



NIRB File No.: 07YN019
NPC File No.: 148322
NRI File No.: 02 023 16R-M

September 1, 2016

Wayne Pollard
McGill University, Department of Geography
805 Sherbrooke St. W.
Montreal, QC H3A 0B9

Sent via email: wayne.pollard@mcgill.ca

Re: Notice of Screening for McGill University's Proposed Amendments to the "An Investigation of the Sensitivity of High Arctic Permafrost to Climate Change" Project

Dear Wayne Pollard:

On July 7, 2016 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen McGill University's (the Proponent) proposed amendments to Nunavut Research Licence No. 02 023 16R-M for the "An Investigation of the Sensitivity of High Arctic Permafrost to Climate Change" project from the Nunavut Planning Commission (NPC or Commission) due to significant modification to the original project proposal (NIRB File No. 07YN019). The NPC indicated within its screening referral that the amended project proposal conforms to the North Baffin Regional Land Use Plan (NBRLUP) and that the conformity determination issued on January 18, 2013 continues to apply.

Pursuant to section 86 of the *Nunavut Planning and Project Assessment Act* (NuPPAA), the NIRB has commenced screening this project proposal and due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB File No. **07YN019**, the NIRB views this project proposal as an amendment to the previously screened project and assigned this proposal with this previous file number. Please reference this file number in all future related correspondence.

INFORMATION REQUEST

Following a preliminary completeness check, the NIRB determined that the proposal as submitted did not contain the necessary information for the NIRB to carry out its screening. On July 21, 2016 the NIRB requested that McGill University provide additional information in support of this proposal by August 4, 2016. On August 17, 2016 the NIRB received the

requested additional information and commenced the screening pursuant to Part 3 of the NuPPAA.

PROJECT SCOPE

Project Scope:

The proposed amendments to the “An Investigation of the Sensitivity of High Arctic Permafrost to Climate Change” project include activities located within the Qikiqtani (North Baffin) region, approximately five (5) kilometres (km) northwest of Resolute Bay. In addition to continuing previously approved research activities on Axel Heiberg Island and Ellesmere Island, the Proponent intends to conduct land, vegetation, and permafrost studies, as well as research training activities, adjacent to Resolute Bay. The supplemental activities are proposed to take place seasonally from 2016 to 2019 during the months of August and September.

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

- Mapping of permafrost, groundwater, group ice to examine components of climate change and permafrost; the establishment of temporary camps on Axel Heiberg Island and Ellesmere Island; and utilization of Environment Canada’s station in Eureka along with the existing camp on Ellesmere Island;¹
- Accommodations and use of facilities for up to seven (7) personnel at the Polar Continental Shelf Program (PSCP) facility in Resolute Bay;
- Use of research equipment including surveying levels, ground probes, global positioning systems, and ground-penetrating radars to conduct land, vegetation, and permafrost research studies and training activities;
- Access to local research and training sites on foot or by all-terrain vehicles;
- Transportation and use of fuel to facilitate transportation activities; and
- Collection of wastes during field studies with appropriate disposal at the PCSP facility.

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 www.nirb.ca by using any of the following search criteria:

- Project Name: Addition of a training component to Nunavut Research Licence No 02 023 16R-M
- NIRB File No.: 07YN019
- Application No.: 124692

The documents received include:

- *NPC Screening Referral and Conformity Determination*
- *NPC Application*

¹ Screening Decision Report, NIRB File No. 07YN019 (March 20, 2007)

- *NIRB's Online Application Form (formerly the NIRB Part 1 form in English)*
- *NIRB Part 1 Summary Form in English and Inuktitut*
- *Non technical Project Proposal summary in English, French, and Inuktitut*
- *Map noting study sites*
- *Proponent correspondence*

The NIRB will copy you on screening process related correspondence and upload related documents to the NIRB's 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 McGill University's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **September 12, 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 via email at info@nirb.ca, via fax at (867) 983-2594 or via the individual project dashboard for this assessment on the NIRB's online public registry at www.nirb.ca by using any of the following search criteria:

- Project Name: Addition of a training component to Nunavut Research Licence No 02 023 16R-M
- NIRB File No.: 07YN019
- Application No.: 124692

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
 Karén Kharatyan, Nunavut Water Board
 Salamonie Shoo, Qikiqtani Inuit Association
 Joel Fortier, Qikiqtani Inuit Association
 Mosha Cote, Nunavut Research Institute
 Tracey McCaie, Indigenous and Northern Affairs Canada

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

Enclosures (4): Public Notice of Screening (English and Inuktitut)
 Comment Forms (English and Inuktitut)

