

SCIENTIFIC RESEARCH LICENCE APPLICATION LAND, FRESHWATER & MARINE BASED RESEARCH

NRI strongly recommends that applicants review the following documents prior to submitting an application: *Scientific Research Licencing Guidelines* and *Negotiating Research Relationships in Inuit Communities: A Guide for Researchers*.

For more information about the Nunavut Research Institute (NRI) please visit our web site www.nri.nu.ca

IMPORTANT

This application fulfills the requirements for the NIRB environmental screening. Please be advised that your application will not be processed until the application form, project summary, and maps are received.

SECTION 1: APPLICANT INFORMATION

1a. Project Title AREVA Kiggavik Project 2013 Aquatic Data Collection

1b. Project Number

Please indicate if applicant has submitted any previous application(s) to NRI Yes No
related to this project proposal? x

If yes, please indicate the previous NRI licence numbers: 0300608R-M, 0301009R-M, 0301409N-A

Please indicate if applicant has submitted any previous application(s) to NIRB Yes No
related to this project proposal? x

If yes, please indicate the previous NIRB project number(s): NIRB File No. 09MN003

2. Applicant's full name and mailing address:

<u>Mr. Brent Topp</u>	Phone: <u>(306) 667-1189</u>
<u>Golder Associates Ltd., 1721 8th Street East</u>	Fax: <u>(306) 665-3342</u>
<u>Saskatoon, Saskatchewan, S7H 0T4</u>	Email: <u>Brent_Topp@golder.com</u>

3. Field Supervisor's name and mailing address:

<u>Ms. Francine Audy, Aquatics Specialist</u>	Phone: <u>(306) 667-1158</u>
<u>Golder Associates Ltd., 1721 8th Street East</u>	Fax: <u>(306) 665-3342</u>
<u>Saskatoon, Saskatchewan, S7H 0T4</u>	Email: <u>Francine_Audy@golder.com</u>

4. Other Personnel list (name, position, affiliation)

<u>Ross Phillips, Water Resources, Golder Associates Ltd</u>	
<u>Aquatics technician 3 TBD, Golder Associates Ltd</u>	
<u>Aquatics technician 4 TBD, Golder Associates Ltd</u>	

SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

Note: Application for DFO permit is being submitted concurrent to this application

<input type="checkbox"/> Regional Inuit Association (RIA)	<input type="checkbox"/> Canadian Launch Safety (CLS)
<input type="checkbox"/> Nunavut Water Board (NWB)	<input type="checkbox"/> Environment Canada (EC)
<input type="checkbox"/> Nunavut Planning Commission (NPC)	<input type="checkbox"/> Department of Environment (GN)
<input type="checkbox"/> Department of Indian And Northern Development (DIAND)	<input type="checkbox"/> Department of National Defense (DND)
<input checked="" type="checkbox"/> Department of Fisheries and Oceans (DFO)	<input type="checkbox"/> Hamlet
<input type="checkbox"/> Community Government & Services (CG&S)	<input type="checkbox"/> Parks Canada (PC)
<input checked="" type="checkbox"/> Nunavut Research Institute (NRI/GN)	<input type="checkbox"/> Canadian Wildlife Service (CWS)
<input type="checkbox"/> Department of Culture, Language, Elders, and Youth (CLEY/GN)	<input type="checkbox"/> Other (please specify): _____

2. List the active permits, licences, or other rights related to the project proposal and their expiry date:

The following active licenses for AREVA's Kiggavik Project are included below. This application is for the proposed 2013 Aquatic Data Collection survey providing additional aquatic baseline data to support the Kiggavik Project final environmental impact statement.

- **AANDC** N2009C0017 expires April 9 2014
- **KIA** KVL306C02 expires January 3 2014
- **NWB** 2BE-KIG1318 June 13 2018
- **WSCC** Approval expires December 31, 2013

3. Have you applied for all authorizations required to conduct the project proposal activities?

☒ YES

☐ NO

SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the activities related to the project proposal:

