



WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee		Licensee Representative	
Hamlet of Igloolik		Bhabesh Roy	
Licence No. / Expiry		Representative's Title	
3BM-IGL1520		Municipal engineer	
Land / Other Authorizations			
None			
Date of Inspection		Inspector	
October 5, 2017		Jonathan Mesher	
Activities Inspected			
<div><input checked="" type="checkbox"/> Camp/Municipality<div><input type="checkbox"/> Roads/Hauling</div></div> <div><input type="checkbox"/> Drilling<div><input type="checkbox"/> Other:</div></div> <div><input type="checkbox"/> Mining</div> <div><input type="checkbox"/> Construction<div><input type="checkbox"/> Other:</div></div> <div><input type="checkbox"/> Reclamation</div> <div><input type="checkbox"/> Fuel Storage</div>			

Conditions:    **A - Acceptable**    **C - Concern**    **U – Unacceptable**    **NA – Not Applicable**    **NI – Not Inspected**

Water Use			Site Conditions			Haz/Mat Management		
	Condition	Comment		Condition	Comment		Condition	Comment
Intake/Screen	A		Water Management Structures	A		Storage	A	
Flow Measure. Device	C	2	Culverts / Bridges	A		Spills	A	
Source:	A		Drainage	A		Spill Plan	A	
Water Use:	C	2, 4	Erosion / Sediment	A				
Recirculation ( y /n)	NA		Mitigation Measures	A		Administrative		
			Reclamation Activities	A		Records	A	
			Materials Storage	A		Reports	A	
Waste Disposal			Signage	A		Plans	NI	
Waste Water	A					Notifications	NA	
Solid Waste	C	13	Monitoring			Other		
Hazardous Waste	C	11	Sample Collection / Analysis	NI				

*\*The number in the comments field will correspond with specific comments provided below.*

Samples taken by Inspector:  
☐ Yes   ☒ No

Location(s):

SECTION 1	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
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**Inspectors Statement**

October 5, 2017, a water licence inspection was conducted at the Hamlet of Igloolik, Qikiqtani Region, Nunavut. Sites inspected included the freshwater lake (South Lake), water storage reservoir, sewage lagoon, hazardous materials storage area and the solid waste disposal facility.

**Inspection**

**Water Use and related structures:**

1.

The licensee is permitted to use up to 299 cubic metres of water per day or 81,208 cubic metres per annum. In 2016 the licensee submitted an amendment requesting to the Nunavut Water Board (NWB) to increase the capacity of the storage reservoir, this work has been approved by the NWB. Though the increase of the reservoirs capacity has been approved by the NWB it does not appear that an increase of water usage has been approved.

2.

It appears to the inspector that the Licensee has used more than the allowable water usage of 81,208 m3 per annum in 2017.

i.

The inspector was informed by the licensee representative that the reservoir has a capacity of approximately 102,000m3.

ii.

This reservoir has been filled from empty in the summer of 2017.

iii.

The Licensee has also been using water directly from the Lake while the reservoir was under construction for municipal purposes.

iv.

Water is being withdrawn from South Lake and pumped to the reservoir using an 8 inch pipe approximately 3km long, the water that is drained out of the pipe at its lowest point and is not accounted for.

3.

The Inspector is requesting that the licensee accounts for its water usage at the point where it is withdrawn from South Lake. This will provide the Nunavut Water Board and the Inspector with An accurate reading of water usage.



4. The Licensee representative has also informed the inspector that in the reservoir had been filled from empty in 42 days. With this information it appears the licensee has pumped more than 300 cubic metres per day and is storing more than 60,000 cubic metres of water. With the information provided to the inspector, INAC has determined that the licensee requires a type A water Licence.

Sewage Disposal Facility

5. Recent construction of the new Sewage disposal facility converted 3 old holding cells into 2 larger cells and added a 3<sup>rd</sup> cell to the northwest of the facility.
6. At the time of inspection, the sewage lagoon was in-use, operating as intended, and was retaining the sewage until decanting occurs.
7. The recent snowfall made it difficult to determine the condition of the berm walls.
8. Freeboard height was sufficient and no concerns were noted with the operation of this facility.

Metal Storage Area:

9. Metal and hazardous wastes were being segregated in the Metal Storage Area.
10. Due to the lack of surface water management it did not appear to the inspector that, the hazardous waste is being segregated and stored in such a manner as to prevent the deposit of deleterious substances into any water. This is in contradiction of Part D, Item 7 of the water licence 3BM-HAL1520. See Figure 1 and 2 for a photo of the current storage of Hazardous waste.

Solid Waste Disposal Facility

11. The Licensee manages domestic waste through a burning and covering procedure.
12. During the 2016 inspection the inspector requested that the following concern be addressed by the Licensee and/or the Nunavut Water Board;

i. The Licence requires that all solid wastes be permanently contained within the Solid Waste Disposal Facility. There were no signs of leachate coming from the facility at the time of inspection; however, considering this is an unlined and unbermed facility, leachate generation during rain events is likely.

ii. Since the Domestic Waste Facility in its current form is an approved facility under the water licence, the Water Board and/or Hamlet should address the management of leachate and include its generation and discharge as part of the water licence.

SECTION 2	<input type="checkbox"/> Comments	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
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The Licensee is currently out of compliance with the following issues noted on the inspection conducted on October 5, 2017.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL, Item 7.

“The Licensee shall segregate and store all hazardous materials and/or hazardous waste within the Modified Solid Waste Disposal Facilities in such a manner as to prevent the deposit of deleterious substances into any water, until such a time that the materials have been removed for proper disposal at an approved facility.”

PART C: CONDITIONS APPLYING TO WATER USE, Item 2.

“The annual quantity of water used for all purposes shall not exceed 81,208 cubic metres annually or a daily quantity of water for all purposes shall not exceed 299 cubic metres.”

PHOTO LOG

Date	Camera	Inspector	Authorization
05/10/2017	SONY DSC-HX50V	Jonathan Mesher	3BM-IGL1520



Figure 1: Hazardous waste storage.



Figure 2: Hazardous waste storage

Inspector's Name	
Jonathan Mesher	
Signature	
Date	
October 10, 2017	