AREVA RESOURCES CANADA INC.

Submission to the NIRB
Screening Part 2 Form
Project Specific Information Requirements

KIGGAVIK/SISSONS PROJECT

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2. Project Description

General

1) Name and location of proposed project

The Kiggavik/Sisson Project is located within:

MAX Latitude: 64° 45' 6.6" MAX Longitude: 98° 9' 9.7"
MIN Latitude: 64° 10' 33.8" MIN Longitude: 97° 9' 23.3"

The existing Kiggavik camp is located approximately 80km west of Baker Lake. This camp, which will be refurbished (including the addition of three new buildings), is located at 64° 26' 26"N and 97° 39'36"W on NTS map sheet #66/A. The camp will support a uranium exploration program. Please refer to the attached maps.

2) Contact information for proponent(s) and other project contacts

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3) List of acts, regulations and guidelines that apply to project activities

- Article - Nunavut Land Claims Agreement
- Department of Justice (GN) - Labour Standards Act and Fairness Practices Act
- Department of Health and Social Services (GN) - Public Health Act - Camp Sanitation Regulations, Water Supply Regulations
- Department of Environment (GN) – Spill Contingency Planning and Reporting Regulations
- Indian and Northern Affairs Canada - Territorial Land Use Act - Territorial Land Use Regulations (for Land Use Permit), Canada Mining Regulations
- Nunavut Water Board (NWB) – Nunavut Water and Nunavut Surface Rights Tribunal Act (for Water Licence) - Interim Procedures and Information Guide for Applicants, Interim Rules of Practice and Procedure for Public Hearings
- NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- NWTWB - Guidelines for Contingency Planning

- Fisheries and Oceans Canada (DFO) - Freshwater Intake End of Pipe Fish Screen Guideline (Fisheries Act - s.35)
- RWED (what is this?) - Environment Protection - Spill Contingency Regulations
- Heath Canada – Guidelines for Drinking Water Quality
- Transport Canada and Department of Community and Government Services (GN) - Transportation of Dangerous Goods Act - Transportation of Dangerous Goods Regulations
- Environment Canada – Canadian Environmental Protection Act

4) List of approvals, permits and licenses required including the authorizing agency, activity to which the authorization applies, and dates

Approvals, permits, licenses required	**Agency**	**Applicable activities**	**Date of duration**
Water Licence (Submitted November 9, 2006)	Nunavut Water Board	Obtain water and mange waste to run summer field programs (drills, drinking water, etc).	March 1, 2007 to March 1, 2009
Land Use Permit #N2006C0037 (submitted November 9, 2006)	Indian Northern Affairs Canada	Carry out summer prospecting, exploration, and drilling program, including running an exploration camp.	March 1, 2007 to March 1, 2009
Access to Inuit Owned Land – Land Use and Water Use Licence KVL306C02 (Submitted November 9, 2006)	Kivalliq Inuit Association	Access to Inuit owned land to carry out summer prospecting, exploration, and drilling program, including running an exploration camp.	March 1, 2007 to March 1, 2009
Conformity Check (dated December 15, 2006)	Nunavut Planning Commission	Conformity with Land Use Plan.	March 1, 2007 to March 1, 2009

Project Information

5) History of the site

The Kiggavik Sissons Project is a uranium surface exploration project located approximately 80 km west of Baker Lake. The project is made of two large groups of mining leases and mineral claims subdivided into Kiggavik to the north and Sissons to the south. The Kiggavik camp was first established in 1977 and it was occupied for drill programs until 1997. During peak years, this camp accommodated up to 50 persons. Site clean up activities were undertaken in 2003 and 2004, which included repairing buildings to prevent further deterioration and demolishing those that were beyond repair. Currently, there are 10 buildings of various functions located throughout the Kiggavik camp site, as well as core shack and core storage at the Sissons site, and a small core storage area at the former camp at Pointer Lake. Exploration drilling has not taken place at the project since the end of the 1997 field season.

