

WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee	Licensee Representative
Tower Arctic Ltd.	Simon-Pier Laberge
Licence No. / Expiry	Representative's Title
8BW-PIM1821	Project Manager
Land / Other Authorizations	Land / Other Authorizations
N2019X0012	03QN074
Date of Inspection	Inspector
August 11, 2020	Joseph Monteith
Activities Inspected	
<div><input checked="" type="checkbox"/> Camp<input type="checkbox"/> Drilling<input type="checkbox"/> Mining<input checked="" type="checkbox"/> Construction<input checked="" type="checkbox"/> Reclamation<input checked="" type="checkbox"/> Fuel Storage</div> <div><input checked="" type="checkbox"/> Roads/Hauling<input checked="" type="checkbox"/> Other: Spill Report sites<input type="checkbox"/> Other:</div>	

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable
PART:			Condition	Observation No.*	
A: SCOPE, DEFINITIONS AND ENFORCEMENT					
B: GENERAL CONDITIONS			A		
C: CONDITIONS APPLYING TO SECURITY			NI		
D: CONDITIONS APPLYING TO WATER USE			A	1-9	
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT			A	13-14	
F: CONDITIONS APPLYING TO MODIFICATIONS			NI		
G: CONDITIONS APPLYING TO CONSTRUCTION			NI	10-12	
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING			A	15	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING			NA		
J: CONDITIONS APPLYING TO MONITORING			A		
SCHEDULES			A		
*The observation number corresponds with specific comments provided below.					
Samples taken by Inspector:		Location(s): N66° 09' 00" , Longitude: W65° 40' 34"			
<input type="checkbox"/> Yes <input type="checkbox"/> No					

SECTION 1	<input type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
BACKGROUND <p>Construction of the Pond Inlet Marine Infrastructure Project has been underway through two open-water seasons, which initiated in 2018. The CIRNAC LUP was not issued until June 6, 2019 as CIRNAC confirmed in late 2018 that a LUP was required. This was in addition to the License of Occupation provided by Public Services and Procurement Canada (PSPC). The Water License from the Nunavut Water Board Construction is ongoing seasonally and will continue in 2020. Led by the Government of Nunavut (GN) - Community and Government Services (CGS), ownership and responsibility will transfer to the GN - Economic Development and Transportation (EDT) once operational.</p> <p>A map of the construction of the Pond Inlet Marine Infrastructure Project (photo 1)</p> Inspector Statement <p>On August 20, 2020, Water License inspections were conducted at the site of the Pond Inlet Infrastructure Project, Pond Inlet, Qikiqtani Region, Nunavut, to verify compliance with the terms and conditions of the Water Licence 8BW-PIM1821.</p> General Condition <ol style="list-style-type: none">On Tuesday, April 07, 2020 at 3:47 PM the Nunavut Water Board uploaded to their FTP site a copy of Tower Arctic's 2019 Annual Report. ftp://ftp.nwb-oen.ca/registry/8%20MISCELLANEOUS/8B/8BW%20-%20Watercourse/8BW-PIM1821%20Tower%20Arctic%20Ltd/3%20TECH/1%20GENERAL%20(B)/2%20ANNUAL%20RPT/2019/A copy of the Water License was posted at the time of the inspection (Photo 16). Conditions Applying to the Protection of Water <p>A map of the Stream Crossings – (See photo 1)</p>			



- 3. A total of 7 water crossings along the hauling road from the municipal quarry to the site of the Pond Inlet Infrastructure Project (Photo2).
- 4. CS-07 Water Crossing (Photo 3)
- 5. CS-06 Water Crossing (Photo 4)
- 6. CS-06 Water Crossing (Photo 5)
- 7. CS-05 Water Crossing (Photo 6)
- 8. CS-04 Water Crossing (Photo 7)
- 9. CS-03 Water Crossing (Photo 8)

Quarry Site

- 10. Top of the Quarry Pit, looking in (photo 9)
- 11. Inside the Quarry Pit (Photo 10)
- 12. Quarry Stock Pile, was observed to be inland and 31 metres away from any water body. Located between CS-07 and CS-06 (Photo 2).

Waste

- 13. An agreement with the community of Pond Inlet was struck to receive all waste from the construction to the community landfill
- 14. All hazardous waste is contained in sea cans, in secondary containment. To be shipped to an approved Hazardous Waste Storage Facility (Photos 13, 14, & 15).

