



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee		Licensee Representative	
Hamlet of Pangnirtung		Wayne Solomon	
Licence No. / Expiry		Representative's Title	
3BM-PAN0810 // Renewed to 3BMPAN1417		Acting Senior Administrative Officer	
Land / Other Authorizations		Land / Other Authorizations	
Date of Inspection		Inspector	
14/08/2014		A.Keim	
Activities Inspected			
<input type="checkbox"/> Camp	<input type="checkbox"/> Drilling	<input type="checkbox"/> Mining	<input type="checkbox"/> Construction
<input type="checkbox"/> Roads/Hauling	<input type="checkbox"/> Other: Water Discharge	<input checked="" type="checkbox"/> Other: Municipal	<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	Haz/Mat Management		Condition	Comment
Intake/Screen	NI			Water Management Structures				Storage		U	2
Flow Measure. Device	A			Culverts / Bridges		A		Spills		NI	
Source: Duval River				Drainage		NA		Spill Plan		A	
Water Use:	A			Erosion / Sediment		NA					
Recirculation ( y /n)	N			Mitigation Measures		NA		Administrative			
				Reclamation Activities		NA		Records		C	1
				Materials Storage		A		Reports		C	1
Waste Disposal				Signage		U	2	Plans		C	1
Waste Water	U	1						Notifications		NA	
Solid Waste	U	2		Monitoring		Other					
Hazardous Waste	U	2		Sample Collection / Analysis		C	1				
*The number in the comments field will correspond with specific comments provided below.											
Samples taken by Inspector:			Location(s): Samples collected at Raw Water Source, Leachate from Solid Waste								
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Management Area , Effluent from discharge at Mechanical Plant								

SECTION 1	<input checked="" type="checkbox"/> Comments (s.____)	<input type="checkbox"/> Non-Compliance with Act or Licence (s.____)	<input type="checkbox"/> Action Required (s.____)
Administration:			
<p>On August 31<sup>st</sup> 2010, following the issuance of an Emergency amendment to allow for the discharge of effluent to the Duval river following the collapse of the Bridge in the community that License expired. The Licensee was expected to have in place within the duration of that amendment a complete application sufficient in composition to allow for the Board to issue a new renewal licence.</p> <p>As part of the Emergency amendment the Licensee and the Government of Nunavut were to have completed and submitted for approval of the Nunavut Water Board (Board) a Compliance Plan that was to outline the steps and tasks necessary to bring the License into full and complete compliance with the legislation and the terms of the existing license as well as a timeline for when those actions would be completed. It was expected that the timelines would fall within the two year duration of the amendment and would be completed on time.</p> <p>The Licensee has remained without a License since August 31<sup>st</sup> 2010.</p> <p>Between 2011 and 2014 a number of submissions to the Board have been made by the Government of Nunavut on behalf of the Licensee with respect to the renewal of the expired license. In August of 2014 sufficient documentation was provided to the board for a review to be completed and the application found to meet the minimum requirements necessary for the package to be sent for the review of regulators and the Board. On September 16<sup>th</sup> 2014, two days following the Inspection, a renewal license for the Municipality of Pangnirtung was approved and issued by the Nunavut Water Board.</p> <p>Contained within that approval and issuance of the renewal license is also the requirement to submit to the Board for approval within the 2014 Annual Report, revised Plans to include the following:</p> <ul style="list-style-type: none"><li>• Executive Summaries;</li><li>• A document Control Section intending to track document revisions</li><li>• The WWTP O&amp;M Plan shall also include a non-technical overview of its design and ability to satisfy effluent discharge criteria. The revised plan shall also include details related to WWTP changes/upgrades expected by end of 2014;</li><li>• The SW O&amp;M Plan shall also include details of Monitoring Program Stations actual description, a schematic and a topographic map of appropriate scale detailing the land filling areas, run-off from Sludge disposal area, and Monitoring Program Stations locations.</li><li>• Submission of a Stand Alone Spill Contingency Plan</li><li>• Submission of a QA/QC plan in accordance with the “Quality Assurance (QA) and Quality Control (QC) Guidelines for use by Class “B” Licensees in Collecting Representative Water Samples in the Field, 1996” Standard as well as information related to the laboratory accreditation pursuant to ISO/IEC Standard 17025.</li></ul>			



Inspection:

Water use:

During the period of Inspection a site visit to the Water reservoir was conducted. During this inspection the following were identified:

- 1. Fencing was found to be in good shape and up in all areas to prevent access and protect the facility
- 2. Signage should be up-graded and improved
- 3. Vehicle access to the raw water pumping location (reservoir fill) must be blocked off when not in use and properly maintained
- 4. Water levels were low and filling will begin this month.
- 5. The Water treatment and pumping station is scheduled for replacement by 2016.

