



MiningWatch Canada

Mines Alerte

Suite 508, 250 City Centre Avenue, Ottawa, Ontario, Canada K1R 6K7
tel. (613) 569-3439 — fax: (613) 569-5138 — info@miningwatch.ca — www.miningwatch.ca

New Prosperity EIS Sufficiency Review Summary of Comments Submitted by Federal and Provincial Agencies

By Ramsey Hart, MiningWatch Canada
ramsey@miningwatch.ca

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Introduction

On September 27, the New Prosperity Review Panel initiated a 45-day comment period on the Environmental Impact Statement filed by Taseko Mines Ltd. The press release announcing the start of the comment period noted that it was to give “Aboriginal groups, the public, governments and other participants an opportunity to submit their views in writing to the Panel on the sufficiency of the information presented in the EIS and on its technical merit.”¹ This document provides a summary of the comments received from five federal and three provincial agencies:

- Fisheries and Oceans Canada (DFO)
- Environment Canada (EC)
- Health Canada (HC)
- Natural Resources Canada (NRCan)
- Transport Canada (TC)
- BC Ministry of Forests, Lands and Natural Resource Operations (MFLNR)
- BC Ministry of Energy and Mines and Natural Gas (MEMNG)
- BC Ministry of the Environment. (MOE)

All of the comments are available online in the CEAA registry. The three BC ministries are included in one submission from the BC Environmental Assessment Office. The CEAA registry number and a link to the documents are provided in the footnotes.

¹ New Prosperity Gold-Copper Mine Project Federal Review Panel, Public Notice. September 27, 2012. <http://www.ceaa.gc.ca/050/document-eng.cfm?document=81567>

The Panel has 30 days as of November 11 to respond to the comments received and determine whether to proceed to hearings but has already announced that it has identified one major deficiency in how the EIS addresses cumulative environmental effects. The Panel has advised that additional information requests for Taseko are forthcoming.

While the extent to which the departments characterise the deficiencies as major or minor issues varies, together the comments paint a damning picture of the adequacy of the EIS. Three of the five the federal agencies (EC, DFO, TC) identified issues within their specific areas of expertise as “major” i.e. they need to be addressed before going forward with hearings or before the agency could properly evaluate project impacts. NRCan deferred to the Panel as to whether the EIS was sufficient in NRCan’s areas of expertise to proceed to hearings, but identified a number of areas where “clarification or additional work would improve the evaluation of the project” – as discussed below, some of these areas would appear to represent major deficiencies.

A focal point of many of the problems identified by government reviewers is the very challenge that Taseko claims to have figured out – how to “save” Teztan Biny (Fish Lake) from the impacts of the mine. Across the board, regulators raised concerns that the information provided was not satisfactory to support Taseko’s assertions that it will save Teztan Biny or to adequately review the project’s potential effects on Teztan Biny.

The many comments about incomplete information and inconsistencies in even basic information, such as the distance from the tailings impoundment to the pit rim, suggests a rushed effort to get the EIS in with a sloppy product being the result.

The potential impacts of the project on downstream salmon populations is an issue of much concern to Indigenous peoples and many stakeholders but was only picked up by provincial Ministry of Natural Resources and was absent from DFO’s comments. This is despite poor treatment of this issue within the EIS and DFO’s earlier expression of concern during the initial phase of the review.²

To be sure, many of the deficiencies raised by the agencies concern issues of explanation, clarification and incorporating more variables into existing models. There are, however, several issues where weak baseline data, questionable analysis or missing information are flagged as fundamental problems that could require substantive new work. These issues include:

- Hydrology of Teztan Biny and the flows of groundwater between the lake and the area of the proposed open pit. (NRCan)
- The ecology of Teztan Biny and which nutrients control productivity. (DFO, MOE)

² DFO, November 2, 2011 Letter to Canadian Environmental Assessment Agency. New Prosperity Registry Document # 4. <http://www.ceaa.gc.ca/050/documents/53302/53302E.pdf>

- Characterization of the glacial till over the area of the proposed tailings impoundment. (EC, NRCan & MEMPNG)
- Modelling the water quality of the future pit lake. (MOE)

Below are a few select quotes from the submissions. These are followed by summaries of each submission. Note that there are two submissions from DFO, one general and one focussed on the deficiencies in the modelling of the ecology of Teztan Biny.