6) Map of the project site within a regional context indicating the distance to the closest communities

The Kiggavik site is located about 80 km west of Baker Lake. Figure 1 shows the location of the site in relation to communities. Figures 2 shows the leases and boundaries of project activities. Figure 3 shows the leases in relation to Inuit owned land.

7) Map of any camp site including locations of camp facilities

Figure 6 shows the location of the existing camp and the proposed additions. Figures 7 and 8 are aerial photos taken of the camp site in 2003 and in 2006.

8) Map of project indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife

Figure 2 shows the project leases and boundaries in relation to Beverly Calving Area Critical Wildlife Areas and caribou crossings as provided by KIA. Figures 4 and 5 show the location of infrastructure in relation to the water bodies nearby and the proposed drilling program locations and sources of drilling water. Figure 6 shows the location of existing buildings at the Kiggavik site and the proposed locations of new buildings. Figures 7 to 9 are aerial photographs of the camp and core storage areas.

9) Type of mineral resource under exploration. Indicate if the mineral of interest is any of the following.

- **Base metals –** no
- **Diamonds** – no
- **Uranium** - The Kiggavik Sissons Project is a uranium exploration project
- **Other –** Precious metals (gold and platinum)

10) Project need and purpose

The main objectives of the proposed field program for 2007 and 2008 are:

i) To gather additional information about the known mineral deposits and their setting to determine if these deposits can be safely and economically extracted while protecting the environment (i.e., is the project viable?)

ii) To learn more about the environment, the land and its people so that the project can be designed to protect the environment and people and to bring meaningful benefit to the people.

iii) To further explore the area for potential for additional resources.

In order to achieve these goals, a program of prospecting, exploration, diamond drilling, and environmental baseline work will be required. The details of the program are currently being finalized, and will be forwarded in the near future. To support the program, a temporary camp will be re-established at the current Kiggavik camp.

11) Alternatives to the project and alternatives to the project components

There are no alternatives to the proposed 2007/2008 program as the required information cannot be gathered without the field program. It is expected that the additional field information will assist AREVA to best achieve sustainable development objectives of protecting the environment, maximizing benefits to the people of the region, and designing a technically, economically, and environmentally viable project.

With respect to alternatives to the project components, two aspects were and are being considered:

i. Possibilities of drilling prior to snow melt to better protect the terrestrial environment. This alternative was evaluated and subsequently rejected as it was considered to be not practical. The lakes and ponds in the vicinity of the proposed drilling locations are shallow and freeze to the bottom. Larger lakes with potential to access water in winter were found to be too far from drill sites. Various mitigative measures and "best practice" have thus been identified to minimize impact (e.g., using a helicopter to move the drill rig).

ii. Camp location and infrastructure. A number of potential camp locations were identified, including refurbishing the existing Kiggavik camp. The residents of Baker Lake and various regulatory agencies will be consulted this summer (2007) to discuss the advantages and disadvantages of moving the camp to a new location. In the interim, the existing Kiggavik camp will be refurbished to carry out the 2007 summer program.

12) Type of exploration activity

- **Geophysical work (indicate ground and/or air) –** yes (ground and air). May include gravity and resistivity.

- **Exploration drilling –** on land exploration drilling in 2008 or 2009 if indicated by geophysical data.
- **Exploration stripping and or trenching** - no
- **Deposit drilling/preliminary delineation drilling –** primarily deposit drilling to gather samples for laboratory testing and for gathering geological, geotechnical, and hydrogeological data in 2007; further delineation drilling in 2008, in addition to drilling for gathering site data
- **Bulk extraction/detailed delineation drilling** - no
- **Other**