Spill Reports

- 15. A total of 23 Spill Reports reported for 2020 that Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) is the lead on. The majority of the spills will be closed as they are below the reportable threshold of the NT/NU Spills working Group Agreement. As per the water license, all spills, regardless of size and quantity will be reported; with a follow up written report.

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
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The following information is a summary of the Actions Required by the licensee to promote and ensure compliance. Please provide a response to the following Actions Required within 30 days of receiving this report proposing timelines to address the concerns noted:

- Uncover all Culverts, so that the water doesn't freeze in the culverts, and plug them up for freshet in 2021.
- As per the water license, all spills, regardless of size and quantity will be reported; with a follow up report after 30 days on the status can be summarized in one report for the minor spills to satisfy the requirements of the license, to follow up with a written report. The larger spills which go over the reportable limit will individually require proper follow up, with individual reports.
- Follow the CCME guidelines for proper remediation of a hazardous waste spill.

SECTION 3	<input type="checkbox"/> Comments	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
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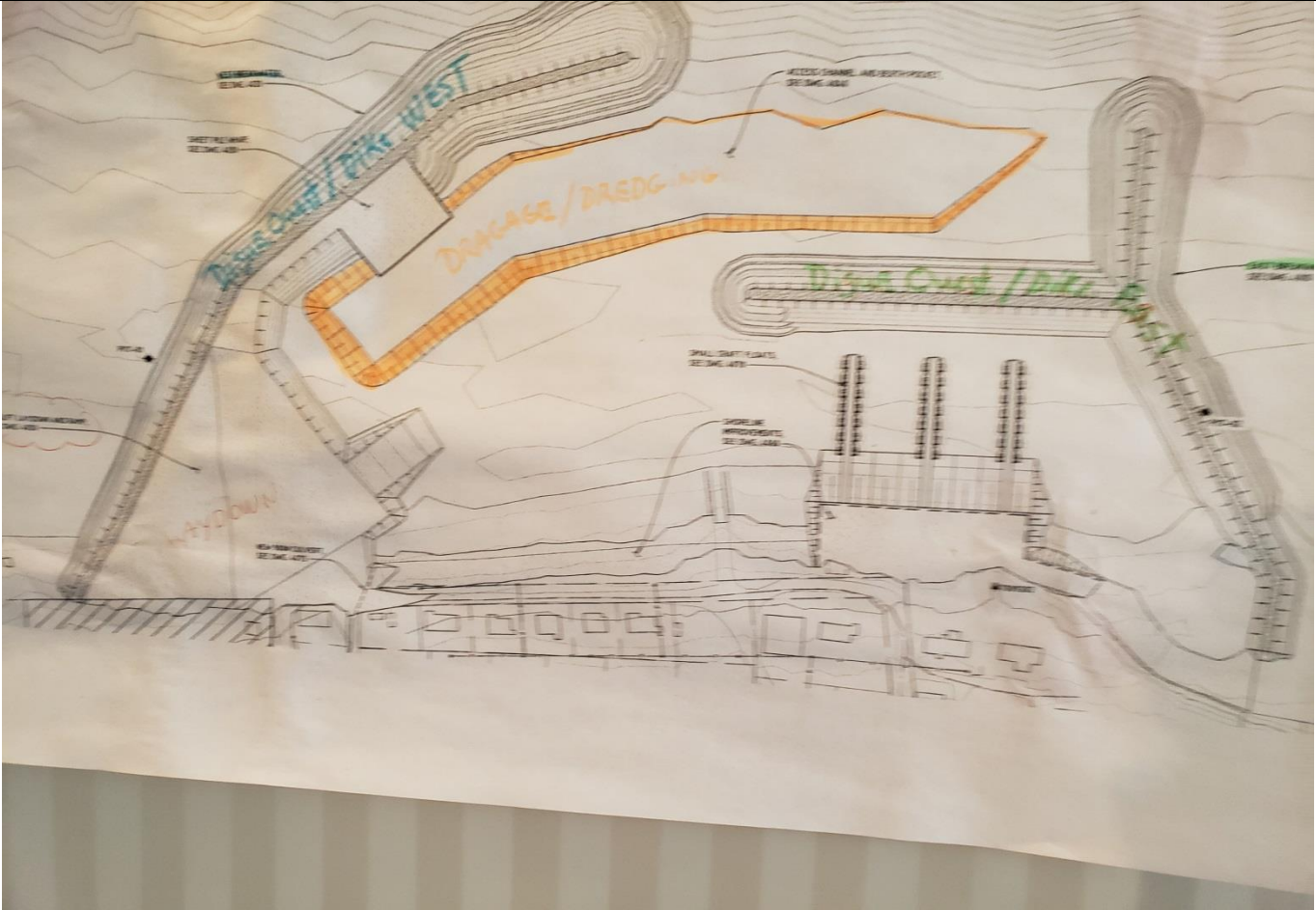
Part G: Conditions Applying to Spill Contingency Planning
Item 4;
If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
a. Employ the Spill Contingency Plan;
b. Report the spill immediately to the 24-Hour Spill Line at (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.

