Water Licence Inspection Report

☒Original
☐Follow-Up Report

Authorization	Representative
Arctic Bay	**Debbie Johnson**
Authorization No. / Expiry	**Representative's Title**
3BM-ARC1924/AUGUST 28, 2024	**sao_ab@qiniq.com**
Other Authorization/s	

Activities Inspected

☒ **Camp** ☐ **Drilling** ☐ **Mining** ☐ **Construction** ☐ **Reclamation** ☐ **Fuel Storage** ☐ **Roads/Hauling** ☐ **Winter Hauling** ☐ **Camp, Private** ☒ **Other (Drill site, unmanned)**

Conditions: **A- Acceptable** **U-Unacceptable** **C-Concern** **NI-Not Inspected** **NA- Not applicable**

PART:	Condition	Observation No.*
A: SCOPE, DEFINITIONS AND ENFORCEMENT	A	
B: GENERAL CONDITIONS	A	
C: CONDITIONS APPLYING TO SECURITY	NI	
D: CONDITIONS APPLYING TO WATER USE	A	1,2,3
E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT	C	4-15
F: CONDITIONS APPLYING TO MODIFICATIONS	NI	
G: CONDITIONS APPLYING TO CONSTRUCTION	NI	
H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING	NI	
I: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE PLANNING	NI	
J: CONDITIONS APPLYING TO MONITORING	A	
SCHEDULES	A	

**The licence and the observation number corresponds with specific comments provided below.*

Samples taken by Inspector:	Location(s): Latitude:
☐ Yes ☒ No	Lat/Long;

**refers to specific terms and conditions found in the permit/lease in question.*

Section 1 Comments

Inspector Statement

On June 17, 2023 I, Isaiah James Bolt, Inspector with the Crown Indigenous Relations and Northern Affairs Canada (CIRNAC), Along with Fellow Inspector Joseph Monteith of CIRNAC, conducted an on site inspection of Arctic Bay's license **3BM-ARC1924** to verify compliance of the conditions of their water license.

Water use and related structures

1. Water is being withdrawn from pump house at Marcil Lake(photo 1), as approved by the Water Licence. They were withdrawing water from Marcil Lake using trucks when the water pump from the pump house was broken.
2. The flow meter in the pump house reads 40937779m at the time of inspection. (Photo #2)
3. Water logs are being kept, but no water extraction volumes or flow rates recorded on the log. (Photo #3)
4. A photo of the totalizer in one of the water trucks was taken (Photo #4).

Waste water facility

5. Some debris observed in the lagoon (plywood).
6. Surface water runoff from the mountain is migrating into the lagoon instead of around it. (Photo #7)
7. The freeboard at the time of inspection was estimated at around 4 metres.
8. Spill way and decanting pipe observed, no concerns. (Photo#8)
9. Decanting pipe is directed into a half culvert to help spread the effluent. (Photo #9)

Bulk metal facility/Hazardous waste area in the metal dump

10. Surface water run-off from the mountain above the bulk metal facility flows through metals, and hazardous waste area.
11. Inspectors observed many propane tanks, fuel drums, batteries and buckets of waste product out of containment and mixed together. Product is not in any way contained or sorted (Photo #13,14,15)
12. Around Garage 1 and Garage 2 there are many waste oil drums stored out of secondary containment. Many spills have been observed outside of both garages (Photos #24-#30). Some seem new and active, others seem older.
13. Buckets of waste oils are also stored outside of garage #1. (Photo#23)

Burn and Cap

14. There is no fencing around the Burn and cap facility. (Photo #19 and #20)
15. Some propane tanks observed in burn and cap facility. (Photo #20)
16. Contaminated soil stored near the entrance to the burn and cap is exposed to the elements (Photo#21). The plastic covering the piles of contaminated soil has blown off and isn't doing anything. Rain and melt water can easily come in contact with the contaminated soil and migrate downhill.

Section 2 Non-Compliance with Choose an item.

