



August 6, 2013

Mine No.: 0300150

VIA EMAIL

Mr. Karl E. Gustafson
McMillan LLP

<contact information removed>

Mr. Livian Michaud
Panel Manager
Canadian Environmental Assessment Agency
160 Elgin Street
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Dear Mr. Gustafson and Mr. Michaud:

Re: MEM response to McMillan LLP Letter dated July 31, 2013

We write further to your letter of July 31, 2013 (Panel Document 820). MEM is also addressing these comments to the Federal Panel so that they may form part of the panel hearing record for the New Prosperity Project.

As you are aware, the Federal Panel invited provincial agencies, including the Ministry of Energy and Mines (MEM) to provide their comments on the New Prosperity Project and its environmental effects to the Panel (i.e. Panel Document 134 (September 27, 2012), Panel Document 571 (June 21, 2013)). The purpose of our comments have been in response to that invitation, focusing our review and comments on those aspects that would be relevant to the application of Taseko Mines Limited (Taseko) for an Amendment to the BC Environmental Assessment Certificate #M09-02.

We appreciate that the word 'significant' has specialized meaning in the environmental assessment process and that a determination on whether an environmental effect is 'significant' is within the purview of the Panel. Consequently, we hereby clarify our July 29, 2013 comments such that the words 'significant' and 'significantly' are removed. The inclusion of these words did not provide additional technical value to the comments in our submission.

In your July 31, 2013 letter you also highlight important seepage information that has been presented to the New Prosperity Federal Review Panel during the course of the hearings. MEM has reviewed the technical information referred to in your letter as well as other panel documents. Our comments are as follows:

1. We acknowledge that different modelling approaches were taken by Taseko and NRCAN, and that these have been reviewed by Dr. Smith of UBC, the Panel's independent expert hydrogeologist.
2. Based on the information you have noted, Dr. Smith has found both modelling approaches to be valid and confirmed that the NRCAN base case model *"provided a useful and conservative estimate of foundation seepage"*. Dr. Smith concluded that a range of seepage estimates would be expected somewhere

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between 20-100 L/s from the tailings storage facility (TSF), and that the real seepage value is likely towards the upper end of this range. (Panel Documents 751 and 668)

3. Taseko used an estimate of 70 L/s of seepage in the effects assessment and assumed that a groundwater pumping system would have an interception efficiency of 60%.
4. Mr. Crozier stated to the Panel on July 27, 2013 (Panel Document 774), that predictions within a factor of two is quite good between modelling outputs.
5. Comments made by NRCAN on July 29, 2013 (Panel Document 781), note that they do not believe it is correct to state that Taseko's modelling predictions are essentially equivalent to NRCAN, but they acknowledge that the resultant seepage numbers are within a factor of two.
6. In our November 9, 2012, March 15, 2013 and June 14, 2013 adequacy determination comments to the Panel, and in our July 19, 2013 (Panel Document 656) and July 29, 2013 (Panel Document 787) review comments to the Panel, MEM has not expressed concerns with the modelling methodology taken by Taseko. We did express early concerns with the level of information on the presence, thickness and hydraulic conductivity of the foundation materials because the sensitivity analysis that Taseko undertook (Appendix 2.7.2.4-A-C) indicated that the modeled seepage rates were sensitive to changes in hydraulic conductivity of the hydrostratigraphic units. The sensitivity results indicated that changing the hydraulic conductivity by a factor of 5 increased seepage rates by a factor of 4 which would be above the values determined by NRCAN and Dr. Smith.
7. MEM believes that the information provided to the panel from Taseko and the various interveners points to a potential range of seepage rates. Dr. Smith has stated that the value is likely towards the upper end of this range (Panel Documents 751). MEM believes that the current analysis does not resolve the uncertainty related to the appropriate seepage rate with the current information that is available and that it is important to acknowledge that this uncertainty exists. A change in seepage rates could have important implications to TSF seepage management, water treatment requirements and the ultimate water quality in Fish Lake and its tributaries.
8. MEM acknowledges that Dr. Smith believes that Taseko's estimates for seepage recovery of 60% are conservative and that interception efficiencies could potentially be increased following system optimization, but this would take time (Panel Documents 751).
9. MEM also notes that in the July 29, 2013 proceedings transcript (Panel Document 781, page 295), Taseko is undertaking to "*proceed with the remodelling, or rerunning of the model, with respect to the TSF seepage pond deficiencies*". MEM understands that this is in follow-up to Dr. Smith's recommendation to the Panel (Panel document 751, bullet two on the slide entitled "Opinion of Potential Risks of Seepage from the TSF Entering Nearby Lakes (2)").
10. MEM maintains that there is still uncertainty with the amount of seepage that will occur and the implications that this seepage will have on the water quality in Fish Lake and its tributaries.
11. MEM believes that it may prove helpful for Taseko to undertake additional water quality modelling based on the upper end seepage rate estimates and with the updated estimates of seepage pond collection efficiency, to better establish the effects of mitigation on Fish Lake water quality. MEM maintains that without this information, the effects to water quality of Fish Lake and its tributaries are uncertain.
12. Taseko has proposed relying on adaptive management including water treatment to mitigate adverse effects to Fish Lake water quality and to conclude no significant adverse effects to Fish Lake. Since the effectiveness of the proposed treatment processes to decrease metal concentrations to the design specifications has not been fully provided, MEM believes that Taseko's conclusion of their ability to prevent adverse effects to Fish Lake water quality is also uncertain.

