



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
Iqaluit, NU, X0A 0H0

Your file - Votre référence
8BW-PIM----
Our file - Notre référence
CIDM#1222629

July 10, 2018

Mr. Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
E-mail: licensing@nwb-oen.ca

**Re: Crown-Indigenous Relations and Northern Affairs Canada's comments on
Tower Arctic Ltd.'s application for water licence #8BW-PIM---- – Nunavut
Marine Infrastructure Pond Inlet**

Dear Mr. Dwyer,

Thank you for your June 18, 2018 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 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) 975-4555 or by e-mail at david.zhong@canada.ca.

Sincerely,

David Zhong
Regulatory and Science Advisor

Technical Review Memorandum

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

From: David Zhong, Regulatory and Science Advisor, Water Resources Division,
CIRNAC

Date: July 10, 2018

Re: Review of New Application for Type B Water Licence 8BW-PIM----

Applicant: Tower Arctic Ltd.
Project: Nunavut Marine Infrastructure Pond Inlet
Region: Qikiqtani

A. BACKGROUND

On June 18, 2018, the Nunavut Water Board (Board) provided notification of Tower Arctic Ltd.'s (the applicant) submission of an application for new Type B water licence 8BW-PIM---- for the Nunavut Marine Infrastructure Pond Inlet Project.

The applicant is requesting a water licence to use water or deposit waste into water for the construction of the Nunavut Marine Infrastructure Pond Inlet. The project is located on the North-West end of the Baffin Island in the hamlet of Pond Inlet. It consists of constructing two breakwaters for a steel piles wharf and a small craft harbor, a quarry to provide about 0.2 million tonnes of aggregate materials, and a new 6 kilometers (km) hauling road to transport the aggregates to the construction site. Eleven (11) watercourse crossings have been identified along the 6 km long hauling road.

The Board requested interested parties to review the application and make representations on or before July 10, 2018.

B. RESULTS OF REVIEW

On behalf of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Water Resources, the following comments and recommendations are provided for the Board's consideration.

1. Description of Undertaking

Reference:

- 8BW-PIM---- Type “B” Water Licence Application, Tower Arctic Ltd., June 01, 2018
- Annex 3
- Construction Work Plan, Tower Arctic Ltd., June 15, 2018

Comment:

The description of undertaking was given in Annex 3. It stated that *“The object of the application at the Nunavut Water Board is to obtain the license required to cross water courses for the project’s hauling road. The hauling road will make the link (6 kilometers) between the quarry and the construction site in Pond Inlet. Each time a water course will be cross, a culvert will be placed to ensure the continuous water flow.”*

The scope of work of the Nunavut Marine Infrastructure Pond Inlet Project, described in the Construction Work Plan, includes not only the construction and operation of the hauling road, but also quarry activities, which would also require a water licence.

Recommendation:

The applicant should include the quarry activities in Annex 3 as part of the undertaking.

2. Proposed Term of Licence

Reference:

- 8BW-PIM---- Type “B” Water Licence Application, Tower Arctic Ltd., June 01, 2018

Comment:

The applicant indicated that the proposed construction schedule was between July 28, 2018 and August 21, 2018 (i.e., 25 days) and the proposed term of licence was three (3) years, which seems to contradict with the difference (i.e., two (2) years) between the requested date of issuance (i.e., July 2018) and the requested expiry date (i.e., August 2020).

It is not clear if the applicant is requesting a 25 day licence, a three (3) year licence, or a two (2) year licence.

Recommendation:

The applicant should clarify its proposed term of licence.

3. Spill Response Plan

Reference:

- Spill Response Plan, Tower Arctic Ltd., June 15, 2018
- NIRB 17XN030, October 2, 2017

- Construction Work Plan, Tower Arctic Ltd., June 15, 2018

Comment:

Number nine (9) and number thirteen (13) of the NIRB Terms and Conditions (17XN030) require that *“The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board”* and *“The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130”*, respectively. However, the applicant's Spill Response Plan does not address the re-fueling and personnel training requirements of the above-noted Terms and Conditions.

The applicant indicated in its Construction Work Plan that blasting will occur one to two times per day during quarry activities and there is a need of blasting for the construction of the hauling road between station 5+666 and 5+900. However, explosives are not listed as hazardous materials in the Spill Response Plan.

In its Spill Response Plan, the applicant established the steps to take in response to a spill. However, this spill response procedure does not consider if it is safe to respond and what protective equipment might be needed.

During rain events and freshet, road construction and operation and quarry activities may result in run-offs containing high levels of blast residue and TSS (i.e., total suspended solids). However, neither the Construction Work Plan nor the Spill Response Plan has addressed this issue.

Furthermore, the correct Spill Report Form can be found at:

https://www.enr.gov.nt.ca/sites/enr/files/128-spill_report_form_e_fillable_1.pdf, which is different from the one included in the Spill Response Plan (i.e., Appendix B).

Recommendation:

The applicant should update its Spill Response Plan and, if necessary, also the Construction Work Plan to address the above-noted issues.

4. Site Restoration

Reference:

- Spill Response Plan, Tower Arctic Ltd., June 15, 2018
- Construction Work Plan, Tower Arctic Ltd., June 15, 2018

Comment:

In the Construction Work Plan, the applicant stated that *“At the end of the project a general clean-up of each site will be done. The Quarry site will be closed according to the method in the Quarry Management Plan. For the Hauling route, a final grading will be done and two earth berms placed at the extremities to avoid use by vehicles.”*

The application package does not seem to include the Quarry Management Plan. For the hauling road, it is not sufficient to grade the road and place two earth berms at the ends to prevent road access by vehicles. The culverts may need to be removed so that no sediment enters the stream near the road watercourse crossings.

Recommendation:

The applicant should submit a Quarry Management Plan and also include measures to prevent sediment from entering streams in its road restoration plan.