



# **Water Licence Inspection Report**

⊠Original	
☐Follow-Up I	Report

Licensee				Licensee Repre	sentati	ive				
Hamlet of Kuglu	Hamlet of Kugluktuk Shaun Cummins and Matthew Hokanak.									
License No./Expiry				Representative	e's Title					
3BM-KUG2030				Foremar	1					
Other Authorizations										
Activities Inspected	_									
☐ Camp, Commercial	_		•		n 🗆 F	uel Stora	ige 🗆 Roads/	'Hauling 🗆 V	Vinter Ha	uling
☐ Camp, Private 🛛 Ot	her Comn	nunity se	wage, solid waste fa	cilities.						
0 1111										
Conditions:	A- Accep	table	U-Unacceptable	C-Concer	n Condit	NI-NOt Comme	Inspected	NA- Not	аррисав	ie
Water Use	Condition	Comment	Site Conditions		ion	nt	Haz/Mat M	anagement	Condition	Comment
Intake/Screen	NI		Water Managemen	t Structures	NI		Storage		С	
Flow Measure. Device	NI		Culverts / Bridges		NI		Spills		С	
Source:	NI		Drainage		NI		Spill Plan		NI	
Water Use:	NI		Erosion / Sediment		С					
Recirculation ( y /n)	NI		Mitigation Measure	!S	NI		Administrat	ive		
			Reclamation Activit	ies	NA		Records		NI	
			Materials Storage		С		Reports		NI	
Waste Disposal			Signage		С		Plans		NI	
Waste Water	С						Notification	S	NI	
Solid Waste	С		Monitoring				Other			
Hazardous Waste	С		Sample Collection /	Analysis	NI		Follow-up fr	om	С	
							previous ins	pection		
*T	he numbe	r in the c	omments field will co	rrespond with	spec	ific comn	nents provide	d below.		
Samples taken by Inspe	ector:		Location(s):							
☐ Yes ☐ No										

## **Section 1 Comments**

On September 19, 2024, I, Isaiah James Bolt, Inspector with the Crown Indigenous Relations and Northern Affairs Canada (CIRNAC), conducted an inspection of Kugluktuk's Sewage Lagoon, Land farm, Hazardous waste, and Metal Dump to ensure compliance against their water license.

Inspection began at 9:30am on September 19 2024. I was accompanied by Shaun Cummins (foreman-projects and fleet) and Matthew Hokanak (Foreman-water/sewage and roads) for the inspection.

- 1. Sewage Lagoon: At the time of inspection the lagoon had been decanted so water levels in the lagoon were a lot lower than usual. No flow meter was present on the effluent line or the pump.
- 2. The lagoon is still leaking product into the environment and shows signs of slumping inside the berm on the east wall close to the discharge area, -spillway of lagoon. (Photo #1 and #2) show the erosion of the berm on the inside wall close to the sewage truck discharging area. The fence shown in (Photo #1) had dropped a significant amount and is an indicator that the berm is in fact losing substantial material internally. (Photo #3) shows the slumping of material inwards into the lagoon under the liner. Discharge from the sewage trucks may not be clearing the gap between the concrete bollards and the spillway and is migrating down into the pooling area shown in (Photo #1).



