



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

|  |  |  |                                       |
|--|--|--|---------------------------------------|
| Licensee   |  | Licensee Representative                    |                                       |
| Lupin Mines Inc.                                 |  | Karyn Lewis                                |                                       |
| Licence No. / Expiry                             |  | Representative's Title                     |                                       |
| 2AM-LUP0914(expired)(amended)                    |  |  |                                       |
| Sewage Lakes discharge only to August 19, 2015   |  |  |                                       |
| Land / Other Authorizations                      |  | Land / Other Authorizations                |                                       |
| 8WLC-LUP1516 (June 10, 2016)                     |  |  |                                       |
| Date of Inspection                               |  | Inspector                                  |                                       |
| 14/07/2015                                       |  | Eva Paul                                   |                                       |
| Activities Inspected                             |  |  |                                       |
| <input checked="" type="checkbox"/> Camp         | <input type="checkbox"/> Drilling  | <input checked="" type="checkbox"/> Mining | <input type="checkbox"/> Construction |
| <input type="checkbox"/> Roads/Hauling           | <input checked="" type="checkbox"/> Other: Monitoring and water management | <input type="checkbox"/> Other:            | <input type="checkbox"/> Reclamation  |
| <input checked="" type="checkbox"/> Fuel Storage |  |  |                                       |

| 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  | NA             |         | Water Management Structures  | U         | 4                | Storage               | A                   |         |                    |  |
| Flow Measure. Device   | NA             |         | Culverts / Bridges   | A         |                  | Spills                | U                   | 8       |                    |  |
| Source:  | NA             |         | Drainage   | A         |                  | Spill Plan            | NI                  |         |                    |  |
| Water Use:   | NA             | 1       | Erosion / Sediment   | U         | 5                |                       |                     |         |                    |  |
| Recirculation ( y /n)  | NA             |         | Mitigation Measures  | U         | 3                | Administrative        |                     |         |                    |  |
|  |                |         | Reclamation Activities   | U         | 3                | Records               | NI                  |         |                    |  |
|  |                |         | Materials Storage  | A         |                  | Reports               | C                   | 3       |                    |  |
| Waste Disposal   |                |         | Signage  | U         | 6                | Plans                 | U                   | 7       |                    |  |
| Waste Water  | U              | 2       |  |           |                  | Notifications         | U                   |         |                    |  |
| Solid Waste  | A              |         | Monitoring   |           |                  | Other                 |                     |         |                    |  |
| Hazardous Waste  | U              | 3       | Sample Collection / Analysis   | U         | 7                | Inspection Reports    | U                   | 9       |                    |  |
|  |                |         |  |           |                  | Inspector’s Direction | U                   | 10      |                    |  |
| *The number in the comments field will correspond with specific comments provided below. |                |         |  |           |                  |                       |                     |         |                    |  |
| Samples taken by Inspector:  |                |         | Location(s): LUP-1 (water intake), LUP-10 (TCA Pond 2), LUP-14 (Effluent from LSL) |           |                  |                       |                     |         |                    |  |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                      |                |         |  |           |                  |                       |                     |         |                    |  |

| SECTION 1   | <input checked="" type="checkbox"/> Comments (s.1) | <input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2) | <input checked="" type="checkbox"/> Action Required (s.3) |
|---|--|--|---|
| <p>An inspection was conducted on July 14 2014 to assess compliance at the Lupin Mine Site with LMI's several authorizations and an outstanding Direction. Currently, the Type 'A' water licence for the Lupin Mine is expired and as such LMI had no authorization to use water or deposit waste in relation to the Mine, although the obligations in the licence persist until such time as a renewal licence is approved. In order to conduct monitoring and site management, LMI sought an Emergency Amendment to the licence (valid to August 19, 2015) in order to decant the Sewage Lakes Facility, and an Approval without a Licence (NWB 8WLC-LUP1516) in order to use water for domestic purposes and deposit human waste. Additionally, a Direction was issued on September 8, 2014 to LMI to maintain the sewage lakes at a level that is consistent with safe operation, and to implement the recommendations in the 2014 geotechnical engineer's report. LMI has not built the camp that was authorized under 8WLC-LUP1516, and were conducting day trips only to site, as use of the water and waste facilities licensed under 2AM-LUP0914 was prohibited. Following this inspection, on an additional Direction was issued (2015-KIT002-EP) to decant the TCA.</p> <p>I was joined on-site by Karyn Lewis of LMI, and Mathieu Beaudouin of Discovery Mining Services.</p> <ol style="list-style-type: none"><li>At the time of the inspection no water was being used, as no camp facilities were in operation.</li><li>At the time of the inspection, waste water (effluent) from the sewage lagoon was trickling over a compromised section of the Lower Sewage Dam, and flowing freely around the south end of the dam due to high levels within the facility and lack of repairs to the dam [see Photos 1-3]. This is a recurring issue since 2012, indicating that this facility is not being operated or maintained satisfactorily. This is contrary to the Direction issued in 2014 and to the Emergency Amendment. As the peak of freshet had passed by the time I was on site, I believe that greater flow happened prior to my arrival on-site, and may have caused the small wash-out that was in evidence (the "compromised section"). It's also possible that it was caused by ice scouring. Organic matter from within Lower Sewage Lake (LSL) was piled up at this area. LMI (or their agent) was on site July 9, 2015 in order to sample from the lagoon; notice of the extreme level in the lagoon should have been reported at that time.</li><li>A portion of the tailings remains uncovered [Photos 4-7]. Despite the high water levels from freshet and precipitation (prompting LMI to notify the Minister indicating that the facility was in imminent need of decanting), the surface area of exposed tails in the unremediated portion of the TCA that is not covered by water remained essentially unchanged from last year. Also, the exposed tails remain solid enough to walk on, and in some areas the surface is cracked and flaking. To my knowledge, no mitigation measures have been put in place to cover the exposed tailings, whether temporarily or permanently. LMI's care and maintenance plan indicates that a binding agent will be applied to the exposed tails in Cells 3 and 5. It is also noted that the diagram of the TCA provided in the 2014 Geotechnical Inspection does not show the exposed tailings; the diagram shows the whole area as either covered or underwater which is not accurate.</li><li>A) The Lower Sewage Dam was not repaired nor decanted in a timely manner, contrary to the Inspector's Direction,</li></ol> |  |  |   |



resulting in a failure to contain effluent within the facility. The Upper Sewage Dam long, lengthwise cracks; one appears to be greater than 0.5 m in depth. These cracks were not noted in 2014. Slumping is noted on the west side of the dam. [Photos 8-10]

B) At the time of the inspection there remained approximately 1.5 m freeboard in the TCA Pond 2. Mr. Beaudoin indicated at the lowest point in the pond wall there was approximately 1.2 m freeboard. 1 m of freeboard is required to be maintained in the facility, and the levels have increased more than 1 m from last year. [Direction 2015-KIT002-EP was issued on July 22 to decant the TCA]. [Photo 11]

C) My observations at the main fuel farm are contrary to those of LMI's consultant in 2014 (*2014 Lupin Fuel Tank Farm Inspection*). Mr. Tong observed water ponding in the main tank farm, and did not observe active seepage at the time of his visit (August 19, 2014). Conversely, I noted that one berm (the cell with two orange tanks, immediately south of the largest berm) contained no ponding water while the berms on either side of it contained significant ponded water. Further, there was a clear seepage channel at the toe of that berm, with water flowing west toward the airstrip. I did not note any other obvious source for the flow of water. [Photos 12-16]

- 5. Erosion of the Lower Sewage Dam, Upper Sewage Dam, and the Tailings Containment structures [Photo 17] was evident at the time of the inspection.
- 6. No signage identifying the monitoring stations was noted.
- 7. Mathieu Beaudouin collected confirmatory water samples on behalf of LMI during the inspection, at the same locations I sampled. I noted that he forgot to wear gloves when he began sampling at LUP-1. LMI has not adhered to the timelines as outlined in the Liquid Waste Management Plan (2013), which has contributed to delays in decanting the facilities.
- 8. No spill report has been filed for the discharge of effluent from the Sewage Lakes prior to decant approval.
- 9. Several items were not addressed in 2014 with respect to the findings of the 2014 inspection. At the time of the 2015 inspection, these requirements have not yet been addressed. They are itemized below.
- 10. The geotechnical inspection occurred on September 15, 2014. LMI had not, at the time of this inspection, implemented the recommendations from the report, despite a Direction that was issued to the company indicating that any recommended repairs were to be carried out 'without delay'. At the time of this inspection, there was a failure of the dam to contain the effluent within Lower Sewage Lake.

SECTION 2



Comments



Non-Compliance with Act or Licence



Action Required

**Non-comprehensive list – prioritized for the matters most relevant and requiring to be addressed immediately.**

**2AM-LUP0914:**

- Part B Item 14: Failure to observe the Liquid Waste Management Plan.
- Part D Item 4: Failure to carry out adequate inspections of water management structures.
- Part E Item 6(d): Failure to immediately address erosion of the TCA.
- Part H Item 8: Failure to report an unauthorized discharge of effluent.
- Part J Item 8: Failure to undertake additional monitoring as requested by the Inspector.

**NWB Emergency Amendment motion 2014-P11-12-03:**

To "...preserve the necessary freeboard space and maintain the integrity of the Facilities, before and/or during 2015 freshet period, in accordance with the terms and conditions of Part E, Items 8 and 10 in Licence 2AM-LUP0914 and all associated monitoring and reporting obligations."

**Inspector's Direction Dated September 8, 2014:**

- 1. Failure to maintain the facility at a level that is consistent with safe operation.
- 2. Failure to implement recommendations of the 2014 Geotechnical Inspection with respect the Sewage Lakes Facilities.

**Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002**

- 12(1) Deposit of waste in contravention of a licence.
- 12(3) Failure to report a deposit of waste to an inspector.
- 86(4) Failure to furnish information as requested by an inspector for purposes of an inspection.
- 90(1) Failure to comply with a direction.
- 90(2)(a) Contravention of a Type A licence.



|  |                                   |   |   |
|--|-----------------------------------|---|---|
| SECTION 3  | <input type="checkbox"/> Comments | <input type="checkbox"/> Non-Compliance with Act or Licence | <input checked="" type="checkbox"/> Action Required |
| <p>Outstanding requirements from 2014 Inspection:</p> <ol style="list-style-type: none"><li>1. Hazardous Waste Inventory – <b>August 31 2015</b> (As per LMI’s commitment of February 23, 2015).</li><li>2. Sampling outside TCA: documentation and assessment showing that the material outside the TCA is esker material and not tailings – report to be received by Inspector by <b>September 30, 2015</b>. Confirmation that this work has been/is being conducted and that LMI will provide the report by September 30, 2015 is requested by <b>August 31, 2015</b>.</li><li>3. Geotechnical inspection of Waste Containment Areas – report to be received by Inspector by <b>October 31, 2015</b>.</li><li>4. Cleanup of Spill 12-306 (Satellite Tank Farm) - LMI is to complete removal of contaminated material by <b>August 31, 2015</b> and provide a report to the Inspector detailing its 2015 activities by <b>September 30, 2015</b> (As per LMI’s commitment of February 23, 2015).</li></ol> <p>Let it be noted that these deadlines have now been extended by a year, with the exception of no.2 which is outstanding since <u>2012</u>. I am confused by LMI’s approach to site maintenance and compliance issues. While last year LMI focussed on the risks to the Sewage Lakes facility, this year while the situation was much worse, there was no urgency in LMI’s actions to address the overtopping and the degradation of the facility. While LMI has chosen to only visit the site for day-trips until full use of the camp is secured, this does not excuse LMI of the responsibility of carrying out any and all obligations of the licence, past inspections, and the Directions. Additionally, LMI should ensure to undertake the activities earlier than last year, in order to avoid another year’s delay due to snowfall. I made it very clear to Ms. Lewis while on-site that the sampling outside the TCA was to be completed this year with no excuses. Let it also be noted that as per Part H, item 8 of the licence, any spills or imminent risk of spills/unauthorized discharges are to be reported to the inspector immediately and the Spill Contingency Plan is to be implemented.</p> <p>Additional requirements for 2015 include the fulfilment of the 2014 Inspector’s Direction and the recent 2015 Direction (2015-KIT002-EP) dated July 22, 2015; and full compliance with the monitoring requirements of 2AM-LUP0914, particularly with respect to both the Sewage Lakes Facilities and the Tailings Containment Area discharges. Failure to meet other requirements of the licence and approved plans will be addressed in due course.</p> |                                   |   |   |

|                            |                            |
|----------------------------|----------------------------|
| Licensee or Representative | Inspector’s Name           |
| -                          | Eva Paul                   |
| Signature                  | Signature                  |
| -                          | <i>Sent electronically</i> |
| Date                       | Date                       |
| -                          | 05/08/2015                 |

Att: Photo Log

CC: Phyllis Beaulieu, Manager of Licensing, NWB  
Erik Allain, Manager of Field Operations, AANDC  
Tracey McCaie, Manager, Lands Administration, AANDC  
Baba Pedersen, Kitikmeot RMO, AANDC





PHOTO LOG

| Date             | Camera         | Inspector                     | Authorization            |
|------------------|----------------|-------------------------------|--------------------------|
| 14/07/2015       | SONY DSC-HX50V | Eva Paul                      | 2AM-LUP0914/8WLC-LUP1516 |
| Photo Log # 1    |                | Location (NAD 83 DD MM SS.SS) |                          |
| Photo # DSC02950 |                | (taken while flying)          |                          |



**Description:** Aerial view of south end of Lower Sewage Dam. Arrows demonstrating flow of effluent are added for illustrative purposes.

|                  |                               |
|------------------|-------------------------------|
| Photo Log # 2    | Location (NAD 83 DD MM SS.SS) |
| Photo # DSC03122 | N65°45'28.96" W111°12'55.92"  |



**Description:** Compromised section of Lower Sewage Dam. Effluent was trickling over this section at the time of the inspection in the direction of the arrow. It is suspected that the flow was greater prior to the inspection. Contents of LSL are pushed onto the berm (circled area).





Photo Log # 3

Photo # DSC03126

Location (NAD 83 DD MM SS.SS)

N65°45'27.55" W111°12'26.41"



**Description:** South end of Lower Sewage Dam looking south. Effluent is flowing around the end of the dam.

Photo Log # 4

Photo # DSC02924

Location (NAD 83 DD MM SS.SS)

(taken while flying)



**Description:** Aerial view of Cell 3 looking roughly north. Uncovered and exposed tailings shown in outlined area. Yellow marker denotes approximate location where Photo 5 was taken.





Photo Log # 5

Location (NAD 83 DD MM SS.SS)

Photo #DSC03099

N65°43'20.99" W111°17'01.49"



**Description:** View of the uncovered tailings taken from the north side near K Dam, looking south-east. Approximate location shown in Photo 4. I proceeded to walk across the tails southwards towards the water.

Photo Log # 6

Location (NAD 83 DD MM SS.SS)

Photo # DSC03101

Unrecorded



**Description:** Cracked surface of tailings. Numerous animal tracks were visible.





Photo Log # 7

Location (NAD 83 DD MM SS.SS)

Photo # DSC03103

N65°43'14.27" W111°16'49.48"



Description: Shiny metallic flakes visible on the surface of the exposed tailings.

Photo Log # 8

Location (NAD 83 DD MM SS.SS)

Photo # DSC03111

Unrecorded



Description: View of Upper Sewage Dam facing southward away from the mine site. Cracks visible in dam that were not noted in 2014.





Photo Log # 9

Location (NAD 83 DD MM SS.SS)

Photo # DSC03113

N65°45'34.59" W111°13'56.63"



Description: Close-up of large crack in Upper Sewage Dam estimated to be greater than 0.5 m deep.

Photo Log # 10

Location (NAD 83 DD MM SS.SS)

Photo # DSC03115

N65°45'34.68" W111°13'57.11"



Description: Upper Sewage Dam looking north towards mine site. Slumping visible on the west (left) side of the dam.





