



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee		Licensee Representative	
Hamlet of Arctic Bay		Sam Willie	
Licence No. / Expiry		Representative's Title	
3BM-ARC1419		Acting Senior Administrative Officer	
Land / Other Authorizations			
None			
Date of Inspection		Inspector	
July 28, 2017		Jonathan Mesher	
Activities Inspected			
<input checked="" type="checkbox"/> Camp/Municipality	<input type="checkbox"/> Drilling	<input type="checkbox"/> Mining	<input type="checkbox"/> Construction
<input type="checkbox"/> Roads/Hauling	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Fuel Storage			

Conditions:		A - Acceptable	C - Concern	U - Unacceptable	NA – Not Applicable	NI – Not Inspected	
Water Use		Condition	Comment	Site Conditions		Condition	Comment
Intake/Screen		A		Water Management Structures		A	
Flow Measure. Device		A		Culverts / Bridges		A	
Source:		A		Drainage		A	
Water Use:		A		Erosion / Sediment		A	
Recirculation ( y /n)		NA		Mitigation Measures		A	
				Reclamation Activities		A	
				Materials Storage		A	
Waste Disposal				Signage		A	
Waste Water		A					
Solid Waste		C		Monitoring			
Hazardous Waste		A		Sample Collection / Analysis		NI	
*The number in the comments field will correspond with specific comments provided below.							
Samples taken by Inspector:			Location(s):				
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

SECTION 1	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
Inspectors Statement			
<p>The Hamlet of Arctic Bay has a water licence that is valid until 2019. The Licensee is permitted to use 299 cubic meters of water per day, and is permitted to discharge treated sewage into the environment from the Waste Water Treatment Facility. The Licence does not grant the right to deposit of wastes into the environment (leachate) from the Solid Waste Disposal Facility.</p> <p>On June 28, 2017, a water licence inspection was conducted at the Hamlet of Arctic Bay, Qikiqtani Region, Nunavut. Sites inspected included:</p> <ul style="list-style-type: none"><li>• Marcil Lake: Located approximately 8 kilometers east of the Hamlet. The water is pumped from the lake to the treatment plant and is then distributed by trucks to residents in the community.</li><li>• Sewage Treatment Facility: The Hamlet uses a single cell, sewage lagoon system to treat sewage generated by the community. The lagoon system, which was constructed in 2013 and has a projected lifespan of 20 years, is complemented by a wetland area (a vegetative filter-strip) that is used to polish water treated from the sewage lagoon system.</li><li>• Solid Waste disposal facility: The Hamlet operates a non-engineered landfill facility for the purposes of treating domestic waste and bulky metal waste. Although sparse details have been provided in the application with respect to the operations of this facility, some information included in the application suggests that the Licensee is contemplating constructing a new solid waste facility and that once the facility is constructed, the Licensee will be prepared to submit the relevant operations and maintenance manual.</li></ul>			



Inspection

Water Use and related structures:

- 1. Water is being withdrawn from Marcil Lake as approved in the Water Licence.
- 2. The inspector is requesting that the Licensee install a flow meter in order to accurately record the water usage.

Waste Water Treatment Facility

- 3. At the time of inspection, the sewage lagoon was in-use, operating as intended, and was retaining the sewage until decanting occurs.
- 4. Berm walls surrounding the facility appeared to be in good condition and the freeboard height was sufficient.
- 5. To decant the facility, the Licensee siphons the effluent through hoses over the berm wall. Erosion control measures were in place at the time of the inspection.
- 6. No concerns were noted with the operation of this facility.

Metal Storage Area:

- 7. During the previous inspection (2015), it was requested to store scrap metals on top of the reclaimed sewage lagoon. The Hamlet has not initiated this activity as of yet.
- 8. During the 2016 inspection it was observed that a small stream flows through the existing metal storage area and then flows into a sump downstream of the domestic waste facility. This stream was not visible at the time of the 2017 inspection.
- 9. No issues were noted about this facility.

Domestic Waste Facility

- 10. The Licensee manages domestic waste through a burning and covering procedure.
- 11. In the 2016 inspection a small stream was noted flowing through this facility due to the recent rainfall. Please ensure that water is properly diverted around the municipal refuse to ensure that this facility does not generate Leachate.
- 12. There are no other issues with this facility; the waste appeared to be well segregated.

Reports/Records:

- 13. Records for water use were in good order.

Hazardous Waste:

- 14. Paints, batteries, and some hazardous materials are being stored and segregated in sea cans at the Metal Storage Area.

SECTION 2

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Comments

☐

Non-Compliance with Act or Licence

☐

Action Required

Click here to enter text.

Inspector's Name

Jonathan Mesher

Signature

Date

September 11, 2017