

Memo

To	Lynn Carter	File No.	VE51295
From	Bruce Ott	cc	Greg Missal, Tahera
Tel			
Fax			
Date	12 November 2004		
Subject	KIA Additional Questions re. Tahera Water Licence Application – Re-Issue		

This memorandum is in response to KIA additional questions sent by e-mail to Greg Missal 8 November 2004 by Ms. Lynn Carter.

- Is the depth of road fill adequate for permafrost protection?*

The intent of the depth of road fill is to protect the permafrost. 1.5 metres is a good starting number. Theoretically it could be thinner because Jericho is north of the other diamond mines where we have the experience.
- What is the closure plan for the causeway?*

The NNLP indicates that the causeway surface will be excavated to ice level rather than to the existing water level. The remaining material will serve as a submerged reef for fish. This would occur on closure and after the pipeline was removed.
- What is the approximate area (metres squared) of the buildings, both wood frame and steel construction?*

The shop is 160 feet by 68 feet. The camp is 70 units each of which is about 10 feet by 56 feet. The other 2 buildings are the process plant and the explosives plant and the sizes are not available at this time pending confirmation of contractors to build the facilities.
- What is the cost of lowering the spillway and what is the conceptual design for this?*

As noted in Appendix W (SRK Technical Memorandum P) of the submission to the NWB, the water storage capacity of the PKCA will be minimized at closure by either breaching the West Dam or deepening the spillway. As closure is approached, a variety of factors will need to be considered in order to select which of these two options will be most appropriate. However, in general, a lower target elevation would favour the breach option; a higher target elevation would favour lowering the spillway. In the case of the spillway lowering, this would require drilling and blasting a channel through the bedrock adjacent to the north abutment of the West Dam. The corresponding cost will depend on

the target spillway elevation which, in turn, will depend on the volume of rock that must be excavated

5. *What is the area of the roads, both light vehicles and heavy haul?*

This information was provided in the Jericho Diamond Project Final EIS:

Haul roads (22 m width): 4 ha

Access roads (13 m width) (includes 3.5 km of winter road): 10.4 ha

Airport road (10 m width): 1.5 ha

Ore trucks would use only the haul roads. Other heavy trucks would use the access road. The road to the airport is designed for light trucks.

6. *What is the area of the airstrip?*

This information was provided in the Jericho Diamond Project Final EIS: 2.4 ha.

7. *Is the intended dump slope angle 3H:1V for closure of the rock and coarse PK piles?*

The intended dump slope for closure of the rock and coarse PK piles is 3H:1V, which corresponds to a slope of 18.4°. A slope angle of "approximately 19°" is mentioned in some documents. It corresponds to a slope of 2.9H:1V and is, for all practical purposes, the same as a slope of 3H:1V.

8. *How will minor maintenance work be done in the first years after remediation? (e.g. leave some equipment on site, etc.)*

Support equipment will be left on site after closure for maintenance purposes until it is no longer needed. We would leave low value (old) pieces to minimize carrying costs

9. *What contribution does the mine site and Jericho watershed make (area, %, volume) to the Burnside River at the Burnside River outlet?*

The Jericho River watershed above the outlet to Carat Lake is 148 km². The average flow is 1.5 m³/s. The Burnside River at its outlet is 16,800 km² and the average flow is 122 m³/s. From this it is evident that the contribution from Jericho is essentially unmeasurable at the mouth of the Burnside River.

10. *Will heavy haul roads require berms and how will this affect caribou?*

There are no plans for berms on haul roads, but ditches will be required. Nuna Logistics to confirm.

11. *What is the area of roads (both light and heavy vehicle) on the IOL compared to the total area of roads?*

Haul roads: 0.05 ha on IOL

Access roads: 9.5 ha

Airport road: 1.5 ha



12. *What is the area of buildings (both wood and steel frame) and pads on IOL as compared to the total area of buildings and pads?*

Buildings are on Crown Land, except the explosives buildings for which dimensions are presently not available. The coarse PK will be on a pad. The total area of the coarse PK is 11.35 ha, of which 1/3 is on KIA land or approximately 3.75 ha.

13. *What is the ballpark cost for liability insurance?*

Tahera Diamond Corporation is investigating cost of liability insurance. An answer cannot be given at this time.

14. *Has Tahera considered faster filling of the pit lake by pumping from Carat Lake or the PKCA and what would be the implications of this on the predicted pit lake water quality and filling timeframe?*

Rapid filling of the open pit from Carat Lake was considered in the Jericho Diamond Project Final EIS, and supplemental submissions as a means of reducing the post-closure monitoring period. However, it was not selected as the preferred alternative because it may be required to provide short-term storage of seepage and runoff from the waste rock piles should metals and/or nutrients exceed the applicable discharge criteria. By ensuring the filling period would take a minimum of 15 to 20 years, there would be ample time for ammonia and nitrate from the waste piles to flush from the piles into the open pit where degradation and plant uptake will remove these components from the water. If necessary, metals can also be removed by in-pit treatment methods during the filling period. If monitoring from the first few years following closure indicates that the discharges from the waste rock dumps meet the applicable criteria, consideration could be given to accelerated filling using water from Carat Lake. There will not be enough volume of water left in the PKCA on closure to make pumping from this facility to the open pit worthwhile.