



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee		Licensee Representative	
Hamlet of Hall Beach		Bhabesh Roy	
Licence No. / Expiry		Representative's Title	
3BM-HAL1520		Municipal Engineer	
Land / Other Authorizations		Land / Other Authorizations	
Date of Inspection		Inspector	
July 11, 2018		Joseph Monteith & Jonathan Mesher	
Activities Inspected			
<input type="checkbox"/> Camp	<input type="checkbox"/> Drilling	<input type="checkbox"/> Mining	<input type="checkbox"/> Construction
<input type="checkbox"/> Roads/Hauling	<input checked="" type="checkbox"/> Other: Potable Water Source, Waste Water Treatment Facility, and Solid Waste Facility	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Fuel Storage

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable	
PART:				Item No.*	Condition	Observation No.*
A: SCOPE, DEFINITIONS AND ENFORCEMENT					A	
B: GENERAL CONDITIONS					A	
C: CONDITIONS APPLYING TO SECURITY					NI	
D: CONDITIONS APPLYING TO WATER USE				1-3	A	
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT				4-14	C	
F: CONDITIONS APPLYING TO MODIFICATIONS					NI	
G: CONDITIONS APPLYING TO CONSTRUCTION					NI	
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING					A	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING					NA	
J: CONDITIONS APPLYING TO MONITORING					A	
SCHEDULES					A	
<i>*The item number corresponds with specific conditions within the licence and the observation number corresponds with specific comments provided below.</i>						
Samples taken by Inspector:		Location(s): Latitude: 69°23’N and Longitude: 81°46’W Coordinates takes you into the ocean around Fury and Hecla Strait.				
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

SECTION 1	<input checked="" type="checkbox"/> Comments (s. __)	<input type="checkbox"/> Non-Compliance with Act or Licence (s. __)	<input type="checkbox"/> Action Required (s. __)
BACKGROUND <p>The Hamlet of Hall Beach (Hamlet), with an estimated population of 829 (2010), is located on the western shore of Foxe Basin within the Qikiqtani Region of Nunavut.</p> <p>The Hamlet owns and operates several municipal facilities aimed at providing relevant services to the residents of the community including a potable Water Supply Facility (WSF), Solid Waste Disposal Facility (SWDF), and a Sewage Disposal Facility (SDF). The Hamlet is authorized for 70,000 cubic metres of water for community use and up to a maximum of 35,000 cubic metres annually.</p> <p>The Hamlet shares the same Potable Water Source with the Department of National Defence – North Warning Sites.</p> Inspector Statement <p>On July 11, 2018, a water licence was conducted at the Hamlet of Hall Beach, Qikiqtani Region, Nunavut.</p> Water Use Related Structures <ol style="list-style-type: none">Water withdrawal is conducted from South Lake to the Water Storage Reservoir. The Water from South Lake is recharged by opening up a gate on a dyke which is also a man-made reservoir. The Storage Reservoir has a capacity of 60,000 cubic metres (See Photo #1).At the time of the inspection a yellow triangle sign was observed titled HAL 1 at the pump house of the water treatment facility indicating a monitoring site.The water reservoir appeared to be working as intended.Two pumping stations at the Water Storage Reservoir. One for community, and another for the North Warning Site.			



5. It was suggested that the flow metre wasn't working at the time of the inspection. But, upon closer inspection the flow metre appeared to be working, and used to record usage amounts. At the time of the inspection the flow metre read 3,387,299.9 Litres, and the logs read the same amount as of July 11, 2018 on the log sheet (See Photo #2 & 3). The monthly water consumption report recorded 3,026,455.7 Litres used for the month of July in 2018.
6. On October 25, 2018, William Koonoo, Municipal Technical Clerk, Government of Nunavut (GN), Community Government and Services (CGS) emailed WRO Monteith the Water Consumption records for Hall Beach for January 2018, to September 2018 which showed a total amount of 25,321,989.3 Litres. Well below their authorized amount listed in the water licence (See Photo #4).