Photo Log # 11

Location (NAD 83 DD MM SS.SS)

Photo # DSC02936

(taken while flying)



Description: Aerial view of “N” Dam and Pond 2 looking south-west. Pondwater from Pond 2 has surpassed “N” Dam (circled in red).

Photo Log # 12

Location (NAD 83 DD MM SS.SS)

Photo # DSC03153

N65°45’49.73” W111°14’14.18”



Description: Main tank farm berm, looking west. South-most cell is holding water, the central cell (shown on right) is not.





Photo Log # 13

Location (NAD 83 DD MM SS.SS)

Photo # DSC03167

N65°45'49.74" W111°14'20.10"



**Description:** West berm of the fuel farm looking roughly North. Note dry cell in foreground and water ponded in the larger cell (orange reflection of tanks off water). Note the orange spray paint down-slope to the left for reference in Photos 14 and 15.

Photo Log # 14

Location (NAD 83 DD MM SS.SS)

Photo # DSC03168

N65°45'49.90" W111°14'20.10



**Description:** Note the flow path of water down-hill from the orange paint. The area is otherwise dry. Photos 15 and 16 are taken from point 't'.





Photo Log # 15

Location (NAD 83 DD MM SS.SS)

Photo # DSC03170

N65°45'50.34" W111°14'19.79"



Description: Flow of water down-slope from point 't'.

Photo Log # 16

Location (NAD 83 DD MM SS.SS)

Photo #DSC03169

N65°45'50.34" W111°14'19.79"



Description: Looking into the berm from point 't'.





Photo Log # 17

Location (NAD 83 DD MM SS.SS)

Photo #DSC03073

N65°43'27.56" W111°18'11.73"



Description: View of eroded internal TCA dam.





WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

|  |  |  |                                       |
|--|--|--|---------------------------------------|
| Licensee                                       |  | Licensee Representative                          |                                       |
| Lupin Mines Inc.                               |  | Karyn Lewis                                      |                                       |
| Licence No. / Expiry                           |  | Representative's Title                           |                                       |
| 2AM-LUP0914(expired)(amended)                  |  |  |                                       |
| Sewage Lakes discharge only to August 19, 2015 |  |  |                                       |
| Land / Other Authorizations                    |  | Land / Other Authorizations                      |                                       |
| 8WLC-LUP1516 (June 10, 2016)                   |  |  |                                       |
| Date of Inspection                             |  | Inspector  |                                       |
| 14/07/2015                                     |  | Eva Paul   |                                       |
| Activities Inspected                           |  |  |                                       |
| <input checked="" type="checkbox"/> Camp       | <input type="checkbox"/> Drilling  | <input checked="" type="checkbox"/> Mining       | <input type="checkbox"/> Construction |
| <input type="checkbox"/> Roads/Hauling         | <input checked="" type="checkbox"/> Other: Monitoring and water management | <input type="checkbox"/> Other:                  | <input type="checkbox"/> Reclamation  |
|  |  | <input checked="" type="checkbox"/> Fuel Storage |                                       |

| 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  | NA             |             | Water Management Structures  | U                   | 4                  | Storage               | A         |         |
| Flow Measure. Device   | NA             |             | Culverts / Bridges   | A                   |                    | Spills                | U         | 8       |
| Source:  | NA             |             | Drainage   | A                   |                    | Spill Plan            | NI        |         |
| Water Use:   | NA             | 1           | Erosion / Sediment   | U                   | 5                  |                       |           |         |
| Recirculation ( y /n)  | NA             |             | Mitigation Measures  | U                   | 3                  | Administrative        |           |         |
|  |                |             | Reclamation Activities   | U                   | 3                  | Records               | NI        |         |
|  |                |             | Materials Storage  | A                   |                    | Reports               | C         | 3       |
| Waste Disposal   |                |             | Signage  | U                   | 6                  | Plans                 | U         | 7       |
| Waste Water  | U              | 2           |  |                     |                    | Notifications         | U         |         |
| Solid Waste  | A              |             | Monitoring   |                     |                    | Other                 |           |         |
| Hazardous Waste  | U              | 3           | Sample Collection / Analysis   | U                   | 7                  | Inspection Reports    | U         | 9       |
|  |                |             |  |                     |                    | Inspector's Direction | U         | 10      |
| *The number in the comments field will correspond with specific comments provided below. |                |             |  |                     |                    |                       |           |         |
| Samples taken by Inspector:  |                |             | Location(s): LUP-1 (water intake), LUP-10 (TCA Pond 2), LUP-14 (Effluent from LSL) |                     |                    |                       |           |         |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                      |                |             |  |                     |                    |                       |           |         |

| SECTION 1  | <input checked="" type="checkbox"/> Comments (s.1) | <input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2) | <input checked="" type="checkbox"/> Action Required (s.3) |
|--|--|--|---|
| <p>An inspection was conducted on July 14, 2015 to assess compliance at the Lupin Mine Site with LMI’s several authorizations and an outstanding Direction. Currently, the Type ‘A’ water licence for the Lupin Mine is expired and as such LMI had no authorization to use water or deposit waste in relation to the Mine, although the obligations in the licence persist until such time as a renewal licence is approved. In order to conduct monitoring and site management, LMI sought an Emergency Amendment to the licence (valid to August 19, 2015) in order to decant the Sewage Lakes Facility, and an Approval without a Licence (NWB 8WLC-LUP1516) in order to use water for domestic purposes and deposit human waste. Additionally, a Direction was issued on September 8, 2014 to LMI to maintain the sewage lakes at a level that is consistent with safe operation, and to implement the recommendations in the 2014 geotechnical engineer’s report. LMI has not built the camp that was authorized under 8WLC-LUP1516, and were conducting day trips only to site, as use of the water and waste facilities licensed under 2AM-LUP0914 was prohibited. Following this inspection, on an additional Direction was issued (2015-KIT002-EP) to decant the TCA.</p> <p>I was joined on-site by Karyn Lewis of LMI, and Mathieu Beaudouin of Discovery Mining Services.</p> <ol style="list-style-type: none"><li>At the time of the inspection no water was being used, as no camp facilities were in operation.</li><li>At the time of the inspection, waste water (effluent) from the sewage lagoon was trickling over a compromised section of the Lower Sewage Dam, and flowing freely around the south end of the dam due to high levels within the facility and lack of repairs to the dam [see Photos 1-3]. This is a recurring issue since 2012, indicating that this facility is not being operated or maintained satisfactorily. This is contrary to the Direction issued in 2014 and to the Emergency Amendment. As the peak of freshet had passed by the time I was on site, I believe that greater flow happened prior to my arrival on-site, and may have caused the small wash-out that was in evidence (the “compromised section”). It’s also possible that it was caused by ice scouring. Organic matter from within Lower Sewage Lake (LSL) was piled up at this area. LMI (or their agent) was on site July 9, 2015 in order to sample from the lagoon; notice of the extreme level in the lagoon should have been reported at that time.</li><li>A portion of the tailings remains uncovered [Photos 4-7]. Despite the high water levels from freshet and precipitation (prompting LMI to notify the Minister indicating that the facility was in imminent need of decanting), the surface area of exposed tails in the unremediated portion of the TCA that is not covered by water remained essentially unchanged from last year. Also, the exposed tails remain solid enough to walk on, and in some areas the surface is cracked and flaking. To my knowledge, no mitigation measures have been put in place to cover the exposed tailings, whether temporarily or permanently. LMI’s care and maintenance plan indicates that a binding agent will be applied to the exposed tails in Cells 3 and 5. It is also noted that the diagram of the TCA provided in the 2014 Geotechnical Inspection does not show the exposed tailings; the diagram shows the whole area as either covered or underwater which is not accurate.</li><li>A) The Lower Sewage Dam was not repaired nor decanted in a timely manner, contrary to the Inspector’s Direction,</li></ol> |  |  |   |





resulting in a failure to contain effluent within the facility. The Upper Sewage Dam long, lengthwise cracks; one appears to be greater than 0.5 m in depth. These cracks were not noted in 2014. Slumping is noted on the west side of the dam. [Photos 8-10]

B) At the time of the inspection there remained approximately 1.5 m freeboard in the TCA Pond 2. Mr. Beaudoin indicated at the lowest point in the pond wall there was approximately 1.2 m freeboard. 1 m of freeboard is required to be maintained in the facility, and the levels have increased more than 1 m from last year. [Direction 2015-KIT002-EP was issued on July 22 to decant the TCA]. [Photo 11]

C) My observations at the main fuel farm are contrary to those of LMI's consultant in 2014 (*2014 Lupin Fuel Tank Farm Inspection*). Mr. Tong observed water ponding in the main tank farm, and did not observe active seepage at the time of his visit (August 19, 2014). Conversely, I noted that one berm (the cell with two orange tanks, immediately south of the largest berm) contained no ponding water while the berms on either side of it contained significant ponded water. Further, there was a clear seepage channel at the toe of that berm, with water flowing west toward the airstrip. I did not note any other obvious source for the flow of water. [Photos 12-16]

- 5. Erosion of the Lower Sewage Dam, Upper Sewage Dam, and the Tailings Containment structures [Photo 17] was evident at the time of the inspection.
- 6. No signage identifying the monitoring stations was noted.
- 7. Mathieu Beaudouin collected confirmatory water samples on behalf of LMI during the inspection, at the same locations I sampled. I noted that he forgot to wear gloves when he began sampling at LUP-1. LMI has not adhered to the timelines as outlined in the Liquid Waste Management Plan (2013), which has contributed to delays in decanting the facilities.
- 8. No spill report has been filed for the discharge of effluent from the Sewage Lakes prior to decant approval.
- 9. Several items were not addressed in 2014 with respect to the findings of the 2014 inspection. At the time of the 2015 inspection, these requirements have not yet been addressed. They are itemized below.
- 10. The geotechnical inspection occurred on September 15, 2014. LMI had not, at the time of this inspection, implemented the recommendations from the report, despite a Direction that was issued to the company indicating that any recommended repairs were to be carried out 'without delay'. At the time of this inspection, there was a failure of the dam to contain the effluent within Lower Sewage Lake.

SECTION 2



Comments



Non-Compliance with Act or Licence



Action Required

**Non-comprehensive list – prioritized for the matters most relevant and requiring to be addressed immediately.**

**2AM-LUP0914:**

- Part B Item 14: Failure to observe the Liquid Waste Management Plan.
- Part D Item 4: Failure to carry out adequate inspections of water management structures.
- Part E Item 6(d): Failure to immediately address erosion of the TCA.
- Part H Item 8: Failure to report an unauthorized discharge of effluent.
- Part J Item 8: Failure to undertake additional monitoring as requested by the Inspector.

**NWB Emergency Amendment motion 2014-P11-12-03:**

To "...preserve the necessary freeboard space and maintain the integrity of the Facilities, before and/or during 2015 freshet period, in accordance with the terms and conditions of Part E, Items 8 and 10 in Licence 2AM-LUP0914 and all associated monitoring and reporting obligations."

**Inspector's Direction Dated September 8, 2014:**

- 1. Failure to maintain the facility at a level that is consistent with safe operation.
- 2. Failure to implement recommendations of the 2014 Geotechnical Inspection with respect the Sewage Lakes Facilities.

**Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002**

- 12(1) Deposit of waste in contravention of a licence.
- 12(3) Failure to report a deposit of waste to an inspector.
- 86(4) Failure to furnish information as requested by an inspector for purposes of an inspection.
- 90(1) Failure to comply with a direction.
- 90(2)(a) Contravention of a Type A licence.





|  |                                   |   |   |
|--|-----------------------------------|---|---|
| SECTION 3  | <input type="checkbox"/> Comments | <input type="checkbox"/> Non-Compliance with Act or Licence | <input checked="" type="checkbox"/> Action Required |
| <p>Outstanding requirements from 2014 Inspection:</p> <ol style="list-style-type: none"><li>1. Hazardous Waste Inventory – <b>August 31 2015</b> (As per LMI’s commitment of February 23, 2015).</li><li>2. Sampling outside TCA: documentation and assessment showing that the material outside the TCA is esker material and not tailings – report to be received by Inspector by <b>September 30, 2015</b>. Confirmation that this work has been/is being conducted and that LMI will provide the report by September 30, 2015 is requested by <b>August 31, 2015</b>.</li><li>3. Geotechnical inspection of Waste Containment Areas – report to be received by Inspector by <b>October 31, 2015</b>.</li><li>4. Cleanup of Spill 12-306 (Satellite Tank Farm) - LMI is to complete removal of contaminated material by <b>August 31, 2015</b> and provide a report to the Inspector detailing its 2015 activities by <b>September 30, 2015</b> (As per LMI’s commitment of February 23, 2015).</li></ol> <p>Let it be noted that these deadlines have now been extended by a year, with the exception of no.2 which is outstanding since <u>2012</u>. I am confused by LMI’s approach to site maintenance and compliance issues. While last year LMI focussed on the risks to the Sewage Lakes facility, this year while the situation was much worse, there was no urgency in LMI’s actions to address the overtopping and the degradation of the facility. While LMI has chosen to only visit the site for day-trips until full use of the camp is secured, this does not excuse LMI of the responsibility of carrying out any and all obligations of the licence, past inspections, and the Directions. Additionally, LMI should ensure to undertake the activities earlier than last year, in order to avoid another year’s delay due to snowfall. I made it very clear to Ms. Lewis while on-site that the sampling outside the TCA was to be completed this year with no excuses. Let it also be noted that as per Part H, item 8 of the licence, any spills or imminent risk of spills/unauthorized discharges are to be reported to the inspector immediately and the Spill Contingency Plan is to be implemented.</p> <p>Additional requirements for 2015 include the fulfilment of the 2014 Inspector’s Direction and the recent 2015 Direction (2015-KIT002-EP) dated July 22, 2015; and full compliance with the monitoring requirements of 2AM-LUP0914, particularly with respect to both the Sewage Lakes Facilities and the Tailings Containment Area discharges. Failure to meet other requirements of the licence and approved plans will be addressed in due course.</p> |                                   |   |   |

|                            |                            |
|----------------------------|----------------------------|
| Licensee or Representative | Inspector’s Name           |
| -                          | Eva Paul                   |
| Signature                  | Signature                  |
| -                          | <i>Sent electronically</i> |
| Date                       | Date                       |
| -                          | 05/08/2015                 |

Att: Photo Log

CC: Phyllis Beaulieu, Manager of Licensing, NWB  
Erik Allain, Manager of Field Operations, AANDC  
Tracey McCaie, Manager, Lands Administration, AANDC  
Baba Pedersen, Kitikmeot RMO, AANDC





PHOTO LOG

| Date             | Camera         | Inspector                     | Authorization            |
|------------------|----------------|-------------------------------|--------------------------|
| 14/07/2015       | SONY DSC-HX50V | Eva Paul                      | 2AM-LUP0914/8WLC-LUP1516 |
| Photo Log # 1    |                | Location (NAD 83 DD MM SS.SS) |                          |
| Photo # DSC02950 |                | (taken while flying)          |                          |



**Description:** Aerial view of south end of Lower Sewage Dam. Arrows demonstrating flow of effluent are added for illustrative purposes.

|                  |                               |
|------------------|-------------------------------|
| Photo Log # 2    | Location (NAD 83 DD MM SS.SS) |
| Photo # DSC03122 | N65°45'28.96" W111°12'55.92"  |



**Description:** Compromised section of Lower Sewage Dam. Effluent was trickling over this section at the time of the inspection in the direction of the arrow. It is suspected that the flow was greater prior to the inspection. Contents of LSL are pushed onto the berm (circled area).





Photo Log # 3

Photo # DSC03126

Location (NAD 83 DD MM SS.SS)

N65°45'27.55" W111°12'26.41"



**Description:** South end of Lower Sewage Dam looking south. Effluent is flowing around the end of the dam.

Photo Log # 4

Photo # DSC02924

Location (NAD 83 DD MM SS.SS)

(taken while flying)



**Description:** Aerial view of Cell 3 looking roughly north. Uncovered and exposed tailings shown in outlined area. Yellow marker denotes approximate location where Photo 5 was taken.





