

## DE BEERS CANADA EXPLORATION INC.

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#601 – Precambrian Building - 4920 52<sup>nd</sup> Street  
Yellowknife, NT X1A 1R6

11 November 2003

Phyllis Beaulieu  
Licensing Administrator  
Nunavut Water Board  
Box 119  
Gjoa Haven, NT XOE IJO

### **RE: APPLICATION: NEW “TYPE B” WATER LICENCE FOR KIKERK/KNIFE LAKE PROJECT**

Please accept this letter and the accompanying application package as a formal request for a Type B Water Licence to obtain water for a remote camp and an exploration site, known collectively as the “Kikerk/Knife Lake property”, West Kitikmeot Region, Nunavut. The previous water licence for this project was #NWB2KIK0002. As it is planned to establish a new 25-person camp on or before 01 March 2004 to serve a drill programme at nearby Knife Lake, timely processing of this application would be much appreciated. A cheque in the amount of \$30.00, payable to the Receiver General for Canada, is attached to cover licence fees. (A separate land-use application for erecting and operating a camp on the property was submitted in October 2003 to Indian and Northern Affairs (INAC), Iqaluit. There already is an INAC land-use permit to cover the drill programme.)

The De Beers Canada Exploration (DBCE) project in the Kikerk Lake (*Kikkiktalik*) area has been ongoing since the early 1990s; DBCE discovered the “Knife Lake” kimberlite in 2000. Currently, DBCE is Operator of a joint-venture with Rhonda Corporation at Knife Lake. This 1.5km long shallow lake lies NE-SW across the boundaries of two of the property’s claims. The proposed camp is located 2.3km W of the Knife Lake exploration area at co-ordinates 67° N. lat. – 113.2° W. long. A fly-in diamond core drill programme of up to 25 holes is planned at the north end of Knife Lake, roughly between 01 March and 01 May 2004. The Kikerk/Knife Lake camp would support this programme, housing a 10-person drill crew, up to 4 geophysical surveyors, several geologists and several camp personnel. Should results warrant, a further exploration programme in 2005 could follow, likely comprised of both large-diameter drilling and trenching at Knife Lake; an amendment to this licence would be sought prior to this activity.

The accompanying application is comprised of: <sup>(1)</sup> An English-language Summary. <sup>(2)</sup> An Inuktitut Summary. <sup>(3)</sup> A completed NWB application form. <sup>(4)</sup> A completed NWB Exploration/Remote Camp Supplementary Questionnaire. <sup>(5)</sup> A detailed Project Description (with maps, photos and 10 appendices, including a CD-ROM containing the entire DBCE Environmental Management System). Please note that the attached archaeological summary document (*Appendix 10A*) will be replaced by a detailed final report, when available. Certain documents – such as Appendices 3 and 4, which are comprised of MSDS sheets, and are available as hard-copy only – are being sent to you by First Air air-velope. Where digital copy is available, all digital component documents will be e-mailed to you, as per your request.

Thank you for the opportunity to make this submission. Once you have received all associated documents, please contact me if you have any questions, or require extra copies or re-transmissions.

Shirley Standafer-Pfister  
Lands and Government Relations Manager  
[shirley.standaferpfister@ca.debeersgroup.com](mailto:shirley.standaferpfister@ca.debeersgroup.com)

attach.

cc: Nunavut Impact Review Board (NIRB) – Cambridge Bay, NU

Our contract archaeologist, Callum Thomson, takes site notes during a field survey in summer 2004 in the Kikerk/Knife Lake mineral claims exploration area.



APPLICATION FOR "TYPE B" WATER LICENCE,  
NUNAVUT WATER BOARD,  
KIKERK/KNIFE LAKE PROJECT, NU

NOVEMBER 2003

De Beers Canada Exploration Inc.

## TABLE OF ATTACHMENTS

### NUNAVUT WATER BOARD 'TYPE B' WATER LICENCE FOR KIKERK/KNIFE LAKE PROPERTY

#### PROJECT DESCRIPTION

##### Kikerk/Knife Lake Project Description

ACCOMPANYING DOCUMENTS: (1) Title Page, (2) Cover Letter c/w Cheque for Fees, (3) Kikerk/Knife Lake Project Summary (English), (4) Kikerk/Knife Lake Project Summary (Inuktitut), (5) NWB Water Licence Application Form, (6) NWB Exploration/Remote Camp Supplementary Questionnaire

#### MAPS and PHOTOS - Kikerk/Knife Lake Project

Map 1: Proposed Kikerk/Knife Camp, Nunavut - October 2003

Map 2: Regional Map - DBCE Claimblocks in West Kitikmeot

Map 3: Kikerk/Knife Lake Project - Proposed Spring Drilling 2004

MAP 3 TABLE (included): Provisional UTM Co-ordinates - Kikerk/Knife Lake Spring Drill Programme 2004

Photo 1: De Beers Canada Exploration Inc. - Rockinghorse Camp

Photo 2: De Beers Canada Exploration Inc. - Knife Lake, NU

#### APPENDICES

Appendix 1A: De Beers Canada Exploration General Responsibilities -

Operating Procedure #004 (One Component of the Extensive De Beers Canada Environmental Management System (EMS))

Appendix 1B: De Beers Canada Environmental Policy

Appendix 1C: Operating-Procedures Indices, De Beers Canada Environmental Management System (4-Page Listing)

Appendix 1D: De Beers Canada Environmental Management System, Vers. 1.04g [ CD-ROM ]

Appendix 2A: LF-70 Diamond Core Drill (Boart Longyear)

Appendix 2B: LY-50 Diamond Core Drill (Boart Longyear)

Appendix 3: MSDS Sheets for Products Which May Be Used in a Camp

Setting

Appendix 4: MSDS Sheets for Drilling Muds/Additives Proposed  
for

Use by Contractor, Boart Longyear Inc.

Appendix 5: Nunavut Spill Report Form

TABLE OF ATTACHMENTS (cont.)

