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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: 2BE-KIG1823 /Renewal

June 14, 2018

Mr. John Robbins
Areva Resources Canada
P.O. Box 9204
817-45th Street West
Saskatoon SK S7N 3X5

Email: john.robbs@areva.com

RE: NWB Renewal Water Licence No. 2BE-KIG1823 – Kiggavik Project

Dear Mr. Robbins:

Please find attached Licence No. **2BE-KIG1823** issued to Areva Resources Canada 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 Agreement)*. The terms and conditions of the attached Licence related to the use of Water and the deposit of Waste 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 the use of Water and the deposit of Waste must cease, or the Licensee may be in contravention of the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA)*. 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 (3) months** prior to the Licence expiry date. It should be noted that in accordance with s. 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with s. 76 of *NuPPAA*.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public's 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 INAC and DFO on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie
Nunavut Water Board,
Chair

LT/kt/rqd

Enclosure: Renewal Licence No. **2BE-KIG1823**

Comments – INAC, DFO

Cc: Distribution List – Kivalliq

¹ Indigenous and Northern Affairs Canada (INAC), January 22, 2018; and Fisheries and Oceans Canada (DFO), January 10, 2018

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DECISION

LICENCE NUMBER: 2BE-KIG1823

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated November 17, 2018 for a renewal of a Water Licence made by:

Areva Resources Canada

to allow for the use of Water and deposit of Waste in support of camp operations and activities related to exploration including land-based diamond drilling, prospecting, geological mapping, and geophysical surveys to further evaluated mineral deposits, and potential studies to support mine development at the Kiggavik Project, located in the Kivalliq Region of Nunavut, at the following general geographical coordinates:

Project Extents:

Latitude: 64° 39' N	Longitude: 97° 57' W
Latitude: 64° 39' N	Longitude: 97° 20' W
Latitude: 64° 17' N	Longitude: 97° 20' W
Latitude: 64° 16' N	Longitude: 97° 58' W

Camp Location(s):

Latitude: 64° 26' N	Longitude: 97° 39' W
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DECISION

After having been satisfied that the Application is for a proposal that was previously reviewed by the NPC for which the conformity determination, dated December 15, 2006, remains applicable, and that the activities were previously screened by the Nunavut Impact Review Board (NIRB file No.: 06AN085 on April 3, 2007 and August 30, 2007), and that the NPC determined on December 14, 2017 that this project proposal is exempt from the *Nunavut Planning and Project Assessment Act* (NuPPAA) under section 235 of that Act, 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* (NWNSRTA or Act) and Article 13 of the *Nunavut Agreement*, 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 *Nunavut Agreement* and of the Act, waived the requirement to hold a public hearing, and determined that:

Licence No. 2BE-KIG1318 be renewed as Licence No. 2BE-KIG1823 subject to the terms and conditions contained therein. (Motion #: 2018-B1-013)

Signed this 14th day of June, 2018 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board, Chair

LT/kt/rqd

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. The site has been in care and maintenance since 2016.

File History

The NWB issued the initial licence, Licence No. 2BE-KIG0708, for the project on May 9, 2007. The licence, which expired on May 31, 2008, allowed for the use of forty (40) cubic metres of Water per day in support of exploration activities including a land-based drilling program.

The Licence was renewed as Licence No. 2BE-KIG0812 on April 25, 2008 with the expiry date set for December 31, 2012. The renewed licence allowed for the use of one hundred and ten (110) cubic metres of Water per day for domestic purposes and land-based drilling activities (5 cubic metres per day for domestic purposes and 105 cubic metres per day for drilling).

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.

The Licence was renewed for a third time as Licence No. 2BE-KIG1318 on June 14, 2013 with the expiry date set for June 13, 2018. The renewed licence allowed for the use of three hundred (300) cubic metres per day for domestic purposes and land based drilling activities (10 cubic metres of Water per day for domestic purposes and 289 cubic metres per day for drilling).

Amendment No. 1 to Licence 2BE-KIG1318 was issued on June 3, 2015 to allow for exploration activities to be undertaken in both the Kiggavik and the St. Tropez areas.

