



NIRB File No.: 25YN023
NPC File No.: 150691

May 1, 2025

Ross Lieblappen
Vermont State University
124 Admin Drive
Randolph Center, VT
05061
United States of America

Sent via email: ross.lieblappen@vermontstate.edu

Re: Notice of Screening for Vermont State University's "Interpretations of Polar Environments at the Nanoscale" Project Proposal

Dear Ross Lieblappen:

On April 5, 2025 the Nunavut Impact Review Board (NIRB) received a referral to screen Vermont State University's "Interpretations of Polar Environments at the Nanoscale" project proposal from the Nunavut Planning Commission (Commission), which noted that the project proposal is outside the area of an applicable regional land use plan. On April 11, 2025 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 **25YN023** - please reference this file number in all future related correspondence.

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/126166.

Project:	Interpretations of Polar Environments at the Nanoscale
Region:	Kitikmeot
Location:	Surrounding areas of Cambridge Bay

Closest Community:	Cambridge Bay	Distance (approximate)	15 kilometres (km)	Direction	North and south
Summary of Project Description:	The Proponent intends to conduct scientific research to improve characterization of various polar terrains from the microscale and into the nanoscale using X-ray computed tomography.				
Project Proposed Timeline:	May 11 to May 25, 2025				

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

- Collect up to eight (8) permafrost cores;
 - Transportation via truck to five (5) or six (6) locations outside of town;
 - Core size approximately one (1) metre in length and 7.5 centimetre in diameter;
- Collect up to eight (8) sea ice cores;
 - Transportation via snow machine to five (5) or six (6) locations in the Cambridge Bay harbour;
 - Core size approximately one (1) metre in length and 7.5 centimetre in diameter;
- Hiring of local services for ice/animal guiding from Vivitem company; and,
- Use of accommodations and facilities in Cambridge Bay including the Canadian Hiring Arctic Research Station.

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/126166 and include:

- *Nunavut Planning Commission Conformity Determination*
- *NIRB Online Application in English and Inuinnaqtun*
- *Project Summary*
- *Polar Knowledge Canada Research Support Agreement*

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 Vermont State University project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **May 12, 2025**.

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/126166.

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4619 or kgillard@nirb.ca.

Sincerely,



Kelli Gillard
Manager, Impact Assessment
Nunavut Impact Review Board

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

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

cc: Distribution List
Elizabeth Goodell, Vermont State University
Tracey McCaie, Crown-Indigenous Relations and Northern Affairs Canada
Mosha Cote, Nunavut Research Institute
José Audet-Lecouffe, Fisheries and Oceans Canada
Wynter Kuliktana, Kitikmeot Inuit Association
Tannis Bolt, Kitikmeot Inuit Association

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. Vermont State University (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.: 150691), and the NIRB (Online Application Form, April 11, 2025; and Project Summary, April 11, 2025). 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.
7. The Proponent shall dispose of all combustible wastes as required by the appropriate authorizing agencies. All non-combustible wastes from the project site shall be removed to an approved facility for disposal.

Wildlife – General

8. 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.
9. 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.
10. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
11. The Proponent shall ensure that all wildlife have the right-of-way on any roads or trails. Vehicles are required to slow down or stop and wait to permit the free and unrestricted movement of wildlife across roads or trails at any location.

Migratory Birds and Raptors Disturbance

12. 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*.
13. 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.

Caribou and Muskoxen Disturbance

14. The Proponent shall avoid interfering with any paths or crossings known to be frequented by caribou during periods of migration as identified by current land use plans in place and/or by Inuit Qaujimaningit.
15. The Proponent shall not locate any operation or undertake activities that could block or cause any diversion to migration of caribou or muskoxen.
16. The Proponent shall immediately cease activities likely to interfere with the migration or calving of caribou or muskoxen until such time as the caribou or muskox have passed.

Road and Ground Disturbance

17. 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.

Land Use and Restoration of Disturbed Areas

18. The Proponent shall use existing trails where possible during project activities on the land.
19. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
20. 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.

Heritage Sites

21. The Proponent shall ensure that archaeological and paleontological sites are not purposely or inadvertently disturbed as a result of project activities.
22. The Proponent shall ensure that all personnel 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.

Other

23. 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.
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.