Select Quotes from Government Agencies

...in light of the omissions noted above, and the Proponent's characterization of the Fish Lake ecosystem, the approaches presented in the EIS are not sufficiently comprehensive to enable full environmental evaluation of impacts of the New Prosperity project on the productivity of the Fish Lake. – Fisheries and Oceans.

... there are critical information gaps surrounding the characterization of current and future conditions in Fish Lake (i.e. N-availability, oxygen availability, lake physics and ecology associated with climate change), which unless accurately modeled, will compromise the ability to make reasonably informed decisions on the impacts to lake and fish productivity. Failure to produce this suite of information represents a critical data gap ... -- Canadian Science Advisory Secretariat, for Fisheries and Oceans

There is insufficient information provided to allow validation of the effectiveness of the proposed measures and several inconsistencies in the information presented in different portions of the EIS introduce further uncertainties. Collectively, these deficiencies are considered major. – Environment Canada

NRCan believes that the proponent's overall estimate of seepage mitigation efficiency is over-optimistic given the highly heterogeneous nature of overburden units beneath the TSF and the potential for rapid contaminant transport along preferential groundwater flow paths that bypass interception wells. – Natural Resources Canada

In 1994, as part of site investigations for the original Prosperity Mine Project, the proponent conducted a pump test in a well immediately north of Fish Lake for the purpose of evaluating the use of wells for pit dewatering (Appendix 2.6.1.4D-A, sec. 3.2.5, p.7). The test yielded estimates of hydraulic conductivity in formations between the proposed pit and Fish Lake that were considered unrealistically high (Appendix 2.6.1.4D-A, Table C-5) possibly due to problems with the testing procedure. Results from the test were therefore considered unreliable and discounted (Appendix 2.6.1.4D-A, sec. 3.2.5, p.7). Since that time, the proponent

has not undertaken any further site investigation work aimed at confirming the original pump test results or at better characterizing groundwater interactions with Fish Lake. – Natural Resources Canada

The mitigation that is outlined for Potential Effects is not sufficiently detailed. For example: where and how would the proponent maintain an access road and boat launch for the controlled passage of First Nations and the public by vehicle to the shores of Fish Lake? – Transport Canada

Fisheries and Oceans³

DFO found the EIS to be deficient in four areas: fish habitat compensation, the pit lake as fish habitat, inclusion of fish issues in the Alternatives Assessment and modelling of the productivity of Fish Lake. DFO also sought clarification on other aspects, even though they deemed them to be in accordance with the guidelines.

The company has proposed a number of fish habitat enhancement projects as compensation for the proposed project's impacts on fish habitat (e.g. the elimination of substantial spawning grounds). DFO noted that basic information about proposed fisheries compensation activities is missing for three of the proposed compensation projects including land tenure, biological rationale and groundwater characterisation. The proposals do not address impacts of the activities themselves on existing fisheries nor on species at risk and clarification was requested regarding the net increase in productivity vs. the total amount of habitat affected.

According to DFO, "These deficiencies compromise the ability of DFO to provide the Panel with an opinion on whether the fish and fish habitat compensation program has adequately offset the project impacts to fish, fish habitat, and the fisheries".

The EIS assumes that the pit lake will become viable habitat post-reclamation but according to DFO, "The EIS does not include an assessment of the suitability of the pit for fish including consideration of the effects of pit depth in relation to mixing and anoxic conditions and an assessment of the degree of uncertainty associated with these predictions as outlined in the EIS Guidelines." DFO states that the pit could become a source of fish mortality and without additional information it is difficult to determine the role the pit would have.