Photo Log # 5

Location (NAD 83 DD MM SS.SS)

Photo #DSC03099

N65°43'20.99" W111°17'01.49"



**Description:** View of the uncovered tailings taken from the north side near K Dam, looking south-east. Approximate location shown in Photo 4. I proceeded to walk across the tails southwards towards the water.

Photo Log # 6

Location (NAD 83 DD MM SS.SS)

Photo # DSC03101

Unrecorded



**Description:** Cracked surface of tailings. Numerous animal tracks were visible.





Photo Log # 7

Location (NAD 83 DD MM SS.SS)

Photo # DSC03103

N65°43'14.27" W111°16'49.48"



Description: Shiny metallic flakes visible on the surface of the exposed tailings.

Photo Log # 8

Location (NAD 83 DD MM SS.SS)

Photo # DSC03111

Unrecorded



Description: View of Upper Sewage Dam facing southward away from the mine site. Cracks visible in dam that were not noted in 2014.





Photo Log # 9

Photo # DSC03113

Location (NAD 83 DD MM SS.SS)

N65°45'34.59" W111°13'56.63"



Description: Close-up of large crack in Upper Sewage Dam estimated to be greater than 0.5 m deep.

Photo Log # 10

Photo # DSC03115

Location (NAD 83 DD MM SS.SS)

N65°45'34.68" W111°13'57.11"



Description: Upper Sewage Dam looking north towards mine site. Slumping visible on the west (left) side of the dam.





Photo Log # 11

Location (NAD 83 DD MM SS.SS)

Photo # DSC02936

(taken while flying)



**Description:** Aerial view of “N” Dam and Pond 2 looking south-west. Pondwater from Pond 2 has surpassed “N” Dam (circled in red).

Photo Log # 12

Location (NAD 83 DD MM SS.SS)

Photo # DSC03153

N65°45’49.73” W111°14’14.18”



**Description:** Main tank farm berm, looking west. South-most cell is holding water, the central cell (shown on right) is not.





Photo Log # 13

Location (NAD 83 DD MM SS.SS)

Photo # DSC03167

N65°45'49.74" W111°14'20.10"



**Description:** West berm of the fuel farm looking roughly North. Note dry cell in foreground and water ponded in the larger cell (orange reflection of tanks off water). Note the orange spray paint down-slope to the left for reference in Photos 14 and 15.

Photo Log # 14

Location (NAD 83 DD MM SS.SS)

Photo # DSC03168

N65°45'49.90" W111°14'20.10



**Description:** Note the flow path of water down-hill from the orange paint. The area is otherwise dry. Photos 15 and 16 are taken from point 't'.





Photo Log # 15

Photo # DSC03170

Location (NAD 83 DD MM SS.SS)

N65°45'50.34" W111°14'19.79"



Description: Flow of water down-slope from point 't'.

Photo Log # 16

Photo #DSC03169

Location (NAD 83 DD MM SS.SS)

N65°45'50.34" W111°14'19.79"



Description: Looking into the berm from point 't'.





Photo Log # 17

Location (NAD 83 DD MM SS.SS)

Photo #DSC03073

N65°43'27.56" W111°18'11.73"



Description: View of eroded internal TCA dam.





**INSPECTOR'S DIRECTION**  
**Pursuant to Section 87(1) of the *Nunavut Waters***  
**and *Nunavut Surface Rights Tribunal Act, 2002***

22 July 2015

2015-KIT002-EP

**ISSUED TO: Lupin Mines Incorporated**

Attn: Patrick Downey, President and CEO  
#1204 – 700 West Pender Street  
Vancouver, BC V6V 1G8

**RE: *Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002***  
**INSPECTOR'S DIRECTION**

---

This document constitutes an Inspector's Direction to Lupin Mines Inc., pursuant to subsection 87(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*, hereinafter referred to as the "Act".

**REASONABLE GROUNDS FOR BELIEF**

I, Eva Paul, an Inspector designated by the Minister of the Aboriginal Affairs and Northern Development Canada under subsection 85(1) of the Act, have reasonable grounds to believe:

That, pursuant to section 87(a)(iii) of the Act, there may be a failure of a work related to the use of waters or the deposit of waste, AND;

That, pursuant to section 87(1)(b) of the Act, the adverse effects of that failure may cause, a danger to persons, property or the environment.

It is my information and belief that:

1. Lupin Mines Incorporated ("LMI") holds the type 'A' water licence for Lupin Mine, 2AM-LUP0914 (the "Licence"). This licence expired on March 31 2014. On May 11, 2015, a renewal licence was issued by the Nunavut Water Board (NWB) for the Minister's approval, however, this approval was not granted.
2. In the absence of a valid water licence, LMI has no authority to use water or deposit waste in relation to Lupin Mine.
3. LMI received two temporary authorizations: an emergency amendment to 2AM-LUP0914 valid to August 19 2015, for discharge of the sewage lakes facility only, and 8WLC-LUP1516 valid to June 10 2016, for the establishment of a separate camp. However, neither of these temporary solutions permits the required discharge from the TCA, nor do they allow for use of the existing water use and waste disposal facilities.
4. On July 3, 2015 LMI wrote a letter to the Minister requesting that he reverse his decision to withhold approval of the new type 'A' water licence, 2AM-LUP1520, indicating that without legal authority to discharge the Tailings Containment Area (TCA), there is a "severe risk of an uncontrolled discharge of effluent to the surrounding lands and receiving waters"... "in the very near term".
5. Clarification was immediately sought of LMI by the Inspector of the quantity and immediacy of the risk. LMI indicated that the original figure of 3,000,000L was incorrect and the correct volume to be discharged was 3,000,000m<sup>3</sup>, and that while there is no risk of imminent breach, that the TCA must be discharged in 2015 to prevent damage to the facility.
6. On July 10, 2015 a work plan was requested of LMI by AANDC and the Nunavut Water Board (NWB) to describe in detail the personnel required and the work to be carried out to mitigate the risk to this facility and the environment.
7. On July 16, 2015 LMI submitted to AANDC the requested plan entitled "*Appendix A: Tailings Facility 2015 Work Plan*", which details the personnel required and the work required to prepare, treat, sample, and discharge water from the TCA in accordance with requirements set by the Nunavut Water Board and by Environment Canada's *Metal Mining Effluent Regulations*, and the time it will take to do so.





## MEASURES TO BE TAKEN

Pursuant to subsection 87(1) of the Act, I hereby direct Lupin Mines Incorporated to:

1. Immediately take the steps necessary to mitigate the risk to the TCA and to the environment. This shall be carried out in compliance with Part E of the expired 2AM-LUP0914 licence, the 2013 Liquid Waste Management Plan, and the 2015 Work Plan submitted to AANDC on July 16, 2015. In the case of conflict of dates or timings between the latter two documents, the Work Plan will supersede.
2. Implement fully the monitoring program as described in 2AM-LUP0914 (expired) with respect to the discharge (Stations LUP-10, LUP-20, LUP-21, LUP-22, LUP-24, and LUP-25) as identified in step 10 of the Work Plan.

LMI may accommodate up to 30 personnel at Lupin Mine as necessary to carry out the above tasks and may utilize the water facilities. However, there is an Inspector's Direction (issued September 8, 2014) that requires LMI to maintain the facility at a level that is consistent with safe operation, and to implement the recommendations in the 2014 geotechnical engineer's report "2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020". The sewage lakes may only be utilized

- a) once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out;
- b) the effluent levels within those lakes is decanted to allow operation within the limits contained Part E of water licence 2AM-LUP0914; AND,
- c) the September 8, 2014 Inspector's Direction is subsequently revoked.

An alternate method of sewage disposal will be required in the interim. In addition to the personnel required for the TCA discharge, LMI may accommodate extra persons to complete the work on the Lower Sewage Dam.

If you fail to comply with this Direction, an AANDC Water Resources Officer duly appointed under the Act may take the measures referred to and may, for that purpose, enter any place in Nunavut, other than a place that is designed to be used and is being used as a permanent or temporary private dwelling-place. Any portion of the reasonable costs incurred by Her Majesty in right of Canada for such action may be recovered as a debt due to Her Majesty from you.

Failure to comply fully or in part with an Inspector's Direction constitutes an offence under subsection 90 (1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and may entail, upon summary conviction, a fine of \$100,000 or to imprisonment for a term of one year, or both.

Further pursuant to subsection 90 (4) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, each day on which the Inspector's Direction is not complied with shall be considered a separate offence.

## THE LAW

*Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c. 10*

### Definitions

4. "waste" means any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means, and includes
  - (a) any substance or water that, for the purposes of the Canada Water Act, is deemed to be waste;
  - (b) any substance or class of substances specified by the regulations;
  - (c) water containing any substance or class of substances in a quantity or concentration that is equal to or greater than that prescribed by the regulations; and





- (d) water that has been subjected to a treatment or change described by the regulations.

“waters” means, except for the purposes of subsection 41(2), inland waters, whether in a liquid or solid state, on or below the surface of land.

## **Prohibitions**

### **Use of waters**

11. (1) Subject to subsection (2), no person shall use, or permit the use of, waters in Nunavut except in accordance with the conditions of a licence.

### **Deposit of Waste**

12. (1) Subject to subsection (2) and except in accordance with the conditions of a licence, no person shall deposit or permit the deposit of waste

- (a) in waters in Nunavut; or
- (b) in any other place in Nunavut under conditions in which the waste, or any other waste that results from the deposit of that waste, may enter waters in Nunavut.

## **Duty to report deposits**

12. (3) Where waste is deposited in contravention of this section, every person who owns or has the charge, management or control of the waste, or who caused or contributed to the deposit, shall, subject to the regulations, without delay report the deposit to an inspector.

## **Expiry or cancellation**

46. The expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence.

## **Remedial measures**

87. (1) An inspector may direct any person to take such reasonable measures as the inspector may specify, including the cessation of an activity, to prevent the use of waters or the deposit of waste or the failure of a work related to the use of waters or the deposit of waste, or to counteract, mitigate or remedy the resulting adverse effects, where the inspector believes, on reasonable grounds,

- (a) that
  - (i) waters have been or may be used in contravention of subsection 11(1) or of a condition of a licence,
  - (ii) waste has been or may be deposited in contravention of subsection 12(1) or of a condition of a licence, or
  - (iii) there has been, or may be, a failure of a work related to the use of waters or the deposit of waste, whether or not there has been compliance with any standards prescribed by the regulations or imposed by a licence; and
- (b) that the adverse effects of that use, deposit or failure are causing, or may cause, a danger to persons, property or the environment.

## **Powers of inspector**

87. (4) Where a person fails to comply with a direction given under subsection (1), the inspector may take the measures referred to in that subsection and may, for that purpose, enter any place in Nunavut, other than a place that is designed to be used and is being used as a permanent or temporary private dwelling-place.

## **Recovery of Her Majesty's costs**

87. (5) Any portion of the reasonable costs incurred by Her Majesty in right of Canada under subsection (4) that is not recoverable from the security furnished and maintained under section





76 may be recovered as a debt due to Her Majesty from the person to whom the direction was given.

### **Offences and Punishment**

90. (1) Any person who contravenes subsection 11(1) or section 12, or fails to comply with subsection 11(3) or with a direction given by an inspector under subsection 87(1), is guilty of an offence and liable on summary conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding one year, or to both.

90. (2) A licensee holding a type A licence who

- (a) contravenes any condition of the licence, where the contravention does not constitute an offence under section 91, or
- (b) fails, without reasonable excuse, to furnish or maintain security as required under subsection 76(1)

is guilty of an offence and liable on summary conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding one year, or to both.

### **Continuing offences**

90. (4) Where an offence under this section is committed on or continued for more than one day, it is deemed to be a separate offence for each day on which it is committed or continued.

### **Action to enjoin not prejudiced by prosecution**

93. (1) Notwithstanding that a prosecution has been instituted in respect of an offence under section 90, the Attorney General of Canada may commence and maintain proceedings to enjoin conduct that constitutes an offence under that section.

### **Civil remedy not affected**

93. (2) No civil remedy for any act or omission is affected because the act or omission is an offence under this Part.

## **CONCLUSION**

This Direction is **WITHOUT PREJUDICE** to any further course of action that AANDC may take with respect to any contravention of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, including an amended or subsequent Inspector's Direction, prosecution or injunction under any Act.

AANDC will be conducting further inspections of the site to verify compliance under the Act and with the Inspector's Direction(s).

This Direction is issued in accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. The complete text of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* is available at the Department of Justice website: <http://laws.justice.gc.ca/en/search>. The complete text of the Water Licence is available at the Nunavut Water Board Public Registry, which may be accessed through the Board's website: <http://www.nunavutwaterboard.org/en/>.

If you require further information, have any questions or concerns, or wish respond to the alleged facts contained in this Direction, please call or write to the undersigned at (867) 975-4548 or [Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca). Your comments will be considered, and where appropriate, a response will be provided.

Eva Paul

Inspector

sent electronically

Inspector's Signature

Cc: Phyllis Beaulieu, Manager of Licensing, Nunavut Water Board  
Erik Allain, Manager of Field Operations, AANDC  
Terry Sewell, A/Regional Director General, Nunavut Regional Office, AANDC





---

## [Licensing] Documentation on Public Registry.

---

Eva Paul <Eva.Paul@aandc-aadnc.gc.ca>

Tue, Aug 11, 2015 at 2:25 PM

To: "Beaulieu, Phyllis" <phyllis.beaulieu@nwb-oen.ca>, "Ikkutisluk, Robin" <robin.ikkutisluk@nwb-oen.ca>, "Porter, Ida" <ida.porter@nwb-oen.ca>

Hi Ida, and thank you. The correspondence below is from July 29 onwards.  
Eva

>>> Ida Porter <ida.porter@nwb-oen.ca> 8/11/2015 4:18 PM >>>

[Quoted text hidden]

----- Forwarded message -----

From: Eva Paul <Eva.Paul@aandc-aadnc.gc.ca>

To: Karyn Lewis <klewis@elginmining.com>, Patrick Downey <pdowney@elginmining.com>

Cc: Erik Allain <Erik.Allain@aandc-aadnc.gc.ca>, Terry Sewell <Terry.Sewell@aandc-aadnc.gc.ca>, "Cavanagh Norm" <Norm.Cavanagh@justice.gc.ca>, "Norm.Cavanagh@justice.gc.ca", Christine Kowbel <ckowbel@lawsonlundell.com>, licensing@nwb-oen.ca

Date: Wed, 29 Jul 2015 12:07:18 -0400

Subject: Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. *"...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.*
2. *A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: *"...to preserve the necessary freeboard space and maintain the integrity of the Facilities."* As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it



is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.

I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction (2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau  
Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada  
Nunavut Regional Office | Bureau régional du Nunavut  
Building 969, PO Box 2200 | Édifice 969, CP 2200  
Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548  
Cell | Mobile: 867-222-6490  
Fax | Téléc. : 867-979-6445  
[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis



---

**From:** Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]  
**Sent:** July-23-15 1:55 PM  
**To:** Karyn Lewis  
**Cc:** Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

**From:** Karyn Lewis  
**Sent:** Wednesday, July 22, 2015 10:57 PM  
**To:** Eva Paul  
**Cc:** Patrick Downey; Licensing Department  
**Subject:** Lupin - Sewage Lagoon Sample Results

Eva,

Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.

Karyn Lewis



----- Forwarded message -----

From: Eva Paul <Eva.Paul@aandc-aadnc.gc.ca>

To: Karyn Lewis <klewis@elginmining.com>, Patrick Downey <pdowney@elginmining.com>

Cc: Erik Allain <Erik.Allain@aandc-aadnc.gc.ca>, Terry Sewell <Terry.Sewell@aandc-aadnc.gc.ca>, "Cavanagh\ Norm" <Norm.Cavanagh@justice.gc.ca> <Norm.Cavanagh@justice.gc.ca>, Christine Kowbel <ckowbel@lawsonlundell.com>, licensing@nwb-oen.ca

Date: Fri, 31 Jul 2015 13:41:24 -0400

Subject: RE: Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

In order to ensure we're not overlooking any details, I'll copy and paste from the original documents:

As per the September 8 2014 Inspector's Direction:

*"1. ...to immediately decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.  
2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

Thus, the 2014 Direction requires that the repairs to the facility be carried out prior to use. No repairs were recommended to the upper dam; only to the lower dam. It was not undertaken in 2014, which necessitated further direction in 2015.

