

P.O. Box 119 GJOA HAVEN, NU X0B 1J0 TEL: (867) 360-6338 FAX: (867) 360-6369 אבי ביי ביי של החבי החבי העומעעד WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

File: 2BE-KIG0812/Amendment No. 6

March 14, 2012

Frederick Guerin, Ph.D General Manager, Kiggavik-Sissions AREVA Resources Canada Inc. P.O. Box 9204 817 – 45<sup>th</sup> Street West Saskatoon, SK S7N 3X5 Email: frederic.guerin@areva.ca

RE: 2BE-KIG0812Type "B" - Amendment No. 6

#### Dear Frederick Guerin:

Please find attached, Amendment No.6 to Type "B" Licence No. 2BE-KIG0812 issued to AREVA Resources Canada by the Nunavut Water Board (NWB) (Motion 2011-21-L04) pursuant to its authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada and the Nunavut Waters and Nunavut Surface Rights Tribunal Act. The terms and conditions of the original Licence related to water use and waste disposal remain an integral part of this approval.

The Licensee is advised that although this Amendment is exempt from screening by the Nunavut Impact Review Board (NIRB)<sup>1</sup> in accordance with Schedule 12-1 of the *Nunavut Land Claim Agreement (NLCA)*, the original Screening Decision Report<sup>2</sup> must continue to be consulted as it may contain recommendations that are applicable to this amendment.

Further, the NWB strongly recommends that the Licensee consult the comments received from intervening parties on issues identified. Aboriginal Affairs and Northern Development Canada (AANDC) provided recommendations and comments that included a suggestion for the Licensee to conduct laboratory analyses to confirm and/or determine the age of water associated with artesian flow encountered to help improve the understanding of the source of the water. Environment Canada (EC) requested that information be provided with respect to the procedures developed for sealing and capping where artesian flow is encountered. This information is attached for your consideration.<sup>3</sup>

<sup>1</sup> Nunavut Impact Review Board (NIRB), Screening Exemption Correspondence, dated December 2, 2011.

<sup>&</sup>lt;sup>2</sup> NIRB Screening Decision Report (NIRB File No.: 06AN085), dated April 3, 2007.

<sup>&</sup>lt;sup>3</sup> Aboriginal Affairs and Northern Development Canada (AANDC), December 21, 2011; and Environment Canada (EC), December 22, 2011.

Sincerely,

Thomas Kabloona Nunavut Water Board

Chair

TK/sj/pb

Licence No. 2BE-KIG0812 - <u>Amendment No. 6</u> Comments – AANDC, EC Enclosure:

Cc: Distribution - Kivalliq

# LICENCE AMENDMENT No. 6

Licensee: AREVA Resources Canada Inc.

Licence No: 2BE-KIG0812 Type "B"

Licence Issued: April 25, 2008
Amendment No.1: August 5, 2008
Amendment No.2: March 18, 2009
Amendment No.3: July 27, 2009

Amendment No.4: April 1, 2010 (rescinded, May 13, 2010)

Amendment No 5: July 15, 2011(superseded by Amendment No. 6)

Effective Date: March 14, 2012

Pursuant to its authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada and the *Nunavut Waters and the Nunavut Surface Rights Tribunal Act*, with respect to the application for amendment dated November 10, 2011, made by AREVA Resources Canada Inc., the Nunavut Water Board hereby grants the following Licence Amendment.

The Licence issued April 25, 2008 with an expiry date of December 31, 2012 shall be amended to include the following terms and conditions, with respect to use of water and deposit of waste during camp and drilling operations to: (1) allow AREVA Resources Canada Inc., to conduct land-based drilling during low flow artesian conditions within all areas encompassed by the Kiggavik Lease for the Kiggavik-Sisson Project; and (2) remove permission to drill within thirty (30) meters of the high water mark of Andrew Lake and Mushroom Lake. The Kiggavik-Sissons Project is located in the Kivalliq Region, generally located at the geographical coordinates as follows:

Max Latitude: 64°39'29"N Max Longitude 97°57'50"W Min Latitude: 64°17'02"N Min Longitude 97°20'56"W

The Kiggavik-Sissons Project is a uranium surface exploration project located approximately 80 kilometres west of the community of Baker Lake. The original Licence for the project was issued on May 9, 2007 with an expiry date of May 31, 2008. As mentioned above, the current or renewed Licence was issued on April 25, 2008 with an expiration date of December 31, 2012.