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Appendix 6:	Spill Contingency Plan - Kikerk/Knife Lake Project
Appendix 7:	Procedures for Recording/Avoiding Suspected Archaeological Sites
Appendix 8:	Animal Sighting Report Form
Appendix 9:	General Guidelines: Kikerk/Knife Lake Property - Abandonment and Restoration of Camp Facilities
Appendix 10A:	Summary Report on Archaeological Surveys in the Vicinity of a Proposed Exploration Camp, Knife Lake/Tree River Area, Nunavut (INTERIM REPORT)
Appendix 10B:	Preliminary Archaeological Assessment of Proposed Knife Lake Exploration Camp Location, and Mitigation Recommendations



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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN

## WATER LICENCE APPLICATION FORM

Application for: (check one)

☒ New ☐ Amendment ☐ Renewal ☐ Assignment

### LICENCE NO:

(for NWB use only)

#### 1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

Shirley Standafer-Pfister  
DE BEERS CANADA EXPLORATION INC.  
#601 – Precambrian Building  
4920 52<sup>nd</sup> Street  
Yellowknife, NT X1A 1R6

Phone: (867) 766-7350; -7356 (direct)

Fax: (867) 766-7351

e-mail: [shirley.standaferpfister@ca.debeersgroup.com](mailto:shirley.standaferpfister@ca.debeersgroup.com)

#### 2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)

DE BEERS CANADA EXPLORATION INC.  
One William Morgan Drive  
Toronto, ON M4H 1N6

Phone: (416) 423-5811

Fax: (416) 423-0081

#### 3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)

At the NW edge of the Slave Geological Province, 60km south of the Coronation Gulf and 20km south of Kikerk Lake (*Kikkiktalik*), DBCE holds a mineral claimblock known as the "Kikerk/Knife Lake Property". Property is comprised of 5 directly-held claims: **KL 08, KL 10, KL 11, KL 12 and TREE 1**. The subject of exploration is a small waterbody known as "Knife Lake", which lies NE-SW across **KL 12 and TREE 1**. All the claims have undergone legal survey, with the purpose of being taken to lease. Co-ordinates of the small block are shown below. **MAPS ARE ATTACHED WITH SUBMISSION.**

#### Kikerk/Knife Lake Property:

Latitude: 66° 40' -- 67° 30' Longitude: 113° 04' – 113° 20' NTS Map Nos. 86P/03 and 86 I/14

#### 4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

Continuation of and advancement of the existing exploration programme (new fly-in camp, ground geophysics, drill testing, evaluation). A drill programme is planned to occur between 01 March [after erection of camp] and 01 May 2004, drilling into the Knife Lake kimberlite occurrence on Crown land. (See attached MAPS and PROJECT DESCRIPTION).

#### 5. TYPE OF UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in "bold")

☐ Industrial

☒ Remote/Tourism Camp

☐ Mine Development      ☐ Municipal  
☒ Advanced Exploration      ☐ Power  
☒ Exploratory Drilling      ☐ Other (describe): \_\_\_\_\_

## 6. WATER USE

☒ To obtain water \*      ☐ To divert a watercourse  
☐ To modify the bed or bank of a watercourse      ☐ Flood control  
☐ To alter the flow of, or store, water      ☐ Other (describe): \_\_\_\_\_  
☐ To cross a watercourse

**\* Pump water for camp use (drinking, washing) and for use by 2 core drills. Should a bulk sample be recovered in future (2005), a detailed AMENDMENT would be submitted. However, the volume level requested here takes bulk-sample water use into account.**

## 7. QUANTITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

- Approx. **6m<sup>3</sup>**/day potable water from Tree River on which PROPOSED CAMP would be situated; greywater reports to a hand-dug sump. (Biodegradable soap, phosphate-free). Possible water use during till sampling or ground geophysical surveying (summer programmes) would be negligible, as samplers/technicians carry daypacks with beverages, food, etc.  
 - Approx. **21m<sup>3</sup>**/day for 2 core drills operating concurrently (10-11cm diam. core) over 2 months; about 80% of water is recirculated.  
 - Approx. **50m<sup>3</sup>**/day for a large-diam. RC casing drill or RC-air assist production drill (assuming size of 61cm diam.) over roughly 6 weeks (2005). (NOTE: The casing rig and production rig would not be used concurrently).  
**GRAND TOTAL/DAY: 6m<sup>3</sup> + 50m<sup>3</sup> = 56m<sup>3</sup> WATER USE REQUESTED**

## 8. WASTE (for each type of waste describe: composition, quantity, methods of treatment and disposal, etc.)

25-45 Pacto bags/day from Pacto toilets: burned or bagged and flown out. (No water required). Sewage  
½ of 121L garbage container/day; what can't be burned, will be packaged and flown out. Solid Waste  
For greywater, see 7. above. Greywater  
Max. 140 1-2L containers of household cleaners, oils, lubricants; 3 drums waste fuel/oil and filters: incinerated or packaged and flown out for disposal. Hazardous and Waste Oil  
N/A Sludges.  
Hard to est. at this time; possibly a Twin Otter-load flown out over project; scrap wood which  
can't be reused would be incinerated. Bulky Items/Scrap Metal  
N/A Other (describe)

**(PURCHASE OF CSA Environmentally-Rated Incinerator currently under consideration for 2004 programme; otherwise, a 205L drum would be designated as a burn barrel.**

## 9. PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)

*[Drilling Authorisation, Workers' Comp. Board will be updated before end of 2003].*

### Land Use Permit

#N2001C0007

DIAND ☒ Yes ☐ No If no, date expected \_\_\_\_\_

#NWB2KIK0002

Nunavut Water Board - Licence ☒ Yes ☐ No If no, date expected (EXPIRED – new licence  
sought).\_\_\_\_\_



Commissioner \_\_\_\_\_ Yes ☒ No If no, date expected \_\_\_\_\_

**10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** (direct, indirect, cumulative impacts, etc.) Minimal and temporary impact – REFER TO ATTACHED PROJECT DESCRIPTION.

NIRB Screening ☒ Yes \* \_\_\_\_\_ No If no, date expected (Nov. or Dec. 2003)

\*

**Project previously screened by NIRB; new documentation submitted to NIRB in association with new request for a camp permit and a new water licence.**

**11. CONTRACTORS AND SUB-CONTRACTORS** (name, address and functions)

- Boart Longyear, #403 47<sup>th</sup> St., Saskatoon, SK – Drilling Contractor  
(306) 931-4466 (phone); (306) 931-1150 (FAX)  
- Aurora Geosciences Ltd., 3502 Raccine Rd., Yellowknife, NT – Geophysical Contractor  
(867) 920-2729 (phone); (867) 873-3816 (FAX)  
- Air Tindi, Box 1693, Yellowknife, NT – Fixed-Wing Contractor  
(867) 669-8200 (phone); (867) 669-8210 (FAX)  
- Great Slave Helicopters, Bag 7500, Yellowknife, NT – Helicopter Contractor  
(867) 873-2081 (phone); (867) 873-6087  
- Bryon Jones, in-house expeditor, DBCE Yellowknife Office  
(867) 766-7350 (phone); 444-1173 (cell); (867) 766-7351 (FAX)  
- G&G Expediting, Box 1046, Yellowknife, NT -- Expeditor (if required)  
(867) 669-9705 (phone); (867) 669-9706 (FAX)  
- EBA Engineering, #201-4916 49<sup>th</sup> St., Yellowknife, NT -- Engineering and Environmental Consultant  
(867) 920-2287 (phone); (867) 873-3324 (FAX)

