

Application for Water Licence Amendment

Application Submission Date: 07/27/2018
Month/Day/Year

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NUNAVUT IMALIRIYIN KATIMAYIT
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

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APPLICATION FOR WATER LICENCE AMENDMENT

The applicant is referred to the NWB's Guide 7: Licensee Requirements Following the Issuance of a Water Licence for more information about this application form.

Where possible, provide background information regarding the original licence application or attach previously submitted information.

EXISTING LICENCE NO: 2AM-LUP1520

1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. **An amendment will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: Lupin Mines Incorporated

Address: #1204 – 700 West Pender Street
Vancouver, BC V6C 1G8

Phone: 778-386-7340

Fax: N/A

e-mail: K.Lewis@mandalayresources.com

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.

Name: Same as Block 1

Address:

Phone: _____

Fax: _____

e-mail: _____

(Attach authorization letter.)

3. NAME OF PROJECT

Has the name of the project changed?

☐ Yes ☒ No

If Yes, indicate the name of the project including the name of the location:

Lupin Mine, Contwoyto Lake, Nunavut

4. LOCATION OF UNDERTAKING

Does the proposed amendment change the location of the amended undertaking?

☐ Yes ☒ No

Provide the project extents and camp locations. Identify proposed changes. No change proposed.

Project Extents

NW: Latitude: (65° 47' 23" N) Longitude: (111° 20' 43" W) UTM: 484197,7296512

NE: Latitude: (65° 47' 16" N) Longitude: (111° 08' 03" W) UTM : 493862,7296266

SE: Latitude: (65° 40' 50" N) Longitude: (111° 07' 41" W) UTM : 494121,7284294

SW: Latitude: (65° 40' 05" N) Longitude: (111° 20' 07" W) UTM: 483956,7284323

Camp Location(s)

Latitude: (65° 45' 54" N) Longitude: (111° 14' 05" W) UTM: 489249,7293737

5. MAP

Does the proposed amendment change the locations of any of the main components of the undertaking?

☐ Yes ☒ No

Attach a topographical map, indicating the main components of the undertaking. Identify proposed changes.

See List of Figures in the accompanying Final Closure and Reclamation Plan (FCRP).

NTS Map Sheet No.: 76E/14 Map Name: UNIT LAKE Map Scale: 1:50,000

6. NATURE OF INTEREST IN THE LAND

Does the proposed amendment change the nature of the interest in the land?

☐ Yes ☒ No

If Yes, indicate changes. _____

Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☒ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: See table below Date of expiry: See table below

Surface

☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: Pending See table below Date of expiry: t.b.d

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other _____

Date (expected date) of issuance: _____ Date of expiry: _____

NAME	TYPE	DESCRIPTION	EXPIRY
2428	Mineral Lease	Lot 1 Group 1216 Quad 76E/14	27-Jul-2033
3275	Mineral Lease	Lot 1003 Quad 76E\11	27-Sep-2030
3276	Mineral Lease	Lot 1002 Quad 76E\11	27-Sep-2030
3277	Mineral Lease	Lot 1004 Quad 76E\11	27-Sep-2030
3278	Mineral Lease	Lot 1001 Quad 76E\11	27-Sep-2030
76E/14-1-12	SURFACE LEASE	Minesite, Tailings Containment Area	Pending(a)
76E/14-2-13	SURFACE LEASE	Airstrip	Pending(a)
76E/11-2-7	SURFACE LEASE	Fingers Lake Quarry, Access Road	Pending(a)
76E/11-3-7	SURFACE LEASE	Fingers Lake Water Lot Dock	Pending(a)
76E/14-10-6	SURFACE LEASE	VOR Navigational Aid Site	Pending(a)

a) LMI has filed renewal application and all fees through 2018 have been paid for the leases that expired March 2012. LMI has recently been advised leases have been signed off by LMI pending signatures from DIAND.

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations: Lupin Mines Incorporated, wholly owned, indirect subsidiary of Mandalay Resources Incorporated

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the existing project is located.

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> North Baffin | <input type="checkbox"/> Keewatin |
| <input type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq |
| <input type="checkbox"/> Akunnig | <input checked="" type="checkbox"/> West Kitikmeot |

Does the proposed amendment change the land use planning area?