13) Activities included in this project

- Satellite remote sensing – satellite photos may be taken
- Air craft remote sensing – *airborne geophysics data will be gathered*
- Soil Sampling - soil sampling will be carried out on foot supported by helicopter, and this activity is expected to have little to no disturbance
- Sediment sampling – carried out for 1990 Environmental Assessment for the proposed Kiggavik Project. Additional sediment sampling will be carried out.
- On land drilling (indicate drill type) - diamond drilling will be conducted using helicopter portable drill rigs (~ Boyles 25A), and the drill will moved by helicopter to minimize impact.
- On ice drilling – no
- Overburden removal – no
- Road use and/or construction – None other than overland winter transport.
- Air strip use and/or construction – Possible landing of fixed wing aircraft with tundra tires on eskers near the sites.
- Camp use and/or construction - A temporary wooden camp will be established at the Kiggavik site by refurbishing what is currently there and supplementing with additional new buildings, including: 1 storage shed/generator/shop shack (former kitchen), 1 dry building (new), 1 kitchen (new), 2 offices, 7 sleeping units, 1 latrine shack (new), 2 fuel storage areas (new containment berms), incinerator (may be simple unit, i.e.drums), and a greywater sump. SK Construction has been contracted to repair the existing camp and construct 2 new buildings. The camp will be powered by a 30-35 kw genset with appropriate electrical and plumbing.
- Fuel Transport and Storage - the fuel for the project will delivered by overland haulage during the winter. Additional fuel, if required, will be transported by aircraft (fixed or rotary wing) during the summer. The fuel cache will be located at the camp in an area which forms as much of a natural depression as is available while maintaining a distance of a minimum of 100 metres from the high water mark of any nearby water bodies. The aviation fuel, diesel, and unleaded gasoline are contained in 205 litre drums. Each drum will be inspected immediately upon delivery to the cache site to ensure that there has been no damage during transport. Daily inspections will be conducted of the fuel cache. All fuel will be stored accordingly with all terms, conditions and requirements of licences and permits issued for this project.

- Explosives transport and storage – no
- Chemical Transport and Storage - Lubricants and drill additives will be stored in a floored ten or wooden buildings. AREVA will register with EPS and a waste manifest will accompany all movements of hazardous waste.
- Pit and/or quarry – no
- Work within navigable waters - no
- Other - Environmental baseline work consisting of preliminary field surveys conducted on foot and supported by helicopter (wildlife, bird checklist surveys, bird transects, raptor nest survey, waterfowl nesting habitat survey, predator denning sites, water sampling)

  - Geological mapping and prospecting conducted on foot and supported by helicopter with little to no disturbance to the environment

  - Geophysical surveys - ground geophysics (possibly in 2008) will be conducted on foot, supported by helicopter with little to no disturbance to the environment

14) Department of Fisheries and Oceans (DFO) Operational Statement (OS) activities that apply to the project proposal:

- Bridge maintenance – no
- Clear span bridge – no
- Culvert maintenance – no
- Ice bridge – no
- Routing maintenance dredging – no

15) If any of the DFO OS apply to the project proposal, does the Proponent agree to meet the conditions and incorporate the measures to protect fish habitat as outlined in the applicable OS? If yes, please provide a signed statement of confirmation.

Not applicable.

15) Schedule for the above activities

Not applicable.

Geophysical

17) Indicate on map the boundary subject to air and/or ground geophysical work.

Airborne Gravity Gradiometer surveys will be conducted (See Figure 10, the limits of the survey are outlined by the overlying light magenta polygon).

18) Provide flight altitudes and locations where flight altitudes are below 300m.

The fixed wing survey aircraft will fly at approximately 90 to 100 m altitude above the ground surface. Limits of the survey are outlined in Figure 10. Caribou and other wildlife presence and movement will be taken into account.

Drilling

19) The number of drill holes and number of metres (provide estimates and maximum where possible)

A total of 13 to 22 diamond drill holes corresponding to about 4,500 metres to 7,000 metres of diamond drilling are planned for 2007. A total of about 11,000 metres are planned in 2008.