The Alternatives Assessment is deficient according to DFO because it does not consider impacts on fish other than those associated with the tailings area and because the quantified comparison only considers the impact on number of water bodies but not presence or absence of fish. DFO also sought clarification about the number of watersheds deemed affected by each of the alternatives assessed; the accounting of

³ CEAA Registry # 277: <http://www.ceaa.gc.ca/050/documents/p63928/83498E.pdf>

traditional land use activities; and inclusion of recreational fishing in the analysis of alternatives.

DFO also requested clarification in the following areas:

- ensure fish populations of Little Fish Lake and upper watershed are included in all habitat assessments;
- Use of standard 30m riparian buffer as was done by DFO in previous review;
- EIS should not apply a discount multiplier to areas of habitat that are ephemeral as it's still important habitat for trout;
- Methods used to assess non-fish bearing status of water bodies are not up to industry standards and clarification of methods used is needed;
- Habitat impacts on Fish Lake are inconsistently described in some places the EIS states impacts on Fish Lake are not assessed and the habitat not included in summary tables, but elsewhere it indicates there has been an assessment of effects from recirculation of lake water and metals in fish tissue.
- Fish population and fishing activity descriptions for Little Fish Lake are inconsistent and contradictory.

Fisheries and Oceans - Lake Productivity⁴

DFO made a supplemental submission that is focused on the ecology of Teztan Biny and in particular the efforts made within the EIS to model the lake's biological productivity at present and evaluate the effects of the project.

The reviewers expressed concern about the the company's "highly questionable" reliance on climate data from the Bakerville meteorological site – 230km from Teztan Biny and in a different biogeoclimatic region. They also state that there is inadequate consideration of current and future impacts of climate change

The reviewers do not agree with Taseko's conclusion that the lake's productivity is "limited" by phosphorus. The role of another key aquatic nutrient - nitrogen is not considered and thus the fish productivity models and predictions of impacts may not be accurate.

The submission states that monitoring and mitigation measures regarding phosphorus are vague and don't specify what type of phosphorus is being measured. The monitoring thresholds for taking responsive action overlap with baseline conditions meaning they can't function as indicators of change, there are also no thresholds for other important parameters that could change with effects of the project.

The EIS was characterized as having "critical information gaps" which prevent the evaluation of the impacts of the New Prosperity project on the productivity of the Fish Lake. DFO stated, "these deficiencies compromise the ability of DFO to comment on the

⁴ CEAA Registry # 302: <http://www.ceaa.gc.ca/050/documents/p63928/83764E.pdf> (listed as being from Canadian Science Advisory Secretariat but submission is from DFO)

impacts to the lake and fish productivity predicted to be caused by the Project and the proposed mitigation measures”. Though the review does not clearly state this, addressing these gaps would likely require considerable additional baseline data collection, then analysis and modeling over at least one full year.

Environment Canada⁵

EC described three deficiencies as “major” within its areas of jurisdiction: alternatives for mine waste disposal, effects on water quality and wildlife in particular migratory birds. Other deficiencies such as information on water quantity were also flagged but not considered major.

Alternatives Assessment and Multiple Accounts Analysis

The EIS’ Alternatives Assessment was found to be faulty with inconsistent application of criteria and lack of clarity. EC points out that inclusion of the pit as a mitigation measure for water quality effects doesn’t address prime objective of protecting Teztan Biny.

Consistent with Transport Canada’s findings, EC notes that the Alternatives Assessment states access to Fish Lake will be maintained but it’s not clear how.

The documents are not consistent with their descriptions of the number of watersheds that will be affected by the project.

Water quality is poorly dealt within in the in the Alternatives Assessment especially with regard to protection of Fish Lake. EC directs Taseko to include new metrics in their assessment.

