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Our Reference: VA101-1/15-A.01
Continuity Nbr.: VA07-00322

February 28, 2007

Mr. Paul Sterling
Imperial Metals Corporation
200 - 580 Hornby Street
Vancouver, BC, V6C 3B6

Dear Paul,

Re: Mount Polley Test Heap Leach Pad
Responses to Comments by Ministry of Energy and Mines

Knight Piésold Ltd. has reviewed the comments that were provided by Imperial Metals from the Ministry of Energy and Mines Chris Carr in an email dated January 4, 2007. The responses to the comments are provided in this letter. The comments were based on the review of the Monitoring Manual and the Report on Feasibility Design of Test Heap Leach Pad. The comment followed by Knight Piésold's response is outlined below:

Comment: ***"The KP report is a feasibility level design. The leach pad will consist of a single 8 m lift, however, the Monitoring Manual indicates the pad will be constructed to 8 m in three lifts."***

KP Response**:** The procedure described in the Monitoring Manual was to build the test heap to 8 m in 3 lifts, to blend the sulphur into the ROM ore (minus 150 mm). The test heap will be built in a single 8 m lift of minus 19 mm ore. The Monitoring Manual will be updated to reflect this change.

Comment: ***"I would be interested to know the rationale for selecting a 1 in 100 year return design basis earthquake."***

KP Response**:** The rationale for selecting the 1 in 100 year return design basis earthquake (DBE) over the more standard 1 in 475 year return design basis earthquake is based on the hazard rating of the facility, and the design life of the structure. The rationale for choosing the 1 in 100 year rather then the 1 in 475 year return DBE is based on the short design life of 5 years and the low hazard rating of the facility. However, KP has checked the seismic stability for the 1 in 475 year return event and the factor of safety of 1.5 is well above the minimum required factor of safety of 1.1.

Comment: ***"The report indicates the maximum differential settlement under the pad to be "within reasonable levels". What is the estimated differential settlement, how much settlement is tolerable and what would be the effect on the HDPE liners?"***

KP Response: Differential settlement estimates ranging from 25 mm to 75 mm for the test heap leach pad were determined for the mine waste dump behaving as a very loose sand and gravel over short distances.

The liner design was based on the prediction of the maximum deformations that the liner could theoretically experience during the service lifetime. This would include randomly located differential settlements of the subgrade material. The model for evaluating the liner thickness and differential settlement was based on "Designing with Geosynthetics, 3rd edition" by Robert Koerner, Section 5.3.4 Thickness Considerations. The calculation file is attached for reference and confirms that the 60 mil HDPE liner will not be adversely affected by these conservative differential settlement estimates.

Comment: ***"The design appears to incorporate the necessary safeguards for a zero discharge facility. The design consists of an impermeable liner and leak collection system. It will be important that the HDPE liners be installed and tested under engineering supervision."***

KP Response: The liner system was installed with a high level of engineering supervision. KP had a site engineer present during the construction and geosynthetic installation period. A hydrostatic test was performed on the inner liner to verify the integrity of the 60 mil HDPE installation and the performance of the LCRS system. This test confirmed the integrity of the inner liner installation and the results will be provided in the Construction Report.

Comment: ***"The report indicates worst case conditions for liner leakage. Is the estimated leakage rate from the outer liner a concern?"***

KP Response: Leakage rates through the inner and outer liners presented in the Feasibility Report were estimated using the theoretical empirical equations proposed by Bonaparte et al (1989). These calculations assume a specific hole size per acre with a specified head acting on the outer liner. This estimated leakage rate represents an extreme worst case condition for assessment of environmental impacts. The hydrostatic test confirmed a lower leakage rate through the inner liner which corresponds to a high quality liner system installation. The LCRS system was also evaluated during the hydrostatic test and it was confirmed that there is a negligible head build-up on the outer liner. Specific procedures for operation of the LCRS as outlined in the Operations Manual ensure that the head will not build-up on the outer liner. Therefore, the hydrostatic test results confirmed that the reduced leakage rate through the outer liner will be negligible.

