



VIA COURIER

April 23, 2009

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0  
Ph (867)360-6338 ext. 26  
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[licensing@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

Andrew Keim  
Water Resource Officer  
Indian and Northern Affairs Canada  
Qimugjuk Bldg., 2<sup>nd</sup> Floor  
P.O. Box: 2200  
Iqaluit, NU X0A 0H0  
Ph (867) 975-4289  
Fax (867) 979-4560  
[keima@ainc-inac.gc.ca](mailto:keima@ainc-inac.gc.ca)

Dear Ms. Beaulieu:

**Re: AMENDMENT REQUEST FOR THE REALLOCATION OF WATER USAGE  
THE KIGGAVIK PROJECT – AREVA RESOURCES CANADA INC.  
NWB WATER LICENCE #2BE-KIG0812**

Please accept the enclosed amendment request tot Water Licence #2BE-KIG0812, Condition Part C: Amend Item 1, to allow for the use of 290 cubic meters of water per day for drilling and 10 cubic meters per day to supply camp. The maximum allowable quantity per day would continue to be 300 cubic meters per day. Currently the camp is allowed 5 cubic meters of water per day while the drill is allowed 295 cubic meters per day.

Water licence #2BE-KIG0812 was issued April 25<sup>th</sup>, 2008 and expires December 31, 2012. The current licence approves the exploration of uranium including geophysics, soil sampling, mapping,

diamond drilling and environmental baseline field program; all activities are conducted from the camp based at the Kiggavik site. The 2009 field program is a continuation of the 2008 field program.

The volumes requested in the amendment application submitted in June 2008 underestimated the amount of water required by the camp during periods of full/nearly full occupancy. The field program remains the same as originally indicated, which is to conduct diamond drilling at the Kiggavik, Granite, Bong, End Grid and Andre Lake sites; in situ testing; groundwater sampling and the continuation of environmental baseline work (aquatic, terrestrial, wildlife, hydrogeological and hydrological assessments).

Also enclosed is a cheque for the application fee as well as a Project Summary both in English and Inuktitut.

Please do not hesitate to contact me with any questions, comments or concerns.

Sincerely,

Kim Sarauer  
Environment and Radiation Protection Supervisor  
Kiggavik Project  
AREVA Resources Canada Inc  
Tel: (306) 343-4043  
[kim.sarauer@areva.ca](mailto:kim.sarauer@areva.ca)  
*AREVA Group*

Enclosed:

- Application Form
- Application Fees
- Project Summary – English
- Project Summary – Inuktitut

Cc:

Frederic Guerin, AREVA

## **KIGGAVIK PROJECT SUMMARY**

The Kiggavik Project is a uranium surface exploration project located approximately 80 kilometers west of Baker Lake. The project consists of the Kiggavik site to the north and Sissons to the south. This uranium exploration project was initially started in 1975 by the previous operator, Urgangesellschaft Canada Ltd., and several mineral deposits were discovered between 1977 and 1988. AREVA Resources Inc (formerly COGEMA Resources Inc.) became the project operator in 1993, conducting exploration activities from 1993 to 1997. The project had been under care and maintenance from 1997 until 2007 when licenses and permits were granted for the project by INAC, NWB and KIA to conduct further exploration activities and environmental baseline studies. Current INAC and KIA permits and licenses will expire in April 2010 and January 2010, respectively;

The 2009 field program is relatively similar to the activities conducting during the 2007 and 2008 programs; consisting of diamond drilling and environmental baseline studies to improve the understanding of the project site and the known mineral deposits. The intent of the project is to gather information required to determine whether these deposits can be safely and economically extracted and processed, while protecting the environment. A program of prospecting, geological mapping and geophysical surveys will also be carried out throughout the lease areas to identify potential for additional mineral deposits and to further evaluate known potential areas.

In 2009, diamond drilling will continue at the Kiggavik site, however drilling will largely focus on the Sissons site at reduced grid spacing. Environmental baseline studies will continue to be carried out in the areas of aquatics, terrestrial, wildlife assessment, hydrological and hydrogeological assessments to update the current database and address data gaps.

The 2009 program is tentatively scheduled to begin in May. At this time the fuel storage tank systems that are to be installed during the winter months will be inspected by qualified personnel and be prepared for use. It is expected that the drill and environment crews will be mobilized to the site during May and June. The program is expected to be shut down and prepared for the winter season by the end of September or beginning of October. All operations and personnel will be conducted out of the Kiggavik camp and will be supported by helicopter services.

AREVA is committed to carrying out its field programs in an environmentally responsible and sustainable manner.