Water Treatment Facility

7. The Water Treatment Facility consists of two cells. Cell #1 is the south side cell of the two; whereas, Cell #2 is the north side of the two cells.
8. The fencing looked like it was operating as intended, but the base of the fencing looked as if it was causing some structural damage to the lagoon walls, this may need to be maintained and should be monitored (See Photo #5).
9. The freeboard was in good standing above 1 metre.
10. A leak was observed at the South East corner of Cell # 1 at the time of the inspection (See Photo #6). A spill report was requested to be submitted. On August 3, 2018 at 14:47 a Spill Report – Spill 2018309 was submitted to the Spill Line as per Part B: Subsection 6. On October 2, 2018 Bhabesh Roy, Community and Government Services – Municipal Planning Engineer had emailed WRO Monteith with a document attached which had stated that since a leak was found, CGS created a mitigation measure to use until the damage to the sewage lagoon walls can be repaired. The plan was to use Cell #2 until it reached capacity and then to deposit sewage into Cell # 1 when full and, to submit a spill report if any signs of spills are observed (See Photo #7).

Solid Waste Facility

11. The Solid Waste Facility located next to the Water Treatment Facility segregates their waste into metals, burnable waste, hazardous waste, and woods. There was solid waste deposited next to a lake North West of the sewage lagoon, that site is under remediation, and was being supervised by a consultant from EXP Services Inc. (See Photo #8). At the time of the inspection, it was observed that the berms were compromised, but upon discussion with the consultant on site, he had fixed up the berms so that no contact with the waste and the water would take place (See Photo #9).
12. Fencing requires maintenance around burnable waste section. (See Photo #10).
13. Some hazardous waste is located in the Bulk Metal Storage section. This should be removed and segregated appropriately. (See Photo #11).
14. The Hazardous Waste section appears to be bermed but not lined. Further inspection to verify whether it is lined is required. Hazardous Waste is segregated, exposed to the elements. But, no signs of water pooling, seepage, or ground instability (See Photo #12).

SECTION 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
<div>-Maintain fencing base at the sewage lagoon (see Photo # 5)</div> <div>-Maintain fencing at burnable waste facility (see Photo #10)</div> <div>-Remove hazardous waste from bulk metal storage facility (see Photo #11)</div>			
SECTION 3	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
<div>Click here to enter text.</div>			

Licensee or Representative	Inspector's Name
Bhabesh Roy	Joseph Monteith
Signature	Signature
	
Date	Date
	November 15, 2018



CC:

