



NIRB File No.: 16YN043

NPC File No.: 148292

July 29, 2016

Jochen Halfar
Department of Chemical and Physical Sciences
University of Toronto at Mississauga
3359 Mississauga Rd.
Davis Building, Room 4044
Mississauga, ON L5L 1C6

Sent via email: jochen.halfar@utoronto.ca

Re: Notice of Screening for University of Toronto's "Past Climate Reconstruction using Annually-layered Carbonate buildups on the Nunavut Shallow Seafloor" project proposal

Dear Jochen Halfar:

On June 8, 2016 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen the University of Toronto (U of T)'s "Past Climate Reconstruction using Annually-layered Carbonate buildups on the Nunavut Shallow Seafloor" project proposal from the Nunavut Planning Commission (NPC or Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan. Pursuant to section 86 of the *Nunavut Planning and Project Assessment Act* (NuPPAA), the NIRB has commenced screening this project proposal and has assigned it file number 16YN043.

INFORMATION REQUEST

Following a preliminary completeness check, the NIRB determined that the proposal as submitted did not contain the necessary information for the NIRB to carry out its screening. On June 16, 2016 the NIRB requested that the U of T provide additional information in support of this proposal by June 30, 2016. On July 22, 2016 the NIRB received the requested additional information and commenced the screening pursuant to Part 3 of the NuPPAA.

PROJECT SCOPE

Project Scope:

The proposed "Past Climate Reconstruction using Annually-layered Carbonate buildups on the Nunavut Shallow Seafloor" project is located within the Qikiqtani (North Baffin) region, along

the coastline from Qikiqtarjuaq to Resolute Bay. The proponent intends to collect small carbonate (limestone) mounds to further the understanding of ocean temperature and sea ice evolution during the past centuries. The program is proposed to take place in August and September 2016.

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

- Transportation of five (5) personnel by 16 metre (m) marine vessel along the coastline between Qikiqtarjuaq and Resolute Bay including Jones Sound, Lancaster Sound, Wellington Channel, Perry Strait, and Prince Regent Inlet;
- Use of two (2) m boat for site navigation;
- Transportation, storage and use of 4,000 litres (L) of diesel to power the vessels;
- Collection of up to 20 inorganic calcium carbonate (limestone) mounds, three to eight 3-8 centimeters (cm) in diameter and up to three (3) cm high, with the use of hand tools;
- Use of self-contained underwater breathing apparatus (SCUBA) at water-depths of 15-20 m at various locations to access sampling locations;
- Use of water for domestic purposes; and
- Production of greywater and sewage which would be stored onboard marine vessel.

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 by using any of the following search criteria:

- Project Name: Past Climate Reconstruction using Annually-layered Carbonate buildups on the Nunavut Shallow Seafloor
- NIRB File No.: 16YN043
- Application No.: 124690

The documents received include:

- *NPC Screening Referral and Conformity Determination*
- *NPC Application and Conformity Questionnaire*
- *NIRB's Online Application Form (formerly the NIRB Part 1 form in English)*
- *NIRB Part 1 Summary Form in English*
- *Non-technical Project Proposal summary in English and Inuktitut*
- *Maps noting project area*
- *Nunavut Research Institute's Scientific Research Licence Application in English*

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 U of T project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **August 8, 2016**.

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 is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; 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**).

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 by using any of the following search criteria:

- Project Name: Past Climate Reconstruction using Annually-layered Carbonate buildups on the Nunavut Shallow Seafloor
- NIRB File No.: 16YN043
- Application No.: 124690

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4607 or at kbenoit@nirb.ca.

Sincerely,



Kristina Benoit
Technical Advisor
Nunavut Impact Review Board

cc: Distribution List
Karén Kharatyan, Nunavut Water Board
Joel Fortier, Qikiqtani Inuit Association
Mosha Cote, Nunavut Research Institute
Elizabeth Patreau, Fisheries and Oceans Canada

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

Enclosures (4): Public Notice of Screening (English and Inuktitut)
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. University of Toronto (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 the Nunavut Planning Commission (Application to Determine Conformity, June 8, 2016), and the NIRB (Online Application Form, July 7, 2016; and Maps noting project area, July 22, 2016).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Waste Disposal

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.

Fuel and Chemical Storage

6. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances.
7. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including waste water) or sediment into any marine waters, and shall manage wastes on board the vessel prior to final disposal at approved port facilities.
8. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife - General

9. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
10. 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.
11. If any marine mammals are encountered while on the vessels, the Proponent shall not attempt to intersect or interfere with the movements of marine mammals. Strategic positioning of

vessels ahead of the path being traveled by mobile whales and waiting for the whales to pass is also prohibited.

12. 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.

Migratory Birds and Raptors Disturbance

13. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration and moulting.
14. The Proponent shall avoid the seaward site of seabird colonies and areas used by flocks of migrating waterfowl by three (3) kilometres.

Other

15. 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.
16. The Proponent should, to the extent possible, hire local people.
17. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.