- ☐ Yes ☒ No

If yes, indicate the land use planning area in which the amended undertaking is located.

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> North Baffin | <input type="checkbox"/> Keewatin |
| <input type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq |
| <input type="checkbox"/> Akunnig | <input type="checkbox"/> West Kitikmeot |

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

- ☐ Yes ☒ No

If Yes, indicate date issued and attach copy. _____

Does the proposed amendment change the original NPC conformity determination or the need to obtain one?

- ☐ Yes ☒ No

If Yes, indicate date issued (or expected) and attach a copy. _____

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

Consistent with the Boards Reasons for Decision dated 11 May 2015, correspondence is on the NWB public registry from the Nunavut Planning Commission (i.e., email dated 26 February 2014) indicating that, as the project is located outside the boundaries of the two approved land use plans in Nunavut, no conformity determination was required and no further review by the Nunavut Planning Commission would be required as it relates to the current Water Licence.

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-LUP1520%20LMI/2%20ADMIN/2%20NPC%20NIRB/0%20NPC/140228%202AM-LUP0914%20NPC%20Determination-IMLE.pdf>

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

- ☒ Yes ☐ No

If Yes, indicate date issued and attach copy. ___ May, 6, 2008 ___ NIRB File WR99053 ___

Does the proposed amendment change the original NIRB screening determination or the need to obtain one?

- ☐ Yes ☐ No

If Yes, indicate date issued (or expected) and attach a copy. _____
If No, provide written confirmation from NIRB confirming that a screening determination is not required.

LMI assumes the final closure of the Lupin Mine does not constitute a significant modification requiring further review under the Nunavut Agreement and that the original NIRB Screening Decision Report (NIRB 99WR053) and reconfirmed by NIRB in 2011 for the project apply. This assumption and approach is consistent with the determination made for final closure of the Polaris Mine and Nanisivik Mine, both located in Nunavut, projects originally screened under Canadian Environmental Assessment Act, grandfathered in the Nunavut Agreement and subsequently screened by NIRB.

Note: The initial submission of a Final Abandonment and Restoration Plan, under Licence 2AM-LUP0008 was submitted on February 28, 2005 as a requirement of Part I, Item 3. The TCA Closure Plan and Appendices to the Plan were approved with the licence renewal in 2009 and again, with the approval of the Interim Abandonment and Restoration Plan, 2013 (IARP) in 2015.

9. DESCRIPTION OF UNDERTAKING

Does the proposed amendment change the description of the undertaking?

☐ Yes ☒ No

Classification MINING: Final Closure and Reclamation of the Lupin

List and attach plans and drawings or project proposal. Identify proposed changes.

The primary supporting document providing a description of the undertaking is attached as the Final Closure and Reclamation Plan (FCRP). LMI intends to continue to implement the approved (July 2018) Interim Closure and Restoration Plan (ICRP) during the amendment process.

The amendment/renewal application includes the FCRP, which will supersede the approved IARP, upon approval, and provide the necessary documentation, direction, and clarity for final closure and reclamation of the Lupin Mine.

A summary of the supplemental documents that have been previously submitted as Licence condition requirements, or as updates during recent amendments to the Licence are included as Table A.

10. OPTIONS

Does the proposed amendment change any of the alternative methods and locations that were considered to carry out the project?

☐ Yes ☒ No

Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Identify proposed changes.

LMI has investigated various options to resume operations at the Lupin Mine evidenced by the extended period of Care and Maintenance. Alternatives for closure were assessed by various prior Licensees beginning with the initial submission of a Final Abandonment and Restoration Plan, in 2005. Based on various factors, LMI has made the decision to proceed with final closure of the Site.

The FCRP outlines various alternatives where possible, to remediation and closure activities currently under consideration. For example: the method of disposal of contaminated soils and demolition debris.

11. CLASSIFICATION OF PRIMARY UNDERTAKING

Indicate the primary classification of undertaking for the existing licence by checking one of the following boxes:

- | | |
|--|--|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input checked="" type="checkbox"/> Mining (includes exploration/drilling/exploration camps) | |
| <input type="checkbox"/> Conservation | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Miscellaneous (describe below): |
| <input type="checkbox"/> Power | |

Does the proposed amendment change the classification of primary undertaking?

