



NIRB File No. 14YN015

May 7, 2014

Galen Halverson
Dept. of Earth and Planetary Sciences
McGill University
3450 University Street
Montreal, QC H3A 0E8

Sent via email: galen.halverson@mcgill.ca

Re: Notice of Part 4 Screening for McGill University's "Tracking Paleoenvironmental Change in the latest Mesoproterozoic (ca. 1.1 billion years old) Bylot Supergroup, Baffin Island" project proposal

Dear Galen Halverson:

On April 14, 2014 the Nunavut Impact Review Board (NIRB or Board) received McGill University's "Tracking Paleoenvironmental Change in the latest Mesoproterozoic (ca. 1.1 billion years old) Bylot Supergroup, Baffin Island" project proposal from the Nunavut Research Institute (NRI). On April 20, 2014 the NIRB received a positive conformity determination (North Baffin Regional Land Use Plan) from the Nunavut Planning Commission. NIRB has assigned this project proposal file number **14YN015** - please reference this file number in related future correspondence.

The proposed project is located in the Qikiqtaaluk Region, between the communities of Pond Inlet and Arctic Bay. The program is proposed to take place from July 26, 2014 to August 30, 2014 and intends to study the rocks of the Borden Basin in northern Baffin Island. The purpose of this research is to study changes in the global environment around 1 billion years ago, when these rocks of the Borden Basin were formed; specifically to investigate the changes in seawater chemistry and the diversity of life at the time, as recorded in these strata.

The proposed project activities and components include:

- Study exposed sedimentary rocks of the Borden Basin in northern Baffin Island to conduct geological mapping;
- Collecting rock specimens by hand (fist size or smaller) near Angmaat Mt., Alpha River; and Shale Valley for geochemical analysis;
- Up to 7 persons on site for approximately 24 days;
- Establish 3 temporary tent camps in different parts of the basin;

- Coordinated helicopter transportation with the Polar Continental Shelf Program for transportation of personnel and supplies to and from each camp site;
- Kitchen waste returned to Pond Inlet or Arctic Bay for appropriate disposal;
- Burial of human waste at site;
- Component of several PhD theses available via Halverson's website at McGill University or by email request; and
- Results incorporated into PhD theses and scientific publications and presented at international conferences and will be made available to NRI and other organizations upon request.

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/14YN015-McGill%20University-Paleoenvironmental%20Change/> including:

- *Nunavut Research Institute Application Form in English;*
- *Maps;*
- *Non technical Project Proposal summary in English;*
- *Non technical Project Proposal summary in Inuktitut;*
- *Nunavut Planning Commission Conformity Determination; and*
- *Nunavut Planning Commission Questionnaire.*

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.

Be advised that the NIRB is copying parties and municipalities potentially affected by this project proposal. Interested parties are encouraged to comment directly to the NIRB by **Tuesday May 20, 2014**.

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 or via fax at **(867) 983-2594**.

If you have any questions or concerns, feel free to contact the undersigned at 867-983-4621 or pgross@nirb.ca.

Sincerely,



Pamela Gross
Assistant Technical Advisor
Nunavut Impact Review Board

cc: Distribution List
 Phyllis Beaulieu, Nunavut Water Board
 Bernie MacIsaac, Qikiqtani Inuit Association
 Tracey McCaie, Aboriginal Affairs and Northern Development Canada
 Mosha Cote, Nunavut Research Institute

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

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

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. McGill University (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 (Scientific Research License Application, April 14, 2014).

Water

4. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.

Waste

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.

Wildlife - General

6. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
7. 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.
8. 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.
9. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques.

Migratory Birds and Raptors Disturbance

10. 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.

Aircraft Flight Restrictions

11. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
12. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
13. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
14. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

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.

Temporary Camps and Land Use

16. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
17. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.
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 ensure that all disturbed areas are restored to a stable or pre-disturbed state as practical as possible upon completion of field work.

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.