



P.O. Box 119

GJOA HAVEN, NT X0E 1J0

TEL: (867) 360-6338

FAX: (867) 360-6369

kNK5 wmoEp5 vtmpq

NUNAVUT WATER BOARD

NUNAVUT IMALIRIYIN KATIMAYINGI

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Peregrine Diamonds Ltd. **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: **WENDY MATHISON** Tel: (604) 408-8880 Fax: (604) 408-8880 E-mail: wendy@pdiam.com
2. Project Manager: **PETER HOLMES** Tel: (604) 408-8880 Fax: (604) 408-8880 E-mail: peter@pdiam.com
3. Does the applicant hold the necessary property rights?
Yes. Peregrine holds all Prospecting Permits on the Chidliak property 100%: *7242 through 7276*.
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
☐ Annual
☒ Multi Year:
If Multi-Year indicate proposed schedule of on site activities
Start: 01 June 2008 Completion: 01 June 2013

CAMP CLASSIFICATION

6. Type of Camp
☐ Mobile (self-propelled)
☐ Temporary
☒ Seasonally Occupied: June-September 2008
☐ 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?
The camp will accommodate a maximum of 15 people at any one time, but will not have that number continuously. For example, since activities are staged, personnel who complete their tasks (such as the airborne geophysical contractor) would leave site when their work is completed to make room for new crew arriving (such as the ground geophysical contractor and the sediment sampling crews). After startup (approx. 3 people), population will fluctuate between 13 and 15 in 2008.
8. Provide history of the site if it has been used in the past.

Peregrine Diamonds Ltd. was granted the 35 Prospecting Permits of the Chidliak property on 01 February 2007 by Indian and Northern Affairs Canada (INAC). Grassroots prospecting (below permit threshold) was conducted in 2006, with followup in 2007.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.
A camp will be set up at the location of the former temporary prospecting camp, which is situated on a flat gravel outwash area, sparsely vegetated, with access to an unnamed stream (30m-50m W) for potable water. (See Map 3 and Photo 1 accompanying the application).

10. How was the location of the camp selected?
Few suitable locations on the property; site was selected as providing a natural airstrip and access to freshwater in summer.

Was the site previously used?

Yes. Three tents were erected on the site to support prospecting and sampling associated with identifying the general area of interest.

Was assistance from the Regional Inuit Association Land Manager sought?

No. Site is on Crown land. Local land-users and the QIA would be consulted, should the camp be relocated in future.

Include maps and/or aerial photographs.

(Refer to PHOTO 1 and MAP 3 accompanying the application).

11. Is the camp or any aspect of the project located on:
- | | |
|--|---|
| <input checked="" type="checkbox"/> <u>Crown Lands</u> | Permit Number(s)/Expiry Date: <u>Class A Land-Use Permit being applied for.</u> |
| <input type="checkbox"/> Commissioners Lands | Permit Number (s)/Expiry Date: _____ |
| <input checked="" type="checkbox"/> <u>Inuit Owned Lands</u> | Permit Number (s)/Expiry Date: <u>QIA Land Licence I being applied for.</u> |

12. Closest Communities (distance in km):
Iqaluit, ~85km SW of the SW corner of property; Pangnirtung, ~133km N of NE corner of property.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?
Peregrine is interested in working co-operatively with Nunavumiut and intends to visit Iqaluit and Pangnirtung as soon as possible in 2008 to commence consultation with residents, QIA and HTAs. Discussion on services and employment already has commenced with Qikiqtaaluk Corporation (Iqaluit office).

14. Will the project have impacts on traditional water use areas used by the nearby communities?
No.

Will the project have impacts on local fish and wildlife habitats?

No. In the case of helicopter surveying, caution will be exercised in approaching polar bear habitat, which exists at the northernmost reaches of the property. In all cases where human safety is not at stake, wildlife will be given right-of-way, and no harassment of wildlife will be tolerated.

