

File: 2AM-LUP2032

July 22, 2024

Frazer Bourchier President & Chief Executive Officer Mandalay Resources Corp. Suite 330 – 76 Richmond Street East Toronto, ON M5C 1P1

Email: <u>f.bourchier@mandalayresources.com</u>

RE: NWB Technical Review of 2021, 2022, and 2023 Annual Reports for the Lupin Mine Project; Water Licence No: 2AM-LUP2032

Dear Frazer Bourchier:

The Nunavut Water Board (NWB or Board) has completed the technical review of the 2021, 2022, and 2023 Annual Reports (Reports) for type A Water Licence No: 2AM-LUP2032 (Licence) issued to Lupin Mines Incorporated (LMI or Licensee), a wholly owned, indirect subsidiary of Mandalay Resources Corporation.

On May 13, 2024, the NWB acknowledged receipt of the Annual Reports and distributed these for a two-month public review. Comments were received from Crown-Indigenous Relations and Northern Affairs (CIRNA)¹ and Environment and Climate Change Canada (ECCC)² on July 10, 2024, and July 15, 2024, respectively.

Table 1 summarizes the Interveners' recommendations and the deadline to respond and provide outstanding information. Please refer to the submissions addressed above for a detailed discussion of the comments.

¹ Crown-Indigenous Relations and Northern Affairs Canada's Review of the 2021, 2022, and 2023 Annual Reports and Dam Safety Report for the Lupin Mine Project, CIRNA, July 10, 2024

² 2AM-LUP2032 – Lupin Mines Incorporated (LMI) – Lupin Mine – 2021, 2022 & 2023 Annual Reports, ECCC, July 15, 2024

Table 1 Intervener Recommendation and Deadline to Respond and Provide Outstanding Information

SN	Intervener Recommendation	Deadline to Respond and Provide Outstanding Information			
Crown-Indigenous Relations and Northern Affairs					
R-01	CIRNA recommends LMI provide an approximate timeframe for addressing the outstanding recommendations from the 2022 and 2023 Annual Inspection Reports to the Board.	September 30, 2024			
R-02	 CIRNA recommends that LMI provide: a. An approximate date as to when the survey of the Temporary Fuel Farm (TFF) will be completed and submitted to the Board for review. b. An approximate date as to when the as-built report of the TFF will be completed and submitted to the Board for review. c. An approximate date for the decommissioning and cleanup of the existing Main Tank Farm to the Board. d. An approximate date as to when the Updated Reclamation and Closure Plan will be submitted to the Board which includes the TFF. 	September 30, 2024			
R-03	CIRNA recommends LMI provide: a. An update on the timeline for continued active reclamation activities on site. b. A management plan with timelines to address the concerns and recommendations provided in the 2023 Dam Safety Report. c. Details on the assessment of the onsite conditions of the dam, including the final spillway designs for Dam 1A, and J Dam. d. A timeline as to when the ten (10) recommendations provided by SLR Consulting (Canada) Ltd. will be addressed. e. Provide an update on the status of work with respect to the dam in its 2024 Annual Report.	September 30, 2024			
	Environment and Climate Change Car	nada			
1.	ECCC recommends that the Proponent provide clarification on the current status of the incinerator, and update the 2023 Annual Report and 2023 Geotechnical Inspection Report to reflect this information.	September 30, 2024			

2.	ECCC recommends that the Proponent clarify what the annual temperature averages were in 2023 at site, and update the 2023 Geotechnical Inspection Report and 2023 Dam Safety Review with these changes.	September 30, 2024
3.	ECCC recommends that the Proponent indicate: a. Which of the recommendations from Table 4- 1 of the 2022 Geotechnical Inspection Report, that they have implemented, and update the 2023 Annual Report and 2023 Dam Safety Review report with this information. b. Whether they plan to implement the recommendations made in Section 11 of the 2023 Dam Safety Review report and Table 4- 1 of the 2023 Geotechnical Inspection Report. c. Report on the progress and results of these measures, in future years of the Lupin Mine Site annual reports.	September 30, 2024
4.	 ECCC recommends that the Proponent: a. Clarify which monitoring locations were sampled in 2023. b. Provide a summary of all water quality monitoring data from the 2023 sampling period and the laboratory result data sheets. c. Update the 2023 Annual Report and the 2023 Geotechnical Inspection Report with this information. 	September 30, 2024
5.	 ECCC recommends that the Proponent: a. Provide a summary of the results of the September 2023 water quality sampling. b. Discuss the areas of concern that were targeted by the September 2023 water quality sampling and an interpretation of the results, including a discussion on how the results will ongoing management. c. Update the 2023 Geotechnical Inspection Report with this information. 	September 30, 2024
6.	ECCC recommends that the Proponent include rows in the table in Item 1 (f) of the Annual Reports for non-contaminated diesel and jet fuel, and include information regarding quantities of each material, and their method of storage.	September 30, 2024, Subsequent annual reports (March 31 st of the year following the year being reported)
7.	ECCC recommends that the Proponent verify the accuracy of the information presented in Item 1 (j) of the 2021 Annual Report, and update the report to either correct the typographical error, or to include any missing unauthorized discharges or spills that	September 30, 2024

