



Box 1602, 5014-50<sup>th</sup> Avenue  
Yellowknife, NT X1A 2P2  
Ph. 867-675-0788 Fax 867-675-0789

**Natalie Plato**

Deputy Director

Crown-Indigenous Relations and Northern Affairs Canada  
Giant Mine Remediation Project

June 27, 2025

**Review of Thermosyphon and Dam Foundation Designs Against AR6 Climate Predications**

Dear Natalie:

In May 2020, Golder Associates Ltd. produced a report titled *Giant Mine Remediation Project Climate Change*. The Giant Mine Oversight Board (GMOB), Alternatives North and the Giant Mine Working Group Technical Advisor submitted comments on the report in 2023 as part of the Giant Mine Working Group process.

The Project Team responded in May 2024 and distributed a report by WSP Canada in January 2024 which developed updated climate data and predictions based on the Intergovernmental Panel on Climate Change, Sixth Assessment Report (AR6) and subsequent climate models, published in 2022. GMOB appreciates the work done by the Project Team, which reflects best practices in mine closure planning.

In August 2024, WSP also produced a Technical Memo that incorporated AR6 and other climate data and models to review the engineering designs completed and submitted to date for various components of the Giant Mine Remediation Project. The review found that the water related structural designs were sufficiently robust enough to handle the updated climate change projections; however, recommended the following:

“Based on the technical findings above, the following is recommended for Public Services and Procurement Canada, and Crown-Indigenous Relations and Northern Affairs Canada:

- Advance remediation activities as planned for water treatment plant mine water intake pumps, drainage structures, and Baker Creek using designs that were based on AR5.
- Review results of this evaluation for thermosyphons and dam foundations with the design team.” (p. 16) [highlight added]

GMOB Director, Kevin O'Reilly requested an update on the review of the thermosyphons and dam foundations considering the new climate change data, as this report does not appear to have been submitted or distributed. In an email response dated June 13, 2025, the following was stated:

“The design team are currently reviewing the evaluation with respect to the thermosyphons and dam foundations. I do not expect that an additional report or technical memo will be produced at this time.”

GMOB notes that a Technical Memo was developed for the water related structure designs, but that does not appear to be the approach for the thermosyphons and dam foundations. It remains unclear to GMOB how the Project Team intends to demonstrate that these components have been reviewed against the AR6 climate assessment and data developed by WSP Canada. GMOB would appreciate clarification of this matter and looks forward to your response.

Regards,



Graeme Clinton  
Chair

cc. Directors, Giant Mine Oversight Board  
Giant Mine Working Group Members  
Parties to the Environmental Agreement