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. 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)

*** In 2009, diamond drilling will commence, if 2008 results are favourable.**

- ☐ Other: _____

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?

Cuttings will report to suitable sump locations (natural depressions or outcrops near drillholes), and monitored such that drainage is away from watercourses. Should a drilling mud be required, only environmentally-benign products are used.

20. Describe what will be done with drill water?

Drillwater is recirculated up to 80%, with relict drillwater and cuttings reporting to suitable sump locations as noted in Question #19 above.

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.
Please see digital MSDS files accompanying this application for potential drill additives.

22. Will any core testing be done on site? Describe.
No.

SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.
A Spill Contingency Plan (Appendix 7a) and Emergency Response Plan (Appendix 7b) accompany the application.

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

In 2008: 1 at the camp, 1 at the heli/fuel cache area. In 2009: 1 at each drillshack when drills are in operation. (Extra absorbents, as well as drip pans/catch pails and refuge drums, also will be present).

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

Diesel – 200 (205L) drums stored in a cache area at camp.

Jet-B – 300 (205L) drums, stored as per diesel.

Unleaded petrol (gasoline) – 8 (205L) drums, stored as per diesel and Jet-B.

Propane cylinders – 25 (45kg), stored upright, secured with chain or in a cage, near the kitchen and dry (where propane use will occur). Empties will be bled and flown out on backhauls.

Bungs and valves will be checked daily during rounds by the camp personnel. A commercial hand-held gas detector can be used for checking propane bottles. Chemicals will be stored in their original, labelled containers in their use areas (kitchen, dry, generator shed, drillshack) on absorbent padding or inside non-reactive drip trays. Up to about 140L of chemicals/hazardous substances could be required in a programme season. Drilling-related chemicals, muds and oils/greases are stored in their original large tubs at drill-side, in the approx. volume of 200L. Lead-acid batteries in use would be in corrosive-resistant sleeves and storage of spares would be in similar boxes.

Please see digital MSDS files accompanying this application.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

See answer to Question #9 above. Water will be pumped via flexible hose to a holding tank in the dry, where it will be chlorinated with household sodium hypochlorite (Javex) for disinfection, with addition controlled by readings from a Hach potable-water test kit. At future drilling areas, the water sources in closest proximity to diamond drillhole (DDH) locations, *i.e.*, clean freshwater of sufficient volume to support drilling without drawdown, will be selected; specific drillhole locations will be determined at the time of the 2009 programme.

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

○ Domestic Use: 10 m³/day for camp * Water Source: see above

○ Drilling Units: 50m³/day total ** Water Source: see above

○ Other: _____ Water Source: _____

* 0.25m³/person/day is anticipated, but 0.5m³/person/day has been allowed for in this licence request to allow for any potential increase of camp personnel in 2009.

** NOTE: Drilling in 2009.

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

Suction hose inserted into water will be screened to prevent entrainment of fish. Water-pump intake also will be screened with fine mesh.

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

Chlorination is accepted by northern environmental-health officers as suitable treatment for camp potable-water supply. Should sampling be instituted in future, samples would be analysed at an accredited environmental lab for total coliforms and *Escherichia coli* (*E. coli*) within 24 hours; other parameters would include chlorine, oil and grease (the latter for raw water only) and turbidity. A formerly-common parameter, faecal coliforms, would not be included, as current public-health understanding has established that the parameter of *E. coli* alone is sufficient to indicate faecal contamination (pers. comm., D. Fleming, Stanton Territorial Health Authority, NT, September 2006).

30. Will drinking water be treated? How?

Yes. See Question #26 above.

31. Will water be stored on site?

Yes, water for camp will be pumped to a poly holding tank in the dry, from whence water (after chlorination) will be distributed via hose-lines to sinks (kitchen and dry) and shower (dry).

