

LUPIN MINES INCORPORATED

July 16, 2015

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

Attention: Karen Costello, Director, Resource Management

Lupin Mine, Water Licence No. 2AM-LUP0914

Dear Sirs and Mesdames:

We write further to our teleconference on July 10, 2015 between Lupin Mines Incorporated (LMI), the Nunavut Water Board (NWB) staff, and Aboriginal Affairs and Northern Development Canada (AANDC) staff. Thank you to all who participated in the call and we look forward to continuing our discussions to work towards a resolution to the regulatory and permitting issues that we are all facing.

As you are aware, due to the delay in the issuance of the Type A Water Licence renewal, LMI is currently not authorized to use its mine site camp or to undertake tasks it would normally be permitted under its Type A Water Licence, including discharge of the tailings pond. The Type A Water Licence renewal application was initiated by LMI over 16 months ago. The unforeseen delay in the renewal and amendment of the Type A Water Licence was not caused by LMI and, indeed, it has initiated these discussions in a proactive attempt to address the ongoing requirement to maintain and care for the site.

Our understanding from NWB staff is that an emergency amendment to the Type A Water Licence cannot be issued and approved by the Minister of Aboriginal Affairs and Northern Development Canada in a timely way due to notice periods. Thus, the only regulatory option presented that would permit LMI to proceed with the necessary tasks is the issuance of a direction by the AANDC inspector pursuant to section 87 of the *Nunavut Waters and Nunavut Surface Tribunal Act* (NWNSRTA).

At the end of our teleconference, AANDC requested a written description of the necessary tasks in order to confirm this approach and to provide justification as to why use of the camp is necessary. We provide this summary below as well as our comments on the proposed direction.

Tailings Facility 2015 Work Plan Overview

As you know no waters were discharged from the tailings pond in 2013 or 2014.

LMI must discharge between 2.5 million m³ and 3 million m³ from its tailings pond at the Lupin Mine this summer to preserve the integrity of the tailings pond and to prevent overtopping. LMI requires approximately 27 workers for a six week period to treat the water in the tailings pond to ensure it is safe for discharge and meets all the applicable regulatory criteria. Following the treatment period, LMI will require 3-4 workers on site for 30 further days for sampling and monitoring. Once the tailings pond samples have met the Environment Canada *Metal Mining Effluent Regulations* requirements for safe discharge, LMI will then require a crew of 13-14 workers for 28-42 days to complete the discharge. Further work plan details are described at Appendix A. We also note that this task would be undertaken in accordance with the current Liquid Waste Management Plan and the Water Quality Monitoring Plan and Quality Assurance/Quality Control Plan.

In order to safely complete this work plan, LMI requires the use of its mine site camp facilities. The use of the mine camp will permit workers to the use of showers, living quarters and a kitchen ensuring the health, safety and security of those workers. For example, the workers will be working with lime and in the tailings pond area and will require access to showers.

Not only is the mine camp site required for health and safety reasons, it is also required for the practical reason of attracting, retaining and hiring competent and qualified workers to perform this work. Simply put, it will be impossible to hire and retain the necessary complement of workers if a proper, safe and secure camp site cannot be provided.

Finally, utilizing the existing camp removes the unnecessary environmental risks created by the expanded project foot print for a separate temporary camp for 30 people.

Comments Regarding Potential Inspector's Direction

AANDC has proposed to issue an inspector's direction pursuant to section 87 of the NWNSRTA as a solution to the current licencing gap created by the unforeseen delay in the issuance of the renewed Type A Water License. The inspector's direction must include *reasonable measures* in accordance with the NWNSRTA.

Accordingly, the inspector's direction must:

1. permit LMI to discharge water from its tailings pond (on the condition that the discharge meets the parameters set out in the Type A Water Licence as recommended by the Board);
2. permit LMI to utilize the existing mine camp site (including all related use of water and sanitary facilities) in order to undertake the treatment, sampling and discharge work; and
3. acknowledge that the direction is required because of the current regulatory delay and shall not form part of LMI's enforcement record.

Time is of the essence. The work must commence before **July 23, 2015**, to ensure there is sufficient time to accomplish the work prior to freeze up. We anticipate discharge would commence on October 3, 2015. In order to ensure there is time to complete the discharge, we request authorization to occupy the camp and manage water until **October 31, 2015** (unless the Type A Water Licence is issued by the Minister in the interim).

We are available for any follow up to our discussions with a goal of finding a mutually agreeable resolution in the circumstances. If you have any questions about this letter or our planned activities, please do not hesitate to contact me or my colleague, Karyn Lewis.

Yours truly,

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

Patrick Downey
President
LMI

cc.

Eva Paul, Erik Allain, Andrew Kiem, AANDC
Dave Hohnstein, Sean Joseph, Phyllis Beaulieu, NWB

Appendix A: Tailings Facility 2015 Work Plan

The following is a detailed summary of the work requirements and schedule required to treat the tailings water prior to discharge.

