



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

Your file - Votre référence
1BH-SAN----

June 29, 2015

Our file - Notre référence
IQALUIT#924443

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

**Re: Aboriginal Affairs and Northern Development Canada's (AANDC) Review of
Nunavut Construction Limited's New Application for Water Licence #1BH-
SAN---- – Bulk Fuel Facility Upgrade, Sanikiluaq, Nunavut**

Dear Ms. Beaulieu,

Thank-you for the email notice received on May 28, 2015 regarding the above mentioned application.

AANDC Water Resources Division reviewed the application and the results of our review are provided in the enclosed memorandum for the Board's consideration. Comments have been provided pursuant to the Department'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 at 867-975-3876 or Sarah.Forte@aandc-aadnc.gc.ca for any additional information.

Regards,

Sarah Forté
Water Management Coordinator

c.c.: Andrew Keim, Acting Manager of Water Resources, AANDC Nunavut
Erik Allain, Manager of Field Operations, AANDC Nunavut

Technical Review Memorandum

To: Phyllis Beaulieu, Manager of Licensing, NWB

From: Sarah Forté, Water Management Coordinator, AANDC

Date: June 29, 2015

Re: Water Licence Application, #1BH-SAN----

Applicant: Nunavut Construction Limited
Project: Bulk Fuel Facility Upgrade, Sanikiluaq, Nunavut
Region: Qikiqtani

A. BACKGROUND

On May 28, 2015 the Nunavut Water Board provided notification to interested parties that Nunavut Construction Limited (the applicant) had submitted an application in support of their Bulk Fuel Facility Upgrade Project. A Type 'B' water licence #1BH-SAN---- has been requested for hydrostatic testing purposes during a seven month term (June to December 2015).

The applicant requires the use of freshwater to test the retention capacity of a newly constructed 1 000 m³ steel fuel tank and a modified 3 000 m³ steel fuel tank. This tank is situated within a bermed fuel storage facility. A total of 3 000 m³ of water is required and will be abstracted from an adjacent clear water pond (a maximum of up to 295 m³ will be pumped per day when filling the tanks). This water will be run through a "solid Particle Collector" before being released into a ditch beside the tank farm once the testing program is completed. There are no plans to test the quality of this water before it is discharged because it is not expected to undergo any significant change, though an oil-water separator will be brought on site in case it is necessary.

B. RESULTS OF REVIEW

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

1. Water source

Comment:

The applicant describes the water source as a nameless clear water pond near the tank farm but it is not identified on the maps provided. Nor has an assessment on whether the planned water withdrawal will impact the source pond's storage capacity.

Recommendation:

The applicant should provide a general assessment on whether the planned water withdrawal will impact the source lake's storage capacity. This may not be the case but further information should be provided (e.g., topographic map showing entire lake and surrounding area, surface area data, and volume).

2. Fuel Management and Spill Contingency Provisions

Comment:

If not managed properly fuel used to power the water pump's generator can contaminate soil and water if spilled.

Recommendation:

As a minimum, the licence should include the following fuel management and spill contingency provisions:

- All fuel storage containers, including the generator, should be equipped with secondary containment; and
- The applicant must immediately report any spills where the spill is of an amount equal to or greater than the amount set out in Schedule B of Nunavut's Spill Contingency Planning and Reporting Regulations.

3. Discharging Water of onto the Land

Comment:

Without adequate control measures water released from the tested fuel tanks can destroy vegetation and erode soil when discharged onto the land.

Recommendation:

Effluent discharge into the ditch, as proposed in the application, should be managed (i.e., flow rate, energy dissipation, etc.) to prevent vegetation damage and soil erosion.

4. Nunavut Impact Review Board (NIRB) Determination

Comment:

A screening determination from the NIRB is required according to box 8 of the application. None has been provided as confirmed in box 27 of the application.

Recommendation:

The applicant should provide the determination when received.

5. Water testing

Comment:

The applicant states that the quality of the water used for hydrostatic testing will not change much and proposes no chemical testing before its release. However, there seems to be a real risk of oil contamination since the applicant will go to the trouble of bringing an oil-water separator on site.

Recommendation:

The applicant should describe how they will ensure that the water is not contaminated with hydrocarbons. As a minimum, the licence should require the Licensee report on the presence or absence of a visible sheen in the water being discharged.

C. CONCLUSION

AANDC considers Nunavut Construction Limited's application for water licence #1BH-SAN---- to be lacking important information regarding the water source. The applicant should be requested to furnish this information before being issued a licence.