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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI

## EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

**Applicant:** \_\_\_\_\_ **Licence No:** \_\_\_\_\_  
(For NWB Use Only)

### ADMINISTRATIVE INFORMATION

1. **Environment Manager:** Barry McCallum Tel: 306-343-4596 Fax: 306-343-3460  
E-mail: barry.mccallum@areva.ca
2. **Project Manager:** Barry McCallum Tel: 306-343-4596 Fax: 306-343-3460  
E-mail: barry.mccallum@areva.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.**  
  
No
5. **Duration of the Project**  
[ ] Annual  
[X] Multi Year:  
If Multi-Year indicate proposed schedule of on site activities  
Start: March 01, 2007 Completion: March 01, 2009

### CAMP CLASSIFICATION

6. **Type of Camp**  
[ ] Mobile (self-propelled)  
[X] Temporary  
[X] Seasonally Occupied: possibly May through to September  
[ ] Permanent  
[ ] Other: \_\_\_\_\_
7. **What is 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 host a maximum of 30 in 2007 and 40 in 2008 during peak times.

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

The Kiggavik camp was first established in 1977 and it was occupied for drill programs until 1997. During peak years, this camp accommodated up to 50 persons. Camp clean up activities were undertaken in 2003 and 2004, which included repairing buildings to prevent further deterioration and demolishing those that were beyond repair. Currently, there are 12 buildings of various functions located throughout this area in care and maintenance.

**CAMP LOCATION**

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

The existing Kiggavik camp is located approximately 80km west of Baker Lake. This camp, which will be refurbished (including the addition of five new buildings), is located approximately 300m south of a small unnamed lake at 64° 24'N and 97° 52'W on NTS map sheet #66/A. Please refer to the attached maps and figures in Appendix I.

A new camp at the Sissons site is being considered for the 2008 season. The location of this camp will be determined in consultation with NWB, KIA, INAC and the community of Baker Lake during the 2007 season.

**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.**

The existing Kiggavik camp was selected based on the proximity to the deposits and the small lake for water supply. The proposed new camp location is being evaluated on the basis of proximity to the exploration drill program, location of water source, and heritage resource locations. As mentioned above, the location of the new camp will be determined in consultation with the community of Baker Lake and agencies.

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

<input checked="" type="checkbox"/> Crown Lands	Permit Number (s)/Expiry Date: <u>Application submitted</u>
<input type="checkbox"/> Commissioners Lands	Permit Number (s)/Expiry Date: _____
<input checked="" type="checkbox"/> Inuit Owned Lands	Permit Number (s)/Expiry Date: <u>Application submitted</u>

**12. Closest Communities (distance in km):**

Baker Lake is approximately 80km to the east of the Kiggavik camp.

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

Yes. AREVA has undertaken various meetings and discussions with key groups in Baker Lake, including the Mayor and hamlet council members, Hunter Trapper Organization, community members including elders originally from Aberdeen Lake. AREVA has also established a community liaison office in Baker Lake to engage in an ongoing dialogue about our project and our activities in Nunavut.



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 impacts are anticipated.

## **PURPOSE OF THE CAMP**

15. ☒ Mining – Exploration (drilling, mapping, geophysical surveys)  
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)  
(Omit questions # 16 to 21)  
☐ Other \_\_\_\_\_ (Omit questions # 16 to 22)
16. ☐ 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:**  
☐ 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?**

All land-based drill cuttings will be pumped to a sump that will be located a minimum of 31 metres from the normal high water mark of any water body. The sump will be backfilled upon completion of the hole. Radioactive cuttings (>1 uSv/h at 1 m) will be stored in a fenced compound at the Kiggavik site.

20. **Describe what will be done with drill water?**

The drill water will be returned to the sump and a series of settling tanks so that it can be reused for drilling.

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.**

The exact drill additives are not known at this time. MSDS sheets for some of the common additives used are included in the attached Spill Contingency Plan. AREVA will ensure that the additives are non-toxic and biodegradable and will update the Spill Contingency Plan with appropriate MSDS sheets once the additives have been determined.

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

Drill cores will be split and sent to a laboratory for geochemical analysis.

## **SPILL CONTINGENCY PLANNING**

23. **Does the proponent have a spill contingency plan in place? Please include for review.**

Yes there is a Spill Contingency Plan in place. It is attached as Appendix A to this application for review.

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

There will be one spill kit at camp, one at each of the drill and one at each fuel cache locations. In addition, there will also be a minimum of one empty fuel drum plus pump located at each fuel cache for use in the event of a leaking or damaged fuel drum. Additional spill pads will be available at each fuel cache. As well, spill pads will be stored in closed pails and located behind the buildings at camp. Please refer to Appendix A, Spill Contingency Plan.

