



NIRB File No.: 10YN009

NPC File No.: 148243

(previous) NWB File No.: 3BC-ACS1313

(previous) NRI File No.: 0209911R-M-Amended

May 27, 2016

Benoit Beauchamp
University of Calgary
2500 University Dr. NW
Calgary, AB T2N 1N4

Sent via email: bbeaucha@ucalgary.ca

Re: Notice of Screening for the University of Calgary's "Arctic Carbonates, Sandstones and Volcanic Rocks – North Axel Heiberg Island, Nunavut" project proposal

Dear Benoit Beauchamp:

On April 14, 2016 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen the University of Calgary's (U of C) "Arctic Carbonates, Sandstones and Volcanic Rocks – North Axel Heiberg Island, Nunavut" project proposal from the Nunavut Planning Commission (NPC or Commission) due to significant modification to the original project proposal. The NPC noted that the conformity determination issued on January 29, 2010 still applied to this proposal.

Pursuant to section 86 of the Nunavut Planning and Project Assessment Act (NuPPAA), the NIRB commenced screening this project proposal. Due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB file number **10YN009**, the NIRB views this project proposal as an amendment to the previously screened project and assigned this proposal with this previous file number.

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 April 27, 2016 the NIRB requested that the U of C provide additional information in support of this proposal by May 11, 2016. On May 19, 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 “Arctic Carbonates, Sandstones and Volcanic Rocks – North Axel Heiberg Island, Nunavut” project is located within the Qikiqtani region (North Baffin), on Axel Heiberg Island, approximately 650 kilometres (km) north of Resolute Bay, and 500 km northeast of Grise Fiord. The proponent intends to investigate and collect carbonate, sandstone, and volcanic rock samples for geochemical and microscopic analysis. The program is proposed to take place in July of 2016.

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

- Investigation of carbonate, sandstone, and volcanic outcrops on northern Axel Heiberg Island in the Sverdrup Basin;
- Collection of 50 (total) 0.5-kilogram rock samples from three (3) research sites using a geological hammer;
- Transportation of up to three (3) personnel from Resolute Bay to a Polar Continental Shelf Program (PCSP) landing site south of Bunde Fiord via twin otter;
- Transportation of personnel from the PCSP landing site to, and between, three (3) research sites via PCSP helicopter;
- Establishment and restoration of three (3) sequential temporary campsites;
- Use of water for camp operations;
- Production of combustible and non-combustible wastes, greywater, and sewage;
- Incineration of combustible wastes and storage of non-combustible wastes to be transported to Resolute Bay for disposal;
- Disposal of greywater in pits to be backfilled after use;
- Storage and use of fuel for camp operations; and
- Publishing of research data in peer-reviewed journals to be made publicly available through the Geological Survey of Canada.

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: Arctic carbonates, sandstones and volcanic rocks, Northern Axel Heiberg Island, Nunavut
- NIRB File No.: 10YN009
- Application No.: 124660

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 Inuktitut*
- *Non-technical Project Proposal summary in English, Inuktitut, and French*
- *Map noting project research and temporary camp locations*
- *Additional project information through correspondence*

The NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site 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 the U of C's project proposal with this letter, and we invite interested parties to comment directly to the NIRB by **June 7, 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 at info@nirb.ca or via fax at (867) 983-2594. **The NIRB has recently launched an updated online public registry, and parties can access project information as well as submit comments directly to the NIRB via www.nirb.ca.**

If you have any questions or require clarification, feel free to contact the undersigned at (867) 983-4615 or at dstpierre@nirb.ca.

Sincerely,



Davin St. Pierre
Technical Advisor II
Nunavut Impact Review Board

cc: Distribution List
 Karén Kharatyan, Nunavut Water Board
 Mosha Cote, Nunavut Research Institute
 Joel Fortier, Qikiqtani Inuit Association

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. The University of Calgary (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, April 14, 2016), the NIRB (additional information submitted May 19, 2016), the Nunavut Water Board, and to the Nunavut Research Institute.
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

5. 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 Nunavut Water Board.
6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste Disposal/Incineration

7. 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.
8. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
9. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Fuel and Chemical Storage

10. Unless otherwise authorized by the Nunavut Water Board, the Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
11. The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.

12. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
13. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, and at all fuel storage sites.
14. 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

15. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
16. 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.
17. 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

18. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metres buffer around the nests). If active nests of any birds are discovered (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
19. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
20. The Proponent shall ensure its aircraft avoid excessive hovering or circling over areas where bird presence is likely.

Aircraft Flight Restrictions

21. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
22. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
23. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

Caribou and Muskoxen Disturbance

24. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
25. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as movement of equipment or personnel until such time as the caribou have passed.

Temporary Camps and Land Use

26. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
27. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Restoration of Disturbed Areas

28. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
29. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state as practical as possible upon completion of field work.

Other

30. 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.
31. The Proponent should, to the extent possible, hire local people.
32. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.