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Lupin Mines Inc.  
#1204 - 700 West Pender Street  
Vancouver, BC V6C 2T7

RE: LMI's August 18 Response to 2015 Inspection Report

Hello Karyn,

Thank you for your letter, dated August 18, 2015, in response to the 2015 Water Licence Inspection Report. I appreciate the efforts that are being made to achieve compliance with the water licence. To echo the sentiments expressed in your July 30 e-mail, I do believe much more common ground would be found if we discussed some of these issues rather than debating them in writing. However, for the time being there are deadlines approaching and I will do my best to respond to the points you raised in this letter. My responses below reflect the same headings as used in your correspondence, and in the case of the first subject, I refer to paragraph numbers also.

***Sewage Lagoon***

P.1 Effluent flowing around the south end of the dam has been observed repeatedly since 2012, and seepage through the north end of the dam was identified by LMI's geotech engineer in 2014. The Direction issued in 2014 specifically stated that the engineer's recommendations be implemented without delay. LMI did not provide a plan/timeline to implement the recommendations as was required by the 2014 Direction, and did not implement the recommendations in 2014 or early 2015 until a second Direction was issued.

P.2 The last work reported on the facility was in 2012, prior to the work that is currently being undertaken in 2015 as a result of the second Inspector's Direction. With respect to reporting requirements, please refer to the licence: As per Part H Item 8: Any unauthorized discharge of waste and/or effluent is to be reported. A 'discharge' as defined in the licence (Schedule A): release of any water or waste to the receiving environment.

P.3 Part E Item 8 lists Oil and Grease as a discharge parameter. Oil and Grease is a common parameter that is tested in the laboratory, falling in the categories of Organics or Nutrients (see the attached Field Sheet from Taiga Lab; it falls under Nutrients). However, upon further review of Lupin's documents, I note that LMI has "field observation of visual sheen" in the Monitoring Plan, and if that plan is deemed approved by the Board, I will follow that. That said, as LMI has some contractors who are not necessarily following best sampling techniques (eg-sampling with no gloves on) it might be in LMI's best interest to err on the side of caution.



P.4 The geotechnical inspection of the Sewage Lakes Facility was required as a result of the July 2014 inspection, the report for which was submitted to LMI on August 5 2014. LMI did not undertake the required inspection until after the issuance of a Direction on September 8, 2014. LMI did not implement the recommendations in 2014 or early 2015, contrary to the Direction “without delay”, and failed to prevent worsening of the condition of the facility.

P.5 An Emergency Amendment to the licence (valid to August 19, 2015) existed in order to decant the Sewage Lakes Facility, and a Direction remains, issued on September 8, 2014 to LMI to maintain the sewage lakes at a level that is consistent with safe operation. LMI failed to maintain the facility in compliance with these, as observed during the July 2015 inspection.

However, it appears that the work that LMI is undertaking now in 2015 will remedy the problem for the time being and allow the Direction to be revoked. I look forward to an update on the situation.

Please note that sampling of the Lower Sewage Lagoon will be required again prior to any additional decant, given the plan to pump effluent from the Upper lagoon, and particularly if the facility is put back into service before that time.

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

I appreciate your prompt attention to this matter. I look forward to receipt of the 2015 Geotechnical Inspection report with a schedule for implementation and a summary of work in the Annual Report.

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

This sampling was originally required as a result of the 2012 inspection and remains outstanding.

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

Thank you for the clarification. Please provide a copy of the site drainage plan with the 2015 Annual Report.

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

I recommend LMI review the timelines outlined in the LWMP and also the Monitoring Plan for future reference and to ensure that sampling is conducted with sufficient lead time to allow for analysis, receipt of results, and the required notifications prior to any effluent being discharged from the facility (Sewage Lakes). As effluent was discharging from the facility without authorization at the time of the inspection, the timelines had not been implemented as intended.

I am also concerned with respect to the timing of sampling and discharge from the TCA. 2AM-LUP0914 Schedule J – Conditions Applying to the Monitoring Program requires that the bioassay for both rainbow trout and *Daphnia* be undertaken *prior* to initiation of decant and the samples (presumably the results) be provided to Environment Canada. The LWMP (2013) states that “*Ten (10) days prior to discharge (July) If pH is between 6.0 and 9.5, the results from the bioassay pass, and effluent quality at in Pond 2 does not exceed the limits listed in Table 3 additional steps to commencing discharge are to be undertaken.*” However, LMI’s notice of August 13, 2015 indicates that toxicity tests will be taken when discharge from the TCA commences. Please explain how LMI will ensure that the discharge is non-acutely lethal as per the licence monitoring requirements prior to discharge commencing.



### **Signage for Monitoring Stations**

I appreciate your attention to replacing the signage.

### **LMI's Commitments (Outstanding requirements from the 2014 Inspection)**

1. Hazardous Waste Inventory

Please note that as per LMI's letter of February 23, 2015, "*LMI will include this task in its 2015 scope of work and will provide an updated inventory to the Inspector on or before August 31, 2015.*" Your letter of August 18 indicates that the inventory will be completed by August 31, but the expectation is that the results be reported to the Inspector by that date. Please provide the report on August 31, 2015.

2. Sampling outside the TCA

Submission of the report by December 31, 2015 is acceptable to me as long as LMI ensures to conduct the work in 2015 prior to snowfall. No assurance was provided in the August 18 letter that this work has even begun. I do anticipate that the August 31, 2015 confirmation will indicate that the work has been substantially completed in order to avoid the snowfall issues as encountered in 2014.

3. Geotechnical Inspection of Waste Management Areas

I look forward to receipt of this report by October 31, 2015.

4. Spill 12-306

The current August 18 correspondence does not indicate whether LMI is on schedule to address the reclamation of Spill 12-306. As per LMI's letter of February 23, 2015, "*LMI intends to complete removal of contaminated material by August 31, 2015 and will provide a report to the Inspector detailing its 2015 activities by September 30, 2015.*" LMI has already postponed this work that was originally required to be carried out by October 31, 2014. September 30, 2015 was the date that LMI determined was feasible, and so that was the date reiterated in the 2015 inspection report. LMI is to undertake the work according to that agreed-upon schedule. Please revise your work plan accordingly.

Regards,

Eva Paul

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Att: Taiga Field Sheet