As per the July 22 2015 Inspector's Direction:

*"The sewage lakes may only be utilized:*

- a) once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out;*
- b) the effluent levels within those lakes is decanted to allow operation within the limits contained Part E of water licence 2AM-LUP0914; AND,*
- c) the September 8, 2014 Inspector's Direction is subsequently revoked."*

Unauthorized discharges from this facility have been documented since 2012 and it is now time to fix the problem, properly and completely. My expectation is that the full suite of recommendations given by Mr. Tong are implemented: immediately to the lower dam, and, if it should prove necessary, to the upper dam prior to the end of this field season.

In order to revoke the 2014 Direction, you are correct that AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report. Thank you for providing a potential solution. I would ask that while on-site, Mr. Tong again re-assess both the lower and upper dams. I am still working on the inspection report from July, however, while we were there I noted that the upper dam showed tension cracks that were not in evidence in 2014. So, it would probably be easiest if you have him assess it while he's on-site, rather than having to return at a later date, causing potential further delays.

Following the inspection, I would ask that you provide Mr. Tong's report, certified and unedited, that we may review it. Also, if you would like to expedite the process, you may authorize Mr. Tong to correspond directly with me or my representative, so that any questions we have may be answered more quickly. I will do my best to ensure that it is reviewed as soon as possible at our end. When we are satisfied with the work and the information provided, LMI will be notified that the Direction is revoked and the facility may be put into service.



AANDC will follow up with an on-site inspection as indicated in my last correspondence. However, a quick turn-around of Mr. Tong's report and/or direct discussion with Mr. Tong may provide enough information to revoke the Direction prior to the site visit. We all hope to reach a resolution to this issue as soon as possible.

Thank you,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau  
Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada  
Nunavut Regional Office | Bureau régional du Nunavut  
Building 969, PO Box 2200 | Édifice 969, CP 2200  
Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548  
Cell | Mobile: 867-222-6490  
Fax | Téléc. : 867-979-6445  
[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aandc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/30/2015 7:54 PM >>>

Eva,

Thanks for your email. We agree with you that we should be focusing on working together to reach a satisfactory conclusion. While we disagree with a number of statements in your email, we find that there is little to be gained by debating these points. We suggest it would be more productive for us to meet and discuss some of those issues in person at some future date after this summer's field season.

We wish to confirm our next steps with you. In your email, you said AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report before LMI can use the facility. That work should be completed by Monday, August 3<sup>rd</sup>. We suggest that Mr. Tong, P.Eng., the author of the 2014 Sewage Dam Inspection Report, attend site to inspect the work and, subject to the results of his inspection, confirm its compliance with his recommendations. Mr. Tong is scheduled to attend site on Tuesday, August 4<sup>th</sup> and we will provide AANDC with a copy of his Lower Sewage Dam Inspection report as soon as we receive it.

We look forward to continuing to work with you on this important matter.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340



**From:** Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]  
**Sent:** July-29-15 9:07 AM  
**To:** Karyn Lewis; Patrick Downey  
**Cc:** Erik Allain; Terry Sewell; Cavanagh Norm <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>; Christine Kowbel; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. *"...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.*
2. *A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: *"...to preserve the necessary freeboard space and maintain the integrity of the Facilities."* As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.



I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction (2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : [867-975-4548](tel:867-975-4548)

Cell | Mobile: [867-222-6490](tel:867-222-6490)

Fax | Téléc. : [867-979-6445](tel:867-979-6445)

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was



allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

---

**From:** Eva Paul [<mailto:Eva.Paul@aandc-aadnc.gc.ca>]  
**Sent:** July-23-15 1:55 PM  
**To:** Karyn Lewis  
**Cc:** Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

**From:** Karyn Lewis  
**Sent:** Wednesday, July 22, 2015 10:57 PM  
**To:** Eva Paul  
**Cc:** Patrick Downey; Licensing Department  
**Subject:** Lupin - Sewage Lagoon Sample Results



Eva,

Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

----- Forwarded message -----

From: Karyn Lewis <klewis@elginmining.com>

To: Eva Paul <Eva.Paul@aandc-aadnc.gc.ca>, Patrick Downey <pdowney@elginmining.com>

Cc: Erik Allain <Erik.Allain@aandc-aadnc.gc.ca>, Terry Sewell <Terry.Sewell@aandc-aadnc.gc.ca>, "Cavanagh Norm" <Norm.Cavanagh@justice.gc.ca> <Norm.Cavanagh@justice.gc.ca>, Christine Kowbel <ckowbel@lawsonlundell.com>, "licensing@nwb-oen.ca" <licensing@nwb-oen.ca>

Date: Thu, 30 Jul 2015 23:54:07 +0000

Subject: RE: Recent events at Lupin Mine (2AM-LUP0914, amended)

Eva,

Thanks for your email. We agree with you that we should be focusing on working together to reach a satisfactory conclusion. While we disagree with a number of statements in your email, we find that there is little to be gained by debating these points. We suggest it would be more productive for us to meet and discuss some of those issues in person at some future date after this summer's field season.

We wish to confirm our next steps with you. In your email, you said AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report before LMI can use the facility. That work should be completed by Monday, August 3<sup>rd</sup>. We suggest that Mr. Tong, P.Eng., the author of the 2014 Sewage Dam Inspection Report, attend site to inspect the work and, subject to the results of his inspection, confirm its compliance with his recommendations. Mr. Tong is scheduled to attend site on Tuesday, August 4<sup>th</sup> and we will provide AANDC with a copy of his Lower Sewage Dam Inspection report as soon as we receive it.

We look forward to continuing to work with you on this important matter.

Karyn Lewis

Lupin Mines Incorporated



---

**From:** Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]  
**Sent:** July-29-15 9:07 AM  
**To:** Karyn Lewis; Patrick Downey  
**Cc:** Erik Allain; Terry Sewell; Cavanagh Norm <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>; Christine Kowbel; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. *"...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.*
2. *A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: *"...to preserve the necessary freeboard space and maintain the integrity of the Facilities."* As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a



requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.

I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction (2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548

Cell | Mobile: 867-222-6490

Fax | Téléc. : 867-979-6445

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the



lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

---

**From:** Eva Paul [<mailto:Eva.Paul@aandc-aadnc.gc.ca>]  
**Sent:** July-23-15 1:55 PM  
**To:** Karyn Lewis  
**Cc:** Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

**From:** Karyn Lewis  
**Sent:** Wednesday, July 22, 2015 10:57 PM  
**To:** Eva Paul  
**Cc:** Patrick Downey; Licensing Department  
**Subject:** Lupin - Sewage Lagoon Sample Results

Eva,

Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)

----- Forwarded message -----

From: Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)>

To: Eva Paul <[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)>, Patrick Downey <[pdowney@elginmining.com](mailto:pdowney@elginmining.com)>

Cc: Erik Allain <[Erik.Allain@aandc-aadnc.gc.ca](mailto:Erik.Allain@aandc-aadnc.gc.ca)>, Terry Sewell <[Terry.Sewell@aandc-aadnc.gc.ca](mailto:Terry.Sewell@aandc-aadnc.gc.ca)>, "Cavanagh Norm" <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)> <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>, Christine Kowbel <[ckowbel@lawsonlundell.com](mailto:ckowbel@lawsonlundell.com)>, "licensing@nwb-oen.ca" <[licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)>

Date: Tue, 11 Aug 2015 02:24:54 +0000

Subject: RE: Recent events at Lupin Mine (2AM-LUP0914, amended)

Eva,

Please find attached a report from Alvin Tong, P.Eng. We are providing Mr. Tong's letter to you to satisfy condition (a) on page 2 of your Inspector's Direction dated July 22, 2015 for the use of the sewage lagoons at Lupin. We will advise you once we have completed decanting the sewage lagoons.

Regards,

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)



**From:** Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]  
**Sent:** July-31-15 10:41 AM  
**To:** Karyn Lewis; Patrick Downey  
**Cc:** Erik Allain; Terry Sewell; Cavanagh Norm<[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca); Christine Kowbel;  
[licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
**Subject:** RE: Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

In order to ensure we're not overlooking any details, I'll copy and paste from the original documents:

As per the September 8 2014 Inspector's Direction:

*"1. ...to immediately decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.  
2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

Thus, the 2014 Direction requires that the repairs to the facility be carried out prior to use. No repairs were recommended to the upper dam; only to the lower dam. It was not undertaken in 2014, which necessitated further direction in 2015.

As per the July 22 2015 Inspector's Direction:

*"The sewage lakes may only be utilized:  
a) once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out;  
b) the effluent levels within those lakes is decanted to allow operation within the limits contained Part E of water licence 2AM-LUP0914; AND,  
c) the September 8, 2014 Inspector's Direction is subsequently revoked."*

Unauthorized discharges from this facility have been documented since 2012 and it is now time to fix the problem, properly and completely. My expectation is that the full suite of recommendations given by Mr. Tong are implemented: immediately to the lower dam, and, if it should prove necessary, to the upper dam prior to the end of this field season.

In order to revoke the 2014 Direction, you are correct that AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report. Thank you for providing a potential solution. I would ask that while on-site, Mr. Tong again re-assess both the lower and upper dams. I am still working on the inspection report from July, however, while we were there I noted that the upper dam showed tension cracks that were not in evidence in 2014. So, it would

probably be easiest if you have him assess it while he's on-site, rather than having to return at a later date, causing potential further delays.

Following the inspection, I would ask that you provide Mr. Tong's report, certified and unedited, that we may review it. Also, if you would like to expedite the process, you may authorize Mr. Tong to correspond directly with me or my representative, so that any questions we have may be answered more quickly. I will do my best to ensure that it is reviewed as soon as possible at our end. When we are satisfied with the work and the information provided, LMI will be notified that the Direction is revoked and the facility may be put into service.

AANDC will follow up with an on-site inspection as indicated in my last correspondence. However, a quick turn-around of Mr. Tong's report and/or direct discussion with Mr. Tong may provide enough information to revoke the Direction prior to the site visit. We all hope to reach a resolution to this issue as soon as possible.

Thank you,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548

Cell | Mobile: 867-222-6490

Fax | Téléc. : 867-979-6445

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/30/2015 7:54 PM >>>



Eva,

Thanks for your email. We agree with you that we should be focusing on working together to reach a satisfactory conclusion. While we disagree with a number of statements in your email, we find that there is little to be gained by debating these points. We suggest it would be more productive for us to meet and discuss some of those issues in person at some future date after this summer's field season.

We wish to confirm our next steps with you. In your email, you said AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report before LMI can use the facility. That work should be completed by Monday, August 3<sup>rd</sup>. We suggest that Mr. Tong, P.Eng., the author of the 2014 Sewage Dam Inspection Report, attend site to inspect the work and, subject to the results of his inspection, confirm its compliance with his recommendations. Mr. Tong is scheduled to attend site on Tuesday, August 4<sup>th</sup> and we will provide AANDC with a copy of his Lower Sewage Dam Inspection report as soon as we receive it.

We look forward to continuing to work with you on this important matter.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

---

**From:** Eva Paul [<mailto:Eva.Paul@aandc-aadnc.gc.ca>]

**Sent:** July-29-15 9:07 AM

**To:** Karyn Lewis; Patrick Downey

**Cc:** Erik Allain; Terry Sewell; Cavanagh Norm <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>; Christine Kowbel; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Subject:** Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. *"...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with*

- Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.*
2. *A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."*

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: "...to preserve the necessary freeboard space and maintain the integrity of the Facilities." As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.

I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction (2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,



*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548

Cell | Mobile: 867-222-6490

Fax | Téléc. : 867-979-6445

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

---

**From:** Eva Paul [<mailto:Eva.Paul@aandc-aadnc.gc.ca>]

**Sent:** July-23-15 1:55 PM

**To:** Karyn Lewis

**Cc:** Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Subject:** Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

**From:** Karyn Lewis

**Sent:** Wednesday, July 22, 2015 10:57 PM

**To:** Eva Paul

**Cc:** Patrick Downey; Licensing Department

**Subject:** Lupin - Sewage Lagoon Sample Results

Eva,

Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340



Lupin\_1CL008.003\_Letter to LMI\_20150807\_AT\_PMH\_FINAL.PDF  
1932K





Phyllis Beaulieu &lt;phyllis.beaulieu@nwb-oen.ca&gt;

---

**[Licensing] RE: Recent events at Lupin Mine (2AM-LUP0914, amended)**

---

Karyn Lewis &lt;klewis@elginmining.com&gt;

Thu, Jul 30, 2015 at 5:54 PM

To: Eva Paul &lt;Eva.Paul@aandc-aadnc.gc.ca&gt;, Patrick Downey &lt;pdowney@elginmining.com&gt;

Cc: Erik Allain &lt;Erik.Allain@aandc-aadnc.gc.ca&gt;, Terry Sewell &lt;Terry.Sewell@aandc-aadnc.gc.ca&gt;, "Cavanagh Norm" &lt;Norm.Cavanagh@justice.gc.ca&gt; &lt;Norm.Cavanagh@justice.gc.ca&gt;, Christine Kowbel &lt;ckowbel@lawsonlundell.com&gt;, "licensing@nwb-oen.ca" &lt;licensing@nwb-oen.ca&gt;

Eva,

Thanks for your email. We agree with you that we should be focusing on working together to reach a satisfactory conclusion. While we disagree with a number of statements in your email, we find that there is little to be gained by debating these points. We suggest it would be more productive for us to meet and discuss some of those issues in person at some future date after this summer's field season.

We wish to confirm our next steps with you. In your email, you said AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report before LMI can use the facility. That work should be completed by Monday, August 3<sup>rd</sup>. We suggest that Mr. Tong, P.Eng., the author of the 2014 Sewage Dam Inspection Report, attend site to inspect the work and, subject to the results of his inspection, confirm its compliance with his recommendations. Mr. Tong is scheduled to attend site on Tuesday, August 4<sup>th</sup> and we will provide AANDC with a copy of his Lower Sewage Dam Inspection report as soon as we receive it.

We look forward to continuing to work with you on this important matter.

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)

---

**From:** Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]**Sent:** July-29-15 9:07 AM**To:** Karyn Lewis; Patrick Downey**Cc:** Erik Allain; Terry Sewell; Cavanagh Norm <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>; Christine Kowbel; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)**Subject:** Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. "...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.
2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: "...to preserve the necessary freeboard space and maintain the integrity of the Facilities." As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.

I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction



(2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : [867-975-4548](tel:867-975-4548)

Cell | Mobile: [867-222-6490](tel:867-222-6490)

Fax | Téléc. : [867-979-6445](tel:867-979-6445)

[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:kewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis

Lupin Mines Incorporated

778-386-7340

---

From: Eva Paul [<mailto:Eva.Paul@aandc-aadnc.gc.ca>]  
Sent: July-23-15 1:55 PM  
To: Karyn Lewis  
Cc: Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
Subject: Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

From: Karyn Lewis  
Sent: Wednesday, July 22, 2015 10:57 PM  
To: Eva Paul  
Cc: Patrick Downey; Licensing Department  
Subject: Lupin - Sewage Lagoon Sample Results

Eva,

Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.



Karyn Lewis

Lupin Mines Incorporated

778-386-7340



Phyllis Beaulieu <phyllis.beaulieu@nwb-oen.ca>

---

## [Licensing] RE: Recent events at Lupin Mine (2AM-LUP0914, amended)

1 message

Eva Paul <Eva.Paul@aandc-aadnc.gc.ca>

Fri, Jul 31, 2015 at 11:41 AM

To: Karyn Lewis <klewis@elginmining.com>, Patrick Downey <pdowney@elginmining.com>

Cc: Erik Allain <Erik.Allain@aandc-aadnc.gc.ca>, Terry Sewell <Terry.Sewell@aandc-aadnc.gc.ca>, "Cavanagh Norm" <Norm.Cavanagh@justice.gc.ca> <Norm.Cavanagh@justice.gc.ca>, Christine Kowbel <ckowbel@lawsonlundell.com>, "licensing@nwb-oen.ca" <licensing@nwb-oen.ca>

Hello Karyn,

In order to ensure we're not overlooking any details, I'll copy and paste from the original documents:

As per the September 8 2014 Inspector's Direction:

- "1. ...to immediately decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.
2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."