Appendix A

Proposed Project Specific Terms and Conditions

The NIRB is proposing to re-issue the recommended project-specific terms and conditions contained in the March 20, 2007 Screening Decision Report for NIRB File No.: 07YN019 in addition to new terms and conditions designed to mitigate any potential adverse ecosystemic or socio-economic impacts that could result from ongoing and proposed additional activities. The previously-approved terms and conditions, in addition to the new recommended terms and conditions, include the following:

Previously-Approved Project-Specific Terms and Conditions¹:

General

1. Wayne Pollard (the Permittee) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Permittee shall forward copies of all permits to the NIRB obtained and required for this project prior to the commencement of the project.
3. The NIRB shall be notified of any changes in operating plans or conditions associated with this project prior to any such change.

Fuel and Wastes Storage

4. The Permittee shall not deposit, nor permit the deposit of any fuel, chemicals, wastes or sediment into any water body.
5. The Permittee shall locate, if applicable, all sumps, pits, spill basins and fuel caches and other hazardous materials a minimum of thirty (30) metres away from the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish.
6. The Permittee shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
7. The Permittee shall ensure that any non-combustible and hazardous waste, including waste oil, is disposed appropriately off site at an approved facility.
8. The Permittee is required to use secondary containment with impervious linens for storage of all barreled fuel rather than relying on natural depressions to contain spills.
9. All spills of harmful substances should be documented and reported to the 24-hour spill line at (867) 920-8130, regardless the quantity of release.
10. The Permittee shall ensure that any temporary camps are restored to their natural state after the completion of project activities.

Wildlife

11. The Permittee is required to ensure that there is minimal disturbance to any nesting birds and wildlife in the area.

12. The Permittee shall not disturb or destroy the nests or eggs of migratory birds. If active nests are encountered during project activities, the nesting area should be avoided to prevent disturbance (i.e. the young have left the vicinity of the nest).
13. The Permittee is required ensure that camp waste be made inaccessible to wildlife at all times.
14. The Permittee shall follow procedures outlined in the "Territorial Safety in Bear Country Manual", and should contact the Regional Biologist or the Wildlife manager for information and advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears. Consideration should be given to setting up an electric fence around the camp.
15. In the event of a defense kill of a Polar Bear, the Permittee shall be aware of section 5.6.52 and 5.6.55 of Nunavut Land Claims Agreement (NLCA.) and shall contract nearest government of Nunavut wildlife office immediately for further direction.
16. Any observations of Ivory Gulls should be forwarded to Mark Mallory, Seabird Biologist, Environment Canada, CWS, Box 1714, Qimugjuk Bldg. 969, Iqaluit, NU, X0A 0H0, Phone: (867) 975-4637 Email: mark.mallory@ec.gc.ca or Grant Gilchrist, Environment Canada, NWRC, Raven Road, Carleton University Ottawa, ON, Canada K1A 0H3 P: (613) 998-7364 F: (613) 998- 0458 Email: grant.gilchrist@ec.gc.ca.

Aircraft Operations

17. The Permittee shall ensure that aircraft do not, unless for emergency, touch-down in areas where concentrations of wildlife are present. And raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft.
18. If the disturbance cannot be avoided, it is recommends that aircraft used in conducting project activities maintain a flight altitude of at least 610 m and a horizontal distance of 2 km during horizontal (point to point) flight from any known colonies of Ivory Gulls and any other observed groups (colonies) of Ivory Gulls during the nesting season.

Archaeological

19. The Permittee should be aware of the law regarding disturbance of archaeological and palaeontological sites and the removal of artifacts found. If a site is found it should remain undisturbed and its location should be reported to the Government of Nunavut Department of Culture, Language, Elders and Youth.

Additional recommended project-specific terms and conditions:

General

1. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (Application to Determine Conformity, July 7, 2016), and the NIRB (Online Application Form, July 11 and August 17, 2016); Project Map and Translated NIRB Part 1 Form, August 17, 2016).
2. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Fuel and Chemical Storage

3. 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. Further, the Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures.

Wildlife - General

4. 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.
5. 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.

Caribou and Muskoxen Disturbance

6. 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

7. 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.
8. The Proponent should, where possible, use existing roads or trails while travelling overland.

Other

9. The Proponent should engage with local residents regarding planned activities in the area and should solicit available Inuit Qaujimaningit and information regarding current recreational and traditional usage of the project area which may inform project activities. Posting of translated public notices and direct engagement with potentially interested groups and individuals prior to undertaking project activities is strongly encouraged.
10. The Proponent should, to the extent possible, hire local people.
11. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.