P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

kNK5 wmoEp5 vtmpq
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Aboriginal Affairs and Northern Development Canada (AANDC)
Licence No:_____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: N/A Tel: _____ Fax: _____E-mail:_____

2. Project Manager: Erika Solski Tel: 867-975-4577 Fax: 867-975-4736
E-mail: Erika.Solski@aandc-aadnc.gc.ca

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.

   Yes

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: March 2014 Completion: March 31 2016

CAMP CLASSIFICATION

6. Type of Camp

   ☐ Mobile (self-propelled)
   ☑ Temporary
   ☑ Seasonally Occupied: June to October 2013
   ☐ Permanent
   ☐ Other:_____

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

The design and maximum occupancy of the camp is 15 people. The expected average population is 15 people.

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

Not Applicable.

CAMP LOCATION

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

The proposed location of the camp facilities will be located just north of the airstrip (GPS Coordinates 65°28'58.34"N, 110°22'5.25"W). Figures showing this layout with related features can be found in Appendix 5.

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 location was selected because of the proximity to the site activities and a water source as well as the fact that it is a flat dry area. The site has not been used previously to our knowledge. See Appendix 2 and 5 for additional figures showing the proposed camp location.

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

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

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

Kugluktuk is ~330 km to the Northwest of the Contwoyto Lake Remediation Site.

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

Yes, Community Meetings were held in Kugluktuk in January 2013. An additional meeting is planned for the winter of 2014 in Kugluktuk.

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.

PURPOSE OF THE CAMP

15.
- ☐ Mining (includes exploration drilling)
- ☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
- ☑ Other: **To Support Remedial Activities**

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: **Remedial Activities**

17. Type of deposit (exploration focus):

- ☐ Lead Zinc
- ☐ Diamond
- ☐ Gold
- ☐ Uranium
- ☑ Other: **Not Applicable**

DRILLING INFORMATION

18. Drilling Activities

Not Applicable.

- ☐ Land Based drilling
- ☐ Drilling on ice

19. Describe what will be done with drill cuttings?

Not Applicable.

20. Describe what will be done with drill water?

Not Applicable.

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.

Not Applicable.

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

Not Applicable.

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.

A Site Specific Spill Contingency Plan has been provided with this Water Licence Application located in Appendix 12.

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

Spill kits will be located as follows:

- **A minimum of two "Drum Spill Kits" will be maintained in the fuel storage/refueling area. An inventory of over pack drums and additional spill cleanup materials will be stored near this area as well.**
- **All mobile equipment will carry an "Equipment Spill Kit".**
- **ATVs will carry small portable spill kits**

For further information see the Site Specific Spill Contingency Plan in appendix 12.

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

See the Site Specific Spill Contingency Plan located as an appendix within appendix 12.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

All water will be sourced from Contwoyto Lake (GPS Coordinates 65°29'4.75"N, 110°22'47.07"W). See Appendix 5.

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

☑	Domestic Use: **~1.5**	Water Source: **Contwoyto Lake**
☐	Drilling: _____	Water Source: _____
☐	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 from the lake directly into a mobile tank and later transferred into the camp tank. The water intake hose will be covered with a screen (maximum screen size of 2.54 millimetres and maximum screen approach velocity of 0.038 metres/second) to ensure that no fish become trapped. The line will also be suspended off the bottom of the lake a distance of at least 1.0 metres to ensure that there is no damage to the lake bottom and fish habitat.

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

The water quality would initially be tested according to the Guidelines for Canadian Drinking Water Quality to determine if it is drinkable as is or to determine which treatment will be required to make it potable. Even if chemical analysis shows that the water is potable, Chlorine tablets will be used for all potable and cooking water. This would be used to assure the constant quality of it.

30. Will drinking water be treated? How?

With Chlorine tablets if required.

31. Will water be stored on site?

Yes, in a 4000 litre camp water tank.

WASTE TREATMENT AND DISPOSAL

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

☑ Camp Sewage (blackwater)

7.5 litres of ash per day. The Sewage will be kept in Pacto Toilets and then incinerated in CY14CA Dual Chamber Incinerator. The ashes will be consolidated and shipped and disposed of off-site in an appropriately licensed disposal facility.

☑ Camp Greywater

100 litres/day x 15 people (max) = 1500 litres/day The camp grey water will be directed into the Bio Barrier Membrane and then held in bladders until testing can confirm that it meets applicable criteria before discharge (As described in Appendix 2 (question # 23 of the NIRB Part Two Form) or supplemental information in Appendix 10.

☑ Solid Waste

Solid camp waste (paper, packaging, food, etc.) will be incinerated (combustibles only) or shipped south to a licensed disposal facility.

☑ Bulky Items/Scrap Metal

Non-combustible solid waste collected around the site and generated during site operations will be compacted and packaged for transportation off-site.

☑ Waste Oil/Hazardous Waste

Hazardous waste including cylinders, items painted with lead based paint, and organic liquids. These materials will be packaged as per the Transportation of Dangerous Goods Regulations and shipped south to a licensed disposal facility.

☑ Empty Barrels/Fuel Drums

Existing drums on–site with contents and Empty barrels will be Transported off-site for processing and disposed of accordingly, in an appropriately licensed disposal facility.

☑ Other:

Other waste includes contaminated soils (metals and petroleum hydrocarbons). Contaminated soils will be handled as described in the Remedial Action Plan (Appendix 4). To summarize:

- **Tier II soil (~50 cubic metres) – packaged and transported south to an appropriately licensed disposal facility.**
- **Type B (hydrocarbons) soil (~1142 cubic metres) – to be treated on-site in an on-site Landfarm.**

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

A CY14CA Dual Chamber incinerator (See Appendix 10 for Supplemental Information) will be used on-site. Combustible wastes generated from camp operations will be incinerated; these will include paper, cardboard, other packaging materials and food wastes.

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 shipped south to a licensed disposal facility.

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

Not Applicable.

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

Not Applicable.

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?

The waste treatment and disposal methods have been used on similar projects in the north in the past and have been accepted by clients and regulators. The only waste treatment to take place on-site is the incineration of combustible wastes and treatment of grey water.

Potential O&M problems that could be encountered during the incineration of the combustible wastes are failure of the incinerator and incomplete combustion. The supplier of the incinerator is supply recommended spare parts and recommended incineration durations. The contingency plan for these problems include, either repairing the incinerator off-site disposal of incinerator ash.

Potential O&M problems that could be encountered during the treatment of grey water is limited to poor test results and not being able to discharge. There will be two bladders on site for redundancy and additional bladders can be flown in as required. The water will be reprocessed should this happen and tested again. In-line carbon filters are also potential optional solutions.

Drinking water: chlorine pills will be available on site and UV lamps may be used if required. Water bottles will be also available for emergencies.

Waste water: The treatment system comes with spare parts. In case of temporary shutdown, the waste water will be accumulated into lined bladders.

ABANDONMENT AND RESTORATION

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

Since this is a Remediation Project, the Remedial Action Plan details the final abandonment and restoration activities at the site. A copy of the Remedial Action Plan has been provided in Appendix 4.

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: _____

An Environmental Screening Report was completed and is provided in appendix 6. Also an Archaeological Impact Assessment was conducted at the site and has been provided in Appendix 8. A list of additional documents detailing the site has been provided in Appendix 9.

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
- ✓ 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