

July 30, 1996

14745-40/MTPO/01

Mr. Brian Kynoch VP Operations Mt. Polley Mining Corp. 700, 815 W. Hastings St. Vancouver, B. C. V6V 1B4

Dear Mr. Kynoch:

RE: MOUNT POLLEY TAILINGS DAM

This letter confirms a telephone discussion between Henry Ewanchuk and Brian Kynoch of Imperial Metals Corporation, Tim Eaton and George Headley of Ministry of Employment and Investment (MEI) July 30, 1996.

These items are listed for clarity.

- 1. The original design of the starter dam (Stage Ib) has been permitted to elevation 931 metres. Detailed construction drawings with modifications were recently submitted by Knight Piesold June 14, 1996 describing a higher starter dam and modifications to the basin liner, foundation drainage system, seepage collection pond, and a higher ultimate dam. We interpret this to be your request to amend Permit M-200 to construct the starter dam to elevation 934 metres. This amendment should be issued shortly.
- 2. The design and construction of the dam above elevation 934 metres including the upstream drainage system will be reviewed and permitted subsequently to Starter Dam Stage Ib construction and reflect a further detailed design review. However the upstream drainage system ties to pipes passing through both abutments at approximately elevation 930 metres. Although within the approved starter dam component we recommend you review the need for these abutment pipes as soon as possible.
- 3. Site drilling investigation was just completed within the starter dam footprint for piezometer installation and checking foundation soils and groundwater conditions. Modification of foundation drains including vertical drain holes intersecting a glacial lacustrine/fluvial soils sequence have been installed to provide relief of possible foundation pore pressures. Piezometers have been installed to monitor pressures. Additional relief holes can be installed if required. The above additional site investigations and foundation drainage modifications have been carried out and are acceptable. What was initially interpreted to be a weak zone in one borehole is attributed to drilling technique.

- 4. The tailings dam design proposes a complex upstream dam section internal drainage pipe system. The potential for upsets is higher with this drainage system included. However adequate drainage and strength within the beach or upstream dam section is required for stability. MEI considers it is not in the best interests of the province, industry or Imperial Metals to use this complex drainage system to achieve design stability objectives. We recommend that you thoroughly review all aspects of the dam site conditions, robustness of design, ease of construction, materials, installation, monitoring, testing, maintenance and closure.
- 5. The Health, Safety and Reclamation Code for Mines in British Columbia (Code) and your Permit M-200 requires that you submit a satisfactory 'as built' report and plan before you can operate the impoundment (filling with water then tailings). However we understand that you need to start filling this fall after substantial dam freeboard is in place. I will be inspecting the site this summer and with satisfactory construction progress this can be addressed at that time.
- 6. Prior to MEI issuing Permit Amendments for construction above elevation 934 metres we require that you retain a qualified tailings dam expert, independent of your current consultant to review the foundation conditions for the dam site, your particular storage requirements, the design of the dam and make recommendations for the most efficient and safest dam design. The independent tailings dam expert to be truly independent should be from out of province with no B.C. consulting affiliations. We recommend, in no order of preference:
- Mr. Allan J. Breitenbach, P. E. from Denver (303 290-9904),
- Fred Matich, P. Eng. consulting engineer from Ontario (416 239-0821),
- Dr. Norbert Morgenstern, P. Eng., consulting engineer from Edmonton (403 492-5127),
- Dr. John D. Nelson, P.E. from Fort Collins, Colorado (970 223-7171), or,
- Mr. Steve Vick, P. E. consulting engineer from Colorado(303 838-1443).

MEI feel the above requirements are necessary to satisfy the best interests of all parties involved. Please call me at 952-0480 if you have any questions regarding the above.

Yours sincerely;

George S. Headley, P. Eng.

Senior Geotechnical Engineer

TE/gh/tl

cc:

F. Hermann, MEI, Victoria

E. Beswick, MEI, Prince George

K. Brouwer, Knight Piesold

W. Jolley, MELP, Victoria