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

COMMENT – T-41

Source: Canadian Environmental Assessment Agency

Summary of Comment

The hydrographs for BRH-0003B, BRH-0013, and BRH-0001B are all similar in slope to that for BRH-0009 during the decline in Marmion Reservoir water levels. We question the Proponent's conclusion that there is no direct hydraulic connection between these wells and Marmion Reservoir.

This information will be necessary to have a clear understanding of what the effects of seepage will be on water quality in the receiving environment.

Proposed Action

Re-evaluate the degree of hydraulic connection between groundwater wells and Marmion Reservoir. The Proponent should clarify whether the hydraulic connection has any bearing on the possibility of seepage flowing to receiving water bodies and quantify the effect of such a connection.

Reference to EIS

Hydrogeology TSD, Section 2.4 – Groundwater Levels, (and Figures 2-12, 2-13)

Response

The hydraulic connection was evaluated as being indirect and seasonal in nature. The wells are located in the vicinity of the Marmion Reservoir. The Marmion Reservoir was shown to have limited influence on these locations based on observations of short term fluctuations in reservoir water level relative to fluctuations in the monitoring wells. Thus the hydraulic connection is not “direct”, but rather more seasonal in nature. This conclusion is based on the data as presented. This data was used in the evaluation of potential impacts at a Final EIS/EA stage of decision making. Additional data will be collected, and analyses completed during the detailed design stage of the Project once EIS/EA approval is obtained.

Water quality of seepage water and direct discharge of water from all facilities is expected to be compliant with applicable MMER and O. Reg 560/94 criteria. Water quality concentrations for each potential point source were also considered as part of IR-MOE-NR-GW-16 in Appendix 1.IV of the Final EIS/EA Report and it was found that direct discharge of these concentrations into a water body would not result in adverse aquatic impacts.

During the detailed design stage of the Project, additional drilling will be undertaken along the dam alignments, ditch alignments and near the edges of proposed stockpiles. With this additional information, a more robust modelling evaluation will be undertaken to refine and optimize the design of the seepage collection system.

Monitoring programs will be conducted and refined as site data refines the conceptual model. It is the intent of Canadian Malartic Corporation to work with the applicable regulatory agencies to develop appropriate monitoring programs and plans that will meet the requirements of engineering design, the needs of the agencies with respect to permitting requirements, and evaluation of potential for impacts, such that predictions can be verified, trends identified, and adaptive management strategies can be implemented if necessary.

Through this process, ongoing monitoring and adaptive management if necessary, seepage is not expected to have an impact on the receiving water bodies.
