 920-2287 (Yellowknife)
	EBA FAX	(867) 873-3324 (Yellowknife)
	Contact	Brent Murphy or John Clark.
(Alternate)	Jacques Whitford Environment Limited	
	JW phone	(867) 873-8296 (Yellowknife)
	JW FAX	(867) 669-6394 (Yellowknife)
	Contact	Nick Lawson
Responsibilities	Adviser provides expert advice on environmental/logistical cleanup requirements. Each/both may provide assistance in developing any required testing or monitoring programme, or in activating an existing programme. Each/both may recommend preventive measures.	
Project Personnel	(Field Geologists – Unnikrishnan Purushothaman, Gus Fomradas and Jason Cameron; 1 Great Slave Helicopters pilot and 1 engineer; 2 Boart Longyear drillers on shift; 1 Boart Longyear foreman, Jacques Rousseau, or 4-6 persons on hand during shift.	
	Knife Worksite-67° 0’ 47”N	113° 9’ 23” W (Zone 12)
	MSAT Telephone-DBCE	(600) 700-3100
	Globalstar-Boart Longyear	(403) 997-8301
Responsibility	Assume response duties, as assigned by Project Manager, Alternate Project Manager and/or the Response Co-ordinator.	

9.2. SPILL-RESPONSE TEAM OBLIGATIONS

The obligations and responsibilities of Contingency Plan awareness, maintenance and preparedness begin with the arrival of DBCE employees and contractors. Particularly in the case of new arrivals, the supervisor is obliged to acquaint programme staff with Company policies and procedures as enshrined in the De Beers Canada Environment Policy (*Figure 2)* and detailed in the DBCE Environmental Management System (EMS), kept in CD-ROM format and/or hard copy in the site office, and also available on-line, whenever remote-access internet is available. Material Safety Data Sheets (MSDS) on hazardous products also are kept available on site. In addition, all DBCE supervisors are required to have successfully completed the Mine Safety Supervisor Level I course (as a minimum), whether employees of the contractor (such as a drilling company) or DBCE.

Figure 3

DE BEERS CANADA

POLICY STATEMENT

ENVIRONMENTAL MANAGEMENT

De Beers Canada*, active in diamond exploration and mining, is committed to the concept of sustainable development, which requires balancing good stewardship of the natural environment with economic growth.

Accordingly, De Beers Canada will:

• Conduct all activities in compliance with applicable legislation, and other requirements, providing for the protection of the environment, employees and the public;

• Apply appropriate good management practices in the absence of legislation or where De Beers believes more stringent criteria than those required by law are needed to advance environmental protection and to minimize environmental risks;

• Integrate the management of environmental, social, cultural and economic issues into company business and planning;

• Protect the environment through the wise use of resources and prevention of adverse environmental impacts;

• Implement, maintain and improve appropriate management systems and programmes to achieve environmental objectives, and to continually improve environmental performance through a process of regular review;

• Ensure awareness among employees and contractors of this environmental policy, promote shared responsibility and accountability for environmental obligations, and provide the support and training necessary to achieve these objectives; and

• Communicate openly with governments, employees, local communities and the public to sustain mutual understanding of environmental, social and economic issues.

**Unless otherwise stated, the term De Beers Canada means De Beers Canada Corporation, De Beers Canada Mining Inc. and De Beers Canada Exploration Inc*

PS.01.02	**President and Chief Executive Officer** **R.G. Molyneux**		**Date:** **June 1, 2002**		**Page 1 of 1**
Prepared By:	**J. Fowler**	**Approved By:**	**J. Joyce**	**Date Issued:**	**May 25, 2001**
Form No.:	**Env Policy**	**Revision No.:**	**02**	**Date of Revision:**	**June 1, 2002**