**12. STUDIES UNDERTAKEN TO DATE** (list and attach copies of studies, reports, research, etc.)

- (1) "Archaeological Overview Assessment of the TREE 1 Claim and Surrounding Area, Kikerk Lake Mineral Exploration Area, Nunavut", Jacques Whitford Environment Ltd., 28 February 2001 (PREVIOUSLY SUBMITTED).
- (2) **Pending Report:** Archaeological Field Assessment of the De Beers Exploration Camp, Tree River/Knife Lake Area (report likely available in early 2004). SUMMARY ATTACHED WITH APPLICATION (Appendix 10A + LETTER FROM ARCHAEOLOGIST (Appendix 10B).
- (3) Relevant research not associated with the project: "Final Report on Resource Management Planning in West Kitikmeot", Nunavut Planning Commission Transition Team (July 1996). (NOT ATTACHED).

**13. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN**

Supplementary Questionnaire (where applicable: see section 5) ☒ Yes \_\_\_\_\_ No If no, date expected \_\_\_\_\_

Inuktitut/English Summary of Project ☒ Yes \_\_\_\_\_ No If no, date expected \_\_\_\_\_

Application fee \$30.00 (c/o of Receiver General for Canada) ☒ Yes \_\_\_\_\_ No (BEING SENT BY AIR COURIER)

**14. PROPOSED TIME SCHEDULE**

\_\_\_\_\_ Annual (or) ☒ Multi Year

Start Date: 01 March 2004 Completion Date: 01 September 2006 (with renewal for 1 year, 2006-2007)



**Name (Print)**

**Title (Print)**

**Signature**

**Date**

**(NOTE: SIGNATURE PAGE ALSO WILL BE FAXED)**

For Nunavut Water Board use only		
APPLICATION FEE	Amount: \$ _____	Receipt No.:
WATER USE DEPOSIT	Amount: \$ _____	Receipt No.:



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## EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

**Applicant:** Shirley Standafer-Pfister for De Beers Canada Exploration **Licence No:** \_\_\_\_\_  
(For NWB Use Only)

### ADMINISTRATIVE INFORMATION

1. **Lands and Government Relations Manager:** (see above) Tel: (867) 766-7350 Fax: (867) 766-7351  
E-mail: shirley.standaferpfister@ca.debeersgroup.com Cellphone: (867) 444-1239
2. **Geological Project Manager:** Peter Holmes Tel: (867) 766-7300 Fax: (867) 766-7348 E-mail: peter.holmes@ca.debeersgroup.com
3. **Does the applicant hold the necessary property rights?** Yes, through Mining Recorder, INAC, Iqaluit, NU.
4. **Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?**  
If so, please provide letter of authorization. Claims are all held in the name of De Beers Canada Exploration Inc.
5. **Duration of the Project**  
☐ Annual  
☒ Multi Year:  
If Multi-Year indicate proposed schedule of on-site activities  
Start: 01 March 2004 Completion: 01 September 2006 (with possible renewal for 1 yr. to 01 September 2007)

### CAMP CLASSIFICATION

6. **Type of Camp**  
☐ Mobile (self-propelled)  
☒ Temporary  
☒ Seasonally Occupied: max. 60-90 days  
☐ Permanent  
☐ Other: \_\_\_\_\_
7. **What are the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?**  
New camp will hold up to 25 with proposed number of sleep tents (8-9). Maximum of 24 expected to overnight at any one time; 20 would be an average occupation in winter; 15 in summer. Average fluctuation, 3-5 persons.
8. **Provide history of the site if it has been used in the past.**

(See "*Project Summary*" and "*Project Description*" documents.)

No camp has previously existed on the Kikerk/Knife Lake property. DBCE has explored the Kikerk area since the early 1990s, and conducted a drilling programme at Knife Lake in 2000 and 2001; prior programmes were based out of DBCE's Rockinghorse camp 86km SE.

## CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The camp and 5 mineral claims are situated within the Wopmay Orogen on the western margin of the Slave Province of the northwest Canadian Shield, and also characterised as lying in the Bear Slave Upland (Bostock, 1970), north of the tree line, an area broken by lakes and streams, whose shores are comprised of glacial and post-glacial deposits. Glaciofluvial deposits, although rare in the Kikerk Property, exist in the region dominantly as eskers (varying from sand-rich to boulder-rich material) and related kames, but also as outwash plains. A thin vegetative cover of dwarf birch, willow, grasses, lichen and moss provides forage for passing muskox and caribou.

The area is delimited at the compass points by the following waterbodies: Coronation Gulf, some 60km north, and Kikerk Lake (Kikkiktalik), approx. 20km north; the Tree River at the south and east, and crossing the small claimblock; Napaktulik Lake due south; and the Coppermine River at the west and northwest.

The area is characterised by distinctive landform and sediment assemblages that radiate outwards from the Keewatin Ice Divide. Zone 4 (the area of interest) is characterised by extensive areas of nearly drift-free, ice-moulded bedrock with virtually no esker development (Shilts and Aylsworth, 1989). Eskers (none are present on the 5 claims) are generally small, sinuous ridges, parallel or sub-parallel with the indicated direction of ice movement. Approaching the Coronation Gulf coast, the northwesterly ice flow direction shifts to northerly.

The terrain is commonly marked by bedrock exposure; at the southeast of the property, rocks of the Archaean Yellowknife Supergroup, including autochthonous basement granites, gneisses and volcanic rocks are exposed. A thin (< 2m thick) sandy to silty glacial till, bouldery at surface, predominates.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

This was the only suitable campsite within the 5-claim area; shallow waters with prominent boulders predominate, reducing options for a camp location. There is no pre-existing camp. Although information will be supplied to the Kitikmeot Inuit Association in Kugluktuk, the exploration area itself is located on Crown land.