	occurred in 2021.	
8.	ECCC recommends that the Proponent provide corrections to the information in Item 1 (f) and 1 (m) of the 2023 Annual Report, to accurately indicate the year in which waste will be shipped via the winter road.	September 30, 2024
9.	ECCC recommends that the Proponent include fuels and lubricants in the inventory of chemicals used at the Lupin site, and update their supporting plans, including the Waste Management Plan, with this information.	September 30, 2024
10.	ECCC recommends that the Proponent update the Waste Management Plan to include information on the storage methods for batteries on the Lupin site.	September 30, 2024
11.	ECCC recommends that the Proponent clarify the intended method of disposal of metal drums in the Waste Management Plan. Furthermore, ECCC recommends that the Proponent add information to the plan, detailing any cleaning procedures that will be used to remove residual material in metal drums, prior to their disposal.	September 30, 2024
12.	ECCC recommends that the Proponent revise the Waste Management Plan, and any other relevant plans and reports, to include a section on the management of sewage and greywater at the Lupin site, including references to other plans where information on sewage and greywater management can be found.	September 30, 2024
	Nunavut Water Board	
1.	The Board has received commitments from the Licensee in the Reports to respond to the Engineer's recommendations for the Tailings Containment Area provided during the annual inspections. However, as per Part J, Item 12, a cover letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations is required with every annual inspection report of the Tailings Containment Area within sixty (60) days following the inspection.	Sixty (60) days following the inspection of the Tailings Containment Area
2.	Item 1(g) of the 2021 Annual Report references Table A2, Table A3, and Table A4 for further details on monitoring data for several monitoring stations. However, Table A2, Table A3, and Table A4 are missing from Appendix A. The Board requests the Licensee to provide the	September 30, 2024

	missing information.	
3.	The 2021 Annual Report states "Water quality guidelines were exceeded for a number of samples from the receiving environment for pH, total aluminum and total zinc. For East Lake, Boot Lake and Lower Sewage Lake exceedances were recorded for pH, total aluminum, total iron, total copper, total nickel and total zinc."	September 30, 2024
	The Board requests clarification regarding whether this was a temporary event and these did not happen subsequently. The Board would also like to know if any studies were conducted and explanation could be provided concerning this finding.	
4.	The design drawing for the Temporary Fuel Farm was submitted with the 2022 Annual Report. The Licensee is reminded of Part G, Item 1 of the Licence: "The Licensee shall, at least sixty (60) days prior to initiating construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Wastes, submit to the Board for review, final design specifications and for construction drawings, signed and stamped by an Engineer."	Sixty (60) days prior to initiating construction activities
5.	The Passive Monitoring column for LUP-10b in Table 9 — Water Quality Monitoring Requirements for Active and Passive Closure at Lupin Mine states "See Section 6.2.1 for TCA pH triggers and adaptive monitoring requirements." The Board requests the Licensee to review and update the section number to 6.2.2 instead of 6.2.1 as per the Post Closure Monitoring Plan.	September 30, 2024

Additionally, the Board acknowledges the *Technical Review and Summary* from CIRNA, dated February 22, 2022, which states the decision to release \$3,061,255.66 in financial security. The Board also received *Technical Memorandum 2020 and 2021 Contaminated Soils Remediation, 2021 Financial Assurance Release, Lupin Mine, NU* dated February 23, 2022, and defers the decision to release the financial security to CIRNA.

The Board also acknowledges the following two addenda to reflect the Licensee's current Closure Phase in Care and Maintenance and new implementation timelines for final closure and monitoring for Post Closure Phase:

- Table 14 Summary of Measures for Final Closure, Final Closure and Reclamation Plan dated August 2020; and
- Table 9 Water Quality Monitoring Requirements for Active and Passive Closure at Lupin Mine, Post Closure Monitoring Plan dated April 2021.

Furthermore, according to the Board's letter³ dated September 27, 2021, if the Licensee plans to make changes to the monitoring program, the Licensee is advised to submit a modification request to the Board for approval. Unless directed otherwise by the Board, such revision may not necessarily be considered as an "Amendment" to the Licence as per Part B, Item 17.

Copies of all documents received during the Annual Reports review can be accessed through the NWB's Public Registry and FTP site using the following link:

ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-LUP2032%20LMI/3%20TECH/B%20GENERAL/2%20ANNUAL%20RPT

The technical review of the Annual Reports concluded that the information provided generally meets the reporting requirements of the Licence. However, as provided in the table some additional details/clarifications are required. The Licensee is requested to address these comments by the specified deadlines.

If you have any questions, please contact the undersigned at nidhi.singh@nwb-oen.ca or (867) 360 6338 (ext. 32).

Best regards,

Nidhi Singh Technical Advisor

Nunavut Water Board

Enclosure: Comments - CIRNA, ECCC; NWB Technical Review of the Post Closure

Monitoring Plan and the QA/QC Plan

Cc: Distribution List – Lupin

³ NWB Technical Review of the Post Closure Monitoring Plan and the QA/QC Plan; Lupin Mine Project; Water Licence No: 2AM-LUP2032, September 27, 2021