☐ Yes ☒ No

Mining: Closure and Reclamation

If Yes, indicate the primary undertaking of the amendment: _____

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be updated and submitted with an Application for Amendment. Indicate which SIG(s) are applicable to your application.

- ☐ Hydrostatic Testing
- ☐ Tannery
- ☐ Tourist / Remote Camp
- ☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
- ☐ Onshore Oil and Gas Exploration Drilling
- ☐ Mineral Exploration / Remote Camp
- ☐ Advanced Exploration
- ☒ Mine Development
- ☐ Municipal
- ☐ General Water Works
- ☐ Power

The undertaking classification of activities has not changed. The application for renewal/amendment reflects final phase of Mining (closure and reclamation). No SIG in place for Mine Closure.

12. WATER USE

Indicate, using the boxes below, the types of water use(s) approved in the existing licence.

- | | |
|--|---|
| <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes | |
| <input checked="" type="checkbox"/> To obtain water for industrial purposes | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To cross a watercourse | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input checked="" type="checkbox"/> To alter the flow of, or store water | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> Other: _____ | |

Does the proposed amendment change the type(s) of water use(s)?

☒ Yes ☐ No

If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of water use(s) noting any water use(s) that are to be added, continued, or removed.

- | | |
|--|---|
| <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes | |
| <input checked="" type="checkbox"/> To obtain water for industrial purposes | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To cross a watercourse | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input checked="" type="checkbox"/> To alter the flow of, or store water | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> Other: _____ | |

Change to final phases of mining (closure and post closure), therefore, water use for active mining and milling/ore processing will no longer be required.

Domestic water use for camp operation required. (currently approved use)

Industrial water use for multi-purposes may include equipment maintenance, road maintenance, materials cleaning prior to disposal required (currently approved uses).

Restoration of natural water flows where practicable will be carried out at the Tailings Containment Area (currently approved activity).

Restoration of natural water flows where practicable at the Sewage Lakes area (Upper and Lower Sewage lakes), to allow positive natural drainage (currently approved activity ICRP)

13. QUANTITY OF WATER INVOLVED

Does the proposed amendment change the source of water?

☐ Yes ☒ No

Indicate the water source(s). Identify proposed changes.: Contwoyto Lake, NU

See FCRP Figure 4

(show location(s) on map)

Does the proposed amendment change the quality of the water source and/or its available capacity?

☐ Yes ☒ No

Describe the quality of the water source(s) and the available capacity(s).

The water source (Contwoyto Lake) is of high quality and is used as a potable water source with minimal water treatment required. Source consistent since initial development in 1980. In terms of capacity; this Lake is approximately 1,034 km² in size with depths varying up to 60 m or more.

For source quality information refer to the Water Licence Annual Reports posted on the NWB ftp site at

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-LUP1520%20LMI/3%20TECH/1%20GENERAL%20%28B%29/2%20ANNUAL%20RPT>

Identify any changes: _____none expected_____

Does the proposed amendment change the overall quantity of water to be used?

☒ Yes ☐ No

Provide the overall estimated quantity to be used. Identify proposed changes. : __685__ m³/day.

Does the proposed amendment change the quantity of water to be used from each source?

☒ Yes ☐ No

Provide the estimated quantity(s) of water to be used from each source. Identify proposed changes:

Contwoyto Lake 685 m³/day

Does the proposed amendment change the quantity of water to be used for each purpose?

☒ Yes ☐ No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.). Identify proposed changes.:

Water use for mining and milling (processing) activities will no longer be required. The current licence authorized the use of up to 5000 m³/year during care and maintenance activities. A transition to operations condition was included for water use up to 500,000 m³/year upon notice.

As the activities at the mine site will transition from the current general care and maintenance and progressive reclamation, to final reclamation and closure and then closure monitoring, personnel will likely be at site year-round and at increased numbers during the construction and demolition periods, and require water use at a varied rate depending on activity. Proposed water use is as follows:

Camp: 100 m³/day (variable dependent on the number of personnel in camp and time of year).
Industrial: 585 m³/day industrial (variable dependent on time of year and activities)

LMI proposes to have the ability, once construction, demolition and closure activities have been completed, to request a reduction in the total water use, back to the current, 5,000 m³/year amount, to allow for ongoing closure monitoring.