The Alternatives Assessment doesn’t adequately address impacts on migratory bird habitat as it only deals with one species (Barrow’s Goldeneye) and doesn’t do a great job of that. Other weaknesses include wetland habitat impacts and dust modelling.

The conclusion that the two assessed alternative plans are equal in terms of impacts on the Tsilhqot’in is not justified and the level of detail regarding impacts on areas of recognised Aboriginal rights is not adequate. The scoring for traditional use (number of users and types of activities) is not explained. Nor is there a justification given for the statement that the Tsilhqot’in response to the two mine plans would be the same.

Potential differences in quality of recreational use of Teztan Biny if the mine is developed also needed to be considered.

The Multiple Accounts Analysis within the Alternatives Assessment references the potential to expand the tailings facility but the only reason this would be needed is if additional reserves were mined and it’s been established that this would require the

5 CEAA Registry # 292: <http://www.ceaa.gc.ca/050/documents/p63928/83520E.pdf>

draining of Teztan Biny. Given this, EC questions the inclusion of additional storage capacity as a criterion.

Cost figures given in the assessment need to be broken down and EC points out that there are no figures for the mitigation costs that were included in the 2009 MAA. The conclusion that the other alternative would be more expensive is not justified within the MAA.

Requested improvements to the Alternatives Assessment and MAA could likely be done without major new field work or research. The majority are clarifications of inconsistencies. Enough information could probably be gleaned from existing studies to deal with these, though addressing them could affect the scoring of the two alternatives. The inconsistencies, omissions etc. point to a poor quality of work and poor attention to detail, disappointing if not surprising given the level of scrutiny this project is under.

Water Quality

Control of the water or “seepage” that will move through the tailings facility and waste rock piles and into the environment is a crucial part of Taseko’s claims to being able to prevent significant impacts on Teztan Biny. EC’s review states that there “is insufficient information provided to allow validation of the effectiveness of the proposed measures and several inconsistencies in the information presented in different portions of the EIS introduce further uncertainties. Collectively, these deficiencies are considered major.”

One notable inconsistency is the references to the distance between Fish Lake and the edge of the open pit which change throughout the EIS.

Consistent with concerns expressed by NRCan (see below), EC notes that impacts of pumping water away from the pit (dewatering) on local hydrology are not adequately described (including effects on water levels of Teztan Biny). The ability to maintain water levels in Teztan Biny is fundamental to protecting the ecological functions and resource values of the lake.

Information about seepage collection from the waste rock pile, tailings impoundment and groundwater recovery is insufficient for EC to be able to assess the effectiveness of proposed measures. More specificity in design parameters is needed. Taseko has not met the requirement of the guidelines to themselves assess the effectiveness of their proposed measures and justify their conclusions.

Additional concerns related to seepage from the tailings impoundment include inconsistent parameters (hydraulic conductivities) to describe the flow of water through the glacial tills at the impoundments base. EC notes that the conductivity used to model seepage from the TSF is four and five times lower than other references in the EIS and thus the seepage may be underestimated:

This discrepancy could mean that the model has underestimated the amount of seepage that would be released from the TSF, and therefore underestimated the amount of seepage that could reach surface waters, particularly Fish Lake and Wasp Lake, and impact the water quality in those lakes.

Seepage from the TSF is also likely under-estimated because the model does not seem to account for the fact that much of the TSF will be full of waste rock that has much greater conductivity than the tailings. Nor does the model include consideration of areas of discontinuous till, a reality that is referenced in the EIS. EC is concerned that the number of test pits and boreholes within the TSF footprint is not adequate to describe the heterogeneity of the site.

Taseko states that the Metal Mining Effluent Regulations will not apply but they may apply to seepage, which is considered a “long term risk factor”.

The EIS states that complete details for their water quality predictions are available in an appendix when they are not. EC requested the details of the model.

EC is concerned about the plan to re-circulate water in Teztan Biny and the potential to see accumulation of metals or nutrients in the lake and asks for additional supporting info on recirculation and examples where it has been successful.

