

WATER LICENCE INSPECTION FORM

☒ Original

☐ Follow-Up Report

Licensee	Licensee Representative
Hamlet of Clyde River	Bhabesh Roy , Johnathan Paulluq, Moe Kuluguqtuk
Licence No. / Expiry	Representative's Title
3BM-CLY1419 Renewal Licence	Municipal Engineer – GN- C&GS , Acting Senior Administration Officer, acting Hamlet foreman
Land / Other Authorizations	Land / Other Authorizations
Date of Inspection	Inspector
14/08/2018	Joseph Monteith
Activities Inspected	
<input type="checkbox"/> Camp	<input type="checkbox"/> Drilling
<input type="checkbox"/> Roads/Hauling	<input type="checkbox"/> Mining
	<input type="checkbox"/> Construction
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Fuel Storage
	<input checked="" type="checkbox"/> Other: Potable Source, Waste Disposal Facility, Solid Waste Facility, General Conditions , water crossing (LUP N1999X0043)
	<input type="checkbox"/> Other:

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable
PART:	Condition		Observation No.*		
A: SCOPE, DEFINITIONS AND ENFORCEMENT	NA				
B: GENERAL CONDITIONS	A				
C: CONDITIONS APPLYING TO SECURITY	NI		1		
D: CONDITIONS APPLYING TO WATER USE	C		2-6		
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT	A		7-14		
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	NI				
J: CONDITIONS APPLYING TO MONITORING	A				
SCHEDULES	A				
*The observation number corresponds with specific comments provided below.					
	Location(s):				
	Water Crossing - N70 28 30.0 W68 32 30.1 LUP N1999X0043 –Bridge Construction				
	3BM-CLY1419 Renewal coordinates: N70° 27', W68° 33' is incorrect as the coordinate is in the old town part of Clyde River apart of 1BR-CLY1828				
Samples taken by Inspector:					
<input type="checkbox"/> Yes <input checked="" 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>The Hamlet of Clyde River (Clyde River or the Hamlet or Licensee) is located approximately 750 kilometres North of Iqaluit, on the shore of Patricia Bay, on the east coast of Baffin Island, within the Qikiqtani Region of Nunavut. Freeze up usually occurs during the month of November but may occur as early as September or October, while spring thaw usually occurs between late May and June. The Hamlet had a population of approximately 1053 (2016).</p> <p>The Hamlet is licenced to withdraw 36,000 cubic metres of water per year, or 36,000,000 Litres per year.</p> <p>A Water Supply Facilities which draws water from Water Source Lake. Water is treated in the truck-fill station and stored for trucked water to holding tanks in each building;</p> <p>- A Sewage Disposal/Treatment Facilities (Two Lagoon Cells) which receives trucked sewage collected from holding tanks in each building and houses, with a wetland area between the lagoon and the ocean; and</p> <p>- A Solid Waste Disposal/Management Facility, which includes a bulky metals disposal area, and hazardous waste oil storage area.</p> <p><b>Inspector Statement</b></p> <p>On August 14, 2018 WRO Monteith conducted an inspection on water licences 3BM-CLY1419 Renewal Licence to verify compliance with the terms and conditions of the water licence and the applicable Acts.</p> <p><b>General Conditions</b></p> <p>1. ON October 29, 2018 WRO Monteith requested a copy of the Annual Report from the Nunavut Water Board, and any outstanding documents, and was replied back from Richard Dwyer, Manager of Licencing, Nunavut Water Board. “The NWB has no record of receiving 2016 annual report as well as: Part F, Item 3. The Licensee</p>			

shall submit to the Board for approval within ninety (90) days of issuance of the Licence, a stand-alone Hazardous Waste Management Plan to reflect the operation of a functional hazardous waste management facility and provide procedures for the hazardous waste segregation and storage; Part F, Item 4. The Licensee shall submit to the Board for approval within ninety (90) days of issuance of the Licence, a stand-alone Spill Contingency Plan for Water, Sewage and Solid Waste Operations including management of Hazardous materials in the event of a spill. The stand-alone Plan is to take into consideration, at a minimum, the comments received during the review of the renewal Application.”

