

**Bellefontaine, Kim MEM:EX**

**From:** Warnock, George MEM:EX  
**Sent:** Friday, April 13, 2012 3:38 PM  
**To:** 'Luke Moger'; 'rbrown@mountpolley.com'  
**Cc:** 'tfisch@mountpolley.com'; 'wrennie@mountpolley.com'; 'jmoore@mountpolley.com'; 'dreimer@mountpolley.com'; Rothman, Stephen MEM:EX; Howe, Diane J MEM:EX  
**Subject:** Mount Polley Mine - Geotechnical Site Visit April 12, 2012  
**Attachments:** Mount Polley\_120412\_01.JPG; Mount Polley\_120412\_02.JPG; Mount Polley\_120412\_03.JPG; Mount Polley\_120412\_04.JPG; Mount Polley\_120412\_05.JPG; Mount Polley\_120412\_06.JPG; Mount Polley\_120412\_07.JPG; Mount Polley\_120412\_08.JPG; Mount Polley\_120412\_09.JPG; Mount Polley\_120412\_10.JPG; Mount Polley\_120412\_11.JPG; Mount Polley\_120412\_12.JPG; Mount Polley\_120412\_13.JPG; Mount Polley\_120412\_14.JPG; Mount Polley\_120412\_15.JPG; Mount Polley\_120412\_16.JPG

Hello Luke and Ryan,

Thanks again for your time yesterday – I appreciate the information that you provided and the site tour of the Mount Polley mine. As discussed, my visit was not intended as a formal geotechnical inspection, but simply as an opportunity to learn more about your operation. However, I thought that a few comments were in order, namely:

- Mount Polley is commended for the decision to strip organics from the footprint of all roads and waste rock dumps. I believe that this pro-active approach is paying dividends in terms of improved stability during construction, which (I believe) ultimately saves time and money for the mine.
- Mount Polley is commended for utilizing controlled blasting and scaling in the development of final pit walls. Most of the pit walls appear to be in very good shape.
- I recommend that consideration be given to the development of a written procedure for work near the toe of pit walls by personnel on foot. This could include the use of spotters (as required or if requested by the employee at risk), restrictions on work during periods of heavy precipitation, prohibitions for entry by non-essential personnel, prohibiting breaks in the danger zone, etc. This would be a good topic for a safety meeting as well.
- I recommend that consideration be given to the development of a written procedure for work in the run-out zone of waste rock spoils. This could include a pre-entry visual inspection, the use of spotters (if required or as appropriate), prohibitions during inclement weather or during periods of poor visibility, etc.
- I recommend that wirelines be purchased or manufactured so that they are available for use if required. Wirelines should be utilized on high waste rock dumps and/or where signs of deformation are observed.
- Please check your files to see if two documents required under the August 15, 2011 permit have been submitted to the Ministry: i.) Pit Slope Design Report for the C2 and Boundary Zone Pit (Section B 1.(a)), and ii.) Standard Waste Dump Operating Procedures (Section B.2.(c)(i)). I was unable to locate these documents in our files.

I have attached photographs taken during the site visit. Unfortunately, some of them are not all that clear due to poor visibility at the time of the site visit. Photograph descriptions as follows:

Photo 1: Southwest Corner of Spring Pit – viewed toward the west.

Photos 2 to 4: Panorama of Northeast wall (single benching)

Photo 5: View of Waste Haul Road from the PAG stockpile.

Photo 6: View to west from the NAG Base Dump – stripped foundation, soil toe berm, and ditch.

Photo 7: View of double benching on North wall in distance and sump in foreground.

Photo 8: View of stripped foundation ahead of Waste Haul Road.

Photo 9: Area with minor re-alignment and two new culverts.

Photos 10 and 12: Outer side of Perimeter embankment – currently at angle of repose – ultimate slope angle to be 2H : 1V.

Photo 11: Beach and water outfall on inside of perimeter embankment.

Photo 13: 47m high Main embankment constructed of NAG waste rock – view to southeast.

Photo 14: View to northwest of South embankment.

Photo 15: Wight Pit Green Giant Fault Failure – note area of unloading at top.

Photo 16: Underground portal protected by mesh.

Regards,

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