Wildlife

No wildlife habitat compensation plan is included in the EIS as required by the guidelines. Nor is there an assessment of wetland functions that will be impacted and according to EC it is not clear if the most current info on species at risk has been used.

Taseko needs to provide maps of areas surveyed for rare plants and EC is concerned that two federally listed rare plant species may have been missed (Rusty Cord-moss, and Alkaline wing-nerved moss). New baseline data collection would be required to address this issue.

EC requested more information about work on bats that was done for the EIS including locations of sampling and provisions for assessing presence of hibernacula.

Changes in status of rare and at risk species since the previous EIS need to be identified and incorporated into the documentation.

Surface Water Quantity

EC requested additional information to determine validity of the tailings storage facility water balance, but deficiencies are not considered major. Concerns included the input data (a weather station 125 km from the site), oversimplified modelling and scenarios that

do not adequately address potential extremes of wet and dry conditions.

The level of information provided (eg. one year of lake level data) in the EIS limits confidence in modelling changes to the water level in Teztan Biny. This is not a major issue for EC as its mandate does not include fish and fish habitat.

The EIS makes assumptions about the future based on past data which EC finds fault with given potential for new climate change driven trends. EC is also concerned about use of limited climate data and lack of incorporation of Global Climate Models. EC requests the company provide additional information on possible impacts of future climate change on hydrology.

Natural Resources Canada⁶

Overall NRCan's review states that the EIS met the guidelines in areas of their expertise but identified where clarification and additional work would improve evaluation of the effects of the project (changes to the quantity and quality of water in Fish Lake). This conclusion is surprising given the severity of the criticism and significance of the gaps identified that relate to key issues such as the protection of Teztan Biny from seepage and from dropping water levels caused by massive pumping to keep the pit dry.

Groundwater

NRCan is concerned about the future of Teztan Biny from dewatering pumps intercepting groundwater that would otherwise go to Teztan Biny and from the potential for the lake to drain into the open pit. NRCan had previously requested additional hydrogeological work but presumably these requests were not met.

Taseko's current estimates of groundwater flow to Teztan Biny are very low and require confirmation. NRCan requested new hydrogeological characterization including field tests. One of the most damning commentaries on the EIS is the quote from NRCan included above which bears repeating here:

In 1994, as part of site investigations for the original Prosperity Mine Project, the proponent conducted a pump test in a well immediately north of Fish Lake for the purpose of evaluating the use of wells for pit dewatering (Appendix 2.6.1.4D-A, sec. 3.2.5, p.7). The test yielded estimates of hydraulic conductivity in formations between the proposed pit and Fish Lake that were considered unrealistically high (Appendix 2.6.1.4D-A, Table C-5) possibly due to problems with the testing procedure. Results from the test were therefore considered unreliable and discounted (Appendix 2.6.1.4D-A, sec. 3.2.5, p.7). Since that time, the proponent has not undertaken any further site investigation work

⁶ CEAA Registry # 272: <http://www.ceaa.gc.ca/050/documents/p63928/83488E.pdf>

aimed at confirming the original pump test results or at better characterizing groundwater interactions with Fish Lake.

It is remarkable that NRCan did not describe this as a major deficiency!

NRCan also took issue with the modelling methods used by Taseko to predict interactions between the pit and Teztan Biny noting that the model “implicitly assumes that infinite amount of recharge water available with which to maintain the level of the lake during pit dewatering and post-closure infilling.” NRCan concluded that “the proponent’s numerical groundwater flow analyses are incapable of predicting whether or not this [lake] level will change in response to pit dewatering.”

Tailings Storage Facility and Tailings Characterisation

NRCan does not have much if any faith in Taseko’s predictions for the effectiveness of the mitigation measures to prevent tailings water from seeping into Teztan Biny. They consider this to be the greatest long-term threat to water quality of the lake.

