DE BEERS GROUP

Chidliak Exploration Project

Abandonment and Restoration Plan
LUP# N2018C0002

April 2023

Contents

TABLES

REVISION HISTORY

Revision	Date	Comments
0.0	January 10, 2018	Peregrine Abandonment and Restoration Plan
1.0	December 8, 2022	Revision to update Peregrine info to De Beers format submission to NWB/CIRNAC
1.1	April 4, 2023	Updates to include NWB Public Comment Recommendations

1.1 Introduction

Peregrine Diamonds Ltd. (Peregrine) is a wholly-owned subsidiary of De Beers Canada Inc.(De Beers). Peregrine first began diamond exploration activities at its Chidliak Exploration Project in 2008. The project is located on the Hall Peninsula of South Baffin Island between Cumberland Sound and Frobisher Bay. The two closest communities are Pangnirtung 200 kilometers to the north and Iqaluit 120 kilometers to the southwest.

Exploration field work is currently seasonal with field programs typically conducted in the winter months from late February to early May and summer programs typically conducted from late June to early September.

Four field camps are established on the project. Discovery Camp is used as the primary base of operations and the other three camps (Aurora Camp, CH-6 Camp and Sunrise Camp) are occasionally used for logistics support or emergency refuge.

Most activities are low impact including prospecting, mapping, sampling and geophysics, all of which leave a negligible impact on the environment. Activities including exploration core drilling and small diameter reverse circulation drilling leave a small footprint in the near term but after one or two years, impacts are difficult to detect.

The project currently consists of 41 mining leases exclusively on Crown land with an aggregate area of 42,758 hectares. Since 2013 almost all field activities have been confined within a priority work area centred on the kimberlites considered to have economic potential (See Attached Project Map). This abandonment and restoration plan includes all existing camp facilities and worksites.

1.2 Location Coordinates

This Abandonment and Restoration Plan applies to the entire Chidliak Exploration Project. However, since 2013, most activities have focused at the following six locations, all located entirely on Crown Lands.

Discovery Camp (est. 2008)

Located on high ground next to a natural cobble airstrip. The camp was constructed at this location in 2008. The site was selected due to the presence of the only natural landing area suitable for fixed wing wheel equipped aircraft in the vicinity of the kimberlite discoveries. This is the primary camp for field activities. The camp consists of exploration style tents, some wooden buildings and a large Quonset.

Projection: Latitude/Longitude

Datum: WGS 84

Latitude: 64°14'25.46"N

Longitude: 66°20'45.45"W

50K NTS: 26B01

Sunrise Camp (est. 2009)

The camp was established on the shore of a large lake in the winter of 2009. The camp is primarily used in the winter as the lake surface is used for an ice runway. At present, the camp consists of wooden cabins, walkways and tent platforms. The camp is not currently in use.

Projection: Latitude/Longitude

Datum: WGS 84

Latitude: 64°14'17.20"N

Longitude: 66° 7'45.32"W

50K NTS: 26B01

Aurora Camp (est. 2011)

The Aurora Camp was constructed in 2011 at the northern end of the Chidliak Exploration Project area to facilitate exploration and for safety reasons. The camp is situated on the shore of a lake. A seasonal ice airstrip was established on the lake in 2011. The camp was used for two field seasons (Winter/Summer 2011). The camp consists of wooden buildings and wooden platforms. The camp is not currently in use.

Projection: Latitude/Longitude

Datum: WGS 84

Latitude: 64°36'32.00"N

Longitude: 66°34'43.00"W

50K NTS: 26B10

Ch-6 Camp (est. 2013)

The CH-6 Camp was constructed in 2013 next to the prospective CH-6 kimberlite.. The camp was established for safety and logistical purposes. It enables the field crews to be housed close to the work area without significant distances to travel from other camp facilities. The camp consists of exploration style tents and a couple of wooden buildings. **Projection:** Latitude/Longitude

Datum: WGS 84

Latitude: 64°19'24.62"N

Longitude: 66°31'30.37"W

50K NTS: 26B07

CH-6 Kimberlite

Much of De Beers evaluation work takes place at the CH-6 kimberlite. **Projection:** Latitude/Longitude

Datum: WGS 84

Latitude: 64°19'17.57"N

Longitude: 66°31'47.53"W

50K NTS: 26B07

CH-7 Kimberlite

Much of De Beers evaluation work takes place at the CH-7 kimberlite.