Water Use and Related Structures

2. Water is withdrawn from Water Source Lake. GPS Coordinates: Lat: N70° 28’ 59.339” Long: W68° 36’ 48.744.
3. The condition of the piping was good. The length approximately 47 metres. Diameter 8 inches, with a 4 inch internal pump housed within the intake pipe. The pipe has a fish mesh screen.
4. The pump house has a flow meter, and it measured 008696868m³ (See photo 1) at the time of the inspection. WRO Monteith also photographed the Pump Meter Reading log book for August 2018 which had 13 entries for the month of August. On August 1, 2018 the records show a reading of 867791m³. On August 13, which was the day of inspection, the log showed a reading of 869686m³ (see photo 2).
5. At the time of the inspection, WRO Monteith received “Delivery Summary by Water Rate” from January 1, 2018 to July 31, 2018 which shows a total of 22,972m³ water delivered.
6. On October 30, 2018 Jayson Mablick, Municipal Technical Clerk, Government of Nunavut(GN), Community & Government Services(C&GS) provided the Water Consumption Report for January to September 2018 for Clyde River and showed a total of 29,535m³ water withdrawn for community use to date(See photo 7). This is below the allowable maximum daily water listed in the 3BM-CLY1419 Renewal Licence. Use of water varies throughout the year

Waste Water Treatment Facility

7. At the time of the inspection, the sewage lagoon was in-use. The walls were operating as intended, no signs of leakage, but some slumping or erosion were observed on the west side of the lagoon walls (See photo 3). The lagoon has two cells; the first is the original lagoon with a capacity of 11,600m³, the other cell forms as an extension from the original lagoon, with no listing for the amount of sewage it can store. No issues were observed during the course of the inspection
8. At the time of the inspection, Bhabesh Roy, and Moe Kuluguqtuk conducted as a part of their monitoring sampling program.

Solid Waste Facility

9. Burnable solid waste is deposited in the fenced Open Pit Burning area of the Solid Waste Facility. The Hamlet burns the burnable garbage and push it into a pit, and cover the ash garbage with gravel.
10. The fencing, which is approximately 1.5 metres high, is damaged in some parts on the north side of the fire pit. The fencing only covers a portion of the fire pit portion and should have more fencing put in to mitigate any garbage from blowing across the environment into any fresh water, the ocean, or compromising the capacity of the sewage lagoon (see photo 4).
11. The metal dump is a mix of vehicles, white waste, empty oil drums, boats, building material and engines has some hazardous waste paint cans, within that section. No observations of batteries, or waste oil barrels in the metal dump.
12. There is no berm to contain any leachate coming from bulk metal section of the land farm. Contaminants may migrate with rain water contaminating the environment on its migration down slope to the ocean (See photo 6).

Hazardous Waste Facility

13. The Hazardous Waste Section contains a few sea cans(full), a bermed area full of waste oil drums, some packaged ready for delivery, waste oil drums on the inside and outside of the berm, spilling its leaked contents onto the ground all around the area. Some of the sea cans are left open to the environment (See photo 5). The exposure of hazardous wastes outside berms, and outside of sea cans is violations of the licence, and should be considered a spill. Deployment of Spill Contingency Plans and reporting the spills to the spills line hasn’t been occurring.

Section 2	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input checked="" type="checkbox"/> Action Required
The following information is a summary of the Actions Required by the licensee to promote and ensure compliance: <ul style="list-style-type: none"><li>Adhere to the authorized amount of water withdrawal listed in the licence.</li><li>Clear any sediment accumulating on the bridges, and mitigate any of the sediment from depositing into the river.</li><li>Consolidate all Hazardous Waste and store in such a way as to protect water from mixing with the hazardous waste.</li><li>Ship out hazardous waste to an approved hazardous waste disposal facility to make room in berms, and sea cans for current and future hazardous waste. Keep copies of Hazardous Waste Manifest to verify that hazardous</li></ul>			

waste has been shipped out and received.

- Erect fencing to finish off the fencing surrounding half the burn and cap section of the Solid Waste Facility.


SECTION 3

☐ Comments

☒ Non-Compliance with Act or Licence

☐ Action Required

Part B: Item 7  
The Licensee shall immediately report to the 24-Hour Spill Report Line at (867) 920-8130, any spills of Waste, which are reported to, or observed by the Licensee, within the municipal boundaries or in the areas of the Water Supply or Waste Disposal Facilities.

Licensee or Representative	Inspector's Name
Bhabesh Roy	Joseph Monteith
Signature	Signature
	
