## Version 3 Hammond Reef Gold Project EIS/EA – Addendum (Part B) Responses to Provincial Information Requests

## 1656263

Identifier	Topic	Reference to EIS/EA Report	Summary of Comment	Proponent's Response	Subsequent Comment
			Date: March 2014	Date: June 2015	
MOE SW-8	Water quality, effluent mixing		The effluent mixing proportions for the various sections of Marmion Reservoir presented in section 5.2 are not clear. It appears that the values have been reported incorrectly as percent values rather than as proportions of the original concentrations. For example, they report peak mixing in table 5-2 as 0.56% when they appear to be reporting that the concentration in Upper Marmion Lake under peak mixing will be 0.56 of the original concentration. This is a major difference between the reported values and the actual values. It is not possible to determine if these values were used appropriately with respect to modelled concentrations of the various parameters due to a lack of explanation in the v.2 of the TSD.	The results of the Marmion basin mixing model are presented as concentrations of mine effluent in each model compartment assuming the discharge of a non-specific, conservative parameter with an initial concentration of 100 particles per unit volume. For example, a predicted concentration of 1.0 is equivalent to 1.0% of the initial discharge concentration. Therefore, the reported values can be correctly interpreted either as concentrations (assuming a discharge concentration of 100 parts per unit volume) or as percentages of the initial concentration.  In the example referenced in the comment (from Table 5-2), the maximum mixing concentration is 0.56 particles per unit volume (assuming a discharge concentration of 100 parts per unit volume) or 0.56% of the initial effluent concentration.	MOE SW-8B