WASTE TREATMENT AND DISPOSAL

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

⊗ **Camp Sewage (blackwater)**

A latrine will be set up at the campsite, housing 2 Pacto waterless toilets or a pit privy; setback will be at least 30m, as per other Nunavut permits and licences. Bagged sewage from Pactos up to a volume of approx. 30L/day will be generated, depending on camp population; bags will be incinerated on site. If a pit privy is used, pits will be limed daily. Toilets are checked daily by camp attendants.

⊗ **Camp Greywater**

Cooking grease is removed from the waste stream for incineration; it does not enter the greywater sump. Greywater from the kitchen and dry will be pumped to a natural depression or hand-dug sump the requisite distance from water (at least 30m). The liquid component of greywater reporting to the sump will both evaporate and percolate through the gravelly soil; the sump contents will be treated with Javex, if required to control odours which might attract wildlife.

○ **Solid Waste**

Combustible kitchen waste on the order of at least one 121L garbage bin by volume will be incinerated daily at camp, or burned in a burn barrel retrofitted with a flue for combustion. Non-combustible solid waste which can't be reused or recycled will be collected and removed on backhauls for proper disposal (authorisation will be secured with the Iqaluit landfill in advance).

○ **Bulky Items/Scrap Metal**

It is conceivable that up to 2/3 of a Twin-load of such scrap (500kg) could be accumulated during a long programme and flown out for proper disposal, most likely at a contractor's storage yard (e.g., broken parts, spent drill rod, etc.) Timbers would be stored on site for future needs.

○ **Waste Oil/Hazardous Waste**

A volume of 2 drums' worth of waste oil/fuel, filters, oily rags, etc., could be generated in 2008; these drums would be labelled as to contents, sealed and removed on backhauls for proper disposal (authorisation will be secured with the Iqaluit landfill or collection authority in advance).

○ **Empty Barrels/Fuel Drums**

Empty drums will be segregated from full drums, bungs tight, and flown out on backhauls, with a certain number reserved for use as refuge drums (containers for waste fuel, scrap, any spilt hydrocarbons, should such occur).

○ **Other:** *N/A*

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

A CSA-rated fuel-fired incinerator (such as a camp-rated model sold by Ketek Industries of Edmonton, and flyable in a Twin Otter) will be installed on site, or a retrofitted burn barrel with flue will be used. Combustible waste – typically, food waste, paper and Pacto bags – will be incinerated. Ash remains will be bagged and flown out on backhauls for disposal at the Iqaluit landfill.

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

As indicated in the "Solid Waste" section above, non-combustible solid waste which can't be reused or recycled will be collected and removed on backhauls for proper disposal (authorisation will be secured with the Iqaluit landfill in advance). Local contractors, such as the expeditor, Qikiqtaaluk Corporation, will assist with obtaining authorisation.

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

Sumps (for camp and for DDH at any future drillsites) will be sited as far as possible from waterbodies and at least 30m, unless permission is obtained from the INAC inspector. The sump for the camp will be a natural depression or hand-dug pit on the order of 1m x 1m x 1.5m, with a freeboard of approx. 0.4m, depending on actual conditions.

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? Yes.

What known O&M problems may occur? What contingency plans are in place?

Please refer to the Spill Contingency Plan accompanying this application and the Project Description.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.
Please refer to the Abandonment and Restoration Plan accompanying this application. (The proposed camp will be sited on a flat, gravel outwash, sparsely vegetated, which aids in final cleanup. At the end of final operations at that location, the camp will be dismantled; materials which can be burned will be burned on site and remaining materials, drums, etc., flown off site, such that the use area is returned to its prior condition. The camp sump will be examined, cleaned of debris (if required), infilled and re-covered with reserved overburden. Documenting photographs will be taken before/during/after the cleanup.)

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:

Depending on the 2008 results, baseline-data collection specific to the Chidliak Project area will commence in 2009 so as to occur as the project advances. Currently, some data has been obtained from Nunavut Wildlife Division in respect of polar bear habitat and movements of the South Baffin caribou population. Data has been requested in regard to area use by migratory bird species.

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.