

# LUPIN MINES INCORPORATED

August 18, 2015

Aboriginal Affairs and Northern Development Canada  
Nunavut Regional Office  
Building 918, P.O. Box 100  
Iqaluit, NU X0A 0H0

Attention: Eva Paul

Dear Sirs and Mesdames:

**Re: Notice of Compliance to Lupin Mines Inc. (“LMI”) Water Licence Inspection Form dated August 5, 2015**

We write further to the water licence inspection at the Lupin mine site conducted on July 14, 2015 (the “Inspection”) and the subsequent inspection report issued on August 5, 2015 (the “Inspection Report”).

***Sewage Lagoon***

The Inspection Report states that water was observed “*trickling over a compromised section of the Lower Sewage Dam*”, that the high water level in the lower sewage lagoon ought to have been reported to you, and that a spill report ought to have been made by LMI. In addition, the Inspection Report suggests that LMI has failed to diligently repair the dam in a timely way.

LMI has diligently inspected, maintained and repaired the sewage lagoons. First, the site conditions at the time of the Inspection did not reveal any water “*trickling over a compromised section of the lower sewage dam.*” Please see the photographs attached as Appendix A taken during the Inspection which clearly do not show trickling over of the dam. Second, we respectfully disagree with your conclusion that a greater flow happened on site prior to your arrival. We did observe some minor seepage around the south end of the dam to an area of tundra over 2 km from any water body (see attached photos in Appendix A). A spill report is not required because it is not seeping into or anywhere near a waterbody. In addition, we note that in all previous inspections the seepage was not considered reportable by any AANDC inspector, including you. Third, as discussed at the time of your Inspection, LMI had taken steps to discharge from the lower sewage lagoon in accordance with its amendment to its Type A Water Licence and LMI was waiting for laboratory results prior to discharge.

In your email of July 29, 2015, it was stated that LMI had failed to comply with the sampling requirements of the Type A Water Licence because its lab had not analyzed the samples for oil and grease and because LMI had relied on the field observations of the sampler to determine if there was a visible sheen. We disagreed that the Type A Water Licence required the analysis that you suggested. However, we sought advice from our consultant, Steven Lines M.Sc., P.Biol., DEIA of Tunaley, Lines & Associates, who, after consulting with David Hohnstein, the

Technical Director for the Nunavut Water Board, confirmed his advice to us that lab analysis for oil and grease is not required under our licence and that it is appropriate to rely on the field observations of the sampler to determine whether or not there was a visible sheen. Please find enclosed a copy of an email from Steven Lines to LMI, copied to David Hohnstein, in which Steven Lines confirms his advice as Appendix B.

With respect to the observations pertaining to the lower sewage dam, we note that most observations noted occurred over the winter of 2014/2015. The recommendations from the 2014 geotechnical inspection were dated October 2014. The 2014 geotechnical recommendations were provided to LMI with our professional engineer's understanding and approval that the repairs would be completed during the 2015 field season. Therefore, the repairs referenced in the 2014 geotechnical report were included as part of LMI's 2015 work plan, which was the soonest that LMI could reasonably undertake the recommended repairs because of the northern climate and work conditions. As indicated in the report of Mr. Tong dated August 7, 2015, the repairs to the lower sewage dam have, in general, been completed and he has indicated the remaining repairs should be completed prior to 2015 freeze up.

In 2014, LMI was advised by the regulator that it could not discharge from the sewage ponds prior to the issuance of the emergency amendment to the Type A Water Licence (once signed by the Minister) and the 2014 Inspector's direction. LMI followed the advice of its geotechnical engineer and its past experience at this site, in decanting the lower sewage lagoon during 2014 to a level that ought to have provided sufficient space for the 2015 freshet. In order to ensure there is sufficient freeboard available for 2016 freshet, LMI will increase the freeboard available in the lower sewage lagoon before freeze-up.

### ***Upper Sewage Dam***

Our geotechnical inspector was on site at the time we received the Inspection Report. We immediately forwarded your Inspection Report to him so that he could investigate the concerns you identified respecting the upper sewage lagoon dam, including cracks, slumping and erosion.

Mr. Tong, P.Eng., has investigated those issues and he has advised us that the dams are stable, but we understand that he will be recommending some routine work to be done before the 2015 freeze-up. This work is part of our planned annual maintenance of site facilities.

In order to complete these maintenance repairs, LMI will continue to lower the level of the lower sewage lagoon. Once that discharge is complete, LMI will discharge the upper sewage lagoon into the lower sewage lagoon so that the water level is low enough in the upper sewage lagoon to complete the repairs recommended by Mr. Tong during the 2015 field season. We will advise you once the decanting is complete and once the repairs have been done.