Projection: Latitude/Longitude

Datum: WGS 84

Latitude: 64°15'0.31"N

Longitude: 66°21'18.06"W

50K NTS: 26B01

1.3 Primary Authorizations

1) **INAC – Class "A" Land Use Permit N2012C002**
    a. Issued: November 30, 2018
    b. Expires: November 30, 2024
2) **NWB – Class "B" – Water Use and Waste Water Disposal Permit #2BE-CHI1823**

[OFFICIAL]

a. Issued: June 1, 2018

b. Expires: May 31, 2023

3) GN – Department of Environment - Waste Generator Number #NUG-100030

a. Issued: April 8, 2008

b. Expires: No expiry

1.4 Rehabilitation Targets

1.4.1 Waste Handling

De Beers practices ongoing reclamation and active waste management. Waste management is viewed as a critical daily activity that prevents the accumulation of debris. A critical component of the waste handling procedures is the camp incinerator.

- Sewage is collected in Pacto bags and incinerated on an as needed basis (daily when camp is full)
- Domestic garbage is collected and incinerated on an as needed basis (daily when the camp is full)
- Hazardous waste generated is minimal and consists primarily of empty fuel drums with fuel residue. Empty fuel drums are refilled and reused or transported to Iqaluit and transferred to Nunatta Environmental Services Inc. for cleaning and disposal.
- Car batteries are collected and taken to the battery collection area at the Iqaluit landfill.
- Fuel drums stored in berms at the camp sites are checked daily. Inventory counts are completed regularly during programs and final counts are done at the end of season.
- Minor amounts of waste oil are collected and recycled as incinerator fuel. If a large volume is generated, it is collected and taken to Nunatta Environmental Services, or alternative authorized hazardous waste handler, for disposal.
- Camp induction training includes waste awareness and waste handling
- Any contamination of soil is documented and soil is bagged and consolidated until a sufficient quantity of soil is accumulated for disposal with Nunatta Environmental Services, or alternative waste handler.

1.4.2 Seasonal Camp Closures

- At the close of the field season, the occupied camp facility is cleaned, organized and secured.
- All buildings are cleaned and doors are bolted shut with the exception of the generator shed which is securely latched. This building is left unlocked in the event that anyone out on the land requires temporary refuge from the elements.
- All fuel for buildings are shut off at the drum's source and the fill cap is closed tightly. All drums are stored in berms or drum caddies so any potential leaks will be contained. Exhaust for tent heaters are pulled out and the holes are plugged to prevent snow from blowing in.
- The fuel valve for the camp generator is shut off. The internal tank is double walled with an internal catchment so any potential spills are contained. A drip pan is also placed under the generator to catch any potential oil drips.
- All combustible domestic waste is incinerated in the incinerator. Ash is placed in a container and flown back to Iqaluit on a weekly/biweekly basis. Hazardous waste will be shipped off-site to a designated Waste Handler.
- Non-combustible waste is assembled and sorted (metals, glass, plastics, rubber etc.) and transported to Iqaluit for disposal in the landfill. Pop cans are donated to local charities. Sorted glass, metals and plastics are recycled whenever the Iqaluit landfill recycling program is operational. Otherwise they are deposited in the landfill.
- Fuel inspections and fuel inventories are conducted daily. Fuel is stored on its side in impermeable berms. Drums are stored sideways with the bungs at 3 o'clock and 9 o'clock positions. At the end of the season a final inspection and inventory is completed prior to departure.
- Some dry goods are left in the kitchen tent stored in plastic Rubbermaid containers. All perishable food is brought back to Iqaluit and donated to a local charity.
- The bear fence is shut off and the bear fence gates are tied open.
- Large equipment is stored both outside and inside the Quonset. Outside equipment is stored on high, dry ground beyond the perimeter of the bear fence. The equipment is aligned parallel to prevailing winds to prevent accumulation of snow drifts.
- All water tanks and water lines are drained.
- Grease trap in the kitchen is cleaned out and the contents incinerated.
- Small equipment is stored securely in the buildings.
- Anything that can freeze to the ground is stored atop of wooden blocks (ie. trailer hitches, steel sleigh runners)
- Drill supplies are stored on pallets or in the mobile drill shed. Drill supplies are covered with tarps.