20) Drill additives used

The exact drill additives are not known at this time. MSDS sheets of the most common additives (e.g., Poly-drill 133-x, 550X Polymer, Calcium chloride dehydrate) are found in "AREVA Resources Inc. Spill Contingency Plan, Kiggavik Sissons Project". AREVA will ensure that the additives are non-toxic and biodegradable and will update the Spill contingency Plan with appropriate MSDS sheets once the additives have been determined.

21) M**ethod of dealing with drill cuttings**

All drill cuttings will be collected in a sump located a minimum of 31 meters from the normal high water mark of any water body. The sump will be back filled upon completion of the hole. Drill cutting in ore (>1µSv/h at 1 m) will be collected in drums and/or buckets and stored on-site in a designated area (currently a fenced-in area at Kiggavik camp site).

22) M**ethod for dealing with drill water**

Drill water will be directed to a sump and a series of settling tanks prior to being re-circulated for drilling. Radioactive sediment (>1µSv/h at 1 m) will be collected in drums and/or buckets and stored on-site in a designated area (currently a fenced-in area at Kiggavik camp site).

23) Describe how drill equipment will be mobilized

One drill, currently located in Baker Lake, will be transported to site via overland winter haulage. The second drill will also be transported via overland winter haulage if it is secured in time, or flown out by helicopter if it cannot be secured until after spring thaw. Once at the project site, the drill will be flown from location to location via helicopter.

24) Describe how drill holes will be abandoned

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned or flown out to an approved disposal location (approval from Baker Lake pending). Grey water and sludge sumps will be filled and leveled. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site.

25) If project proposal involves uranium exploration drilling, consider the potential for radiation exposure and radiation protection measures.

Radiation protection measures in accordance with AREVA's Exploration Department Radiation Protection Procedures Manual will be carried out throughout the project. The radiation protection procedures include dose assessment and planning, worker dose monitoring, area monitoring, and taking radiation readings.

Transport

26) Describe how the site will be accessed and how supplies will be brought to site.

The site will be accessed via overland winter route when possible, and by air from Baker Lake. New camp buildings, construction material, main load of fuel and the drill will be brought to site from Baker Lake via overland transport on frozen ground. Single or twin Otter aircraft and helicopter will be used to transport supplies, fuel, and personnel when overland winter travel is not feasible.

27) If an airstrip is being used or constructed provide a description and its location

There is no formal landing strip proposed at this time. Nearby eskers will be used for landing single and twin Otter aircrafts equipped with tundra tires, as was previously done. Minor grading may be required on the eskers. The locations of the eskers that may be used for landing are:
N 64 deg 26 min 11 sec; W 097 deg 37 min 54.6 sec (Figure 4)
N 64 deg 25 min 35.6 sec; W 097 deg 43 min 20.9 sec (slightly west of Figure 4)
N 64 degrees 21 minutes 4.3 seconds W 097 degrees 52 minutes 22.2 seconds (Figure 5)

28) Describe Expected Flight Altitudes

Flights to and from the site will be flown at altitudes higher than 300 metres unless safety or cloud ceilings do not permit. Flights near caribou and other large mammals will be avoided. Wildlife sighting and disturbance records will be kept. Geophysics flights (Section 18) will be flown below 300m, as required to gather data. Flight crews will be given an information session on flight altitudes, wildlife sightings and wildlife disturbance avoidance and reporting.

Camp Site

29) A list of existing and proposed camp structure and infrastructure

The proposed wooden main camp will consist of the following:

- 1 - storage shed, generator shack and shop (formerly kitchen)
- 1 - dry building (new)
- 1 – kitchen/ dining (new)
- 2 - offices (refurbish existing buildings)
- 7 sleeping units (refurbish existing units)
- 1 - latrine shack (new)
- 2 - fuel storage areas (new containment berms)
- Greywater sump
- 1 – incinerator (for combustible waste)
- 2 – helicopter landing pads (refurbish existing pads)

Figure 6 shows the camp layout.

