

APPENDIX TO NUNAVUT WATER BOARD

WATER LICENCE APPLICATION

3. Main Components of Undertaking

De Beers Canada Exploration Inc. has set up a tent camp for up to 30 people near the eastern edge of an un-named lake at latitude 70° 56' 04"N and longitude 80° 11' 03" W. The duration of the camp will be from approximately May 1 to September 10, 2005 with soil sampling and geological mapping undertaken on the Crown land adjacent to this location using two helicopters. The purpose of work in the area is exploration for kimberlites which are the host rock for diamonds. De Beers has a number of exploration permits in the area surrounding the proposed campsite where it would like to conduct kimberlite exploration.

With respect to Inuit Owned Lands (IOL's) administered by the community of Pond Inlet and Artic Bay, the De Beers exploration program will affect the following, AB-01, AB-02, AB-44, AB-52, AB-53 and AB-54 and PI-16, PI-17, PI-19 and PI-48. It is possible that sampling will be undertaken on these IOL's and applications for access to this land has been submitted to the QIA.

The camp will be serviced by twin otter aircraft equipped with tundra tires which will land on a temporary landing strip next to the campsite. No heavy equipment was used to prepare the landing strip. Some larger stones were removed from the soil and some small depressions were filled in with shovels so that the aircraft can land safely. The total area encompassing the campsite, fuel storage area and aircraft landing strip is approximately 4 hectares.

Airborne geophysics is planned to take place in mid May. This will involve a helicopter towing a sensor approximately 20m off the ground over an area 15km x 10km on Crown land just to the north of Erichsen Lake. This should be completed by the end of May.

Ground geophysics will be conducted at the same time by two geophysicists and two Inuit assistants from Igloodik. This should take approximately three weeks. All this work is on crown land.

Drilling with a small reverse circulation drill will be undertaken in June. This will test some existing targets from previous surveys and some from the geophysics that will be done in May. If this drill is unable to sufficiently test every target then a diamond drill will be used in July.

The sampling in 2005 will consist of soil and stream sampling with 2 man sample teams flown by helicopter from site to site collecting samples. A stream sample will consist of about ten litres of sand and gravel collected from a stream every 5 kilometres. A soil sample is also 10 litres and is collected from the ground every 0.5 to 2km along traverse lines. At each site, De Beers will ensure that no litter is left behind, and that the sample hole is filled in once again before leaving the site. The samples will be flown by aircraft from camp to Igloodik where they will be shipped south on the sealift for analysis in De Beers' laboratory in Sudbury, Ontario.

The camp consists of up to 15 Weatherhaven style tents with wooden floors. Water for the camp will be drawn from the lake using a submersible pump and will be stored in a temporary storage tank at the camp for use in the kitchen and in wash facilities.

Grey water from the kitchen and shower facilities will be disposed of in gravel-lined sumps at the camp. Human waste will be disposed of in a pit privy. A portable diesel powered generator will supply power to the camp. All garbage from the camp will be flown from the work area and disposed of in the municipal landfill at Igloolik.

An Inuit wildlife monitor will ensure the safety of the camp's residents.

At the end of the field season the camp will be decommissioned but the tents be left standing as De Beers intends to use the campsite once again in 2006 in order to complete soil sampling and geological mapping in the area. It is also proposed that up to 50 drums of sealed Jet-B helicopter fuel be stored at the campsite for further helicopter work in 2006.

3a. Project Summary

De Beers Canada is continuing to explore for diamonds on its Baffin Island Permits in 2005. The proposed work program will begin in mid May 2005 and will last until the end of August. The tent camp will staff 15 people during May and June and this will increase to 20 during July and August. The camp will be serviced by a twin otter aircraft from Igloolik. De Beers will be using Inuit people from Igloolik as sample assistants, geophysical assistants, drill assistants, prospectors, camp attendants, expeditors and wildlife monitors.

Airborne geophysics is planned to take place in mid May. This will involve a helicopter towing a sensor approximately 20m off the ground over an area 15km x 10km on Crown land just to the north of Erichsen Lake. This should be completed by the end of May.

Ground geophysics will be conducted at the same time by two geophysicists and two Inuit assistants. This should take approximately three weeks.

Drilling is planned for June. This will test some targets from the geophysics that will be done in May.

Geological sampling will be undertaken from the camp during July and August and will involve six crews supported by two helicopters. The crews will comprise one geologist and one Inuit assistant. The teams will move from site to site by helicopter in order to collect stream samples or carry out geological mapping. The helicopters will refuel from the base camp or outlying fuel caches, and all empty fuel drums and samples will be removed from the area by aircraft.

