



NIRB File No.: 22YN015
NPC File No.: 149716

April 25, 2022

Myriam Lemelin
Université de Sherbrooke
2500 Boulevard de l'Université
Sherbrooke, Quebec J1N 4J5

Sent via email: myriam.lemelin@usherbrooke.ca

Re: Notice of Screening for Université de Sherbrooke's "Geological Study and Mapping of Hydrothermal Deposits and Gossans at Expedition Fiord, Axel Heiberg Island, as Analogs for Mars" Project Proposal

Dear Myriam Lemelin:

On March 25, 2022, the Nunavut Impact Review Board (NIRB) received a referral to screen Université de Sherbrooke's "Geological Study and Mapping of Hydrothermal Deposits and Gossans at Expedition Fiord, Axel Heiberg Island, as Analogues for Mars" project proposal from the Nunavut Planning Commission (Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan. Pursuant to Article 12, Sections 12.4.1 and 12.4.4 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 87 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*), the NIRB has commenced screening this project proposal and has assigned it file number **22YN015**.

INFORMATION REQUEST

On March 25, 2022, the NIRB requested that the Proponent complete the online application form through the NIRB's public registry system and ensure, pursuant to s. 144(1) of the *NuPPAA*, that sufficient information is provided to determine the scope of the project activities being proposed and commence screening.

Following a preliminary completeness check of the proposal as submitted on April 5, 2022, by the Proponent, the NIRB determined that the proposal did not contain the necessary information for the NIRB to carry out its screening and on April 6, 2022, requested that the Proponent provide the Board with the additional information in order to carry out the screening of the project proposal.

On April 21, 2022, the NIRB received the required information and commenced the screening pursuant to Part 3 of the *NuPPAA*.

PROJECT OVERVIEW

Project Scope:

All documents received and pertaining to this project proposal can be accessed from the NIRB's online Public Registry at www.nirb.ca/project/125681.

Project:	Geological Study and Mapping of Hydrothermal Deposits and Gossans at Expedition Fiord, Axel Heiberg Island, as Analogues for Mars				
Region:	Qikiqtani (North Baffin)				
Location:	Axel Heiberg Island				
Closest Community:	Grise Fiord	Distance (approximate)	383 kilometres (km)	Direction	Northwest
Summary of Project Description:	The Proponent intends to study gossans in the Expedition Fiord area as indicators of ancient hydrothermal systems on Mars.				
Project Proposed Timeline:	July 2022				

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

- Use of a helicopter for transportation of equipment and personnel to and from the temporary camp site;
- Set up and use of a temporary camp for 6 people for the life of the project;
- Use of tools to collect soil and rock samples;
- Sourcing of water at local stream near camp;
- Storage and use of fuel to power generator for camp; and
- Sewage waste to be collected in containers and transported to the McGill Arctic Research Station for incineration.

Inclusion or Exclusion of Scoping List

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 can be accessed from the NIRB's online Public Registry at www.nirb.ca/project/125681 and include:

- *Commission Conformity Determination*
- *Commission Application and Questionnaire*
- *NIRB's Online Application*

- *Project Description in English and Inuktitut*

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 Université de Sherbrooke project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **May 5, 2022**.

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 proposal is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; and if so, why;
- Whether the project proposal is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (and providing 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/project/125681.

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4622 or motokiak@nirb.ca.