1. Daily, weekly water withdrawal levels not being taken at the pump house. (ARC-1). Part I, item-3 of the issued water license: *The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of Water pumped for all purposes at Monitoring Program Station ARC-1.* Please Ensure daily monthly and annual quantities at the point of withdrawal, which is ARC-1.
2. Surface water runoff is migrating into the metal facility/hazardous waste facility. Part D Item 7of the issued water license: *"The Licensee shall segregate and securely store all hazardous materials and/or hazardous Waste, including Waste oil, within the Solid Waste Disposal Facility in such a manner as to prevent the deposit of deleterious substances into any Water and until such time that proper disposal arrangements are made."*
3. Waste oil drums, waste oils buckets, propane tanks and various items not stored in a proper hazardous waste facility.
4. Many waste oil drums leaking outside of the garages. All not in secondary containment.
5. No proper fencing at burn and cap facility. Part D, Item 8 of the issued water license: "*The Licensee shall implement measures to control wind-blown litter at the Solid Waste Disposal Facility."*
6. Contaminated soils exposed to the elements and not in containment. Part G, Item 2 of the issued water license: *"The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the activities under this Undertaking from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent Water body and inspected on a regular basis*."

Section 3 Action Required

1. In regards to section 2, #1: Ensure water use logs are being taken at the assigned withdrawal site (ARC-1)
2. In regards to section 2, #2: Ensure surface water run off is being diverted away from the solid waste and hazardous waste facility.
3. Consolidate all waste oils/hazardous waste into a Hazardous waste berm/secondary containment.
4. Clean up oil stains, leaks, spills that are found outside of both Garage #1 and Garage #2.
5. Ensure burn and cap facility has proper wind blown litter mitigations (fencing).
6. Store contaminated soil in a proper berm or contaminated soil drums to ensure soil isn't exposed to the elements, and water run off isn't flowing through the piles of dirt.
7. Please respond to the actions required by September 25, 2024.

Licensee or Representative	Inspector's Name
	Isaiah James Bolt
Signature	**Signature**
	James Bolt
Date	**Date**
	11/29/2023

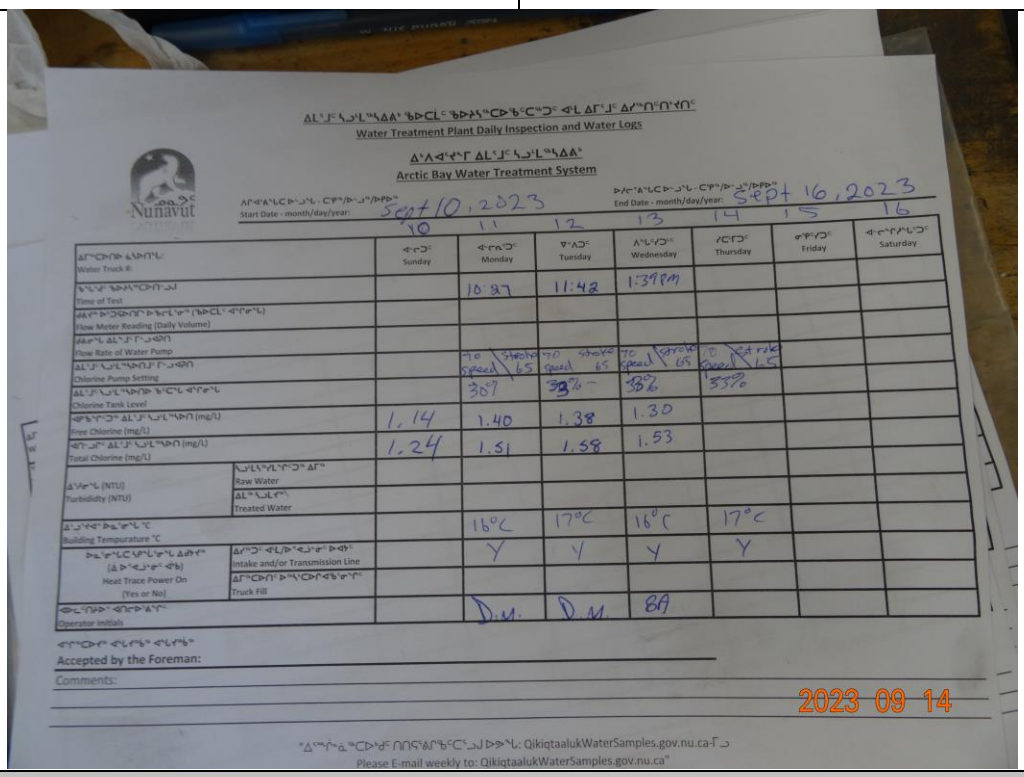
PHOTO LOG			
Date:	**Authorization Number:**	**Camera/Model:**	**Inspector**
Thursday, September 14, 2023	3BM-ARC1924	Sony Cyber Shot, DSCHX50V	Isaiah James Bolt
Photo No.		**Location**	
Photo #1		Click or tap here to enter text.	