NRCan believes that the proponent’s overall estimate of seepage mitigation efficiency is over-optimistic given the highly heterogeneous nature of overburden units beneath the TSF and the potential for rapid contaminant transport along preferential groundwater flow paths that bypass interception wells.

Again, it is surprising that these concerns are not considered major deficiencies.

These uncertainties are compounded by the low level of confidence NRCan has in Taseko’s predictions about the movement of water through the tailings themselves. The concern comes from the limited sampling (2 samples to represent 482 million tones of tailings) of a highly variable and massive volume of material, and the use of groundwater flow parameters at the low end of the possible range. NRCan requested additional measurements of hydraulic conductivity, using more samples of tailings and a rationale for the chosen parameters for hydraulic conductivity.

Confidence in the ability of Taseko to prevent impacts on Teztan Biny is further eroded due to Taseko’s modelling of the rate that tailings water will seep through the impoundment walls (the above concerns relate to seepage directly into the groundwater). NRCan states that the model for Taseko’s estimates “cannot account for flow patterns within the impoundment and does not yield estimates of seepage from the TSF that can be accepted as reliable.”

According to NRCan a new model of seepage through the embankments is needed, it should include the complexities within the tailings area such as the much more porous waste rock.

Other Considerations

NRCan requested further information about how the reduced scope of work in 2012 may have affected the quality and quantity of data for the design and performance of tailings embankments.

According to NRCan the presentation and analysis of metal leaching and acid rock drainage risks are “unclear and require clarification”. NRCan requested new calculations and criticized the assumption of a simplistic linear relationship that needs to be substantiated.

NRCan found no issues with Explosives, seismicity,

Health Canada⁷

HC determined that the EIS is adequate measured against the Guidelines but still found issues that need clarification including:

- Identification and description of receptors for noise effects;
- Explanation for why the EIS uses a model that drastically reduced previously predicted effects on metal concentrations in soil;
- Inclusion of polycyclic aromatic hydrocarbons (PAHs) in air quality component of health impact study;
- Reassessment of health risks associated with contamination of country foods based on total dietary exposure;
- The assessment of health effects should be changed to use specific toxicity reference values rather than one value applied across all contaminants.

Transport Canada⁸

TC has identified gaps in several areas including: baseline information regarding potentially navigable waterways and interaction with the project; watershed scale effects; information about current use by public and Aboriginal groups including of Little Fish Lake; mitigation measures; and impacts on Aboriginal rights as they relate to TC’s mandate.

Most of the detailed comments reference presentation of data and inconsistencies rather than profound problems. Likely the most significant issue TC flags is the lack of

⁷ CEAA Registry # 265: <http://www.ceaa.gc.ca/050/documents/p63928/83461E.pdf>

⁸ CEAA Registry #266: <http://www.ceaa.gc.ca/050/documents/p63928/83462E.pdf>

adequate information about affected parts of the watershed beyond Fish Lake. It seems unlikely that TML has the data to provide a quantitative response to this deficiency and additional fieldwork and consultations would be necessary to address it.

Another major deficiency TC notes is the lack of detailed information about how access would be maintained to Fish Lake. The comments also specifically flag a deficiency in the documentation of discussions with Aboriginal groups and consideration of impacts on Aboriginal rights related to the loss of Little Fish Lake.

BC Ministry of Lands, Forests and Natural Resource Operations⁹

While baseline information for Fish Creek Watershed was considered adequate, the MLFNRO found that there is inadequate information about the fish and fish habitats in the Taseko River, Beece Creek and Big Onion Lake. The Ministry notes that the risk to Taseko River salmon is a more significant threat than local trout populations.

The MLFNRO noted, as did DFO, that there is not enough information provided about habitat compensation projects to be able to assess their likelihood of success.

They also note that any issues with Taseko's water quality predictions identified by Environmental Protection branch of the MOE will have direct impacts on validity of the fish and fish habitat predictions.