11. Is the camp or any aspect of the project located on:

☒ [X] Crown Lands      Permit Number (s)/Expiry Date: #N2001C0007- 03 May 2004  
☐ [ ] Commissioners Lands      Permit Number (s)/Expiry Date: \_\_\_\_\_  
☐ [ ] Inuit Owned Lands      Permit Number (s)/Expiry Date: \_\_\_\_\_

12. Closest Communities (distance in km):  
Kugluktuk, 150km northwest; Bathurst Inlet (Kinggaug), 220km east.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

DBCE plans to continue to regularly visit Kugluktuk (the closest community) in connection with its programmes to discuss what is planned or has occurred, both with Regulators and with community residents; the next meetings are

currently being arranged through Kugluktuk regulators, and will occur in either January or February 2003. The last community visit (by Shirley Standafer-Pfister and Peter Holmes) occurred in October 2002. Parties seeking work are contacted and hired as appropriate. Individuals from Kugluktuk and Cambridge Bay have worked on the project; there was no programme in 2002. Should the project expand, consultation will occur with other regional communities.

14. Will the project have impacts on traditional water use areas used by the nearby communities?  
Will the project have impacts on local fish and wildlife habitats?

The Kikerk/Knife Lake Project will consist in temporary presence on the land and temporary and minimal use of water in a remote area. There will be no interference with traditional Inuit use of water resources, and no impacts on local fish and wildlife habitat; DBCE recognises and supports Inuit use of their own lands, for their own purposes. Neither sport fishing nor hunting will occur from the DBCE camp, or at worksites, and ungulates have never been observed to calve in the area, as the claims are distant from caribou and muskox calving grounds. If large aggregations of muskox or caribou were to move through a site where drilling was to commence, or was in progress, activity would not proceed or would cease until the animals which were in close proximity had progressed onward. Personnel and contractors are trained seasonally in DBCE's Environmental Awareness course, and are encouraged to complete a Wildlife Sighting Form (*Appendix 8* of the Application Package) when wildlife are observed during programmes.

## PURPOSE OF THE CAMP

15. ☐ Mining (EXPLORATION)  
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)  
(Omit questions # 16 to 21)  
☐ Other \_\_\_\_\_ (Omit questions # 16 to 22)
16. ☐ Preliminary site visit  
☐ ☒ Prospecting  
☐ Geological mapping  
☐ ☒ Geophysical survey  
☐ ☒ Diamond drilling  
☐ ☒ Reverse circulation drilling/bulk sampling (possible in 2005)  
☐ Other: Mechanical trenching on land (possible in winter 2005)
17. Type of deposit:  
☐ Lead Zinc  
☒ Diamond  
☐ Gold  
☐ Uranium  
☐ Other: \_\_\_\_\_

## DRILLING INFORMATION

18. Drilling Activities  
☐ ☒ Land Based drilling  
☐ ☒ Drilling on ice
19. Describe what will be done with drill cuttings?  
Drill cuttings will report to a land-based sump, the requisite distance from a waterbody. Any inadvertent spillage of cuttings will be scraped/shovelled and/or heat-steamed and will report to a land-based sump.
20. Describe what will be done with drill water?

80% or more of drillwater is recirculated; the small amount of sedimented water not recycled will report to a land-based sump, the requisite distance from a waterbody.

21. List the brand names and constituents of the drill additives to be used? Include MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

A complete list of drilling additives which could conceivably be used by the contractor, Boart Longyear, in conducting a drill programme in Nunavut, are attached with the Application Package as *APPENDIX 4*. Given that both the contractor and DBCE have a commitment to environmental protection, the additives are benign (as per MSDS sheets), and, should an additive be required, the safest additive for the job at hand would be employed. In accordance with the DBCE Environmental Policy (*cf. APPENDICES 1A-1C*, and *Environmental Management System CD-Rom, APPENDIX 1D*), chemicals and additives, no matter how benign or inert, are handled out-of-doors or in well-ventilated areas, with proper masks (to prevent dust inhalation) and goggles (to obviate eye irritation). Skin irritation would rarely be a problem, due to wearing of gloves and coveralls by workers. Any spills of materials would be cleaned up promptly, as per the guidelines provided with each product, and as per the Environmental Policy and Kikerk/Knife Lake Spill Contingency Plan (*APPENDIX 6*). As part of the DBCE EMS, drilling contractors are required to record details of any additive used.

22. Will any core testing be done on site? Describe.

Core flown out; no testing on site.

## SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.

Yes. "Spill Contingency Plan – Kikerk/Knife Lake Project" is included with the Application as *Appendix 6*.

24. How many spill kits will be on site and where will they be located?

At least one spill kit is present in camp at all times; absorbents are present where fuel is transferred and under stationary equipment. One spill kit is present at each drill site, and additional absorbent padding also is used where fuel is transferred or placed in drip pans under stationary equipment. In addition, DBCE complies with all WCB regulations, wherein supervisors are required to have WCB Supervisory Certificates and each driller or helper is First-Aid and WHMIS certified. DBCE personnel and drilling supervisors are trained in Transport of Dangerous Goods and in spill- and fire-response.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Diesel fuel for heating, running generators and garbage incineration, diesel for drillsites (including pumps, generators, etc.), petrol (unleaded gas) for snowmachines and gas-powered water pumps, Jet-B for aviation requirements, propane for cooking, laundry and at drillsite; oils, greases and fluids in gen-shed or in drillsite storage shed, as appropriate. (*See "Project Description" with Application Package.*) Household cleaners are stored in kitchen and dry tents, and in limited quantity in the latrine; oils, greases, lubricants are kept in generator shed. (*Fuel/Lubricants MSDS Sheets for camp are attached as Appendix 3*). Oxygen and acetylene for welding at drillsites are kept chained in standard wire racks. All fuels are stored securely away from water, with empties segregated from full containers, and empty fuel containers regularly backhauled.

## WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Water for camp will be pumped from Tree River (*cf. attached MAP 1*). Water for drills will be pumped from Knife Lake (*cf. attached MAP 1*). Potable water for camp will be stored in a manufactured tank in the heated dry; household chlorine bleach is the only treatment required.

27. Estimated demand (in L/day \* person): (*See below*).

- ☐ Domestic Use: 250L (0.25m<sup>3</sup>/person/day – 2004) Water Source: Tree River  
☐ Drilling Units: 10 500L (10.5m<sup>3</sup>/drill/day – 2004) Water Source: Knife Lake  
☐ Other: \_\_\_\_\_ Water Source: \_\_\_\_\_

\* Total maximum camp use of 6m<sup>3</sup>/day (from Tree River) and total maximum of 10.5m<sup>3</sup>/day/per drill (from Knife Lake – PW or SW casing); if an RC production rig and large-diameter casing rig were used, consumption could increase to a maximum of 50m<sup>3</sup>/day/drill. If the new camp is at top estimated capacity, e.g., 25 persons, the average per-person use would be 0.25m<sup>3</sup>/day for potable water (drinking/ washing/bathing/% of food prep).

