



NIRB File No.: 06AN085  
INAC File No: N2006C0037  
KIA File No.: KVK306C02

August 15, 2007

Barry McCallum  
Manager, Nunavut Affairs  
AREVA Resources Canada Inc.  
817-45<sup>th</sup> Street West  
Saskatoon, SK S7K 3X5

Via email: [barry.mccallum@areva.ca](mailto:barry.mccallum@areva.ca)

**Re: Application Acknowledgement for AREVA's Amendment Request with Indian and Northern Affairs Canada for the Kiggavik-Sissons Project**

Dear Mr. McCallum:

On August 14, 2007, the Nunavut Impact Review Board (NIRB or Board) received an application from Indian and Northern Affairs Canada (INAC) for an amendment to AREVA's "Kiggavik-Sissons" project.

The original application for the above project was acknowledged by the NIRB on December 15, 2006 and screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA). On April 3, 2007, the NIRB issued a 12.4.4(a) screening decision to INAC allowing the proposed project to proceed subject to specific recommended terms and conditions. Project components/activities included the following:

- Satellite remote sensing
- Aircraft remote sensing to collect airborne geophysics data
- Soil sampling supported by helicopter
- Sediment sampling
- On-land drilling supported by helicopter
- Winter overland transportation of goods
- Construction of temporary wooden camp, and expansion of existing structures
- Fuel transportation and storage
- Chemical transportation and storage
- Environmental baseline work consisting of field surveys conducted on foot and supported by helicopter
- Ground geophysical surveys conducted on foot and supported by helicopter
- Geological mapping and prospecting conducted on foot and supported by helicopter
- Possible landing of aircraft with tundra tires on eskers
- Consumption of water and generation of waste

AREVA is proposing to amend their land use permit to include the following additional components/activities:

- Replace current fuel caches that store hundreds of drums (205 litre size) in arctic berms with double-walled tanks (50,000 litre size) to adequately facilitate the 2008 fuel season and future requirements;
- Transportation of tanks to the Kiggavik site via an ice road during the 2007/2008 winter season;
- Use of tanker trucks to fuel all the tanks, access to site will be via the ice road;
- The addition of 2 ATV's and 2 snowmobiles to the equipment list;
- Upgrade the existing diesel powered 35 kilowatt (kW) generator at the Kiggavik camp to a diesel powered 100 kW generator;
- Addition of 4 sleeping quarters, with walkways and expansion of washroom facilities to accommodate growth in personnel for the 2008 field program.

The NIRB has determined that this request results in a change to the original scope of the project. The request by AREVA also includes activities which would occur during the 2008 field season. The proponent should be aware that the land use permit issued by INAC will be reviewed after the expiry of this permit on April 9, 2008, and will be subject to any findings, direction or advice received by INAC and the Kivalliq Inuit Association (KIA) from the Government of Nunavut Department of Environment (GN-DOE) as a result of the 2007 GN/GNWT Population Surveys conducted of the Beverly and Ahik Caribou Herds (NIRB term and condition #1, Screening Decision Report #06AN085).

The INAC application and the original NIRB screening file, 06AN085 are available from NIRB's ftp site at the following link:

[http://ftp.nunavut.ca/nirb/NIRB\\_SCREENINGS/ACTIVE\\_SCREENINGS/2007\\_AMENDMENTS\\_RENEWALS/06AN085-AREVA%20Resources%20Inc/](http://ftp.nunavut.ca/nirb/NIRB_SCREENINGS/ACTIVE_SCREENINGS/2007_AMENDMENTS_RENEWALS/06AN085-AREVA%20Resources%20Inc/)

The NIRB is of the opinion that the request for the amendment does not *significantly* change the general scope of the original project activities. Therefore, the NIRB is *proposing* to re-issue the same terms and conditions as those in the attached April 3, 2007 Screening Decision, along with any new terms and conditions the NIRB feels are appropriate. The NIRB is copying interested Parties and municipalities most affected by this project and we invite interested persons to comment directly to the NIRB by **August 24<sup>th</sup>, 2007**.