### ***Tailings Containment Area***

LMI has seen no indication that the uncovered tailings are escaping the Tailings Containment Area and disagrees with the Inspector's assertions, both in the past and in the Inspection Report. Previous sampling information has indicated that the soil outside of the Tailings Containment Area is consistent with background samples for the site. The allegation of windblown tailing was canvassed during the technical meeting and public hearing of LMI's application for its Type

A Water Licence. Arlene Laudrum, P.Geo., FGC of SRK Consulting reviewed soil sample results for soil samples taken by AANDC. In a report dated October 29, 2014, which is filed on the Nunavut Water Board's public registry, Ms. Laudrum compared the results with the background soil quality assessment done in the Phase 1 and Phase 2 Environmental Site Assessment. The Phase 2 study determined a concentration limit which would trigger further action. Ms. Laudrum concluded that the soil samples did not exceed the concentration limit for the site pursuant to the Phase 2 study and that the soil sample did not indicate that tailings are being spread into the environment. Please see paragraph 2 under the heading "LMI's Commitments" for information regarding the sampling program this season.

### ***Main Tank Farm***

We have investigated the area of concern described in the Inspection Report. It should be noted that the levels within the tank farm berm areas have and will always remain differentiated due to the different elevations and the overall slope of the bermed areas. The area of "potential leakage" identified by the Inspector is not "leakage" – this is a discharge from the overall site drainage plan and is not originating from the bermed areas. This site drainage will continue as designed. In any event, this drainage does not flow into any waters or flow where the drainage could enter waters.

### ***Liquid Waste Management Plan***

The Inspection Report states that LMI has not complied with timelines in its Liquid Waste Management Plan. Can you please provide specifics? LMI believes it has complied with its Liquid Waste Management Plan, but if there is a specific concern, we would be pleased to re-examine our practices to ensure that we are compliant.

### ***Signage for Monitoring Stations***

The Inspection Report states that no signage identifying the monitoring stations was noted. We believe all of the required signs to be in place and do not know of any missing monitoring signs. Please find enclosed as Appendix C photographs representing a sample of the monitoring signs that are in place in accordance with the expired Type A Water License.

### ***LMI's Commitments***

We confirm that LMI remains committed to completing the following tasks at the mine site as it committed to do during renewal process for the Type A Water Licence:

1. Hazardous Waste Inventory will be completed by August 31, 2015.
2. Sampling outside the Tailings Containment Area as recommended by our consultant, SRK Consulting, and as set out in our letter dated February 23, 2015. Confirmation that the work has been done or is being done will be forwarded by August 31, 2015 and the report will be completed and provided to AANDC by December 31, 2015 (as we committed to during the renewal process for the Type A Water Licence).

3. The annual geotechnical inspection of the waste containment areas will be completed and provided to the Nunavut Water Board (with a copy to the Inspector) by October 31, 2015.

4. LMI is currently taking steps to address the contaminated material from Spill 12-306. Its consultant recently attended the site and, as the first part of the process, has sampled the material to characterize and delineate the extent of the contamination. We also understand from our expert that there is evidence the contaminated material is not migrating and that she has seen improvement over time at the site of the spill due to natural attenuation. We will continue to work with our consultant on this issue and take reasonable steps to address this contaminated material.

Yours truly,

A handwritten signature in black ink, appearing to read 'Patrick Downey', with a stylized flourish at the end.

Patrick Downey  
President  
LMI

**APPENDIX A: PHOTOGRAPHS OF LOWER SEWAGE LAGOON**

**APPENDIX B: EMAIL FROM STEVEN LINES, M.Sc., P.Biol., DEIA**

**From:** [slines@tlaconsultants.ca](mailto:slines@tlaconsultants.ca) [<mailto:slines@tlaconsultants.ca>]  
**Sent:** July-31-15 10:34 AM  
**To:** Karyn Lewis  
**Cc:** 'David Hohnstein'  
**Subject:** LUP 10 and 14

Karyn,

I had a chat with Dave, who is cc'd on this email, regarding the oil and grease interpretation for the TCA and sewage lakes. As per my earlier advice to you, the 'no visual sheen' discharge criteria is based on a visual observation made in the field by the sampler. There is no requirement to send a bottle to the lab to obtain the lab's interpretation of visual sheen. It's a determination intended to be made in the field based on observation of the facility overall, which is far more important.

I can check with the lab to see if a visual assessment on a sample is something they would even do, as I'm not sure they would make such a determination and neither Dave or myself have seen this approach before. In any case the licence is clear and only requires the field-based observation. This is standard at other projects I have worked on.

Note that the fuel storage facilities require oil and grease to be measured in addition to the visual observation for sheen.

Regards,  
Steve

Stephen Lines P.Biol., M.Sc.

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T: 514-604-4459  
E: [slines@tlaconsultants.ca](mailto:slines@tlaconsultants.ca)





**APPENDIX C: PHOTOGRAPHS OF MONITORING STATION SIGNAGE**