Does the proposed amendment change the method(s) of extraction?

☒ Yes ☐ No

Describe the method(s) of extraction. Identify proposed changes:

The submersible pumps that were located at the pumphouse have been removed and are currently in storage. A portable submersible pump fitted with an appropriate screen, will be used at the current freshwater pumphouse breakwater to fill the water truck as needed for transfer to the camp storage tanks or used directly for industrial purposes.

Does the proposed amendment change the quantity(s) of water returned to source(s)?

☐ Yes ☒ No

Estimated quantity(s) of water returned to source(s). Identify proposed changes. : ____0____ m³/day

There is no direct return line to the water source.

Does the proposed amendment change the quality(s) of water returned to source(s)?

☐ Yes ☒ No

Describe the quality(s) of water(s) returned to source(s). Identify any changes:

There is no direct return pipeline

Camp sewage and grey water is directed to the permitted sewage lakes facility whereby natural treatment processes (biodegradation/settling) take place. Effluent is released to the environment during the summer months, where eventually over time, the water may return to Contwoyto Lake through natural drainage.

Water from the TCA is released as required during late summer in order to control the water levels within the facility. There has been no production water (mill/mine effluent) discharged to the facility since 2005. The water released from the TCA during the past 12 years is residual process water from milling operations, and water that has naturally collected in the facility. For additional information refer to FCRP Water Quality Section 2.1.6.

For effluent quality information from both locations, refer to the Water Licence Annual Reports posted on the NWB ftp site at:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-LUP1520%20LMI/3%20TECH/1%20GENERAL%20%28B%29/2%20ANNUAL%20RPT>

14. WASTE

Check the appropriate box(s) to indicate the types of waste(s) approved in the existing licence.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Sewage | <input checked="" type="checkbox"/> Waste oil |
| <input checked="" type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Greywater |
| <input checked="" type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste | |
| <input checked="" type="checkbox"/> Other (describe): <u>Effluent discharged from the Tailings Containment Area during operations and care and maintenance activities.</u> | |

Does the proposed amendment change the type(s) of waste(s) to be generated or deposited?

☒ Yes ☐ No

If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of waste(s) to be generated and/or deposited noting the addition, removal or continued generation and/or disposal of waste(s).

- | | |
|---|--|
| <input checked="" type="checkbox"/> Sewage | <input checked="" type="checkbox"/> Waste oil |
| <input checked="" type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Greywater |
| <input checked="" type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste | |
| <input checked="" type="checkbox"/> Other (describe): ____ | |

Continuation of all previously approved waste generation. Wastes to be generated from the undertaking for active closure of the Site, include demolition wastes, being non-hazardous, non-combustible, which will be deposited in the licensed landfill(s) including a solid waste landfill, Demolition Landfill and/or underground workings (accessed from the surface openings).

Dewatering of the surface pits (west zone crown pillar, pits 2, 4 and 5) required for demolition waste disposal, will occur by direct pumping to underground workings via the mine shaft or vent/fresh air openings, or transfer to the Upper Sewage Lake for further treatment as per current licence conditions.

For additional information refer to FCRP Section 2.4.6, Section 4.3.2.11 and 4.3.2.12.

15. QUANTITY AND QUALITY OF WASTE INVOLVED

Does the proposed amendment change the quantity(s) of the types of wastes involved?

☒ Yes ☐ No

Does the proposed amendment change the composition(s) of the types of wastes involved?

☒ Yes ☐ No

Does the proposed amendment change the method(s) of treatment for the types of waste involved?

☐ Yes ☒ No

Does the proposed amendment change the method(s) of disposal for the types of waste involved?

☒ Yes ☐ No

If Yes to any of the above, describe the proposed changes:

Additional wastes to be generated from the undertaking include demolition wastes which are non-hazardous, non-combustible, and will be deposited in the licensed landfill(s) including a demolition waste landfill specifically for the excess demolition wastes, underground workings (accessed from the surface openings).

For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

For detailed waste management information see the Lupin Mine Waste Management Plan, March 2016 and Lupin Mine Liquid Waste Management Plan, March 2016.