The work program will be adjusted as required to minimize the disturbance to wildlife or to avoid cultural areas considered sensitive by the local communities. As it is De Beers' intention to work once again in the area during 2006, some tents and a fuel cache will be left in place at the base camp over the winter period.

This project summary has been translated into Inuktitut and has been attached to the appendices.

4. Detailed Description of Undertaking

De Beers Canada Exploration Inc. (DBCEI) is a Canadian diamond exploration company, which has prospected and explored for diamonds in the N.W.T and Nunavut since the early 1990's. In February 2002, DBCEI (formerly known as Monopros) was awarded 131 prospecting permits covering a 32,552km² area on north-central Baffin Island, centred approximately halfway between the communities of Igloolik and Pond Inlet. The vast majority of the prospecting permits are on Crown Land, with up to 11 Inuit owned lands (IOL's) overlapped by the prospecting permits: IG-10, IG-25, IG-26, AB-01, AB-02, PI-03, PI-13, PI-15, PI-16, PI-19 and PI-48.

In February 2004 42 permits on the east side of the area were dropped and an additional 79 prospecting permits have been awarded to the west of the existing permits. The Inuit Owned Land parcels affected by these permits are AB-44, AB-52, AB-53 and AB-54.

The proposed 2005-field programme will be conducted from the Pingu Juak camp located at latitude 70°56'4" N and longitude 80°11'3" W. The duration of the proposed fieldwork will be from 20th April to the 20th September 2005, with geophysics, drilling, soil sampling and geological mapping undertaken from this location using 2 helicopters. The camp will also be serviced with food and fuel by a Twin Otter aircraft landing on a prepared tundra strip adjacent to the camp and an unprepared strip on the lake. No improvements other than removing stones and rocks from the landing have been done. Up to 200 drums of Jet-B and Jet A1 helicopter fuel and diesel fuel for a camp generator will be stored on site in 45 gallon drums at any given time. Spill kits and contingency plans are in place to deal with fuel spills in the event that they might occur. All De Beers personnel and its aircraft and helicopter sub-contractors will have had specific training in dealing with fuel spills prior to beginning fieldwork on the project. All empty drums will be removed from the field by aircraft prior to the end of the field season for transport south via the sealift.

The Pingu Juak camp is located on the interior of Baffin Island near no known archaeological sites or presently known sites of carving stone. Discussions with local hamlet and HTO officials in Igloolik confirmed the area was likely not inhabited in the past and represents an area of very low archaeological potential. The camp was named after a large hill that can be seen from the camp by a group of Igloolik Hamlet council members who visited the site last year. Discussions with the local community also confirmed the area was not an active area of caribou calving or an area of raptor or migratory bird nesting and that caribou migration in the area is likely to occur in late September to October after De Beers has concluded its field investigations for the season. De Beers has also agreed to provide the local HTO's and other wildlife officials with any information, which it might collect regarding the movements of wildlife in the work area during the field season. The locations of all archaeological sites noted will also be passed on to the relevant organizations.

The camp infrastructure contains up to 15 Weather Haven tents with wooden floors. These tents consist of sleep tents, and office tent, wash tent, storage tent and kitchen/dining tent. Water for the camp will be pumped up from an electrical submersible pump located in the lake adjacent to the camp in a 1500 litre holding tank located next to the wash tent. Grey water from the kitchen and shower facilities will be collected in a leach pit located well away (>30m) from the lakeshore. Pit privies and composting toilets will be used for human waste collection. All kitchen garbage will be collected and back hauled to Igloodik for final disposal in the municipal landfill. A 15kW diesel generator will provide electrical power for the camp.

The overall footprint of the camp, tundra airstrip, lake airstrip and fuel cache will encompass approximately 4 hectares in area. Approximately 200, 45-gallon drums of Jet helicopter fuel, diesel fuel for the generator, stoves and drill will be stored at the camp and various temporary caches. Gasoline for operating various pumps will also be stored at camp and various temporary caches. Several 100 lb bottles of propane will also be stored at camp for use as cooking fuel in the kitchen. Fuel transfer from 45-gallon drums to helicopters and the Twin Otter aircraft will make use of electric pumps that are stored on board the aircraft. Hand operated wobble pumps and 5-gallon jerry cans will be used to fuel the camp electrical generator and smaller engines in and around camp.

As part of De Beers spill emergency procedures, any and all fuel spills regardless of size must be reported to the relevant authorities and an internal report regarding the incident must be filed internally with the company. In order to ensure that spills are cleaned up in an efficient, environmentally responsible manner all De Beers personnel are given mandatory training in spill prevention and spill clean up procedures prior to entering the field. Spill kits containing absorbent material will also be located at the camp fuel cache and at any points of re-fuelling in the camp itself. Should a spill occur, personnel are instructed to take action immediately to control the source of the spill and then begin remedial action to isolate and remove the spill contaminated material into containers which will be flown for disposal at an approved waste disposal facility.