Description:
Pump house where water is withdrawn.

Photo No.	Location
Photo #2	

Description:
Water treatment plant totalizer. Flow gauge meter: 40937779.0

Photo No.	Location
Photo #3	



Description:
Water logs from water treatment plant. No flow metre reading, no flow rate logs.

Photo No.	Location
Photo #4	

Description:
Totalizer on water truck.

Photo No.	Location
Photo #5	Marcil Lake

Description:
Water withdrawl location at Marcil Lake.

Photo No.	Location
Photo #6	

Description:
Sewage truck deposit location.

Photo No.	Location
Photo #7	

Description:
Ice shows migration of water from uphill into the lagoon. (No diversion ditch)

Photo No.	Location
Photo #8	

Description:
This image shows the spill wayer, and the decanting hose coming out of the sewage lagoon.

Photo No.	Location
Photo #9	

Description:
A closer look at the end of the decanting pipe. The pipe spills into a cut open culvert to help disperse effluent over a larger area.

Photo No.	Location
Photo #10	

Description:

Standing outside of the solid metal facility looking uphill. Surface water runoff migrates from the mountain down into the metal facility and by the hasardous waste area.

Photo No.	Location
Photo #11	

Description:

A view from inside the metal facility looking downhill, water was flowing on the left hand side of the road and then crosses over to the right.

Photo No.	Location
Photo #12	

Description:

A photo of outside the metal facility looking at the “hazardous waste area”

Photo No.	Location
Photo #13	

Description:

The hazardous waste area has many things exposed to the elements. (Batteries, propae tanks, waste oil barrels, old naptha cans, paint cans,etc)

Photo No.	Location
Photo #14	

Description:

Another rimage of the hazardous waste area, broek batteries have lead/acid exposed to the elements, buckets with various materials inside, open paint cans and old jerry cans.

Photo No.	Location
Photo #15	

Description:

Another view of the hazardous waste area. Paint spill, paint cans, propane tanks, and batties are left on the ground all over the place.

Photo No.	Location
Photo #16	

Description:

A view of the hazardous waste area looking uphill. Water has pooled where the roads intersect and has begabn migrating into the bulk metal facility.

Photo No.	Location
Photo #17	

Description:

Water flowing from hazardous waste area to bulk metal side.

Photo No.	Location
Photo #18	

Description:
Water flowing into bulk metal facility from the hazardous waste section.

Photo No.	Location
Photo #19	

Description:
Burn and cap area active burning.

Photo No.	Location
Photo #20	

Description:
Propane tanks observed in the burn and cap area.

Photo No.	Location
Photo #21	

Description:
Water flowing by and through contaminated soil piles.

Photo No.	Location
Photo #22	

Description:
Waste oil drums stored outside of garage #1. Not in containment.

Photo No.	Location
Photo #23	

Description:
Waste oil buckets and other product stored outside behind garage #1. Signs of spills.

Photo No.	Location
Photo #24	

Description:
New oil buckets stored outside infront of Garage #1. Signs of large spill on the ground.

Photo No.	Location
Photo #25	

Description:
Sign of spill outside of Garage #1.

Photo No.	Location
Photo #26	

Description:

Waste oil drums stored near garage close to the beach. Signs of leaks coming from barrels.

Photo No.	Location
Photo #27	

Description:

An example of a leaking waste oil drum outside of containment near garage #1.

Photo No.	Location
Photo #28	

Description:
More waste oil drums stored outside of containment. More signs of leaks.

Photo No.	Location
Photo #29	

Description:
Waste oils drums stored outside of containment behind garage #2. Signs of an old leak migrating into the culvert.

Photo No.	Location
Photo #30	

Description:

Waste oil drum with an active leak outside of garage #2. All drums not stored in containment.