

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 Previous Comment	Proponent's Response to Previous Comment	Follow-up comment/ Request for Information	New Proponent Response	Subsequent Comment
			<i>Date: March 2014</i> MOE SW-5	<i>Date: June 2015</i>	<i>Date: August 2015</i>		
MOE SW-5B	Water Quality		Clarification of the conditions representing 'Average Mixing Conditions' and 'Maximum Mixing Conditions' used to model the water quality impacts on Upper Marmion Lake due to effluent discharge; Provincial protocols require that worst case conditions be modelled.	<p>The basin mixing model (box model) simulated the mixing characteristics of Upper Marmion Reservoir that result from inflows, water level management at the Raft Lake Dam and wind driven dispersion in Sawbill Bay. A 28-year period (from January 1984 to December 2011) was simulated using inflow and water level time series' as described in Section 3.1.3.3 of the Lake Water Quality TSD. The results 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).</p> <p>The 'average mixing condition' is defined by the average predicted concentration in each model compartment over the 28-year simulation period. The 'maximum mixing condition' is defined by the highest predicted concentration in each model compartment over the 28-year period. The 'maximum mixing condition' is therefore representative of the 'worst-case mixing condition' in terms of the dilution capacity of the basin.</p>	<p>Provided that this clarification is included in the EA, the proponent's response is adequate for EA. It still seems unclear that the "Maximum mixing condition" is actually the scenario with the minimum dilution/mixing conditions.</p> <p>Additional information and studies may be required at permitting and approvals.</p>	Acknowledged	N/A