

**From:** Carr, Chris EM:EX  
**Sent:** September 13, 2004 9:54 AM  
**To:** Pittman, Ed EM:EX  
**Cc:** Howe, Diane J EM:EX; Errington, John EM:EX  
**Subject:** Mount Polley - application for permit amendment

I have reviewed the Permit M-200 Amendment Application, Northeast Zone prepared by David Pow, dated July 30, 2004.

My comments relate to the geotechnical components of the project.

It is understood that the application is for mining of the Northeast Zone and includes construction of the Wight Pit, haulage road and expansion of the East waste rock dump and provides conceptual closure plans. Tailings produced from the mill will be discharged into the existing tailings storage facility. The application states that the current tailings dam has sufficient design capacity to accommodate the additional tailings produced from the Northeast Zone.

The Wight Pit is located in close proximity to Polley Lake and pit wall stability may be influenced by groundwater flow from the lake. Details of studies that have or will be undertaken to assess possible seepage into the pit along with dewatering plans should be provided. The blast design for the final pit walls has not been provided.

A geotechnical report for the proposed East waste rock dump is to be submitted in support of the permit application. The report should include the results of the foundation investigation, requirements for foundation preparation and surface water diversion and stability analyses for design slopes during construction and closure. The report should provide a failure consequence classification for the dump. A dump construction procedure and monitoring manual will be required. A variance to the Chief Inspector's directive of January 9, 1997 for work below an active dump will be required if there are any roads to be located within the potential failure runout zone of the proposed waste rock dump.

The tailings dam crest is currently at elevation 942.5 m and is permitted to 945 m. Prior to operating the tailings storage facility the following information is required and should be submitted to the Geotechnical section in Victoria:

1. An updated Operation, Maintenance and Surveillance manual (including an Emergency Preparedness Plan).
2. Annual dam safety inspection report for the year 2003. The report should include a review of tailings dam geotechnical instrumentation, including slope inclinometer data and survey monument data.

Please contact me if you have any questions.

*Chris Carr, P.Eng.*

Senior Geotechnical Engineer  
Ministry of Energy and Mines, Mining & Minerals Division  
7th Floor, 1675 Douglas Street, Victoria  
Mailing address:  
P.O. Box 9320 Stn Prov Govt  
Victoria, British Columbia, V8W 9N3  
ph: (250) 952-0485 fax: (250) 952-0481  
Chris.Carr@gems7.gov.bc.ca