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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Benoit Beauchamp_____Licence No: _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. **Project Manager: Benoit Beauchamp_Tel: 403 220-7516_Fax: 403 282-6609 E-mail: bbeaucha@ucalgary.ca**

Benoit Beauchamp
Department of Geoscience
Arctic Institute of North America
University of Calgary
Calgary. AB T2N 1N4

This is a very small operation. Dr. Beauchamp is the professor in charge of this operation. He will be accompanied by two other students.

2. Does the applicant hold the necessary property rights? **Work to be done on Crown land**

3. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. **No**

4. Duration of the Project

   x **One year or less** Start and completion dates: June 25 2010 to August 10, 2010
   ☐ Multi Year:

   If Multi-Year indicate proposed schedule of on site activities
   Start: _____ Completion:_____

CAMP CLASSIFICATION

5. Type of Camp

   ☐ Mobile (self-propelled)
   ☐ Temporary
   ☐ Seasonally Occupied: _____
   ☐ Permanent
   x **Other: Three tents with 3 people will be set up at five different localities on SW Ellesmere Island between June 25 and Augsut 10, 2010**

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

Three tents will be set up 10 m apart. There will be no more than three people in the camp at any given time. During day time, foot traverses will take place from the camp to the nearby outcrops. The camp will be used only in the evening and at night for sleeping and cooking.

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

We have never used these sites in the past.

CAMP LOCATION

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

The small three tent camps will be set up 500 m away from any major water bodies on flat and firm ground suitable to plant our tents. We will stay away from any wildlife dens, nests, herds or packs, should they be seen upon our landing in these areas. We will camp next to snow patches in order to use the melt water for our camp needs.

9. 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.

The locations were selected because they are walking distance to the geological formations we are studying. These sites were never used before. We have applied for, and already received, a Nunavut Research Institue License for our research. A map of our planned camp locations is attached with this questionnaire.

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

x	**Crown Lands**	Permit Number (s)/Expiry Date: _____
☐	Commissioners Lands	Permit Number (s)/Expiry Date: _____
☐	Inuit Owned Lands	Permit Number (s)/Expiry Date: _____

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

Grise Fiord is the closest community. It is located 233 km to the southeast.

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

Through our application for a Research License with the Nunavut Research Institute, the communities of the North Baffin Region have been informed of our planned activities.

13. 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

14. ☐ Mining (includes exploration drilling)
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
x Other: This is a small research expedition on SW Ellesmere Island sponsored by PCSP. We will be doing geological research involving measurements of strata thicknesses and minor rock collections (not fossils). I am a professor at the University of Calgary. I will be there with two graduate students, also from the University of Calgary.

15. 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)
x Geological research: measuring thickness of strata and minor rock collecting (no fossils) to assess ancient climate change.

16. Type of deposit (exploration focus):

☐ Lead Zinc
☐ Diamond
☐ Gold
☐ Uranium
☐ Other: _____

DRILLING INFORMATION

17. Drilling Activities

☐ Land Based drilling
☐ Drilling on ice

18. Describe what will be done with drill cuttings?

19. Describe what will be done with drill water?

20. 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.

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

SPILL CONTINGENCY PLANNING

22. 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.

Should gasoline spill out of the Gerry can, the gasoline will be immediately tansferred to another Gerry can. Should the white gas spill, we will transfer it immediately into another container.

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

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

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Gasoline	1 @ 30 litres	30 litres	Gerry can
Propane	1 @ 30 litres	30 litres	Safe propane container
Other (White gas)	1 @ 30 litres	30 litres	Safe white gas aluminum can

WATER SUPPLY AND TREATMENT

25. Describe the location of water sources.

We will use melt water from snow patches. We are not planning to get any water from rivers or lakes.

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

- x **Domestic Use: 0.01 cubic metres/day** Water Source: **Melt water from snow patches**
- ☐ Drilling: _____ Water Source: _____
- ☐ Other: _____ Water Source: _____

27. 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:

We need 0.01 cubic metres/day for domestic use (cooking and drinking). Since the water will come from melting snow patches, there is no need to prevent entrapment of fish.

28. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

We will visually monitor the water. Should someone get sick, we will have a test kit to test for colloforms and other bacteria.

29. Will drinking water be treated? How?

No, there is no need for it because it comes from clean snow patches. Should we have some concern, we would boil it for a minimum of 20 minutes before drinking it.

30. Will water be stored on site?

The water will be stored in clean plastic containers (water bottles and plastic pouches)

WASTE TREATMENT AND DISPOSAL

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

- x **Camp Sewage (blackwater): 2 litres per day. Liquid to be disposed in dugged out pits away from any running water. Pits to be backfilled after usage. Solid to be Burned as much as possible. Unburned waste to be sealed and shipped to Resolute for disposal**

x **Camp Greywater: 4 litres per day. To be disposed in dugged out pits away from any running water. Pits to be backfilled after usage.**

x **Solid Waste 2 kgs per day. Burned as much as possible. Unburned waste to be sealed and shipped to Resolute for disposal.**

☐ Bulky Items/Scrap Metal

☐ Waste Oil/Hazardous Waste

☐ Empty Barrels/Fuel Drums

☐ Other:

32. Please describe incineration system if used on site. What types of wastes will be incinerated?
Waste to be burned in a metal pail as much as possible. This include paper, cardboard, plastics and human waste. Unburned waste to be sealed and shipped to Resolute for disposal.

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

Unburned waste to be sealed and shipped to Polar Continental Shelf Program (PCSP) in Resolute for disposal. PCSP is responsible for disposing of waste from its scientists.

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

35. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

OPERATION AND MAINTENANCE

36. 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?

This is very small 3-people camp. We never had problem in the past collecting, using and disposing the very small amount of water we use.

ABANDONMENT AND RESTORATION

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

All unburned garbages will be picked, sealed and shipped to Resolute for disposal. All greywater pits and human waste pits will be backfilled. Displaced rocks around tents will be placed back to their original position. The sites will be left in absolute pristine conditions.

BASELINE DATA

38. Has or will any baseline information be collected as part of this project? Provide bibliography.

None that we know about

- ☐ 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: _____

REGULATORY INFORMATION

39. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

We will have a copy of the documents

- ✓ 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
- ✓ 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