#### **LUPIN MINES INCORPORATED**

April 24, 2014

Phyllis Beaulieu Manager of Licensing Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0

By email (phyllis.beaulieu@nwb-oen.ca)

**Re:** 2013 Annual Report: Lupin Mine Type A Water Licence (2AM-LUP0914).

Dear Ms. Beaulieu,

Lupin Mines Incorporated (LMI) is pleased to submit the attached 2013 Annual Report for the Lupin Mine in accordance with Type A water licence 2AM-LUP0914 Part B, Item 2.

Please note that there was only limited Project activity in 2013 for on-going care and maintenance of facilities. The attached information summary addresses the 2013 annual reporting requirements. A water licence renewal application was submitted by LMI to the Nunavut Water Board on February 28, 2014.

Should you have any questions please contact the undersigned.

Yours truly,

Patrick Downey
President and CEO

### **Lupin Mine 2013 Summary of Activities**

The Lupin Mine site was in a state of care and maintenance throughout the 2013 reporting period. The mine was occupied periodically between January and July with camp occupancy numbers ranging from 2 to 17 people on site. During the months when camp was not occupied day trips were carried out each month to ensure the site was safe and environmental risks remained minimal.

A total of 432 m<sup>3</sup> of water was used for domestic purposes in 2013, and 410.4 m<sup>3</sup> of sewage and greywater were transferred to the Upper Sewage Lake. There was no discharge from the Upper Sewage Lake to the receiving environment in 2013.

Care and maintenance activities carried out in 2013 included the backhaul of waste items to southern disposal or recycling facilities, routine inspection of facilities, water sampling, site water management, road maintenance, fuel management, and annual geotechnical inspection. While the site is currently unoccupied, LMI carries out routine site visits to ensure the site is in good condition particularly during the freshet period. More detailed information is available in the monthly monitoring reports provided to the Nunavut Water Board and posted on the public registry.

LMI submitted a water licence renewal application to the Nunavut Water Board on February 28, 2014.

### Lupin Mine Type A Water Licence Part B, Item 2 Annual Reporting Requirements

a) The monthly and annual quantities in cubic metres of water pumped from Contwoyto Lake at Station Number LUP-01:

The following quantities of water were withdrawn from Contwoyto Lake in 2013 for domestic purposes:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Water	90.9	93.3	129.7	96.7	0	11.4	10	0	0	0	0	0	432
use (m³)													

b) <u>The monthly and annual quantities in cubic metres of treated Tailings effluent discharged at Station Number LUP-10:</u>

Not applicable given the care and maintenance status in 2013.

c) The monthly and annual quantities in cubic metres of Minewater discharged at Station Number LUP-11:

Not applicable given the care and maintenance status in 2013.

d) The monthly and annual quantities in cubic metres of treated Sewage effluent discharged at Station Number LUP-14:

There was no decant required from the Upper Sewage Lake in 2013 as the facility was sufficiently decanted in 2012 and only minimal volumes of sewage and greywater were transferred to the facility in 2013 as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Sewage transfer (m³)	86.5	88.6	123.2	91.9	0	10.2	10	0	0	0	0	0	410.4

#### e) Tabular summaries of all data generated under the "Monitoring Program":

The mine site was not active in 2013. However, water sampling was carried out in June at locations where water had accumulated within bermed areas that required dewatering. The sampling results in tabular format were reported in the June monthly report and are included in Appendix A.

The water sample lab analysis results from the Third Party Drum Storage Area showed high toluene. This water was placed in the contaminated storage tank in the Main Tank Farm.

f) A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector:

Three Environment Canada Inspectors were on site on July 25<sup>th</sup> to inspect the fuel storage areas and Tailings Containment Area. One of the fuel tanks containing a mixture of fuel and water located at the Main Tank Farm was noted to be weeping. As a result a crew was mobilized to site on July 29 to transfer the mixture to another tank.

g) A summary of modification and/or major maintenance work carried out on the water supply and the waste disposal facilities, including all associated structures:

No major work was carried out in 2013 on water or waste disposal facilities.

During LMI's routine June 2013 inspection it was observed that the roadway adjacent to Boomerang Lake had eroded as a result of runoff. The roadway was repaired in July, 2013.

h) A list and description of all unauthorized discharges including volumes, spill report line identification number and summaries of follow-up action taken:

There were no unauthorized discharges in 2013.

i) Where applicable, revisions as Addendums, with an indication of where changes have been made, for Plans, Reports, and Manuals:

LMI submitted updates to applicable management plans with the 2012 Annual Report. As noted in the water licence renewal application submitted to the Nunavut Water Board on February 28, 2014, LMI committed to providing Executive Summaries and corresponding

translations for those documents with this 2013 Annual Report. The Executive summaries and translations are included as Appendix B of this Annual Report.

