



3rd Floor Gallery Building
4923-52nd Street, P.O. Box 1500
Yellowknife, NT X1A 2R3

September 16, 2016

Attention: Kierney Leach
Regulatory Officer
Mackenzie Valley Land and Water Board
P. O. Box 2130, YELLOWKNIFE NT X1A 2P6

Dear Ms. Leach,

Re: Type “A” Land Use Permit Application MV2016L8-006 and Type “B” Water Licence Application MV2016X0021 for the Gordon Lake Group Remediation Project – Scope Clarification

On August 4th, 2016 Indigenous and Northern Affairs Canada (INAC) – Contaminants and Remediation Directorate (CARD) applied for a new Type “A” Land Use Permit (LUP) AND Type “B” Water Licence for the Gordon Lake Group (GLG) Remediation Project.

In our application it was identified that there was the potential for construction of a Portal Water Management System (PWMS) at Kidney Pond. The PWMS was a contingent design element intended to address the physical hazard of the open portal and the potential source of contamination from the portal seep. We also stated that further assessment was planned for summer/fall 2016 to confirm whether or not the portal seep water was in fact a source of contamination that would require risk mitigation via the PWMS.

Stantec completed this assessment work on behalf of INAC during the summer of 2016 and recently summarized their results. As indicated at the technical session for the Gordon Lake Water Licence and Land Use Permit held on September 15th, it has been determined that this design element is not necessary for the remediation of this site and has been removed from the scope of our project.

Based on the results from the 2016 assessment field program, there are multiple lines of evidence which support the fact that the PWMS as a remedial option is not required for seepage from the Portal, including:

- Topography suggests that not all the portal water drains to the Wetland;
- Topography suggests that the waste rock piles likely drain into the Wetland, contributing to contaminants of concern (CoC) loadings;
- The estimated volume of water needed to result in overland flow from the Portal is not likely to be present based upon the analysis completed, especially considering that the analysis is overly-conservative in assuming that the freshet is instantaneous;
- The quality of the discharge water is not likely to adversely impact the soil and water chemistry in the receiving environment;

- The water quality in the Portal showed lower CoC concentrations when compared to samples collected from areas considered to characterize waste rock discharge; and,
- Simple groundwater modelling shows portal discharge to be unlikely to develop under steady state conditions; transient freshet conditions may result in discharge for a short period

The design for the Kidney Pond Portal now includes backfilling and capping of the portal. This approach sufficiently addresses the hazards of the portal and the revised design should be considered in the screening and scope of this project. The main environmental risk at Kidney Pond is associated with the potential for Acid Rock Drainage/metal leaching from the ore and waste rock piles which will be mitigated by consolidation and capping as planned under the Waste Rock and Soil Containment Area. The PWMS is therefore unnecessary and should not be considered as part of this project.

If you have any questions or concerns regarding this clarification, please contact me at (867) 669-2769 or alison.heslep@aandc-aadnc.gc.ca, or Amy Allan at (867) 669-2467 or amy.allan@canada.ca

Sincerely,



Alison Heslep
Project Manager, Contaminants and Remediation Division
Indigenous and Northern Affairs Canada

cc: Tim Morton, Inspector

INAC-Lands