



**NIRB File No.: 15YN032**

June 18, 2015

Donald McLennan, PhD  
Canadian High Arctic Research Station  
Aboriginal Affairs and Northern Development Canada  
15 Eddy St., Gatineau, QC  
K1A 0M4

*Sent via email: [donald.mclennan@polar.gc.ca](mailto:donald.mclennan@polar.gc.ca)*

**Re: Notice of Part 4 Screening for the Canadian High Arctic Research Station's "Deployment of Environmental Instrumentation in Greiner Lake Watershed, Cambridge Bay" Project Proposal**

Dear Donald McLennan:

On May 26, 2015 the Nunavut Impact Review Board (NIRB or Board) received the Canadian High Arctic Research Station's (CHARS) "Deployment of Environmental Instrumentation in Greiner Lake Watershed, Cambridge Bay" project proposal from the Nunavut Research Institute (NRI). The NIRB has assigned this project proposal file number **15YN032** - please reference this file number in related future correspondence.

Following a preliminary completeness check, the NIRB determined that the proposal as submitted did not contain sufficient information for the NIRB to permit proper screening. On May 29, 2015 the NIRB requested that CHARS provide additional information in support of this proposal. On June 17, 2015 the NIRB received the requested additional information to proceed with the screening.

The proposed project is located in the Kitikmeot region approximately 12 kilometres (km) northeast of Cambridge Bay. CHARS is proposing to collect climate data to measure environmental variables in the Greiner Lake watershed related to the Arctic carbon cycle to increase understanding of global climate change. The Proponent proposes to install project instruments from July to October, 2015 with instruments to be deployed indefinitely.

The proposed project activities include:

- Installation, operation and maintenance of two weather stations approximately 2 metres (m) high and less than one (1) km apart;
  - Data collected to be wirelessly transmitted to CHARS facilities or recorded on memory cards to be periodically downloaded.

- Installation, operation and maintenance of two eddy covariance towers with masts up to 4 m high;
  - Data collected to be recorded on a memory card replaced periodically.
- Installation of up to four automated soil carbon dioxide (CO<sub>2</sub>) flux chambers to record soil CO<sub>2</sub> fluxes during the summer months;
  - Data to be recorded on memory card and analyzed in a laboratory and deposited in the Polar Data Catalogue.
- Installation, operation and maintenance of 30 watt solar panel mounted on a tripod with rechargeable battery to supply power to instruments;
- Installation, operation and maintenance of two wind turbines mounted on 2.5 m base poles with rechargeable batteries to supply power to instruments during winter months;
- Transportation of personnel, instruments and associated materials via seasonally appropriate transportation including all-terrain vehicle, snow-machine and/or boat.

All documents received and pertaining to this project proposal can be obtained from the NIRB's online public registry at

<http://ftp.nirb.ca/01-SCREENINGS/ACTIVE%20SCREENINGS/15YN032-CHARS-Deployment%20of%20Instruments/> including:

- *Nunavut Research Institute Application Form in English*
- *Non-technical Project Proposal summary in English and Inuinnaqtun*
- *Map*
- *Additional Submitted Information*

Pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), the NIRB shall proceed to screen this project proposal. The NIRB may request additional information at any time during the process. The NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site for public access.

The NIRB is copying parties and municipalities potentially affected by the CHARS's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **June 29, 2015**.

The NIRB would like parties to provide comments regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

Please note that *proposed* project-specific terms and conditions, should the project proceed, have been attached for consideration and comment (**Appendix A**).

Please send your comments to the NIRB at [info@nirb.ca](mailto:info@nirb.ca) or via fax at **(867) 983-2594**.

If you have any questions or require clarification, please contact the undersigned at (867) 983-4615 or [dstpierre@nirb.ca](mailto:dstpierre@nirb.ca).

Sincerely,



Davin St. Pierre, M.REM  
Technical Advisor  
Nunavut Impact Review Board

cc: Distribution List  
Phyllis Beaulieu, Nunavut Water Board  
Geoff Clark, Kitikmeot Inuit Association  
Mosha Cote, Nunavut Research Institute

Attachment: Appendix A – *Proposed* Project Specific Terms and Conditions

Enclosures (2): Comment Forms (English and Inuinnaqtun)

## **Appendix A**

### *Proposed Project Specific Terms and Conditions*

The following is a list of project-specific terms and conditions which, should the project proceed, may be recommended to be attached to any approval.

#### **General**

1. The Canadian High Arctic Research Station (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB (Nunavut Research Institute, Scientific Research Licence, May 26, 2015).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

#### **Water**

5. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

#### **Waste**

6. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All such wastes shall be kept inaccessible to wildlife at all times.

#### **Fuel and Chemical Storage**

7. The Proponent shall ensure that re-fuelling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body.
8. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, and at all fuel storage sites.
9. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

#### **Wildlife - General**

10. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
11. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

12. The Proponent shall not touch, feed or entice wildlife to approach by holding out or setting out decoys or any such devices, foodstuffs or bait of any kind.
13. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.
14. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques.

#### **Migratory Birds and Raptors Disturbance**

15. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metre buffer around the nests). If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.

#### **Caribou and Muskoxen Disturbance**

16. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.

#### **Ground Disturbance**

17. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles must be suspended if rutting occurs.

#### **Land Use**

18. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

#### **Restoration of Disturbed Areas**

19. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
20. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

#### **Other**

21. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
22. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.