Sincerely,



Mia Otokiak
Junior Technical Advisor
Nunavut Impact Review Board

Attachments: Appendix A: *Proposed* Project Specific Terms and Conditions

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

cc: Distribution List
Richard Dwyer, Nunavut Water Board
Carson Gillis, Nunavut Tunngavik Incorporation
Stephen Williamson-Bathory, Qikiqtani Inuit Association
Joel Fortier, Qikiqtani Inuit Association
Jared Ottenhof, Qikiqtani Inuit Association
Michele LeBlanc-Harvard, Government of Nunavut - Department of Environment
Agnes Simonfalvy, Government of Nunavut - Department of Economic Development & Transportation
Mosha Cote, Nunavut Research Institute

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. Université de Sherbrooke (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times and make it accessible to enforcement officers upon request.
2. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 149716) and the NIRB (Online Application Form, April 21, 2022). This information should be accessible to enforcement officers upon request.
3. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
4. The Proponent shall ensure that it meets the standards and/or limits as set out in the authorizing agencies' permits or licences as required for this project.
5. The Proponent shall ensure that all personnel, staff and contractors are adequately trained prior to commencement of all project activities, and shall be made aware of all operational plans, management plans, guidelines and Proponent commitments relating to the project.

Waste Management

6. The Proponent shall manage all hazardous and non-hazardous waste including food, domestic wastes, debris and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) in such a manner to avoid release into the environment and access to wildlife at all times until disposed of appropriately or at an approved facility.

Fuel and Chemical Storage

7. The Proponent shall locate all fuel and other hazardous materials a minimum distance away from the high-water mark of any water body and environmentally sensitive areas as required by the appropriate authorizing agencies. The materials shall be stored in such a manner as to prevent their release into the environment.
8. The Proponent shall ensure that re-fuelling of all equipment occurs a minimum distance away from the high-water mark of any water body as required by the appropriate authorizing agencies.
9. The Proponent shall ensure that all spills of fuel or other deleterious materials of 100 litres or more must be reported immediately to the 24-hour Spill Line at (867) 920-8130.

Wildlife – General

10. The Proponent shall not substantially alter or damage or destroy any wildlife habitat in conducting this operation unless otherwise authorized by the appropriate authorizing agencies.

11. The Proponent shall not chase, weary, harass or molest wildlife. This includes persistently circling, chasing, hovering over, pursuing or in any other way harass wildlife, or disturbing large groups of animals.
12. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

Migratory Birds and Raptors Disturbance

13. The Proponent shall carry out all phases of the project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines*. The Proponent's actions in applying the *Avoidance Guidelines* shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.
14. The Proponent shall not disturb or destroy the nests or eggs of any birds. If active nests of any birds are discovered or located (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have naturally left the vicinity of the nest by establishing a protection buffer zone¹ appropriate for the species and the surrounding habitat.

Land Use and Restoration of Disturbed Areas

15. The Proponent shall use existing trails where possible during project activities on the land.
16. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
17. The Proponent shall remove all garbage, fuel and equipment upon completion of work.
18. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state using Best Available Technology Economically Achievable (BATEA) upon completion of work and/or abandonment.

Camps

19. The Proponent shall ensure that all camps are located durable surfaces, such as gravel or sand that is consolidated and can withstand repeated, heavy use. Measures shall be put in place to prevent erosion, trail formation and damage to the ground.

Heritage Sites

20. The Proponent shall ensure that archaeological and paleontological sites are not purposely or inadvertently disturbed by clients or staff as a result of project activities.
21. The Proponent shall ensure that all clients and staff are aware of the Proponent's responsibilities and requirements regarding archaeological or palaeontological sites that are encountered during land-based activities. This should include briefings explaining the prohibitions regarding removal of artifacts, and defacing or writing on rocks and infrastructure.

¹ Recommended setback distances to define buffer zones have been established by Environment and Climate Change Canada for different bird groups nesting in tundra habitat and can be found at www.ec.gc.ca/paom-itmb.

22. No activities shall be conducted in the vicinity (50 metres buffer zone) of any archaeological/historical sites. If archaeological sites or features are encountered, activities shall immediately be interrupted and moved away from this location. Each site encountered needs to be recorded and reported to the Government of Nunavut-Department of Culture and Heritage.

Other

23. The Proponent should consult with local residents regarding their activities in the area and solicit available Inuit Qaujimaningit and information that can inform project activities.

24. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

25. The Proponent should, to the extent possible, hire local people and access local services where possible.