Licensee or Representative	Inspector's Name Joseph Monteith
Signature	Signature
Date	Date November 28, 2019

CC: Licensing Department, NWB
Justin Hack, Manager of Field Operations, CIRNAC

PHOTO LOG

Date	Camera	Inspector	
August 20, 2020	Nikon Coolpix	Joseph Monteith	8BW-PIM1821
Photo Log #	Location		
Photo 1	Pond Inlet, Qikiqtani Region, Nunavut		



Description: The Pond Inlet Marine Infrastructure Project is to build the small craft harbour. On site Construction map.

Photo Log #1	Location
Photo 2	Pond Inlet, Qikiqtani Region, Nunavut



Description: Construction Map of the Pond Inlet Marina Infrastructure Project. Haul Road from Quarry to the Construction site.



Photo Log #1

Photo 3

Location

Pond Inlet, Qikiqtani Region, Nunavut



Description: Culvert CS-07. The last culvert between the quarry and the construction site.

Photo Log #1

Photo 4

Location

Pond Inlet, Qikiqtani Region, Nunavut



Description: CS-06 Culvert on haul road. Stick protruding out of side of road is location of culvert. No Parallel ditches on downward slope side of road. Parellel ditches observed on higher elevated road. Culvert covered with Rip Rap to protect it if vehicle goes over the side of road, and to stop warm air from melting permafrost.



Photo Log #1

Location

Photo 5

Pond Inlet, Qikiqtani Region, Nunavut



Description: Parallel Ditch only goes from top of the hill to culvert. CS-06 Culvert

Photo Log #1

Location

Photo 6

Pond Inlet, Qikiqtani Region, Nunavut



Description: CS-05 Culvert located where the stick is protruding up from the road. Road widened, possibly to allow other heavy equipment to pass. Widened road width approximately 9 metres wide. Culvert is covered by Rip Rap to mitigate any damage to the culvert, and to mitigate warm air melting permafrost.



Photo Log #1

Location

Photo 7

Pond Inlet, Qikiqtani Region, Nunavut



Description: CS-04 Culvert. Culvert is covered by Rip Rap to mitigate any damage to the culvert, and to mitigate warm air melting permafrost.

Photo Log #1

Location

Photo 8

Pond Inlet, Qikiqtani Region, Nunavut



Description: The first Culvert between the Quarry and the construction site. CS-03, with Rip Rap and silt fencing appear to have been put down to help mitigate sedimentation.



Photo Log #1

Location

Photo 9

Pond Inlet, Qikiqtani Region, Nunavut



Description: The first Culvert between the Quarry and the construction site. CS-03, with Rip Rap and silt fencing appear to have been put down to help mitigate sedimentation.

Photo Log #1

Location

Photo 10

Pond Inlet, Qikiqtani Region, Nunavut



Description: Quarry Pit. Fresh Water interaction in



Photo Log #1

Location

Photo 11

Pond Inlet, Qikiqtani Region, Nunavut



Description: At the bottom of the Quarry Pit. Active site of excavation and hauling. Naturally gravity would accumulate raw water in the depression, and interact with heavy equipment. The water undergoes month testing, if water exceeds particular parametres . Tower Arctis is also bound to monitor run off and discharges from the quarry sites.

Photo Log #1

Location

Photo 12

Pond Inlet, Qikiqtani Region, Nunavut



Description: mobile spill kits in all the vehicles.



Photo Log #1

Location

Photo 13

Pond Inlet, Qikiqtani Region, Nunavut



Description: Hazardous Waste in sea can, in secondary containment. Stored at the Garage area sea can lay down area.

