



NIRB File No.: 15YN032
NRI File No.: 04 016 15N-M
KIA File No.: KTX115X011

November 9, 2015

Donald McLennan
Polar Knowledge Canada
1701-360 Albert Street
Ottawa, ON K1R 7X7

Sent via email: donald.mclennan@polar.gc.ca

Re: Notice of Screening for an Amendment to the Polar Knowledge Canada's "Deployment of Environmental Instrumentation in Greiner Lake Watershed, Cambridge Bay" project

Dear Donald McLennan:

On August 27, 2015 the Nunavut Impact Review Board (NIRB or Board) received an amendment proposal for the Canadian High Arctic Research Station – Polar Knowledge Canada's (proponent) "Deployment of Environmental Instrumentation in Greiner Lake Watershed, Cambridge Bay" project from the Nunavut Planning Commission (NPC or Commission). Pursuant to section 86 of the *Nunavut Planning and Project Assessment Act* (NuPPAA), the NIRB has commenced screening this amendment proposal. Due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB file number 15YN032, the NIRB assigned the amendment file to this previous file number - please reference this file number in all future related correspondence.

INFORMATION REQUEST AND SUSPENSION OF ASSESSMENT ACTIVITIES

Following a preliminary completeness check, the NIRB determined that the amendment proposal as submitted did not contain the necessary information for the NIRB to carry out its screening. On September 18, 2015 the NIRB requested that the Proponent provide additional information in support of this proposal by October 2, 2015.

After receiving notice that the proponent would not be able to provide the required information by the expected date, on October 9, 2015 the NIRB informed Polar Knowledge Canada that it had suspended assessment activities for the screening of the amendment proposal pursuant to subsection 144(2) of the NuPPAA. On November 5, 2015 the NIRB received the requested additional information to commence screening.

PROJECT SCOPE

Project Scope:

The proposed “Deployment of Environmental Instrumentation in Greiner Lake Watershed, Cambridge Bay” project is located within the Kitikmeot region, approximately 10 kilometres (km) from Cambridge Bay. The proponent intends to conduct permafrost sampling and monitoring activities in the Greiner Lake Watershed area. The program is proposed to take place from April to June, 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 vehicles, snow-machines and/or boat;
- Establishment, monitoring, maintenance and reclamation of two (2) permafrost study subsites;
- Subsite studies to include:
 - Use of camera(s), soil sampling and monitoring equipment, and one (1) ADAPT drill;
 - Photo documentation of vegetation and topography;
 - Digging of six (6) (total) sample pits (.03 cubic metres each) for soil sampling;
 - Drilling of up to four (4) (total) three-meter boreholes (10 centimeter diameter) for geochemical and physical core analysis and deployment of temperature and moisture monitoring probes;
 - Installation, operation and maintenance of one (1) 50 watt solar panel system to power instruments;
 - Ongoing collection of data from monitoring probes and distribution of findings via the Nordicana D open-access data repository.

At this time, the NIRB has identified no additional works or activities in relation to the project proposal. As a result, the NIRB will proceed with screening the project based on the scope as described above.

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*
- *Project Amendment Proposal in English*
- *NIRB Part 1 Summary Form in English, Inuktitut and Inuinnaqtun*
- *Non-technical Project Proposal summary in English, Inuktitut and Inuinnaqtun*
- *Original KIA Project Application (May 4, 2015)*
- *Original NRI Application (May 4, 2015)*

- *Both NRI and KIA Applications include original English, Inuktitut and Inuinnaqtun Non-Technical Project Proposal Summaries and Maps*
- *Proponent correspondence*
- *Map showing monitoring and drill sites*

The NIRB will copy you on screening process related correspondence and upload related documents to the above online registry 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 Polar Knowledge Canada's project amendment proposal with this letter, and we invite interested parties to comment directly to the NIRB by **November 19, 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 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) 983-4615 or at dstpierre@nirb.ca.

Sincerely,



Davin St. Pierre
Technical Advisor
Nunavut Impact Review Board

cc: Distribution List
 Johann Wagner, Polar Knowledge Canada
 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 (3): 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, August 27, 2015), the NIRB (Part 1 Form and additional information submitted November 5, 2015), the Kitikmeot Inuit Association (Application for Access to Inuit Owned Land, August 27, 2015) and to the Nunavut Research Institute (Scientific Research Licence Application, August 27, 2015).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Waste Disposal/Incineration

5. 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

6. 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.
7. 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.
8. 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

9. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
10. 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.

11. 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

12. 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.
13. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.

Caribou and Muskoxen Disturbance

14. 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

15. 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.

Drilling on Land

16. The Proponent shall not allow any drilling wastes to spread to the surrounding lands or water bodies.
17. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area. Drill areas should be kept orderly with garbage removed daily to an approved disposal site.
18. The Proponent shall ensure all drill holes are backfilled or capped upon abandonment of site.

Land Use

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

Restoration of Disturbed Areas

20. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
21. 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

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

24. 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.