Bellefontaine, Kim MEM:EX

From:

Warnock, George MEM:EX

Sent:

Wednesday, June 27, 2012 10:23 AM

To:

Howe, Diane J MEM:EX Hoffman, AI MEM:EX

Cc: Subject:

RE: Mount Polley Mine - 2012 Tailings Construction

Attachments:

M-200 Amendment Approving Tailings Storage Facility Stage 8 Construction June 2012

_DRAFT.doc

Hi Diane,

I have reviewed the report titled, "Tailings Storage Facility – Stage 8 2012 Construction Monitoring Manual," prepared by AMEC Environment & Infrastructure and dated March 30, 2012. This report was submitted in support of Mount Polley's application to construct a 3.4m dam raise to El. 963.5 m. AMEC assumed the role of engineer of record for the TSF facility in January 2011. My review comments as follows:

- AMEC indicates that they will provided full-time supervision for the first 10 days of construction and during key construction activities thereafter (sufficient to have "the requisite confidence to provide as-built report sign-off (p. 2)"). This will include training of Mount Polley personnel as Field Inspectors. AMEC indicates that a full-time Field Inspector will be required.
- The roles of Mount Polley and AMEC personnel are defined.
- Necessary laboratory and field testing requirements are defined.
- Foundation preparation, inspection, and approval procedures are defined.
- Monitoring criteria, including inclinometer threshold levels are discussed.
- AMEC commits to providing a combined as-built/annual review report as "confirmation that the dam was raised in conformance with design intent..." (p. 21)
- Downstream slope is designed at 2H: 1V.
- Plans and sections are sufficiently detailed to serve as "For Construction" drawings.
- Updated stability analyses have been completed and are included as a letter report in the appendix. Material strengths appear to be reasonable and calculated factors of safety are acceptable.

In light of the above, I have prepared a draft permit amendment for your review and for Al's signature. I used the Stage 6 amendment as a template (I could not find the Stage 7 amendment in MMS or on the G:\ drive), with two additional conditions based on recommendations made by AMEC in their 2011 as-built report. These conditions include the requirement to complete an updated site water balance, and to measure flows in toe drains.

Feel free to change the draft amendment as you see fit. I am hoping that you will be able to get this out before you leave for holidays as they are likely hoping to start construction in July.

Regards,

George

From: Luke Moger [mailto:lmoger@mountpolley.com]

Sent: Tuesday, June 26, 2012 4:44 PM

To: Warnock, George MEM:EX **Cc:** Howe, Diane J MEM:EX

Subject: RE: Mount Polley Mine - 2012 Tailings Construction

Hi Diane,

Yes it is; do I need a formal letter requesting this permit amendment, or will this e-mail suffice?

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: Warnock, George MEM:EX [mailto:George.Warnock@gov.bc.ca]

Sent: Monday, June 25, 2012 4:33 PM

To: Luke Moger

Cc: Howe, Diane J MEM:EX

Subject: FW: Mount Polley Mine - 2012 Tailings Construction

Hi Luke,

See below. Diane must have hit "Reply" instead of "Reply All."

George

From: Howe, Diane J MEM:EX

Sent: Monday, June 25, 2012 4:28 PM

To: Warnock, George MEM:EX

Subject: RE: Mount Polley Mine - 2012 Tailings Construction

Hi Luke,

Yes you will need a permit to start construction. Is this construction manual your design to the new level?

Regards, Diane

Diane Howe

Deputy Chief Inspector, Reclamation and Permitting Mines and Minerals Resources Victoria, BC (250) 952-0183



Ministry of Energy and Mines

From: Warnock, George MEM:EX Sent: Monday, June 25, 2012 4:13 PM

To: Luke Moger

Cc: Howe, Diane J MEM:EX; Warnock, George MEM:EX Subject: Re: Mount Polley Mine - 2012 Tailings Construction

Hello Luke,

I will try to review your permit and the 2012 Construction Manual when I get back to the office later this week. You may need a letter from MEM to permit the raise.

Regards,

George

Sent from my iPhone

On 2012-06-25, at 4:06 PM, "Luke Moger" < lmoger@mountpolley.com> wrote:

Hi George,

I was hoping to touch base with you in regards to approval of our 2012 construction program. As outlined in my first e-mail below, it is my understanding that we will require a permit to build beyond the 960.5m elevation as previously permitted under our 2011 program.

Please let me know if there is anything I need to provide, or if there is a more formal application I need to pursue.

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: Warnock, George MEM:EX [mailto:George.Warnock@gov.bc.ca]

Sent: Tuesday, April 03, 2012 3:55 PM

To: Luke Moger

Cc: Howe, Diane J MEM:EX; Hoffman, Al MEM:EX; Willms, Teresa MEM:EX

Subject: RE: Mount Polley Mine - 2012 Tailings Construction

Hello Luke,

Thank you for the submitted reports. They will be reviewed in the near future. If you are able to submit hard copies as well that would be appreciated, but this is not strictly necessary. If available, hard copies should be sent to:

Ministry of Energy and Mines Mines and Mineral Resources Division c/o Teresa Willms 6th Floor - 1810 Blanshard Street Victoria, BC V8W 9N3

Regards,

George Warnock, P.Eng. Manager, Geotechnical Engineering Ministry of Energy and Mines 3rd Floor - 1011 4th Avenue Prince George, BC