APPENDIX

C0NTACT LIST

CONTACT LIST–SPILL RESPONSE / ASSISTANCE

Mobile Emergency Spill Response Unit Canadian Northern Oil (Shell Canada Bulk Plant, Yellowknife)		
	Matthew Wasserman	867) 873-3337 (during business hours)
	Peter Lane	(867) 669-1459 (24-hour cell-phone number)
G&G Expediting	Glen MacCara (cell)	(867) 873-1866
De Beers Expeditor	Bryon Jones (cell)	(867) 444-1173
Environment Canada		
	David Tilden, Yellowknife	(867) 669-4728
	Nunavut Office, Iqaluit	(867) 975-4644
	(Nunavut FAX line)	(867) 975-4645
Lands Administration, Indian and Northern Affairs Canada		
	Lands Administrator, Nunavut District	(867) 975-4275
		(867) 975-4286 (FAX)
Water Resources Inspector, Indian and Northern Affairs (Iqaluit)	Scott Stewart	(867) 975-4298 (FAX) (867) 975-6445
RCMP, Yellowknife detachment	Emergencies only:	(867) 669-1111
RCMP, Kugluktuk detachment	Emergencies only:	(867) 982-4111
Yellowknife Fire Department		(867) 873-4506 (867) 873-9056 (FAX)
Kugluktuk Fire Department		(867) 982-4222

Workers' Compensation Board –Occupational Health and Safety (Iqaluit Office)

(877) 404-4407

Workers' Compensation Board-Exploration Site Accident Reports

(800) 661-0792 (24hr)

APPENDIX

MATERIAL SAFETY DATA SHEETS (MSDS)

(See MSDS on accompanying CD)

MATERIAL SAFETY DATA SHEETS

FUELS, FUEL ADDITIVES, OIL
Kikerk/Knife Lake Project – Spring 2004 Drill Programme

(See MSDS on accompanying CD)
- Regular Unleaded Gasoline - Shell
- Diesel Fuel – Petro-Canada
- Jet A-1 – Shell
- Jet B – Shell
- Jet B – ESSO (Imperial Oil)
- Jet A-1 – ESSO (Imperial Oil)
- Propane – Superior Propane
- Diesel Fuel Oil Conditioner – Kleen-Flo
- Kleen-Start Starting Fluid – Kleen-Flo
- Duron Multigrade Engine Oil – Petro-Canada
- Hydrex MV 22, 36, 60 – Petro-Canada
- Chain Oil (Summer, Winter) – Petro-Canada
- Polaris 2T VES Synthetic Oil – Polaris Sales
- Polaris Premium Blue Semi-Synthetic Blend – Polaris Sales

DRILLING MUDS, GREASES, LUBRICANTS
Kikerk/Knife Lake Project – Spring 2004 Drill Programme

(See MSDS on accompanying CD)
- EZ-MUD – Baroid of Canada
- QUIK-GEL – Baroid of Canada
- NL-165 Drilling Mud – Baroid of Canada
- Drill Rod Heavy Grease – Petro-Canada
- API Modified Thread Compound – Petro-Canada
- Grease OG-0, OG-1, OG-2 – Petro-Canada
- Poly Drill Clay Treat II – Poly-Drill
- Poly Drill 1300 – Poly-Drill
- WD-40 Aerosol – WD-40 Products
- Traxon XL Synthetic Blend 75W-90, 80W-140 – Petro-Canada
- Traxon 80W-90, 85W-140 – Petro-Canada

WELDING SUPPLIES
Kikerk/Knife Lake Project – Spring 2004 Drill Programme

(See MSDS on accompanying CD)
- Oxygen – BOC Gases
- Acetylene – BOC Gases
- Covered Electrode (Easy Arc) – Lincoln Electric
- Low Fuming Bronze (Brazing) – Aufhauser

MISCELLANEOUS CHEMICALS
(FIRE EXTINGUISHER CHEMICAL, BATTERY, ANTIFREEZE, SOLVENT, SPRAY PAINT)
Kikerk/Knife Lake Project – Spring 2004 Drill Programme

(See MSDS on accompanying CD)
- Fire Extinguisher Chemical (ABC) – Flag Fire
- Lead-acid Battery – Exide Technologies
- Gas Line Antifreeze – Petro-Canada
- Spray Paint (Fluorescent, Marking) – Rust-Oleum
- Polaris Antifreeze 50/50 Pre-Mix PG – Polaris Sales