



**NIRB File No.: 18YN020**  
NPC File No.: 148796

April 10, 2018

Stephanie Coulombe  
Polar Knowledge Canada  
1 Uvajuq Road  
Cambridge Bay, NU X0B 0C0

Sent via email: [stephanie.coulombe@polar.gc.ca](mailto:stephanie.coulombe@polar.gc.ca)

**Re: Notice of Screening for Polar Knowledge Canada's "Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut" project proposal**

Dear Stephanie Coulombe:

On March 21, 2018 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen Polar Knowledge Canada's (PKC) "Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut" project proposal from the Nunavut Planning Commission (NPC or Commission), which noted that the project proposal is outside the area of an applicable 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 section 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 **18YN020**.

#### INFORMATION REQUEST

On March 21, 2018 the NIRB requested that the Proponent complete the online application form through the NIRB's public registry system and ensure, pursuant to subsection 144(1) of the *NuPPAA*, that the information provided be sufficient to determine the scope of the project activities being proposed and that sufficient information has been provided to commence screening. Following a preliminary completeness check of the proposal as submitted, the NIRB determined that the proposal did not contain the necessary information for the NIRB to carry out its screening and on March 27, 2018 requested that the Proponent provide the Board with the additional information in order to carry out the screening of the project proposal.

On April 5, 2018 the NIRB received the required additional information and commenced the screening pursuant to Part 3 of the *NuPPAA*.

## PROJECT OVERVIEW

### ***Project Scope:***

The proposed “Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut” project is located within the Kitikmeot region, within the municipality of Cambridge Bay, its surrounding area and within the southern part of Victoria Island. The Proponent intends to start a research project to study the response of Victoria Island permafrost ecosystems to climate change and their environmental implications. The program is proposed to take place from May to August 2018.

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

- Use of aircrafts for picks ups and drop offs;
- Use of All Terrain Vehicles (ATVs) to access study sites near the community;
- Deployment and use of geophysical tools to undertake fieldwork. Specific field activities include:
  - Use of aircrafts for aerial surveys;
  - Use of a portable earth drill to collect permafrost samples from the study sites to characterize the permafrost conditions;
  - Use of ground-penetrating radar to survey the active layer of permafrost and to image the subsurface;
  - Monitor spatial changes in the landscape due to thawing permafrost with the use of high-precision Global Navigation Satellite (GPS) System and satellite images;
  - Use of a series of sensors connected to a data logging system to measure ground temperature changes and monitor permafrost thaw in the area;
  - Characterize and sample sediments found at the land surface;
  - Assess the impacts of permafrost disturbances on the water quality of lakes and streams;
  - Gather local knowledge on the changes occurring across the Arctic landscape;
- Transportation, storage and use of fuel for equipment refuelling; and
- Use of accommodations and facilities at the Canadian High Arctic Research Station (CHARS) campus to collect baseline knowledge of permafrost and landscape changes in the Kitikmeot Region.

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](http://www.nirb.ca) by using any of the following search criteria:

- Project Name: Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut
- NIRB File No.: 18YN020
- Application No.: 125305

The documents received include:

- *NPC Screening Referral*
- *NPC Application*
- *NIRB's Online Application Form*
- *Non-technical Project Proposal summary in English and Inuinnaqtun*

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 Polar Knowledge Canada's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **May 1, 2018**.

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.

#### CONTACT INFORMATION

Please send your comments to the NIRB via email at [info@nirb.ca](mailto: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](http://www.nirb.ca) by using any of the following search criteria:

- Project Name: Permafrost Dynamics in Response to Climate Change on Victoria Island, Nunavut
- NIRB File No.: 18YN020
- Application No.: 125305

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

Sincerely,

Mia Stokert

Mia Otokiak  
Junior Technical Advisor  
Nunavut Impact Review Board

cc: Distribution List  
Geoff Clark, Kitikmeot Inuit Association  
Wynter Kuliktana, Kitikmeot Inuit Association  
Drikus Gissing, Government of Nunavut, Department of Environment  
Mosha Cote, Nunavut Research Institute  
Tracey McCaie, Indigenous and Northern Affairs Canada

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