Comment: ***"We will need to see a schedule for monitoring the settlement monuments and groundwater wells. The closest well appears to be GW96-6. I am not sure if this is appropriately located or that once a year monitoring, as required under MOE permit is adequate."***

KP Response: The settlement monuments will be installed in the spring of 2007. A schedule outlining quarterly monitoring of the monuments has been developed for the Construction Report and will be added to the updated Monitoring Manual.

Downgradient groundwater monitoring along the toe of the waste dump and within the perimeter collection diversion ditches will be a more effective means of identifying any potential leakage from the system as any potential seepage through the leach pad will tend to migrate through the waste rock and be transported along the top of the low permeability glacial till foundation. The existing system of perimeter collection ditches has been in operation since the start of mine development.

Comment: ***"The Monitoring Manual appears to be comprehensive; however, it should be updated."***

KP Response: The Monitoring Manual will be updated to reflect the Test Heap Leach Pad monitoring program and ore placement schedule.

Yours truly,

KNIGHT PIÉSOLD LTD.

Brett Garland
Staff Engineer

Ken Brouwer, P.Eng.
Managing Director

Enclosures: Calculation File (1 page)

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Knight Piésold
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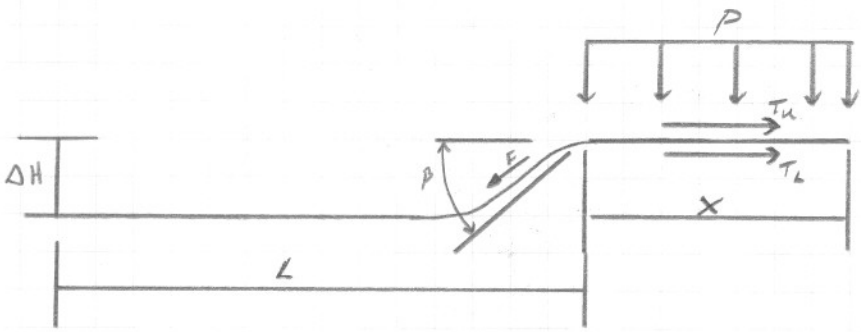
Project/Assignment Name: Mt Polley — P/A No.: VA101-00001/15
Area: Test Heap Leach Pad — Task No.:
Calculations for: Differential Settlement Calcs — Date: Jan 16/02
Calculations by: BG — Reviewed by: BB — Calculation File No.:
Input from: — Date fo review: — Sheet: 1 of



GIVEN: $L = 18$ in, $t = 0.06$

$$t = \frac{P}{\cos\beta}\,\frac{x}{\sigma_{allow}}\left(\tan\delta_U + \tan\delta_L\right)$$

CALC: $\delta_U = 10°$ ← Pg 484
$\delta_L = 18°$ ← TB/ 5.2a

$x = 8$ in ← Figure 5.10a

P = SATURATED ORE SOLUTION WITH MAX Solution depth = 4m

$$\therefore P = \left[4m\left(\frac{3.28\ ft}{1\ m}\right) \times 62.4\ \frac{lb}{ft^3}\right] + \left[\left(1.8\ \frac{tonnes}{m^3} \times 62.4\right) \times \left(8m \times 3.28\ \frac{ft}{m}\right)\right]$$

$= 820\ lb/ft^2 + 2950\ lb/ft^2$ $= \underline{3770\ lb/ft^2}$

σ_{allow} → @ Break $\cong 390{,}000\ lb/ft^2$
@ Yield $\cong 290{,}000\ lb/ft^2$

* WILL USE σ_{allow} @ Yield as tolerable limits

$$\cos\beta = \frac{3770\ lb/ft^2}{0.06} \times \frac{8\ in}{290{,}000\ lb/ft^2} \times \left(\tan 10 + \tan 18°\right)$$

$\cos\beta = 0.869 \Rightarrow \beta = 29.7°$

$\Delta H = 18 \times \tan\beta$

$\Delta H = 10.25$ in @ Yield

$= \underline{260\ mm}$