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NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

## EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

**Applicant:** Peregrine Diamonds (De Beers Canada) **Licence No:** 2BE-CHI1823  
(For NWB Use Only)

### ADMINISTRATIVE INFORMATION

1. Environment Manager: Chad Corson (Permitting Coordinator) Tel: 249-377-4445  
Fax: \_\_\_\_\_ E-mail: chad.corson@debeersgroup.com
2. Project Manager: Marc Lincoln (Project Manager) Tel: 604-218-5013 Fax: \_\_\_\_\_  
E-mail: marc.lincoln@debeersgroup.com
3. Does the applicant hold the necessary property rights? Yes, 41 Mining leases having an aggregate area of 42,758 hectares. CIRNAC Class A Land Use Permit # N2018C0002
4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. No
5. Duration of the Project  
☐ One year or less      Start and completion dates:  
☒ Multi Year:

If Multi-Year indicate proposed schedule of on site activities  
 Start: 2008      Completion: 2038 (Estimate)

### CAMP CLASSIFICATION

6. Type of Camp  
☐ Mobile (self-propelled)  
☐ Temporary  
☒ Seasonally Occupied: Winter/Summer  
☐ Permanent  
☐ Other: \_\_\_\_\_



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7. What is the design, maximum and expected average population of the camp?

**This is a renewal application – no changes are requested.**

There are four field camps authorized for use at the Chidliak Exploration Project. The Discovery Camp (est. 2008, max pop. 40), the Sunrise Camp (est. 2009, max pop. 24) the Aurora Camp (est. 2011, max. pop 40) and the CH-6 Camp (est. 2013, max. pop. 30). The primary camp for operations is the Discovery Camp. The other three camps are currently no longer used with CH-6 to be used for temporary refuge. All camps are comprised of temporary non-permanent structures. The main camp structures are exploration tents, wood walled tents with canvas covers and a Quonset at Discovery camp.

8. Provide history of the site if it has been used in the past.

See above.....

## **CAMP LOCATION**

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

**This is a renewal application/volume amendment no changes to locations are requested.**

Please refer to **Schedule 1 – Critical Locations & Coordinates**

### **Discovery Camp**

The Discovery Camp was established in 2008. The site was selected after extensive air photo analysis, topographic map analysis and a field reconnaissance. The Discovery Camp site is the only location in the Chidliak Exploration Project Area that has a natural landing area capable of handling fixed wing aircraft on wheels during the summer months. The camp is located on glaciofluvial sediments next to a meltwater drainage.

### **Sunrise Camp**

The Sunrise Camp was established in 2009. The site was selected through satellite imagery. The location was selected because it is adjacent to an eight (8) kilometer long lake upon which fixed wing aircraft can land in the winter. This lake is the closest lake to the main Discovery Camp. The camp is situated upon boulder glacial lag.

### **Aurora Camp**



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The Aurora Camp was established in 2011. The site was selected through satellite imagery and field reconnaissance. The location was selected because it is adjacent to a three (3) kilometer long lake upon which fixed wing aircraft can land in the winter and the camp is also close to geophysical anomalies which required exploratory drilling. The geophysical anomalies were too far away from Discovery Camp for logistics and safety support so it was decided to establish the Aurora Camp. Aurora Camp is approximately 41 kilometers northwest of the Discovery Camp. The camp is established on hummocky glaciofluvial sediments and bedrock. Some areas have a very thin veneer of glacial till.

### **CH-6 Camp**

The CH-6 Camp was established in 2013. The site was selected through satellite imagery and field reconnaissance. The location was selected due to its proximity to the CH-6 kimberlite which is the subject of drilling and trenching campaigns. The Camp is situated upon weathered bedrock with a thin veneer of glacial till. There are no local potable water sources and water must be hauled to the camp. CH-6 Camp has only been occupied in the winter. The closest water bodies where potable and camp water can be drawn are three to five kilometers away. Since 2013 the camp has been used as an emergency safety refuge during summer drill programs at the CH6 kimberlite.

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.

See above...

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

<input checked="" type="checkbox"/>	Crown Lands	Permit Number (s)/Expiry Date: <u>N2018C0002/ Nov 30, 2024</u>
<input type="checkbox"/>	Commissioners Lands	Permit Number (s)/Expiry Date: _____
<input type="checkbox"/>	Inuit Owned Lands	Permit Number (s)/Expiry Date: _____

12. Closest Communities (direction and distance in km):

Pangnirtung - 200 kilometers north  
Iqaluit – 125 kilometers southwest

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

Yes, consultation commenced in 2008. See **Schedule 7 – Consultation Catalogue**



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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?

No, it will not. The project uses a very small amount of water from the total volume of water available in the area.

### PURPOSE OF THE CAMP

15. ☒ Mining (includes exploration drilling) **Exploration**  
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)  
 (Omit questions # 16 to 21)  
☐ Other \_\_\_\_\_

16. Activities (check all applicable)

- ☐ Preliminary site visit  
☒ Prospecting  
☒ Geological mapping  
☒ Geophysical survey  
☒ Diamond drilling  
☒ Reverse circulation drilling  
☒ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)  
☐ Other: \_\_\_\_\_

17. Type of deposit (exploration focus):

- ☐ Lead Zinc  
☒ Diamond  
☐ Gold  
☐ Uranium  
☐ Other: \_\_\_\_\_

### DRILLING INFORMATION

18. Drilling Activities

- ☒ Land Based drilling  
☒ Drilling on ice (**Not done since 2011**)



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19. Describe what will be done with drill cuttings?

Please refer to **Schedule 5 – Waste Management Plan**

20. Describe what will be done with drill water?

Drill water is recirculated and contained in natural sumps.

