



NIRB File No. 10YN046

June 15, 2010

Melissa Lafreniere
Dept of Geography M-C D201
Queen's University, Kingston, ON K7L 3N6

Via email: Melissa.lafreniere@queensu.ca

Re: Notice of Part 4 Screening for Queen's University - Melissa Lafreniere's "Climate change impacts on river flows, sediment loads, and water quality" project proposal

Dear Melissa Lafreniere:

On June 11, 2010 the Nunavut Impact Review Board (NIRB or Board) received your "Climate change impacts on river flows, sediment loads, and water quality" project proposal from Nunavut Research Institute. The NIRB has assigned this project proposal file number 10YN046 - please reference this file number in related future correspondence.

The proposed project is located at Aulattivijjuaq River on Baffin Island, Nunavut. The nearest community is Pangnirtung, located approximately 25 km southwest of the project site. The project is designed to understand how climate change will affect river flows, sediment loads and water quality by combining measurements of water level and water quality in the rivers with studies of lakes and lake sediments to reconstruct past river flows. The project also intends to understand how climate change can affect floods. The planned project activities will be undertaken from August 16, 2010 to August 31, 2012.

The project activities would include:

- Establishment and removal of temporary camp;
- Use of watercraft/land vehicle for personnel drop-off and pick-up to project location;
- Periodic seasonal site visits for water and snow samples collection and instrument maintenance; and
- Scientific research activities, including:
 - Onsite hydrological and physical testing in two chosen rivers (flow rate, flow, level, temperature, and turbidity);
 - Water sample collection for water chemistry analysis;
 - Deployment of a temporary weather station to monitor the meteorological data; and
 - Soil moisture monitoring at two sites using thin metal probes.

All documents received and pertaining to this project proposal can be obtained from NIRB's ftp site at <http://ftp.nirb.ca/SCREENINGS/ACTIVE%20SCREENINGS/10YN046-Queens%20U%20-%20Melissa%20Lafreniere/> including:

- *Nunavut Research Institute (NRI) Application (English)*
- *Map*
- *Non Technical Project Proposal Summary (English and Inuktitut)*
- *Letter to Pangnirtung HTO by the Proponent*

Pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), the NIRB shall proceed to screen this project proposal. The NIRB may request additional information at any time during the process. The NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site for public access.

Be advised that the NIRB is copying interested parties and municipalities most affected by your project proposal. Interested parties are encouraged to comment directly to the NIRB by **June 25, 2010**.

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 and socio-economic effects; and 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**).

Please send your comments to the NIRB at info@nirb.ca or via fax at **(867) 983-2594**.

If you have any questions or concerns, feel free to contact me directly at (867) 983-4606 or lwan@nirb.ca.

Sincerely,



Li Wan
Technical Advisor
Nunavut Impact Review Board

cc: Distribution List
Mosha Cote, NRI (Mosha.Cote@arcticcollege.ca)
Stephen Bathory, QIA (landsdirector@qia.ca)
Phyllis Beaulieu, NWB (licensing@nunavutwaterboard.org)
Spencer Dewar, INAC (Spencer.Dewar@inac-ainc.gc.ca)

Attachments: Appendix A – *Proposed Project Specific Terms and Conditions*
Enclosures (2): 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. Queen's University-Melissa Lafreniere (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 NIRB (*Nunavut Research Institute Application*, date June 7, 2010, and *Letter to Pangnirtung HTO* dated May 28, 2010.)
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

5. 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

6. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at approved facilities in the community of Pangnirtung. All wastes shall be kept inaccessible to wildlife at all times.

Fuel Storage

7. 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.
8. The Proponent shall report all spills of fuel, or other deleterious materials immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife

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. The Proponent shall not disturb or destroy the nests or eggs of any birds. 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.

12. The Proponent shall cease activities that may interfere with migration or calving of caribou, until the caribou have passed or left the area.
13. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques.

Physical Environment

14. 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. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
15. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Camp

16. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.

Restoration

17. The Proponent shall remove all garbage and fuel at each field season.
18. The Proponent shall complete all clean-up campsite, and restoration of the lands used prior to the final abandonment.

Other

19. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the region.