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.*

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.
All documents should be uploaded in the following formats: MS Word, Adobe PDF or jpeg.

SECTION 1: APPLICANT INFORMATION

1a. Project Title Assessment of TSS Sedimentation on Macroinvertebrate Benthic Communities in Arctic Inland Lakes

1b. Project Number

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

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 (x) No ( )

If yes, please indicate the previous NIRB licence number(s): Project Certificate NIRB No.004

2. Applicant's full name and mailing address:

Ryan VanEngen
Bovey Building: University of Guelph
50 Stone Rd N1GEW1, Guelph ON

Phone: 519.400.7979
Fax: ____
Email: rvanenge@uoguelph.ca

3. Field Supervisor's name and mailing address:

Ryan VanEngen
Bovey Building: University of Guelph
50 Stone Rd N1GEW1, Guelph ON

Phone: 519.400.7979
Fax: ____
Email: rvanenge@uoguelph.ca

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

Dr. Keith Solomon (Academic Advisor,Professor) ____
Dr. Paul Sibley (Academic Advisor) ____
____ ____

SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

[ ]	Regional Inuit Association (RIA)	[ ]	Canadian Launch Safety (CLS)
[ ]	Nunavut Water Board (NWB)	[ ]	Environment Canada (EC)
[ ]	Nunavut Planning Commission (NPC)	[ ]	Department of Environment (GN)
[ ]	Department of Indian And Northern Development (DIAND)	[ ]	Department of National Defense (DND)

[ ]	Department of Fisheries and Oceans (DFO)	[ ]	Hamlet
[ ]	Community Government & Services (CG&S)	[ ]	Parks Canada (PC)
[ ]	Nunavut Research Institute (NRI/GN)	[ ]	Canadian Wildlife Service (CWS)
[ ]	Department of Culture, Language, Elders, and Youth (CLEY/GN)	[ ]	Other (please specify): ____

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

Permit:	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:

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

[x] Other: Note: Meadowbank Mine Site facilities will be used for research purposes. No additional structures will be constructed, no increase in water use or waste accumulation.

2. Personnel

Total No. of personnel on site = (A)	Total No. of days on-site = (B)	Total No. of Person days (A) Ã— (B) =
2	50	100

3. Timing

Period of operation:	July 1, 2010	to	Sept. 30, 2011
Proposed term of authorization:	____	to	____

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

The Meadowbank mine site facilities will be used for research purposes. Planning and field data collection will begin in July 2010 and continue through the open water season.

If needed on-ice sampling may be completed in the fall and a second field season may commence in July 1,2011 and be completed Sept 30, 2011.

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 Nr.	Land Status Crown, Commissionersâ€™, Inuit Owned
Meadowbank Mine Site	Kivalliq	65"00	6H	IOL

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

Lat (degree / minute) **Long** (degree / minute)

NTS Map Sheet Nr. (if different from above)

Please attach maps (preferably 1:250,000 scale) which clearly indicate camp sites and research sites. PDF, jpeg or tiff versions are requested.

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 â€“ dimensions	Proposed use
All equipment will be provided by Meadowbank Mine site	____	____
Truck	1/2 tonne pickup	Transportation to boat
Motorized Boat	18 ft aluminum with 15 hp motor	Lake sampling
____	____	____
____	____	____
____	____	____

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	____	____	____
Aviation fuel	____	____	____
Propane	____	____	____
Other	____	____	____

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
____	____	____

4. Have you applied for a Class A Licence 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)	____	____	____
Greywater	____	____	____
Combustible wastes	____	____	____
Non-Combustible wastes	____	____	____
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:

Minute	____	____	____

Community	Name	Organization	Date Contacted

2. How will the proposed project benefit Nunavut? Will your project provide local employment or training opportunities? Please specify.

The proposed study will benefit Nunavut by providing an evidence based approach to evaluating the impacts of industrial disturbance on aquatic ecosystems for future decision making.

At least one local person will be employed as a field assistant. As a field assistant this person will be trained in environmental field sampling. This may lead to employment at the Meadowbank mine site within the Enviro Department.

3. Please describe the nature of local services and/or logistic support that will be required from local communities, eg. Equipment, accommodations, outfitting, translations...

The Meadowbank project works closely with the Hamlet of Bake Lake and the Kivalliq Inuit Association on an ongoing basis.

The research project is limited to the Mine Site Project Lake Area and is not expected to raise concerns within the community given that the research dove-tails with the aquatic monitoring programs currently permitted at the mine-site.

No public access is permitted past km 85 of the mine road, therefore there should be no concerns for this project.

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:

No

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?

(x) YES ( ) NO

2. Is the proposed research associated with International Polar Year (IPY)?

( ) YES (x) NO

Applicant:

Ryan VanEngen	Environmental Biologist	March 9,2010
Signature	Title	Date

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