Airborne geophysics is planned to take place in mid May. This will involve a helicopter towing a Magnetic and Electro Magnetic sensor approximately 20m off the ground over an area 15km x 10km on Crown land just to the north of Erichsen Lake. This should be completed by the end of May.

Ground geophysics will be conducted at the same time by two geophysicists and two Inuit assistants from Igloodik. This should take approximately three weeks. All this work is on crown land. Three different survey types will be used. Gravity, magnetics and electromagnetics.

The drill operation will test geophysical and geo-chemical targets and will be conducted with a diamond core rig (LF70) or a small Reverse Circulation drill. The drill crew will consist of 4 people; a geologist, a drill operator, a drill assistant and another Inuit assistant to aid the geologist in sample collection. The drill rig will be helicopter supported. Drilling with a small reverse circulation drill will be undertaken in June. This will test some existing targets from previous surveys and some from the geophysics that will be done in May. If this drill is unable to sufficiently test every target, such as targets under lakes, then a diamond core drill that has the ability to drill angle holes will be used in July.

The sampling will be undertaken during July and August and will consist of soil and stream sampling with 2 man sample teams flown by helicopter from site to site collecting samples. A stream sample will consist of about ten litres of sand and gravel collected from a stream every 5 kilometres. A soil sample is also 10 litres and is collected from the ground every 0.5 to 2km along traverse lines. At each site, De Beers will ensure that no litter is left behind, and that the sample hole is filled in once again before leaving the site. The samples will be flown by aircraft from camp to Igloolik where they will be shipped south on the sealift for analysis in De Beers' laboratory in Sudbury, Ontario. Several Inuits who have worked on the project in the past will also be used to prospect directly for kimberlite in some areas. These men have proven that they can identify fragments of kimberlite in the till and allow the prospecting to target in on high interest areas much quicker than conventional sampling techniques.

Should any wildlife such as caribou be seen while exploration activities are underway, geologists are instructed to note how many animals are present, their location and to leave the area immediately. De Beers strictly prohibits the harassment of any wildlife from any of its aircraft or in any of its camps. An Inuit wildlife monitor from a local HTA will be employed to provide security for the camp.

In addition to providing employment for Inuit assistants during the geophysics, drilling and sampling phases, De Beers will also provide employment for wildlife monitors and camp attendants in its field operations. The work cycle will be 2 weeks with 2 shifts for the Inuit assistants, therefore doubling the amount of people working on the project. It is anticipated about 24 Inuit from Igloolik will work on the project during the summer. Additional employment opportunities will also arise locally for expediting services and the provision of services external to camp such as groceries, fuel and hotel accommodation.

The proposed De Beers exploration camp on Baffin Island is envisaged as a temporary exploration camp facility, which will be used once again as a base for additional work in the area during 2006. At the end of the 2005 field season it is proposed that the camp be decommissioned of its equipment and field supplies, but that the tents be left standing. It is also proposed that up to 100 drums of sealed Jet-B helicopter fuel be stored at the campsite for further helicopter work in 2006. When the camp is no longer required however, the tents, wooden floors and all other equipment on site will be dismantled and flown out of the area by aircraft. Drainage sumps and privies will also be back filled and restored as much as possible and no empty fuel drums will be left on site.

8. Waste Disposal

Disposal of grey water from the kitchen and shower facilities in the De Beers camp will be made in gravel-lined hand dug sumps located 34m from the lake shore. Human waste will be disposed of in pit privies. The guidelines adhered to for the waste disposal will be drawn from *Land Use Guidelines for Mineral Exploration, Yukon and N.W.T.* (Indian and Northern Affairs Publication, 1994).

Permission to dispose of kitchen garbage and other camp waste has been given to De Beers by the Hamlet of Igloolik and it is backhauled several times per week.

De Beers has spill kits on hand at the camp location in order to deal with potential spills from diesel and helicopter fuel stored in drums at the camp. All De Beers personnel and its sub-contractors (helicopter and aircraft contractors) will have specific training in dealing with fuel spills. In the event that a fuel spill should occur, contaminated soil and absorbent material from the spill will be flown by aircraft to a landfill facility specifically designated for fuel contaminated material in Iqaluit or to a suitable location further south if required.

10. Environmental Impacts and Mitigation Measures

The proposed camp location described above is a temporary facility and will be entirely removed after De Beers has completed its work in the area. We intend to leave the tent frames and floors in place over the winter of 2005 however, as we intend to use the camp once again in 2006.

The overall impact of De Beers activities on the land will be very low. Helicopters based in the campsite will be used to transport geology teams from sample site to sample site. Additional soil sampling and geological mapping work will be completed from the camp on foot. None of the sampling work will be undertaken using ATV's or vehicles.

