WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Lupin Mines Inc.	Steve Bundrock
Licence No. / Expiry	**Representative's Title**
2AM-LUP2032	
Land / Other Authorizations	**Land / Other Authorizations**
Date of Inspection	**Inspector**
15/07/2024	Isaiah James Bolt

Activities Inspected

☒ Camp ☐ Drilling ☐ Mining ☐ Construction ☐ Reclamation ☒ Fuel Storage
☒ Roads/Hauling ☐ Other: ☒ Other: Care & Maintenance

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	C	14
Flow Measure. Device	NI		Culverts / Bridges	U	13	Spills		
Source:	A	16	Drainage			Spill Plan		
Water Use:			Erosion / Sediment	C	9,12,13			
Recirculation (y /n)			Mitigation Measures			**Administrative**		
			Reclamation Activities			Records	NI	
			Materials Storage	A		Reports		
Waste Disposal			Signage	A		Plans		
Waste Water	A	8				Notifications		
Solid Waste	C	14	**Monitoring**			**Other**		
Hazardous Waste			Sample Collection / Analysis			Quarry		

**The number in the comments field will correspond with specific comments provided below.*

Samples taken by Inspector:	Location(s):
☐ Yes ☒ No	

SECTION 1 ☒ **Comments** (s.__) ☐ **Non-Compliance with Act or Licence** (s.__) ☐ **Action Required** (s.__)

On July 15, 2024, I, Isaiah James Bolt, Inspector with the Crown Indigenous Relations and Northern Affairs Canada (CIRNAC), writer of this report, Along with fellow inspector Jonathan Mesher, of CIRNAC, conducted an on-site visit of 2AM-LUP2032 to verify compliance against their water licence and Land Use Permit.

We arrived at Lupin on the Dash-7 at 1:00PM. We were accompanied By Steve Bundrock, he is the representative for Mandalay at Stantec.

1. 1:12pm- we began our inspection of the demolition of buildings in central Lupin: Concrete pads and concrete reinforcements still present on site. (Photo #1) A wall of concrete still stands in the lot.(Photo #2)
2. 1:12pm- A pond of water remains in the middle of camp where contaminated soil was removed and placed into the crown pillar. This water should be tested before being released into the environment upon confirmation that it is within guideline specifications. Results should be submitted to CIRNAC Inspectors 10 days before discharging into the underground mine or tailings ponds. (Photo #3)

3. 1:14pm- Contaminated soil removal from behind truck shop: (Photo #4, #5) This soil removal took place to remove contaminated soil from an old fuel spill and soil was moved to the crown pillar. The pond should be sampled and tested for hydrocarbons before being released into the environment upon confirmation that it is within guideline specifications. Results should be submitted to CIRNAC Inspectors 10 days before discharging into the underground mine or tailings ponds.

4. 1:17pm- Main tank farm (single tank): Inspectors observed only a small bit of water in the single tank farm berm. (Photo #6).

5. 1:17pm: Main tank farm (3 tanks): The tank farm has no water and it. Inspectors observed 3 caribou in the tank farm and 2 parked trucks. (Photo #7) Inspectors also noted that approximately 200 barrels of

assorted fuels and 17-1000L totes being stored in the main tank farm berm. The entrance to the tank farm is being used as a refuelling station. A hand pump is hooked up to fuel drum. (Photo #8)

6. Waste rock pile: the waste rock pile is across the road from the main tank farm. This rock was tested and found to not be acid generating. The waste rock pile is being used to cap the crown pillar. No concerns noted. (Photo: #9)

7. 1:25pm: Active Tank Farm: The Active tank farm is a smaller tank farm north of the main tank farm. There are 6 white tanks in the berm. There is no water inside the berm. (Photo #10) Inspector BOLT noted that there was a stain on the sand inside the berm. (Photo: #11) No other concerns noted inside the tank farm.

8. 1:37pm: Sewage Lagoon and sewage truck hose connection: No concerns noted. (photo #12)

9. 1:47pm: Dam-2: The inside wall of the dam shows signs of erosion. (Photo #14) The wall of the dam on the west side (outside) is very steep. (Photo #13) No other concerns noted.

