

Liconson

## WATER LICENCE INSPECTION FORM

○ Original
 □ Follow-Up Report

Licensee			Licensee Represent	lative	
Hamlet of Kimmi	rut		Bhabesh Roy		
Licence No. / Expiry			Representative's Title		
3BM-KIM0911 Expired January 2011			Municipal Engineer		
Land / Other Authorizations			Land / Other Authorizations		
Date of Inspection			Inspector		
July 3, 2018		Joseph Monteith & Jonathan Mesher			
Activities Inspected					
Camp	☐ Drilling	☐ Mining	Construction	n Reclamation	☐ Fuel Storage
☐ Roads/Hauling	Other: Potable Wate	er Source, Waste Water	Other:		
	Treatment, and Solid W	'astes			
Conditions:	A- Acceptable	<b>U-Unacceptable</b>	C-Concern	NI-Not Inspected	NA- Not applicable
PART:				Condition	Observation No.*
A: SCOPE, DEFINITIONS AND ENFORCEMENT				NA	
B: GENERAL CONDIT	IONS	С			

Licensee Penrocentative

C: CONDITIONS APPLYING TO SECURITY	NI			
D: CONDITIONS APPLYING TO WATER USE	А	1-5		
E: CONDITIONS APPLYING TO WASTE DISP	С	6-14		
F: CONDITIONS APPLYING TO MODIFICATION	NI			
G: CONDITIONS APPLYING TO CONSTRUCT	NI			
H: CONDITIONS APPLYING TO EMERGENCY	А			
PLANNING				
I: CONDITIONS APPLYING TO ABANDONM	NI			
CLOSURE PLANNING				
J: CONDITIONS APPLYING TO MONITORING	NI			
SCHEDULES	А			
* The observation number corresponds with specific comments provided below.				
Samples taken by Inspector: Location(s): N62° 50′ 06″ and W69°52′04″		9°52′04′′		

SECTION 1	Comments (s)	Non-Compliance with Act or Licence (s)	Action Required (s)

## BACKGROUND

☐ Yes 🔀 No

The Hamlet of Kimmirut is a small community with a population of approximately 546. The Hamlet is located on the southern tip of Baffin Island in Nunavut at 62°50′06″N and 69°52′04″W within the Qikiqtani region of Nunavut. The Hamlet of Kimmirut currently discharges its sewage to a ditch which drains directly to the ocean. In 2001 a new sewage lagoon was constructed 1.5 km from the community to improve the treatment of sewage.

The Hamlet of Kimmirut has been without a water licence since January 2011. On August 12, 2013 an application for a renewal was submitted. On May 31, 2016 a renewal and amendment application for a Type "B" water licence for water use and/or waste disposal was submitted to the Nunavut Water Board (NWB). The previous licence authorized the withdrawal of 30,000 cubic metres annually.

### **Inspector Statement**

On July 3, 2018, an inspection was conducted at the Hamlet of Kimmirut, Qikiqtani Region, Nunavut.

At the time of the inspection the Hamlet was contravention of the Nunavut Waters, and Nunavut Surface Rights Tribunal Act (NWNSRTA).

This inspection was conducted as per Part A: subsection 1(c) of the expired water licence 3BM- KIM0911, and subsection 46 of the NWNSRTA.

#### **General Condition**

On November 3, 2018 Bhabesh Roy sent WRO Monteith the Annual Reports for 2015, 2016, and 2017.

#### **Unlicenced Water Use**

Water Use and Related Structures

- 1. Water is being withdrawn from Fundo Lake from a water pumping station. This use of water is not authorized without a valid water licence.
- 2. The quantity of water withdrawn from the lake is being accounted for by calculating the amount of water



being delivered.

- 3. On October 25, 2018 William Koonoo, Municipal Technical Clerk, Government of Nunavut (GN), Community & Government Services (CGS) sent WRO Monteith a copy of the water consumption rates for the Hamlet of Kimmirut for the Months of January 2018, to September 2018 with the current annual total of 13,472,725 Litres withdrawn from Fundo Lake. This falls below the amount listed in their expired water licence. The trend shows that the Hamlet of Kimmirut might not exceed the amount approved in the expired water licence.
- 4. At the time of the inspection, no evidence of drawdown from water use was evident at the lake.
- 5. A yellow triangle sign titled KIM1 indicting the location of a monitoring station was observed at the time of the inspection (photo 1).