Based on the above points, MEM has updated the conclusions in Section 1.1 of the July 29, 2013 memo (Panel Document 787) related to TSF foundation composition, seepage rates and groundwater capture, as set out below:

- There is uncertainty with the presence/thickness of till within the tailings facility to limit seepage. It is also uncertain whether hydraulic conductivity could be sufficiently enhanced over the TSF area to meet (or exceed) the modeled hydraulic conductivity used in the Taseko numerical groundwater model.

- There is uncertainty with TSF seepage estimates due to the possible range of hydraulic conductivity in the hydrostratigraphic units underlying the TSF. This could result in more seepage from the TSF than modeled.
- The groundwater capture system proposed in the EIS is conceptual and it is difficult, based on the current information, for MEM to assess the effectiveness of the groundwater pumping/mitigation system to protect water quality in Fish Lake and the Fish Lake tributaries.

In consideration of the information exchanged by technical experts during the Panel Technical Hearings and given the restated conclusions above, as well as the stated objective to preserve Fish Lake and its tributaries, MEM therefore believes it is necessary to revise the summary conclusion presented in our July 29, 2013 comments to the Panel (set out in Section 3, Page 6 of our July 29, 2013 letter (Panel Document 787)).

MEM recognizes the substantive efforts of the proponent to redesign the New Prosperity project to mitigate effects and protect Fish Lake and its tributaries; specifically the relocation of the tailings, waste rock and ore facilities, and the commitments to manage water and treat Fish Lake water quality in an effort to protect Fish Lake and its tributaries.

Based on the information available, MEM believes that in the context of preserving Fish Lake and its tributaries there remain uncertainties around the ability to limit and collect the expected volume of seepage from the TSF, and the ability to effectively treat water to maintain water quality in Fish Lake and its tributaries. This leads MEM to conclude that, as detailed in the EIS and supporting documents, the ability to prevent adverse effects to Fish Lake and its tributaries from a water quality perspective is uncertain.

MEM acknowledges that Taseko has proposed additional site investigation work (July 18, 2013; Panel Document 642) after EA decisions. This work should lead to a reduction in the above noted uncertainties. Should the project be approved, this work would be examined during future regulatory processes.

Sincerely,

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cc. Nathan Braun, Project Assessment Manager, BC Environmental Assessment Office