Thus, the 2014 Direction requires that the repairs to the facility be carried out prior to use. No repairs were recommended to the upper dam; only to the lower dam. It was not undertaken in 2014, which necessitated further direction in 2015.

As per the July 22 2015 Inspector's Direction:

"The sewage lakes may only be utilized:

- a) once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out;
- b) the effluent levels within those lakes is decanted to allow operation within the limits contained Part E of water licence 2AM-LUP0914; AND,
- c) the September 8, 2014 Inspector's Direction is subsequently revoked."

Unauthorized discharges from this facility have been documented since 2012 and it is now time to fix the problem, properly and completely. My expectation is that the full suite of recommendations given by Mr. Tong are implemented: immediately to the lower dam, and, if it should prove necessary, to the upper dam prior to the end of this field season.

In order to revoke the 2014 Direction, you are correct that AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report. Thank you for providing a potential solution. I would ask that while on-site, Mr. Tong again re-assess both the lower and upper dams. I am still working on the inspection report from July, however, while we were there I noted that the upper dam showed tension cracks that were not in evidence in 2014. So, it would probably be easiest if you have him assess it while he's on-site, rather than having to return at a later date, causing potential further delays.

Following the inspection, I would ask that you provide Mr. Tong's report, certified and unedited, that we may review it. Also, if you would like to expedite the process, you may authorize Mr. Tong to correspond directly with me or my representative, so that any questions we have may be answered more quickly. I will do my best to ensure that it is reviewed as soon as possible at our end. When we are satisfied with the work and the information provided, LMI will be notified that the Direction is revoked and the facility may be put into service.

AANDC will follow up with an on-site inspection as indicated in my last correspondence. However, a quick turn-around of Mr. Tong's report and/or direct discussion with Mr. Tong may provide enough information to



revoke the Direction prior to the site visit. We all hope to reach a resolution to this issue as soon as possible.

Thank you,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau  
Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada  
Nunavut Regional Office | Bureau régional du Nunavut  
Building 969, PO Box 2200 | Édifice 969, CP 2200  
Iqaluit, NU X0A 0H0

Phone | Tél. : [867-975-4548](tel:867-975-4548)  
Cell | Mobile: [867-222-6490](tel:867-222-6490)  
Fax | Téléc. : [867-979-6445](tel:867-979-6445)  
[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/30/2015 7:54 PM >>>

Eva,

Thanks for your email. We agree with you that we should be focusing on working together to reach a satisfactory conclusion. While we disagree with a number of statements in your email, we find that there is little to be gained by debating these points. We suggest it would be more productive for us to meet and discuss some of those issues in person at some future date after this summer's field season.

We wish to confirm our next steps with you. In your email, you said AANDC requires confirmation that LMI's work on the lower sewage lagoon complies with the recommendations from the 2014 Sewage Dam Inspection report before LMI can use the facility. That work should be completed by Monday, August 3<sup>rd</sup>. We suggest that Mr. Tong, P.Eng., the author of the 2014 Sewage Dam Inspection Report, attend site to inspect the work and, subject to the results of his inspection, confirm its compliance with his recommendations. Mr. Tong is scheduled to attend site on Tuesday, August 4<sup>th</sup> and we will provide AANDC with a copy of his Lower Sewage Dam Inspection report as soon as we receive it.

We look forward to continuing to work with you on this important matter.

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)

---

From : Eva Paul [mailto:[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)]

Sent: July-29-15 9:07 AM

To: Karyn Lewis; Patrick Downey

Cc: Erik Allain; Terry Sewell; Cavanagh Norm <[Norm.Cavanagh@justice.gc.ca](mailto:Norm.Cavanagh@justice.gc.ca)>; Christine Kowbel; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

Subject: Recent events at Lupin Mine (2AM-LUP0914, amended)

Hello Karyn,

I am writing as a follow-up to the recent July 14, 2015 inspection, and to your e-mail below of July 24:

I have been conducting compliance inspections at Lupin Mine since 2012, and have issued inspection reports following each inspection that identified non-compliance with the water licences. While I have made numerous attempts to accommodate LMI's difficulties in meeting the requirements of the licences and the Act, there remains overall a failure to rectify the deficiencies that have been observed. In September 2014 I issued an Inspector's Direction that required of LMI the following:

1. "...Decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued.
2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay."

LMI did decant the facility in September 2014 following the issuance of the Direction.

The emergency amendment to the water licence as issued August 21, 2014 was issued to LMI for one specific purpose: "...to preserve the necessary freeboard space and maintain the integrity of the Facilities." As you are aware, I attended site on July 14 in order to determine whether compliance has been achieved with the existing licence(s) and the Direction. I found that the requirements of the licence(s) and the Direction have not been met: a) the lagoon had not been maintained at a safe level, and consequently effluent was flowing, unchecked, out of the facility; and b) the repairs recommended in the 2014 Geotechnical Inspection had not been undertaken.

Your e-mail of July 24 (below) indicates to me that perhaps we are suffering from a misunderstanding in terms of terminology. While standing on the Lower Sewage Dam on July 14, we both observed that effluent was both flowing around the side of the dam, and also trickling over a low point in the top of the dam. Your e-mail below states that "the lower sewage dam is not overtopping and there is no failure of a work", in spite of us both having seen it and in spite of having photos that demonstrate that this was, in fact, occurring. Whether it is called 'overtopping', or 'failing to contain the effluent', it is very clear that the Lower Sewage Dam is not fulfilling its intended purpose, and this constitutes a failure. You also state that "The samples weren't tested for oil & grease because we are not required to test for that...", however it is clearly listed as a requirement of Part E item 8 of the effective licence (2AM-LUP0914, amended). It is not at the discretion of the sampler to determine whether or not there is a visible sheen; that is a determination to be made by the objective analyst. Misunderstandings of this nature are far from helpful in our ongoing efforts to work together to achieve compliance within this regulatory framework.



I was relieved to receive your e-mail of July 27, which indicates that LMI is returning to site immediately to complete the discharge and the repairs to the lagoon. A follow-up inspection will be conducted in August by myself or another AANDC inspector, and attended by a Geotechnical Engineer. At this time we hope to be able to confirm compliance with the recommendations that were provided by LMI's consultant in the 2014 Sewage Dam Inspection, in order to authorize use of the facility going forward.

I also expect to return to site in September, to monitor progress with the recently issued July 22 Direction (2015-KIT002-EP) with respect to the Tailings Containment discharge. It is my sincere hope that we can reach a conclusion to these problems within the confines of the inspection process and that matters do not have to escalate any further.

An inspection report for the July 14, 2015 inspection is forthcoming.

Best regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : [867-975-4548](tel:867-975-4548)

Cell | Mobile: [867-222-6490](tel:867-222-6490)

Fax | Téléc. : [867-979-6445](tel:867-979-6445)

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 7/24/2015 11:48 AM >>>

Hi Eva,

Thanks for confirming that the discharge is authorized. As we observed during our joint inspection, the lower sewage dam is not overtopping and there is no failure of a work so we were very surprised that you should include that statement in your correspondence.

As we discussed during the inspection, we have been waiting for the lab work to confirm that discharge was allowed and to organize a crew. We delivered the samples to the lab on July 10<sup>th</sup>, and received the results on July 21<sup>st</sup>, and then had the results reviewed by our consultants by July 22<sup>nd</sup>. We forwarded those results to

you within a day of receiving them ourselves. We weren't able to keep a crew on standby, so we are working to get a competent crew out as soon as possible. We are taking all reasonable measures to comply with the various regulatory requirements, including the Direction dated July 22, 2015

As for oil & grease, there are no lab results. The samples weren't tested for oil & grease because we are not required to test for that, so the reference on the summary table was to the visual observation that no sheen was observed.

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)

---

From: Eva Paul [<mailto:Eva.Paul@aadnc-aadnc.gc.ca>]  
Sent: July-23-15 1:55 PM  
To: Karyn Lewis  
Cc: Erik Allain; Patrick Downey; [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)  
Subject: Re: Lupin - Sewage Lagoon Sample Results

Hi Karyn,

Sorry it's taken me a day to get the attachments you sent downloaded and read; the hazards of being on a mobile device. Although it's a step up from not having wireless at all, as I was without for the last couple of days. Thank you for the results, and the summary table that you attached. I don't see the lab result for Oil and Grease, although you've included it in the summary. Can you please send the report?

As you saw while we were at site on the 15th, the lower sewage dam was overtopping. I'm surprised you don't have arrangements made yet; it is still just as big a deal as it was last year when the emergency amendment was sought. Bigger, in fact, as this constitutes failure of a work. LMI needs to address this immediately. Discharge is authorized as soon as you can get there.

Eva

---

From: Karyn Lewis  
Sent: Wednesday, July 22, 2015 10:57 PM  
To: Eva Paul  
Cc: Patrick Downey; Licensing Department  
Subject: Lupin - Sewage Lagoon Sample Results

Eva,



Please find attached a copy of the lab results for samples from LMI's Sewage Lakes Disposal Facilities at the Lupin Mine. As the samples meet the limits for discharge as set out in paragraph 8 of Part E of our Type A Water Licence, and in accordance with your Direction, we are planning on discharging from the Sewage Lakes either later this week or early next week (as soon as we have confirmed a flight and crew). Once the date is confirmed, we will advise you.

Karyn Lewis

Lupin Mines Incorporated

[778-386-7340](tel:778-386-7340)



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

|  |  |  |                                       |
|--|--|--|---------------------------------------|
| Licensee   |  | Licensee Representative                    |                                       |
| Lupin Mines Inc.                                 |  | Karyn Lewis                                |                                       |
| Licence No. / Expiry                             |  | Representative's Title                     |                                       |
| 2AM-LUP0914(expired)(amended)                    |  |  |                                       |
| Sewage Lakes discharge only to August 19, 2015   |  |  |                                       |
| Land / Other Authorizations                      |  | Land / Other Authorizations                |                                       |
| 8WLC-LUP1516 (June 10, 2016)                     |  |  |                                       |
| Date of Inspection                               |  | Inspector                                  |                                       |
| 14/07/2015                                       |  | Eva Paul                                   |                                       |
| Activities Inspected                             |  |  |                                       |
| <input checked="" type="checkbox"/> Camp         | <input type="checkbox"/> Drilling  | <input checked="" type="checkbox"/> Mining | <input type="checkbox"/> Construction |
| <input type="checkbox"/> Roads/Hauling           | <input checked="" type="checkbox"/> Other: Monitoring and water management | <input type="checkbox"/> Other:            | <input type="checkbox"/> Reclamation  |
| <input checked="" type="checkbox"/> Fuel Storage |  |  |                                       |

| 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  | NA             |             | Water Management Structures  | U                   | 4                  | Storage               | A         |         |
| Flow Measure. Device   | NA             |             | Culverts / Bridges   | A                   |                    | Spills                | U         | 8       |
| Source:  | NA             |             | Drainage   | A                   |                    | Spill Plan            | NI        |         |
| Water Use:   | NA             | 1           | Erosion / Sediment   | U                   | 5                  |                       |           |         |
| Recirculation ( y /n)  | NA             |             | Mitigation Measures  | U                   | 3                  | Administrative        |           |         |
|  |                |             | Reclamation Activities   | U                   | 3                  | Records               | NI        |         |
|  |                |             | Materials Storage  | A                   |                    | Reports               | C         | 3       |
| Waste Disposal   |                |             | Signage  | U                   | 6                  | Plans                 | U         | 7       |
| Waste Water  | U              | 2           |  |                     |                    | Notifications         | U         |         |
| Solid Waste  | A              |             | Monitoring   |                     |                    | Other                 |           |         |
| Hazardous Waste  | U              | 3           | Sample Collection / Analysis   | U                   | 7                  | Inspection Reports    | U         | 9       |
|  |                |             |  |                     |                    | Inspector’s Direction | U         | 10      |
| *The number in the comments field will correspond with specific comments provided below. |                |             |  |                     |                    |                       |           |         |
| Samples taken by Inspector:  |                |             | Location(s): LUP-1 (water intake), LUP-10 (TCA Pond 2), LUP-14 (Effluent from LSL) |                     |                    |                       |           |         |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                      |                |             |  |                     |                    |                       |           |         |

| SECTION 1   | <input checked="" type="checkbox"/> Comments (s.1) | <input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2) | <input checked="" type="checkbox"/> Action Required (s.3) |
|---|--|--|---|
| <p>An inspection was conducted on July 14 2014 to assess compliance at the Lupin Mine Site with LMI's several authorizations and an outstanding Direction. Currently, the Type 'A' water licence for the Lupin Mine is expired and as such LMI had no authorization to use water or deposit waste in relation to the Mine, although the obligations in the licence persist until such time as a renewal licence is approved. In order to conduct monitoring and site management, LMI sought an Emergency Amendment to the licence (valid to August 19, 2015) in order to decant the Sewage Lakes Facility, and an Approval without a Licence (NWB 8WLC-LUP1516) in order to use water for domestic purposes and deposit human waste. Additionally, a Direction was issued on September 8, 2014 to LMI to maintain the sewage lakes at a level that is consistent with safe operation, and to implement the recommendations in the 2014 geotechnical engineer's report. LMI has not built the camp that was authorized under 8WLC-LUP1516, and were conducting day trips only to site, as use of the water and waste facilities licensed under 2AM-LUP0914 was prohibited. Following this inspection, on an additional Direction was issued (2015-KIT002-EP) to decant the TCA.</p> <p>I was joined on-site by Karyn Lewis of LMI, and Mathieu Beaudouin of Discovery Mining Services.</p> <ol style="list-style-type: none"><li>At the time of the inspection no water was being used, as no camp facilities were in operation.</li><li>At the time of the inspection, waste water (effluent) from the sewage lagoon was trickling over a compromised section of the Lower Sewage Dam, and flowing freely around the south end of the dam due to high levels within the facility and lack of repairs to the dam [see Photos 1-3]. This is a recurring issue since 2012, indicating that this facility is not being operated or maintained satisfactorily. This is contrary to the Direction issued in 2014 and to the Emergency Amendment. As the peak of freshet had passed by the time I was on site, I believe that greater flow happened prior to my arrival on-site, and may have caused the small wash-out that was in evidence (the "compromised section"). It's also possible that it was caused by ice scouring. Organic matter from within Lower Sewage Lake (LSL) was piled up at this area. LMI (or their agent) was on site July 9, 2015 in order to sample from the lagoon; notice of the extreme level in the lagoon should have been reported at that time.</li><li>A portion of the tailings remains uncovered [Photos 4-7]. Despite the high water levels from freshet and precipitation (prompting LMI to notify the Minister indicating that the facility was in imminent need of decanting), the surface area of exposed tails in the unremediated portion of the TCA that is not covered by water remained essentially unchanged from last year. Also, the exposed tails remain solid enough to walk on, and in some areas the surface is cracked and flaking. To my knowledge, no mitigation measures have been put in place to cover the exposed tailings, whether temporarily or permanently. LMI's care and maintenance plan indicates that a binding agent will be applied to the exposed tails in Cells 3 and 5. It is also noted that the diagram of the TCA provided in the 2014 Geotechnical Inspection does not show the exposed tailings; the diagram shows the whole area as either covered or underwater which is not accurate.</li><li>A) The Lower Sewage Dam was not repaired nor decanted in a timely manner, contrary to the Inspector's Direction,</li></ol> |  |  |   |





resulting in a failure to contain effluent within the facility. The Upper Sewage Dam long, lengthwise cracks; one appears to be greater than 0.5 m in depth. These cracks were not noted in 2014. Slumping is noted on the west side of the dam. [Photos 8-10]

