



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

NWB file:
8BW-PIM----
Our file - Notre référence
CIDM#1223383

July 20, 2018

Mr. Simon-Pier Laberge
Project Manager, Jr. Eng.
Tower Arctic Ltd.
P.O. Box 717
Iqaluit, NU, X0A 0H0
Simon-Pier.Laberge@towerarctic.net

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

Dear Mr. Laberge,

Thank you for your July 13, 2018 email message responding to CIRNAC's comments submitted to the Nunavut Water Board (NWB) on the above-noted Type B water licence application.

The Water Resources Division of CIRNAC's Nunavut Regional Office reviewed your email response and the attached documents and would like to provide further comments in the enclosed memorandum for your and 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*.

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

cc.

Richard Dwyer, Manager of Licensing, Nunavut Water Board
licensing@nwb-oen.ca

Technical Review Memorandum

To: Richard Dwyer, Manager of Licensing, Nunavut Water Board
Simon-Pier Laberge, Project Engineer, Tower Arctic Ltd

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

Date: July 20, 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 July 10, 2018, the Water Resources Division of CIRNAC's Nunavut Regional Office submitted technical review comments to the Nunavut Water Board (Board) on Tower Arctic Ltd.'s (the applicant) application for new Type B water licence 8BW-PIM---- for the Nunavut Marine Infrastructure Pond Inlet Project.

On July 13, 2018, Mr. Simon-Pier Laberge, Project Engineer of Tower Arctic Ltd, responded to CIRNAC's comments by email.

The Water Resources Division of CIRNAC's Nunavut Regional Office reviewed Tower Arctic Ltd.'s responses and would like to offer the following comments.

B. COMMENTS ON TOWER ARCTIC LTD.'S RESPONSES

Tower Arctic Ltd.'s Response:

I just want to clarify an item in the A) background section. The purpose of the license is not to use water or deposit waste into water. We are asking the license to install approximately eleven culverts for the hauling road construction.

CIRNAC's Follow-up Comment:

Nunavut Water and Nunavut Surface Rights Tribunal Act (Act) defines **use of water** as:

"use, in relation to waters, means a direct or indirect use of any kind, including, but not limited to,

(a) any use of water power and geothermal resources;

- (b) any diversion or obstruction of waters;
- (c) any alteration of the flow of waters; and
- (d) any alteration of the bed or banks of a river, stream, lake or other body of water, whether or not the body of water is seasonal."

Installing culverts at watercourse crossings is considered as **use of water** and consequently requires a water licence.

Nunavut Water and Nunavut Surface Rights Tribunal Act defines **waste** as:

"waste means any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means, and includes

- (a) any substance or water that, for the purposes of the Canada Water Act, is deemed to be waste;
- (b) any substance or class of substances specified by the regulations;
- (c) water containing any substance or class of substances in a quantity or concentration that is equal to or greater than that prescribed by the regulations; and
- (d) water that has been subjected to a treatment or change described by the regulations. (déchet)."

Quarrying activities and road construction and operation may result in surface runoffs containing high level of sediments and/or other contaminants and therefore, could be considered as deposit waste into water. The Act prohibits deposit of waste into water without a licence. In other words, a water licence, which will set out discharge criteria for different parameters, is required for road construction and operation and for quarrying activities.

Tower Arctic Ltd.'s Response:

1. Description of the Undertaking

We included in the Annex 3 a summary of the quarry activities. In the attached files you will also find the quarry management plan that states all the mitigation measures that will be put in place to limit erosion and spread of sediments. (ref: (ANNEX 3) Water License Application rev01/15255-00331-07-TA-GN-CWP-0002-01)

CIRNAC's Follow-up Comment:

Thank you for including quarry activities in Annex 3 and for proving the quarry management plan. CIRNAC would like to recommend that the description of the undertaking be translated into Inuktitut and that the quarry management plan be an integral part of the licence application.

Tower Arctic Ltd.'s Response:**2. Proposed Term of License**

At the beginning of the process, we were thinking that the license was needed only for the construction of the haul road. In our schedule, the hauling road construction was lasting for 25 days but the whole project will begin in July-August 2018 and finish in August 2020.

CIRNAC's Follow-up Comment:

Thank you for the clarification.

Tower Arctic Ltd.'s Response:**3. Spill Response Plan**

In our revised Construction Work Plan, blasting around 5+666 and 5+900 stations has been removed as we will not have to do it. The Spill Response Plan attached has been modified to include explosives in hazardous materials, procedures (safe or not to respond and equipment needed) and the correct Spill Report Form. As mentioned in the first item, the quarry management plan attached lists all the measures about sediments and erosion. (ref: 15255-00331-07-TA-GN-CWP-0003-1)

CIRNAC's Follow-up Comment:

Thank you for the revision. Again, CIRNAC would like to recommend that the quarry management plan be an integral part of the licence application.

Tower Arctic Ltd.'s Response:**4. Site Restoration**

At the end of the works, the Construction Specifications provided by the client (Government of Nunavut), specify that the hauling road need to be closed by earth berms (see attached picture). We had planned to place two earth berms separated by a trench, at both ends of the road. If this measure is not sufficient can you give us recommendation about the road closure?

For the culverts removal, we will make sure with you that the culverts will be made to prevent erosion. The temporary road will be used during the three years of the project and the design has been made to make the road passable for more than three years. (ref: Construction Specifications (haul road closure))

CIRNAC's Follow-up Comment:

Thank you for providing construction specifications. Should the road be handed over to the Hamlet of Pond Inlet at the completion of the project or end of water licence, the Hamlet will need to confirm that it is willing to accept responsibility of the road after the transfer.

CIRNAC would also like to point out that the NIRB noted in **17XN030** that “*if the Hamlet of Pond Inlet would be using the rock quarry and the alternate haul road if constructed, both would be required to undergo a separate assessment for use by the Hamlet.*”