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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

# EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

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**Applicant:** Commander Resources Ltd. **Licence No:** _____
(For NWB Use Only)

## ADMINISTRATIVE INFORMATION

1. Environment Manager: Gordon Davidson Tel: (604) 685-5254 Fax: (604) 685-2814 E-mail: gdavidson@commanderresources.com

2. Project Manager: as above Tel: _____ Fax: _____ E-mail: _____

3. Does the applicant hold the necessary property rights? Yes

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: Aug. 1, 2010 Completion: July 31, 2015

## CAMP CLASSIFICATION

6. Type of Camp

   ☐ Mobile (self-propelled)
   ☒ Temporary
   ☒ Seasonally Occupied: Summer only.
   ☐ Permanent
   ☐ Other: _____

7. What is the design, maximum and expected average population of the camp?
   Tent camp - will be able to accommodate a max. of 12 people. Average camp population ~ 10

8. Provide history of the site if it has been used in the past.
   1995 - 2001 - Camp site used by Teck - Cominco.

## CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies. The camp is to be situated on a small Unnamed lake about 700m x 200m in size - This lake is about 9 km east of Aston Bay on Peel Sound.

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 site was used by a previous explorer (Teck - Cominco) between 1995 - 2001.

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

| | | |
|---|---|---|
| ☒ | Crown Lands | Permit Number (s)/Expiry Date: PP 7548 - exp. 01/31/13 |
| ☐ | Commissioners Lands | Permit Number (s)/Expiry Date: _____ |
| ☐ | Inuit Owned Lands | Permit Number (s)/Expiry Date: _____ |

12. Closest Communities (direction and distance in km):
Resolute - 112 km North.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?
Service providers in Resolute have been contacted. Community consultations will proceed immediately prior to commencement of field work.

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

## PURPOSE OF THE CAMP

15.
- ☒ Mining (includes exploration drilling)
- ☐ 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

- [x] Reverse circulation drilling
- [ ] Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- [ ] Other: _____

17. Type of deposit (exploration focus):

- [x] Lead Zinc
- [ ] Diamond
- [ ] Gold
- [ ] Uranium
- [x] Other: Copper

**DRILLING INFORMATION**

18. Drilling Activities

- [x] Land Based drilling
- [ ] Drilling on ice

19. Describe what will be done with drill cuttings?
Reverse Circulation drilling (RC) - all cuttings are collected & bagged.
Diamond Drilling (DD) - cuttings to be disposed of in natural sump. If no sump available, cuttings will be collected, and disposed of in suitable sump.

20. Describe what will be done with drill water?
RC drilling will not use any water
DD - water use minimized with recirculation

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.
i) Beet Juice DD - Calcium Chloride.
ii) Ardee (Drill Lubricant).

22. Will any core testing be done on site? Describe. No - All analytical work will be done in labs in southern Canada.

**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.
See Attached.

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

Two spill kits will be onsite. One will be stored at the fuel cache, and the other will be stored at the generator shelter.

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

- see attached list.

## WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Camp water will be taken from small unnamed lake about 700m x 200m in size.

- See attached list for water sources for diamond drilling.

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

- [x] Domestic Use: 2 Water Source: descibel above.
- [x] Drilling: 15 Water Source: _____ - DD only.
- [ ] Other: _____ Water Source: _____

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guideline*) Describe:

Water will be pumped out the lake with a submersible electric pump. The intake hose will be equipped with a screen to prevent fish entrapment.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency? Given the brief field season and the small camp, no water quality tests will be made. Should the camp size increase, or the length of the field season increase, then coliform testing will be carried out.

30. Will drinking water be treated? How?

Bleach will be added in low concentrations if organic matter present in water.

31. Will water be stored on site?

Temporarily in 500 litre plastic tank

## Question 25 – List of Fuels & Chemicals On Site – Storm Project

At Camp:

Diesel – 100 drums
Regular Gas – 1 drum
Jet Fuel – 150 drums
Propane – 10 cylinders (100 lb)

Calcium Chloride – 300 bags

Diesel, Regular Gas & Jet Fuel all stored at camp within berms.

Calcium Chloride stored on pallets; covered by tarpaulin.

## Question 26 – Water Sources for Diamond Drilling

It is difficult to forecast what water body we would use as a water source for future diamond drilling programs since the specific areas we will be targeting will not be known until the initial RC drilling program is completed. The general area we wish to test is identified on the attached map, and the two most likely sources of water for drilling are the lake where the camp will be situated, and the major river immediately south of the area of interest. We will have to investigate on the ground whether these sites are suitable sources for drilling when we determine where we wish to drill.

## WASTE TREATMENT AND DISPOSAL

32. Describe the quantities, treatment, storage, transportation, and disposal methods for the following (where relevant):

- Sewage

**All sewage waste will be incinerated.**

- Camp grey water

**Camp grey water will be disposed of into dry pits located adjacent to the tents. Grey water will be allowed to percolate into the overburden at a minimum distance of approximately 50 m from nearby lakes.**

- Combustible solid waste

**All solid waste will be incinerated on-site.**

- Non-combustible solid waste, including bulky items/scrap metal

**Non combustible solid waste will be stored on site and periodically flown out to a suitable, licensed landfill site off-site.**

- Hazardous waste or oil

**Waste oil will be collected and sealed in clearly marked sealed plastic pails, and transported to Resolute for disposal at an approved site. Lead-acid batteries will also be contained in appropriate sealed containers, clearly marked, and transported to Resolute for disposal at an approved site.**

- Contaminated soils/snow

**All contaminated soils and snow will be stored in empty 205 liter drums, and will be transported to Resolute for disposal.**

- Empty barrels/ fuel drums

**Empty drums will be collected and transported to Resolute either for disposal at an approved site or for refilling.**

- Any other waste produced

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33. Please describe incineration system if used on site. What types of wastes will be incinerated?
A dual chamber oil fired incinerator will be used to incinerate sewage and combustible solid waste.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted? Non-combustible waste will be taken to Resolute on a weekly basis. Due to the small volume of anticipated waste (less than 4 cubic feet per week over 6 weeks) authorization will be secured prior to field work.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for all sumps (if applicable). One sump will be located behind each of the cooks tent and the dry. Each sump will be at least 80cm in diameter, and 100 cm deep.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency? No.

## 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. None anticipated. n/a.

## ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site. All drill sites to be cleaned up following completion of each hole. All tent sites will be restored by fertilizing ground following the removal of tents, frames and floors.

## 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: _____

See Attached Page.

## REGULATORY INFORMATION

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*
- ✓ NWNSRTA – *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

**Baseline Data (Question 39)**

The following data will be collected as part of Commander's exploration programs at the Storm Project.

1. Physical Environment
   - Photos will be taken of the campsite and fuel cache areas before, during, and after field activities so that any changes to the physical environment can be documented.

2. Biological Environment
   - Photos will be taken of the campsite and fuel cache areas as described above will also document changes to vegetation in the area.
   - Wildlife logs will be maintained so that a record of all wildlife seen within the project area will be documented.

3. Socio-Economic Environment
   - Records of all Inuit employment generated by this exploration project will be maintained.
   - Any archeological sites discovered will be noted and passed on to the appropriate regulatory authorities.

- ✓ 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