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- 3. (Photo #4) shows the decanting hose reaching out into the environment. The line is well away from any water body and is ensuring effluent can filter through the receiving environment.
- 4. (Photo #5) shows the water pump and the hose used to pull effluent out of the lagoon. No flow meter was attached to the pump. According to the Foremen the decanting pump ran at a rate of 80m3 an hour 29 days at 23 hours a day which equals to 53360m<sup>3</sup>.
- 5. (Photo #6) Cracking/slumping of the outer east wall of the lagoon was observed. This area is known for the active leak throughout the year.
- 6. (Photo #7) shows the active leaking from the east wall as well as the slumping /cracking described in line 5 above.
- 7. (Photo # 8) shows the propane storage location. Propane bottles, 20lbs and 1 lbs bottles are shown placed on the ground amongst trash.
- 8. (Photo #9) shows the waste battery location. Boxes for the batteries is shown in the back ground. Batteries are placed on the ground and exposed to the elements.
- 9. (Photo #10) is of the "Landfarm" area. The south east corner of the solid waste facility (open burn area). This area has not been cleaned as per the inspectors request in pervious years reports and is still being used as an "hazardous waste" section. Piles of contaminated soil are present in the middle of this area. These piles are creating an obstacle which hinders the hamlets ability to access the back portion of the landfarm. This greatly reduced the available usable space of the landfarm. (Photo #11) shows the backside of these piles.
- 10. Waste batteries are also present inside the landfarm facility. (Photo #12)
- 11. (Photo #13) shows the area where the waste oil burner is located. Drums of "burnable" oil/fuel are stored near the oil burner. The oil burner has not been operational for a few years due to deterioration.
- 12. (Photo #14) shows "un-burnable" product such as glycol and other hazardous material stored away from the oil burner. These drums were tested and deemed unfit for burning. These barrels should be placed into the Hazardous waste section (south west side of the solid waste facility)
- 13. (Photo #15 and #16) The bulky metal facility was observed to have old fuel drums and white waste(fridges and freezers) mixed in with various bulky metals. Some of these used fuel drums were cut up and dismantled while others were observed to have holes poked into them and are leaking small amounts of Diesel fuel into the metal dump. The drums that are not cut up should be moved to the hazardous waste storage, dismantled drums that are shown to be clean may stay within the bulky metal facility.
- 14. (Photo #17) shows the ponding at the lower end of the bulky metal facility. This water is stagnant and shows no sign of migration.

## **Section 2 Non-Compliance**

- 1. Erosion caused by truck discharging into lagoon. Section 3.5 Point #5 of the Sewage treatment facility Operation and maintenance plan states: "The discharge flume/spillways to the sewage lagoon shall be inspected for damage or displacement monthly, and repaired as necessary. The vehicle stop bollards located between the truck pad and discharge spillway are particularly important."
- 2. No Flow metre attached to the decanting line. Part H Item #4 "The Licensee shall measure and record in cubic metres, the monthly and annual quantities of effluent discharge from monitoring program station KUG-3"
- 3. Propane and other hazardous material stored improperly, including waste fuels and white wastes in the bulky metal facility. Part D, Item #11 of the issued water license states: "The Licensee shall segregate and store all hazardous materials and or hazardous waste within the solid waste disposal facility in such a manner as to prevent the deposit of deleterious substances into any water, until such a time that the materials have been removed for proper disposal at an approved facility."

### **Section 3 Action Required**

In regards to non-compliance issue #1: Part D Item #6 of the issued water license states: "The sewage disposal facility shall be maintained and operated, to the satisfaction of an Inspector and in such a manner as to prevent structural failure". Please ensure that discharged sewage is not causing erosion of the truck pad on the east side of the lagoon.

In regards to non-compliance issue #2: Part B, Item #6 of the issued water license states: "The Licensee shall install flow metres or other such devices, or implement other such methods as approved by the board in writing, for the measuring of Water volumes as required under Part H of this license"

In regards to non-compliance issue #3: -Propane bottles stored on the ground should be placed in boxes and stored for shipment.
-Batteries stored on the ground should be placed in the appropriate boxes and stored for shipment. -Hazardous waste/waste fuels stored in the Landfarm should be consolidated and placed in the appropriate hazardous waste section (South West corner of the solid waste facility). -Batteries stored in the landfarm should be consolidated with the rest of the batteries and placed in appropriate boxes and stored for shipment. -White wastes and fuel drums mixed in with bulk metals should be sorted and separated from bulky metals and placed in their appropriate areas.

