

MP00187

Narynski, Heather M MEM:EX

From: Luke Moger <lmoger@mountpolley.com>
Sent: Wednesday, July 31, 2013 11:42 AM
To: Narynski, Heather M MEM:EX
Cc: Warnock, George MEM:EX
Subject: RE: Mt. Polley - Stage 9 Dam Raise Application

Hi Heather,

Thank you very much for the quick response.

I agree with all of your points, and the FoS is something we are working into our designs; we should be discussing this (MEM/MPMC/Design Consultants) prior to our next raise submission (anticipated late 2013).

Kindest Regards,

Luke Moger

Project Engineer, Mining Operations
Mount Polley Mining Corporation

Tel: +1 (250) 790-2215 ext. 113
Fax: +1 (250) 790-2613
Email: LMoger@MountPolley.com

From: Narynski, Heather M MEM:EX [<mailto:Heather.Narynski@gov.bc.ca>]
Sent: Monday, July 29, 2013 5:50 PM
To: Luke Moger
Cc: Warnock, George MEM:EX
Subject: Mt. Polley - Stage 9 Dam Raise Application

Hi Luke,

Thanks for submitting Mount Polley's updated 2013 OMS Manual. I have added this document to MEM records.

I have reviewed the following documents in support of your application to amend Permit M-200 for Stage 9 dam raise to El. 970m:

- "Mount Polley Mine Tailings Storage Facility – Stage 9 2013 Construction Monitoring Manual", AMEC Environment & Infrastructure, dated April 11, 2013
- "Mount Polley Mine Tailings Storage Facility Stage 8/8A 2012 As-Built Report", AMEC Environment & Infrastructure, dated March 27, 2013
- "Amendment to Permit Approving Tailings storage Facility Stage 8 Construction", dated June 27, 2012
- "Permit Amendment Approving Tailings Storage Facility Stage 8A Construction", dated September, 2012
- 2013 OMS Manual
- 2013 Site Water Balance

I have submitted draft permit conditions to Diane Howe for review, and you should be hearing from her shortly regarding the status of your request. The Deputy/Chief Inspector may require additional information prior to finalizing the permit.

The stability analyses indicate that the FOS for the "Main Embankment" only marginally achieves the short term CDA design criteria of 1.3. This FOS includes modifications incorporating a centerline design above El. 963.5 m and the construction of a waste rock toe buttress to El. 925.0 m. Previous correspondence from MEM has highlighted the difference in interpretation of the CDA Guidelines. AMEC has considered the construction period to be the entire "pre-closure" period while CDA Guidelines, Table 6-2 recommends a minimum FOS of 1.3 "before reservoir filling", and a FOS of 1.5 at the "normal reservoir level".

MEM requires a commitment from Mount Polley that they are moving toward increasing these FOS for the main embankment as part of subsequent dam raises in an effort to move toward achieving a long term FOS equal to 1.5. It is expected that Mount Polley will continue their transition to centerline construction and provide additional buttressing with time. It is understood that sufficient mitigation measures are in place relating stability analyses to monitored piezometer data with pre-determined threshold response levels (Table 2.3 and Table 2.4). It is also understood that all dams are classified as "significant" based on CDA Guidelines, but have utilized the design criteria for a "high" consequence dam.

Based on my review, I do not anticipate issues with permitting the raise to the new design elevation, however no construction shall take place until a formal permit is issued from the Chief Inspector.

Kind Regards,
Heather

Heather Narynski, P.Eng
Sr. Geotechnical Inspector
Ministry of Energy, Mines and Natural Gas
1810 Blanshard St., Victoria, BC V8W 9N3
Wk: 250-387-0883
Cell: 250-893-3396