

File No.: 2BE-KIG0813/Renewal

June 14, 2013

Stephanie Forseille, SHEQ Coordinator, Exploration AREVA Resources Canada Inc. P.O. Box 9204 817 – 45<sup>th</sup> Street West Saskatoon SK S7N 3X5

Email: <u>stephanie.forseille@areva.ca</u> John.robbins@areva.ca

**RE:** NWB Renewal Licence No. 2BE-KIG1318

## Dear Stephanie Forseille:

Please find attached Licence No. **2BE-KIG1318** issued to AREVA Resources Canada Inc. by the Nunavut Water Board (NWB) 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 (Nunavut Land Claims Agreement or NLCA).* The terms and conditions of the attached Licence related to water use and waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received by interested persons on issues identified. This information is attached for your consideration.<sup>1</sup>

Sincerely,

Original Signed By:

Lootie Toomasie Nunavut Water Board Vice Chair

LT/sj/ri

Enclosure: Licence No. 2BE-KIG1318

Comments – AAND, EC

Cc: Kivalliq Distribution List

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<sup>&</sup>lt;sup>1</sup> Aboriginal Affairs and Northern Development Canada (AANDC), December 19, 2012; and Environment Canada (EC), December 19, 2012.

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## **DECISION**

#### LICENCE NUMBER: 2BE-KIG1318

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated October 22, 2012, for the renewal of a Water Licence made by:

#### AREVA RESOURCES CANADA INC.

to allow for the use of water and disposal of waste during camp operations and activities related to exploration that include prospecting, geological mapping, diamond drilling at the Kiggavik Project located within the Kivalliq Region of Nunavut, 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 (Project Extents)

Latitude: 64° 26' 29" N Longitude: 97° 39' 34" W (Existing camp)

## **DECISION**

After having been satisfied that the application was in conformity with the Keewatin Regional Land Use Plan<sup>1</sup> and exempt from the requirement for screening as described within Section12.4.3 the Nunavut Impact Review Board<sup>2</sup> in accordance with Article 12 of the *Nunavut Land Claim Agreement (NLCA)*, the NWB decided that the application could proceed through the regulatory process. In accordance with S.55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act)* and Article 13 of the *NLCA*, public notice of the application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *NLCA* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

Licence No. 2BE-KIG0812 be renewed as Licence No. 2BE-KIG1318 subject to the terms and conditions contained therein (Motion #: 2013-B1-011)

Signed this 13 <sup>th</sup> day of	June 2013	_ at Gjoa Haven, NU.
Original Signed By:		
Lootie Toomasie		
Nunavut Water Board, Vic	ce Chair	
LT/sj/ri		

<sup>&</sup>lt;sup>1</sup> NPC Conformity Determination, February 15, 2013.

<sup>&</sup>lt;sup>2</sup> NIRB Screening Exemption Decision, April 8, 2012.

### **Background**

The Kiggavik Project is a uranium surface exploration project located approximately 80 kilometres west of the Hamlet of Baker Lake. The project consists of the Kiggavik lease, which contains the Kiggavik site to the north and the Sissions site to the south, as well as the St. Tropez claim, located to the north of the Kiggavik site.

#### File History

The original licence for the project, 2BE-KIG0708, which was issued on May 9, 2007, expired on May 31, 2008. The Licence allowed for the use of forty (40) cubic metres of water per day in support of exploration and land-based drilling activities.

The Licence was renewed as 2BE-KIG0812 on April 25, 2008 and it expired on December 31, 2012. The renewed licence allowed for the use of one hundred and ten (110) cubic metres per day of water per day for land-based drilling activities and for domestic purposes – five (5) cubic metres per day for domestic use and one hundred and five (105) cubic metres per day for drilling purposes.

On August 5, 2008, Amendment No. 1 was issued to licence 2BE-KIG0812 to allow for an increase in the volume of water from one hundred and ten (110) cubic metres per day to three hundred (300) cubic metres per day – two hundred and ninety-five (295) cubic metres per day for drilling and five (5) cubic metres per day for domestic use.

Amendment No. 2 to Licence 2BE-KIG0812 was issued on March 18, 2009 to allow for delineation, in-fill, and geotechnical drilling within thirty-one (31) metres of the ordinary High Water Mark within the End Grid Lake area as identified in the application received October 9, 2008. Additional monitoring and spill contingency planning requirements were also included as conditions under the amendment.

Amendment No. 3 to Licence 2BE-KIG0812 was issued on July 27, 2009 to allow for the reallocation in the water volume used for domestic purposes, while restricting the total volume of water allowed for use under the licence to three hundred (300) cubic metres per day. The water use for domestic purposes was increased from five (5) cubic metres per day to ten (10) cubic metres per day while water use for drilling purposed was decreased from two hundred and ninety-five (295) cubic metres per day to two hundred and ninety (290) cubic metres per day.

