



Water Resources
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

NWB file - Votre référence
2BE-KIG0812 - Renewal

AANDC file - Notre référence
IQALUIT - # 615096

December 19, 2012

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: Water Licence No. 2BE-KIG0812, Renewal Application – Kiggavik Project – Areva Resources Canada Inc.

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of Areva Resources Canada Inc. renewal application for water licence number 2BE-KIG0812 – Kiggavik Project, located in the Kivalliq region. The Nunavut Water Board distributed the application for comment on November 19, 2012. The following comments are provided pursuant to AANDC's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

In conducting this review, I have referred to all documents on the Nunavut Water Board's FTP site as it relates to 2BE-KIG. Attached is a Technical Review Memorandum for your consideration.

Please feel free to contact me should you have any questions or comments. I can be reached at 867.975.4566 or by email at Andrea.Cull@aandc-aadnc.gc.ca.

Sincerely,

Originally signed by

Andrea Cull
Pollution Policy Specialist, AANDC

Cc: Murray Ball, Manager of Water Resources, AANDC
Christine Wilson, Resource Management Officer, AANDC

Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: Andrea Cull – Pollution Policy Specialist, Aboriginal Affairs and Northern Development Canada

Re: Water Licence No. 2BE-KIG0812, Renewal Application – Kiggavik Project – Areva Resources Canada Inc.

Background

Areva Resources Canada Inc. "*the Proponent*" has submitted an application for a renewal water licence, number 2BE-KIG – Kiggavik Project, located in the Kivalliq region. The Proponent is interested in continuing exploration work in the area.

Recommendations/Comments

On behalf of the Aboriginal Affairs and Northern Development Canada (AANDC) Water Resources Division the following comments/ recommendations are provided to the Nunavut Water Board (the Board) for consideration.

- **Waste**

Hazardous Waste

AANDC recommends that Hazardous waste/waste oil materials and hydrocarbon contaminated soil stored on-site should be clearly labeled with labels visible under all conditions and in all seasons. This recommendation is intended to prevent possible damage or misplacement of the containers.

AANDC recommends that the Proponent remove all hazardous materials/ waste oil from the site on a regular basis to prevent the over-accumulation of these materials. Hazardous waste/waste oils must be disposed of at an approved facility outside of the Territory of Nunavut (there are no known approved facilities within Nunavut). All transfer of this type of waste must be in accordance with the Government of Nunavut "Guideline for General Management of Hazardous Waste - January, 2002". In addition hazardous wastes should be stored within a lined secondary containment structure to prevent any off site impacts (other secured structures would also be acceptable).

AANDC recommends that the Proponent be required to submit copies of all manifest forms related to the transport of hazardous waste/waste oil as part of the Annual Report required in this water licence.

Greywater and Drilling Wastes

AANDC recommends that all sumps for the disposal of grey water or drilling wastes shall be located a minimum distance of 31 metres from any water body and shall be managed to ensure that there are no adverse effects to the quality, quantity and flow of water. Furthermore, all sumps shall be backfilled and contoured to match the surrounding landscape prior to the end of the project.

Part J, Item 3 of the current water licence states that the Licensee shall determine the GPS co-ordinates of all locations where wastes associated with camp operations and drilling operations are deposited.

AANDC recommends that the Proponent submit GPS coordinates of all sump locations. These coordinates should be submitted in the Annual Report(s).

- **Incineration**

No Open Burning

Consistent with Environment Canada's (EC) "Technical Document for Batch Waste Incineration Guidelines", there should be no open burning of plastics, wood treated with preservatives, electrical wire, styrofoam, asbestos or painted wood. This is to prevent the deposition of waste materials from incomplete combustion and/or leachate from contaminated ash residues (these ashes may affect surrounding waters).

Part D, Item 2 of the current water licence states that the licensee shall not practice open burning or on-site land filling of domestic waste, unless otherwise approved by the Board.

AANDC recommends that there be no open burning, and that incineration be used.

Incineration

Part D, Item 3 of the current water licence states that the licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.

AANDC recommends the Nunavut Water Board consider specifying a mode of incineration. This would provide greater clarity to the Proponent, and ensure waste is incinerated appropriately as to avoid possible leaching into surrounding waters from improperly burnt ash, and the excessive deposition of particulate matter into watersheds which could adversely affect water quality. For camps of 10 to 50 people or greater, it is generally advised to use a dual chamber forced-air incinerator or a dual chamber controlled-air incinerator as recommended in the Technical Document for Batch Waste Incineration Guidelines from EC. Facilities incinerating more than 26 tons of waste per year should do so with a dual chamber, controlled air incinerator.

AANDC recommends that the Proponent demonstrate determined efforts to achieve compliance with the Canada-Wide Standards for Dioxins and Furans and the Canada-Wide Standard for Mercury Emissions. Efforts should include the implementation and documentation of a comprehensive waste management strategy (especially waste segregation) that is designed to reduce and control the volumes of wastes produced, transported, and requiring disposal and a procedure to ensure that inappropriate materials are not incinerated.

- **Water Use and Monitoring**

Part C, Item 1 of the current water licence states the Licensee shall obtain all water for domestic camp use from an unnamed lake approximately three hundred metres north of the camp, up to a maximum of ten (10) cubic metres per day. Drill water shall be obtained from local water source(s), proximal to the drilling targets, to a maximum of two-hundred and ninety (290) cubic metres per day. The volume of water for the purposes of this Licence shall not exceed three-hundred (300) cubic metres per day.

AANDC recommends that water sources likely to be used to support drilling activities be listed in the water licence (including the GPS coordinates).

Water Use Fees

Please note that a total of \$1,065.00 is due and payable on April 25, 2013.

- **Spill Contingency Plan**

The Spill Contingency Plan should make reference to the Nunavut Spill Report Line and include a copy of the Nunavut Spill Report Form. This form can be obtained from the Nunavut Water Board public registry at <http://www.nunavutwaterboard.org>.

Please note that the 24-hour Spill Report Line telephone number is 867.920.8130 and facsimile number is 867.873.6924. Furthermore, AANDC

requests the Proponent report all spills to the Manager of Field Operations/AANDC, by phone at 867.975.4295 and by fax at 867.975.6445, as well as the Nunavut Spill Report Line.

- **AANDC Field Operations Inspection Report**

Please note that on July 29, 2012 an AANDC Water Resource Officer inspected the Kiggavik Project area. The findings of this inspection report should be taken into consideration of the renewal of this water licence.

Prepared by Andrea Cull

Cc: Murray Ball, Manager of Water Resources, AANDC
Christine Wilson, Resource Management Officer, AANDC