30) Describe the type of camp

- Mobile – the new buildings are on skids so that they can be moved to another location, if need be.
- Temporary – other potential camp sites will be identified and evaluated during the 2007 season – it is thus possible that the camp will be moved to another location during the 2007/2008 winter
- Seasonal – the camp will be used for the duration of the summer field program and prepared for wintering at the end of the season
- Permanent – no
- Other - no

31) Maximum number of people expected on site

The maximum number of people at the camp will be approximately 32 in 2007 and 40 in 2008.

32) Describe the source of power for the camp

Power will be supplied by diesel generators. It is planned that a 30 to 35 kW generator will be used to power the camp, and a number of small (5kW) generators will be used for localized or backup power.

Equipment

33) A list of equipment indicating uses and approximate dimensions

Please refer to Screening Part 1 Form, Section 4, question 1. The main equipment that will be utilized are:

- helicopter – Astar 350 or similar equipment
- Boyles 25A Diamond Drill - approximately 3m by 3m
- Second diamond drill of similar type and size
- generator – 30 to 35 kW and backup system
- water pump for camp and drill – small

34) If possible, provide digital photos of equipment

Digital photos of equipment are not available at this time but can be taken this field season and provided in the annual report.

35) Method of moving equipment within the project site

Equipment will be moved by helicopter within the project site.

Water

36) Location of water source(s)

The water source for the camp will be the small unnamed lake located to the northwest of the camp site. Water sources for the diamond drilling will be small lakes close to the individual drill sites. See Figures 4, 5 and 6 for locations of water supplies.

37) The estimated rate of water consumptions (L/d)

Water consumption for the proposed activities is estimated at 100,000 L/d (100 m^3/d), including 100 L/d per person for camp usage. Exact volumes of water consumption will be reported in the annual reports.

38) Describe water intakes. Describe methods for prevention of fish entrapment

Water intakes will be designed to meet DFO guidelines for screens to prevent entrapment of fish. That is, the intakes of the water pumps will be equipped with a screen, with a

mesh size small enough to prevent any danger to fish. Pumping rates will be sufficiently low so as to prevent the impingement of fish on the pump intake screen.

Waste

39) Characteristics, quantities, treatment, storage, transport, and disposal methods for the following:

a) Sewage – *it is estimated that about 0.02 m^3/d per person of camp sewage will be generated, which will be incinerated on-site and/or placed in latrine sumps. Latrine sumps will be treated with lime if necessary and/or as advised by the Water Resource Officer and back-filled for closure.*

b) Camp greywater – *it is estimated that about 6 m^3/d of camp greywater will be generated. Greywater will be disposed-of in a sump to be located a minimum of 31 m from the normal high water mark of any waterbody, unless otherwise specified in the terms and conditions of permits and licences.*

c) Combustible solid waste – minimal quantities of this type of waste will be generated. Combustible waste such as food, paper and wood will be incinerated on a daily basis using a modified 45 gallon drum or an incinerator. Residue will be removed to municipal disposal.

d) Non-combustible waste – minimal quantities of this type of waste will be generated , which will be removed from site and taken to Baker Lake, once authorization for disposal has been granted.

e) Bulky items/scrap metal - minimal amount of this type of waste will be generated. Items will be removed from site by surface transport in the following winter for proper disposal, recycling and/or re-use.

f) Waste oil/hazardous waste – minimal quantity of this type of waste is expected to be generated. Waste of this nature will be removed from site for proper disposal or used to incinerate waste materials. If removed for off-site disposal, these materials will be registered and have a waste manifest.

g) Empty barrels/fuel drums - *will be removed from site via overland winter haulage or aircraft backhaul to be returned to Baker Lake for recycling either there or barged south.*

h) Other – None anticipated.

Fuel

40) The types, quantities (number of containers, type of containers and capacity of containers),method of storage, method of containment, location of storage (shown on map) and uses.