10. 1:58pm: Dam 1-A: (Photo #15) shows large pipes reaching into the tailings pond for decanting of treated and tested tailings. No Concerns with the dam. There was, however, calcium clumps on the top of the dam wall beside the mixer. This mixer is used to mix water and calcium to help raise the Ph level of the tailings to a suitable level before decanting. (Photo #16).

11. 2:07pm: Dam-1B: no concerns noted with Dam-1B.

12. 2:11pm: Dam-6: Inspectors observed silt run-off and erosion of the road close to Dam 6. (Photo #18). A drill rod was observed on the tundra south of Dam-6. (Photo #19) A fuel drum was observed on the tundra, close to a lake between Dam-6 and Dam-5. (Photo #20)

13. 2:30pm: A culvert on the esker haul road near fox lake is placed too high up the bank and may be causing ponding beside the road. (Photo #21)

14. 3:25pm: Landfill: The landfill has crushed barrels that are leaking product onto the ground. (Photo#22) Also in the landfill are some used containers of oil or coolant that seem to have leaked onto the ground.

15. 3:43pm: The concrete pad at the Jetty has yet to be removed. A large steel plate is used to cover a hole in the concrete.

16. 3:45pm: The hose at the end of the Jetty is used to collect water from Contwoyto lake. The end of the hose was submerged and was not photographed. No Concerns Noted.

SECTION 2 ☐ **Comments** ☒ **Non-Compliance with Act or Licence** ☐ **Action Required**

Comment #2 & #3: -Part E, Item 10 of the water license: “The licensee is authorized to treat petroleum hydrocarbon contaminated soil generated by the project at the Landfarm Facility as per the Waste management plan (Solid and Hazardous), dated march 2016, or disposed of underground as per the *final closure and reclamation plan*, sated July 2018 or as otherwise approved by the Board in writing.”

Comment # 9, #12, #13: -Part G, Item 5, stated “The licensee shall implement sediment and erosion control measures prior to and during construction, and reclamation and closure, to prevent entry of sediment into water.”

Comment # 14: -Part G, Item 10 :The licensee shall implement preventative and mitigation measures to prevent any chemicals, fuels, or wastes associated with the undertaking from entering a waterbody, unless otherwise authorized under this license.

SECTION 3 ☐ **Comments** ☐ **Non-Compliance with Act or Licence** ☒ **Action Required**

-Ensure all spills/stains and contaminated water are cleaned up and contaminated soil or water is placed into a Landfarm or underground as per the water license.
-Ensure all erosion is being mitigated.
-Ensure all culverts are working properly and not causing any ponding or contributing to erosion.
Hazardous waste and used hazardous waste containers should be placed into the hazardous waste berm.

Licensee or Representative	Inspector's Name
Steve Bundrock, Lupin Mine Tailings Containment Area Engineer of Record, Stantec	Isaiah James Bolt
Signature Steve Bundrock Digitally signed by Steve Bundrock Date: 2024.09.20 13:36:41 -06'00'	**Signature** Signed Original on File
Date	**Date**

Office Use Only: Follow-up report to be issued by Inspector ☐ Yes ☒ No

cc. CIRNAC, Manager Field Operations, Iqaluit, jeremy.fraser@rcaanc-cirnac.gc.ca

Nunavut Water Board, Manager of Licensing, Gjoa Haven, licensing@nwb-oen.ca

PHOTO LOG

Date	Camera	Inspector	Authorization
2024 July 15	Olympus Tough TG-6	James Bolt	2AM-LUP2032

Photo Log # P7150002

Photo 1



Description: Concrete foundations and rebar left over from old buildings, centre of lupin camp

Photo Log # P7150031

Photo 2



Description: Concrete wall and rebar, centre of lupin camp

Photo Log # P7150033

Photo 3



Description: Image showing the pond in the middle of lupin camp

Photo Log # DSC04331

Photo 4



Description: View #1 of the Fingers Lake Quarry Area

Photo Log # P7150008

Photo 5



Description: Contaminated soil removal pond behind the mechanic shop

Photo Log # P7150012

Photo 6



Description: Main tank farm (single tank)

Photo Log # P7150017

Photo 7



Description: Main tank farm (3 tanks). Image showing 2 of 3 tanks, 2 trucks, 3 caribou laying between 2 orange tanks, and small orange tank

Photo Log # P7150019

Photo 8



Description: Main tank farm (3 tanks) the photo is north side of the berm showing storage of drums, totes, and refuelling station beside the small orange tank

