HAMMOND REEF GOLD PROJECT RESPONSE TO COMMENTS ON FINAL EIS/EA

COMMENT - T-28

Source: Canadian Environmental Assessment Agency

Summary of Comment

The Proponent has used the geochemical test results in their water quality predictions. For example, they used the tailings process water quality from the aging testing in the water quality model. In Table 3-12, there are several parameters (e.g., Al, Cd, Co, Cu, Mo, Ni, Pb, U and Zn) whose total concentrations exceed one or more of the applicable criteria (PWQO, MISA or CCME). However, for the dissolved concentrations for these parameters, which are relatively lower than the total concentrations, no such exceedances are reported. It was noted that the Proponent has used the dissolved concentrations for some parameters, which are one order of magnitude lower than the total concentrations as the input source term data in the water quality modelling.

The results do not accurately reflect the water quality predictions for the effects assessment.

Proposed Action

Provide an updated water quality assessment that incorporates total concentrations into surface water quality modelling.

Reference to EIS

Hammond Reef Gold Project Geochemistry, Geology and Soils TSD Section 3.5.2.3.1 Aging Tests, page 61.

Response

Total concentrations are included in the water quality model for the basin as provided in Section 4.4.2 of the Lake Water Quality TSD. The predicted total concentrations presented in Table 4-8 consider the removal of Total Suspended Sediment (TSS) to a discharge concentration of 0.0149 g/L based on a maximum permitted MISA TSS discharge of 0.015 g/L (O.Reg. 560/94), and potential for air deposition from site based on air deposition modelling results.

The inclusion of TSS from the site waters and from air deposition does not materially change the results of the model or interpretation of model results as demonstrated in Table 4.8 of the Lake Water Quality TSD.