B) At the time of the inspection there remained approximately 1.5 m freeboard in the TCA Pond 2. Mr. Beaudoin indicated at the lowest point in the pond wall there was approximately 1.2 m freeboard. 1 m of freeboard is required to be maintained in the facility, and the levels have increased more than 1 m from last year. [Direction 2015-KIT002-EP was issued on July 22 to decant the TCA]. [Photo 11]

C) My observations at the main fuel farm are contrary to those of LMI’s consultant in 2014 (*2014 Lupin Fuel Tank Farm Inspection*). Mr. Tong observed water ponding in the main tank farm, and did not observe active seepage at the time of his visit (August 19, 2014). Conversely, I noted that one berm (the cell with two orange tanks, immediately south of the largest berm) contained no ponding water while the berms on either side of it contained significant ponded water. Further, there was a clear seepage channel at the toe of that berm, with water flowing west toward the airstrip. I did not note any other obvious source for the flow of water. [Photos 12-16]

- 5. Erosion of the Lower Sewage Dam, Upper Sewage Dam, and the Tailings Containment structures [Photo 17] was evident at the time of the inspection.
- 6. No signage identifying the monitoring stations was noted.
- 7. Mathieu Beaudouin collected confirmatory water samples on behalf of LMI during the inspection, at the same locations I sampled. I noted that he forgot to wear gloves when he began sampling at LUP-1. LMI has not adhered to the timelines as outlined in the Liquid Waste Management Plan (2013), which has contributed to delays in decanting the facilities.
- 8. No spill report has been filed for the discharge of effluent from the Sewage Lakes prior to decant approval.
- 9. Several items were not addressed in 2014 with respect to the findings of the 2014 inspection. At the time of the 2015 inspection, these requirements have not yet been addressed. They are itemized below.
- 10. The geotechnical inspection occurred on September 15, 2014. LMI had not, at the time of this inspection, implemented the recommendations from the report, despite a Direction that was issued to the company indicating that any recommended repairs were to be carried out ‘without delay’. At the time of this inspection, there was a failure of the dam to contain the effluent within Lower Sewage Lake.

|           |                                   |  |  |
|-----------|-----------------------------------|--|--|
| SECTION 2 | <input type="checkbox"/> Comments | <input checked="" type="checkbox"/> Non-Compliance with Act or Licence | <input type="checkbox"/> Action Required |
|-----------|-----------------------------------|--|--|

**Non-comprehensive list – prioritized for the matters most relevant and requiring to be addressed immediately.**

**2AM-LUP0914:**

- Part B Item 14: Failure to observe the Liquid Waste Management Plan.
- Part D Item 4: Failure to carry out adequate inspections of water management structures.
- Part E Item 6(d): Failure to immediately address erosion of the TCA.
- Part H Item 8: Failure to report an unauthorized discharge of effluent.
- Part J Item 8: Failure to undertake additional monitoring as requested by the Inspector.

**NWB Emergency Amendment motion 2014-P11-12-03:**

To “...preserve the necessary freeboard space and maintain the integrity of the Facilities, before and/or during 2015 freshet period, in accordance with the terms and conditions of Part E, Items 8 and 10 in Licence 2AM-LUP0914 and all associated monitoring and reporting obligations.”

**Inspector’s Direction Dated September 8, 2014:**

- 1. Failure to maintain the facility at a level that is consistent with safe operation.
- 2. Failure to implement recommendations of the 2014 Geotechnical Inspection with respect the Sewage Lakes Facilities.

**Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002**

- 12(1) Deposit of waste in contravention of a licence.
- 12(3) Failure to report a deposit of waste to an inspector.
- 86(4) Failure to furnish information as requested by an inspector for purposes of an inspection.
- 90(1) Failure to comply with a direction.
- 90(2)(a) Contravention of a Type A licence.



|  |                                   |   |   |
|--|-----------------------------------|---|---|
| SECTION 3  | <input type="checkbox"/> Comments | <input type="checkbox"/> Non-Compliance with Act or Licence | <input checked="" type="checkbox"/> Action Required |
| <p>Outstanding requirements from 2014 Inspection:</p> <ol style="list-style-type: none"><li>1. Hazardous Waste Inventory – <b>August 31 2015</b> (As per LMI’s commitment of February 23, 2015).</li><li>2. Sampling outside TCA: documentation and assessment showing that the material outside the TCA is esker material and not tailings – report to be received by Inspector by <b>September 30, 2015</b>. Confirmation that this work has been/is being conducted and that LMI will provide the report by September 30, 2015 is requested by <b>August 31, 2015</b>.</li><li>3. Geotechnical inspection of Waste Containment Areas – report to be received by Inspector by <b>October 31, 2015</b>.</li><li>4. Cleanup of Spill 12-306 (Satellite Tank Farm) - LMI is to complete removal of contaminated material by <b>August 31, 2015</b> and provide a report to the Inspector detailing its 2015 activities by <b>September 30, 2015</b> (As per LMI’s commitment of February 23, 2015).</li></ol> <p>Let it be noted that these deadlines have now been extended by a year, with the exception of no.2 which is outstanding since <u>2012</u>. I am confused by LMI’s approach to site maintenance and compliance issues. While last year LMI focussed on the risks to the Sewage Lakes facility, this year while the situation was much worse, there was no urgency in LMI’s actions to address the overtopping and the degradation of the facility. While LMI has chosen to only visit the site for day-trips until full use of the camp is secured, this does not excuse LMI of the responsibility of carrying out any and all obligations of the licence, past inspections, and the Directions. Additionally, LMI should ensure to undertake the activities earlier than last year, in order to avoid another year’s delay due to snowfall. I made it very clear to Ms. Lewis while on-site that the sampling outside the TCA was to be completed this year with no excuses. Let it also be noted that as per Part H, item 8 of the licence, any spills or imminent risk of spills/unauthorized discharges are to be reported to the inspector immediately and the Spill Contingency Plan is to be implemented.</p> <p>Additional requirements for 2015 include the fulfilment of the 2014 Inspector’s Direction and the recent 2015 Direction (2015-KIT002-EP) dated July 22, 2015; and full compliance with the monitoring requirements of 2AM-LUP0914, particularly with respect to both the Sewage Lakes Facilities and the Tailings Containment Area discharges. Failure to meet other requirements of the licence and approved plans will be addressed in due course.</p> |                                   |   |   |

| Licensee or Representative | Inspector’s Name           |
|----------------------------|----------------------------|
| -                          | Eva Paul                   |
| Signature                  | Signature                  |
| -                          | <i>Sent electronically</i> |
| Date                       | Date                       |
| -                          | 05/08/2015                 |

Att: Photo Log

CC: Phyllis Beaulieu, Manager of Licensing, NWB  
Erik Allain, Manager of Field Operations, AANDC  
Tracey McCaie, Manager, Lands Administration, AANDC  
Baba Pedersen, Kitikmeot RMO, AANDC





PHOTO LOG

| Date             | Camera         | Inspector                     | Authorization            |
|------------------|----------------|-------------------------------|--------------------------|
| 14/07/2015       | SONY DSC-HX50V | Eva Paul                      | 2AM-LUP0914/8WLC-LUP1516 |
| Photo Log # 1    |                | Location (NAD 83 DD MM SS.SS) |                          |
| Photo # DSC02950 |                | (taken while flying)          |                          |



**Description:** Aerial view of south end of Lower Sewage Dam. Arrows demonstrating flow of effluent are added for illustrative purposes.

|                  |                               |
|------------------|-------------------------------|
| Photo Log # 2    | Location (NAD 83 DD MM SS.SS) |
| Photo # DSC03122 | N65°45'28.96" W111°12'55.92"  |



**Description:** Compromised section of Lower Sewage Dam. Effluent was trickling over this section at the time of the inspection in the direction of the arrow. It is suspected that the flow was greater prior to the inspection. Contents of LSL are pushed onto the berm (circled area).





Photo Log # 3

Photo # DSC03126

Location (NAD 83 DD MM SS.SS)

N65°45'27.55" W111°12'26.41"



**Description:** South end of Lower Sewage Dam looking south. Effluent is flowing around the end of the dam.

Photo Log # 4

Photo # DSC02924

Location (NAD 83 DD MM SS.SS)

(taken while flying)



**Description:** Aerial view of Cell 3 looking roughly north. Uncovered and exposed tailings shown in outlined area. Yellow marker denotes approximate location where Photo 5 was taken.





Photo Log # 5

Location (NAD 83 DD MM SS.SS)

Photo #DSC03099

N65°43'20.99" W111°17'01.49"



**Description:** View of the uncovered tailings taken from the north side near K Dam, looking south-east. Approximate location shown in Photo 4. I proceeded to walk across the tails southwards towards the water.

Photo Log # 6

Location (NAD 83 DD MM SS.SS)

Photo # DSC03101

Unrecorded



**Description:** Cracked surface of tailings. Numerous animal tracks were visible.





Photo Log # 7

Location (NAD 83 DD MM SS.SS)

Photo # DSC03103

N65°43'14.27" W111°16'49.48"



Description: Shiny metallic flakes visible on the surface of the exposed tailings.

Photo Log # 8

Location (NAD 83 DD MM SS.SS)

Photo # DSC03111

Unrecorded



Description: View of Upper Sewage Dam facing southward away from the mine site. Cracks visible in dam that were not noted in 2014.





Photo Log # 9

Location (NAD 83 DD MM SS.SS)

Photo # DSC03113

N65°45'34.59" W111°13'56.63"



Description: Close-up of large crack in Upper Sewage Dam estimated to be greater than 0.5 m deep.

Photo Log # 10

Location (NAD 83 DD MM SS.SS)

Photo # DSC03115

N65°45'34.68" W111°13'57.11"



Description: Upper Sewage Dam looking north towards mine site. Slumping visible on the west (left) side of the dam.





Photo Log # 11

Photo # DSC02936

Location (NAD 83 DD MM SS.SS)

(taken while flying)



Description: Aerial view of “N” Dam and Pond 2 looking south-west. Pondwater from Pond 2 has surpassed “N” Dam (circled in red).

Photo Log # 12

Photo # DSC03153

Location (NAD 83 DD MM SS.SS)

N65°45’49.73” W111°14’14.18”



Description: Main tank farm berm, looking west. South-most cell is holding water, the central cell (shown on right) is not.





Photo Log # 13

Photo # DSC03167

Location (NAD 83 DD MM SS.SS)

N65°45'49.74" W111°14'20.10"



**Description:** West berm of the fuel farm looking roughly North. Note dry cell in foreground and water ponded in the larger cell (orange reflection of tanks off water). Note the orange spray paint down-slope to the left for reference in Photos 14 and 15.

Photo Log # 14

Photo # DSC03168

Location (NAD 83 DD MM SS.SS)

N65°45'49.90" W111°14'20.10



**Description:** Note the flow path of water down-hill from the orange paint. The area is otherwise dry. Photos 15 and 16 are taken from point 't'.





Photo Log # 15

Location (NAD 83 DD MM SS.SS)

Photo # DSC03170

N65°45'50.34" W111°14'19.79"



Description: Flow of water down-slope from point 't'.

Photo Log # 16

Location (NAD 83 DD MM SS.SS)

Photo #DSC03169

N65°45'50.34" W111°14'19.79"



Description: Looking into the berm from point 't'.





Photo Log # 17

Location (NAD 83 DD MM SS.SS)

Photo #DSC03073

N65°43'27.56" W111°18'11.73"



Description: View of eroded internal TCA dam.

August 6, 2015  
Project No: 1CL008.003

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

**Attention: Karyn Lewis**

Dear Karyn:

**RE: Inspector's Direction Issued on July 22, 2015**

As part of the Inspector's Direction issued on July 22, 2015, specified on page 2 of the document, Measures to be Taken, second paragraph:

*"LMI may accommodate up to 30 personnel at Lupin Mine as necessary to carry out the above tasks and may utilize the water facilities. However, there is an Inspector's Direction (issued September 2014) that requires LMI to maintain the facility at a level that is consistent with safe operation, and to implement the recommendations in the 2014 geotechnical engineer's report '2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020'. The sewage lakes may only be utilized*

- a) Once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out."*

The recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dam Geotechnical Inspection Report is as follows:

*"The Lower Sewage Dam is generally in stable condition with no immediate concern of major failure and breaching. Maintenance and monitoring are recommended to ensure the condition of the dam does not further degrade. LMI should consider backfilling the eroded upstream section of the dam with compacted granular material with the face armored with riprap. Additional granular fill should be placed and compacted in the southern low section of dam to create a uniform elevation crest. LMI should monitor the condition of the tension cracks to determine their rate of movement. If the monitoring results indicate the cracks are lengthening or widening, LMI should consider*

**U.S. Offices:**

Anchorage 907.677.3520  
Denver 303.985.1333  
Elko 775.753.4151  
Fort Collins 970.407.8302  
Reno 775.828.6800  
Tucson 520.544.3688

**Mexico Office:**

Queretaro  
52.442.218.1030

**Canadian Offices:**

Saskatoon 306.955.4778  
Sudbury 705.682.3270  
Toronto 416.601.1445  
Vancouver 604.681.4196  
Yellowknife 867.873.8670

**Group Offices:**

Africa  
Asia  
Australia  
Europe  
North America  
South America



*constructing a 2 m wide buttress with a 2H:1V slope to half the height of the dam with compacted granular material, downstream of failed section of dam."*

A geotechnical inspection was completed by Alvin Tong, PEng, on August 5, 2015. Both of the upper and lower sewage dams are currently in stable conditions. The inspection observed that the eroded upstream section identified in 2014 was repaired with granular material, covered with geotextile, and then overlaid with some riprap armour. Additional granular material had been placed in the 2014 identified southern low section to raise the crest and match the elevation of the rest of the dam. At the time of the visit, the freeboard was observed to be around 0.5 m. The site crew have set up siphons on the lower dam to further reduce water level in the lower sewage pond.

In general terms, the 2014 recommended maintenance have been carried out. Recommended minor works to be carried out prior to the end of the field season include:

- Compaction on the placed crest fill, and
- Completions of the riprap placement over the upstream dam face at the identified areas.

Site crew has received directions and are staging to complete the work.

The 2015 Sewage Dams Inspection Report will be submitted when ready.

Key photographs for the observations at the lower dam are provided in Attachment A.

Sincerely,  
SRK Consulting (Canada) Inc.



Alvin Tong, PEng.  
Senior Consultant

**Disclaimer**—SRK Consulting (Canada) Inc. has prepared this document for <Client Name>. Any use or decisions by which a third party makes of this document are the responsibility of such third parties. In no circumstance does SRK accept any consequential liability arising from commercial decisions or actions resulting from the use of this report by a third party.

The opinions expressed in this report have been based on the information available to SRK at the time of preparation. SRK has exercised all due care in reviewing information supplied by others for use on this project. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information, except to the extent that SRK was hired to verify the data.

## Attachment A: Key Photographs for Observations

---





**Photo 1:** Looking south at the repair work complete on the upstream face on the Lower Sewage Dam along the 2014 identified southern area.




**Photo 3:** Looking south at the repair work complete on the southern abutment on the Lower Sewage Dam along the 2014 identified low area.



**Photo 2:** Looking south at the repair work complete on the downstream face on the Lower Sewage Dam along the 2014 identified southern area.