Fuel types	Number of containers for 2007	Type and capacity of containers
P-50 diesel mainly to generate power	**365 to 500**	205 litre drums
Jet B Aviation fuel for helicopter usage	**300**	205 litre drums
Unleaded gasoline for portable generators	**5**	205 litre drums
Propane for cooking and appliances	**25**	45 kg cylinders

Additional fuel that may be required in the summer will be delivered via a helicopter or a turbine otter from Baker Lake.

Method of storage and containment - fuel will be stored on-site within a secondary containment (e.g., rubberized berm or other suitable berm construction) with sufficient capacity to handle 110% of the total fuel volume plus the size of the largest container. Doubled-wall envirotanks may be used in 2008 and subsequent years.

Fuel cache location – fuel will be located at two main fuel cache locations at the Kiggavik camp (97° 39’ 28” W., 64° 26’ 26” N) and near the core logging shack at the Sissons site (97° 52’ 44” W., 64° 19’ 54” N). These locations are shown in Figures 4, 5 and 6.

41) Describe secondary containment measures including the type of material or system used (for storage of fuel over 4000 L)

As noted above, and further detailed in the Spill Contingency Plan, a suitable secondary containment with sufficient capacity will be used. For 2007, this will be manufactured berm containment. Envirotanks are being considered for 2008. The fuel storage area will be located a minimum of 100 metres from the normal high water mark of any waterbody and will be located in a natural depression if possible. A spill kit will be located at each of the fuel cache.

42) Describe the method of fuel transfer and the method of fueling

The fuel will be transferred from the 205 litre drums to the equipment needing refueling using manual or battery powered pumps.

Chemical and Hazardous Materials

43) The types, quantities (number of containers, the type of containers and capacity of containers), method of storage, method of containment, location of storage (shown on map), and uses.

The main chemicals present on site will consist of lubricants and drill additives which will be stored at the camp within a secondary containment inside the buildings designated for this purpose (i.e., the storage shed, formerly used as kitchen). The types and quantities of chemicals and hazardous materials have yet to be determined. This information will be forwarded as soon as it becomes available. At each of the drills, a limited quantity of these chemicals will be kept for use.

44) Describe any secondary containment measures including the type of material or system used

Chemicals and hazardous materials will be stored within a secondary containment system. For more information please refer to Section 5 of the Spill Contingency Plan.

45) Describe the method of chemical transfer

The drill additives will be transferred according to the manufacturers guidelines and the operating procedures of the drill contractor.

Explosives

46) Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), and method of storage.

No explosives will be used, thus not applicable.

Public Involvement / Traditional Knowledge

47) Describe the level of public involvement, a summary of public involvement measures, a summary of concerns expressed, and methods of addressing concerns

AREVA has opened an information office in the community of Baker Lake. The office is opened daily and staffed by a Community Liaison Officer. AREVA has formed a Community Liaison Committee comprised with representatives from Hamlet, Hunters and Trappers Organization, District Education Authority, Elders group, Youth Group, Health Committee, and Justice Committee. The committee normally meets once per month to discuss the Kiggavik-Sissons project and its progress.

During 2006, AREVA made presentations to or met with various groups including:

Hunters and Trappers Organization – Baker Lake
CLARC - Baker Lake
Hamlet Council – Baker Lake
Inuit Heritage Centre – Baker Lake
Highschool career fare and graduation – Baker Lake
KIA – Rankin Inlet

LPAC – meeting in Toronto
Community of Baker Lake at an open house/ feast for the grand opening of the AREVA office.
BQ Caribou Management Board – Winnipeg

Concerns expressed are mostly concentrated in the areas of protecting the environment, particularly caribou, keeping the community and informed, and bringing work to Baker Lake people. Concerns are addressed as quickly and directly as is practical. AREVA is working with the BQ Caribou Management Board in the areas of best practices and population research and will review environmental protection and wildlife protection procedures to incorporate comments received. For example, a daily wildlife siting record will be kept and KIA records will be incorporated into AREVA procedures. The community is being kept informed through the information office, which is open 5 days a week, and through periodic updates to stakeholder organizations. The community is kept involved through the Community Liaison Committee, which represents stakeholder organization in Baker Lake and which normally meets once per month. Employment of locals through direct employment and through contractors is maximized. At the recommendation of the CLARC, a several groups (totaling 17) of Aberdeen Lake people were taken to the project site and also to their traditional homeland. At the request of the HTO, a group of Athabascan Hunters will be brought to Baker Lake to meet with the HTO.