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe:

Waterline suction-line will be equipped with a mesh grate to obviate entrainment of fish.

29. Will drinking water quality be monitored? What parameters will be analysed and at what frequency?

Potable water pumped into the holding tank is monitored daily. Water quality of Tree River at camp location is pristine, and testing of the water by an accredited lab would be undertaken should the camp size and exploration activities increase, or should activity cease and the camp area be restored to its former condition. Addition of chlorine bleach to the potable stored water will be the only treatment measure (testing via Hach Colorimeter Test Kit). Should the camp increase in size in future, additional treatment, such as ultraviolet, would be considered.

30. Will drinking water be treated? How?

No treatment of drinking water required at this stage, except with the addition of chlorine.

31. Will water be stored on site?

Water will be stored in a holding tank in the heated dry building.

## WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

- ☐ Camp Sewage (blackwater) – Self-sealing Pacto toilet bags are either burned or incinerated daily.

*(Please refer to accompanying Application).*

- ☐ Camp Greywater -- Potable water used for cooking and washing is piped via heat-traced poly-line within an insulated utilidor to a covered sump.

*(Please refer to accompanying Application).*

- ☐ Solid Waste – Garbage collected in standard covered receptacles; either burned or incinerated daily.

*(Please refer to accompanying Application).*

- ☐ Bulky Items/Scrap Metal – Bulky scrap items which can be recycled are reused; if unusable, metals are packaged and flown out on backhauls for disposal in Yellowknife. Wood scrap is burned.

*.(Please refer to accompanying Application).*

- ☐ Waste Oil/Hazardous Waste – Very small amount of waste oil/fuel, about 3 drums, will be stored in labelled drum(s). Household cleaners, oils, lubricants stored and disposed of in

original containers. Waste oil is suitable for burning as fuel or is incinerated. Where space is available on backhauls, waste oil/fuel drums can be flown out for disposal in Yellowknife.

*(Please refer to accompanying Application).*

☐ Empty Barrels/Fuel Drums — Other than drums kept for waste fuel/oil, and as spill receptacles (e.g., for disposal of soaked absorbent padding), all empties are returned to source on backhauls.

☐ Other: N/A.

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

A 205L burn barrel will be used to burn combustible garbage; purchase of a CSA environmentally-rated incinerator (such as used in our Rockinghorse camp) is under consideration, should project economics warrant. Typical wastes burned would be Pacto bags, kitchen waste, cardboard and small wood scrap.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Non-combustibles will be flown out by regular fixed-wing charter and returned to Yellowknife for proper disposal.

35. Describe location (relative to water bodies and camp facilities ) dimensions and volume, and freeboard for sumps (if applicable).

DBCE locates all sumps the requisite distance from waterbodies, whether greywater sumps or drill sumps. Sumps are dug to allow overcapacity with respect to input. The covered greywater sump in camp likely will have dimensions of 1m x 1m x 1.5m, which should prove more than adequate for several seasons of use. Freeboard of 30cm would be sufficient, as sumps are monitored daily, and, if a sump is seen to be filling up, sumpwater can be pumped into refuge drums until a new sump can be dug.

36. Will leachate monitoring be done? What parameters will be sampled and analysed, and at what frequency?

N/A.

## OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

Yes. Camp water supply is pumped into a holding tank in a heated structure, and the tank is drained prior to seasonal camp closure. Poly-line can be drained, dismantled and rolled up when not in use, or rolled up, or stacked if frozen, and thawed in a heated structure. Should heat-tracing fail, utilidor box containing the potable waterline and greywater line can be opened and any frozen sections changed out and thawed. Waterlines at drillsites can be heat-steamed to thaw. All methods used for water supply and disposal are climate-appropriate. Waste treatment not applicable; waste disposal by burning or transport offsite is climate appropriate for remote sites. Power failure is obviated by having two generators on site; for pumping, there is similarly a backup pump on site. Our expeditors, G&G Expediting of Yellowknife, or our in-house expeditor, Bryon Jones of Yellowknife, are on 24-hour call, should materials be required which are not on site; DBCE also maintains a charter contract with Air Tindi, so emergency air transport for parts, etc., is guaranteed.

## ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.



*(Please refer to attached "Project Description" and to "Abandonment and Restoration Plan" (APPENDIX 9) ).*  
As Kikerk/Knife Lake Property is under active exploration, only seasonal cleanup and securing of premises will occur in 2004-2005. It is anticipated that all camp and drillsite facilities will be regularly inspected by regional Regulators.

## **BASELINE DATA**

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

- ☐ ☒ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ☐ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- ☐ ☒ Socio-Economic Environment (Archaeology, Land and Resources Use, Demographics, Social and Culture Patterns, etc.)
- ☐ Other:

*(Water-quality baseline data will be collected prior to, during and after drilling on Knife Lake in association with the 2004 drill programme. Archaeological baseline data collection commenced several years ago, and an archaeological field survey of the new campsite is scheduled for summer 2004). (SEE BIBLIOGRAPHY LIST IN NWB APPLICATION FORM).*

## **REGULATORY INFORMATION**

40. Do you have a copy of

- ☐ ☒ Article 13 - Nunavut Land Claims Agreement
- ☐ ☒ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- ☐ ☒ NWB - Interim Rules of Practice and Procedure for Public Hearings
- ☐ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- ☐ ☒ NWTWB - Guidelines for Contingency Planning
- ☐ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- ☐ Fisheries Act - s.35
- ☐ ☒ RWED - Environment Protection- Spill Contingency Regulations
- ☐ Canadian Drinking Water Quality Guidelines
- ☐ ☒ Public Health Act Camp Sanitation Regulations
- ☐ Public Health Act Water Supply Regulations
- ☐ ☒ Territorial Land Use Act and Regulations

You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.

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## **DE BEERS CANADA EXPLORATION INC. KIKERK LAKE/KNIFE LAKE PROJECT SUMMARY**

From 1993 until the present, De Beers Canada Exploration Inc. (DBCE), a Canadian diamond exploration company, has prospected and explored in the Kikerk Lake area (*Kikkikhtalik*) from our regional office in Yellowknife; until October 2000, we were known as "Monopros Limited".

Commencing in 2000, DBCE became operator of an exploration project situated on the "TREE 1" mineral claim adjoining the four remaining DBCE "KL" claims; this activity has been concentrated at the east end of a small unnamed lake, informally known as "Knife Lake", where DBCE intersected kimberlite in spring 2000. Several seasons of exploratory diamond core drilling were conducted at Knife Lake on the "TREE 1" claim from DBCE's Rockinghorse (*Koamaogaktok*) camp, located 86km southeast. As this is a long distance to travel, DBCE has decided to erect a new camp, similar in size to Rockinghorse camp, close to Knife Lake; this new camp, to be located on DBCE's "KL 12" mineral claim, would be approximately 2.3km from the exploration area. Having a camp close to Knife Lake would result in cost efficiency and improve logistics. No activity will occur on Inuit-Owned Land.