Application Procedural History

The Nunavut Water Board (NWB or the Board) received on November 17, 2017 from AREVA Resources Canada Inc. (AREVA, or the Applicant, or the Licensee) an application to renew Licence No. 2BE-KIG1318. The Application consists of the following documents:

- 171117 2BE-KIG1318 Cover Letter_Inuktitut & English Summary
- 171117 2BE-KIG1318 Maps
- 171117 2BE-KIG1318 NIRB_NPC Documents
- 171117 2BE-KIG1318 Water Licence Renewal Application
- 171117 2BE-KIG1318 Board of Directors_Cert of Amendment

On December 15, 2017, the NWB distributed the Application for public review with the deadline for comments set for January 22, 2018. On or before the deadline for comments, submissions were received from two intervening parties: Indigenous and Northern Affairs Canada (INAC) and Fisheries and Oceans Canada (DFO). The interveners provided general comments and recommendations related to the Application. All information pertaining to the Application as well as details on interveners' comments received are made available on the NWB's ftp site at the following link:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2B/2BE%20-%20Exploration/2BE-KIG1318%20Areva/>

In reviewing the comments and considering the licence renewal, the NWB has also reviewed the Project's 2017 Annual Report including various management plans that had been updated to reflect the Project's care and maintenance status and are relevant to the review of AREVA's application for renewal of its water licence. The plans include:

- Abandonment and Restoration Plan, Version 6;
- Spill Contingency Plan, Version 8;
- Uranium Exploration Plan, Version 5; and

- Waste Management Plan, Version 7.

Given the linkage between the above-mentioned Plans and the water licence renewal, the NWB distributed the 2017 annual report on April 3, 2018 for public review with a deadline for comments set for May 3, 2018. On or before the deadline for comments, submissions were received from INAC and ECCC providing general comments and recommendations related to the Plans.

Issues

The following sections provide some background information relevant to the terms and conditions included in this licence renewal, in the context of submissions received and/or the Board's rationale.

Reclamation Security Assessment

In its submission dated January 22, 2018 INAC commented that no financial security assessment was provided in the application package, noting the following statement in the renewal application:

“An estimate for total financial security was not submitted with the original water licence application; however, AREVA is working closely with the Kivalliq Inuit Association (KIA) on the arrangements of financial security. If required for information purposes, AREVA can forward the security estimates to the NWB.” (pg 12, Block 21, Application for Water Licence Renewal, November 17, 2017)

INAC further recommended that the Licensee should be required to submit a reclamation security estimate, and that this estimate must be consistent with the Mine Site Reclamation Policy for Nunavut (INAC, 2002). The Board agrees with INAC and requires the Licensee to submit to the Board for approval within ninety (90) days of the date of the issuance of this Licence, an assessment of the current restoration liability using the most recent version of RECLAIM or other equivalent method as approved by the Board in writing, in accordance with the principles of INAC's "Mine Site Reclamation Policy for Nunavut" 2002.

Water Sources

In its submission dated January 22, 2018 INAC noted that the previous licence prohibits the use of water from streams and that the renewal application proposed that all water sources come from freshwater lakes. INAC further noted that the Exploration Viable Sources Map provided as Figure 1.0-3 in the application package identifies many potential water sources in rivers, and that due to the map scale it is difficult to determine if some of those might be streams. As such INAC recommended that the Licensee should update their Viable Water Sources of Exploration map prior to using water for drilling to avoid using water from rivers and streams, unless permission for those locations is obtained in advance.

Further to INAC's comments, the Board has carried forward the aforementioned Licence condition prohibiting the use of Water from streams or any Water bodies not identified in the Licence unless authorized and approved by the Board in writing.

Uranium Exploration Plan

The Board notes that the 2017 annual report dated January 19, 2018 included an updated Uranium Exploration Plan reflecting the transition to a Care and Maintenance Phase. The Board has approved the 2017 version of the Plan entitled "AREVA Resources Canada Inc., Uranium Exploration Plan, Exploration Department, Kiggavik Project" dated January 2017 that was submitted with the 2017 annual report.

In addition, the Licensee shall review the Plan 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.

Spill Contingency Plan

The Board notes that the 2017 annual report dated January 19, 2018 included an updated Spill Contingency Plan reflecting the transition to a Care and Maintenance Phase. The Board has approved the 2017 version of the Plan entitled "AREVA Resources Canada Inc., Spill Contingency Plan, Exploration Department, Kiggavik Project" dated January 2017 that was submitted with the 2017 annual report. The Licensee is advised to consult the comments received from ECCC regarding the Plan.