Photo Log # P7150022

Photo 9



Description: waste rock pile that will be used to cap the crown pillar

Photo Log # P7150023

Photo 10



Description: Active tank farm, 6 tanks

Photo Log # P7150030

Photo 11



Description: Small fuel stain on the inside of the active tanks farm

Photo Log # P7150035

Photo 12



Description: Sewage discharge line and sewage lake

Photo Log # P7150038

Photo 13



Description: Dam-2

Photo Log # P7150047

Photo 14



Description: Dam-2 Erosion on the inside wall of the dam

Photo Log # P7150048

Photo 15



Description: Dam-1A, large decanting pipes reaching into the tailings pond

Photo Log # P7150051

Photo 16



Description: Dam-1A: Image shows a mixer, with some block of calcium near the ladder

Photo Log # P7150059

Photo 17



Description: Dam 1B

Photo Log # P7150061

Photo 18



Description: Road erosion close to Dam-6, image also shows some silt run off from the road.

Photo Log # P7150063

Photo 19



Description: A drill rod exposed Close to Dam-6, image also shows silt runoff on the tundra from the road.

Photo Log # P7150064

Photo 20



Description: A drum on the tundra between Dam-6 and Dam-5, south of Cell-3

Photo Log # af3a1612

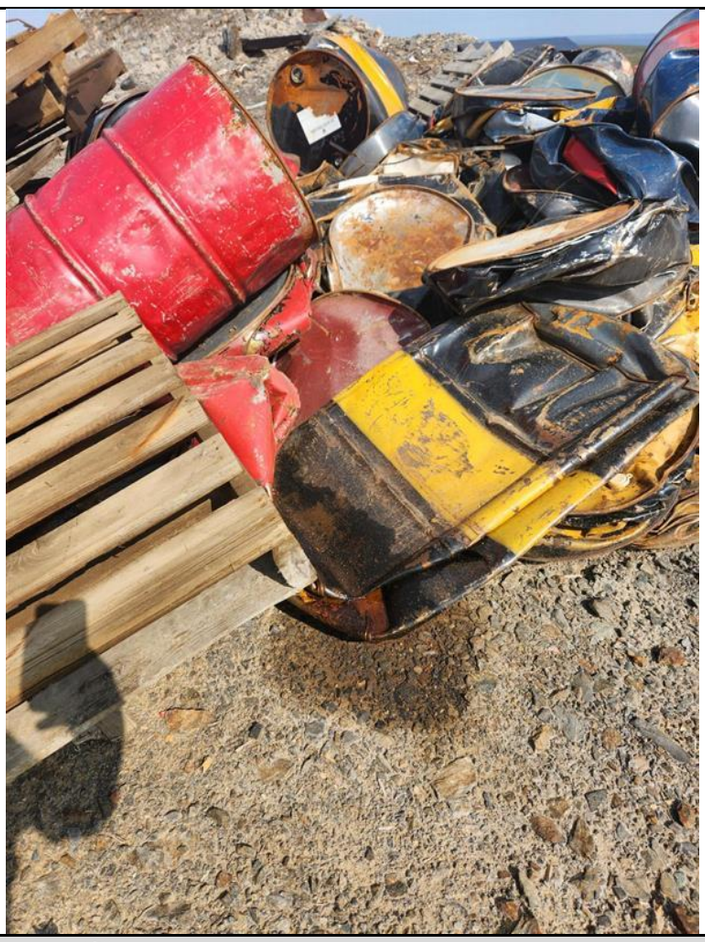
Photo 21



Description: 2 Pipes used as culvert drainage, 1 pipe has a hole, both pipes are high off the ground and may not be able to drain ponding water beside the road effectively.

Photo Log # f5463c8e

Photo 22



Description: Crushed drums inside the Landfill, some drums leaking product onto the ground

Photo Log # 6c5b0435

Photo 23



Description: Used oil containers leaking product onto the ground on inside the landfill

Photo Log # 962fa1b4

Photo 24



Description: Image shows the concrete pad at the Jetty. A large hole is covered by the metal plate. There is a warning on the plate.

Photo Log # fb4cc533

Photo 25



Description: Image shows the location of water withdrawal on the Jetty. The end of the hose was not inspected.