- Mobile bulk fuel tanks are emptied. Any excess fuel is transferred to empty 205 litre drums and stored in berms.
- Inventory is done of supplies that are left on site and the positioning of all equipment outside and stockpiles outside (Core boxes, drill gear).
- Ash from the incinerator is removed weekly/biweekly and flown to Iqaluit for with Nunatta Environmental Services.
- Valuable electronics, firearms, ammunition etc. is removed from site.
- Empty propane tanks are flown back to Iqaluit where they are stockpiled in a secure yard. At the opening of the sea lift they are transported south where they are refilled.

1.4.3 Final Camp Closure

- All mobile and fixed equipment will be removed from sites prior to final closure.
- All drill equipment and supplies will be removed from the site prior to final closure.
- All buildings on site are temporary in construction and most are canvas lined and will be disasembled and shipped off-site. Wood buildings and floors can be disassembled, cutup, and either burned on site, provided to interested parties, or transported to Iqaluit. If practical, prior to site abandonment burning of such wood at Discovery will consider burning in open drums or used as stock in the incinerator. Otherwise burning will occur in a contained pile. Any Chidliak Project camp burning should not occur within 31 meters of the perceived high water mark of a natural waterbody, and consideration taken as not to disturb wildlife or vegetation. In Iqaluit the shipped materials will be sold, disposed of in the Iqaluit landfill, or placed in containers and shipped south. Any nails or metal bits remaining will be collected by hand using magnets.
- All equipment will be sorted, consolidated and packed and shipped to Iqaluit. In Iqaluit the materials will be disposed of, sold or placed in containers and shipped south.
- Untreated wood will be burned at a designated burn area at each camp site. Materials that may be burned at closure include untreated timbers, construction scrap wood, and plywood. Any nails or metal bits remaining will be collected by hand using magnets.
- Mobile equipment will be transported back to Iqaluit by overland route.
- Equipment will be flown out by fixed wing aircraft or by helicopter sling.
- All fuel will be managed so inventories are consumed at site. Any remaining fuel will be transported back to Iqaluit.
- Domestic garbage will be incinerated at site. Ash from the incinerator is removed weekly/biweekly and flown to Iqaluit for disposal at Nunatta Environmental Services. Hazardous waste will be shipped off-site to a designated Waste Handler.

- At the conclusion of demobilization, each camp site will be searched to pick up any residual garbage by hand. Any debris will be consolidated and flown to Iqaluit.
- Existing holes in camp (post holes etc.) will be backfilled and re-contoured to blend in with the surrounding terrain.
- The greywater system, which consists of plastic pipe outfalling to greywater sumps when in operation receive water from the camp kitchen and dry buildings, will be drained, dismantled and removed off-site for disposal or recycled to another project. The sump and immediate environment will be examined, any remaining debris removed, the sump will be backfilled and levelled, and remaining bagged materials transported off-site for disposal.
- All sites will be inspected by De Beers personnel for any evidence of contaminated soil. If located it will be collected and bagged for disposal with Nunatta Environmental Services Inc.
- A final site inspection with the assigned land use Inspector and/or CIRNAC's land use engineer will be completed at the conclusion of final camp closure operations. Any concerns issued by the Inspector or engineer will be dealt with to their satisfaction.
- The Discovery Camp gravel runway is natural with no construction and consists of gravel and cobbles. The Runway will be inspected for any contaminants or debris, and rutting loosely contoured.

