

Thompson Creek Metals Co

Davidson Project

Comments on the Care and Maintenance Plan and Water Quality Update

Public Liaison Meeting, Smithers, BC May 7, 2013-05-12

Attendance:

Kathie Wagar, Regional Director, Ministry of Energy, Mines and Natural Gas

Patrick Williston, Ministry of Environment

Claudia Schwuchow, Kathlyn Creek Watershed Group

Wayne Whittemore, Kathlyn Creek Watershed Group

Craig Stewart, Ministry of Environment

John Knight, Glacier Creek Watershed Group

Wade Brunham, Rescan (consultant for Thompson Creek Metals)

David Bailey, Thompson Creek Metals

Jim Hutter, Designated Manager for Thompson Creek Metals

Comments

- Is it a Care and Maintenance Plan or a Closure Plan—or both?
- Removal of most of the infrastructure has taken place. Some reclamation and revegetation, naturally and through targeted seeding has occurred already for most of the site.
- Adit closure needs to be properly evaluated to determine the most effective manner of closure. There are pros and cons to various closure scenarios but the first step should be to investigate further reductions in adit discharge. Use of a bulkhead requires evaluation in terms of geotechnical stability, underground location, unintended consequences and hydraulics, (e.g. will back pressure lead to discharges elsewhere).
- It was noted that the program termination language in the closure plan was not appropriate and the proponent was made aware that on-going monitoring programs will be determined at the discretion of the regulatory agencies in communication with the proponent and stakeholders. The Proponent pointed out that this provision of the Care and Maintenance Plan (p. 3-4) is predicated upon a request made by the company to MEMNG, with the opportunity for a response by the PLC and regulatory agencies. Final determination will be based on the regulatory context and plans for the site.
- Existing waste rock pile is stable and pretty much re-vegetated already; however, further geochemical evaluation of the waste rock and the other areas in the drainage may occur. E.g. Will disturbance of the pile liberate metals; particularly arsenic; is arsenic naturally occurring in the mineralogy of the area.
- Access road – reclamation or maintenance? Slide area needs some engineering assessment and work. This may include additional culverts, ditching or other work as required.

- There are concerns about the diversion ditches (maintenance, effectiveness, etc.) adjacent to the access road. The question was to the adequacy, design and maintenance of the diversion ditches. Blockages, short-circuiting and erosion can cause issues and as part of the on-going monitoring program, the ditches would require a thorough checking to make sure they are functioning properly. Proponent has undertaken, and the Care and Maintenance Plan proposes to continue, regular monitoring of the access road including runoff, erosion and the need for placement and replacement of culverts.
- Water quality monitoring to continue (revisions to the monitoring plan may be necessary) under the prior agreement between Proponent and MEMNG. The 2x per year monitoring frequency may be evaluated to determine if it is inadequate to capture the variability in discharges throughout the year; however, any such review should also consider whether more frequent monitoring provides useful additional information. Sampling program is to be reviewed by agencies.
- Water quality effects and report conclusions require further assessment. Biological studies have been conducted previously, but these may be evaluated as a component of any modified monitoring program. The monitoring program would also include both of the Kathlyn and Glacier Gulch watersheds as discharges may occur to both if required.
- Could monthly reports to be sent out? Is there any utility? The monitoring program and standardization of information collection and distribution is to be evaluated and drafted. This would include water quality sampling, physical inspection, timing, reporting, etc. to ensure that the site inspections and the data submitted accurately reflects the existing site conditions and any changes over time.
- Where are the other monitoring wells? The Proponent notes that locations of the monitoring wells were presented in the Groundwater section and appendix of the EA.
- MLRD test pad – gate – remove or keep? Further evaluation of the test pad is required. Note that moving the test pad will alter the pad dynamics and would thus create, essentially, a second test which can only in part be compared with the existing test pad results, (e.g. new flow paths, change to material exposure, changes to flushing patterns, changes to ambient conditions, etc.)
- Cadmium levels are currently reviewed and reported.
- Time series data should be considered as annual averages
- Public access and trespass continues to be an issue at the site and may play a role in decisions regarding final road rehabilitation and adit closure.

Key Issues to be resolved

- Water flows from the adit – what is coming out, what flows and where, taking into account that considerable data has already been collected on all of these issues
- Is there any evidence of impact of the adit release on domestic wells in the Kathlyn Creek drainage?
- Dump-What are the geochemical conditions in the waste rock? Is arsenic naturally occurring in this drainage?
- Access road – maintain to facilitate access to the mine area for further environmental monitoring and exploration, or remove culverts, re-contour slopes and decommission?
- Is the mine closed or in care and maintenance? Regulators (MoE and MEMNG) and the Proponent must convene to discuss this issue and the implications of the property closure status

given the site potential, the on-going impacts from the site infrastructure, and Proponent's legal rights under the Mines Act.

Actions

- John to bring forward analysis of cadmium to Wade Brunham
- John to forward concerns to MEMNG and MoE by June 14th. Agency review is required to evaluate possible solutions.
- Proponent to produce a plain language version of the baseline draft – summary of past and current water quality conditions.
- MOE to prepare and send a comment letter by June 14th.
- MOE to immediately send 80s data to Wade Brunham.
- Evaluate the need for a monthly report – have a checklist of what is being monitored, should be more formal for proper analysis (MOE to help).
- MOE to review data collected since 2005 (Freshwater Baseline Report) and water quality monitoring program which was approved by MEMNG previously.
- MOE and MEMNG to review regulatory responsibilities and authorizations.
- Proponent to produce a second draft of the plan based on feedback from regulators and stakeholders.

Timelines:

- Internal government review – within 30 days
- Address key issues – PLC and MOE comments to be given to chair by June 14
- Company response to comments – July 12
- Draft review – August
- Full PLC meeting to finalize the draft – Sept – 3rd Thursday.