Overview of Process

The tailings water builds up over a period of time due to snow and water accumulations within the ponds still available for deposition and other downstream ponds. This water must be discharged periodically to prevent overtopping and also to ensure water levels do not cause dam wall damage. LMI has calculated that they must discharge between 2 million m³ and 3 million m³ this year.

The water must be treated with a significant amount of 10-20% lime solution prior to discharge to allow the discharge to meet stringent receiving water quality standards as set by Environment Canada under the *Metal Mining Effluent Regulations*. Once treatment is complete, the water must be tested and results sent to Environment Canada at least 30 days prior to discharge. If at the end of that time the water meets set standards a process of continual discharge takes place using a syphon system. Water is also then syphoned from upstream ponds to maintain a level water balance between adjoining ponds.

Prior owners of the property used a very rudimentary method of lime treatment whereby they brought bags of slaked lime on a boat with an outboard motor - opened the bags on the boat and dumped them in the water and used the out board motor as a sort of mixer. They did this in batches. Although apparently effective the current management deemed this as a very unsafe process both from a health and safety perspective and potentially environmental standpoint.

In order to upgrade this process, LMI installed a fully independent lime mixing and addition system at the dam to full OSHA and other required safety standards. The system consists of a lime mixing tank with a properly install lime bag breaker which is covered and ventilated for employee safety. The system has a fully independent water system to ensure a proper lime mix which provides steady feed of lime for pH control purposes. The lime solution is then pumped from the mix tanks via a series of pipes, valves and distributors to the pond. The distribution in the pond is balanced and monitored by two persons in a boat. Once the process is commenced it must run continuously to ensure that lime does not plug in the pipes as lime will form a hard cake very quickly.

Summary of Staffing Needs

LMI uses 3 crews continuously for 8 hours/shift. Each crew consists of 2 laborers for mixing- 2 for pumping and 2 for lime distribution for a total of 6 per crew or 18 total. We also require a full time mechanic to ensure all equipment is available to operate continuously and a full time supervisor. Two further persons are required for sampling and logging of all data.

To operate the camp for this group we will require 2 cooks, 2 kitchen helpers and two cleaners for laundry etc. We will also require a full time camp manager. In total, up to 27 individuals will be required to be housed at camp in order to complete these tasks.

Treatment will take approximately 6 weeks based on previous experience- then we will require between 3-4 persons on site for the next 30 days for sampling and monitoring. Once approval has been received from Environment Canada to discharge it will take a crew of approximately 14 persons to complete this over a period of between 28 - 42 days.

Summary of Tailings Containment Area Discharge Procedures

The following procedures must be followed in preparation for discharge of tailings effluent from the Tailings Containment Area (TCA).

Pre Discharge

1. Air Compressor Check
2. Set-up Siphons
3. Organize Water Quality Monitoring Equipment
4. Contact Analytical Lab
5. Contact Bioassay Lab to order two sets of containers required for the Static pass/fail bioassay for Rainbow Trout (20 L) and one set of containers required the MMER LC50 bioassay for Rainbow Trout (40L).
6. Collect Pre-Discharge Samples
7. Commence Lime Treatment – Approx forty two (42) days to complete
8. Thirty (30) days prior to discharge - Contact Environment Canada at least thirty days in advance to provide notice to the Environment Canada Enforcement Officer of the collecting of the MMER LC50 bioassay samples.
9. Ten (10) days prior to discharge - 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 additional steps to commencing discharge are to be undertaken.
 - Provide notice to the AANDC Inspector at least ten (10) days prior to initiating discharge from the TCA including an estimated volume proposed for discharge and the receiving location, and copy the Environment Canada Enforcement Officer.
 - Commence daily pH measurements with the portable pH meter in Pond 2 near the siphon intake to verify pH stability.
 - As weather allows continue to profile Pond 2 at various locations to verify homogeneity.
 - Continue water treatment to maintain a consistent pH throughout Pond 2 (ideally between pH 6.5 and 9).

Discharge

10. Twenty Eight (28) to Forty Two (42) days to complete - The following procedures must be followed during discharge from the Tailings Containment Area (TCA):

- Measure pH in Pond 2 near the siphon intakes. If pH is between 6.0 and 9.5, the results from the Rainbow Trout and Daphnia bioassay tests pass, and effluent quality at LUP-10 does not exceed the criteria provided in Table 3 below, start the siphons.
- The discharge rate from the TCA shall not exceed 70,000 cubic metres per day, unless otherwise approved by the Board in writing.
- Collect daily, weekly, and monthly samples at LUP-10, 20, 21, 22, 24 and 25.
- Prepare samples for shipment to the lab on weekly flight. Each shipment must include at least one duplicate sample and one trip blank.
- Continue water treatment to maintain a consistent pH throughout Pond 2 (ideally between pH 6.5 and 9).