**Photo 4:** Looking north at the repair work complete on the upstream face on the Lower Sewage Dam. Note the siphons in background actively lowering the water level.

|  |                          |   |                 |                    |
|--|--------------------------|---|-----------------|--------------------|
| <br>Job No: 1CL008.003<br>Filename: Photo Log_Ateditits_RevA.pptx | Lupin Mine Inc.          | Inspector's Direction Response Letter             |                 |                    |
|  |                          | Maintenance Work Completed<br>At Lower Sewage Dam |                 |                    |
|  | Lupin Mine – Sewage Dams | Date:<br>Aug. 7, 2015                             | Approved:<br>AT | Attachment:<br>A.1 |





Ida Porter &lt;ida.porter@nwb-oen.ca&gt;

---

## [Licensing] Recent events at Lupin Mine (2AM-LUP0914, amended)

---

Eva Paul &lt;Eva.Paul@aandc-aadnc.gc.ca&gt;

Tue, Aug 11, 2015 at 2:46 PM

To: Karyn Lewis &lt;klewis@elginmining.com&gt;, Patrick Downey &lt;pdowney@elginmining.com&gt;

Cc: Erik Allain &lt;Erik.Allain@aandc-aadnc.gc.ca&gt;, Terry Sewell &lt;Terry.Sewell@aandc-aadnc.gc.ca&gt;, "Cavanagh Norm" &lt;Norm.Cavanagh@justice.gc.ca&gt; &lt;Norm.Cavanagh@justice.gc.ca&gt;, Christine Kowbel &lt;ckowbel@lawsonlundell.com&gt;, "licensing@nwb-oen.ca" &lt;licensing@nwb-oen.ca&gt;

Hello Karyn,

I acknowledge receipt of the August 6, 2015 letter from Mr. Tong of SRK Consulting (Canada) Inc. in relation to condition (a) of the Inspector's Direction dated July 22, 2015.

As described in Mr. Tong's letter, material has been added to the dam but the compaction and riprap placement has not yet taken place. Mr. Tong indicates that the observed freeboard was approximately 0.5 m at the time of inspection and that discharge is ongoing. No specific dates with respect to the completion of the required work are suggested in the report or your e-mail below.

Please provide the anticipated dates whereby the compaction/riprap work and the decant will be completed.

Regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200

Iqaluit, NU X0A 0H0

Phone | Tél. : 867-975-4548

Cell | Mobile: 867-222-6490

Fax | Téléc. : 867-979-6445

Eva.Paul@aandc-aadnc.gc.ca

&gt;&gt;&gt; Karyn Lewis &lt;klewis@elginmining.com&gt; 8/10/2015 10:24 PM &gt;&gt;&gt;

[Quoted text hidden]



# 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.

---

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





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









AANDC, Nunavut District Office  
Box 2200  
Iqaluit, NU, X0A 0H0

26 August 2015

Doc #2015-KIT017-EP

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

Water Resources Officer, Kitikmeot Region  
Aboriginal Affairs and Northern Development Canada  
Phone: 867-975-4548  
Cell: 867-222-6490  
Fax: 867-979-6445  
[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aadnc.gc.ca)

Att: Taiga Field Sheet





Batch No. : Lab use only

Send Results & Invoice to:

(Please notify if results or invoice are to be sent to different locations)

Company/Agency: \_\_\_\_\_

Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Province/Territory: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Signature : \_\_\_\_\_

Client Project No: \_\_\_\_\_

Date collected: \_\_\_\_\_

Time collected: \_\_\_\_\_

Sampler: \_\_\_\_\_

Location: \_\_\_\_\_

Rush Required: ☐Yes ☐No

Note: *Analysis may be subcontracted without prior notice.*  
*See reverse for how to complete form and sampling protocols.*

Date Received: \_\_\_\_\_ Received By: \_\_\_\_\_

Comments: \_\_\_\_\_

(Laboratory use only)

-WATER SAMPLES -

|  |  |  |  |
|--|--|--|--|
| Sample Type (freshwater, sewage, wastewater, potable , groundwater, salt water, etc) |  |  |  |
| Client Sample ID (As it should appear on final report)                               |  |  |  |
| Taiga Sample ID (Laboratory use only)  |  |  |  |

Bottle Type and Parameter

[ ✓ ] PLEASE CHECK PARAMETERS REQUESTED BELOW:

|           |   |  |                 |                               |                               |                    |  |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |
|-----------|---|--|-----------------|-------------------------------|-------------------------------|--------------------|--|-------------------------------|-------------------------------|--------------------|-------------------------------|--|-------------------------------|--|--|--|--|--|--|--|--|--|
| Routine   | pH, Conductivity, Alkalinity  | pH   | Cond            | Alk                           | pH                            | Cond               | Alk  | pH                            | Cond                          | Alk                |                               |  |                               |  |  |  |  |  |  |  |  |  |
|           | Individual Anions Suite <input type="checkbox"/>  | Cl   | SO <sub>4</sub> | F                             | NO <sub>2</sub> -N            | NO <sub>3</sub> -N | Cl   | SO <sub>4</sub>               | F                             | NO <sub>2</sub> -N | NO <sub>3</sub> -N            |  |                               |  |  |  |  |  |  |  |  |  |
|           | Total Nitrite (NO <sub>2</sub> ) + Nitrate (NO <sub>3</sub> )   | NO <sub>2</sub> + NO <sub>3</sub> -N               |                 |                               |                               |                    | NO <sub>2</sub> + NO <sub>3</sub> -N               |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |
|           | Individual Cations Suite <input type="checkbox"/>   | Ca   | Mg              | Na                            | K                             | Ca                 | Mg   | Na                            | K                             | Ca                 | Mg                            | Na   | K                             |  |  |  |  |  |  |  |  |  |
|           | Hardness (Calculated)   | Hardness   |                 |                               |                               |                    | Hardness   |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |
|           | Reactive Silica   | SiO <sub>2</sub>                                   |                 |                               |                               |                    | SiO <sub>2</sub>                                   |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Rec'd: Y N   |                 |                               |                               |                    | Rec'd: Y N   |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |
| Nutrients | Chlorine: Total, Residual   | T. Cl  |                 |                               | R. Cl                         |                    |  | T. Cl                         |                               |                    | R. Cl                         |  |                               |  |  |  |  |  |  |  |  |  |
|           | Chemical Oxygen Demand  | COD  |                 |                               |                               |                    | COD  |                               |                               |                    |                               | COD  |                               |  |  |  |  |  |  |  |  |  |
|           | Color   | Apparent   |                 |                               | True                          |                    |  | Apparent                      |                               |                    | True                          |  |                               |  |  |  |  |  |  |  |  |  |
|           | Turbidity   | Turbidity  |                 |                               |                               |                    | Turbidity  |                               |                               |                    |                               | Turbidity  |                               |  |  |  |  |  |  |  |  |  |
|           | Total Suspended Solids, Dissolved Solids  | TSS  |                 |                               | TDS                           |                    |  | TSS                           |                               |                    | TDS                           |  |                               |  |  |  |  |  |  |  |  |  |
|           | Ammonia   | NH <sub>3</sub>                                    |                 |                               |                               |                    | NH <sub>3</sub>                                    |                               |                               |                    |                               | NH <sub>3</sub> -N                                 |                               |  |  |  |  |  |  |  |  |  |
|           | Phosphorus: Total, Dissolved, Ortho   | TP   | DP              |                               | OP                            | TP                 | DP   |                               | OP                            | TP                 | DP                            |  | OP                            |  |  |  |  |  |  |  |  |  |
|           | Carbon: Total, Dissolved  | TOC  |                 |                               | DOC                           |                    |  | TOC                           |                               |                    | DOC                           |  |                               |  |  |  |  |  |  |  |  |  |
|           | Nitrogen: Total, Dissolved  | TN   |                 |                               | DN                            |                    |  | TN                            |                               |                    | DN                            |  |                               |  |  |  |  |  |  |  |  |  |
|           | Visible Oil and Grease  | Visible  |                 |                               |                               |                    | Visible  |                               |                               |                    |                               | Visible  |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Received : Y N                                     |                 |                               |                               |                    | Received : Y N                                     |                               |                               |                    |                               | Received : Y N                                     |                               |  |  |  |  |  |  |  |  |  |
| Sterile   | Fecal Coliforms (FC)  | FC   |                 |                               |                               |                    | FC   |                               |                               |                    |                               | FC   |                               |  |  |  |  |  |  |  |  |  |
|           | Total Coliforms (TC), E. Coli (EC)  | TC   |                 |                               | EC                            |                    |  | TC                            |                               |                    | EC                            |  |                               |  |  |  |  |  |  |  |  |  |
|           | Fecal Streptococcus (FS)  | FS   |                 |                               |                               |                    | FS   |                               |                               |                    |                               | FS   |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Received: Y N T: _____°C<br>Sterile container: Y N |                 |                               |                               |                    | Received: Y N T: _____°C<br>Sterile container: Y N |                               |                               |                    |                               | Received: Y N T: _____°C<br>Sterile container: Y N |                               |  |  |  |  |  |  |  |  |  |
|           | Biological Oxygen Demand  | BOD  |                 |                               |                               |                    | BOD  |                               |                               |                    |                               | BOD  |                               |  |  |  |  |  |  |  |  |  |
|           | Carbonaceous BOD  | CBOD   |                 |                               |                               |                    | CBOD   |                               |                               |                    |                               | CBOD   |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Received: Y N T: _____°C                           |                 |                               |                               |                    | Received: Y N T: _____°C                           |                               |                               |                    |                               | Received: Y N T: _____°C                           |                               |  |  |  |  |  |  |  |  |  |
| Metals    | Please indicate if sample is preserved and/or filtered  | Pres <input type="checkbox"/>                      |                 | Filt <input type="checkbox"/> | Pres <input type="checkbox"/> |                    | Pres <input type="checkbox"/>                      | Filt <input type="checkbox"/> | Pres <input type="checkbox"/> |                    | Pres <input type="checkbox"/> | Filt <input type="checkbox"/>                      | Pres <input type="checkbox"/> |  |  |  |  |  |  |  |  |  |
|           | ICP-MS(1): Cd, Cr, Cu, Co, Mn, Ni, Pb, Zn, Fe   | Total  |                 | Dissolved                     |                               | Total              | Dissolved  |                               | Total                         | Dissolved          |                               | Total  | Dissolved                     |  |  |  |  |  |  |  |  |  |
|           | ICP-MS(2): 25 element scan <b>includes As</b> (not included: B, Bi, Hg, Sn)   | Total  |                 | Dissolved                     |                               | Total              | Dissolved  |                               | Total                         | Dissolved          |                               | Total  | Dissolved                     |  |  |  |  |  |  |  |  |  |
|           | Individual Metals by ICP-MS (please circle each metal): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cs, Cu, Fe, Hg, Li, Mn, Mo, Ni, Pb, Rb, Sb, Se, Sn, Sr, Ti, Tl, U, V, Zn | Total  |                 | Dissolved                     |                               | Total              | Dissolved  |                               | Total                         | Dissolved          |                               | Total  | Dissolved                     |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | TM rec'd: Y N                                      |                 | DM rec'd: Y N                 |                               | TM rec'd: Y N      | DM rec'd: Y N                                      |                               | TM rec'd: Y N                 | DM rec'd: Y N      |                               | TM rec'd: Y N                                      | DM rec'd: Y N                 |  |  |  |  |  |  |  |  |  |
|           | Hexane Extractable Material (O&G)   | HEM  |                 |                               |                               |                    | HEM  |                               |                               |                    |                               | HEM  |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Rec'd: Y N   |                 | Pres: Y N                     |                               | Rec'd: Y N         | Pres: Y N  |                               | Rec'd: Y N                    | Pres: Y N          |                               | Rec'd: Y N   | Pres: Y N                     |  |  |  |  |  |  |  |  |  |
|           | BTEX, Purgeable HC (40mL x 2 vials)   | BTEX   |                 | Purg HC                       |                               | BTEX               | Purg HC  |                               | BTEX                          | Purg HC            |                               | BTEX   | Purg HC                       |  |  |  |  |  |  |  |  |  |
|           | Extractable HC (1L amber glass bottle)  | Ext HC   |                 |                               |                               |                    | Ext HC   |                               |                               |                    |                               | Ext HC   |                               |  |  |  |  |  |  |  |  |  |
|           | Trihalomethanes (40 mL x 2 vials)   | THM  |                 |                               |                               |                    | THM  |                               |                               |                    |                               | THM  |                               |  |  |  |  |  |  |  |  |  |
|           | Laboratory use only   | Vial rec'd: Y N                                    |                 | Ext rec'd: Y N                |                               | Vial rec'd: Y N    | Ext rec'd: Y N                                     |                               | Vial rec'd: Y N               | Ext rec'd: Y N     |                               | Vial rec'd: Y N                                    | Ext rec'd: Y N                |  |  |  |  |  |  |  |  |  |
|           | Other: <i>see special request form</i>  |  |                 |                               |                               |                    |  |                               |                               |                    |                               |  |                               |  |  |  |  |  |  |  |  |  |

For safety purposes, please disclose any contaminants (e.g. heavy metals, cyanide, etc.) that may be present at high levels and pose a risk to human health

Taiga Environmental Laboratory  
Taiga Field Sheet  
Revision 4 Effective Date 18-Jan-10

Page \_\_\_\_\_ of \_\_\_\_\_  
Form ID: FOR Q005 File ID: 551.4.4.5  
FOR Q005 – Taiga Field Sheet Revision 4

HOW TO FILL OUT THIS FORM

|                    |  |
|--------------------|--|
| Company/Agency     | The full, legal company name.  |
| Address            | Full street address including suite or unit number, if applicable. Final reports will be sent to this address. |
| City/Town          | City or Town   |
| Province/Territory | Province or Territory  |
| Postal Code        | Postal Code  |
| Phone              | Full telephone number, including area code and extension, if applicable  |
| Fax                | Facsimile number   |
| E-mail             | E-mail address, if available   |
| Signature          | Signature of the individual filling out the form   |
| Client Project No  | This information will appear on the final analytical report  |
| Date Collected     | Enter the date(s) that the samples were collected  |
| Time Collected     | Enter the time(s) the sample(s) were collected in military time or note if it is a.m or p.m                    |
| Sampler            | The name of the individual who collected the sample  |
| Location           | The general location of where the samples were collected   |
| Rush Required      | Indicate if regular or Rush turnaround time is required. Check yes only if Rush is required, no if not.        |
| Sample Type        | Identify the sample matrix (freshwater, drinking water, soil, etc)   |
| Client Sample ID   | Identify each submitted sample. This identification will appear on the analytical report.                      |
| Test Column        | Check off the tests you require for each sample submitted.   |

IMPORTANT INFORMATION

**Turnaround time**  
Standard turnaround time is 10 business days. Please note that turnaround time delays may occur if the *Field Sheet* is incomplete or incorrectly filled out.

**RUSH analysis**  
Rush turnaround time is 5 business days. All samples received at the lab are analyzed on a ‘first come, first serve’ basis unless otherwise specified as Rush. Rush samples will be place in the front of the line and analyzed prior to routine samples. A premium charge of 100% shall be charged for the analysis. Rush services depend on staff availability, analysis required, and capabilities of the lab. Please contact the lab prior to requesting this service.

**Sample Receipt, Custody, and Storage**  
All submitted samples remain the sole property of the client and may be returned to the client for appropriate storage or disposal at the discretion of Taiga Environmental Laboratory.

All submitted samples will be stored for 30 days from the date the final report is printed. Arrangements can be made to hold the samples for an extended time at a nominal fee.













**Sampling Supplies**  
Sample bottles, preservatives, labels, and forms are available at no cost when requesting services. To place a bottle order, please submit a *Bottle &/or Preservative Order Form* a minimum of 48 hours in advance. Please note the shipment of Dangerous Goods may be delayed due to availability of qualified airline agents to process the paperwork.

**Shipping Charges**  
All shipping costs are the responsibility of the client.

**Confidentiality**  
All data and reports are considered confidential and the property of the client. No information shall be released to others without documented approval from the client.

**Limit of Liability**  
Although every care and precaution is taken in the performance of our services, our liability for loss or damage in all circumstances is limited to re-analysis of the sample(s) at our expense or the cancellation of charges.

