



WATER LICENCE INSPECTION FORM

Original
 Follow-Up Report

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|---|--|---|--|
| Licensee LUPIN MINES INC. | | Licensee Representative KARYN LEWIS | |
| Licence No. / Expiry 2AM-LUP1520 | | Representative's Title | |
| Land / Other Authorizations | | Land / Other Authorizations | |
| Date of Inspection 14 JUNE 2016 | | Inspector EVA PAUL | |
| <input checked="" type="checkbox"/> Camp <input checked="" type="checkbox"/> Roads/Hauling | | <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage | |
| <input type="checkbox"/> Other: CIM activities | | <input checked="" type="checkbox"/> Other: waste facilities | |

| Conditions: | A - Acceptable | C - Concern | U - Unacceptable | NA - Not Applicable | NI - Not Inspected |
|------------------------|----------------|-------------|------------------------------|---------------------|--------------------|
| Water Use | Condition | Comment | Site Conditions | Condition | Comment |
| Intake/Screen | NA | | Water Management Structures | A | 4 |
| Flow Measure. Device | A | | Culverts / Bridges | A | |
| Source: Contour | A | | Drainage | A | |
| Water Use: W.B. | A | | Erosion / Sediment | C | 2 |
| Recirculation (y/k) | A | | Mitigation Measures | C | 2 |
| | | | Reclamation Activities | NA | |
| | | | Materials Storage | A | |
| | | | Signage | A | |
| Waste Disposal | | | Monitoring | | |
| Waste Water | NC | 1 | Sample Collection / Analysis | A | |
| Solid Waste | A | | | | |
| Hazardous Waste | A | | | | |

*The number in the comments field will correspond with specific comments provided below.

| | |
|---|--|
| Samples taken by Inspector: | Location(s): LUP-01, LUP-10, LUP-14, LUP-27 |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |

SECTION 1 Comments (s. 1 #2) Non-Compliance with Act or Licence (s. 1) Action Required (s. 3)

- ① pump intake in main tank farm berm (for discharge) was allowed to sit on bottom of berm; appears to have drawn sediment. Ensure intake is raised off sandy bottom.
- ② General sediment erosion seen along roads and air strip. Pump discharge from main tank farm was discharged onto sandy berm wall, causing erosion to main tank farm berm wall. Hose should be extended to rocky area to mitigate erosion.
- ③ No measures are in place to prevent migration of satellite tank farm spill (no dykes, absorbents etc). As this will result in spread of contamination (may result), consideration should be given to preventing the spread of hydrocarbons.
- ④ Even with work done last season on lower sewage berm, fast freshet has raised Lower Sewage Lake to less than 1m freeboard and effluent is close to flowing around the south end. This should be monitored

| | |
|--|-------------------------------------|
| Licensee or Representative KARYN LEWIS | Inspector's Name EVA PAUL |
| Signature | Signature |
| Date 14/06/16 | Date 14/06/16 |

Office Use Only: Follow-up report to be issued by Inspector Yes No



| | |
|----------------------|-------------------------|
| Licensee | Licensee Representative |
| LUPIN MINES INC | KARYN LEWIS |
| Licence No. / Expiry | Representative's Title |
| 2AM-LUP1520 | |
| Date of Inspection | Inspector |
| 14 JUNE 2016 | EVA PAUL |

SECTION 2 Comments (s.1+2) Non-Compliance with Act or Licence (s.) Action Required (s.3)

④(continued) and if necessary, berm height increased. LMI is waiting for results, and, if compliant, will discharge ASAP; However, there is little margin for error. If results are non-compliant, what is LMI's plan to deal with effluent?

SECTION 3 Comments (s.) Non-Compliance with Act or Licence (s.) Action Required (s.3)

① Ensure discharges are conducted in a manner that does not result in sediment uptake, and minimize erosion.

② Consider limiting hydrocarbon migration from STF spill. (Traffic over the spill, flow through sandy soil etc.)

