



## WATER LICENCE INSPECTION FORM

Original  
 Follow-Up Report

<b>Licensee</b> Lupin Mines Inc.	<b>Licensee Representative</b> Karyn Lewis
<b>Licence No. / Expiry</b> 2AM-LUP1520	<b>Representative's Title</b>
<b>Land / Other Authorizations</b> NI	<b>Land / Other Authorizations</b> NI
<b>Date of Inspection</b> 05-06/10/2016	<b>Inspector</b> Eva Paul
<b>Activities Inspected</b>	
<input checked="" type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input checked="" type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage <input checked="" type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: <input type="checkbox"/> Other:	

**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	A		Water Management Structures	A		Storage	A	
Flow Measure. Device	A		Culverts / Bridges	NI		Spills	U	4
Source: Contwoyto	A		Drainage	A		Spill Plan	A	
Water Use:	A	1	Erosion / Sediment	A				
Recirculation ( y / n )	A		Mitigation Measures	C	4	<b>Administrative</b>		
			Reclamation Activities	A	5	Records	A	
			Materials Storage	A		Reports	A	
<b>Waste Disposal</b>			Signage	A		Plans	A	
Waste Water	A	2				Notifications	A	
Solid Waste	A		<b>Monitoring</b>			<b>Other</b>		
Hazardous Waste	A	3	Sample Collection / Analysis	A	6			

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

<b>Samples taken by Inspector:</b>	<b>Location(s):</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LUP-01

**SECTION 1**      **Comments (s.1)**      **Non-Compliance with Act or Licence (s.2)**      **Action Required (s.3)**

I was present at Lupin Mine October 5-6, 2016 to conduct a site inspection. Karyn Lewis of LMI was present, several employees of Discovery Mining Services, as well as Mr. Downey (now consulting for LMI). Findings were as follows:

1. Due to the small number of people on-site, the Water Intake facility was not in use. The Licensee continues to truck water from Contwoyto Lake for camp use. The Licensee was maintaining daily records of water use.
2. Sewage Lakes Disposal Facility was in use for sewage and grey water. No further discharge for 2016 was being contemplated; at the time of the inspection there was greater than 1m freeboard in Lower Sewage Lake and the SLDF was freezing over. Pallets and debris are noted downslope of the Lower Sewage Lake dam, as well as extensive quad tracks in the wetland downstream. No discharge was undertaken from the TCA in 2016. Barrels stored in the 3<sup>rd</sup> Party Berm were labelled, and waste water stored therein is reportedly to be used in the landfarm in the future.
3. The Licensee has maintained records of waste backhaul and has removed all hazardous waste from the storage facility. The landfarm construction was substantially complete, with the liner held in place by sandbags. Snow and water will be removed in the spring and the facility will be ready for use once aggregate has been placed and once monitoring wells have been installed (E.25), or any changes to monitoring of this facility have been clarified and approved by the Board (see also comment 6).
4. A miscommunication occurred with respect to temporary mitigation of the STF spill, which had been requested as a precaution, in case the landfarm was not constructed in a timely fashion. Rather than trenching around the contaminated area to prevent further spread, as was intended, it appears that a trench was dug through the most contaminated area, and the contaminated soil placed outside of the trench. While photos of the work had been requested by the Inspector in August at a point where it could have been addressed, nothing was provided until October. As it was late in the season, nothing further was requested at the time, on the understanding that the decommissioning of the STF and removal of contaminated soil to the landfarm will be a priority for 2017. It is unacceptable to the Department that the Licensee has taken 5 years to begin addressing the remediation of this spill (identified in 2012).
5. Repairs were undertaken on TCA internal Dam M as per recommendations in the geotechnical inspections. This repair was required before work could be done in Cell 5 to cover the tailings. PAG material was being removed from the 'ball diamond' and placed in the TCA, and is to be covered in esker material. Approximately 6,000 m<sup>3</sup> of material had been placed on Cell 5 at the time of the inspection. Repairs to cover in Cell 1 were also being undertaken.
6. During the inspection, Ms. Lewis indicated that the Landfarm was designed such that monitoring wells would be unnecessary or redundant. The monitoring requirements form part of the licence, as such, LMI will have to request of the NWB to modify the monitoring requirements under Part J item 11; otherwise the licence requirements will be considered to be in binding. This matter must be addressed prior to use of the landfarm, as per Part E item 25. It is my understanding that LMI intends to commission the landfarm in 2017 to manage the STF spill, and as such will need to action this promptly.



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

Administrative review of Licence 2AM-LUP1520:

B.11: Plans submitted under the licence should include **clear timelines** for implementation.

E.6.i: The geotechnical report shall include a cover letter from the Licensee **outlining an implementation plan**.

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

1. Please provide to the Inspector by April 24<sup>th</sup>, 2017, the records of inspections under D.5 for 2016.
2. If the Licensee disagrees with the installation of monitoring wells under E.25, please provide to the Board full written justification to remove the requirement from the licence.
3. E.19: Discharge location for landfarm is to be established with the Inspector prior to any discharge.
4. G.3: Construction summary report consistent with Schedule G Item 1 within 90 days of completion of the landfarm.

<b>Licensee or Representative</b>	<b>Inspector's Name</b>
	Eva Paul
<b>Signature</b>	<b>Signature</b>
	<i>Sent electronically</i>
<b>Date</b>	<b>Date</b>
	31-03-2017

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

CC:                    Licensing Department, NWB  
                          Erik Allain, Manager of Field Operations, INAC



PHOTO LOG

Date	Camera	Inspector	Authorization
October 5, 2016	SONY DSC-HX50V	Eva Paul	2AM-LUP1520

Photo Log # 1	Location (NAD 83 DD MM SS.SS)
Photo DSC06152	N W



Description: Aerial view of Lower Sewage Lake dam.

Photo Log # 2	Location (NAD 83 DD MM SS.SS)
Photo DSC06153	N W



Description: Quad tracks downstream of Lower Sewage Lake.



Photo Log # 3

Photo DSC06207

Location (NAD 83 DD MM SS.SS)

N65 45 31.5

W111 12 54.5



Description: Debris downslope of Lower Sewage Lake dam.

Photo Log # 4

Photo DSC06136

Location (NAD 83 DD MM SS.SS)

N

W



Description: TCA from the air.



Photo Log # 5

Location (NAD 83 DD MM SS.SS)

Photo DSC06168

N

W



Description: Landfarm construction.

Photo Log # 6

Location (NAD 83 DD MM SS.SS)

Photo DSC06171

N65 45 47.3

W111 13 38.18



Description: Landfarm construction.



Photo Log # 7

Location (NAD 83 DD MM SS.SS)

Photo DSC06223

N65 45 46.03

W111 13 49.81



**Description:** Trench outside STF, which does not serve to contain the spread of hydrocarbons.

Photo Log # 8

Location (NAD 83 DD MM SS.SS)

Photo DSC06234

N

W



**Description:** Recent work in the TCA.