



Crown-Indigenous Relations
and Northern Affairs Canada

Relations Couronne-Autochtones
et Affaires du Nord Canada

Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
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June 25, 2019

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0

Your file - Votre référence
IBH-ARV1819

Our file - Notre référence
CIDM#1254823

**Re: Crown-Indigenous Relations and Northern Affairs Canada comments on the
Tower Arctic Ltd. – Water Treatment plant and Reservoir renewal application
for water licence # IBH-ARV1819– Arviat, Nunavut**

Dear Mr. Dwyer,

Thank you for your June 3, 2019 invitation for technical review comments on the above referenced application.

The Water Resources Division of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the renewal application and the results of our review are provided in the enclosed memorandum for the Nunavut Water Board's consideration. Comments have been provided pursuant to CIRNAC's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

CIRNAC appreciates the opportunity to participate in this review. If there are any questions or concerns, please contact me at (867) 975-4568 or by e-mail at Lisa.Bachellier@canada.ca.

Sincerely,

Lisa Bachellier
Water Resource Technician

Canada

Technical Review Memorandum

To: Richard Dwyer, Manager of Licensing, Nunavut Water Board

From: Lisa Bachellier, Water Resource Technician, Water Resources Division, CIRNAC

Date: June 25, 2019

Re: Review of Renewal Application for Type B Water Licence 1BH-ARV

Applicant: Tower Arctic Ltd.

Project: Water Treatment plant and Reservoir

Region: Kivalliq

A. BACKGROUND

On June 3, 2019, the Nunavut Water Board (NWB) provided notification of Tower Arctic Ltd. - submission of a renewal application for Type B water licence IBH-ARV1819 for the Water Treatment plant and Reservoir for 813 cu, for hydrostatic testing.

The Tower Arctic Ltd licence will be expired July 4, 2019 licence for municipal undertakings for the use of water and deposit of waste. This renewal application is for a 20 year licence term.

Tower Arctic Ltd. proposed construction date is August 2017 and proposed completion date is November 2019 but no work has been yet started.

B. RESULTS OF REVIEW

Crown-Indigenous and Relations Northern Affairs Canada (CIRNAC) Water Resources has reviewed the documentation provided with this application and found that much of the necessary information has been provided.

On behalf of CIRNAC, the following comments and recommendations are provided for the NWB consideration.

1. Annual Report

Reference:

- Water Licence 1BH-ARV1819, Nunavut Water Board, July 5, 2018.

Comment:

Part B: General Conditions Item # 2

The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:

- a. A summary report of water use activities;
- b. A list of unauthorized discharges and a summary of follow-up actions taken;
- c. A description of all progressive and/or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
- d. A summary of all information requested and results of the Monitoring Program; and
- e. Any other details on water use requested by the Board by the 1st of November of the year being reported.

Recommendation:

CIRNAC recommends that Arctic Tower Ltd. submit an annual report to indicate that no work has been done.

2. Spill Contingency Plan

Reference:

- Water Licence 1BH-ARV1819, Nunavut Water Board, July 5, 2018.

Comment:

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall not use any fuel or hazardous materials that have a potential to spill.

2. The Licensee shall submit to the Board for approval sixty (60) days prior to commencement of usage of fuel or any hazardous materials, a Spill Contingency Plan, prepared in the format set out by the Consolidation of Spill Contingency Planning and Reporting Regulations R-068-93.
3. If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. employ the approved Spill Contingency Plan;
 - b. where the spill is of an amount equal to or greater than the amount set out in Schedule B of the Nunavut's Spill Contingency Planning and Reporting Regulations, report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. for each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
4. The Licensee shall, in addition to Part H, Item 3, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

Recommendation:

CIRNAC recommends that Arctic tower Ltd submit a Spill contingency plan.

3. Abandonment and Restoration Plan

Reference:

- o Water Licence 1BH-ARV1819, Nunavut Water Board, July 5, 2018.

Comment:

Part I: Conditions Applying the abandonment and Restoration prior temporary closing

1. The Licensee shall complete all restoration work prior to the expiry of this Licence.
2. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
5. The Licensee shall remove from the site, all relevant infrastructure and site materials and equipment including docks, water pumps and lines prior to the expiry of this Licence.
6. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

Recommendation:

CIRNAC recommends that Tower Arctic Ltd. submit an abandonment and restoration plan.

4. Government of Nunavut – Public Health

Reference:

Email June 15, 2018 between Ian Parsons and Richard Dwyer: Cc Lisa Bachellier

Comment:

The concerns with the direct discharge of hydrostatically used water are that contaminants may end up in the drinking water (TSS, metal fines, etc.) CIRNAC considers that since this is a drinking water issues, the Government of Nunavut – Public Health may want to weigh in as well. Other alternatives to this may have to be explored such as; 1) the used water is tested/sampled for TSS and fines then placed back into the reservoir system; 2) the water is discharged over land, into a nearby waterbody or the ocean – therefore more water would need to be pumped from source into the reservoir system; 3) The licensee uses saline water since they intend to use saline water to disinfect.

Recommendation:

CIRNAC highly recommends Tower Arctic correspond with Public Health as this implicates drinking water, and the Government of Nunavut may require input in this project before the construction starts. No record of any correspondence with the Government of Nunavut is recorded.

5. Water Use

Reference:

- Water Licence 1BH-ARV1819, Nunavut Water Board, July 5, 2018. Part C Item # 1 & 2

Comment:

1. The Licensee shall obtain all water for hydrostatical testing activities from the Arviat Water Reservoir. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety-nine (299) cubic metres per day, to a maximum of two thousand and two hundred (2,200) cubic metres annually.
2. Streams cannot be used as a water source unless authorized and approved by the NWB in writing.
3. In the water licence application Dated April 20, 2018 under section 13 'Provide the overall estimated quantity of water used: 813 cu, m total'. The water licence 1BH-ARV1819 issued on July 5, 2018 by the Nunavut Water Board, under Part C: Conditions applying to water use item # 1 '1. The Licensee shall obtain all water for hydrostatical testing activities from the Arviat Water Reservoir. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety-nine (299)

cubic metres per day, to a maximum of two thousand and two hundred (2,200) cubic metres annually.' If the intended water use is 813 cu m it will be 29, 6745 cu, m annually and that will exceed the maximum allowance.

Recommendation:

CIRNAC would like clarification on the total amount of water to be used.

6. Hydrostatic test equipment

Reference:

Email dated May 8, 2018 between Assol Kubeisinova from the Nunavut Water board and Doug Thompson from Arctic Tower Ltd. question # 3 &4

Dear Doug Thompson,

I am a Nunavut Water Board technical advisor working on the 1BH-ARV---- file.

To supplement you application, could you please provide:

1. executive summary, in English and Inuktitut;
2. spill plan;
3. an equipment layout for the hydrotest;
4. a hydrotest procedure (can be simple, step-by-step), if not provided in the executive summary.

Comment:

CIRNAC would like confirmation of an equipment list for the hydrotest, and procedures for the hydrotest

Recommendation:

CIRNAC recommends that Arctic tower submits the hydrotest equipment list and procedures to the NWB for approval.