



Water Resources  
Nunavut Regional Office  
P.O. Box 100  
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May 14, 2012

Phyllis Beaulieu  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU, X0A 1J0

Your file - Votre référence  
3BC-FCA----  
Our file - Notre référence  
CIDM# 526895

**Re: Canadian Museum of Nature – Flora of the Canadian Arctic Project –  
New Water Licence Application 3BC-FCA----**

Dear Phyllis Beaulieu:

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of the new water licence application, 3BC-FCA---- submitted by Dr. Saarela, Canadian Museum of Nature to the Nunavut Water Board (NWB). The following advice has been provided pursuant to AANDC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA) and the *Department of Indian Affairs and Northern Development Act* (DIAND Act). In conducting our review, AANDC referred to the documents on the NWB's FTP-site under 3BC-FCA----.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by e-mail at [Jean.Allen@aandc-aadnc.gc.ca](mailto:Jean.Allen@aandc-aadnc.gc.ca)

Sincerely,

*Original Signed By*

Jean Allen  
Water Management Specialist

Cc. Murray Ball, Manager of Water Resources, AANDC  
Andrew Keim, A/Manager of Field Operations, AANDC



## **Technical Review Memorandum**

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: Jean Allen – Water Management Specialist, AANDC

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### **Re: Canadian Museum of Nature – Flora of the Canadian Arctic Project – New Water Licence Application 3BC-FCA----**

#### **A. Project Description**

On April 12, 2012, the Nunavut Water Board (Board) distributed Dr. Saarela's new application for a Type B water licence for water use and waste disposal in association with the Flora of the Canadian Arctic Project. The applicant has requested a licence term of 3 months (June to September 2012) to conduct comprehensive floristic studies in Southern Baffin Island.

Dr. Saarela proposes to establish 5-7 temporary camps to accommodate 6 people along the Soper Heritage River from Mount Joy to Kimmirut (Katannilik Park), in the vicinity of Kimmirut (including Taqaiqsirvik Park), and at the head of Barrier Inlet which is located approximately 60 km southeast of Kimmirut. Transportation to the site will be by canoe along the Soper Heritage River and by helicopter to Barrier Inlet.

Water sources for the camps include the Soper Heritage River, municipal water in the vicinity of Kimmirut, and a small unnamed river and lake in Barrier Inlet. The total estimated quantity of water required is 0.3 m<sup>3</sup> per day for domestic use only. Sewage will be buried and it is proposed that toilet paper waste will be burned in a small hole in the ground. Greywater will be dumped at least 50 m from any water sources. All other garbage will be packed and removed from the site.

#### **B. Results of Review**

AANDC Water Resources Division offers the following comments/recommendations for the Board's consideration.

##### **1. General**

- AANDC recommends that traditional knowledge be incorporated into the research study by involving local people (similar to the research done in the Belcher Islands).

##### **2. Waste Management**

- The supplementary questionnaire states that toilet paper will be burned in a small hole in the ground. AANDC does not encourage the open burning of waste and recommends that the applicant consider alternate methods



- of disposal including latrine pits, existing park facilities (i.e., outhouses), or that it be removed from site along with all other garbage.
- AANDC recommends that the applicant follow best management practices for grey water disposal, including the restoration of any dug out sumps used for grey water to pre-disturbance conditions.
  - Should garbage be disposed in Nunavut, AANDC recommends that the applicant identify the solid waste facility that will accept and dispose of the camp solid waste. It is recommended that the applicant obtain written authorization from an approved solid waste facility confirming the use of their facilities for the proper disposal of solid waste and this letter should be provided to the NWB.

### **3. Spill Contingency Plan**

- In the Project Description (Section 1, vii), only Barrier Inlet is identified in the plan. AANDC recommends that this plan apply to all proposed camp sites in the water licence application (camping fuel applies to all sites).
- AANDC recommends that the applicant submit any updated copies of the plan to the NWB (i.e., satellite phone numbers, spill kit contents).
- In addition to reporting spills to the Nunavut/NWT Spill Report Line, AANDC recommends that all spills be reported to the AANDC Manager of Field Operations at 867-975-4289 (phone) and/or 867-975-6445 (fax). It is also recommended that all spills be recorded in an annual report.
- AANDC recommends that the plan be representative of the small camp proposed (i.e., booms, pumps, heavy equipment, etc. may not apply to a small camp such as that proposed).
- Section 3D indicates that contaminated products will be placed in empty waste oil containers. Will these containers be flown onto site or will waste Jet B fuel containers be used? And what will be used if there are no empty containers at the time of the spill? AANDC recommends clarification on how contaminated products will be stored.
- AANDC notes that the Material Safety Data Sheet (MSDS) for lantern fuel was last revised in 1998 and recommends that they provide the most recent MSDS to the NWB.

### **4. Abandonment and Reclamation**

- While no specific plan was provided, the provisions for waste removal and site cleanup provided appear to be sufficient to the size and scale of the camp. It is noted that the applicant will leave the sites as found (supplementary questionnaire) and that all items associated with the project will be removed at the end of each camp stay (water licence application). It is recommended that the applicant provide the NWB with more information regarding the reclamation of sumps and the removal/disposal of fuel containers (fuel drums and white gas cans) prior to cancellation.