Photo Log #1

Location

Photo 14

Pond Inlet, Qikiqtani Region, Nunavut




Description: hazardous waste sea can, drip pans, and waste oil storage in secondary containment.

Photo Log #1

Photo 15

Location

Pond Inlet, Qikiqtani Region, Nunavut



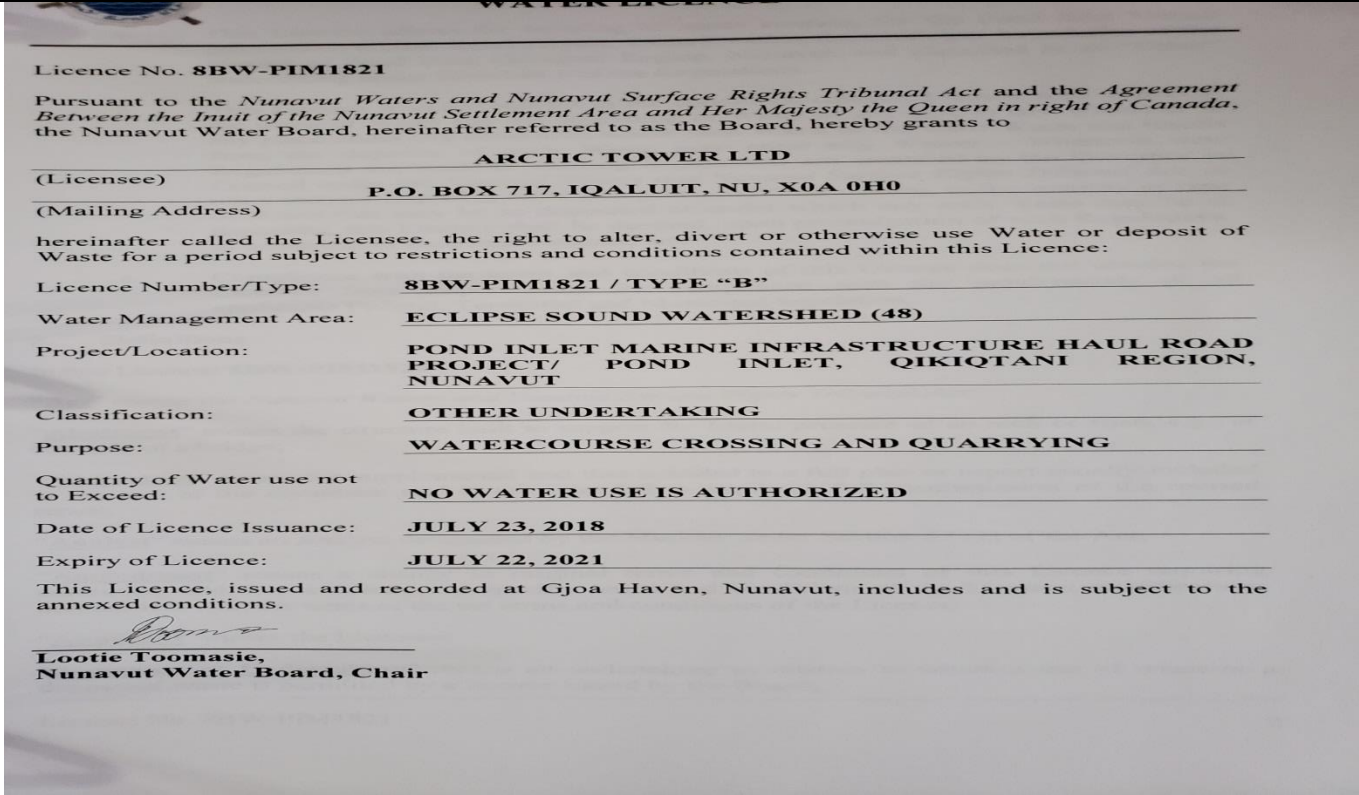
Description: palleted bulk metal waste. Ready to be disposed with in the municipal landfill.

Photo Log #1

Photo 16

Location

Pond Inlet, Qikiqtani Region, Nunavut



Description: copy of water license posted.



Photo Log #1

Location

Photo 17

Pond Inlet, Qikiqtani Region, Nunavut



Description: Boom to mitigate the impact of construction.