<input type="checkbox"/> Temporary camp (to be removed at end of field season)	<input type="checkbox"/> Soil disposal/ soil storage
<input type="checkbox"/> Permanent camp (to remain for life of authorization)	<input type="checkbox"/> Incineration of combustible wastes and removal of non-combustible wastes
<input type="checkbox"/> Construction of recreational or safety cabin	<input type="checkbox"/> River/ stream/ lake crossing or work/ bridge
<input type="checkbox"/> Temporary fuel storage (to be removed at end of field season)	<input type="checkbox"/> Drainage alteration
<input type="checkbox"/> Permanent fuel storage (to remain for life of authorization)	<input type="checkbox"/> Geoscientific sampling by diamond drilling
<input type="checkbox"/> Placement of structures for life of permit (other than camp or cabin – i.e. scientific instruments)	<input type="checkbox"/> Geoscientific sampling by soil sampling
<input type="checkbox"/> Placement of permanent structures (other than camp or cabin – i.e. scientific instruments)	<input type="checkbox"/> Geoscientific sampling by trenching
<input type="checkbox"/> Air surveys (i.e. geophysical, wildlife)	<input type="checkbox"/> Geoscientific sampling by borehole core
<input checked="" type="checkbox"/> Use of aircraft/watercraft/land vehicle for personnel drop-off and pick-up to project location	<input type="checkbox"/> Blasting
<input checked="" type="checkbox"/> Use of on-site mechanized vehicles (i.e. zodiacs)	<input type="checkbox"/> Channeling
<input type="checkbox"/> Sewage or grey water disposal via sump	<input type="checkbox"/> Excavation
<input type="checkbox"/> Hazardous waste storage or disposal	<input type="checkbox"/> Hydrological testing
<input type="checkbox"/> Solid waste disposal	<input type="checkbox"/> Abandonment and restoration
<input type="checkbox"/> Chemical storage	<input type="checkbox"/> Site restoration (fertilization/ grubbing/ scarification/ spraying/ recontouring)
<input type="checkbox"/> Explosives storage	<input type="checkbox"/> Research
<input type="checkbox"/> Soil testing	<input checked="" type="checkbox"/> Ecological survey
	<input type="checkbox"/> Harvesting
	<input type="checkbox"/> Removal of vegetation for scientific purposes
	<input type="checkbox"/> Other:

2. PersonnelTotal No. of
personnel on
site = (A)**4**Total No. of
days on-site
= (B)**14**Total No. of Person days
(A) × (B) =
56**3. Timing**

Period of operation:

August 12, 2013

to

August 26, 2013Proposed term of
authorization:**August 1, 2013**

to

September 5, 2013**Please outline the phases of the proposed project (construction/ operation/ decommissioning) including the timing and scheduling of each phase.**

The research project will make use of AREVA's existing exploration camp and permits (listed above). Data collection will be carried out during one field visit over a period of two to three weeks. The proposed dates include a two week period August 12th to August 26, 2013.

4. Location(s) of data collection:

Location Name	Region North Baffin, South Baffin, Kivalliq, Kitikmeot	Co-ordinates Lat (degree / minute), Long (degree / minute)	NTS Map Sheet #	Land Status Crown, Commissioners', Inuit Owned
Judge Sissons Lake	Kivalliq	64°18'11" , 97°34'17"	66A04/A05	Crown
Siamese Lake	Kivalliq	64°27'33" , 97°26'47"	66A06	Crown
Mushroom Lake	Kivalliq	64°21'23" , 97°52'54"	66A05	Crown
Squiggly Lake*	Kivalliq	64°30'33" , 97°48'02"	66A05/A12	Crown
Skinny Lake*	Kivalliq	64°30'17" , 97°30'40"	66A05/A12	Crown
Kavisilik Lake*	Kivalliq	64°31'51" , 97°30'22"	66A12	Crown
Aberdeen Lake*	Kivalliq	64°29'21" , 98°43'11"	66A12	Crown

* Only one of these lakes will be used as a future EEM reference station

If the project proposal includes a **camp**, please provide the coordinates of the camp location

Lat (degree/minute)

64°26'29"

Long (degree/minute)

97°39'34"

NTS Map Sheet # (if different from above)

66A05

The Nunavut Impact Review Board may require additional location information in a subsequent Project Specific Information Requirement (PSIR) submission. This may take the form of a digital Geographic Information Systems (GIS) file.

SECTION 4: NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

Please attach a non-technical description of the project proposal, no more than 500 words, in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot). The project description should outline the following:

- Project Title
- Researcher's Name and Affiliation
- Project Location
- Timeframe
- Project Description
 - purpose
 - goals & objectives

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- method of transportation
- any structures that will be erected (permanent / temporary)
- restoration / abandonment plans
- Methodology
 - collection protocol
 - collection mechanisms
 - indicate why specific communities or individuals were selected for your research
- Data
 - short term & long term use of data
 - other uses of data
- Reporting
 - How will the research results be communicated to the individual participants, communities, regional and Nunavut organizations?
 - Will the research result in a publication?

SECTION 5: MATERIAL USE

1. List equipment (including drills, pumps, aircrafts, vehicles etc.):

Equipment type and number	Size – dimensions	Proposed use
Helicopter	Astar 350 or other unspecified	Movement of field equipment and personnel
2 boats (zodiacs) and outboard motors, fuel tanks	16 ft (Golder) and as available	Mode of transport on lakes
1 electrofishing equipment for boat includes generator, control unit, anode/cathode boom system and railing. Electrofishing backpack unit includes battery.	300 lbs on a pallet (this equipment may not be needed)	For small-bodied fish surveys
Small mesh size gill nets, seine nets, minnow traps, fish scales and rulers	50 lbs on same pallet as above	For small-bodied fish surveys
Ekman dredges, 500 µm nitex bags, plastic tubs, D-nets etc.	2 x plastic tub, 20 lbs	For benthic invertebrate sampling
Tech-Ops corer, core tubes, sediment bags, coolers, etc.	1 x 200 lb wooden crate, 1 cooler,	For sediment sampling
Water sampling and filtering equipment, Kemmerer, coolers, preservatives, etc	Wooden box, 8-10 coolers	For water sampling
YSI multiprobes and cables	2 large pelican cases 50 lbs	For limnology
Safety and personal gear	2 large bags/person 400 lbs	For safe work

