Prairie and Northern Region Environmental Protection Operations Directorate Environment and Climate Change Canada 9250 - 49th Street NW Edmonton, AB T6B 1K5

December 16, 2019

via email to: k.lewis@mandalayresources.com\

Karyn Lewis **Executive Assistant** Lupin Mines Incorporated Suite 330 - 76 Richmond Street Toronto, Ontario M5C 1P1

Dear Karyn Lewis:

Subject: Lupin Mine 5th EEM Interpretive Report

Environment and Climate Change Canada (ECCC) has reviewed your "Lupin Mine Environmental Effects Monitoring Phase 5 Interpretive Report," submitted June 1, 2017 and the addendum submitted July 5, 2019. Our review took into account requirements of the Metal Mining Effluent Regulations (MMER) of the Fisheries Act, information in the EEM Technical Guidance Document as well as generally accepted standards of good scientific practice. This review is not a substitute for reading the MMER and does not in any way supersede or modify the Fisheries Act or the MMER. In the event of an inconsistency between this review and the Act and/or the MMER, the Act and the Regulations prevail.

Review comments for the mine to consider are attached.

As required under the Metal and Diamond Mining Effluent Regulations (MDMER), the next interpretive report and biological monitoring data are due on June 6, 2020. The report and data must be submitted via the Environmental Effects Monitoring Electronic Reporting (EEMER) system at https://ec.ss.ec.gc.ca/.



File #: MM3082

If you have any questions or concerns about the EEM program or if you wish to discuss the interpretive report, please contact Regional Coordinator Erik Allen at 780-717-4884 or at erik.allen@canada.ca. For questions regarding EEMER, please contact ec.esee-eem.ec@canada.ca.

Sincerely,

Andrea McLandress Regional Director

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Enclosure: Review comments and recommendations on "Lupin Mine Project – Lupin Mines Incorporated (LMI) – Response to comments received December 14, 2018, on Lupin Mine Environmental Effects Monitoring (EEM) Phase 5 Interpretive Report," July 2019 submission

cc: Cristina Ruiu Environment and Climate Change Canada, Regina
Mark Aussenegg Environment and Climate Change Canada, Yellowknife
Erik Allen Environment and Climate Change Canada, Edmonton

Karén Kharatyan Nunavut Water Board Derek Donald Nunavut Water Board

Ian ParsonsCrown-Indigenous Relations and Northern Affairs CanadaLisa BachellierCrown-Indigenous Relations and Northern Affairs Canada

Review comments and recommendations on "Lupin Mine Project – Lupin Mines Incorporated (LMI) – Response to comments received December 14, 2018, on Lupin Mine Environmental Effects Monitoring (EEM) Phase 5 Interpretive Report," July 2019 submission

The following comments and recommendations are based on the review of the report by members of a Technical Advisory Panel (TAP) consisting of representatives from Environment and Climate Change Canada (ECCC), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Nunavut Water Board (NWB).

3. NWB. The response indicated that high conductivity in Seep Creek is likely related to residual effluent from discharge in 2015. NWB is concerned that residual effluent appeared unexpectedly and could recur. It is unclear if surface runoff and seepage are contributing to the elevated conductivity, or if the residual effluent signal will recur in the future. Please provide further information on possible sources of residual effluent in the next interpretive report.