In addition, the Licensee shall review the Plan 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.

Abandonment and Restoration Plan

The Board notes that the 2017 annual report dated January 19, 2018 included an updated Abandonment and Restoration Plan reflecting the transition to a Care and Maintenance Phase. The Board has approved the 2017 version of the Plan entitled "AREVA Resources Canada Inc., Abandonment and Restoration, Exploration Department, Kiggavik Project" dated January 2017 that was submitted with the 2017 annual report.

In addition, the Licensee shall review the Plan 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.

Monitoring

Previous licences have included a condition requiring the Licensee to 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.

The Board notes that this condition was addressed in the 2009 annual report which states that the lab analysis was determined to be subject to error, therefore, AREVA resampled the camp water supply on June 27, 2009 and analysis conducted at the SRC Laboratory showed no traces of grease and oil. As such the condition has been removed from the renewed licence.



NUNAVUT WATER BOARD WATER LICENCE RENEWAL

Licence No. **2BE-KIG1823**

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

AREVA RESOURCES CANADA

(Licensee)

P.O. Box 9204 817-45th 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-KIG1823 TYPE "B"**

Water Management Area: **BAKER LAKE WATERSHED - 8**

Location: **KIVALLIQ REGION, NUNAVUT**

Classification: **MINING UNDERTAKING**

Purpose: **DIRECT USE OF WATER AND DEPOSIT OF WASTE**

Quantity of Water use not to Exceed: **TWO HUNDRED AND NINETY NINE (299) CUBIC METRES PER DAY**

Date of Licence Issuance: **JUNE 14, 2018**

Expiry of Licence: **JUNE 13, 2023**

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

Lootie Toomasie
Nunavut Water Board, Chair

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of Water and the deposit of Waste for a Mining undertaking classified as per Schedule 1 of the *Regulations* at the Kigavvik Project, located approximately 80 km west of Baker Lake within the Kivalliq Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the deposit 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*;

“**Addendum**” 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;

“**Applicant**” means the Licensee;

“**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 Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Bulk Fuel Storage Facility**” means the fuel storage facility as described in the Application and supporting documents submitted November 28, 2007;

“**Closure and Reclamation Plan**” means a Plan developed to reach the closure goal and taking in account the “Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories” 2013;

“**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 Agreement**” 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/2013-69 18th April, 2013;

“**Secondary Containment**” means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and provides a minimum capacity of 110% of the original vessel. Where multiple vessels are stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles;

“**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 or Sumps” A structure or depression that collects, controls, and filters liquid Waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid Waste;

“Toilet Wastes” 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 fees payable to the Receiver General for Canada for the right to use Waters, shall be sent to the Board annually in accordance with Section 12 of the *Regulations*.
2. The Licensee shall submit to the Board for review within ninety (90) days of the date of the issuance of this Licence, an assessment of the current restoration liability using the most recent version of RECLAIM or other equivalent method, in accordance with principles of INAC “Mine Site Reclamation Policy for Nunavut” 2002.
3. 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. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-owned lands for the reporting period;
 - c. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands for the reporting period;
 - d. Quantity of Waste disposed in on-site Waste disposal facility;
 - e. Quantity of Waste backhauled to approved facility for disposal;
 - f. A list of unauthorized discharges and a summary of follow-up actions taken;
 - g. Any revisions to the Spill Contingency Plan, Abandonment and Restoration Plan, Uranium Exploration Plan, and Assessment of Current Restoration Liability, as required by Part B, Item 8, submitted in the form of an Addendum;
 - h. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - i. Report all artesian flow occurrences as required under Part F, Item 8;
 - j. A summary of all information requested and results of the Monitoring Program;
 - k. Any other details on Water use or Waste disposal requested by the Board by the 1st November of the year being reported.
4. 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.
 5. 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.
 6. 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.
 7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
 8. 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.
 9. 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.
 10. 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:

(a) **Manager of Licensing:**
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

(b) **Inspector Contact:**
Manager of Field Operations, INAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

11. The Licensee shall submit one (1) paper copy and one (1) 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.
12. The Licensee shall ensure that all documents or correspondence submitted by the Licensee to the NWB are received and acknowledged by the Manager of Licensing.
13. This Licence is assignable as provided for in Section 44 of the *Act*.
14. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