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NUNAVUT IMALIRIYIN KATIMAYINGI  
NUNAVUT WATER BOARD  
OFFICE DES EAUX DU NUNAVUT

## WATER LICENCE APPLICATION FORM

Application for: (check one)

☐ New
 ☐ Renewal
 ☒ Amendment
 ☐ Assignment
 ☐ Cancellation

### LICENCE NO:

(for NWB use only)

<b>1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE</b>  Kim Sarauer AREVA Resources Canada Inc. PO Box 9204, 817 - 45 <sup>th</sup> Street West Saskatoon, SK S7K 3X5  Phone: (306) 343-4043 Fax: (306) 343-1044 E-mail: kim.sarauer@areva.ca	<b>2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)</b>  Same Address  Phone: (306) 343-4500 Fax: E-mail:
<b>3. LOCATION OF UNDERTAKING</b> (describe and attach a topographical map, indicating the main components of the Undertaking)  Please refer to maps submitted with the application in Dec 07 (resulting in the issuance of Water License 2BE-KIG0812 which expires December 31, 2012), indicating the locations planned for conducting the diamond drilling (Granite, Bong, End Grid and Andrew Lake) and the location of the Kiggavik camp which was refurbished in 2008. Environmental baseline program will continue to consist of aquatic, terrestrial and wildlife studies/assessments.  Latitude: (64°26'26" N)      Longitude: (97°39'36" W) NTS Map Sheet No. <u>64A/05</u> Scale: <u>1:50,000</u>	
<b>4. DESCRIPTION OF UNDERTAKING</b> (attach plans and drawings)  There are no changes to the field program described in the December 2007 application; which as indicated in this application will include geological mapping; geochemical and geophysical surveys; approximately 14,000-metres of diamond drilling is planned to occur at three locations (Kiggavik leases known as Granite North, East and West (3232, 3234 & 3246); and Sissons (Bong, 3246, End Grid 3302 & Andrew Lake 3301); drill core logging and sampling. Environmental baseline work will be conducted to updated existing information and to address data gaps in surface hydrology; hydrogeology; permafrost depth; aquatic and terrestrial study programs; climate; meteorology; air quality and heritage resources.  This amendment request is related to condition Part C - Amend Item 1 of the Water Licence #2BE-KIG0812 which states the following:	

"The Licensee shall obtain all water for domestic camp use from an unnamed lake approximately three hundred metres distance north of the camp, to a maximum of five (5) cubic metres per day. Drill water shall be obtained from local water source(s), proximal to the drilling targets as outlined in the application, to a maximum of two hundred and ninety-five (295) cubic metres per day. The volume of water for the purposes of this Licence shall not exceed three-hundred (300) cubic metres per day."

5. **TYPE OF PRIMARY UNDERTAKING** (A supplementary questionnaire **must** be submitted with the application for undertakings listed in "**bold**")

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Industrial</b>  | <input type="checkbox"/> Agricultural                                      |
| <input checked="" type="checkbox"/> <b>Mining and Milling</b> (includes exploration/drilling) | <input type="checkbox"/> <b>Conservation</b>                               |
| <input type="checkbox"/> <b>Municipal</b> (includes camps/lodges)                             | <input type="checkbox"/> Recreational                                      |
| <input type="checkbox"/> Power  | <input checked="" type="checkbox"/> <b>Miscellaneous</b> (describe below): |

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings

**6. WATER USE**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> To obtain water                 | <input type="checkbox"/> Flood control                          |
| <input type="checkbox"/> To cross a watercourse                     | <input type="checkbox"/> To divert a watercourse                |
| <input type="checkbox"/> To modify the bed or bank of a watercourse | <input type="checkbox"/> To alter the flow of , or store, water |
| <input type="checkbox"/> Other (describe):                          |   |

**7. QUANTITY OF WATER INVOLVED** (cubic metres per day including both quantity to be used and quality to be returned to source)

- Water use** ☐ 100m<sup>3</sup>/day or less  
☒ Greater than 100m<sup>3</sup>/day; if greater, indicate quantities to be used for each purpose (camp, drilling, etc.)

Current approval granted the use of 300 cubic meters per day, 295 cubic meters for drilling and 5 cubic meters to supply camp; however as the camp grows we are experiencing an increase in the water usage. Therefore, we are applying for an amendment to allow for the use of 290 cubic meters of water per day for drilling and 10 cubic meters per day to supply camp. The maximum allowable quantity per day would continue to be 300 cubic meters per day.

**Water returned to source**

As much as possible m<sup>3</sup>/day

**8. WASTE** (for each type of waste describe: composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Sewage                  | <input checked="" type="checkbox"/> Waste oil        |
| <input checked="" type="checkbox"/> Solid Waste             | <input checked="" type="checkbox"/> Greywater        |
| <input checked="" type="checkbox"/> Hazardous               | <input type="checkbox"/> Sludges                     |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" type="checkbox"/> Other describe): |

DRILL WATER - to be recirculated if possible, collected if contaminated and discharged into low-lying area in nearby environment if clean.

