

Dear Diane and Chris,

Please find below responses to questions as outlined in your respective e-mails regarding the Mine Permit Amendment Application for Mount Polley Mine.

Diane Howe's Comments

1. Review and supply supporting documentation that projected tailings amount will fit into the TSF (970m).

Please find attached the supporting documentation as **Item 1**.

Based on internal documents including LOM tonnages (32,041,000t of Mill Feed at 2.60 S.G.) and the water balance, in combination with the Tailings Storage Facility (TSF) depth-capacity curve as designed by Knight Piésold, it is projected that all material produced as a result of continuing mining operations, as well as additional items contained within the permit amendment, will be able to be stored within the Dam structure as designed. Final projected elevation of the TSF is 966.51m (freeboard included), with current ultimate design to 970.0m. Full calculations are as included in **Item 1**.

2. Provide supporting documentation for C2 and Boundary pit design.

Pit wall and bench configurations have been provided in the Application; however, the Boundary and C2 Zones are still in the exploration stages, with further drilling and definition required before pit design can be finalized. Given that the Boundary and C2 pits are projected to be mined commencing in 2013 and 2014 respectively, comprehensive design will be submitted once the respective ore bodies have been defined appropriately.

Design shall be completed with input from a design consultant, and all work shall be supervised by a qualified geotechnical engineer. Design will be modelled and modified based on pit mapping, stability performance and a review by a qualified geotechnical engineer.

3. Combined all existing geotechnical data in a single report for SERDS.

Geotechnical information for the SERDS is attached as **Item 2**.

4. Provide geotechnical information for Temporary PAG dump storage area.

Geotechnical information for the Temporary West PAG Stockpile is included as **Item 3**.

A study provided by Golder Associates dated December 1, 2010 summarizes the results of field and laboratory investigations that were previously carried out in 1999 which include the area now designated for the Temporary West PAG Stockpile (previously called the 1040 metre platform).

5. Provide ABA sampling procedure.

A revised ABA sampling procedure has been included as **Item 4**.

Operational classification procedures are as provided: a combination of geological mapping and modelling of blast hole analysis data is used to map the distribution of the PAG waste in each bench. Key items of the procedure include maintaining minimum sample density of 1 per 30,000 tonnes, and running individual samples through a LECO sulphur analyzer rather than making ABA composites.

6. Provide Water balance

A copy of the most current Water Balance and supporting text is included as **Item 5**.

The water balance projects through 2012 (and will continue to be projected out each year), and is integral in managing material in the TSF. The water balance is updated with real figures every month (i.e. precipitation, evaporation, daily mill throughput, water flow and pumping rates), with projected inputs based on historical data and forecasted figures.

7. Issue clear maps in both electronic and hard copy format

A clear copy of the maps is included as **Item 6**.

8. Remove SEZ PAG temporary stockpile from permit app.

All reference to the Temporary East PAG Stockpile (SEZ PAG temporary stockpile) will be struck from the Application as detailed further in this response.

9. Provide traffic management plan for expansion.

A traffic control procedure is kept updated at the mine in accordance with the Health and Safety requirements of the Code. An updated traffic management plan will be provided before the changeover to the new mine access occurs.

Chris Carr Comments

10. Site plans/maps need labels to show major components of proposed development.

See Comment 7.

11. The application indicates that there is sufficient capacity in the permitted TSF to store the additional water from the proposed mine development however page 39 indicates additional dam construction will be required near end of mine life presumably to store additional tailings. There is no report from the design consultant to indicate required dam height or confirm that additional dam construction is feasible.

See Comment 1.

12. Geotechnical design report required for the Southeast Rock Disposal Site (SERDS). The application provides information for a relatively small South Rock Disposal Site (report dated October 29, 2010 and includes the proposed South Haul Road), the Northeast Zone Waste Dump (report dated October 19, 2004) and Northeast Waste Rock Dump Extension (report dated November 8, 2006). Stability analyses for the South RDS did not consider undrained loading conditions for dump construction over lacustrine silt and swamp deposits.