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 or a small unnamed lake located to the east of the camp facility, to a maximum of ten (10) cubic metres per day. Water used for drilling 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. The use of Water from streams or any Water bodies not identified in Part C, Item 1, is prohibited unless authorized and approved by the Board in writing.
3. The withdrawal of Water from any stream shall not exceed ten (10) per cent of the low flow of that stream unless approved by the Board in writing.
4. The Licensee shall submit to the Board for approval in writing, the following information at least thirty (30) days prior to the use of Water of a sufficient volume that the source

water body may be drawn down: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.

5. 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.
6. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
7. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
8. 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 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 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. Stream crossing shall be a minimum of five hundred (500) meters from spawning areas.
5. 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..
6. 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 2017 version of the Plan entitled “AREVA Resources Canada Inc., Uranium Exploration Plan, Exploration Department, Kiggavik Project” dated January 2017 that was submitted with the 2017 annual report.

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 is authorized to conduct land-based drilling within thirty one (31) metres of the ordinary High Water Mark of Water bodies within the End Grid Lake area as identified in the application received dated October 9, 2008.
4. The Licensee shall not conduct any land based drilling within thirty-one (31) metres of the ordinary High Water Mark of any water body, unless otherwise approved by the Board in writing.
5. The Licensee shall dispose of all drill waste, including Water, chips, muds and salts (CaCl_2) 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.
6. 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.
7. The Licensee is authorized to drill under low-flow artesian conditions within all areas encompassed by the Kiggavik Project provided that appropriate measures are developed and 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 9;
 - 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.
8. Where drilling activity has penetrated below the permafrost layer, the NWB requests that the Licensee record the depth of permafrost and location of the drill hole to be included within the Annual Report.
9. On-ice drilling is not authorized under this Licence.
10. 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.

11. 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.
12. If artesian flow is encountered in areas other than that encompassed by the Kiggavik Project, 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 3, 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 2017 version of the Plan entitled “AREVA Resources Canada Inc., Spill Contingency Plan, Exploration Department, Kiggavik Project” dated January 2017 that was submitted with the 2017 annual report.
2. 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.
3. The Licensee shall conduct any equipment maintenance and servicing 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.

4. 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.
5. 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.
6. When drilling within areas allowed under 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 measures are implemented for the storage of fuel and all external pumps and motorized equipment used.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Board has approved the 2017 version of the Plan entitled “AREVA Resources Canada Inc. Abandonment and Restoration Plan, Exploration Department, Kiggavik Project” dated January 2017 that was submitted with the annual report.
2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
3. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
4. The Licensee shall backfill and restore all Sumps, sewage/ washwater pits to the pre-existing natural contours of the land.
5. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water intakes, pumps and lines, material and equipment prior to the expiry of this Licence.
6. All roads and airstrip, if any, shall be re-graded to match natural contours to reduce erosion.

7. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
8. 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.
9. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. 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.
10. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal. Where drill casings cannot be removed the Licensee shall cut off the casings at ground level and identify with signage.
11. The Licensee may leave the casings on site, if it intends to continue drilling in existing casings, but shall add signing to keep the area safe for the other territory users. The drill casings left cannot stay on the field for more than 2 years after the drilling.
12. The Licensee may store drill core 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.
13. For the long term storage of drill core, radiation levels must be reduced to less than 1.0 μSv measured at 1 metre from the surface and in no instance is the level allowed to exceed 2.5 μSv .
14. 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.
15. Drill holes are to be sealed by cementing (grouting) the upper 30 metres of bedrock or the entire depth of the hole, whichever is less or as otherwise approved by the Board in writing.
16. If the radiation levels for the stored core exceed the levels identified in Part I, Item 13, 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.
17. The Licensee shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, upon completion of work, upon completion of the undertaking

and as per Part I, Item 4.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water that is used from sources located on, in or flowing through Crown Land, 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 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 11, 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
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. 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.
8. 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.
9. The Licensee shall determine water quality of low-flow artesian conditions identified in Part F, Item 7, by including analyses described under Part J, Item 4.

10. The Licensee shall include in the Annual Report required under Part B, Item 3 all data, monitoring results and information required by this Part.