In order to obtain permission to use water for this camp, as well as for water use associated with continued drilling at Knife Lake, a new Type B water licence is sought from the Nunavut Water Board (NWB); the prior licence expired in 2002. DBCE also is currently applying to Indian and Northern Affairs (INAC) for a Class A Land-Use Permit for the proposed camp. There already is a valid Class A Land-Use Permit (#N2001C0007) which authorises the exploration drilling, and a new permit will be sought prior to that permit's expiry in May 2004.

DBCE would like to continue its exploration activities at Knife Lake on behalf of its joint venture with Rhonda Corporation, and in doing so, intends to continue working co-operatively with regulators and the people of the Kitikmeot.

What is proposed with this application to the Nunavut Water Board (NWB) is a water licence for the maximum number of years allowable – two – with the dates being 01 March 2004 to 01 September 2006; at that time, DBCE may request renewal of the licence for an additional year, if required. DBCE also may request permission to amend the new licence after 2004, once detailed information on a future evaluation programme is known; a 2005 programme could consist of large-diameter drilling and trenching, should results warrant.

# DE BEERS CANADA EXPLORATION

## KIKERK/KNIFE LAKE PROJECT DESCRIPTION

### INTRODUCTION

De Beers Canada Exploration Inc. (DBCE – formerly Monopros Limited), a Canadian company with a regional office in Yellowknife, has prospected and explored for diamonds in the Kikerk Lake (*Kikkiktalik*) area of the Slave Geological Province from the 1990s until the present day. DBCE would like to continue that activity, and by means of the accompanying Indian and Northern Affairs (INAC) land-use permit application, requests permission to construct a 25-person base camp to serve continued exploration in the “Knife Lake” area of the *TREE 1* mineral claim. The Kikerk/Knife Lake Project was served during 2000-2001 from DBCE’s “Rockinghorse camp” some 86km southeast. (No activity occurred in either 2002 or 2003). As it is impractical to continue to serve Kikerk/Knife Lake Project from such a distance, a new permit for operation of a camp close to the project is sought.

The new camp would be located on Crown land in NTS mapsheet 86P/03, within DBCE’s *KL 12* mineral claim, at UTM co-ordinates 404231mE – 7433446mN (NAD 27 Canada Mean, Zone 12). No project activity would occur on Inuit-Owned Land.

### STATUS OF PERMITS AND AUTHORISATIONS

DBCE currently holds five mineral claims in the Kikerk/Knife Lake area (*cf. MAP 1*) – *KL 08*, *KL 10*, *KL 11* and *KL 12*, as well as the adjoining *TREE 1* claim. DBCE’s total holdings in this area equal 11 268.11 acres. All claims are on Crown land, and have been surveyed in order to be taken to lease. In summer 2003, the *TREE 1* claim was transferred to DBCE from joint-venture partner, Rhonda Corporation.

Rhonda’s existing Indian and Northern Affairs (INAC) Class A Land-Use Permit (*#N2001C0007*) for exploration at Knife Lake has now been assigned to DBCE. That permit is valid until May 2004, and prior to the expiry, DBCE will seek a replacement permit to govern its exploration. DBCE’s former Type B Water Licence (*#NWB2KIK0002*) has expired, and an application for a new water licence to govern camp and exploration activities now is sought from the Nunavut Water Board.

Drilling privilege from the Workers’ Compensation Board to conduct drilling at Knife Lake in spring 2004 will be sought at year-end 2003.

### PROPOSED ACTIVITIES AND THEIR NECESSITY

In order to determine if the claims area holds economic potential, active exploration comprised of prospecting, surficial sediment sampling, airborne and ground geophysical surveying and exploratory, delineation and evaluation drilling of numerous targets over a number of years is necessary; without this level of care and effort, new kimberlite orebodies, such as the Knife Lake kimberlite, will not be discovered. A camp to support such activity is a necessary programme component.

The remote location of the Kikerk/Knife Lake property, harsh weather conditions, a highly variable winter drilling window and short summers mean that many more field seasons are required to find, test, analyse and understand resources than would be required in southern Canada; further, the cost of carrying out a field programme in the near-Arctic is high (even from our northern-region base in Yellowknife), which can mean that there may be occasional years in which no programme is conducted at all. Oftentimes, a claim life of 10 years is insufficient to “source” multiple mineral indicator trains across a large claims area, and thus exploration may continue on claims after they are taken to lease. As noted above, 5 DBCE claims on Crown land have undergone legal survey, so that exploration for and evaluation of resource may continue on these claims (*Map 1*).

### **Camp Operation – Crown Land**

It is proposed to construct a camp commencing on 01 March 2004, or earlier, depending on permit issuance. The fly-in camp would be similar in size and composition to our “Rockinghorse camp” (cf. PHOTO 1), equipped with sufficient sleep tents for up to 25 persons, a kitchen, dry, office, core shack, generator shed, burn barrel or incinerator and Pacto toilets, as well as a helicopter landing pad and camp-based fuel cache. A bear fence also may be erected, if warranted.

The camp would be opened seasonally to serve drill programmes (winter) and sediment sampling/ground geophysics (summer), and would be maintained for as long as required by the Kikerk/Knife Lake Project, after which the camp would be entirely dismantled and removed.

### **Drill Programme 2004 – Crown Land**

In spring 2004 (approx. 01 March to 01 May), a 25-hole drill programme producing the equivalent of PQ-diameter (10-11cm) diameter core is planned at Knife Lake; the objective is to recover up to 100t of kimberlite from the Knife Lake kimberlite pipe. Two drills, such as Boart Longyear’s LF-70 hydraulic core rig (the same model as used for several programmes on DBCE’s Rockinghorse property, cf. Appendix 2A) would be deployed concurrently; at 9 000kg, this is a lightweight fly rig. There also is the possibility of use of Boart Longyear’s larger (17 300kg) gear-driven LY-50 core drill modified for fly operation (Appendix 2B). The proposed campsite is approximately 2.3km away from the drillsite area, within easy reach by fixed-wing or helicopter. Kimberlite core recovered would be flown off-site by fixed-wing aircraft.

