## Day 3, April 22<sup>nd</sup>: Water

Homework from Day 3: 15 through 22 (8 total)			
Type and #	Topic – Subtopic	Homework/Undertaking/Commitment	
Homework #15	Water – Jay Pit (Model Inputs)	DDEC is to review the Diavik pre-mitigation (prior to 2008) wet sump ammonia and nitrate water quality results and consider their incorporation into the water quality model for the Misery pit by the end of the Technical Sessions	
Homework #16	Water – Jay Pit (Model Inputs)	DDEC is to confirm whether the inputs for the post- closure model were based on period 13 or 14 end of period results by the end of the Technical Sessions	
Homework #17	Water – Hydrology	DDEC is to investigate what thresholds for surface water level and discharge rates for the narrows would trigger mitigation measures (e.g. modified back-flooding rates) during the Jay pit back-flooding period	
Homework #18	Water – WRSA seepage	DDEC is to examine whether the results of the ARD analysis would differ if the carbonate neutralization potential rather than bulk neutralization potential were used	
Homework #19	Water – Site Water Management (Effect of Wet/Dry years)	DDEC is to clarify values regarding runoff coefficients in Table B-3 from Appendix 3A (DAR)	
Homework #20	Water – Capacity, contingency, and safety factors	DDEC is to provide clarification on the discrepancy between the duration of pumped outflows and increases/decreases in volume in the Jay and Misery pits (Figures 6-3, 6-6, DAR Appendix 3-A)	
Homework #21	Water Quality	DDEC is to clarify whether chlorophyll a model predictions reflect actual chlorophyll a values, or some other metric of phytoplankton productivity in the Appendix 8-F model	
Homework #22	Water Quality	DDEC is to clarify if the W-2 model accounts for salt exclusion (Appendix 8-G)	

Undertakings from Day 3: 4 through 8 (5 total)			
Type and #	Topic – Subtopic	Homework/Undertaking/Commitment	
Undertaking #4	Caribou – Cumulative Effects	DDEC is to include Jay underground as an RFD case as it may contribute to cumulative effects on caribou (further to Homework #13) by May 8th	
Undertaking #5	Caribou – Roads and alternatives	DDEC is to complete a draft Traffic Management Plan for the Jay road by May 8th, and host a short review period and subsequent workshop	
Undertaking #6	Water – hydrogeology	DDEC will provide a summary of 2015 hydrogeology results and qualitatively describe how these updates align with previous predictions to the Review Board for inclusion on the public registry by August 1st, 2015	
Undertaking #7	Water – Hydrology (Model Design)	DDEC is to validate the hydrologic model for the Desteffany Lake outlet for the years possible (in order to	

		increase the certainty of accuracy of the model) by May 8 <sup>th</sup>
Undertaking #8	Water – Water Quality	DDEC is to provide a comparison of the volumes of Lac de Gras and Snap Lake (including residency time/turnover of water in Lac De Gras) and the total volumes of effluent that will be discharged into these lakes by May 8th
Undertaking #9	Water – Site Water Management	DDEC will examine publically available information on pumping test data from Dewey's Fault, specifically the type of testing that was conducted in the Diavik case and identify the potential for conducting such testing at Ekati and its relevance for the Jay case