Please complete all the Actions Required within 90 days and provide photos and details about the complete activities to James.bolt@rcaanc-cirnac.gc.ca



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Licensee or Representative	Inspector's Name
Hamlet of Kugluktuk	Isaiah James Bolt
Signature	Signature
	James Bolt
Date	Date
	21/10/2024

Office Use Only: Follow-up report to be issued by Inspector ⊠ Yes □ No

PHOTO LOG			
Date:	License Number:	Camera/Model:	Inspector
Thursday, September 19, 2024	3BM-KUG2030	Olympus Tough TG-6	Isaiah James Bolt
Photo No.	SBIVI KOGZOSO	Lat/Long (DD.MM.SS.SS, N	
Photo #1		Click or tap here to ente	
			19/09/2024 09:52
			19/09/2024 09:52

#### Description:

Blue Arrow shows pooling area and sedmint build up potentially caused by Sewage water that has not been able to clear the distance from the concrete block to the slope of the liner and is migrating along the bank into the pooling area. Yellow arrow shows erosion caused by this effect. The fence in the photo is also effected as this whole area is being washed out by the pooling water and migrating under the liner.



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Photo No.Lat/Long (DD.MM.SS.SS, NAD83)Photo #2Click or tap here to enter text.



**Description:** 

Another view of the erosion extent and the loss of berm structure under the concrete barrier.

Photo No.Lat/Long (DD.MM.SS.SS, NAD83)Photo #3Click or tap here to enter text.



**Description:** 

The image shows the broken and sunken fence and the "toe" caused by material slumping into the lagoon under the liner.





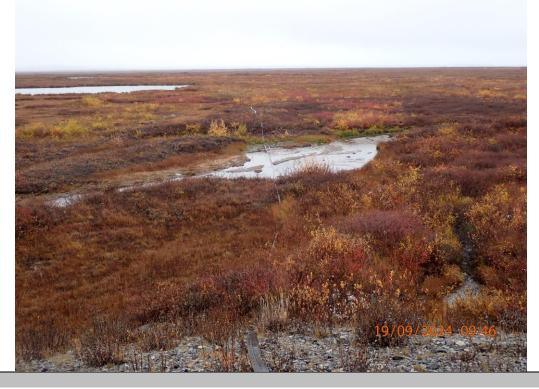


Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #4

Click or tap here to enter text.



Description:

Decanting hose is placed into the receiving environemnt far away from the lagoon. No issues noted.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #5

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Description:

Water pump used to decant.







Photo No.Lat/Long (DD.MM.SS.SS, NAD83)Photo #6Click or tap here to enter text.



**Description:** 

Crack on the butress on the east side of the lagoon

Photo No.Lat/Long (DD.MM.SS.SS, NAD83)Photo #7Click or tap here to enter text.



#### **Description:**

Image shows 5 locations of active leaking. (Red arrows) Each location is an area where effluent is eflitrating from the lagoon. The yellow line shows the cracking on the butress that was installed as an extra precaution to help the berm wall from slumping







Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #8

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**Description:** 

Propane bottles on the ground

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #9

Click or tap here to enter text.



Description:

Batteries on the ground inside the solid waste facility.







Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #10

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Description:

Landfarm, with various hazardous waste

Photo No.

Photo #11

Click or tap here to enter text.



Description:

Backside of the landfarm showing contaminated soil piles blocking access.



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Photo No.Lat/Long (DD.MM.SS.SS, NAD83)Photo #12Click or tap here to enter text.



**Description:** 

Batteries found inside the landfarm

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #13

Click or tap here to enter text.



Description:

Green oil burner shown and various drums of burnable waste.







Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #14

Click or tap here to enter text.



Description:

Un-burnable waste drums shown stored away from the oil burner. This product was tested and deemed unfit for burning.

Photo No.

Lat/Long (DD.MM.SS.SS, NAD83)

Photo #15

Click or tap here to enter text.



Description:

Used oil drums found found inside the bulk metal facility.



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Crown-Indigenous Relations and Northern Affairs Canada



Lat/Long (DD.MM.SS.SS, NAD83) Photo No. Photo #16



**Description:** 

White wastes and fuel drums amongst bulk metal

Photo No. Lat/Long (DD.MM.SS.SS, NAD83) Photo #17 Click or tap here to enter text.



Description:

Kug 2 sample location at bulk metal facility. Showing stagnant water.



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