Part 3 Description of the Existing Environment

Physical Environment
The Baker Lake Project is located south of Baker Lake in Nunavut Territory. Baker Lake is located on tidewater making it accessible by oceangoing barge for approximately six weeks each year. The project area is completely within the sub-Arctic barren lands north of the tree line. The tundra is flat to gently rolling with topographic relief ranging generally between 150 and 300 metres above sea level. There are several eskers in the area and the tundra is underlain by continuous permafrost.

The summer field season is limited to the period from late May to late September due to the Arctic climate. There are many challenges to operating a camp and exploration program in the Arctic. Weather plays an integral role in the start dates and end dates of seasonal programs. As well there can be many weather days. It is critical that personnel working in these conditions understand the climate that they are working in and are fully trained in all areas of safety.

Geological Environment
The property lies within an ENE trending belt of Proterozoic Aphebian metasediments which are part of the Churchill structural province.

Within the Kiggavik ore zone metasediments consist of meta arkose and pelitic units commonly referred to as “dirty quartzite”. They are overlain by the so called “ortho

quartzite" consisting of schists and monomineralic quartzite. Both quartzite unites are intruded by granite and syenite stocks and dykes. A diabase dyke of Hadrian age cross cuts the main ore zone.

Some 2 km north of the Kiggavik area down faulted Middle Proterozoic Thelon sandstone is separated from the older Aphebian metasediments by a major fault zone trending ENE.

Uranium mineralization at Kiggavik is hosted in metasediments and late Hudsonian granites. Uranium mineralization is characterized by an alteration halo around the ore body itself. Primary uranium minerals are pitchblende and coffinite.

In the Kiggavik area itself three ore zones have been identified: Main Zone-Centre Zone and Eastern Zone.

More uranium is found SW of Kiggavik along a NE-SW trend: Bong-End Grid and Andrew Lake. Uranium at Andrew Lake occurs in three different lenses and is hosted within strongly altered illitic metasediments and some granite intrusive. It is structurally controlled. At End grid all the mineralization is found within altered metasediments. The mineralization at Bong is located within altered metasediments in close proximity to a structural zone.

Biological Environment

The property lies within the Low Arctic Ecosystem and is characterized by a continuous vegetation cover broken only by bedrock outcropping or active aggraded surfaces. This continuous vegetation cover is composed of a variety of foliose, squamulos and fruticose lichens, together with various moss species in the surface ground layers, by ericaceous shrub and health species, and by a variety of herbs, grasses and sedges.

The wildlife in the Kiggavik area consists of a number of large mammals such as caribou, small mammals such as hare, sik sik and fox, and a variety of birds.

The most commonly occurring avifauna species in the Kiggavik area are: Lapland longspurs, ptarmigans, horned larks, herring gulls, oldsquaws, dunlins, golden plovers, Baird's sandpipers, arctic terns, sandhill cranes and Canada geese. Five species of raptor are also observed in the Kiggavik area. These are, in order of abundance, the rough-legged hawk, peregrine falcon, short-eared owl,, gyrfalcon and snowy owl.

The two major barren-ground caribou herds in the area are the Beverly herd and the Qaminurjuaq herd. Traditional calving grounds of these herds are to the northwest and southeast of the property. Spring migration routes of the Beverly and Qaminurjuaq herds to reach their calving grounds are generally west and east of the property. Summer migration of the Beverly herd follows the same corridor as the spring. Two water crossings used by the Beverly herd during summer migration occur near the east end of Aberdeen Lake to the west of the property.