In its water licence renewal application LMI also committed to compile its miscellaneous inspection records and photos of: (1) Tailings Containment Area facilities in accordance with water licence condition Part E Item 6(f); as well as (2) fuel containment facilities in accordance with water licence condition Part H Item 6. This compilation is provided as Appendix C of this Annual Report.

j) <u>For Care and Maintenance, provide an updated status of any progressive reclamation as it relates to tailings cover remediation and justification for not proceeding to full reclamation under Part I, Item 5:</u>

LMI continues to monitor the global economic climate and evaluate the feasibility of operating the Lupin mine along with the potential for identifying additional resources through its exploration activities. In the interim, the site remains in care and maintenance and a decision with respect to Part I, Item 5 was not contemplated in 2013.

k) A summary of public consultation and participation with local organizations and the residents of the nearby communities, including a schedule of upcoming community events and information sessions:

Given the care and maintenance status of the site, LMI did not carry out community engagement activities in 2013. However, LMI remains available to discuss current activities with community leadership if interested.

I) A summary of any abandonment and reclamation work completed during the year and an outline of any work anticipated for the next year:

Progressive reclamation activities during 2013 consist of backhauling 51 mega bags of waste from the site.

m) An updated assessment of the current mine reclamation liability using the most current version of RECLAIM as required by Part I, Item 3:

There are no changes to the reclamation security estimate provided in the 2012 Annual Report.

n)	Any other details on water use or waste disposal requested by the Board by Novembe
	1st of the year being reported:

The Nunavut Water Board did not request additional information for the 2013 reporting period. The 2013 Geotechnical Inspection Report was submitted to the Board on November 5, 2013.

### Appendix A

June 2013 Monthly Monitoring Report with Water Sample Results

# Lupin Mines Incorporated

(a subsidiary of Elgin Mining Inc.)

02 July 2013

Ms. Phyllis Beaulieu Manager of Licensing Nunavut Water Board P.O. Box 119 Gjoa Haven, NU XOB 1J0

Dear Ms. Beaulieu

RE: Monthly Report for June 2013
Lupin Mine, Nunavut, License Number 2AM-LUP0914

Activities on site during the month of June involved care and maintenance only. There were 17 person days for the month of June, with up to 5 people on site. Accommodation arrangements remain unchanged from that of April. For business reasons, Lupin Mines Inc. (LMI) made a decision to temporarily return the mine site back to Care and Maintenance (un-occupied status) on April 24, 2013. LMI put all facilities back in proper care and maintenance consistent with the conditions outlined in the permits, licences, and leases.

A site inspection was conducted on May 27, 2013. At that time, water samples were collected from the various tank farm berms and sent to a laboratory for analysis. The lab results are provided in Tables 1-6. A letter was sent to AANDC, including the lab data seeking approval to dewater the berms on June 04, 2013.

Dewatering of the berms commenced on June 18, 2013 and was complete by June 20, 2013. Table 7 provides the volume of water removed from each berm. A site inspection was conducted of the facilities. No leaks were seen in any of the fuel tanks and associated piping. An inspection of the Tailings Containment area was made on June 19, 2013. During this inspection, it was noted that the roadway adjacent Boomerang Lake had eroded as a result of runoff. The area of erosion can be seen in Photo 1. LMI will develop a plan to remediate this area.

Table 1: Satellite Tank Farm Berm – May 27, 2013 @ 13:00 Lab # L1307179-1

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
pH	6.50	6.0 – 9.0	6.0-9.0
TSS	<3.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	<0.050	2.0	4.0
Total Lead	0.00269	0.01	0.02
Benzene	<0.00050	0.37	
Toluene	<0.00050	0.002	-
Ethyl Benzene	<0.00050	0.090	<b> </b> -

2AM-LUP0914

070213-2AM-LUP0914-MONTHLYREPORTINGJUNE2013 This file is produced electronically with 4 pages

Table 2: Waste Oil Tank Farm Berm - May 27, 2013 @ 13:00 Lab # L1307179-2

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
pH	7.22	6.0 – 9.0	6.0 – 9.0
TSS	5.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	0.077	2.0	4.0
Total Lead	0.0188	0.01	0.02
Benzene	<0.00050	0.37	-
Toluene	<0.00050	0.002	-
Ethyl Benzene	<0.00050	0.090	-

Table 3: Main Tank Farm – Jet "A" Berm – May 27, 2013 @ 13:30 Lab # L1307179-3

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
рН	6.54	6.0 – 9.0	6.0-9.0
TSS	<3.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	<0.050	2.0	4.0
Total Lead	0.00065	0.01	0.02
Benzene	<0.00050	0.37	-
Toluene	<0.00050	0.002	-
Ethyl Benzene	<0.00050	0.090	-

Table 4: Main Tank Farm Berm - Cell 1 - May 27, 2013 @ 13:30 Lab # L1307179-4

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
рН	6.10	6.0 - 9.0	6.0 - 9.0
TSS	7.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	<0.050	2.0	4.0
Total Lead	0.00716	0.01	0.02
Benzene	<0.00050	0.37	-
Toluene	<0.00050	0.002	-
Ethyl Benzene	<0.00050	0.090	-