Amendment No. 4 was issued on April 1, 2010 to allow for land-based drilling within thirty-one (31) metres of the ordinary High Water Mark at the End Grid Lake and the proposed Thelon River and on-ice drilling at the proposed Thelon River Crossing for the purpose of gathering geotechnical data. Additional conditions for monitoring were also included in the amendment. This amendment, however, was rescinded by the Board on May 13, 2010. Subsequent to the Board's rescinding Amendment No. 4, the proponent requested that the NIRB suspend processing of the associated NIRB application for the project.

Amendment No. 5 was issued on July 15, 2011 to allow for land-based drilling during low flow artesian conditions as well as drilling within thirty-one (31) meters of the ordinary High Water Mark within the Andrew Lake and Mushroom Lake areas.

Amendment No. 6 was issued on March 14, 2012 to allow for the Licensee to conduct land-based drilling operations during low flows artesian conditions within all areas encompassed by the

Kiggavik lease while disallowing drilling within thirty-one (31) metres of the High Water Mark within the Andrew Lake and Mushroom Lake areas.

#### **Procedural History**

On October 22 and November 2, 2012, the NWB received a complete Application from AREVA Resources Canada Inc. for the five (5) year renewal of Licence 2BE-KIG0812 to allow for the continued use of water and the deposit waste in support of the Kiggavik Project. The Application consists of the following documents:

- AANDC Planned Inspection Schedule;
- 2012 Kiggavik Inspection Information;
- Information on Spill September 2012;
- 2006 Certificate of Amendment;
- April 2007 NIRB Screening Decision;
- Project Area Maps and Figures;
- December 2006 NPC Conformity;
- List of Officers and Directors;
- Letter to NIRB and NPC;
- Project Summaries, English and Inuktitut;
- Renewal Application;
- Renewal Cover Letter;
- Abandonment and Restoration Plan Version 4 Revision 2;
- 2012 INAC Water Use Inspection Form;
- July 2012 Waste Management Plan Version 5 Revision;
- Uranium Exploration Plan Version 3 Revision 2;
- Noise Abatement Plan Version 3 Revision 2 May 2012;
- Radiation Protection Plan Version 6 Revision 0 June 2012;
- Spill Contingency Plan Version 7 June 2012;
- Use of Hamlet of Baker Lake Waste Disposal Facility; and
- Wildlife Mitigation and Monitoring Plan Version 5 Revision 1 June 2012.

On November 19, 2012, the NWB distributed the application for a thirty-day public review period with deadline for comments set for December 19, 2012. Before the deadline for comments had elapsed, submissions were received from two intervening parties, Aboriginal Affairs and Northern Development Canada (AANDC) and Environment Canada (EC). The interveners provided comments and recommendations pertaining to measures that can be implemented to further enhance protection of the areas within the project's footprint.

According to information contained in the renewal application, the scope of activities scheduled to be carried out under the project for the next five years will be similar to the activities carried out during the 2007–2012 field season. Planned Activities include diamond drilling at the Kiggavik and Sissons sites and environmental baseline studies to address relevant gaps in the Draft Environmental Impact Statement (DEIS) submitted to the NIRB for review. Under the St. Tropez claim, planned activities include conducting geological mapping and prospecting other activities involving no water use. Besides renewing the term of the licence, there are no changes being requested by the licensee to the remaining terms and conditions under the existing licence.



## NUNAVUT WATER BOARD WATER LICENCE RENEWAL

Licence No. 2BE-KIG1318

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

(Licensee)

P.O. BOX 9204,  $817 - 45^{TH}$  STREET WEST SASKATOON SK S7N 3X5

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: 2BE-KIG1318 TYPE "B"

Water Management Area: NUNAVUT 06

Location: KIGGAVIK PROJECT

KIVALLIQ REGION, NUNAVUT

Classification: MINING AND MILLING UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not

to Exceed: THREE HUNDRED (300) CUBIC METRES PER DAY

Date of Licence Issuance: JUNE 13, 2013

Expiry of Licence: JUNE 13, 2018

This Licence renewal, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

ORIGINAL SIGNED BY:

Lootie Toomasie,

Notice roomasie,

Nunavut Water Board, Vice Chair

#### PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

#### 1. **Scope**

This Licence allows for the use of water and the disposal of waste for a Mining and Milling undertaking classified as per Schedule II of the *Regulations* at the Kiggavik Project, located approximately 80 Kilometres west of Baker Lake within the Kivalliq Region, Nunavut (within the general Latitudes 64°17'02" to 64°39'29" N and general Longitudes 97°20'56" to 97°57'50" W and the Kiggavik Camp located at Latitude 64°26' 29" N Longitude: 97°39' 4" W).

