



August 27, 2014

Your file - Votre référence
3AM-GRA1015

Our file - Notre référence
IQALUIT-# 822770

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, NU X0E 1J0

Re: Aboriginal Affairs and Northern Development Canada's Technical Review of additional information submitted as part of an amendment application from the Government of Nunavut, Department of Community and Government Services (GN-CGS) for the Seasonal Replenishment of Nipissar Lake.

Dear Ms. Beaulieu:

Thank you for your email of July 7, 2014 concerning the above mentioned application. A memorandum is provided for the Board's consideration. Comments and recommendations have been provided pursuant to Aboriginal Affairs and Northern Development Canada's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me by telephone at 867-975-4282 or email at ian.parsons@aandc-aadnc.gc.ca for further information.

Sincerely,

Ian Parsons
Regional Coordinator
Water Resources Division
Resource Management Directorate
Aboriginal Affairs and Northern Development Canada
Iqaluit, NU X0A 0H0

Encl.

c.c.: Murray Ball, Manager of Water Resources, AANDC Nunavut
Erik Allain, Manager of Field Operations, AANDC Nunavut

Memorandum

To: Phyllis Beaulieu, Nunavut Water Board

From: Ian Parsons, Aboriginal Affairs and Northern Development Canada

CC: Murray Ball (AANDC), Erik Allain (AANDC), Megan Porter (NWB) and Robin Ikkutisluuk (NWB)

Date: August 27, 2014

Re: Water Licence Application, #3AM-GRA1015

Licensee: Government of Nunavut, Dept. of Community and Government Services
Project: Seasonal Replenishment of Nipissar Lake
Region: Kivalliq

Comments:

A. Background

On July 7, 2014, the Nunavut Water Board (NWB) provided notification that a Public Hearing would take place on September 25-26, 2014 for the amendment application, allowing for the seasonal replenishment of Nipissar Lake.

The NWB asked interested parties to submit any additional comments by August 28, 2014.

B. Results of review

On behalf of Aboriginal Affairs and Northern Development Canada (AANDC), the following comments and recommendations are provided:

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| 1. | <p>Char River Flow Monitoring</p> <p>Comment: The licensee has provided flow data for Char river collected over a single year and shared by Agnico-Eagle Mines. The flow data seems to indicate that there is a limited window suitable for water withdrawals, during and shortly after the spring freshet, with substantial seasonal flow. Local observations by AANDC staff indicate that flow in Char River beyond the spring freshet can be very limited. The initial amendment application stated that 125 pumping days would be needed to complete the annual replenishment of Nipissar Lake. The number of pumping days was changed in a more recent submission, indicating that only 14 pumping days will be needed in 2014 increasing annually to 79 days per year by 2030. We presume this is based on a higher withdrawal rate. In either case it appears questionable that the river will support the withdrawals required for replenishment objectives over the medium or long term, and the record of flow monitoring is not sufficient to characterize seasonal water flow or to clarify the issue availability. We further note that in-stream flow requirements have not been established for migrating char.</p> |
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| | <p>Recommendation: The licensee be required to undertake multi-year seasonal flow monitoring of Char River to assess the on-going viability of Char River in meeting community water needs, and to support the adaptive management of water withdrawals, including the establishment of in-stream flow objectives.</p> |
| 2. | <p>Adaptive Management Plan</p> <p>Comment: The department maintains that the licensee has not provided sufficient evidence of the capacity of Char River to sustain the proposed withdrawals over the proposed licence term, taking into account seasonal and annual flow variations and potential competing uses, such as in-stream flow requirements for migrating char. The Operation and Maintenance plan developed for the proposed operation does not include management strategies for maintaining in-stream flow. For example, Section 5.2 of the plan states that <i>“if insufficient flow to operate the pump is present, pumping activities will cease until sufficient water is present”</i>.</p> <p>Recommendation: The department recommends that, as a condition of a the water licence amendment, the licensee be required to develop an adaptive management plan that would include seasonal flow monitoring of Char River for the duration of the licence, formulation of in-stream flow objectives for Char River, and mitigation options for occurrences when flow may be insufficient to meet pumping objectives. Mitigations should include the identification of alternative intake locations (e.g. the original location in Lower Landing Lake).</p> |
| 3. | <p>Alternative Source Assessment</p> <p>Comment: The proponent has indicated that Char River was selected as a supplementary community water source based on economics and a limited assessment of water availability that did not account for flow variability or competing water uses. However, pumping-day targets may exceed the number of high flow days available. This calls into question the viability of the Char River in meeting community water supply objectives.</p> <p>Recommendation: The department recommends that the proponent conduct a more robust assessment of alternative supplementary community water sources that would assesses: watershed water balances, seasonal availability, annual flow variability, competing water uses and that fully captures implementation and operational costs.</p> |
| 4. | <p>Spill Contingency Plan</p> <p>Comment: The spill contingency plan as well as the O&M Plan does not contain the contact information for the AANDC Manager of Field Operations.</p> |

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| | <p>Recommendation: The applicant should include the contact information for the AANDC Manager of Field Operations. The Manager should be contacted in the event of any spill. The contact information is as follows: Manager, Field Operations, AANDC. Phone # 867 975-4295, Fax 867 975-6445.</p> <p>Comment: The spill contingency plan does not describe how refueling operations will be conducted.</p> <p>Recommendation: It is recommended that drip pans/trays or other secondary containment measures be used during any refueling operation to contain any minor spills or drips.</p> |
| 5. | <p>Pipeline</p> <p>Comment: The licensee has indicated that the low point in the water resupply pipeline will have a valve in order to drain water remaining in the pipeline (approximately 127,000 L) to avoid freezing.</p> <p>Recommendation: It is recommended that the licensee place erosion management structures at the pipeline low point to prevent erosion when releasing the water from the pipeline.</p> |

Prepared by Ian Parsons