The NIRB would like Parties to provide comments regarding:

- whether the proposed component or activity was a part of the original proposal;
- whether its inclusion would significantly modify the project;
- any additional mitigation measures that are appropriate; and
- any other matter of importance to the Party related to the project proposal.

Please send your comments to the attention of the NIRB's Manager of Environmental Administration, Leslie Payette at [lpayette@nirb.nunavut.ca](mailto:lpayette@nirb.nunavut.ca) or via fax to (867) 983-2594.

If you have any questions or concerns, please do not hesitate to contact the NIRB's Technical Advisor Sophia Granchinho at [sgranchinho@nirb.nunavut.ca](mailto:sgranchinho@nirb.nunavut.ca) or by phone 867-983-4606.

Sincerely,



Sophia Granchinho  
Nunavut Impact Review Board

Cc: Distribution List  
Jeff Holwell: Indian and Northern Affairs Canada ([holwellj@inac.gc.ca](mailto:holwellj@inac.gc.ca))  
Steve Hartman: Kivalliq Inuit Association ([shartman@kivalliqinuit.ca](mailto:shartman@kivalliqinuit.ca))

Attachment: April 3, 2007 NIRB Screening Decision  
Comment Form



- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

### NIRB Assessment and Decision

After a thorough assessment of all material provided to the Nunavut Impact Review Board (NIRB or Board) (see Appendix D), the decision of the Board as per section 12.4.4 of the NLCA is:

**12.4.4 (a):** the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

### NIRB Recommendations and Recommended Conditions

Although this project proposal is not located within known calving grounds for the Beverly caribou herds, the Board recognizes that the project area may be used for spring-migration, post-calving, and late summer activities for the Beverly caribou herd. In addition, the Board also recognizes that the Thelon Heritage River is considered to be part of Canada's Heritage River System, and understands that some of the project activities, such as geophysical survey flying, will be taking place approximately 10km from the river. Therefore, the Board is recommending broader terms and conditions because of the sensitivities of the Beverly caribou herd and the importance of the Thelon Heritage River. They are the following:

1. As an overriding consideration, Indian and Northern Affairs Canada (INAC) impose strict mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require AREVA (the Proponent) to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to:
  - a. Location and Area
  - b. Time
  - c. Equipment
  - d. Methods and Techniques
  - e. Control or Prevention of Flooding, Erosion and Subsidence of Land
  - f. Use, Storage, Handling and Disposal of Chemical or Toxic Material
  - g. Wildlife and Fisheries Habitat
  - h. Objects and Places of Recreational, Scenic and Ecological Value
  - i. Petroleum Fuel Storage
  - j. Matters Not Consistent with the Regulations
2. INAC must consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the DIAND Caribou Protection Measures.
3. INAC recognize that any activity related to this application (INAC Land Use Permit application N2006C0037) outside the original scope of the project proposal **will** be considered a new project and must be submitted to NIRB for screening. In addition, NIRB recommends that any renewal requests for the project proposal should be forwarded to NIRB for re-screening.

