

1) What is the expected lag time between the overprinting of fish habitat and the construction of proposed fish compensation habitat.

As described in Section F4.2 of the Goliath Gold Project Fish Addendum, and set out in Table F4.2-1, the following two (2) sets of fish habitat offsetting/compensation are proposed:

- The diversion of Blackwater Creek Tributary 2, upstream of the operations area (3,047 m²); and
- The creation of new ponds for fish habitat (60,000 ha).

The expectation is that both of these fish habitat offsetting/compensation measures would be done during the site preparation and construction phase, concurrent with the activities that would result in the overprinting of fish habitat. Therefore, there is not expected to be a meaningful lag between the overprinting of fish habitat and the construction of the offsetting/compensation habitat.

2) As per clarification request #7, what methods will be used for determining the allowable amount of water taking from the tree nursery ponds, and how will these rates be adjusted for drought conditions?

The expectation is that Treasury Metals would implement continuous flow monitoring on the inlets to ponds at the former MNRF tree nursery. This data would be used to determine the allowable volume of water that could be withdrawn each day to meet the commitment of not taking more than 5% of the incoming flow (MMC-8.8). Treasury Metals intends to maximize the amount of recycle and reuse of water within the processing facility to keep the requirements for the withdrawal of freshwater to a minimum.

The rate of withdrawal will be limited to less than 5% of the inflow to the ponds at the former MNRF tree nursery during all flow conditions. In the event of drought conditions, the inflow to the ponds would be decreased and thus the volume of water Treasury Metals could withdraw would also be limited. In the event of extreme drought conditions, it is possible that there would be no flow into the ponds. In this situation, Treasury Metals would not withdraw fresh water from the ponds but would use water from the discharge of the water treatment plant for meeting the freshwater needs.

The water levels within the ponds are artificially controlled by the outlet elevations. For meaningful reductions in water levels in these ponds to occur, there would have to be prolonged periods of no inflow, which would mean prolonged period for which Treasury Metals is unable to take water from the ponds. The commitment was intended to ensure the protection of fish and fish habitat in these ponds, as well as the associated tributaries.

3) Infiltration Rates through the uncapped WRSA.

The rate of infiltration from the uncapped WRSA into the underlying overburden or bedrock was identified as 100–200 mm/year in Appendix M to the revised EIS (April 2018), as well as in Section 7.3 of the Goliath Gold Project Water Addendum. It was noted during the teleconference on May 8, 2019 that Table W7-1 of the Water Addendum lists the seepage from the uncapped WRSA as being 100–200 m³/day. It is possible to convert from one set of units to the other by multiplying the infiltration rate by the area of the WRSA, and then converting the units as shown in the following equations for the upper and lower bound rates of infiltration (i.e., 100 mm/year and 200 mm/year, respectively):

$$100 \frac{mm}{year} \times \frac{1 year}{365 days} \times \frac{1 m}{1000 mm} \times 36.5 ha \times \frac{10000 m^2}{1 ha} = 100 \frac{m^3}{day}$$

and,

$$200 \frac{mm}{year} \times \frac{1 year}{365 days} \times \frac{1 m}{1000 mm} \times 36.5 ha \times \frac{10000 m^2}{1 ha} = 200 \frac{m^3}{day}$$

4) *As per clarification request #10, what regulatory criteria were Treasury Metals planning to use to ensure the protection of mammals and birds that may access the post-closure water cover for the TSF?*

As discussed on the May 8, 2019 teleconference, there are currently no appropriate water quality criteria or standards that would be applicable for the water in the minewater pond during operations, or for the closure water cover for the TSF in post-closure. The PWQO are developed to be protective of freshwater aquatic life, and neither of these features would provide suitable habitat for aquatic life. As described in the response to TMI_872-WL(2)-03, a refined ecological risk assessment was completed to evaluate the potential risk to mammals and birds who may access the open water features of the Project including the minewater pond during operations, and the pit lake during the post-closure phase. The same approach would apply to the closure water cover for the TSF as the water would be a comparable to the quality of the minewater pond. Predicted chemical concentrations in the minewater pond, TSF, and pit lake were compared to toxicity reference values (TRVs) for mammals and birds obtained from peer reviewed literature and the MECP’s risk assessment rationale document. For conservatism, the no observable effect level (NOEL) was selected over the lowest observable effect level (LOEL). The values presented the screening level ecological risk assessment provided in TMI_872-WL(2)-03 are the lower NOEL for either birds or mammals. According the current regulatory ecological risk assessment guidance, a NOEL is typically only employed when assessing potential risk to species at risk (SAR), which require additional protection at the individual level versus the population level. The results of the refined screening level ecological risk assessment presented indicate that the predicted chemical concentrations in the minewater pond during operations and pit-lake post-closure are below levels expected to pose risk to mammals or birds.