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

Please refer to **Schedule 14 – Spill Contingency Plan**

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

Core logging will be done on site but no core testing will be done on site.

## SPILL CONTINGENCY PLANNING

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application. This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

Please refer to **Schedule 14 – Spill Contingency Plan**

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

Spill kits are located at all operations camp sites and at all operations drill sites. There are approximately 25 - 205 litre spill kits, numerous quantities of five (5) gallon spill kits plus storage of other spill response equipment like fuel absorbent booms, pads and rolls.



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

**This is a renewal application, no changes are requested.**

The fuels listed below were authorized under N2018C0002 and 2BE-CHI1823. All drums are stored in impermeable fuel berms.

Fuels	Number of Containers	Capacity of Containers
Diesel	2000	205 litres
Gasoline	20	205 litres
Aviation Fuel	250	205 litres
Propane	65	100 lb
Oxygen & Acetylene	7	100 lb

All other chemicals on site are in small quantities and typically contained in small manufacturer containers ranging in size from 5 gallon pails to 500 millilitres. These materials are kept in storage in the maintenance shed or in tool cribs and are in small quantities relative to the amount of fuel at site. SDS sheets can be found within Appendix “C” **Schedule 14 – Chidliak Exploration Project Spill Contingency Plan**

## WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

**This is a renewal application, no changes are requested.**

Please refer to **Schedule 1 – Critical Locations & Coordinates**

Water Sources for the Discovery Camp, Aurora Camp and Sunrise Camp are adjacent to the camps. The Ch-6 Camp does not have a local water source.

- The Discovery Camp summer water source is a meltwater drainage. In the winter domestic water is hauled to Discovery Camp from one of five (5) approved large diameter drilling under ice winter water withdrawal sites.
- The Sunrise Camp water source is a large lake (“Sunrise Lake”) which is eight (8) kilometers long.
- The Aurora Camp water source is a large lake (“Aurora Lake”) which is three (3) kilometers long

27. Estimated water use (in cubic metres/day):

X Domestic Use: 25 m3 Water Source: See Schedule 1  
X Drilling: 274 m3 Water Source: Local water sources are used for summer drilling.  
Specific approved under ice winter water sources are used for winter large  
diameter drilling locations.

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Yes, in water tanks. The tanks are filled every one or two days depending on water use.

## WASTE TREATMENT AND DISPOSAL

Please refer to **Schedule 5 – Waste Management Plan**

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

☒ Camp Sewage (blackwater)

☒ Camp Greywater

☒ Solid Waste

☒ Bulky Items/Scrap Metal

☒ Waste Oil/Hazardous Waste

☒ Empty Barrels/Fuel Drums

☐ Other:

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



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

Yes, De Beers holds a valid Business Licence from the City of Iqaluit which authorizes it to use the municipal waste facilities. De Beers also uses certified waste handler Nunatta Environmental Services Ltd.

Core drill sumps are located in natural depressions away from the ordinary high water mark of all natural water bodies. Cuttings containment areas will be used in the winter and are as described as follows:

- a. The Cuttings Containment Area 1 was engineer selected and received regulatory approval in 2013. It is located in a large natural rock basin with rock walls and broken rock rubble at the base. It measures approximately 25 meters by 300 meters and has an estimated capacity of 7,000 cubic meters of material. This cuttings containment area was used in 2015 at which time 125 cubic meters of cuttings were deposited in the CH-7 rock basin.

- a. The Cuttings Containment Area 2 was engineer selected and received regulatory approval in 2013. It is located in a large flat area. It measures approximately 100 meters by 100 meters and has a capacity of 2000 cubic meters. This flat area will require a snow berm around the perimeter during use.

- a. The Cuttings Containment Area 3 – CH-6 Rock Basin was selected by an engineer and received regulatory approval in 2013. It is located in a large natural rock basin with rock walls and broken rock rubble at the base. It measures approximately 20 meters by 200 meters and has an estimated capacity of 4,000 cubic meters of material.

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Leachate monitoring will not be done. Kimberlite is mafic rock and carbonate bearing it does not leach acid. Baseline studies have been conducted and are ongoing to study the acid generating potential of rocks in the area.

## 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, the water supply and waste treatment and disposal methods have been used and proven in cold weather. These procedures have been in operation for approximately 10 years.

Operational procedures are simple and thus not subject to breakdown. Periodic maintenance is done on the incinerator but the maintenance is scheduled.

## ABANDONMENT AND RESTORATION

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

Please refer to Schedule 15 – Abandonment and Restoration Plan

## 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: \_\_\_\_\_

Please refer to Schedule 11&11B – Bibliography of Environmental Baseline Studies

## REGULATORY INFORMATION



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40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:
- ✓ ARTICLE 13 – *NCLA -Nunavut Land Claims Agreement*
  - ✓ NWNSTRA – *The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*
  - ✓ *Northwest Territories Waters Regulations, 1993*
  - ✓ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
  - ✓ NWB - Interim Rules of Practice and Procedure for Public Hearings
  - ✓ RWED – *Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993*
  - ✓ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
  - ✓ NWTWB - Guidelines for Contingency Planning
  - ✓ *Canadian Environmental Protection Act, 1999 (CEPA)*
  - ✓ *Fisheries Act, RS 1985 - s.34, 35, 36 and 37*
  - ✓ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
  - ✓ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
  - ✓ Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
  - ✓ Public Health Act - Camp Sanitation Regulations
  - ✓ Public Health Act - Water Supply Regulations
  - ✓ *Territorial Lands Act and Territorial Land Use Regulations; Updated 2000*