Date	Date
	December 6, 2018

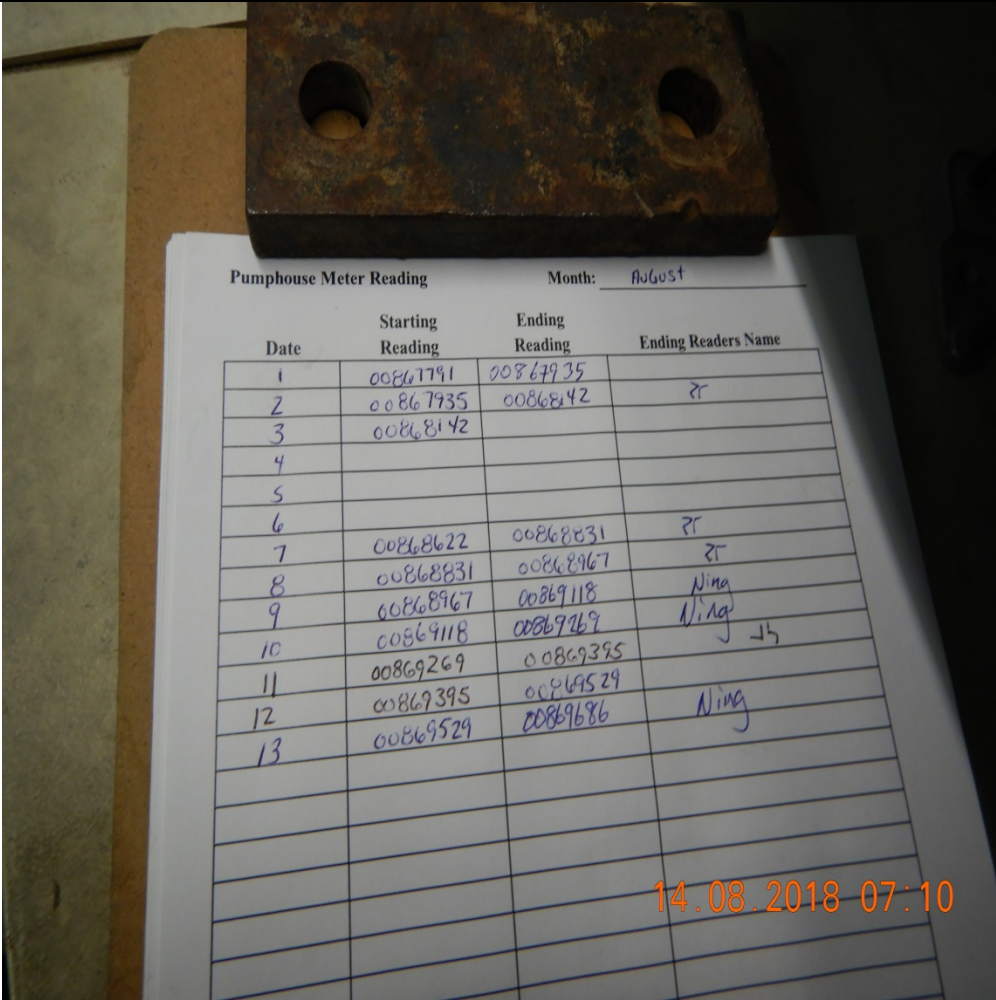
CC: Licensing Department, NWB  
Justin Hack, Manager of Field Operations, CIRNAC

Photo Log

Date	Camera	Inspector
August 14, 2018	Nikon Coolpix	Joseph Monteith
Photo Log	Location	
Photo 1	Clyde River	
		
Description: Working Water Meter – 00869686 m³ withdrawn from potable water source		

Photo Log	Location
Photo 2	Clyde River





Description: Water Usage Logs – Same as Water Usage Meter

Photo Log	Location
Photo 3	Clyde River



Description: base of sewage lagoon walls appears to be slumping

Photo Log	Location
Photo 4	Clyde River





Description: Fire Pit – No fencing on East Side, wind may blow ash and debris out of area onto the environment, the ocean, and to the sewage lagoon

Photo Log

Location

Photo 5

Clyde River



Description: Hazardous Waste Berm – overfilled with waste oil drums. Waste oil drums deposited outside of bermed area. Signs of spills on ground outside of the bermed area.

Photo Log

Location

Photo 6

Clyde River



Description: the outer extent of bulk metal section of land farm, no berm to mitigate any potential deposit of wastes onto environment

Photo Log

Photo 7

Location

Clyde River

Water consumption Jan.01 to Sep.30, 2018

Name of the Community: Clyde River

YEAR BEING REPORTED: 2018

The following information is compiled pursuant to the requirements of **Part B, Item 1** of Water Licence # \_\_\_\_\_ issued to the Hamlet of Clyde River

i) - iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;  
Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged (Estimated)
January	3,336,393	Same
February	3,132,861	Same
March	3,434,891	Same
April	3,241,046	Same
May	3,412,610	Same
June	3,173,306	Same
July	3,241,225	Same
August	3,441,347	Same
September	3,121,655	Same
October		Same
November		Same
December		Same
ANNUAL TOTAL		

Description: Water Usage Log between Jan. – Sept. 2018 – If trend persists, they will exceed licenced amount for water withdrawal