



Indian and Northern  
Affairs Canada

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et du Nord Canada

Nunavut Regional Office  
Operations Directorate  
Water Resources Division  
P.O. Box 100  
Iqaluit, NU X0A 0H0

File # 9545-2-3.3AM.IQAA  
CIDMS #337384

June 5, 2009

*Via Email*

Richard Dwyer  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0E 1J0

Dear Richard,

**Subject      Water License #3AM-IQA0611, City of Iqaluit, Qikiqtani Region,  
Amendment Application**

Please be advised that on behalf of Indian and Northern Affairs Canada, I have completed a review of the above referenced City of Iqaluit submission to the Nunavut Water Board.

A Technical Review Memorandum (attached) is provided to the Board for consideration.

Should you have any questions regarding this submission, feel free to contact me at 867-975-4555 or [David.Abernethy@inac-ainc.gc.ca](mailto:David.Abernethy@inac-ainc.gc.ca).

Regards,  
David W. Abernethy

Cc.      Kevin Buck, Water Resources Division Manager

# Technical Review Memorandum

Date: June 5/09

To: Richard Dwyer, Nunavut Water Board

From: David Abernethy, Indian and Northern Affairs Canada, Water Resources Division, Iqaluit, NU

Re: **Water License #3AM-IQA0611 – City of Iqaluit – Qikiqtani Region – Application for Amendment to Water License**

## A. PROJECT DESCRIPTION

On May 20/09 the Nunavut Water Board (NWB or Board) distributed the City of Iqaluit's Oct. 22/06 application for an amendment to their Type A water license. This included supporting documentation and a NWB compliance assessment report. Interested parties were asked to review and comment on this application by June 12/09.

The following documents were made available for review,

- Nunavut Water Board, prepared by David Hohnstein. *Application for Amendment to Type A Water License 3AM-IQA0611*. Letter to the City of Iqaluit, attention Michèle Bertol. Gjoa Haven: May 20/09;
- Nunavut Water Board, prepared by Tunaley Lines & Associates. *Assessment of Administrative Compliance for Municipal Water License Amendment for the City of Iqaluit*. Gjoa Haven: Apr. 20/09;
- City of Iqaluit, prepared by Michèle Bertol. *Re: City of Iqaluit Water License 3AM-IQA0611*. Letter to the Nunavut Water Board, attention Dionne Filiatrault. Iqaluit: Oct. 8/08;
- City of Iqaluit, Prepared by Crystal Jones. *Re: Authorizing NWB to Discuss City of Iqaluit Water License*. Letter to the Nunavut Water Board, attention Joe Murdock. Iqaluit: Feb. 13/07;
- City of Iqaluit, Prepared by Geoff Baker. *Re: City of Iqaluit Water License 3AM-IQA0611*. Letter to the Nunavut Water Board, attention Phillip di Pizzo. Iqaluit: Oct. 22/06;
- City of Iqaluit. *Water License Application Form*. Iqaluit: Oct. 17/06;

- EarthTech. *Iqaluit, Nunavut – Iqaluit Solid Waste Facility – Drawings Issued for Construction – Project Number 93107*. Edmonton: Aug. 23/06;
- City of Iqaluit, prepared by Geoff Baker. *Re: City of Iqaluit Pending Water License 3AM-IQA0611*. Letter to the Nunavut Water Board, attention Phillip di Pizzo. Iqaluit: June 7/06;
- EarthTech. *City of Iqaluit – Sludge Management – Operation and Maintenance – Draft*. Edmonton: May 18/06;
- Trow Associates Inc. *City of Iqaluit – Lake Geraldine Earth and Concrete Work 2006*. Ottawa: 2006; and,
- Concentric Associates International Inc. *City of Iqaluit – Lake Geraldine Dam Safety Review*. Ottawa: 2006.

## **B. RESULTS OF REVIEW**

The following comments / recommendations are provided for the Board's consideration,

### **1. Type and Form of Public Hearing**

- INAC concurs with the NWB that following the receipt of additional information (from the City of Iqaluit) required to process this amendment application (as stated in the NWB's May 20/09 letter) the Board will proceed with their public review / hearing procedures. It is INAC's preference that a technical meeting / prehearing conference be held by teleconference and that a public hearing take place in Iqaluit.

### **2. Relevance of Information Deficiencies Noted by the Nunavut Water Board and This Review**

- The NWB's Apr. 20/09 compliance assessment report identifies a significant amount of information requirements that have not been submitted to properly process this amendment request. INAC concurs with the Board's decision to process the application pending the receipt of outstanding information identified in their letter to the City of Iqaluit dated May 20/09. An option could be to require the City to submit all relevant information required prior to any technical meeting / prehearing conference undertaken as part of the review process;

### **3. Other Relevant Matters**

- The City of Iqaluit's Oct. 8/08 letter requests changes to the Sewage Treatment Plant's (STP) effluent criteria specified in Part E, Item #s 3 and 4 of their license due to the plant's current operational status. After review of the submitted documentation and based on a site visit, the current sewage treatment system should not be considered as "primary treatment." In fact, the solids removal system currently in place at the facility is grit/coarse solids removal, which is only one component of normal primary treatment requirements.

According to the City of Iqaluit's Oct. 8/08 letter it is noted that the City advises that it cannot comply with the current effluent criteria required by the license. The City is requesting relief from these requirements until "commissioning of Phase 2 of the project" There appears to be no timetable as to when this will occur. INAC concurs that it will be virtually impossible for the present system to meet effluent criteria imposed by the license. Therefore, INAC is of the opinion that the proposed relief from the current effluent criteria requirements would only be acceptable on the condition that the City of Iqaluit be required to submit a signed contract with firm dates of implementation for the commencement of Phase 2 construction activities at the STP. Another option would be for the City to submit a comprehensive impact assessment report that determines the current effects of untreated sewage discharging to the receiving environment both from a short term and long term perspective (keeping in mind that the current system has been operating without effective Suspended Solids and BOD5 removal since at least 2006). Reports of this nature would allow parties to properly assess impacts to the receiving environment prior to agreeing with any relaxation of effluent criteria.

- The City of Iqaluit's Oct. 8/08 letter states that they cannot comply with License condition Part E, Item #16 which requires the collection and containment of all leachate within the West 40 Landfill, as the site does not have an impermeable liner. It is INAC's opinion that the City of Iqaluit should be required to install monitoring wells to determine if there is an impact from leachate. Also, INAC concurs with the recommendations made by the City of Iqaluit that this License condition should be revised to require that all surface runoff from within the West 40 Landfill (contact water) be collected and contained, and that all surface runoff originating outside of the landfill (non-contact water) be diverted away from the site.

### **4. Summary**

INAC recommends that the Board proceed with a public hearing review process either upon receipt of the information noted in the NWB's Apr. 20/09 compliance assessment report or by requiring the submission of this

information by a firm date set by the Board prior to any technical meetings/pre-hearing proceedings.