2. Detail fuel and hazardous material use:

Fuel and hazardous material would be handled as per waste management plan for existing Kiggavik Project camp. See INAC Land Use Permit #N2009C0017 and Kivalliq Inuit Association Licence No. KVL306C02

Fuel	Number of Containers and Capacity	Total Amount of Fuel (in Litres)	Proposed Storage Methods
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	of Containers		
Diesel			
Gasoline	Will be using gasoline from exploration camp	205 litre drums	As per waste management plan for the existing exploration base camp, Kiggavik Project
Aviation fuel	Will be using fuel from exploration camp	205 litre drums	As per waste management plan for the existing exploration base camp, Kiggavik Project
Propane			
Other			
Hazardous Materials and Chemicals	Number of Containers and Capacity of Containers	Total Amount of Hazardous Materials and Chemicals (in Litres)	Proposed Storage Methods
Outboard motor oil	4 x 4 litre containers	16 litres	As per waste management plan for the existing exploration base camp, Kiggavik Project
Formalin	1 x 20 litre	20 litres	As per waste management plan for the existing exploration base camp, Kiggavik Project
Preservatives for water sampling: sulfuric acid, nitric acid,	2 mL vials x 100	<0.5 litre	As per waste management plan for the existing exploration base camp, Kiggavik Project

3. Detail daily water consumption rates

See Nunavut Water Board Licence No. 2BE-KIG1318 for AREVA Kiggavik Project

Daily amount (in Litres)	Proposed water retrieval methods	Proposed water retrieval location
Will use the existing base camp services, Kiggavik- Project	Will use the existing base camp services, Kiggavik- Project	Will use the existing base camp services, Kiggavik- Project

4. Have you applied for a Class A License with the Nunavut Water Board?

See Nunavut Water Board Licence No. 2BE-KIG1318 for AREVA Kiggavik Project

X YES

NO

SECTION 6: WASTE DISPOSAL AND TREATMENT METHODS

1. List the types of waste:

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage (human waste)	*	*	*
Greywater	*	*	*
Combustible wastes	n/a	Incineration	As per waste management plan for the existing base camp, Kiggavik Project
Non-Combustible wastes	Preservative containers, used outboard oil containers, disposal water filters, latex gloves,	As per waste management plan for the existing base camp, Kiggavik Project	As per waste management plan for the existing base camp, Kiggavik Project

Overburden (organic soil, waste material, tailings)	n/a	n/a	n/a
Hazardous waste	n/a	n/a	n/a
Other:			

* Will be using the existing base camp services including waste disposal methods for the Kiggavik Project (See Land Use Permit)

2. Will you be incinerating combustible waste, removing all solid waste, and removing the ash generated from incineration?

Waste will be handled according to the "AREVA Waste management Plan, Kiggavik Project" and these activities have been approved under the INAC Land Use Permit #N2009C0017 and Kivalliq Inuit Association Licence No. KVL306C02.

X YES

☐ **NO**

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

This proposed field work is an extension of the work already completed in support of baseline data collection for the Kiggavik Project Draft Environmental Impact Statement (available on the NIRB FTP site here <ftp://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/09MN003-AREVA%20KIGGAVIK/2-REVIEW/06-DRAFT%20EIS%20&%20CONFORMITY%20REVIEW/02-DEIS%20SUBMISSION/>).

The aquatic field work proposed for August 2013 has been requested by the Nunavut Impact Review Board, following the community roundtable and issuance of the Preliminary Hearing Conference Report (available on the NIRB FTP site here <ftp://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/09MN003-AREVA%20KIGGAVIK/2-REVIEW/08-TECH%20MEETING%20&%20PHC/2-PHC/05-PHC%20DECISION/>).

Regular Kiggavik Project updates are provided to community groups, and ongoing engagement is documented in the Kiggavik Project Annual Report (available on the NIRB FTP site here <ftp://ftp.nirb.ca/02-REVIEWS/ACTIVE%20REVIEWS/09MN003-AREVA%20KIGGAVIK/1-SCREENING/05-ANNUAL%20REPORT/>).

1. List the community representatives that have been contacted and provide the minutes of the meetings if available:

Community	Name	Organization	Date Contacted
See above			

2. How will the proposed project benefit Nunavut?

See above

4. Describe and attach documentation regarding community support or concerns for the proposed project:

See above

5. Is there a traditional knowledge component to this research project? If yes, please explain:

See above

SECTION 8: GENERAL QUESTIONS

1. Do you give NRI permission to publish project information in the Nunavut Research Institute Annual Compendium of Research Undertaken in Nunavut?

☒ YES

☐ NO

3. In addition to the application form, applicants are required to submit additional information in an electronic format to the Manager, Research Liaison, cfilion@nac.nu.ca. Please check that the following have been submitted to NRI:

- ☒ Project Summary -in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot)
☒ NTS Maps of the project

Applicant:

Signature

Title

Date