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

This information is provided in detail in the attached Spill Contingency Plan. In summary, the type of fuels and chemicals include: primarily Jet B and P-50 diesel in 205 litre drums; and to a lesser amount, unleaded gasoline (205 litre drums), propane (45 kg cylinders), lubricants, and drill additives. The initial fuel haul for the 2007 program will include approximately 300 drums of Jet B, 365 drums of P-50, 5 drums of gasoline, and 25 cylinders of propane. It is expected that this quantity will be doubled for the 2008 program.

Fuel will be stored on-site within suitable berms, while lubricants and additives will be stored in one of the buildings designated for storage.

## **WATER SUPPLY AND TREATMENT**

26. **Describe the location of water sources.**

The Kiggavik camp is located to the south of a small unnamed lake. This small lake was used in previous years, and it will continue to be the water source for the Kiggavik camp. There are numerous lakes in the vicinity of the drilling program areas; water will be extracted from the lakes identified in Figure 4.



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

- ☉ Domestic Use: 100 L/day per person Water Source: small unnamed lake
- ☉ Drilling Units: 35 m3/day Water Source: see Figure 7
- Other: \_\_\_\_\_ Water Source: \_\_\_\_\_

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

The water intake for camp operations will consists of a submersible pump and a filtered intake that complies with DFO guidelines for screens to prevent the entrainment of fish.

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

The lake water quality will be compared to the Canadian Drinking Water Quality Guidelines to assess water treatment requirements. Water samples will be collected and tests will be conducted on a monthly basis with a field test kit and analyzed for various types of coliform bacteria.

30. **Will drinking water be treated? How?**

Water filter will be used for drinking water.

31. **Will water be stored on site?**

Water will be collected and stored, as needed, in a tank at the camp.

## **WASTE TREATMENT AND DISPOSAL**

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

- ☉ Camp Sewage (blackwater): 0.02 cubic metres/day/person.  
Disposal method – incinerated using electric toilets and/or latrine sump

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- ☉ Camp Greywater: 6 cubic metres/day.  
Disposal method - sumps.

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- ☉ Solid Waste: minimal amount anticipated.  
Disposal method – incineration if appropriate, or removed from site for proper disposal.

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- ☉ Bulky Items/Scrap Metal: minimal amount anticipated.  
Disposal method – removed from site.
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- ⊗ Waste Oil/Hazardous Waste: minimal amount anticipated.  
Disposal method – routinely collected and removed from site for disposal at approved sites.
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- ⊗ Empty Barrels/Fuel Drums  
Disposal method – removed from site on a regular basis and returned to Baker Lake to be recycled there or barged south for recycling.
- 

- Other:
- 

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

A modified 45 gallon drum with an ash screen will be used to incinerate combustible waste. Combustible wastes such as food, paper and wood will be incinerated on a daily basis.

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

Non-combustible, inert waste will be removed from site and taken to Baker Lake, once authorization and approvals have been granted. We will initiate this approval process to ensure that it is in place before the start of the 2007 drilling season.

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

All sumps will be located at a minimum of 31 metres from the normal high water mark of any water body, including streams. A schematic has been provided (see attached) to show the general location and layout of the Kiggavik camp. Once the location of the sumps have been determined, this information will be forwarded to the agencies.

The location and the layout of the new proposed Sissons camp will be determined during the 2007 drilling season in consultation with the agencies and the community of Baker Lake.

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

Visual inspections of all sumps will be conducted daily. In the event that any leaching is observed, the DIAND Water Resource Officer will be contacted immediately.



## **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 treatment and disposal methods being proposed are currently in practice across the north and follow the regulated guidelines and accepted methods. The current contingency plan at this time is mitigation (safe distance for disposal in sumps, shipping off site any hazardous chemicals/scrap metal/non-combustible waste, etc.) and monitoring. Should any there be any concerns, the DIAND Water Resource Officer will be notified immediately.

## **ABANDONMENT AND RESTORATION**

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

Please see the attached "Abandonment & Restoration Plan". The Plan includes seasonal shutdowns as well as final closure. All drill sites will be cleaned daily with all wastes removed to camp for disposal. All field personnel will be required to return personal garbage to camp for disposal.

## **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:

Extensive amount of environmental baseline information has been collected in this project area in support of the Kiggavik Project Environment Assessment Report in 1990/1991. A complete list of the reports can be forwarded, if needed. We are currently outlining an additional baseline program for 2007 and 2008 so that the existing information can be updated, and also to address data gaps.

## **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.