To date, the Board has issued a total of five (5) amendments, excluding this amendment, and rescinded one amendment (Amendment No.4) under Licence 2BE-KIG0812:

- Amendment No. 1 was issued on August 5, 2008 to allow for an increase in the volume of water from 110 cubic metres per day to 300 cubic metres per day.
- Amendment No. 2 was issued on March 18, 2009 to allow for drilling within thirty (30) metres of the ordinary high water mark within the End Grid Lake area as identified in the application dated October 9, 2008.

- Amendment No. 3 was issued on July 27, 2009 to allow for reallocation of the volume of water used for domestic purposes, while maintaining the total volume of water allowed for use under the Licence at 300 cubic metres per day.
- Amendment No. 4 was issued on April 1, 2010 to allow for on-ice geotechnical drilling at the proposed Thelon River Crossing; that Amendment was rescinded on May 13, 2010. The proponent later requested that the NIRB suspend processing of the application.
- Amendment No. 5 was issued on July 15, 2011 to allow land based drilling during low flow artesian conditions as well as drilling within thirty (30) meters of the ordinary high water mark within the Andrew Lake and Mushroom Lake areas.

The Licence and subsequent issued amendments (1 through 4) shall be amended to take into account the following:

# PART A: SCOPE, DEFINITIONS AND ENFORCEMNT

### 2. **DEFINITIONS**

Insert

"Kiggavik Lease" means the area identified in Figure 1.0-1 submitted as part of the Amendment #6 application dated December 1, 2011.

## PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

#### Amend

Item 3 (as amended in Amendment No. 5)

The Licensee shall not conduct land-based drilling within thirty (30) metres of the ordinary high water mark of any water body, with the exception of the End Grid Lake area as identified in the application dated October 9, 2008.

### Amend

Item 6 (as amended in Amendment No. 5)

The Licensee is permitted to drill under low flow artesian conditions within all areas encompassed by the Kiggavik Lease provided that appropriate measures are implemented to prevent induced contamination of groundwater or salinization of surface water and that the Licensee adheres to the following:

a. The Licensee shall analyze water encountered from the artesian flow to confirm the quality of the water as per Part J, Item 11;

- b. The Licensee shall adhere to the operational and mitigation measures as outlined in the technical support document "Drilling in Low Flow Artesian Conditions" submitted as part of the application dated March 29, 2011.
- c. The Licencee shall provide as part of the Annual Report required by Part B, Item 2, information on all artesian flow encountered, with GPS coordinates, dates, and flow rates, depth, permafrost, aquifer and Packer testing data and associated water quality analytical results.

### Amend

### Item 9 (from Amendment No. 5)

The Licensee shall, when conducting drilling within thirty (30) metres of the ordinary high water mark in accordance with Part F, Item 3, carry out activities on stable ground such as frozen tundra or bedrock, to prevent disturbance to the natural ground and limit erosion and sedimentation.

#### Amend

## Item 10 (from Amendment No. 5)

The Licensee shall establish water quality conditions of adjacent waters or waters immediately downstream prior to and upon completion of any drilling program within thirty (30) metres of the high water mark proximal to the End Grid Lake Area.

## Insert Item 11

If artesian flow is encountered in areas other than the Kiggavik Lease, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report required by Part B Item 2, including the location (GPS coordinates) and dates.

# PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

#### Amend

## **Item 10 (from Amendment No.5)**

The Licensee shall establish water quality conditions prior to and upon completion of drilling at the End Grid Lake areas as identified in the application dated October 9, 2008 as per Part F, Item 10, and Monitoring shall include the following:

- Total Suspended Solids;
- PH;
- Electrical Conductivity;

- Total Trace Metals as determined by a standard ICP Scan (to include at a minimum the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn); and
- Trace Arsenic and Mercury.

# Insert Item 11

The Licensee shall determine water quality of low-flow artesian conditions identified in Part F, Item 6, by including analyses described under Part J. Item 10.

All remaining terms and conditions of the Licence 2BE-KIG0812 Type 'B" issued April 25, 2008 and the applicable subsequently issued amendments still apply

This Licence Amendment issued and recorded at Gjoa Haven, NU on March 14, 2012.

Approved by,

Thomas Kabloona Nunavut Water Board Chair