Refer to table below.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
PHC Contaminated Soils	Petroleum Hydrocarbon Contaminated Soils	34,700	Disposal Underground	Disposal Underground
Contaminated Soils	(As, PbNO ₃ , CN)	16,700	Disposal Underground	Disposal Underground
Asbestos Containing Materials and Other HazMat	Asbestos, Pb painted items	100	Landfill	Landfill
Waste Rock from Mill Laydown Area, Lumber Yard & Bone Yard	Arsenic mineralized waste rock and ore	48,727	Disposal Underground, Landfill, leave in place and cover	Disposal Underground, Landfill, leave in place and cover
Demolition waste	Structural steel, aluminum, copper, plastics, preserved and painted woods,	30,000 m ³	Segregation from combustible materials	Centre and west zone open crown pillars, Landfill, demolition waste landfill
Wastewater disposal (Crown pillar pits 2, 4 and 5)	Water	Approximately 5,250 m ³	None, pumped to the mine voids for disposal underground, or pumped to the Upper Sewage Lake for further treatment.	Pumped to underground for disposal, or upper sewage lake.

For additional information, see sec. 4.4 of the FCRP.

16. OTHER AUTHORIZATIONS

Does the proposed amendment change the need for other authorizations in addition to the sub-surface and surface land use authorizations provided in Block 6?

☒ Yes ☐ No

If Yes, indicate any additional authorizations required, which authorizations are no longer required, and which authorizations continue to be required.

For each provide the following:

For additional information refer to Appendix A – Table A-1 List of Permits, Licences, and Authorizations Required for Project

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES

Does the proposed amendment change the predicted environmental impacts of the undertaking or the mitigation measures?

☐ Yes ☒ No

Describe direct, indirect, and cumulative impacts related to water and waste. Identify any changes.

Lupin Mines Incorporated has developed Management Plans to manage, monitor and mitigate the predicted environmental impacts of the undertaking. The revised 2016 Management Plans were submitted during the amendment no.1 request and include: Lupin Mine Final Closure and Reclamation Plan, Spill Contingency Plan, Care and Maintenance Plan, Wildlife Management Plan, Solid Waste Management Plan, Liquid Waste Management Plan, Water Quality Monitoring Plan and Quality Assurance / Quality Control Plan.

Refer to attached Table A for listing of Management Plans and respective links to the NWB Public Registry.

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS

Was compensation paid and/or an agreement(s) for compensation been entered into with any existing or other users of water during consideration of the existing licence?

☐ Yes ☒ No

If Yes, provide the names, addresses and the nature of water use by those persons or properties.

Does the proposed amendment adversely affect any known persons or property including those that hold licences for water use in precedence to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature?

☐ Yes ☒ No

If Yes, provide the names, addresses and the nature of water use of those persons or properties.

Advise the Board if compensation has been paid and/or an agreement(s) for compensation has been reached with any existing or other water users with respect to the proposed amendment.

19. INUIT WATER RIGHTS

Was compensation paid/ or an agreement(s) for compensation been entered into with any Designated Inuit Organization (DIO) during consideration of the existing licence?

☐ Yes ☒ No

If Yes, which DIO(s) _____

Does the proposed amendment substantially affect the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL)?

☐ Yes ☒ No

If Yes, advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more DIO(s) with respect to the proposed amendment.

Note: the Lupin Mine and undertaking is located entirely on Crown Lands.

- 20. CONSULTATION** - Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

For a complete listing of engagement and consultation record in the FCRP, refer to Section 1.3.6 and subsections as well as Appendix E: Table E-1: Stakeholder Consultation Record and Table E-2 Additional Consultation Record of Inspections.

21. SECURITY INFORMATION

Does the proposed amendment change the financial security assessment?

☒ Yes ☐ No

Does the proposed amendment change the estimate of the total financial security for final reclamation?

☒ Yes ☐ No

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken. Identify any changes in the financial security assessment resulting from the proposed amendment.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the Mine Site Reclamation Policy for Nunavut, Indian and Northern Affairs Canada, 2002.

A revised cost estimate is included in the FCRP as Appendix G.

Note: LMI intends to submit quarterly reports for review by the NWB, interested parties and Inspectors for confirmation of works completed. LMI expects the report will form the basis for security refunds and will define the requests for security refund based on completion of line items provided in the most recent cost estimate, regardless of actual cost expended on the reclamation works. LMI believes refunds should be based on estimated values provided by LMI, given that the posting of security is based on an accepted estimate.