Licensing Department, NWB
Justin Hack, Manager of Field Operations, INAC

PHOTO LOG

Date	Camera	Inspector
July 11, 2018	Nikon Coolpix N16D3-52000738	Joseph Monteith

Photo Log #1	Location:
Photo 1	Hall Beach



Description: Potable Water Source – 60,000 metres cubed capacity

Photo Log #1	Location
Photo 2	Hall Beach



Description: Water Metre – reads 3387299.9

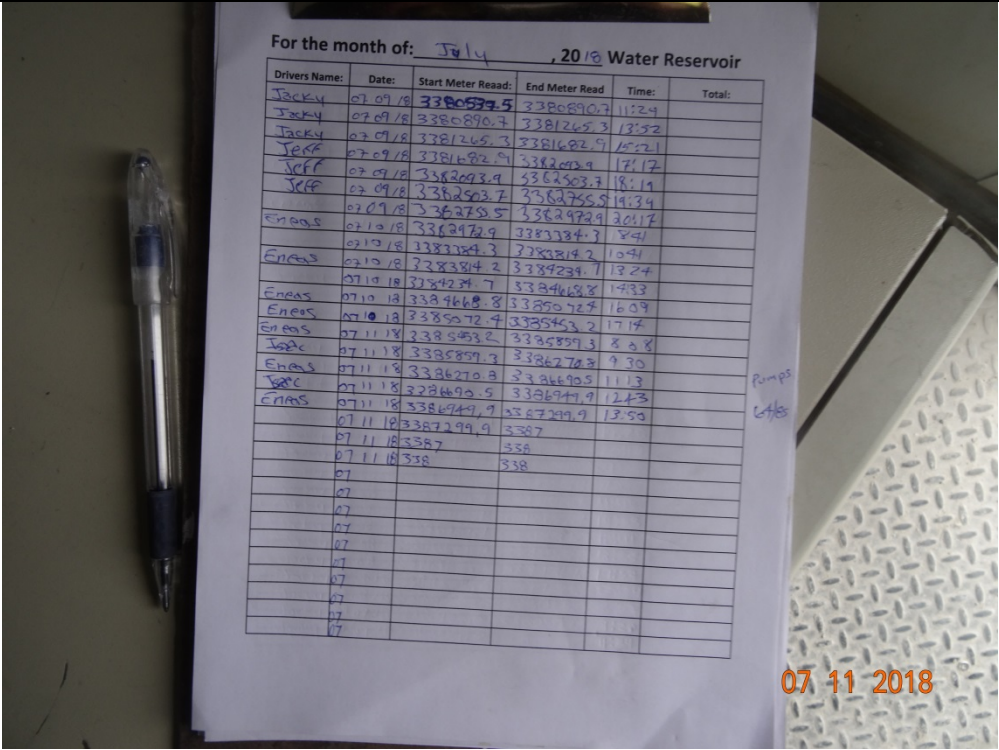


Photo Log #1

Photo 3

Location

Hall Beach



Description: Water Usage Logs from Water Pump House – 3387299.9 on July 11, 2018

Photo Log #1

Photo 4

Location

Hall Beach

MONTHLY WATER CONSUMPTION REPORT
FOR THE HAMLET OF HALL BEACH, NUNAVUT

Month and Year Being Reported: January to September, 2018

Month Reported	Quantity of Water Obtained from all Sources (Litres)	Quantity of Sewage Waste Discharged (Estimated)
January 2018	2,831,103.50	Same
February 2018	2,588,072.40	Same
March 2018	2,883,195.2	Same
April 2018	2,735,222.4	Same
May 2018	3,003,232.2	Same
June 2018	2,699,500.9	Same
July 2018	3,026,455.7	Same
August	2,842,430.7	Same
September	2,712,776.3	Same

Description: Water Usage Report – Shows a total amount of 25,321,989.3 Litres between Jan. – Sept. 2018



Photo Log #1	Location
Photo 5	Hall Beach
	
Description: Erosion at base of fencing post	

Photo Log #1	Location
Photo 6	Hall Beach
	
Description: Leak out of south side Cell #1 Sewage Lagoon	

Photo Log #1

Location

Photo 7

Hall Beach

spill-2018309

Friday, August 3, 2018 - 14:47

Spill Status

Lead Agency: GN - Government of Nunavut

Occurance Date/Time: Thursday, July 26, 2018 - 14:45

Received Method: Email

Potential Spill: No

Known Hazards: mini/no environment hazard

Spill Information

Spill Region: Baffin

Spill Location: Hall Beach, Community, Nunavut

Geolocation: Geolocation is 68.772735, -81.235208

Land Sea Indicator: Land

Spill Source: Sewage Lagoon

Spill Cause: Breakage

Product Spilled: Wastewater (sewage, mine tailings)

Product Spilled Description: Sewage

Supporting Information

Describe any Assistance Required: under investigation

Additional Information: Sewage ex filtration from the new lagoon cell was noticed due to a suspected leakage through the berm; the spill was retained in the adjacent swale so minimum/no environmental impact is expected . It is under investigation to find out th e problem & the solution.

Factors Affecting Spill or Recover: under investigation

Reporter Information

Reporting Date and Time: Friday, August 3, 2018 - 14:45

Description: Spill Report 2018309 – coordinates on spill report do not match site location of spill

Photo Log #1

Location

Photo 8

Hall Beach



Description: Site Map of remediation with EXP Services Inc. Yellow blocks on map shows where the bermed unauthorized bulk metal waste is stored. In-between the bermed blocks is a natural drainage of fresh water from the lake to the ocean.



Photo Log #1	Location
Photo 9	Hall Beach
	
Description: Compromised Berm at Remediation site – Natural Water Runoff from lake	

Photo Log #1	Location
Photo 10	Hall Beach
	
Description: Fencing requiring maintenance at burnable waste section of Solid Waste Facility	



Photo Log #1	Location
Photo 11	Hall Beach
	
Description: Hazardous Waste within the Bulk Metal Section of the Hazardous Waste Facility – Battery(hazardous waste) in the mid ground of photo	

Photo Log #1	Location
Photo 12	Hall Beach
	
Description: Hazardous Waste Section of the Solid Waste Facility	