



Lynn Lake Gold: Review of the supplemental filing

P. 2.3.

The upper case water quality predictions are based on average precipitation and 95th percentile values for the source term and background water quality. NRCan requests that the Proponent provide a sensitivity analysis of the impact of dry and wet periods on the water quality predictions.

p.2.6.

With the addition of 5 meters of waste rock on the MRSA, the complete wetting of the pile is expected to take an additional 3 years, which would delay seepage. However, considering that the pile is built gradually, it is possible that weather allows for complete wetting of different layers of the waste rock pile as it is being built and as a result, seepage at the toe of the pile may breakthrough earlier than predicted. NRCan requests that the Proponent please provide a sensitivity analysis of complete wetting times on water quality predictions.

Tables 3-14 to 3-20 and section on assessment of effects on water quality.

The updated upper case water quality predictions report an increase in all metals and nutrients, above water quality criteria particularly at closure and during post-closure in Keewatin River Tributary (KEE3-B1). Considering that an average precipitation is used, what are the implication to the upper case water predictions? While the updated water quality predictions indicate that the spatial extent would be limited to Keewatin River and part of Minton Lake (i.e. especially cadmium), questions arise. For instance, what is the proportion of metals released to the Keewatin River that will partition to suspended matter and settle in the sediments? NRCan requests a discussion be provided on how this process is affecting the water quality predictions and the spatial extent of contamination.

Assessment of Alternatives to Manage Waste Rock

In this updated modelling, the Proponent chose to modify the shape and height of the piles while there is open pit space available to manage the rock. NRCan requests that the Proponent discuss why they are not backfilling the open pit to reduce the long-term seepage of metals in the Keewatin River Tributary.