From: Howe, Diane J MEM:EX

Sent: Tuesday, April 3, 2012 9:47 AM

To: Warnock, George MEM:EX; Willms, Teresa MEM:EX; Hemphill, Naomi MEM:EX

Subject: FW: Mount Polley Mine - 2012 Tailings Construction

fvi

Diane Howe

Deputy Chief Inspector, Reclamation and Permitting Mines and Minerals Resources Victoria, BC (250) 952-0183

<image001.jpg>

From: Luke Moger [mailto:lmoger@mountpolley.com]

Sent: Tuesday, April 3, 2012 9:20 AM

To: Hoffman, Al MEM:EX; Howe, Diane J MEM:EX

Subject: RE: Mount Polley Mine - 2012 Tailings Construction

Hi Al and Diane,

Please find attached copies of the 2012 Construction Manual and 2011 As-Built and Annual Review, both prepared by our Engineer of Record, AMEC.

Kindest Regards,

Luke Moger

Project Engineer, Mine Operations Mount Polley Mining Corporation

Tel:

+1 (250) 790-2215 ext. 113

Cell:

+1 (250) 267-8552 +1 (250) 790-2613

Fax:

Email: Imoger@mountpolley.com

From: Luke Moger

Sent: Tuesday, April 03, 2012 9:01 AM

To: 'Al.Hoffman@gov.bc.ca'; 'Diane.Howe@gov.bc.ca' Subject: Mount Polley Mine - 2012 Tailings Construction

Hi Al and Diane,

I was hoping to make sure that I have copies of our 2012 TSF Documents circulated to all the necessary individuals. I am in receipt of electronic copies of a 2012 Construction Manual and 2011 As-Built and Annual Review, both prepared by our Engineer of Record, AMEC. I will have electronic copies of both documents sent out to yourselves today, and was also thinking that Chris Carr may require copies and Doug Hill (MOE) of just the as-built/annual report. Please advise if I should include these two in the mailing list for electronic and/or hard copies of the documents as referenced above.

The 2012 program includes a raise of 3.4m to maintain the freeboard allowances within the dam through next winter. Mount Polley typically constructs the tailings dam in annual stages; this year's construction referred to as "Stage 8". In my conversations with Ron Martel previously, he had suggested that Chris Carr may be a good resource to review the project due to familiarity with our project. It is also my understanding that we will require an amendment to continue with this construction as planned; we are projecting May construction, and so hopefully permitting will correspond with this timing.

As mentioned, I will forward electronic copies of both documents momentarily; please advise if you do not receive them. If you could also forward the names of any parties that require copies (and confirm Chris and/or Doug) then I will be happy to provide them with electronic and/or hard copies.

Sincerely,

Luke Moger Project Engineer, Mine Operations Mount Polley Mining Corporation

Tel: +1 (250) 790-2215 ext. 113

Cell: +1 (250) 267-8552 Fax: +1 (250) 790-2613

Email: <u>lmoger@mountpolley.com</u>

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AMENDMENT TO PERMIT APPROVING TAILINGS STORAGE FACILITY STAGE 8 CONSTRUCTION

Permit:

M-200

Issued to:

Mount Polley Mining Corporation

P.O. Box 12

Likely, British Columbia

V0L 1N0

for work located at the:

Mount Polley Mine

Amended at Victoria, British Columbia this 27th day of June in the year 2012.

Al Hoffman, P.Eng. Chief Inspector of Mines

PREAMBLE

This permit amendment is issued in response to an application submitted to the Ministry of Energy and Mines by e-mail fitled, "Mount Polley Mine -2012 Tailings Construction," and dated April 3, 2012. The application was submitted to the Chief Inspector of Mines (Chief Inspector) in accordance with Section 10(6) of the *Mines Act*. The following report was submitted in support of the application:

 A report by AMEC Environmental & Infrastructure entitled "Tailings Storage Facility – Stage 8 2012 Construction Monitoring Manual," and dated March 30, 2012.

Permit No. M-200

Date: June 27, 2012

CONDITIONS

The Chief Inspector hereby approves the application subject to compliance with the following terms and conditions:

General

1. Compliance with *Mines Act* and Code

All work shall be in compliance with all sections and parts of the *Mines Act* and Health, Safety and Reclamation Code for Mines in British Columbia (Code) and the owner, agent or manager (herein called the Permittee) shall obey all orders issued by the Chief Inspector or his delegate.

2. Departure from Approval

The Permittee shall notify the Chief Inspector and the district Inspector of Mines in writing of any intention to depart from either the plan of the work system or the program for the protection and reclamation of the surface of the land and watercourses to any substantial degree, and shall not proceed to implement the proposed changes without the written authorization of the Chief Inspector.

Geotechnical

1. General

- (a) The stage 8 dam raise to elevation 963.5 m shall be constructed in accordance with the design and specifications provided by the design consultant.
- (b) The Operation, Maintenance and Surveillance manual shall be updated in 2012 as recommended in the 2011 As-Built report.
- (c) A comprehensive review and update of the site water balance shall be completed and referenced in the 2012 Construction As-Built and Annual Review, which is to be submitted to the Chief Inspector no later than March 31, 2013.
- (d) Toe drain flows shall be measured and recorded per requirements described in the OMS Manual. This information shall be referenced in the 2012 Annual Report.

All other terms and conditions remain the same.