4. The Kivalliq Inuit Association (KIA) impose strict mitigation measures and/or Environment Terms and Conditions pursuant to the Inuit Owned Lands License (KVK306C02) in regard to:
  - a. General Standards
  - b. Fuel and Chemical Storage
  - c. Campsites
  - d. Fisheries
  - e. Ground Disturbance
  - f. Wildlife
  - g. Any other conditions recommended by the appropriate Community Lands and Resource Committee (CLARC)
5. KIA recognize that any activity related to this application (KIA Inuit Owned Lands License KVL306C02) outside the original scope of the project proposal **will** be considered a new project and must be submitted to NIRB for screening. In addition, NIRB recommends that any renewal requests for the project proposal should be forwarded to NIRB for re-screening.
6. The Government of Nunavut – Department of Environment (GN-DOE) Conservation Officers should conduct random inspections of the project location during the months of May, June, July and August to ensure the Proponent is in compliance with the DIAND Caribou Protection Measures.
7. The GN-DOE should conduct on-going review of wildlife monitoring results submitted from the Proponent as required by the Wildlife Mitigation and Monitoring Plan. Following submission of the required annual report by January 31, 2008 to NIRB, INAC, the KIA and the GN-DOE, the GN-DOE should report to NIRB and INAC its findings regarding the possible impact of the project on the Beverly and Ahiak caribou herds. As noted in correspondence provided to NIRB, the GN recommended a one-year Land Use Approval to be issued, subject to the findings of the 2007 GN/GNWT Population Surveys of the Beverly and Ahiak Caribou Herds.

**In addition, the Board is recommending the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation pursuant to 12.4.4(a) of the NLCA:**

1. The term of the permitted activities associated with Land Use Permit N2006C0037 and Inuit Owned Lands License KVL306C02 is subject to any findings, direction or advice received by INAC and the KIA from the GN-DOE as a result of the 2007 GN/GNWT Population Surveys of the Beverly and Ahiak Caribou Herds.
2. AREVA (the Proponent) shall maintain a copy of this Screening Decision at the site of operation at all times.
3. The Proponent shall forward copies to NIRB of all permits obtained and required for this project prior to the commencement of the project.
4. The Proponent shall operate in accordance with commitments stated in Appendix A and all Operation Plans provided to NIRB, namely:
  - a. Spill Contingency Plan
  - b. Abandonment and Restoration Plan
  - c. Noise Abatement Plan
  - d. Waste Management Plan

- e. Wildlife Mitigation and Monitoring Plan
  - f. Radiation Safety Plan
  - g. Environmental Code of Practice
5. The Proponent shall submit an annual report with copies provided to the NIRB, INAC, the KIA, and GN-DOE by January 31 each year that the project is in operation commencing January 31, 2008. The report must contain, but not be limited to, the following information:
    - a. A summary of activities undertaken for the year and a work plan for the following year;
    - b. The results of environmental studies undertaken and plans for future studies;
    - c. A discussion of the implementation of the Operational Plans, and analysis regarding the effectiveness of the Operational Plans to mitigate adverse environmental impacts;
    - d. Specific to the Wildlife Mitigation and Monitoring Plan: the results from the Caribou Monitoring Program, wildlife encounters and actions/mitigation taken, an analysis of the effectiveness of mitigation measures for wildlife and any anticipated follow-up monitoring program(s);
    - e. A discussion regarding the effects to human health from uranium exploration activities;
    - f. A summary of local hires and initiatives;
    - g. A summary of community consultations
    - h. A summary of site-visits by Land Use Inspectors with results and follow-up actions, including those approvals given by Land Use Inspectors regarding Caribou Protection Measures;
    - i. Site photos;
    - j. Progressive reclamation work undertaken;
    - k. Efforts made to achieve compliance with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*; and
    - l. A summary of how the Proponent has complied with NIRB conditions contained within this Screening Decision, and the conditions associated with all authorizations for the project proposal.
  6. The Proponent shall abide by all DIAND Caribou Protection Measures and those mitigation measures outlined in the Wildlife Mitigation and Monitoring Plan.
  7. The Proponent shall be prohibited to allow aircraft take-offs and landings when groups of caribou are within 1km of the airstrip or helipad.
  8. The Proponent must immediately update its Wildlife Mitigation and Monitoring Plan to include the following requirement:
    - a. Section 2.1 *During June and July* – To avoid injuries to caribou and humans, if one or more caribou approach within **1km** of drilling operations, then activities will be suspended until caribou leave the area.

