



Giant Mine Remediation Project  
PO Box 1500  
Yellowknife, NT X1A 2R3

December 17, 2021

Shannon Allerston  
Regulatory Specialist  
Mackenzie Valley Land and Water Board  
7<sup>th</sup> Floor, 4910-50<sup>th</sup> Avenue  
PO Box 2130  
Yellowknife, NT X1A 2P6

**RE: Giant Mine Remediation Project MV2007L8-0031 2021 Annual Geotechnical Inspection and Implementation Plan**

Dear Ms. Allerston:

The Giant Mine Remediation Project (GMRP) on behalf of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) is submitting the 2021 Annual Geotechnical Inspection (AGI) of the Giant Mine Dams to the Mackenzie Valley Land and Water Board (MVLWB) as per the Type A Water Licence MV2007L8-0031, Part F, Condition 19.

Dam inspections took place on August 17, 18, & 19, 2021. These annual geotechnical inspections are structured to observe and identify any changes to the dam structures since the previous annual geotechnical inspection was completed. Between annual geotechnical inspections our on-site staff use instrumentation to monitor and measure many characteristics of the Giant Mine dams and share this information with our inspecting geotechnical engineers on a monthly and sometimes weekly basis, depending on the structure being observed. The AGI also includes:

- Review of the dam classifications that is conducted based on Canadian Dam Association (CDA) guidelines;
- Review of the Operation, Maintenance, and Surveillance Manual
- Summary of recommended actions for specific dams and general recommendations.

The AGI identifies recommendations based on priority as outlined in section 7 of this report. GMRP has been working diligently to address these recommendations laid out in the AGI and started implementing works in August 2021 after initially presented by the inspecting geotechnical engineer.

The GMRP's approach to implementing the recommended maintenance or operational updates is to address the highest priority items starting with Priority 1 items which are considered a higher dams safety issue and working our way to Priority 4 which are in line with best management practices.

- Section 6 of the AGI report outlines the Dam consequence classification system ratings as a requirement under our Type A water licence. A complete report related to the dam consequence classification system analysis can also be found in Appendix E of this document.



A summary of the actions taken by the GMRP addressing recommendations from previous years is included in Appendix F.

Should you have any questions or require any further information, please contact the undersigned by telephone at (867) 669-2823 or by email at [Natalie.Plato@rcaanc-cirnac.gc.ca](mailto:Natalie.Plato@rcaanc-cirnac.gc.ca).

Sincerely,

Natalie Plato  
Deputy Director  
Giant Mine Remediation Project

cc. Tim Morton, Inspector, CIRNAC

Encl.

GMRP - MV2007L8-0031 – 2021 Annual Geotechnical Inspection - December 2021 Part 1  
GMRP - MV2007L8-0031 – 2021 Annual Geotechnical Inspection - December 2021 Part 2  
GMRP - MV2007L8-0031 – 2021 Annual Geotechnical Inspection - December 2021 Part 3  
GMRP - MV2007L8-0031 – 2021 Annual Geotechnical Inspection - December 2021 Part 4