

PROJECT SCOPE

Project Scope:

The proposed “Deployment of Environmental and Permafrost Monitoring Instrumentation in Greiner Lake Watershed, Cambridge Bay” project is located within the Kitikmeot region, approximately 12 kilometres (km) northeast of Cambridge Bay. The Proponent is proposing to conduct hydrological and sediment sampling in the Greiner Lake watershed as part of a larger study measuring environmental variables related to the Arctic carbon cycle in order to increase understanding of global climate change. The program is proposed to take place between April 1 and October 31, 2016, with monitoring instruments to be deployed indefinitely.

According to the project proposal, the scope of the project includes the following works or activities:

- Transportation of personnel, instruments, and associated materials via seasonally appropriate transportation including all-terrain vehicle, snow-machine, and boat;
- Refuelling of equipment to occur in Cambridge Bay;
- Installation, operation, and maintenance of two (2) river gauging stations. Stations to include:
 - Pressure level sensors,
 - Turbidity and temperature monitoring systems, and
 - Conductivity sensors;
- Measurement of stream flow by acoustic digital current meters at weekly intervals; and
- Maintenance of river gauging stations to be conducted at weekly intervals.

The two (2) weather stations as proposed by the Proponent have been previously screened by the NIRB under file number 15YN032.

REQUEST FOR COMMENTS

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

<http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/2015/15YN032-CHARS-Deployment%20of%20Instruments/> and include:

- *NPC Screening Referral*
- *NRI Scientific Research Licence Application*
- *NIRB Part 1 Summary Form in English, Inuktitut, and Inuinnaqtun*
- *Non-technical Project Proposal summary in English, Inuktitut, and Inuinnaqtun*
- *Maps noting river station locations and proximity proposed to previously approved components*

The NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site for public access. The NIRB may request additional information at any time during the process.

The NIRB is copying parties and municipalities potentially affected by the Proponent's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **February 5, 2016**.

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 or socio-economic effects; and if so, why;
- Whether the project is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; 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**).

CONTACT INFORMATION

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

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4606 or at hrasmussen@nirb.ca.

Sincerely,



Heather Rasmussen, M.Env-EA
Technical Advisor II
Nunavut Impact Review Board

cc: Distribution List
Johann Wagner, Polar Knowledge Canada
Karén Kharatyan, Nunavut Water Board
Geoff Clark, Kitikmeot Inuit Association
Luigi Torretti, Kitikmeot Inuit Association
Mosha Cote, Nunavut Research Institute

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

Enclosures (6): Public Notice of Screening (English, Inuktitut, and Inuinnaqtun)
Comment Forms (English, Inuktitut, 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. Polar Knowledge Canada (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 the Nunavut Planning Commission (Application to Determine Conformity, December 17, 2015), the Nunavut Research Institute (Scientific Research Licence, December 17, 2015) and to the NIRB (NIRB Part 1 and 2 Forms, Non-technical summary, January 22, 2015; additional information including e-mail correspondence by January 25, 2016).
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 Disposal

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-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
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.
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 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.

Migratory Birds and Raptors Disturbance

13. 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.
14. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.

Caribou and Muskoxen Disturbance

15. 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

16. 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

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

Restoration of Disturbed Areas

18. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
19. 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

20. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
21. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.