A number of small mammal species are found near the Kiggavik area. The four major species, in decreasing order of abundance are the red-backed vole, brown lemming, Greenland collared lemming and meadow-vole. Other mammals sighted in the Kiggavik area include the snowshoe hare, arctic hare, arctic ground squirrel, wolf, arctic fox, barren-ground grizzly bear, ermine, and musk-ox.

The aquatic environment in the Kiggavik area consists of a number of ponds, lakes, and streams that support a variety of aquatic life. Water draining the Kiggavik area reaches Judge Sissons Lake,, which empties into the Aniguq River, which flows eastward into the western end of Baker Lake.

There is limited, poor macrophyte development in the lakes. Total biomasses of phytoplankton determined from samples collected in 1979 and 1989 were low, generally ranging between 100 and 300 mg/m^3. Crustacean zooplankton densities in Pointer, Jaeger, Scotch and Judge Sissons lakes in 1979 ranged from 0.4 and 9.6 organisms per litre. Benthic communities in Kiggavik lakes are typically low in number and dominated by various chironomids (midge flies) and the pea clam, pisidium. Other benthic fauna, found in stomachs of fish taken in a 1986 netting program include stoneflies, caddisflies, and amphipods.

Four major fish species (lake trout, arctic grayling, round whitefish and cisco) are broadly distributed within the Kiggavik project area, where habitats are suitable.

Socioeconomic Environment
The project area is located near the community of Baker Lake. There are many known heritage and archaeological sites near the community. AREVA will work closely with the community of Baker Lake to ensure that no areas are disturbed and that sensitive areas are avoided and respected. New archaeological information will be reported. The project Community Liaison Committee of Baker Lake stakeholder groups will be kept informed and will provide advice to the project participants. The project area is infrequently used for trapping and hunting.

Further information about the existing environment can be found in the 1990 Environmental Assessment reports prepared for a previous proposed development at the site.

Part 4 Identification of Impacts

1) See attached Table 1 – Identification of Environmental Impacts. It lists activites and classifies impacts.

2) No long term significant environmental impacts are anticipated due to the described project. Minor disturbances to the surface soil, vegetation, and permafrost may be caused by the drilling and the camp but these areas will all be reclaimed immediately upon completion of the drill sites and the program. Water quality could potentially be impacted by fuel spills or drilling releases. Air quality will be impacted slightly by

burning fuel in aircraft, the genset and by the incineration of garbage. Noise will be generated by mechanical equipment including equipment used to transport the camp, the genset, the helicopters and fixed wing aircraft. All geological, prospecting, and geophysical work will be conducted on foot which will cause little to no impact.

3) The socioeconomic impact will be positive in the form of employment, work experience, and purchase of local supplies. The proposed project will bring employment to Baker Lake through direct employment at the camp as technicians and camp assistants and through construction, setup, operation and supply camp employees and technicians.

4) We do not anticipate any transboundary effects from this project due to its remoteness from boundaries.

Part 5 Mitigation of Impacts

Mitigation of impacts will be accomplished by the following approaches: avoidance, minimization, barriers, procedures, and rehabilitation.

- 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.
- 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.
- 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.
- The presence of wildlife will be carefully monitored to ensure minimal disturbance. Daily wildlife siting 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.
- Water quality will be protected from spills and drilling by use of protective procedures and containments.
- Greywater will be treated through sumps and carefully monitored to ensure containment. No garbage will remain onsite.
- The camp will be decommissioned when no longer used.

Further information is contained in AREVA's Environmental Code of Practice and Spill Response Plan.

Part 6 Cumulative Effects

1) Cumulative effects at this stage are limited to the total amount of aircraft that will be involved in similar activities in the region. Aircraft impacts will be minimized by training, communication and diligence. The size and scope of any future project will be determined by the results of the exploration program.