The MLFNRO found that the review of effects on wildlife in the EIS excludes areas that could be affected by changes to hydrology and water quality from consideration of potential impacts. These include the wetlands and riparian areas downstream of the tailings impoundment in the Fish Creek and Beece Creek watersheds.

BC Ministry of Energy, Mines and Natural Gas¹⁰

Mine Plan

The MEMNG found that the variability in the base layer of glacial till for the tailings impoundment has not been adequately considered and the extent to which changes in hydraulic conductivity of this till layer would effect water quality in Fish Lake, Wasp lake, Big Onion Lake and Little Onion Lake have not been assessed. The incorporation of waste rock which is much more porous (higher hydraulic conductivity) than the tailings has not been adequately considered. Both these findings are consistent with EC's and NRCan's reviews.

⁹ Included in the joint submission by BC EAO, CEAA Registry # 276:
<http://www.ceaa.gc.ca/050/documents/p63928/83497E.pdf>

¹⁰ Included in the joint submission by BC EAO, CEAA Registry # 276:
<http://www.ceaa.gc.ca/050/documents/p63928/83497E.pdf>

Mine Development

The Ministry is concerned that the pit may need to be larger than described to ensure pit-wall stability, thus encroaching further toward Fish Lake. They have requested a sensitivity analysis for such an increase.

They are also concerned that there has not been adequate assurance that mine facilities are not being placed over areas with mineral potential (condemnation analysis). If facilities were to be relocated later this could bring with it new un-assessed environmental effects.

Geology and Geochemistry

According to MEMNG, additional information and clarifications are needed to assist with the assessment of the appropriateness and level of conservatism associated with the inputs to the model that evaluates the potential for acid mine drainage and metal leaching.

More information is also needed about the inputs to various models used to predict how contaminants may be released from waste rock and tailings, explosive residues, dust and the ore stockpile. There is some concern that predictions may not be as conservative (precautionary) as Taseko suggests. For example, water quality modelling associated with the ore stockpile indicates that due to the use of a liner there will be limited (1%) infiltration of water through the pile, into the groundwater and eventually into the pit. There is, however, no liner in the mine design nor any description of a liner in the EIS.

Receiving Environment

The MEMNG requests more detail about the relative contributions of sources of contaminants that contribute to predicted exceedances of water quality guidelines in receiving waters.

Water Quality Effects Assessment

The EIS does not have adequate information about water treatment that may be necessary according to the MEMNG. The Ministry is particularly concerned with tailings seepage and pit water discharge and requests conceptual plans for water treatment and secondary waste management.

Accidents and Malfunctions

Though the likelihood of failure may be remote the significant consequences of failures in the tailings storage facility or water control dams are significant. MEMNG notes that effects of a failure of these components of the project should be considered in the EIS, and have not been.

Environmental Management Plans

Due to “inconsistencies” regarding mitigation measures, contingency plans and when and if they are implemented the Ministry requests additional information in order to assess the adequacy of water management and environmental management plans. The areas of concern include key features of the plan including seepage collection, recirculation of the outflow from Teztan Biny and pumping water from the tailings area into the pit.

BC Ministry of Environment¹¹

MOE identified three areas where the EIS “lacked sufficient information to do a thorough review”:

- The EIS should model pit lake water quality as accurately as possible.
- Taseko has not incorporated relevant information about flows in the Taseko River and has not used information about impacts of climate change on the glacial source of the River.
- The EIS uses two different periods for the ice-free season on Teztan Biny, one of which under-estimates the amount of time the lake is actually open and biologically most productive.

Furthermore, the MOE is concerned that estimates of nutrients in the lake are based on samples taken on three occasions and as a result the predictions about the productivity of the lake are “provisional”. (See also DFO’s comments). MOE is concerned that the recirculation of water in Teztan Biny may cause algal blooms in the lake and the information provided is not adequate to allay these fears.

¹¹ Included in the joint submission by BC EAO, CEAA Registry # 276:
<http://www.ceaa.gc.ca/050/documents/p63928/83497E.pdf>