



NIRB File No.: 23YN023
NPC File No.: 150024

May 8, 2023

Gábor Újvári
Research Centre for Astronomy and Earth Sciences
Konkoly Thege Miklós út 15-17
Budapest Pest 1121
Hungary

Sent via email: ujvari.gabor@csfk.org

Re: Notice of Screening for the Research Centre for Astronomy and Earth Sciences’ “Arctic Climate variations during the late glacial” project proposal

Dear Gábor Újvári,

On March 31, 2023, the Nunavut Impact Review Board (NIRB) received a referral to screen the Research Centre for Astronomy and Earth Sciences’ “Arctic Climate variations during the late glacial period” project proposal from the Nunavut Planning Commission (Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan.

On April 17, 2023, the NIRB received the complete application from the Proponent.

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 **23YN023** - please reference this file number in all future related correspondence.

PROJECT OVERVIEW

Project Scope:

Project:	Arctic Climate variations during the late glacial period				
Region:	North Baffin				
Location:	Barnes Ice Cap				
Closest Community:	Clyde River	Distance (approximate)	200 kilometres (km)	Direction	West

Summary of Project Description:	The Proponent intends study how the earth behaved during global temperature change in the last glacial period by taking ice samples from the Barnes Ice Cap (BIC) and analyzing the dust particles within the ice.
Project Proposed Timeline:	August 2023

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

- Temporary camp for a 5-person team;
- Sampling using an ice auger;
- Use of drones for site imaging;
- Aircraft transport using a Twin Otter and helicopter;
- Temporary cache of approximately 4 barrels of aviation fuel;
- Use of gasoline and propane for camp; and
- Removal of waste for disposal.

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 www.nirb.ca/project/125800 and include:

- *Commission Conformity Determination*
- *NIRB Application,*
- *Barnes Research Proposal,*
- *NPC Project Description, and*
- *Map of Barnes Ice Cap*

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 Research Centre for Astronomy and Earth Sciences project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **May 18, 2023**.

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/125800.

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4618 or rqammaniq@nirb.ca.

Sincerely,



Robby Qammaniq
Technical Advisor II
Nunavut Impact Review Board

Enclosures (2): Public Notice of Screening (English, and Inuktitut)
Comment Forms (English, and Inuktitut)

cc: Distribution List
Tracey McCaie, Crown-Indigenous Relations and Northern Affairs Canada
Stepen Williamson Bathory, Qikiqtani Inuit Association
Jared Ottenhof, Qikiqtani Inuit Association
Joel Fortier, Qikiqtani Inuit Association
Hamlet of Clyde River
Hamlet of Qikiqtarjuaq
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. The Research Centre for Astronomy and Earth Sciences (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.: 150024) and the NIRB (Online Application Form, April 20, 2023). 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.

Water courses/Water bodies (including fresh and marine waters)

6. The Proponent shall ensure that water extraction from any fish-bearing waterbody is done with appropriate care and caution. Small lakes or streams should not be used for water withdrawal unless approved by the appropriate authorizing agency.
7. The Proponent shall ensure that no disturbance of the stream bed, lakebed or the banks of any definable watercourse be permitted, except where deemed necessary for maintaining project-specific operational commitments or approved by a responsible authority in cases of spill management.
8. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including wastewater) or sediment into any water body. The Proponent should have in place an Emergency Spill Response Plan that is approved by the appropriate authorizing agency(ies).

Waste Management

9. 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

10. 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.

11. The Proponent shall use adequate secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) when storing barreled fuel and chemicals at all locations.
12. 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.
13. All fuel and chemical storage containers must be clearly marked with the Proponent's name for ease of identification.
14. The Proponent shall have a Spill Contingency Plan in place at all fuel storage or transfer locations and shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available.
15. The Proponent shall follow the authorizing agencies' direction for management and removal of hazardous materials and wastes (e.g., contaminated soils, sediment and waste oil).
16. The Proponent shall ensure that wildlife deterrent systems are utilized at the time of a spill incident in order to avoid wildlife (terrestrial or marine) and migratory birds from being contaminated.
17. 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

18. 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.
19. 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.
20. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

Migratory Birds and Raptors Disturbance

21. 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*.
22. 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.

Aircraft Flight Restrictions

23. The Proponent shall not alter flight paths to approach wildlife and avoid flying directly over animals.
24. The Proponent shall plan flight paths that minimize flights over known habitat likely to have birds or concentrations of wildlife. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
25. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum flight altitude of 610 metres (2,100 ft) above ground level except during landing, take-off or if there is a specific requirement for low-level flying, which does not disturb wildlife or migratory birds.
26. The Proponent shall avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of 1.5 kilometre. If avoidance is not possible maintain a minimum flight altitude of 1,100 metres (3,500 feet) over these areas.
27. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
28. 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.

Land Use and Restoration of Disturbed Areas

29. The Proponent shall use existing trails where possible during project activities on the land.
30. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
31. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.
32. The Proponent shall remove all garbage, fuel and equipment at the end of each field season and/or upon completion of work and/or upon abandonment.
33. 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

34. 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.
35. The Proponent shall not erect camps or store materials on the surface ice of lakes or streams, except that which is for immediate use.

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.

Heritage Sites

36. 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.
37. 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.

Other

38. 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.
39. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.
40. The Proponent should, to the extent possible, hire local people and access local services where possible.