Any subsequent direction provided by the Government of Nunavut Department of Environment and/or the Kivalliq Inuit Association regarding the Caribou Monitoring Plan must be forwarded to NIRB.
  9. The Proponent shall ensure that there is no hunting or fishing by employees of the company or any contractors hired unless proper Nunavut authorizations have been obtained.
  10. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for*

*Mercury*. Efforts made to achieve compliance shall be reported to the NIRB as part of the annual report.

11. The Proponent shall adhere to conditions stated in attached Appendix B *Archaeological and Palaeontological Resources – Terms and Conditions for Land Use Permit Holders*

12. The Proponent shall avoid the known archaeological and/or palaeontological sites listed in Appendix C.

**Validity of Land Claims Agreement**

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated \_\_\_\_April 3, 2007\_\_\_\_ at Sanikiluaq, NU.



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Lucassie Arragutainaq, A/Chairperson



## **Appendix A**

### **Summary of Proponent Commitments**

1. The disturbances to permafrost will be mitigated by insulating the floors of buildings, and keeping the sump area and incinerator area small, raising the incinerator above the ground.
2. Disturbance to soil and vegetation will be minimized by using walkways. After more than 20 years of camp operation at the site, there is very little sign of disturbance.
3. The impact of helicopter and airplane noise and presence on wildlife and people will be mitigated by avoiding wildlife during flights and avoiding low flying. This will require ongoing communication and diligence.
4. The presence of wildlife will be carefully monitored to ensure minimal disturbance. Daily wildlife sitting records will be maintained and these will be used to plan work so that wildlife disturbance will be minimized. The information will also be provided to management boards and regulatory authorities.
5. Water quality will be protected from spills and drilling by use of protective procedures and containments.
6. Greywater will be treated through sumps and carefully monitored to ensure containment. No garbage will remain onsite.
7. The camp will be decommissioned when no longer used.
8. No fuel, drill cuttings, chemicals, wastes or sediment will be deposited into any water body as per the *Fisheries Act*, Section 36(3).
9. Sumps, including those created for the disposal of drill cuttings will be located above the high water mark of any water body in such a manner as to prevent the contents from entering any water body frequented by fish.
10. Drilling additives or mud will not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water or demonstrated to be non-toxic.
11. Land based drilling will not occur within 30 m of the high water mark of any water body.
12. Materials will not be stored on the surface ice of lakes or streams. Materials on the ice surface must be for immediate use.
13. If an artesian flow is encountered, the drill hole will be immediately plugged and permanently sealed.
14. In terms of the winter road:
  - a. Travel will not begin until the ground is sufficiently frozen to provide support and to avoid surface damage and rutting.
  - b. Stream crossings shall be located to minimize approach grades. Bank disturbance will be avoided and mechanized clearing will not be done immediately adjacent to any watercourse
  - c. Winter lake/stream crossings will be constructed entirely of ice and snow materials; stream crossings will be removed or notched prior to spring break-up

## Appendix B



### BACKGROUND

#### Archaeology

*As stated in Article 33 of the Nunavut Land Claims Agreement:*

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

#### Palaeontology

Under the Nunavut Act<sup>1</sup>, the federal government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*<sup>2</sup>, it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

#### Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

<sup>1</sup> s. 51(1)

<sup>2</sup> P.C. 2001-1111 14 June, 2001

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

## Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.

9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:

- a) survey
- b) inventory and documentation of the archaeological or palaeontological resources of the land use area
- c) assessment of potential for damage to archaeological or palaeontological sites
- d) mitigation
- e) marking boundaries of archaeological or palaeontological sites
- f) site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.

**Appendix C**  
**Confidential Archaeological Sites**

## **Appendix D File History**

On November 29, 2006, the Nunavut Impact Review Board (NIRB) received a project proposal from AREVA for the Kiggavik-Sissons project proposal from the Kivalliq Inuit Association. On November 30, 2006 NIRB notified AREVA that an NPC conformity determination would be required for the project proposal, and also requested additional information from the Proponent. A positive conformity determination was received on December 15, 2006.