Waste Management :

During the period of Inspection the following issued were identified by the Inspector;

- Approximately 500 M from the fenced community solid waste management area, on the side of the roadway is a deposit of approximately 40 barrels and one 10 000 liter tank of unknown origin or contents. Some are marked waste oil and glycol but it is unclear if that is what is contained within that specific drum. It was noted that some drums are leaking and not on secondary containment.
- Within the Solid waste Management Area at the site of the Municipal waste area the entire site was on fire. Large plumes of grey, black smoke were rising from the garbage. There does not appear to be any cover material added once the burn has been completed. More materials were brought in during the period of Inspection.
- Rocks and a long culvert have been installed to segregate the solids from the Waste Water treatment Plant. It was also noted that the bags of solid waste are being placed within a circle of dirt to prevent run off.
- The fence was down all along the back side (closest to the fiord) of the Waste Management Area.
- Samples were collected from two ponds ( 2 sets) below the Solid waste management Area)
- Two new Solid Waste Management Areas have been accessed by the Licensee. Neither site is lined nor has there been a sampling location set for monitoring.
- Hazardous wastes within the fenced Solid Waste Management Area are not segregated and were found to be mixed in with municipal waste.
- At the site of the two new Solid waste management area's previously indentified in 2011 the following were noted;
  - The site is actually two areas with a common access.
  - The facility is unlined and unfenced.
  - The west end, close to the entrance to the Facility has a sea-can for batteries, electronics and Propane tanks on site but it is unclear how these batteries will be safely stored or contained for packaging and shipment off site.
  - The remainder of the area on the west side contains scrap metal including old appliances, house hold fuel tanks, old vehicles, an abandoned fuel delivery vehicle, large industrial parts from the Waste Water Treatment Facility that have been scrapped, Snow machines, and large 1 cube oil and transfer cubes from the Hamlet garage.
  - On the East side of the facility the following were noted; Scrap wood, old fibreglass boats, drywall and construction/ freight debris.
  - During the period of Inspection an Operations Manual or set of procedures for handling of hazardous wastes was not available for review during the period of Inspection.
  - A manual for the operations and maintenance of the new sites was also not available for review when requested during the Inspection
- There are no measures to prevent run off or leachate from leaving any of these waste management facilities.
- No drainage diversions are in place to control contact water within the Municipal Waste Management Area.
- The Waste Water Treatment Plant was undergoing modifications during the period of Inspection. It was noted that a diversion had been installed past the solids removal process and a direct discharge to the dispersion field outside the building was occurring. Samples were collected down from the end of the discharge.

SECTION 2

☐ Comments (s.\_\_\_\_)

☒ Non-Compliance with Act or Licence (s.\_\_\_\_)

☐ Action Required (s.\_\_\_\_)

As identified, a renewal Water License was issued for the community of Pangnirtung on September 16<sup>th</sup>, 2014. This was a month following the Inspection. As such the deficiencies noted are referenced to the terms and conditions of the newly renewed license and not to the expired license that was in force during the period of Inspection. Additionally, as noted, if a condition of the renewal license creates a situation where a new contravention exists but would not have under the previous license, this is identified.

Observed non-compliance;

Part B: General conditions

Item (1). Failure to file complete Annual Reports

Item (2) – Item (3) in renewal License -Failure to comply with the Monitoring Program

Item (4) – Item (5) in Renewal License- Failure to properly install flow meters or implement measures to accurately measure the water volumes

Item (5) – Item (6) in new License – Failure to post all necessary Signage

Part D: Waste Disposal



- Item (3) – Removed from New License – Failure to conduct Acute Lethality testing as required
- Item (4) – Failure to contain all wastes at the Solid Waste Disposal facility
- Item (5) –Item (9) in Renewal License - Failure to properly store hazardous wastes in a manner as to prevent the deposit of deleterious substances into any water.
- Item (7) – Item (10) in renewal License – Failure to implement measures to control wind-blown letter at the Solid Waste Disposal facility.
- Item (8) – Item (11) in renewal License- Failure to implement measures to control surface run off from the Solid Waste Disposal Facility.

Part H: Monitoring Program  
The Licensee has failed to implement the conditions of the Monitoring program

**SECTION 3**      ☐ **Comments (s. \_\_)**      ☐ **Non-Compliance with Act or Licence, (s. \_\_)**      ☐ **Action Required (s. \_\_)**

As noted in this report, on September 16<sup>th</sup>, 2014 the Municipality of Pangnirtung’s Water License has been renewed by the Nunavut Water Board for a period of 3 years. This renewal carried with it the expectation that the Licensee and Government of Nunavut will follow the submitted compliance plan and will adhere to the implementation schedule to achieve compliance with the legislation within the three year term.

The Licensee has a number of projects on-going within the community with direct influence on the use of water and deposit of waste within the community. It is good to see such projects coming to the municipality and AANDC encourages the Licensee to contact our offices to ensure that future activities can be undertaken in compliance within the scope of the existing license.

**Photo Log**

Date	Authorization	Camera	Inspector
August 14 2014	3BM-PAN1417	Sony Cyber shot	A. Keim



Figure 1 Pangnirtung August 14, 2014





Figure 2 Bridge over Duval River



Figure 3 Water Pumping Station at Reservoir





### Figure 5 Monitoring log



Figure 6 Chlorination pump



Figure 7 Chlorine Storage in Pumping station





Figure 8 Leaking barrels - No containment



Figure 9 Barrels - requires containment and clean up





Figure 10 Barrels - Requires containment and clean up



Figure 11 Solid Waste Managment Area - Non Segregated





Figure 12 Solid waste managment area



Figure 13 Fencing is all down on the far side of the Solid Waste Management Area





Figure 14 New Waste Management Site – No Segregation of Haz Wastes - no water management



Figure 15 Totes of Oil - in new Solid Waste Managmne t Area





Figure 16 Old household fuel tanks, appliances and other waste metals



Figure 17 Haz Mat Storage





Figure 18 Haz Mat Storage



Figure 19 WWTF - on going renovations





Figure 20 WWTF Dispersion field



Figure 21 WWTF - Sludge bags awaiting transport to Solid Waste Managment Area



Licensee or Representative	Inspector's Name
	A. Keim
Signature	Signature
	Sent by Email – Original on file
Date	Date
	November 12, 2014

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