See Comment 3.

13. Geotechnical design report required for the temporary West PAG Dump.

See Comment 4.

14. The application indicates that a waste rock dump will be located adjacent to Boundary Zone Pit. I think this is the East PAG Dump that is no longer in the plan?

See Comment 8.

15. Pit slope design report required for C2 Pit and Boundary Pit based on local rock mass and geological structure.

See Comment 2.

M-290
Item 1

Item 1 – Tailings Storage Facility Calculation

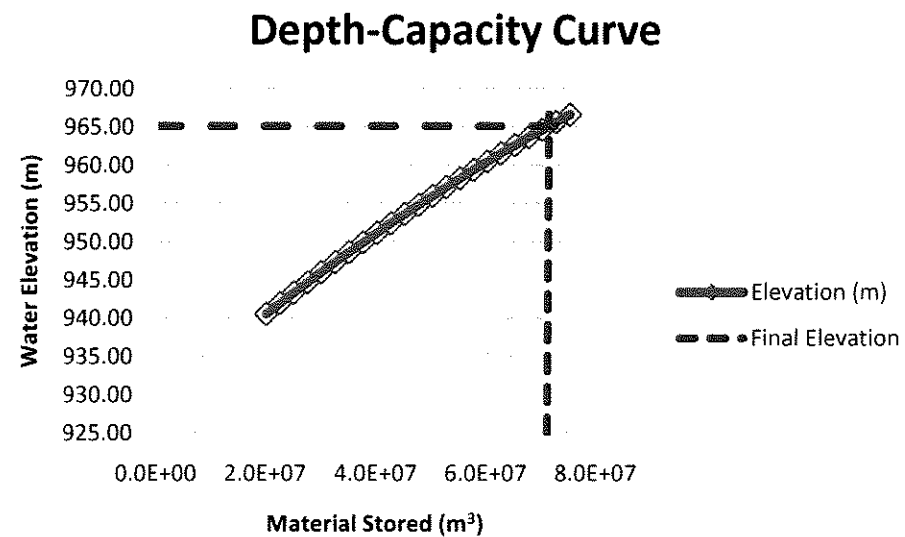
Existing Dam data is as of the end of November and is calculated from the Water Balance (Mount Polley). Projected Values are as per Mount Polley Reserves (Mount Polley) and the Depth-Capacity Curve (Knight Piésold).

Item	Existing Dam	LOM Projection
Cumulative Tailings Since Startup (m ³)	24,782,031	37,106,936
Water (m ³)	22,094,478	34,043,063
Total Material (m ³)	46,876,509	71,150,000
Water Elevation (m)	954.52	965.12
Required Dam Elevation (m)	955.91	966.51

Cumulative tailings to date are as per daily mill throughputs, compiled from daily mill and mine operations data. Water contained in the dam is tracked by means of the water balance, which accounts for all surface and sub-surface water flows collected by various ditches and pipelines that report to the TSF. Water elevation is modeled by the depth-capacity curve provided by Knight Piésold as relating to the dam design, and is verified by monthly surveys of the water surface elevation. A storm and freeboard allowance of 1.39m is added to the projected TSF water level.

For the purpose of Water Balance modelling for the life of mine, an assumed ratio of tailings to water of 1.09 (based on historical data) is assumed. This would require discharge/pit storage at latter stages of mine life in order to maintain.

Depth-Capacity Curve



Mount Polley Water Balance 2010 Update

INTRODUCTION

Mount Polley Mine maintains a water balance to assist in water management planning, including optimizing dam build requirements. The latest revision used is an update from an earlier version used during the first phase of operations (1997–2001); adding new development areas, including Springer Pit, Wight Pit, the Northeast Rock Disposal Site and both East and West long perimeter ditches collecting water from the boundary of the property. For the purpose of this Application, the water balance has been constructed to include water capture associated with proposed new development and ditch systems.

