

Environmental Assessment North  
Environmental Protection Operations (EPO)  
Qimugjuk Building 969  
P.O. Box 1870  
Iqaluit, NU X0A 0H0  
Tel: (867) 975-4631  
Fax: (867) 975-4645

22 December 2011

EC file : 4703 001 006  
NWB file : 2BE-KIG0812

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
PO Box 119  
Gjoa Haven, NU X0B 1J0

Via email: [licensing@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

**RE: 111130 2BE-KIG0812 Areva Resources – Amendment 6 – Type B - Kivalliq Region**

Environment Canada (EC) has reviewed the information submitted with the above-mentioned amendment application as submitted to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act 1999*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

AREVA Resources Canada Inc. is proposing to amend water license 2BE-KIG0912 for its Kiggavik Project. The proposed amendment would allow drilling to continue when low flow artesian flows are encountered to allow for further exploration for uranium deposits as well providing information on the groundwater in the area. This amendment application would replace a previously submitted amendment request, withdrawn by the proponent.

Based on a review of the proposed amendment, EC provides the following comments for the NWB's consideration:

- EC would like to know the proponent's sealing and capping procedures used when containing artesian flow.
- The proponent shall ensure that they have the capacity to contain the volumes of water that may be encountered during low artesian flow for the full duration of the borehole being drilled, and prevent the induced contamination of groundwater or salinization of surface waters if saline conditions are encountered. The proponent shall ensure that the water is contained and not allowed to migrate into fish bearing waters unless it is proven to be non-deleterious. Surface erosion must be prevented.
- The proponent shall report all artesian flow occurrences including the GPS coordinates, dates, artesian flow rates, depth of permafrost, and aquifer data within their Annual Report.
- Water samples shall be taken at each borehole where artesian flow is encountered and analysis results forwarded to the NWB as stipulated in the Water License. The proponent should establish background water quality levels above and below the proposed amended area prior to drilling.

EC should be notified if there are additional proposed changes to the license. Please do not hesitate to contact the undersigned with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at [Paula.C.Smith@ec.gc.ca](mailto:Paula.C.Smith@ec.gc.ca).

Yours truly,



Paula C. Smith  
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO, Yellowknife, NT)  
Ron Bujold (Environmental Assessment Officer, EPO, Yellowknife, NT)  
Allison Dunn (Sr. Environmental Assessment Coordinator, EPO, Iqaluit, NU)