



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee		Licensee Representative	
Department of Community Government and Services Government of Nunavut		Bhabesh Roy – Steve Piercey- Airport Manager	
Licence No. / Expiry		Representative's Title	
3BM-YRB0308 <b>Expired</b>		Regional Engineer	
Land / Other Authorizations		Land / Other Authorizations	
Date of Inspection		Inspector	
July 7, 2016		A.Keim	
Activities Inspected			
<input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage			
<input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: Water Discharge <input checked="" type="checkbox"/> Other: Municipal			

Conditions:		A - Acceptable		C - Concern		U - Unacceptable		NA – Not Applicable		NI – Not Inspected	
Water Use		Condition	Comment	Site Conditions		Condition	Comment	Haz/Mat Management		Condition	Comment
Intake/Screen	NA			Water Management Structures	NA			Storage	NI		
Flow Measure. Device	NA			Culverts / Bridges	NA			Spills	NI		
Source:	NA			Drainage	NA			Spill Plan	NA		
Water Use:	NA			Erosion / Sediment	NA						
Recirculation ( y /n)	NA			Mitigation Measures	NA			Administrative			
				Reclamation Activities	NA			Records	NI		
				Materials Storage	NA			Reports	NI		
Waste Disposal				Signage	A			Plans	NI		
Waste Water	U							Notifications	NA		
Solid Waste	NA			Monitoring		Other					
Hazardous Waste	NA			Sample Collection / Analysis	A						
*The number in the comments field will correspond with specific comments provided below.											
Samples taken by Inspector:				Location(s): Sample collected from ponded waste water below the Lagoon							
<input checked="" type="checkbox"/> Yes <input 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. __)
<p>The above noted expired water license ( 3bm-YRB0308) Is one of three licenses making up- the authorizations issued to the Government of Nunavut and the Municipality of Resolute Bay to provide municipal water and waste services within the community and to the airport located approximately 7 kn from the community of Resolute Bay Nunavut.</p> <p>Between 2006 and 2016 there have been 7 inspections of this facility. Each inspection has identified the following issues with the Lagoon;</p> <ul style="list-style-type: none"><li>Between 2006 and 2015 the Lagoon has overtopped or breached every winter due to limited capacity</li><li>Sample collection and reporting of results have been inconsistent</li><li>Operation of the lagoon continues</li><li>Various issues with Administrative compliance</li></ul> <p>During the period of the 2016 inspection the above noted issues were also identified to the Government of Nunavut representative, Mr. Bhabesh Roy who indicated that the Government had no intention of spending any money on the lagoon and that there were no plans to address this deficiencies. The intention of the Licensee is to continue to operate the facility until such time as the new Waste Water facility can be commissioned under 3BM-RUT1520 and that license amended to allow for the discharge of effluent from the airport facility to the New facility in Resolute Bay.</p> <p>It is unclear how the licensee will be able to treat that extra volume of raw effluent in a continuous flow system with no holding time.</p> <p>The Contractor on site also noted that work on the Lagoon facilities would be required to facilitate the dumping of the new effluent haul truck purchased for this purpose by the contractor. The modifications to the truck stop will be minor in nature and not change the overall scope of the now expired license but the contractor and the Licensee were both informed that they should contact the Nunavut Water Board to inform them of this modification.</p>			



Between 2006 and 2016 there have been 7 inspections of this facility. Each inspection has identified the following issues with the Lagoon;

- Between 2006 and 2015 the Lagoon has overtopped or breached every year
- The Lagoon is a non-engineered lagoon that was designed for a much reduced capacity. ( Note the capacity of the lagoon has increased over the last ten years however it has not kept pace with the volume of effluent produced by new development and expanded use of Airport facilities in recent years.
- Work ( construction of additional cells) completed on the Lagoon was not previously submitted to the NWB for approval not has the on-going work completed by Contracted operator at the site in 2016
- An operations manual for the facility and plan to maintenance has not been completed or submitted.
- The Licensee, specifically the Government of Nunavut, has failed to follow the orders of an inspector contained within an Inspectors Direction issued pursuant to the Act in 2008.

Specifically, in 2016 during the Inspection, the Inspector noted the following:

- Failure to notify the Nunavut Water Board of a modification to Part C (1).
- Failure to submit the Plan required under Part D (3).
- Failure to submit the required Operation and Maintenance Manuals for the Sewage Disposal facility (Part F (1)) \*
- Failure to development and submit a QA/QC Plan. Part H (3)).\*
- Failure to submit as required the appropriate Abandonment and Restoration Plans (Part G (1)).
- Failure to implement the requirements listed under the Monitoring Program (Part H).
- Failure to maintain the Sewage lagoon to the satisfaction of the inspector (Part D (8)).

\* It is noted that following the Inspection and prior to filing this report the Government of Nunavut Submitted an application for renewal of this license along with a number of outstanding plans and manuals including a plan for compliance and an operations manual for the Airport lagoon.

The Licensee has indicated that there are works in place to deposit the effluent from the Airport system into the waste water system operated under the authority of 3BM-RUT1520 (also in the name of the Government of Nunavut). This deposit is to be incorporated into the discharge currently on the foreshore of the community and flowing into the arctic ocean. Currently as there is no treatment system in place to treat the disposal of the effluent generated by the community via this discharge it is unlikely that the addition of an extra 4.2 million litres of effluent from the Airport will have any positive effects other than to stop the overflow from occurring at the airport lagoon.

Photo Log

Date	Authorization	Camera	Inspector
July 7, 2016	3BM-YRB0308 EXPIRED	Sony Cyber shot	A. Keim



Figure 1 Newer of the lagoon cells where truck drops off



Figure 2 Older cell, shallow and frozen to bottom during period of inspection





Figure 3 Older cell with newer cell (N) in the background



Figure 4 Newer cell is divided into two, original cell to left of farther cell





Figure 5 Truck drop off point that required up-grades and maintenance to facilitate off loading



Figure 6 sampling site below lagoon. Samples collected during period of inspection.





Figure 7 sampling #2

Licensee or Representative	Inspector's Name
	A. Keim
Signature	Signature
	Original on File
Date	Date
	August 10, 2016

Office Use Only:	Follow-up report to be issued by Inspector	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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