The water management plan includes the following objectives:

- To capture and manage all water that has been affected by mine components.
- To divert runoff from undisturbed areas away from the mine site and tailings storage facility (TSF).
- To effectively manage the water to minimize the need for regulated discharges to surface water and prevent the need for water removal from Polley Lake.
- To develop a discharge strategy for excess mine water (including tailings supernatant).

WATER MANAGEMENT

Effective water management at the site will ensure that the discharge of TSF water will be minimized and that the removal of water from Polley Lake will not be required. An optimum average volume of water to be stored in the TSF is 1,500,000 m³.

For average precipitation conditions, a surplus of water will be produced on the site. Water reporting to the Tailings Storage Facility (TSF) includes precipitation and runoff from the TSF catchment, runoff from mine disturbed areas including Rock Disposal Sites, and groundwater from some of the open pits.

PROJECT COMPONENTS

The main mine components including the open pits; rock disposal sites (RDS), the mill site, and the tailings facility.

HYDROMETEOROLOGY

PRECIPITATION

Mean annual precipitation for the site was estimated at 740 mm. This value reflects data collected at an on-site weather station and updates a previously estimated mean annual precipitation value of 755 mm used for previous work.

SNOWMELT

All snowfall at the site was considered to melt and contribute to runoff for the months from March to November. Snowfall between December and February was assumed to accumulate as snowpack. The accumulated snow was assumed to melt between March and May, with 10% of the snowpack melting in March, 50% in April, and 40% in May.

EVAPORATION

Evaporation data for the site was collected between 1997 and 2003. The site data was found to closely match the estimates used in previous work so these were maintained for the current water balance.

RUNOFF COEFFICIENTS

Freshet runoff coefficients were used for the months of March, April, and May. It was observed that runoff during these months, when the ground was either frozen (in the early period) or water saturated was being underestimated by the general runoff coefficients for some catchment areas. Runoff coefficients for these areas were set to 100% for the freshet period. Conversely, during the dry summer and early fall months from June through October, it was observed that water from some areas (including the East RDS) was never reporting to the TSF or collection areas and was instead being absorbed into the dry ground or seeping out of the collection ditches. The runoff coefficients for these areas were set to zero for the dry period. Recently, and in most cases, estimated flows are projected based on site observations and have been determined to a more accurate means of projecting flow from a disturbed area.

GROUNDWATER INPUT

The groundwater inflow to the open pits is assumed to generally relate to pit depth. Yearly groundwater inflow rates were estimated using a linear relationship between inflow rate and time.

The Cariboo Pit is currently being used to store excess water; however, it is periodically used to supplement process water needs.

WATER BALANCE UPDATES

The water balance is updated at the end of each month, where pond elevation values are reported in a mine departmental report. The accuracy of the balance is measured by surveyed elevation of the TSF water, and compared to a calculated value in the water balance. (See grey shaded area in the water balance).

Key Parameters and Monitoring Variables

<i>Tailings Tonnage:</i>	Mining Variable
<i>Tailings Solids Density:</i>	Milling Variable
<i>Tailings Beach Volume:</i>	Tailings Operating Variable
<i>Monthly Precipitation:</i>	Automated weather station, snow pack, manual measurements
<i>Monthly Evaporation:</i>	Evaporation pan
<i>Weekly South-East Pond flows:</i>	Estimate; based on field measurements
<i>Weekly Mill site Sump Flows:</i>	Estimate; based on field measurements
<i>Local Weather Information:</i>	Short term planning tool
<i>Ice Thickness:</i>	Monthly Measurement
<i>Hazeltine Flow Measurement:</i>	Pressure Transducers

WATER BALANCE RESULTS

A copy of our water balance is attached. The current dam elevation is 958.0m, and according the water balance provides sufficient freeboard until June of 2011. Looking into late spring of 2012, the dam will need to be at 961m. The crest elevation will be adjusted to maintain freeboard requirements for storage of the probable maximum precipitation (PMP) event plus one metre for wave run-up as required by the current permit (total of 1.39m).