On February 1, 2007 NIRB received the requested information from the Proponent, and on February 5, 2007 commenced the Part 4 Screening. NIRB requested interested Parties provide comments to NIRB by February 26, 2007.

The project is located approximately 80km west of Baker Lake.

The project activities include:

- Satellite remote sensing
- Aircraft remote sensing to collect airborne geophysics data
- Soil sampling supported by helicopter
- Sediment sampling
- On-land drilling supported by helicopter
- Winter overland transportation of goods
- Construction of temporary wooden camp, and expansion of existing structures
- Fuel transportation and storage
- Chemical transportation and storage
- Core storage
- Environmental baseline work consisting of field surveys conducted on foot and supported by helicopter
- Ground geophysical surveys conducted on foot and supported by helicopter
- Geological mapping and prospecting conducted on foot and supported by helicopter
- Possible landing of aircraft with tundra tires on eskers
- Consumption of water and generation of waste

This application was distributed to Baker Lake and to interested Federal and Territorial Agencies.

On February 19, 2007 the Government of Nunavut – Department of Environment requested additional time to review the project information. Subsequently, NIRB granted all Parties until March 12, 2007 to provide comments to NIRB.

By March 12, 2007 NIRB received comments from the following interested Parties:

- Mr. Orin Durey of Baker Lake
- The Government of Nunavut Department of Environment
- The Government of Nunavut Department of Culture, Language, Elders and Youth
- The Beverly and Qamanirjuaq Caribou Management Board
- Environment Canada

Concerns regarding the project proposal were expressed by all interested Parties except for the Department of Culture, Language, Elders and Youth.

The main concerns related to:

- Project activities occurring in lands used by Beverly and Ahiak caribou herds for calving and post-calving
- Potential impacts to caribou from drilling, geophysical surveys, unavoidable low-level flights, and aircraft activity in general
- The necessity of a rigorous wildlife monitoring with particular emphasis on caribou
- Potential impacts to humans and wildlife, including grizzly bears, wolverines, wolves foxes, and raptor nesting areas from noise, human-carnivore interactions and general disruption
- Omissions regarding details about the winter road, including concerns related to use of winter trail prior to completion of the NIRB Part 4 Screening process
- Omissions in the Spill Contingency Plan
- Insufficient information contained within the Abandonment and Restoration Plan, such as details pertaining to the disposal of radioactive sediment, reclamation of the helicopter landing pad, testing for contaminated soils
- Potential for cumulative effects with other projects in the area
- Potential for impacts to air quality related to incineration of wastes
- Proximity of the project proposal to the Thelon Canadian Heritage River, and recognition of the Thelon Game Sanctuary Management Plan, the Thelon Wildlife Sanctuary, and the associated Special Management Areas
- Clarification regarding use of eskers to access project locations

One of the specific comments provided by GN-DOE was to limit the time period of the permit to one-year only (2007). This is to allow for additional review in the following year (2008) after completion of the 2007 GN/GNWT Population Surveys of the Beverly and Ahiak Caribou Herds related to herd population trends and the potential impact of exploration activities.

NIRB provided AREVA with the opportunity to respond to all the comments and concerns by March 20, 2007.

On March 20, 2007 NIRB received AREVA's response to Parties' comments, which included the following:

1. Revised NIRB Part 1 Screening Form in English and Inuktitut
2. Revised NIRB Part 2 Screening Form
3. Revised Spill Contingency Plan
4. Revised Abandonment and Restoration Plan
5. Noise Abatement Plan (new)
6. Waste Management Plan (new)
7. Wildlife Mitigation and Monitoring Plan (new)
8. Radiation Protection Plan (new)
9. Revised Figure 2: Project Location
10. Figure 11: Proposed Aerial Survey Blocks for Caribou Monitoring (new)
11. Figure 12: Winter Road Options for 2007 Exploration Program (new)