### **Drill Programme 2005 – Crown Land**

Should results from the 2004 programme indicate that further (i.e., larger-volume) evaluation of the Knife Lake kimberlite is warranted – to gain additional information on diamond grade and stone distribution – DBCE might consider a combination of large-diameter drilling (with either a production rig alone to do both casing and sample recovery, or with both a large-diameter casing rig and a production rig) and mechanical land-based trenching. Trenching would be considered where the Knife Lake kimberlite pipe subcrops to land. Drilling methodology similar to that used at DBCE’s Kennady Lake (Gahcho Kué) Project, NWT, in 2001-2002 would be employed, i.e., reverse-circulation air-assist production drilling which lowers the incidence of stone breakage typically encountered with reverse-circulation (water) alone. Neither the location of large-diameter holes (LDDH) nor length/orientation of trenches can be determined at this time.

It should be noted that plans beyond 2004 are necessarily highly speculative and subject to change, depending on results and year-to-year budgets; whilst a programme may prove successful, there is also the possibility that a programme may prove unsuccessful, which is a disincentive to further work. INAC, other Regulators and Kitikmeot residents, principally of Kugluktuk, shall be kept fully apprised as plans evolve.

It is hoped that, when the project’s new Type B water licence is obtained, that there will be provision for AMENDMENT of the licence to allow for an LDDH programme and trenching, should such be seen as a viable option for the 2005 season.

### **DURATION OF PROJECT CAMP**

As the Kikerk/Knife Lake Project remains active, the maximum length of time for camp use is requested – that being two years (from 01 March 2004 to 01 March 2006), plus the option to extend the new permit for an additional year, if required. (Water licence duration of 01 March 2004 to 01 September 2006 is sought).

### **METHOD OF TRANSPORTATION**

The drill(s), tooling, other equipment (such as generators, compressors, pumps, Poly-Drill filtration tank), fuel drums and personnel will be moved from site to site by helicopter; it is expected that Great Slave Helicopters of Yellowknife will provide this service, as in the past. Personnel will be ferried back and forth to drill-side from camp during the 2004 programme.

One or two helicopters (e.g., an A-Star or 203 with pilot(s) and engineer) would be based at the proposed camp to support the spring 2004 exploration drilling programme. Fixed-wing service will be required to mobilise, supply, resupply and demobilise the Kikerk/Knife Lake camp and to transport core samples; it is expected that Air Tindi of Yellowknife will provide this service. A Twin Otter and other aircraft, such as a Dash-7, will be deployed on a regularly-scheduled basis.

Around camp, transportation will be by snowmobile; up to 3 Bravo snow machines will be based at camp for the use of camp personnel. Snowmobiles with komatiks are to be used for loading/offloading and transferring fuel to tent drums – not for overland travel away from camp. Several snowmobiles used by the drilling contractor also may be positioned at the drillsite.

Due to the remote location, there are no viable alternatives to the aforementioned modes of transportation.

### **CAMP AND STRUCTURES**

The Kikerk/Knife Lake camp will be a small (25-person) fly-in tent camp located on the east shore of a peninsula intruding the Tree River. This camp will be similar in size and composition to DBCE's existing Rockinghorse camp (*PHOTO 1*), and operated in compliance with a 31m setback from shore. Rockinghorse camp consists of 15 structures, mainly tarp-covered wall tents, as well as a storage shed. The Kikerk/Knife Lake camp also would contain similar structures: An office, kitchen, dry (for washing and laundry), core shack, generator shed, outhouse (with 2 Pacto waterless toilets) and 9 sleep tents. It is expected that 2 generators will be brought to site, one to serve as a spare during oil changes and other maintenance. An electric bear fence would be maintained around the campsite for safety, if warranted. Potable water would be drawn from the river through a screened waterline to prevent entrainment of fish, and water circulated through a boxed and heat-traced distribution system linking the kitchen and dry, with greywater from the kitchen and sinks/showers outfalling to a hand-dug sump pit; only biodegradable phosphate-free soaps will be used. Pacto bags from the latrine and kitchen waste will be burned or incinerated daily to limit animal attraction to the camp. There will be no structures erected away from camp, other than a temporary survival shack for the drillers at Knife Lake, 2.3km away.

### **FUEL STORAGE**

All fuel handling, whether for camp or at drillside, will be governed by a Spill Contingency Plan (*Appendix 6*).

A fuel storage area (drums of diesel and Jet-B fuel, segregated from each other) will be located in the camp compound, sited the required distance from shore. Depending on the number of helicopters used for programmes, one or two heli-pads (gravel areas) also will be sited at the compound; Jet-B drums will be positioned here, with empties separated from full drums, and removed on backhauls. A separate storage area will be created for P40 and P50 diesel drums, with empties removed on backhauls. Cylinders of propane (45kg size) will be stored by the kitchen and dry in an upright and secure position; empty cylinders will be removed on backhauls. There will be no other fuel cache on the property. Approximately 150 drums of diesel (heating fuel and fuel for generators and pumps) will be required for the camp in spring 2004, with only up to about 50 full drums actually stored on site at any one time. Empty drums will be rotated out regularly on backhauls. It is estimated that minimum amounts of other fuels also may be required, e.g., 5 drums of petrol (unleaded gasoline) for snowmobiles in camp, with another 5 barrels positioned at the Knife Lake drillsite for drillers' snowmobiles. All fuels will be flown in. Oils required for the camp generators and snow machines (typically 1- and 2-L size) will be stored in the generator shed. A spill-kit drum (set of pads, socks and/or pillows, disposal bags, gloves, goggles, Sphag-zorb or peat moss, depending on kit manufacturer) will be present in camp, and additional absorbent pads and drip pails or pans will be present where fuel is transferred and under stationary equipment. Fuel transfer will be by means of hand wobble, electric or diesel fuel pump. Wooden cribs will be constructed to support fuel drums at tents, with absorbent padding and catch pails placed directly under drum valves; pails, fuel-line hoses, connections and valves will be checked daily, and the pails shovelled free of snow, as required.

Storage of diesel and Jet-B drums and tubs of oils, greases and lubricants will occur at the Knife Lake drillsite during the drill programme, but that storage is captured under a separate land-use permit (#N2001C0007). A spill-kit drum (*see typical contents list in paragraph above*) will be present at each drillsite, and additional absorbent pads and drip pails or pans will be present where fuel is transferred and under stationary equipment.

#### **POTABLE WATER, GREYWATER AND WASTES**

Potable water will be pumped to a holding tank in the dry, supplied by poly-line inserted into the river offshore; suction line will be suitably screened to prevent entrainment of fish. Greywater line is to be insulated and heat-traced within a plywood utilidor and will outfall from the kitchen sink and lavatory sinks and showers to a hand-dug sump (typical dimensions, as used at Rockinghorse camp, are 1m X 1m X 1.5m); sump will be covered in winter to prevent its being filled with snow. All lines and appliances, such as propane hot water heaters, will be drained of water prior to camp closure to prevent line freezeups.

