April 30, 2012

Our reference IQALUIT-#525135

Sent by email: licensing@nunavutwaterboard.org

Phyllis Beaulieu Manager of Licensing Nunavut Water Board Gjoa Haven, Nunavut X0E 1J0 Your reference 1BW-DUV0911

Re:

Type 'B' Water Licence No. 3BC-NEI----, New Application
Northern Ellesmere Ice Shelves, Epishelf Lakes, and Climate Impacts
Project

University of Ottawa, Department of Geography Qikiqtani Region

Dear Phyllis,

Thank you for your March 30, 2012 request for written representations on the above referenced water licence application.

A Technical Review Memorandum is provided for the Board's consideration.

Please do not hesitate to contact me by telephone at (867) 975-4555 or email at david.abernethy@aandc-aadnc.gc.ca to discuss this submission.

Regards,

David Abernethy
Regional Coordinator
Water Resources Division, Operations Directorate
Nunavut Regional Office
Iqaluit, Nunavut
X0A 0H0

Encl.

c.c.: Murray Ball, Manager of Water Resources (AANDC)



Technical Review Memo

TO Phyllis Beaulieu OUR REFERENCE

Manager of Licensing File #9545-2-3.3BC.NEIA

Nunavut Water Board IQALUIT-#525135

YOUR REFERENCE

FROM David Abernethy 3BC-NEI----

Water Resources Regional Coordinator

Aboriginal Affairs and Northern DATE

Development Canada April 30, 2012

SUBJECT Type B Water Licence No. 3BC-NEI----, New Application

Northern Ellesmere Ice Shelves, Epishelf Lakes, and Climate Impacts

Project

University of Ottawa, Department of Geography

Qikiqtani Region

A. PROJECT DESCRIPTION

On March 30, 2012, the Nunavut Water Board (NWB or Board) distributed the above-referenced water licence application to interested parties for review. The University of Ottawa's Department of Geography are requesting the NWB's approval to use water and dispose of wastes during activities associated with their Northern Ellesemere Ice Shelves, Epishelf Lakes, and Climate Impacts Project. This project is based out of temporary camp on the southwest edge of Milne Fiord, Ellesmere Island. This site has been used to support annual project field work since 2008.

Typically, a 4 person temporary camp is mobilized for the spring and summer months with spring visits lasting for 2-3 weeks, involving 4 people, and summer visits lasting for up to 2 weeks, involving 2 people. The University of Ottawa are requesting the use of 25 L of water per day for domestic purposes when project activities take place. This water will be acquired from a Milne Fiord epishelf lake (freshwater layer that overlies sea water derived from the melt of snow and glacier ice). Sewage and greywater will be disposed in land based sumps and solid wastes will be back-hauled to Resolute for disposal pursuant to agreements established through the Polar Continental Shelf Project. According to the submitted Spill Contingency Plan, empty fuel barrels are backhauled to either Eureka or Resolute for proper disposal pursuant to Polar Continental Shelf Project procedures.

The Nunavut Impact Review Board has screened this project pursuant to Article 12, Part 4 of the *Nunavut Land Claims Agreement* and determined that

project activities can proceed subject to the terms and conditions issued in a Screening Decision Report. The Nunavut Planning Commission are evaluating whether the proposed undertaking conforms with the North Baffin Regional Land Use Plan.

B. RESULTS OF REVIEW

On behalf of Aboriginal Affairs and Northern Development Canada (AANDC), the following comments/ recommendations are submitted for the Board's consideration.

1. Disposal of Greywater and Sewage Effluent

Consistent with standard licence terms and conditions, the University of Ottawa should ensure that camp greywater and sewage effluent will be disposed in sumps located at least thirty-one (31) metres from the ordinary high water mark of any water body such that the quality, quantity or flow of such water bodies is not impaired, unless otherwise approved by the Board in writing.

2. Proposed Licence Term

The University of Ottawa are requesting a twenty-five (25) year licence term. Although the scale of the proposed project does not flag immediate concerns in terms of potetial negative impacts to receiving water bodies resulting from identified project activities, AANDC recommends that a shorter licence term, in the range of 5-8 years, be issued. This would promote regular opportunities for interested parties to review and comment on the University of Ottawa's licensed activities.

3. Secondary Containment of Fuel Barrels

The University of Ottawa should use secondary containment, such as self-supporting insta-berms, when storing barrelled fuel on location rather than relying on natural depressions. This procedure is not identified in the submitted Spill Contingency Plan.

4. AANDC Contact Information for Hazardous Material Spills

Section 7 of the submitted Spill Contingency Plan identifies Mr. Peter Kusugak, AANDC Manager of Field Operations, as the Department's spill report contact. Mr. Kusugak is now retired and as a result this section should be revised to reference the position, "AANDC Manager of Field Operations, Nunavut Regional Office (Tel: 867-975-4295, Fax: 867-975-6445)," for spill reporting purposes.

5. Annual Reporting Requirements

According to Block 26, "Annual Reporting," of the submitted water licence application, the University of Ottawa intends to submit annual reports required

by the Nunavut Research Institute to the Nunavut Water Board. AANDC recommends that the University of Ottawa submit Annual Reports standard to Type B water licences for camp operations to be consistent with the terms and conditions imposed on other licensees.

Prepared by David Abernethy