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

#### 2. **Definitions**

"Act" means the Nunavut Waters and Nunavut Surface Rights Tribunal Act;

"<u>Addendum</u>" means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report.

"Amendment" means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

"Appurtenant Undertaking" means an undertaking in relation to which a use of water or a deposit of waste is permitted by a licence issued by the Board;

"Board" means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

"Bulk Fuel Storage Facility" means the fuel storage facility as described in the Renewal Application and supporting documents submitted November 28, 2007

- "Effluent" means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;
- "Engineer" means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2 and the Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;
- "Greywater" means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;
- "High Water Mark" means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);
- "ICP Scan" means the laboratory method for determining trace metals in water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);
- "Inspector" means an Inspector designated by the Minister under Section 85 (1) of the *Act*;
- "Licensee" means the holder of this Licence;
- "Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;
- "Nunavut Land Claims Agreement (NLCA)" means the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada", including its preamble and schedules, and any amendments to that agreement made pursuant to it;
- "Regulations" means the *Nunavut Waters Regulations sor 2013/669 18th April*, 2013;
- "Sewage" means all toilet wastes and greywater;
- "Spill Contingency Plan" means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;
- "Sump" means an excavation in impermeable soil for the purpose of catching or storing water or waste;

"<u>Toilet Wastes</u>" means all human excreta and associated products, but does not include greywater;

"Waste" means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

"Water" or "Waters" means waters as defined in section 4 of the Act.

#### 3. **Enforcement**

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

#### PART B: GENERAL CONDITIONS

- 1. The amount of water use fees shall be determined and payment of those fees shall be made in accordance with the section 12 of the *Regulations*.
- 2. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
  - a. A summary report of water use and waste disposal activities;
  - b. A list of unauthorized discharges and a summary of follow-up actions taken;
  - c. Any revisions to the Spill Contingency Plan, Abandonment and Restoration Plan, Uranium Exploration Plan, as required by Part B, Item 7, submitted in the form of an Addendum:
  - d. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
  - e. Report all artesian flow occurrences as required under Part F, Item 6;
  - f. A summary of all information requested and results of the Monitoring Program; and
  - g. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

- 3. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
- 4. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes as required under Part J, Item 1.
- 5. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
- 6. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
- 7. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
- 8. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
- 9. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

## i. Manager of Licensing:

Nunavut Water Board P.O. Box 119

Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369

Email: <u>licensing@nunavutwaterboard.org</u>

#### ii. Inspector Contact:

Manager of Field Operations, AANDC Nunavut District, Nunavut Region P.O. Box 100

Iqaluit, NU X0A 0H0

Telephone: (867) 975-4295 Fax: (867) 979-6445

10. The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.

- 11. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
- 12. This Licence is assignable as provided for in Section 44 of the *Act*.

## PART C: CONDITIONS APPLYING TO WATER USE

- 1. The Licensee shall obtain all water for domestic camp use from a small unnamed lake located to the north of the camp or a small unnamed lake located to the east of the camp, to a maximum of ten (10) cubic metres *per* day. Drill water shall be obtained from water sources, proximal to the drilling targets, to a maximum of two-hundred and eighty nine (289) cubic metres *per* day. The total volume of water for the purposes of this Licence shall not exceed two hundred ninety nine (299) cubic metres *per* day.
- 2. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
- 3. If the Licensee requires water in sufficient volume that the source water body may be drawn down the Licensee shall, at least thirty (30) days prior to commencement of use of water, submit to the Board for approval in writing, the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
- 4. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
- 5. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.
- 6. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
- 7. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into water.

## PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

- 1. The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.
- 2. The Licensee shall not practice on-site land filling of domestic waste, unless otherwise

- approved by the Board in writing.
- 3. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
- 4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
- 5. The Licensee shall provide to the Board with documented authorization from all communities in Nunavut receiving wastes from the Kiggavik Project prior to any backhauling and disposal of wastes to those communities.
- 6. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at a licensed waste disposal site.
- 7. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.
- 8. The Licensee shall contain all greywater in a sump located at a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.
- 9. The Licensee shall contain all toilet wastes in latrine pits or use incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.
- 10. The Licensee shall dispose of all toilet wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved waste disposal site.
- 11. The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved treatment facility.

# PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.

- 2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
- 3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
- 4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.
- 5. The Licensee shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs

## PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

- 1. The Board has approved the Plan entitled "AREVA Resources Canada Inc., Kiggavik Project, Nunavut, Uranium Exploration Plan" dated May 2012 (Version 3, Revision 2).
- 2. The Licensee shall review the Plan referred to in this Part as required by changes in operation, and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an addendum to be included with the Annual Report submission required under Part B, Item 2.
- 3. The Licensee shall not conduct any land based drilling within thirty-one (31) 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 received dated October 9, 2008.
- 4. The Licensee shall dispose of all drill waste, including water, chips, muds and salts (CaCl<sub>2</sub>) in any quantity or concentration, from land-based drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty one (31) metres from the ordinary High Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
- 5. Drill mud solids or cuttings with a uranium concentration greater than 0.05 percent are to be collected and then disposed of down the drill hole and sealed.
- 6. 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 12;
- 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 Licence 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.
- 7. Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole to be included within the Annual Report.
- 8. On-ice drilling is not authorized under this Licence.
- 9. The Licensee shall, when conducting drilling within thirty-one (31) 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.
- 10. 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-one (31) metres of the High Water Mark proximal to the End Grid Lake Area.
- 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 G: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
  - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
  - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
  - c. such Modifications are consistent with the NIRB Screening Decision;
- d. the Board has not, during the sixty (60) days following notification of the proposed

Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and

- e. the Board has not rejected the proposed Modifications.
- 2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
- 3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

### PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Board has approved the Plan entitled AREVA Resources Canada Inc., Kiggavik Project, Nunavut, Spill Contingency Plan" dated May 2012 (Version 7), submitted as additional information with the Application.
- 2. The Licensee shall review the Plan referred to in this Part as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report.
- 3. The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering water. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis. An exception to this condition is provided for in Part H, Item 6.
- 4. The Licensee shall ensure that any equipment maintenance and servicing be conducted only in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
- 5. If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a. Employ the approved Spill Contingency Plan;
  - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
  - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
- 6. The Licensee shall, in addition to Part H, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a

Water body.

7. While drilling is occurring as per Part F, Item 3, the Licensee is permitted to allow a limited supply of fuel within thirty-one (31) metres of the ordinary High Water Mark to support the drilling operations, provided that secondary containment is made available for the storage of fuel and all external pumps and motorized equipment used in the drilling operations.

# PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING

- 1. The Board has approved the Plan entitled "AREVA Resources Canada Inc., Kiggavik Project, Nunavut, Abandonment and Restoration Plan" dated May 2012 (Version 4, Revision 2), submitted as additional information with the Application.
- 2. The Licensee shall review the Plan referred to in this Part as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report.
- 3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
- 4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
- 5. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
- 6. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.
- 7. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
- 8. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
- 9. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
- 10. The Licensee shall reclaim areas that have been contaminated by hydrocarbons from normal fuel transfer procedures to meet objectives as outlined in the Government of Nunavut's *Environmental Guideline for Contaminated Site Remediation* (2009). The use of reclaimed soils for the purpose of back fill or general site grading may be carried

- out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
- 11. The Licensee may store drill cores produced by the appurtenant undertaking in an appropriate manner and location at least thirty one (31) metres above the ordinary High Water Mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
- 12. For the long term storage of drill core, radiation levels must be reduced to less than 1.0  $\mu Sv$  measured at 1 metre from the surface and in no instance is the level allowed to exceed 2.5  $\mu Sv$ .
- 13. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. Any drill hole that encounters mineralization with a uranium content greater than 1.0 percent over a length >1.0 metre, and with a meter-percent concentration >5.0, will be sealed by grouting over the entire length of the mineralization zone and not less than 10 meters above or below each mineralization zone.
- 14. Drill holes are to be sealed by cementing (grouting) the upper thirty (30) metres of bedrock or the entire depth of the hole, whichever is less or as otherwise approved by the Board in writing.
- 15. If the radiation levels for the stored core exceed the levels identified in Part I, Item 12, the Licensee shall submit to the INAC Water Resources Inspector, a detailed report of the test results and the proposed long term core handling and mitigation measures for long term storage or removal.
- 16. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

#### PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

- 1. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes.
- 2. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.
- 3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations and drilling operations are deposited.
- 4. The Licensee shall provide follow-up monitoring and analytical results of the potable water supply previously utilized under previous Licences, in order to assess the oil and grease

contamination during the Licence term and investigate the source of contamination and possible mitigation measures required. Plans to address this matter shall be submitted to the NWB within the Annual Report as required by Part B, Item 2.

- 5. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
- 6. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 7. Additional monitoring requirements may be requested by the Inspector.
- 8. Where uranium mineralization has been encountered, under Part I, Items 13 and 14, the Licensee shall monitor the drill sumps and core storage areas to provide the necessary data needed in order to assess and ensure that the mitigation measures required for restoration under the Abandonment and Restoration Plan have been completed.
- 9. The Licensee shall include in the Annual Report required under Part B, Item 2 all data, monitoring results and information required by this Part.
- 10. 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 in accordance with Part F, Item 10, and Monitoring shall include the following:

**Total Suspended Solids** 

pН

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

- 11. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all drill hole locations associated with Part F, Item 3 and provide these locations on a map of suitable scale for review as part of the annual report.
- 12. 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.