It is LMI's expectation that inspections to be completed by DIAND under the NWNSRTA will be completed on a timely (i.e. quarterly) basis in line with LMI reporting such that the processes for securing of refunds can be applied efficiently, thereby allowing LMI to apply the refunds to ongoing reclamation works thus completing the work on schedule, as efficiently as possible.

For additional detail refer to Section 7.0 and subsections of the FCRP.

22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

☐ Yes ☒ No

Taking into account the past performance of the Licensee, LMI confirms that it has the financial ability adequate for completion of the undertaking, mitigating any adverse impacts and providing for satisfactory maintenance and restoration of the site.

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

☐ Yes ☒ No

Provide a list of the officers of the company.

Lupin Mines Incorporated (A wholly owned indirect subsidiary of Mandalay Resources Corporation)

Mandalay Resources Corporation officers:

Belinda Labatte
Dominic Duffy

Note: Consultants supporting on the Application, include: Golder Associates and David Hohnstein, Independent Consultant.

Is the Certificate of Incorporation or evidence of registration of the company name the same?

☒ Yes ☐ No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

Articles of Incorporation, Ontario Corporation Number 1670727, dated April 28, 2006.

On file with NWB at:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-LUP1520%20LMI/1%20APPLICATION/2014%20Renewal/140228%20AM-LUP0914%202006%20Certificate%20of%20Incorporation%20-%20Lupin%20Mines-IMLE.pdf>

23. STUDIES UNDERTAKEN TO DATE

List and attach updated studies, reports, research etc.

See attached Table A and FCRP Appendix F for list of Environmental Studies/Reclamation Research/Engineering Studies and Design Reports.

Note: see also References to the FCRP.

LMI has not included documents already on the NWB Public Registry. (Links provided in FCRP Appendix B and Table A)

Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.

See Table B, Licence Compliance Assessment and Status Report. For a summary of the response to Inspector's reports issued during the Licence term years 2015-2017 refer to supplemental information for Box 23 below.

If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist.

24. PROPOSED TIME SCHEDULE

When are proposed amendments scheduled to be undertaken:

Refer to FCRP Table 14 for Summary of Measures for Final Closure, current through 2025.

Does the proposed amendment change the time schedule considered in the existing licence for any phase of development?

☒ Yes ☐ No

Indicate the start and completion dates for each applicable phase of development (construction, operation, closure, and post closure). Identify proposed changes.

Construction

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

Operation

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

Closure

Proposed Start Date: May/2018 Proposed Completion Date: April/2020
(month/year) (month/year)

Post - Closure

Proposed Start Date: May/2020 Proposed Completion Date: August/2026
(month/year) (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Operation

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Closure

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☒ All season

Post - Closure

☐ Winter ☒ Spring ☒ Summer ☒ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? August 18, 2020

Is the Licensee applying for a combined renewal and amendment of the existing licence?

☒ Yes ☐ No

If Yes, indicate the proposed term of the renewal (maximum of 25 years): Seven (7) years

Requested date of renewal issuance: May/2019 Requested Expiry Date: August/2026
(month/year) (month/year)

(The requested date of renewal issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING

Will the proposed amendment change the content of annual reports or the annual report template?

☒ Yes ☐ No

If Yes, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

The annual reporting under an amended/renewed water licence will change and be dependent on the terms and conditions included in that approval. In addition to general project information, background and company information, anticipated requirements may include: water use and waste disposal activities, inspections and inspection results, monitoring/sampling results, response to INAC inspection reports/actions required, any modifications or maintenance work carried out during the year being reported, updates to plans required during the closure activities as well as the monitoring phase, and any other details on water use and waste disposal requested by the Board prior to November 1 of the year being reported.

LMI intends to submit quarterly reporting, refer to Box 21 above.

27. CHECKLIST

The following must be included with the application for Amendment for the water licensing process to begin.

Completed Application for Water Licence Amendment form.

☒ Yes ☐ No If no, date expected _____

Information addressing Supplement Information Guideline (SIG), where applicable (see Block 11)

☐ Yes ☒ No If no, date expected: No SIG in place for Mine Closure.

Compliance Assessment / Status Report (see Block 23).