DRILL CUTTINGS - will be collected in a low lying area and backfilled upon completion of the hole. Drill cuttings in ore which are >1microservert per hour at 1 meter will be collected and stored in designated areas on site; for possible future handling.

SOLID SEWAGE will be collected and incinerated daily (~ 0.8m<sup>3</sup>/day).

LIQUID SEWAGE (URINE) from urinals is mixed with greywater (~6 m<sup>3</sup>/day) for disposal into a designated low lying area.

SOLID WASTE - Combustibles (paper, non-treated wood and food waste) is incinerated

HAZARDOUS WASTE - properly sorted and stored for future transport to an approved facility

BULKY ITEMS/SCRAP METAL - sorted and stored for future transport to an approved facility

WASTE OIL - sorted and stored for future transport to an approved handling facility

Please refer to the attached Waste Management Plan for more details.

**9. OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING** (give name, mailing address and location; attach if necessary)

INAC Land Use Permit N2006C0037 Expires April 9th, 2010

Rebecca Leighfield

Manager Land Adminstration

INAC

PO Box 100

IQALUIT, NU X0A 0H0

KIA Land Use Licence KVL306C02 Expires January 3rd, 2010  
 Stephan Hartma  
 PO Box 340  
 Rankin Inlet, Nunavut X0C0G0

**Land Use Permit**

DIAND ☒ Yes ☐ No If no, date expected \_\_\_\_\_

Regional Inuit Association ☒ Yes ☐ No If no, date expected \_\_\_\_\_

Commissioner ☐ Yes ☒ No If no, date expected \_\_\_\_\_

**10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** (direct, indirect, cumulative impacts, etc.)

**The predicted effects to the environment are expected to be negligible through the application of AREVA's Environmental Code of Practice, Safety Code of Practice, Environmental Emergency Response Plan. The Spill Contingency Plan and the Abandonment and Restoration Plan are specifically developed for this program.**

**NIRB Screening conducted April, 2007.**

NIRB Screening ☒ Yes ☐ No If no, date expected \_\_\_\_\_

**11. INUIT WATER RIGHTS**

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?

If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?

There are no predicted effects to the quality, quantity or flow of water flowing through Inuit Owned Lands.

**12. CONTRACTORS AND SUB-CONTRACTORS** (name, address and functions)

Boart Longyear - drilling contractors  
 403 - 47th street Saskatoon, SK  
 George Presseault  
 306-931-4466

1984 Enterprises - catering, first response and safety personel  
 Vancouver. BC  
 Lise Tompson,  
 604-736-8119

Peter's Expediting LTD - materials management  
 Baker Lake, NU  
 Peter Tapetai  
 867-793-2703

Golder Associates Ltd - baseline studies and geotechnical logging  
 Saskatoon, SK  
 306-667-1182  
 Rick Schryer



Gebauer and Associates Ltd. - wildlife studies  
 6387 Larch Street  
 Vancouver, BC V6M 4E8  
 604-261-2716  
 Martin Gebauer

EBA Engineering - civil engineering studies  
 9<sup>th</sup> Floor, Oceanic Plaza  
 1066 West Hastings ST  
 Vancouver, BC V6E 3X2  
 Graham Wilkins  
 604-685-0275

Jacques Whitford - baseline marine studies  
 4370 Dominion St  
 Burnaby, BC V5G 4L7  
 Janine Beckett  
 604-436-3014

**13. STUDIES UNDERTAKEN TO DATE** (list and attach copies of studies, reports, research, etc.)

Please refer to our 2007 applications for a complete list.

**14. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN**

Supplementary Questionnaire (where applicable: see section 5) ☐ Yes ☒ No If no, date expected \_\_\_\_\_

Inuktitut and/or Inuinnaqtun/English Summary of Project ☒ Yes ☐ No If no, date expected \_\_\_\_\_

Application fee of \$30.00 (Payee Receiver General for Canada) ☒ Yes ☐ No If no, date expected \_\_\_\_\_

Water Use fee of \$30.00 (unless otherwise indicated in Section 9 of the *NWT Waters Regulations*; Payee Receiver General for Canada)

☐ Yes ☒ No If no, date expected \_\_\_\_\_

**15. PROPOSED TIME SCHEDULE** (unless otherwise indicated, the NWT will consider the application for a five (5) year term)

☐ one year or less (or) ☒ Multi Year

Start Date: May 1, 2008 Completion Date: December 31, 2012

Kim Sarauer

Name (Print)

Environment and  
Radiation Protection  
Supervisor

Title (Print)



Signature

April 23, 2009

Date

For Nunavut Water Board office use only

APPLICATION FEE

Amount: \$ \_\_\_\_\_

Pay ID No.: \_\_\_\_\_

**WATER USE DEPOSIT**    Amount: \$ \_\_\_\_\_    Pay ID No.: \_\_\_\_\_