

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 Past modes of Arctic climate variability from varved sediments from Ellesmere Island

1b. Project Number

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

If yes, please indicate the previous NRI licence number: _____

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

If yes, please indicate the previous NIRB project number(s): _____

2. Applicant's full name and mailing address:

Pierre Francus	Phone: 418-654-3780
INRS-ETE, 490 rue de la Couronne, Québec	Fax: 418-654-2600
Québec G1K 9A9	Email: Pierre.Francus@ete.inrs.ca

3. Field Supervisor's name and mailing address:

Pierre Francus	Phone: 418-654-3780
INRS-ETE, 490 rue de la Couronne, Québec	Fax: 418-654-2600
Québec G1K 9A9	Email: Pierre.Francus@ete.inrs.ca

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

Alexandre Normandeau, Ph.D Student, Laval University	Ashley Rudy (Ph.D. Student)
François Lapointe, Ph.D Student, INRS	

SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

<input type="checkbox"/>	Regional Inuit Association (RIA)	<input type="checkbox"/>	Canadian Launch Safety (CLS)
<input checked="" 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 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:

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 checked="" 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 checked="" type="checkbox"/>	River/ stream/ lake crossing or work/ bridge
<input checked="" 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. atv, snowmobile, truck, zodiac)	<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 checked="" type="checkbox"/>	Research
<input type="checkbox"/>	Soil testing	<input type="checkbox"/>	Ecological survey
		<input type="checkbox"/>	Harvesting
		<input type="checkbox"/>	Removal of vegetation for scientific purposes
		<input type="checkbox"/>	Other:

2. Personnel

Total No. of personnel on site = (A)	3	Total No. of days on-site = (B)	8	Total No. of Person days (A) × (B) = 24
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3. Timing

Period of operation: 2015-08-02 to 2015-08-09
Proposed term of authorization: _____ to _____

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

2015 august 02: arrival on site, setting temporary camp; 2015 august 03: research activities (stratigraphic survey of sediments layers); 2015 august 09: camp removal; departure from site

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
Strathcona lake	Ellesmere island	78°33'20.32 N, -82°7'16" W	49_E	Crown

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

Lat (degree/minute) 78°34'9" N Long (degree/minute) -82°7'25.91" W
NTS Map Sheet # (if different from above) 49_E

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
 - 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
Boat, inflatable, 1940218673805		Research support
TRAILER, ATV, UTILITY, RED, 2330218982678		Research support
OUTBOARD MOTOR, 3-4 HP, SS, OMC, 2805218647167		Research support
GENERATOR, 2000 W, HONDA, 6115218637267		Research support
MOTORCYCLE, ATV, 2X4, KAWA 300, 2340219118333		Research support
Acoustic "CHIRP"		Research support
Tent K2-XT (3), 8340218963524	Floor size 7' 5" X 8' 9", Height 4' 2"	Sleeping
Igloo Tent, 8340218764715	11' diameter	Cooking and storing samples

2. Detail fuel and hazardous material use:

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel			
Gasoline	5 gallons (8X)	160 l	Outside camp on a trap
Aviation fuel			
Propane	20 lbs		In igloo tent
Other "motor oil"	1 liter (2X)	2 l	Outside camp on a trap
Hazardous Materials and Chemicals		Total Amount of Hazardous Materials and Chemicals (in Litres)	

3. Detail daily water consumption rates

Daily amount (in Litres)	Proposed water retrieval methods	Proposed water retrieval location
12 l	Lake water	Lake water

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

✓ 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)	16 Kg		Plastic bagged and brought back to PCSP in Resolute Bay
Greywater	70 liters		In a sump located 35 meters above ordinary water mark from river and lake and away from river flows
Combustible wastes	20 Kg		incineration
Non-Combustible wastes	20 Kg		Plastic bagged and brought back to PCSP in Resolute Bay
Overburden (organic soil, waste material, tailings)			
Hazardous waste			
Other:			

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

✓ YES

NO

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

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

Community	Name	Organization	Date Contacted
Resolute Bay	PCSP		2014-12-15

2. How will the proposed project benefit Nunavut?

This project will improve improve the knowledge of the past climatic conditions and past environment in general.

This will allow to put the current changes in a very long temporal context to figure out if it was already as warm as now during the last 10.000 years. This knowledge will help stake holder to take wise decisions regarding global warning.

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

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

We do not expect to rely on traditional knowledge, because the time scale involved is too old for our purpose.

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 Pierre Francus

Title Professor

Date 2015-03-27