Table 5: Main Tank Farm Berm – Cell 2 – May 27, 2013 @ 13:30 Lab # L1307179-5

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
рН	6.58	6.0 – 9.0	6.0-9.0
TSS	<3.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	<0.050	2.0	4.0
Total Lead	0.00434	0.01	0.02
Benzene	<0.00050	0.37	-
Toluene	<0.00050	0.002	-
Ethyl Benzene	<0.00050	0.090	-

Table 6: Third Party Drum Storage Area Berm – May 27, 2013 @ 13:45 Lab # L1307179-6

Parameter	Results	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
pH	6.18	6.0 - 9.0	6.0 - 9.0
TSS	<3.0	15.0	30.0
Oil & Grease	<1.0	5.0 and no visible sheen	10.0 and no visible sheen
Total Ammonia	<0.050	2.0	4.0
Total Lead	0.00136	0.01	0.02
Benzene	<0.00050	0.37	_
Toluene	0.0271	0.002	-
Ethyl Benzene	<0.00050	0.090	-

Table 7: Berm dewatering volumes – June 18 – 20, 2013

Date	Location	Estimated Volume Removed (m³)
June 18, 2013	Waste Oil Tank Farm Berm (WOTF)	80 m <sup>3</sup>
June 18, 2013	Main Tank Farm Berm (MTF) – Jet "A" Berm	240 m <sup>3</sup>
June 19, 2013	Main Tank Farm Berm (MTF)— Cell	150 m <sup>3</sup>
June 19, 2013	Main Tank Farm Berm (MTF) – Cell 2	450 m <sup>3</sup>
June 19, 2013	Satellite Tank Farm Berm (STF)	60 m <sup>3</sup>
June 20, 2013	3 <sup>rd</sup> Party Drum Storage Area Berm	2.5 m <sup>3</sup>





Domestic water use for the month was estimated to be  $11,350 \, \text{L} \, (11.4 \, \text{m}^3)$ , drawn from Contwoyto Lake. Approximately  $10,215 \, \text{L} \, (10.2 \, \text{m}^3)$  of sewage was produced and discharged to the upper sewage lake.

Domestic waste generated during the month of June was incinerated on-site each day. There was 1 bag of miscellaneous solid waste (plastics) that was sent to an approved facility in Yellowknife, NT for disposal.

If you have any questions regarding the above, please do not hesitate to contact me.

Sincerely,

**Lupin Mines Incorporated.** 

Wayne Osborne

# Appendix B

# **Executive Summaries of Management Plans**

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Spill Contingency Plan (the Plan) with respect to the requirements within Water Licence Number 2AM-LUP0914 (Water Licence), Part H, Item 1.

The documents *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations*, July 22, 1998 and *A Guide to the Spill Contingency Planning and Reporting Regulations*, June 2002, were used as guide in preparing this plan.

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Interim Abandonment and Restoration Plan (the Plan).

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Care and Maintenance Plan (the Plan).

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Waste Management Plan – Solid and Hazardous (the Plan).

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Liquid Waste Management Plan (the Plan).

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Wildlife Management Plan (the Plan).

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Fuel Containment Management Plan (the Plan).

# Appendix C

# **Compilation of Miscellaneous Inspection Records and Photos**

### **Compilation of Miscellaneous Inspection Records and Photos**

The following table lists inspections carried out in 2012 and 2013.

Date of Inspection	Inspection Report	Photos (Y/N)
Tailings Containment Area 2012		
September 12 – 14, 2012	Geotechnical Engineering Inspection	Yes
Tailings Containment Area 2013		
June 17-20, 2013	LMI site monitoring and inspection report	Yes
July 29, 2013	Routine LMI TCA and dams monitoring checklist	Yes
August 29, 2013	Routine LMI TCA and dams monitoring checklist	Yes
September 12, 2013	Geotechnical Engineering Inspection	Yes
October 8, 2013	Routine LMI TCA and dams monitoring checklist	
Fuel Containment Facilities 2012		
February 20, 2012	Routine LMI inspection log	
February 26, 2012	Routine LMI inspection log	
March 4, 2012	Routine LMI inspection log	
November 12, 2012	Routine LMI inspection log	
November 21, 2012	Routine LMI inspection log	Yes
December 9, 2012	Routine LMI inspection log	
December 16, 2012	Routine LMI inspection log	
December 23, 2012	Routine LMI inspection log	
December 30, 2012	Routine LMI inspection log	
Fuel Containment Facilities 2013		
January 6, 2013	Routine LMI inspection log	
January 27, 2013	Routine LMI inspection log	
February 3, 2013	Routine LMI inspection log	
February 9, 2013	Routine LMI inspection log	
March 13, 2013	Routine LMI inspection log	
March 21, 2013	Routine LMI inspection log	
May 27, 2013	Routine LMI inspection log	
July 25, 2013	Environment Canada Inspection	Yes
July 29, 2013	Routine LMI inspection log	
August 29, 2013	Routine LMI inspection log	
October 8, 2013	Routine LMI inspection log	