☐ Yes ☒ No If no, date expected August 3, 2018

Indication of Renewal Requirement (see Block 26)

☒ Yes ☐ No If no, date expected _____

English Summary of Amendment Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Amendment Application.

☒ Yes ☐ No If no, date expected August 3, 2018

Application fee of \$30.00 CDN (Payee Receiver General for Canada).

☒ Yes ☐ No If no, date expected _____

Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes ☒ No If no, date expected: not applicable as current water use fees are paid annually in advance in accordance with Regulations

28. SIGNATURE

Karyn Lewis

Project Manager, Lupin
Mine and Ulu Gold
Project

July 27, 2018

Name (Print)

Title (Print)

Signature

Date

Supplemental Information

(Box 23) Summary of Work Carried out in Response to Inspector's Reports

2015

Environment Canada Inspector was at site on September 27, 2015 to obtain water samples for the treated tailings discharge. No concerns were noted.

Water Resource Inspector was at site on July 14, 2015 to complete a site visit. On September 27, 2015 the Water Resource Inspector and Manager of Field Operations conducted an opportunistic visit to site. There was discussions/ correspondence from July 2015 to December 2015 between the Inspector and Lupin. Correspondence is located on the NWB ftp site under Inspections. A summary of the issues and actions provided are as follows:

- Sewage Lagoon repairs and decant
- Tailings Containment Area treatment and decant
- Hazardous Waste Inventory
- Sampling outside the TCA – Sampling program was completed and filed with NWB as per the renewed water licence
- Geotechnical Inspection – a geotechnical inspection was completed and filed with the NWB as per the renewed water licence
- Spill 12-306 – approval for a landfarm has been included in the renewed water licence and LMI has hired an engineering firm to complete the work required to be able to use the landfarm in the upcoming 2016 season to address this spill.

Referenced Link to NWB FTP site:

[160325 2AM-LUP0914 LMI Response to Inspector Report-IVKE.pdf](#)

2016

Water Resources Inspector was at site June 14, 2016 for a site visit. Report was received June 15, 2016 with a response provided by LMI on June 30, 2016.

A summary of the issues and actions provided are as follows:

- Waste Disposal – Wastewater at Main Tank Farm. Pump intake location at main tankfarm subject to sediment intake. Action: Pump was elevated during discharge. Pump removed to storage.
- Site Conditions – Erosion/Sediment. Poor location of effluent discharge causing some erosion. Action: LMI to take necessary measures to repair erosion along the roads and airstrip as required. Future discharge will be to a stable, rocky location.
- Hazmat Management – Spills. Measures are required at the Satellite tank farm for spill prevention. Action: Construction of a trench to divert water/spills for containment/absorption. Construction of a landfarm for the treatment of hydrocarbon contaminated soils is planned.
- Site Conditions – Water Management Structures. Lower Sewage lake freeboard less than 1m, and near flowing past on the south end of the berm. Monitor, discharge, repair as necessary. Action: Results of sampling were within compliance and LMI discharged with the Inspectors approval. Should criteria not have been met, contingency measures included pumping of water to storage tanks, one currently located between the upper and lower sewage lakes.

Referenced Link to NWB FTP site:

[160630 2AM-LUP1520 LMI Response to Inspector Report of June 14 2016 Final-IVKE.pdf](#)

2017

Water Resources Inspector was at site July 10-12, 2017 for an inspection under the Water Licence. A Report was issued July 18, 2017. A response was provided by LMI directly with the inspector.

A summary of the issues and actions provided are as follows:

- Ensure that tools are available to treat effluent from berms and potentially from the landfarm to meet discharge criteria. Action: LMI will meet all discharge criteria as required under the Licence.
- Contain and manage potentially-contaminated effluent from the portal as per item E.12 of the Licence. Provide an update by August 4, 2017 on this matter, demonstrating action taken. Action: Discussed with and issue was resolved with Inspector, minor amount of water collected at Portal entrance, likely from snow/ice melt and not from within the mine workings.
- Copy inspector on follow-up correspondence with the NWB on landfarm approval. Action: Approval received from the NWB on August 17, 2017 for the modification of the landfarm design for leak detection in lieu of monitoring wells. Requirement to sample the lower sewage lake, downgradient of the Landfarm while in operation.