Taiga Environmental Laboratory reserves the right to refuse to proceed with an analysis if the lab does not have the capability and /or resources to meet analysis requirements, including facilities and equipment, scientific expertise, analytical capabilities, staff scheduling, Quality Assurance/Quality Control specifications, and report.

| Parameter Group  |   | Marking                       | Preservative                                 | Instructions   |
|--|---|-------------------------------|--|--|
|  | Routine   | GREEN                         | Keep Cool at 4°C                             | 1. Rinse bottle three (3) times with sample.<br>2. Fill to top and cap bottle  |
|  | Nutrients   | BLACK                         | Keep Cool at 4°C                             |  |
|  | Biochemical Oxygen Demand (BOD)/Carbonaceous BOD (CBOD) | PURPLE                        | Keep Cool at 4°C                             | 1. Rinse bottle three (3) times with sample.<br>2. Fill to top and cap bottle.<br>3. Sample must be sent to the lab within 24 hours of collection.   |
|  | Microbiological   | STERILE                       | Sodium Thiosulphate<br>Keep Cool at 4°C      | <b>1. DO NOT RINSE BOTTLE.</b><br>2. Fill to top and cap.<br>3. Sample must be sent to the lab within 24 hours of collection.  |
|  | Total Metals  | RED                           | 5mL of 1:3 nitric acid in Red-dot vial       | 1. Rinse bottle three (3) times with sample.<br>2. Fill to near the top.<br>3. Add contents of preservative vial.<br>4. Cap bottle and mix.  |
|  | Dissolved Metals  | RED                           | 5mL of 1:3 nitric acid in Red-dot vial       | <b>1. Filter sample with 0.45um Cellulose Acetate filter.</b><br>2. Rinse bottle three (3) times with filtrate.<br>3. Fill to near the top.<br>4. Add contents of preservative vial.<br>5. Cap bottle and mix. |
|  | Hexane Extractable Material (HEM)                       | YELLOW                        | 4mL of 1:3 sulphuric acid in Yellow Dot vial | <b>1. DO NOT RINSE BOTTLE.</b><br>2. Fill to shoulder of bottle.<br>3. Add contents of preservative vial.<br>4. Cap bottle and mix.  |
|  | BTEX, THM & Purgeable Hydrocarbons                      | 40 mL CLEAR GLASS W/WHITE LID | Keep Cool at 4°C                             | <b>1. DO NOT RINSE BOTTLE.</b><br>2. Fill vials completely leaving <b>NO</b> air bubbles.  |
|  | Extractable Hydrocarbons                                | 1L AMBER GLASS WITH WHITE LID | Keep Cool at 4°C                             | <b>1. DO NOT RINSE BOTTLE</b><br>2. Fill to top and cap  |
|  | Cyanide, Total and WAD                                  | BLUE                          | 1mL of 6N sodium hydroxide solution          | 1. Rinse bottle three (3) times with sample.<br>2. Fill to near the top of container.<br>3. Add contents of preservative vial.<br>4. Cap bottle and mix.   |
|  | Thiocyanate   | ORANGE                        | 2mL 25% sulphuric acid; or keep cool At 4°C  |  |
|  | Phenol  | YELLOW with P                 | 2mL of 20% sulphuric acid                    |  |





September 8, 2015

Doc #2015-KIT018-EP

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

**RE: Revocation of Aboriginal Affairs and Northern Development Canada (AANDC) Inspector's Direction, pursuant to 87(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWSRTA), dated September 8, 2014 issued to Lupin Mines Inc.,**

**AND: Update on compliance with Inspector's Direction dated July 22, 2015**

***Background***

An Inspector's Direction dated September 8, 2014 was issued to Lupin Mines Inc. (LMI) requiring decant, inspection, and repairs of the Sewage Lakes facility at Lupin Mine. LMI was Directed:

- 1. ...to immediately decant the Lower Sewage Lagoon and maintain the facility at a level that is consistent with safe operation. No new waste is to be deposited to the facility. This shall be carried out in compliance with Part E Items 4 and 8 of the expired Licence and until such time as a new licence is issued. [and that]*
- 2. A geotechnical inspection is to be conducted of the Upper and Lower Sewage Lagoon. The engineer's report is to be submitted to the Nunavut Water Board and to the Inspector by October 31 2014, accompanied by a plan and timelines to implement the engineer's recommendations. Any repairs required are to be carried out without delay.*

On July 22, 2015 a second Direction [2015-KIT002-EP] was issued that allows limited use of Lupin Mine's camp facilities in order to prepare for, and carry out, the decant of the Tailings Containment Area and associated monitoring, but denies use of the Sewage Lakes facility until such time as compliance with the previously-issued Direction was achieved. LMI was Directed that:

*The sewage lakes may only be utilized:*

- a) once the recommendations in Part 4, paragraph 2 of the 2014 Sewage Pond Dams Geotechnical Inspection\_1CL008\_002\_PMH\_AT\_20141020 with respect to the Lower Dam have been carried out;*
- b) the effluent levels within those lakes is decanted to allow operation within the limits contained Part E of water licence 2AM-LUP0914; AND,*
- c) the September 8, 2014 Inspector's Direction is subsequently revoked.*



### ***Current Status of the AANDC Inspector's Direction(s)***

LMI contracted Mr. Alvin Tong, P. Eng., a Senior Consultant with SRK Consulting (Canada) Inc. to conduct a geotechnical inspection on September 15, 2014. On September 3, 2015 a memo from the same confirms that the required repairs have been completed and the lagoon levels have been lowered to an acceptable level: *"The dams met the minimum freeboard to allow operation. LMI has provided photographs on 2 September, 2015 indicating all finishing work on both dams are completed."* This memo, signed and stamped by Mr. Tong, is submitted as evidence that the work has been completed.

I have reviewed and am satisfied with the evidence provided in this matter. This correspondence is to inform LMI that LMI is now deemed to have met conditions a) and b) of the July 22, 2015 Direction [2015-KIT002-EP]. The AANDC Inspector's Direction dated September 8, 2014 issued to LMI is now revoked, to satisfy condition (c), recognizing that the work is substantially completed. LMI may therefor now utilize the Sewage Lakes facility, in compliance with Part E items 4, 7 and 8, and Part H item 8 of the expired water licence (2AM-LUP0914) in order to carry out the activities authorized by the July 22, 2015 Direction [2015-KIT002-EP].

The July 22, 2015 Direction [2015-KIT002-EP] remains in effect.

### ***Actions Required***

LMI shall operate the Sewage Lakes facility, in compliance with Part E items 4, 7 and 8, and Part H item 8 of the expired water licence (2AM-LUP0914) until such time as a new licence is in effect. Any outstanding actions (*"minor finishing work"*) to satisfy Mr. Tong's recommendations on this facility are to be carried out *"before the end of 2015's field season"* as indicated in the September 3, 2015 geotechnical inspection report.

Please note that ANY unauthorized discharge of waste or effluent is to be treated as a spill in compliance with Part H item 8 (2AM-LUP0914) and is to be immediately reported and rectified.

As indicated above, the July 22, 2015 Direction [2015-KIT002-EP] remains in effect.

Should you have any questions please contact me at (867) 222-6490.

Eva Paul

Water Resources Officer | Agent des ressources en eau

Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada

Nunavut Regional Office | Bureau régional du Nunavut

Building 969, PO Box 2200 | Édifice 969, CP 2200





Iqaluit, NU X0A 0H0

Cell | Mobile: 867-222-6490

Fax | Téléc. : 867-979-6445

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

cc. David Hohnstein, A/Executive Director, Nunavut Water Board  
Erik Allain, Manager of Field Operations, AANDC  
Terry Sewell, Regional Director General, AANDC  
Norm Cavanagh, Legal Counsel, Department of Justice  
Phyllis Beaulieu, Manager of Licensing, Nunavut Water Board



Ida Porter &lt;ida.porter@nwb-oen.ca&gt;

---

## 2AM-LUP1520 Revocation of Inspector's Direction (2015-KIT002-EP)

---

Eva Paul &lt;Eva.Paul@aandc-aadnc.gc.ca&gt;

Mon, Dec 14, 2015 at 5:22 PM

To: Karyn Lewis &lt;klewis@elginmining.com&gt;, Patrick Downey &lt;pdowney@elginmining.com&gt;

Cc: David Rochette &lt;David.Rochette@aandc-aadnc.gc.ca&gt;, Erik Allain &lt;Erik.Allain@aandc-aadnc.gc.ca&gt;, Norm Cavanagh &lt;Norm.Cavanagh@justice.gc.ca&gt;, Licensing Department &lt;licensing@nwb-oen.ca&gt;, stephanie.autut@nwb-oen.ca

Hello Mr. Downey and Ms. Lewis,

Thank you for the information provided regarding the July 22, 2015 Inspector's Direction. LMI has demonstrated compliance with the terms of this Direction and has substantially completed the work with the exception of the outstanding samples. I can certainly appreciate the logistical difficulties of collecting remote samples at this time of year.

Attached is a revocation of the Direction with the understanding that the remaining samples will be collected as soon as it is safe to do so.

Regards,

*Eva Paul*

Water Resources Officer | Agent des ressources en eau

Indigenous and Northern Affairs Canada | Affaires autochtones et du Nord Canada

PO Box 1500 | CP 1500

4923-52 St | 4923-52e Rue

Yellowknife, NWT | Yellowknife, TNO

X1A 2R3

Phone | Tél.: 867-669-2438

Cell | Mobile: 867-222-6490

Fax | Téléc: 867-669-2702

[Eva.Paul@aandc-aadnc.gc.ca](mailto:Eva.Paul@aandc-aadnc.gc.ca)

>>> Karyn Lewis <[klewis@elginmining.com](mailto:klewis@elginmining.com)> 12/7/2015 7:28 PM >>>

Hi Eva,

We confirm that the discharge of TCA at Lupin has been completed. The daily discharge records are included in the attached file named LUP-10-WQ 2015.

We also confirm that in accordance with the Direction, the monitoring occurred as per the expired licence (2AM-LUP0914) and the 2015 Work Plan, dated July 16, 2015, with the exception of the final samples at LUP-22, LUP-24 and LUP-25. We have been attempting to take samples at these remaining monitoring stations since two weeks after cessation of discharge as set out in our licence and work plan. These sample sites are located near Sun Bay, approximately 2.5 -3 hour drive from the mine site. As you can appreciate, in this season, we cannot have our crew fly into the mine site by plane and drive that far from the mine site due to safety concerns. Therefore, we have had a helicopter on standby to bring the crew as close as possible to the sampling sites but have been prevented from travel by helicopter due to weather conditions. We are hopeful that the ice is now stable enough for a twin otter with skis to land on the lake, as close to Sun Bay as possible, so that we are not limited by helicopter travel restrictions. We have



continued to keep our crew on standby and remain committed to taking all reasonable steps to obtain the final samples at these three monitoring stations. We will notify you once we have been able to travel to the site and obtain the samples and we will provide you with the sample results for these three samples once we receive them.

Please find attached the dates, locations and sample results for each sample site as requested with the exception of the final sample results which we are still endeavouring to complete (see above).

Karyn Lewis  
Lupin Mines Incorporated  
[778-386-7340](tel:778-386-7340)

---

From: Eva Paul [<mailto:Eva.Paul@aadnc-aadnc.gc.ca>]  
Sent: November-23-15 3:37 PM  
To: Patrick Downey  
Cc: Erik Allain; Karyn Lewis  
Subject: Follow up to Inspector's Direction (2015-KIT002-EP)

Hello Mr. Downey,

As the new Type A licence for Lupin Mine has come into effect, I would like to rescind the current-standing Direction issued to LMI. To do so I would request the following:

1. Confirmation that the discharge of the TCA has been completed. Please provide daily discharge records (volume).
2. Confirmation that monitoring occurred as per the expired licence (2AM-LUP0914) and the 2015 Work Plan, dated July 16, 2015. Please include dates, locations, and sample results.

Please provide the above electronically by December 7, 2015.

Thank you.

*Eva Paul*

Water Resources Officer | Agent des ressources en eau  
Aboriginal Affairs and Northern Development Canada | Affaires autochtones et Développement du Nord Canada  
Rm 424, 4923-52 St | Pièce 424, 4923-52e Rue  
Yellowknife, NWT | Yellowknife, TNO  
X1A 2R3  
Phone | Tél.: [867-669-2438](tel:867-669-2438)  
Cell | Mobile: [867-222-6490](tel:867-222-6490)  
Fax | Téléc: [867-669-2702](tel:867-669-2702)  
[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aadnc.gc.ca)

>>> Erik Allain 7/22/2015 7:42 AM >>>  
Mr. Downey,

Please find attached for your immediate action an Inspector's Direction issued under the authority of the

Nunavut Waters and Nunavut Surface Rights Tribunal Act.

If you have any questions or concerns regarding the requirements for compliance please do not hesitate to contact the undersigned at your first convenience.

Regards,

Erik Allain  
Manager, Field Operations  
Field Operations Unit  
Aboriginal Affairs and Northern Development Canada  
Nunavut Regional Office  
P.O. Box 100  
Iqaluit, Nunavut X0A 0H0  
erik.allain@aandc-aadnc.gc.ca  
Phone: (867) 975-4295  
Fax: (867) 979-6445  
B.B (867) 222-8458

This email and any accompanying attachments contain confidential information that may be subject to solicitor-client privilege and are intended only for the named recipients.

If you have received this email in error, please notify the sender and destroy the email. Our e-mail terms of use can be found at <http://www.lawsonlundell.com/disclaimer.html>



2AM-LUP1520 REVOCATION OF INSPECTORS DIRECTION OF July 22 2015.pdf  
130K





December 14, 2015

Doc #2015-KIT022-EP

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

**RE: Revocation of Direction [2015-KIT002-EP], issued to Lupin Mines Inc. on July 22, 2015 pursuant to 87(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA)**

### ***Background***

An Inspector's Direction dated July 22, 2015 was issued to Lupin Mines Inc. (LMI) to mitigate the risk of failure of, or damage to, the Tailings Containment Area (TCA) by way of treating and decanting the facility, and to implement the associated monitoring program.

LMI was directed to:

1. Immediately take the steps necessary to mitigate the risk to the TCA and to the environment. [To be carried out in compliance with Part E of the expired 2AM-LUP0914 licence, the 2013 Liquid Waste Management Plan, and the 2015 Work Plan submitted to AANDC on July 16, 2015.]
2. Implement fully the monitoring program as described in 2AM-LUP0914 (expired) with respect to the discharge (Stations LUP-10, LUP-20, LUP-21, LUP-22, LUP-24, and LUP-25) as identified in step 10 of the Work Plan.

The Direction also permitted limited use of Lupin Mine's camp facilities in order to prepare for, and carry out, the decant of the Tailings Containment Area and associated monitoring, but denied use of the Sewage Lakes facility until such time as compliance with a 2014 Direction was achieved.

### ***Current Status of the AANDC Inspector's Direction(s)***

The 2014 Direction was revoked on September 8, 2015, allowing use of the Sewage Lakes facility.

I have received confirmation that the TCA decant has been completed and LMI has provided discharge records and monitoring results demonstrating that it was carried out in compliance with the Direction and the Licence.

I have reviewed and am satisfied with the evidence provided in this matter. This correspondence is to inform LMI that LMI is now deemed to have met the conditions of the July



22, 2015 Direction [2015-KIT002-EP] and the Direction is now revoked.

***Actions Required***

Acknowledging the logistical and safety challenges at this time of year, final samples for LUP-22, LUP-24 and LUP-25 are to be collected as soon as it is safe to do so, and the results forwarded upon receipt.

Should you have any questions please contact me at (867) 222-6490.

Eva Paul

Water Resources Officer | Agent des ressources en eau  
Indigenous and Northern Affairs Canada | Affaires autochtones et du Nord Canada  
Nunavut Regional Office | Bureau régional du Nunavut  
Building 969, PO Box 2200 | Édifice 969, CP 2200  
Iqaluit, NU X0A 0H0  
Cell | Mobile: 867-222-6490  
[Eva.Paul@aadnc-aadnc.gc.ca](mailto:Eva.Paul@aadnc-aadnc.gc.ca)

cc. Stephanie Autut, Executive Director, Nunavut Water Board  
David Rochette, Regional Director General, AANDC  
Erik Allain, Manager of Field Operations, AANDC  
Norm Cavanagh, Legal Counsel, Department of Justice  
Karén Kharatyan, A/Manager of Licensing, Nunavut Water Board