From: Greg Johnston

**Sent:** Thursday, June 23, 2005 1:41 PM **To:** 'rmartel@mountpolley.com'; Mark Burke **CC:** Ken Brouwer; Les Galbraith; Filing

Subject: Geotextile and perforated piping - Main and South Embankments (VA101-1/10-A.01)

Hello Ron and Mark,

In response to your queries regarding filter cloth and perforated pipe on the Main and South Embankments

## Main Embankment

The Main embankment under the piezometers will require filter cloth be placed. Since I spoke to you yesterday I have learnt that an erosion susceptible unit is mapped in places on the main embankment. The existing design i.e. filter cloth on prepared ground, 1m of Zone T followed by Zone C will be required in this area.

Area's and volumes (Neat line) assuming the stability berm constructed extends between SI01-3 to SI01-5 installations, a distance of approximately 225m.

Geotextile (including an allowance for overlaps) = 3,500 m2

Zone T = 3,200 m3Zone C = 15,000 m3

## **South Embankment**

The South embankment longitudinal drain design change (Design Change 5 Rev. 0) whereby the drain rock surrounding the perforated pipe is removed has been approved with amendments. A filter cloth/ filter sock will NOT be used on the perforated pipe. The Zone F surrounding the pipe has a filter relationship with both the natural ground and the perforations in the drainage pipe (from the Hancor tech spec sheet supplied).

Pipe required:

150mm dia perforated drain pipe = 580 m 200mm dia nonperforated outlet pipe = 20 m + Precast manhole segments from the bone yard

To construct the ultimate South embankment downstream foundation between chainage 6+25 and 11+75 to the top of Zone T requires:

Geotextile = 18,200 m2Zone T = 16,750 m3

Hope this covers what you need.

I understand that you will not be working on the TSF before next Monday, I have changed my site visit to Mt Polley to Tuesday July 5th. This can be revised as needed.

Regards Greg

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