It is anticipated that an outhouse with two Pacto toilets will be constructed. Bagged toilet wastes will be burned daily, along with other combustible waste, in either a fuel-fired incinerator (such as is used at Rockinghorse camp) or in a designated burn barrel (205L sized drum) positioned at the edge of the camp compound. Non-combustible garbage, including metal waste and other bulky scrap, will be flown out for recycling or disposal at the Yellowknife landfill.

#### **POTENTIAL IMPACTS OF CAMP**

Potential impacts of the Kikerk/Knife Lake exploration camp locally, regionally and to the hamlet of Kugluktuk 150km away, are predicted to be minimal, given the commitment of DBCE to its Environmental Policy, Environmental Management System and its regulatory requirements.

The camp will amount to only a few hectares (4ha are being applied for), and the period of activity during any one year will be limited to approx. four or five months in total. Although any human habitation, whether an outfitter's camp or an exploration camp, could possibly result in inadvertent localised fuel spills, or untidy conditions which could in turn result in animal attraction and subsequent damage to property or injury to persons, it must be noted that such occurrences can be successfully controlled by constant vigilance of camp systems and practices. As per best practice, and guided by the De Beers Canada Environmental Management System (EMS) (*cf. CD-ROM accompanying this application as Appendix 1D*) and the company-wide Environmental Policy (*Appendix 1B*), all camp occupants are trained in environmental awareness, proper fuel handling, and in spill and fire response, as well as in safety responsibilities. All camps not in use are properly closed, and areas where use is completed are reclaimed (*also cf. Abandonment and Restoration Plan, Appendix 9*). In small camps (such as the Kikerk-Knife Lake camp), weekly written inspections are done of all facilities and systems, which inspections augment the daily checks performed by the camp attendant during his/her rounds. In larger DBCE camps (i.e., those over 25 persons), daily inspections of all facilities and systems are conducted.

In addition, as one of the key objectives of the DBC Environmental Policy is continuous improvement, it is anticipated that the Kikerk/Knife Lake camp will be regularly inspected (as is the Rockinghorse camp) by federal and territorial inspectors, as well as by in-house personnel and International Standards Organisation (ISO) auditors; site visits also may be organised for community visitors, such as elders.

If further evaluation of the deposit is warranted beyond 2004, an environmental baseline data collection programme will be designed and implemented, commencing in either mid- to late 2004 or in 2005, and will comprise a range of biophysical components, such as wildlife density and distribution, and fish population and habitat. What is planned for 2004 is commencement of a water-quality sampling programme to establish the baseline conditions in Knife Lake, with water samples collected before, during and after the drill programme by qualified technicians and submitted to EnviroTest Laboratories in Edmonton (a certified environmental laboratory) for analysis.



The health and wellbeing of wildlife is of great concern to DBCE in all our operations. If numbers of caribou or muskox should enter an area where work is proceeding, all optional work will cease until the herd has moved on; in a camp context, this would mean foregoing optional operation of equipment, such as takeoff of helicopters. Wildlife will not be approached or disturbed by persons on foot or on snowmachines. In the coming drilling season, a Wildlife Sighting Form (*Appendix 8*) routinely used at other DBCE camps will be employed. Although the project area offers no esker habitat, DBCE is aware of the general importance of glaciofluvial and glaciolacustrine landforms to bears, wolves, foxes and prey mammals, such as sik-siks, and limits habitat disruption wherever possible. Favourable esker habitat is located further south, off the property.

It is understood that archaeological and heritage resources also may be impacted by camp activities. To that end, camp personnel and contractors will be required to follow the Kikerk/Knife Lake Archaeological Protocol (*Appendix 7*). As a field survey was conducted of the Knife Lake area in summer 2003, and previously in 2001, the locations of 7 archaeological sites are known (*cf. Figure 1 - Archaeologist's Letter, Appendix 10B*), and thus can be avoided by camp personnel. A further field survey specifically of the camp area is planned for summer 2004. There are no known deposits of carving stone. An archaeological overview was completed in 2000 and a preliminary field assessment in 2001, and reports from those activities were previously submitted to Regulators. A report on a field survey of the Rockinghorse and Knife Lake areas completed in 2003 is in preparation; a Summary Report of that recent work is attached as *Appendix 10A*).

#### Archaeological Assessment of Potential (2005) Winter Haul Route

The 2003 survey also examined a potential haul route which might be required in future years to move a large (non-heliportable) bulk-sampling rig from the north shore of the Knife Lake peninsula to the drillsite (approx. 1.5km); no archaeological sites were found to exist in this flat, bouldery area (*cf. Summary Report – Appendix 10A*). No winter haul route is to be established in 2004.

#### **SPILL CONTINGENCY PLAN**

The Kikerk/Knife Lake Spill Contingency Plan is contained in *Appendix 6*; the plan is informed by DBCE's commitment to avoiding spills where possible, prompt action when spills occur and utmost concern for human health and safety, and the environment. The DBCE Environmental Policy (*Appendix 1B*) is contained within the De Beers Canada EMS, which system will be kept on site in hard copy and CD-ROM for reference and for training purposes. Our comprehensive, updateable EMS came into effect in autumn 2001 and is included as a CD-ROM with this application (*Appendix 1D*). (Copies of the EMS were first distributed to our Regulators in December 2001).

#### **BENEFITS TO INUIT**

In all its projects, DBCE hires locally to the extent possible. As the Kikerk/Knife Lake Project still is at the exploration stage, there are fewer opportunities for non-technical employment than with a more advanced project; however, opportunities for service provision do exist each season, and such opportunities (e.g., hotel accommodation and supplies) result in direct dollars to communities. Currently, it is planned that two or more Kitikmeot residents will be hired directly as camp staff during the spring programme. Various Kitikmeot services have been used in past programmes, and such use is expected to continue in 2004 and beyond, expanding as and *if* the programme expands.

DBCE also plans to continue to visit the closest community, Kugluktuk, regularly in connection with its programmes to discuss with Regulators and the community what is planned or has occurred. The last meetings occurred in October 2002; a meeting in respect of 2004 programmes is likely early in 2004, or at such time as is convenient to Regulators and the community. If and when the project expands, opportunities for direct employment, service provision and other benefits also will expand. Whatever the project outcome, the De Beers Canada family looks forward to a co-operative and mutually beneficial relationship with the citizens of the Kitikmeot.