#### Unlicenced Deposits of Waste that may affect Fresh Water

Solid Waste Facility

- 6. The Hamlet deals with solid waste by burning the burnable waste, and capping the ash with gravel obtained by their gravel pit.
- 7. The fencing did appear to be without maintenance and should be repaired.
- 8. The facility isn't lined. The leachate from the Solid Waste Facility has the potential to run-off this facility at or near the discharge location of the municipal waste water discharge location.
- 9. During the course of the inspection it was observed that the hazardous waste was located at two locations. The Solid waste facility which had the hazardous waste was exposed to the elements (Photo 4). This site is not lined, and has the potential to mix with fresh water during rainfall, and during the freshet, and at the Municipal Garage. At the municipal garage Hazardous Waste is stored within sea cans behind the municipal garage. At the time of the inspection some of the hazardous waste was taken out the sea cans, so that seacans can be cleaned (Photo 5).
- 10. The Hamlet of Kimmirut uses a waste oil burner to heat up the municipal garage (photo 6).
- 11. Garbage blown from the Solid Waste Disposal Facility was observed within the drainage ditch of the Waste Water Discharge Location (photo 3).

#### Waste Water Discharge

- 12. Municipal Waste Water is being discharged at a location approximately 300 metres from the ocean. The waste water flows over land before it enters the ocean. During a discharge the waste water runs along the ditch and mixes with the rainfall and fresh water run-off during the freshet while migrating down to fresh water ponds and streams that runs along the base of the mountain ahead its final deposit to the ocean (Photo 2). Further Sampling will be conducted as to ascertain whether this discharging of wastes impacts other pieces of legislation.
- 13. There are two monitoring stations at the along the discharge route titled KIM 2 & 3 (photo 3). No sampling was conducted at the time of the inspection.
- 14. The estimated amount of sewage waste discharged is being recorded in the Hamlets "Water Consumption" document listed as "same". The estimates isn't accurate as it doesn't take into account all water withdrawn from the water source for water uses such as dust suppression, which cannot be calculated as the same amount discharged at the discharge location for waste water.
- 15. Two yellow triangle signs titled KIM 2 and KIM 3 indicating the location of the monitoring stations was observed on site at the time of the inspection.

# SECTION 2 Comments Non-Compliance with Act or Licence Action Required

# Non Compliance related to the expired water licence

Part D (4). The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating any decant of the sewage lagoon.

Part D (6). The Licensee shall deposit of and permanently contain all Solid Wastes at the Solid Waste Disposal Facility or as otherwise approved by the Board in writing.

Part D (7). The Licensee shall segregate and store all hazardous materials and/or hazardous wastes, including waste oil, within the Solid Disposal Facility in a manner as to prevent the deposit of deleterious substances into any water until such a time as proper disposal arraignments are made.

Part D (8). The Licensee shall implement measures to control wind-blown litter at the Solid Waste Disposal Facility.

#### Non Compliance with the Act

Nunavut Waters and Nunavut Surface Rights Tribunal Act Use of Waters

11. (1) Subject to subsection (2), no person shall use, or permit the use of, waters in Nunavut except in accordance with





the conditions of a licence.

- (2) Subsection (1) does not apply in respect of
- (a) any unlicensed use of waters that is authorized by the regulations;
- (b) the use of waters
- (i) for a domestic purpose, or
- (ii) for the purpose of extinguishing a fire or, on an emergency basis, controlling or preventing a flood; or
- (c) The use of waters in a national park.
- (3) Where a person diverts waters for a purpose referred to in subparagraph (2)(b)(ii), the person shall, when the need for the diversion has ceased, discontinue the

diversion and, in so far as possible, restore the waters to their original channel.

#### Deposit of Waste

- 12. (1) Subject to subsection (2) and except in accordance with the conditions of a licence, no person shall deposit or permit the deposit of waste
- (a) in waters in Nunavut; or
- (b) in any other place in Nunavut under conditions in which the waste, or any other waste that results from the deposit of that waste, may

enter waters in Nunavut.

- (2) Subsection (1) does not apply in respect of
- (a) any unlicensed deposit of waste that is authorized by the regulations; or
- (b) The deposit of waste in a national park.

Licensee or Representative	Inspector's Name	
Bhabesh Roy	Joseph Monteith	
Signature	Signature	
Date	Date	
	October 2, 2018	

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



#### PHOTO LOG







Description: KIM 2, and KIM3 posted signs down the drainage ditch of the Sewage discharge location. Wind Blown Garbage from Solid Waste Facility







Description: sea can being cleaned with hazardous waste batteries stored out in the elements – not a concern