1.4.4 Drill Sites

- Peregrine ensures that each drill site is properly cleaned up when the hole is closed.
- At the conclusion of drill operations, all drill equipment, drilling materials and debris are removed from the work area and consolidated at camp.
- If drilling is conducted in the winter, the drill site will be re-inspected during the subsequent summer field season to ensure all debris has been collected and removed.
- All sites will be inspected by De Beers personnel for any evidence of contaminated soil. Contaminated soil will be collected and bagged for off-site disposal.
- Drill sumps will be sited to lessen the possibility of flow of drill cuttings into any neighboring waterbodies, taking advantage of topographic features such as natural depressions and bedrock outcrops.
- The underflow material at drill sites consists only of sandy/silty water or rock flour.
- Drill sumps are inspected. In many cases, the underflow material consists only of sandy/silty water. However, where necessary, sumps are backfilled; if this is not

possible due to snow cover and frozen ground, then any sumps requiring backfill will be filled in summer conditions.

- Trenches will be refilled with excavated material at the completion of the drill program. The material that is put back in the hole is generally of greater volume than the hole. In the summer the material melts settles and forms a hollow. The hollow will not be filled as that would necessitate creating an additional hole at another destination to obtain the material.
- Drill core in core boxes will be neatly stacked and left at the drill site location or consolidated at one of the camps.
- The Chidliak Exploration Project promotes the use of only environmentally benign drill additives
- For land based drilling, drill casings are cut off at ground level.
- Large diameter drill holes are cut to ground level and capped with a steel plate
- Cuttings from large diameter drilling are transported to an engineer-selected cuttings deposition area.
- At final closure, old work sites will be re-inspected, if necessary, to ensure compliance

1.4.5 Trench Activities

All trenches require a trench monitoring plan from the Nunavut Water Board. Each monitoring plan is specific to the particular trench location. General conditions are as follows:

- The trench will be refilled and reclaimed after the sample is excavated.
- As a volume of rock has been removed, some subsidence is anticipated. This may result in a small depression in the centre of the trench where water can pool.
- The site will be monitored during subsequent field programs. If water is present, a water sample will be collected and sent for analysis.

1.5 Iqaluit Landfill

De Beers holds an Iqaluit Business Licence and is authorized to use the Municipal Landfill. Tipping fees are charged on waste products with invoices issued at the Landfill Kiosk. Contact for questions at 867-979-5630.

Hours of Operation

Monday	Closed
Tuesday	8:00AM - 2:00 PM (Open through lunch)
Wednesday	8:00AM - 2:00 PM (Open through lunch)
Thursday	8:00AM - 2:00 PM (Open through lunch)
Friday	8:00AM - 2:00 PM (Open through lunch)
Saturday	8:00AM - 5:00 PM (Closed through lunch)
Sunday	Closed

Tipping Fees

All General Commerical Garbage	$50.00 / m3
Car / Truck Body Disposal	$500.00
Snowmobile Disposal	$200.00
Large Appliance Disposal (per item)	$100.00
Refrigerator / Freezer / ACU Disposal (per item)	$125.00
Bulk items (larger than truck body) disposal	$160.00 / m3
Automotive Battery Disposal (each)	$25.00
Oil Tank Disposal (each)	$200.00
Tire Disposal (each)	$70.00
Segregated Salvageable Wood Disposal	$12.00 / m3
Construction Debris Disposal	$100.00 / m3

1.6 Contacts

Table 1-1 Waste management related contact information

External Contact	Description	Telephone
De Beers Environment & Permitting Manager	Compliance, Permitting, Environment (Sarah McLean)	1-867-688-9227
De Beers Chidliak Coordinator	Camp Operations (David Willis)	1-604-836-3284
De Beers Permitting Coordinator	Permitting, Reporting, Monitoring (Chad Corson)	1-249-377-4445
CIRNAC	Resource Management Officer (Joseph Monteith)	1-867-975-1787
Environment Canada	Operations Manager	1-867-975-4644

	(Curtis Didham)	
Nunatta Environmental Services Waste Handler #: NUR-300002	Spill response (Jim Wilson, VP)	Office: 1-867-979-1488 Cel: (867) 222-4111
Environment Canada	24 Hour Spill Report Line	1-867-920-8130 (Iqaluit) Email: spills@gov.nt.ca.