Spill kits containing absorbent matting will be used to handle any potential spills from 45 gallon drums of Jet-B aircraft or diesel fuel which will be stored on site during the field season. De Beers employees and its sub-contractors will be trained prior to the start of field work in the area on how to recognize spills and how to deal effectively with spills should they occur. It is also company policy to report all spills to authorities, regardless of size.

De Beers will service the camp with food and fuel by twin otter aircraft and we do not intend to build any roads or improved airstrips at the campsite at this time. A lake next to the camp will be used to provide water for the camp and grey water will be disposed of in gravel lined sumps located well beyond the lake shore (> 30 metres). All garbage will be removed on a regular basis to the municipal landfill in Igloolik.

An Inuit wildlife monitor will be employed to keep residents in the camp secure from wildlife and other hazards. De Beers has very strict policies for helicopters and aircraft regarding the harassment or chasing of any wildlife. The movements of migrating caribou in the work area will also be monitored and reported to the local Hunter and Trappers Organizations and other wildlife officials. Up to six local Inuit sampling assistants working in the camp will also be free to report on the impact on De Beers' activities regarding the environment or local wildlife at any time. We consider these local assistants to be the eyes and ears of the each community on our activities.

The proposed De Beers exploration camp is a temporary camp which will be used for additional sampling in the area in 2006. When the camp is no longer required, the tents, wooden floors, and all other equipment and structure on site will be dismantled and flown out of the area by aircraft. Drainage sumps and privies will also be backfilled and restored as much as possible and no empty fuel drums will be left on site.

39. Baseline Data

As no 1:50 000 NTS map sheets exist in this area, air photo and Landsat 7 imagery will be used to produce base maps to aid the surficial geological mapping of this area.

During the summer field season all wildlife sightings will be recorded and forwarded to the Wildlife authorities.

An archaeological database of known sites for the area has been compiled.

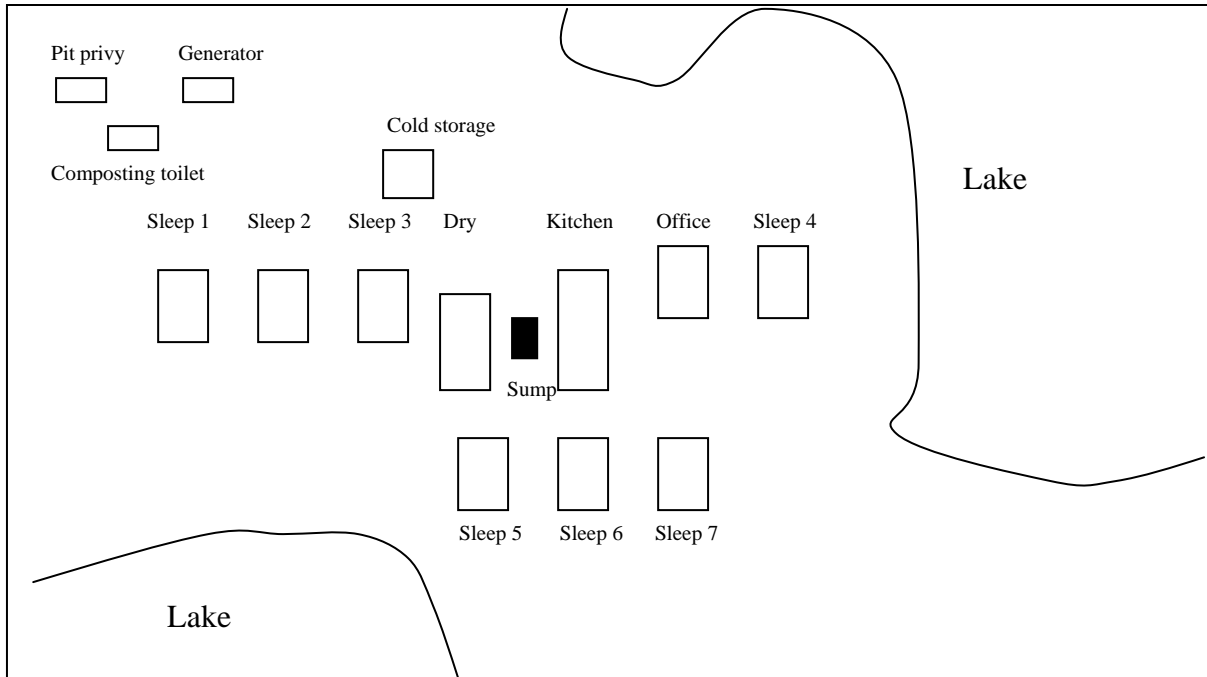


Diagram of Pingu Juak camp