5) *As per clarification request #1, why is Treasury Metals proposing a different concentration of mercury in the treated excess water discharged from the water treatment plant during operations than the mercury concentration in the pit lake following closure?*

The difference in the mercury concentration in excess water discharged from the water treatment plant during operations, and the mercury concentration in the pit lake during post closure has to do with the differences between active and passive phases of the Project and the natural background concentration of mercury in the environment. Treasury Metals recognizes the importance of mercury in water to regional stakeholders and has made committed to use a water treatment plant during operations that is capable of controlling mercury levels in the excess water released from the Project to levels that are equivalent to the background measured in surface water in Blackwater Creek. Following closure, the dewatering activities will cease, and the open pit allowed to flood forming a pit lake. Once filled, the pit lake will be comprised primarily of groundwater, which has a background concentration of mercury of 0.00004 mg/L. It should be noted that there are no current concerns expressed in the area regarding background concentrations of mercury in groundwater with respect to safe drinking water.

Treasury Metals recognizes that discussions will be held with the MECP and MENDM regarding regulatory requirements for the Project post closure which might include site-specific mercury targets.

6) *As per clarification request #5, at what frequency will Treasury Metals complete invasive species surveys?*

Treasury Metals will derive the full details of the invasive species surveys including frequency as part of the Environmental Management Plan process which will include consultation with Indigenous communities and regulators. It is Treasury Metals understanding that that these surveys return the most valuable information when completed prior to site preparation and construction to allow for additional baseline characterization, and then again early in the closure phase when disturbance is greatest.

6) *As per clarification request #3, blasting schedule. The Agency is looking for a timeframe and level of detail similar to Hardrock and Côte to allow for Indigenous community members who may practice traditional land and resource use to schedule their use of land and resources with some level of predictability to avoid blasting if they choose.*

To address this Treasury Metals has modified the language in MMC-3.21 and MMC-3-2.

- **MMC-3.2 (revised):** Prior to construction, a blasting schedule and plan will be developed, which will include a notification process to inform Indigenous community members and other members of the public when blasting will occur and to describe all normal blasting activities on site. This plan will be developed through consultation with local Indigenous community members, stakeholders and

regulatory officials and will be posted publicly on the Treasury Metals website. Treasury Metals currently plans to conduct blasting activities in the open pit between 10:00 am and 4:00 pm and would not conduct blasting on statutory holiday or agreed days of cultural importance (with at least 2 weeks prior notice given to Treasury Metals), unless required for safety purposes. Treasury Metals will notify Indigenous communities of changes to the blasting schedule 48 hours prior the changes taking effect, unless required for safety purposes.

- **MMC-3.21 (new):** Treasury Metals is committed to working collaboratively with Indigenous communities to ensure informed and engaged dialogue throughout the life of the Project and has proposed the formation of an Environmental Management Committee to aid in continued dialoged. The Environmental Management Committee is intended to provide a forum for discussing environmental matters with the potentially affected Indigenous communities such the incorporation of traditional knowledge or items of cultural importance that might have been collected since completion of the EA process. Environmental matters that the Environmental Management Committee would review include but not limited to the blasting schedule and how it may interfere with days of cultural importance Treasury Metals will consider amendments to the blasting schedule to accommodate days of cultural importance, provided that they are brought forth to Treasury Metals at least 2 weeks in advance. The Environmental Management Committee will provide the conduit for which Treasury Metals may amend their blasting schedule. Changes in the blasting schedule in response to a request from the Environmental Management Committee, and or to address exceptional circumstances would be communicated through the Treasury Metals website or via direct communication with the community. Treasury Metals will notify Indigenous communities of changes to the blasting schedule 48 hours prior the changes taking effect, unless required for safety purposes.