

FSC File: 2007-0650-18

June 9, 2011

Nunavut Water Board

P.O. Box 119
Gjoa Haven, NU
X0B 1J0

Attn: Richard Dwyer, Licence Administrator

Re: Hamlet of Baker Lake Water Licence 3MB-BAK1015 – Water Licence Amendment Summary

Dear Mr. Dwyer,

On behalf of the Hamlet of Baker Lake, we are pleased to submit the following Water Licence Amendment Request. FSC Architects & Engineers is providing engineering services for the new water treatment facility in the Hamlet of Baker Lake. This new facility replaces the aging existing facility and is located adjacent to it.

The proposed upgrades are summarized as follows:

- New Prefabricated water treatment plant to replace existing and underequipped water treatment plant;
- New dual intake lines located approximately 180m offshore at a depth of 7-8m below the surface. Associated water intake screens are designed with a maximum screen size of 2.5mm;
- Source water remains to be Baker Lake in approximately the same withdrawal area;
- Total water withdrawal is estimated at 228,000 Litres/day (83,220 m³ annually);
- Treatment facility flow rate is 1200 lpm (allowance for 2 x 1200 lpm truck fills simultaneously from storage tank);
- Process type consists of four pressure media filters, UV & chlorine disinfection prior to storage in a 360,000 L exterior reservoir tank;
- Backwash water is not treated by either UV or chlorine and is used to clean the filters approximately once per week. Backwash water is stored onsite until hauled by truck for disposal at the Hamlet Lagoon.
- Backwash water consists of raw water from Baker Lake with the additional suspended solids from the filter cleaning, no chemicals are added. The suspended solids within the backwash water will settle out in the lagoon and wetland treatment area;

The proposed schedule for the project is as follows, actual schedule will be proposed by awarded contractor:

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|------------------------------------|------------------------|
| • Construction Tender Award | Middle of June 2011 |
| • Issued for Construction Drawings | End of June 2011 |
| • Start Construction | Beginning of July 2011 |
| • Commissioning of New Plant | Summer 2012 |

The proposed amendment has been granted exemption from NPC conformity and NIRB screening; written confirmations have been appended.

We hope that the attached documents meet your requirements at this time and request that the water licence be amended accordingly. If you require any further information or have questions, please do not hesitate to contact me.

Sincerely,

FSC ARCHITECTS & ENGINEERS

A handwritten signature in black ink, appearing to read 'A. Foster', with a long horizontal flourish extending to the right.

Arlen Foster, M.I.T.
Environmental Engineering