③ Ensure Lower Sewage Lake does not bypass the Lower Berm. Monitor daily. Develop measures to prevent occurrence.

| | |
|----------------------------|------------------|
| Licensee or Representative | Inspector's Name |
| KARYN LEWIS | EVA PAUL |
| Signature | Signature |
| | |
| Date | Date |
| 14/06/16 | 14/06/16 (P.) |

LUPIN MINES INCORPORATED

June 30, 2016

Eva Paul, Water Resources Officer
Indigenous and Northern Affairs Canada
Nunavut Regional Office
P.O. Box 1500
4923-52 Street
Yellowknife, NWT X1A 2R3

RE: 2016 Inspection Report dated June 14, 2016/paper copy received June 14, 2016/email copy received June 15, 2016

Dear Inspector Paul:

Lupin Mines Incorporated ("LMI") is responding to the Indigenous and Northern Affairs Canada ("INAC") Inspector's report dated June 14, 2016, with the inspection being carried out June 14, 2016.

The following summary we believe will assist in clarifying and resolving the issues and concerns identified.

1. Waste Disposal - Waste Water:

Inspection Report:

Pump intake in main tank berm (for discharge) was allowed to sit on the bottom of the berm; appears to have drawn sediment. Ensure intake is raised off sandy bottom.

Ensure discharges are conducted in a manner that does not result in sediment uptake, and minimizes erosion.

LMI Response:

LMI would like to confirm, as per our discussion at site, that during approved discharge (prior to your inspection) at the MTF there was a mesh cover in place and the pump intake was elevated. Once the discharge was completed the parts used for elevation and the mesh cover were removed and placed under and on the hose during the MTF-JF approved discharge (prior to your inspection). LMI staff have now removed the pump and hoses and placed them back in storage.

2. Site Conditions - Erosion/Sediment – Mitigation Measures

Inspection Report:

General sediment/erosion seen along roads and airstrip. Pump discharge from main tank farm was discharged onto sandy berm wall, causing erosion to main tank farm berm wall. Hose should be extended to rocky area to mitigate erosion.

Consider limited hydrocarbon migration from STF spill (Traffic over the spill, flow through sandy soil etc.)

LMI Response:

In regards to the general sediment/erosion along the roads and airstrip, as per our discussion, there were no specific areas of major concern by the Inspector. LMI will take the necessary measures to repair erosion along the roads and airstrip as required.

In the future, LMI will make sure that the hose discharging to the environment is placed further down the rocky embankment to minimize erosion. The erosion in photo 1 below, as noted during your inspection, has subsequently been repaired as shown in photo 2 below.

Photo 1 – before repairs



Photo 2 – after repairs



3. **Haz/Mat Management - Spills**

Inspector Report:

No Measures are in place to prevent migration of satellite tank farm spill (no dykes, absorbents etc.). As this will result in spread of contamination (may result), consideration should be given to preventing the spread of hydrocarbons.

LMI Response:

In regards to the potential for hydrocarbon migration from the STF spill, LMI will implement measures at the STF to prevent migration at the STF as requested by the Inspectors. As agreed with the Inspector, LMI will build a trench to divert the water to be captured either with absorbent pads or some other form. This work has commenced and we will provide confirmation once completed. With the new landfarm provisions included in the renewed water licence (2AM-LUP1520), LMI's plan is to prepare, construct and operate a landfarm this year to begin treating the hydrocarbon soil at the STF.

4. **Site Conditions – Water Management Structures**

Inspectors Report:

Even with work done last season on lower sewage berm, fast freshet has raised lower sewage lake to less than 1m freeboard and effluent is close to flowing around the south end. This should be monitored and if necessary, berm height increased. LMI is waiting for results, and if compliant, will discharge ASAP. However, there is little margin for error. If results are non-compliant, what is LMI's plan to deal with effluent?

LMI Response:

The results of the samples at the lower sewage lagoon returned within criteria and LMI has begun discharging with the Inspectors approval.

In the event that the samples had not meet criteria, as discussed, the effluent from the lower sewage lagoon would have been siphoned in tanks, beginning with the big blue tank located between the upper and lower sewage lagoon.

Please do not hesitate to contact me directly should you wish to discuss this letter.

Regards,

Karyn Lewis

Karyn Lewis
Lupin Mines Incorporated
778-386-7340