

June 10, 2005

Philippe di Pizzo Executive Director Nunavut Water Board Box 119 Gjoa Haven, Nunavut XOE 1J0

Re: Aquatics Effects Monitoring Plan Delivered by Electronic Mail

Dear Mr. di Pizzo,

Please find below Tahera's response to key comments received by the Nunavut Water Board related to the Company's Aquatics Effects Monitoring Plan. We look forward to receiving your prompt approval of this plan.

#### General

The Jericho Diamond Mine Water License terms and conditions were developed based on an extensive public process with input from government, the public, and other stakeholders. This includes the AEMP. Unless site conditions indicate through monitoring at Jericho that sampling is inadequate, we do not believe an increase in monitoring is justified at this stage.

### **Specific**

# Section 2.1.1 Inclusion of the O-Lake System in Sampling

We do not believe addition of the O-Lake system will assist management of environmental impacts at the Jericho Mine and the Water Licence reflects that belief in not requiring monitoring of this drainage system. The O-Lakes are east of the airstrip and continue north. The only possible impacts from construction and operation of the Jericho Diamond Mine would be dust from the airstrip and borrow areas. The mine fuel farm is located at the plant site remote from Lake O1; the exploration tank farm will be dismantled, soils tested and the site reclaimed. As previously indicated any contaminated soils will be treated in the mine land farm and only clean soils placed at the old tank farm site, i.e., soils that meet or are better than federal industrial site guidelines for petroleum hydrocarbons.

With respect to fish sampling, the lakes are small with relatively small populations of fish, which will not stand the level of sampling effort to derive meaningful data from the system.

#### Section 2.3 - Definitions

The final AEMP definitions can be modified per Environment Canada's suggestions. One point to note is that <u>site-specific</u> water quality guidelines were developed for Jericho and submitted with the Jericho Water License application. Those site-specific guidelines and not CCME, where the two differ, would be used.

An increase in parameter concentrations would be a signal for investigation which is discussed in more detail in the General Monitoring Plan.

### Section 2.4.1 - Monthly Water Samples at the Benthos Sites

We do not believe addition of monthly water samples at the benthos sites will assist management of environmental impacts at the Jericho Mine and, again, the Water Licence reflects that belief in not requiring such monitoring. The current surveillance network program for water quality is sufficient to detect any changes in water chemistry caused by mining activities. Water moves whereas the benthos are largely stationary. Benthos will integrate water quality effects over time and thus spot sampling at the time of benthos surveys will add nothing to the information gained from the benthos. Any significant water quality effects that might affect benthos will be captured by the surveillance network program unless such

effects are small, chronic and acting over time; the latter effects will not be detected by a grab sample when benthos are sampled.

# Section 4.6 - Mercury Monitoring

Sediment mercury monitoring is included in general monitoring plan which is part of aquatic monitoring. The rationale for the fish tissue monitoring program developed is provided in the AEMP. Mercury in particular is not an issue at Jericho and the mine will not be liberating significant amounts of mercury. As stated in the AEMP and at public hearings for project approval and the Water Licence, the main concern is not to significantly reduce the existing fish populations in the lakes at the Jericho site by engaging in a sampling program adequate to detect changes in mercury levels.

#### Section 5.3 – Frequency and Replication

The title for Table 5.2 will be corrected.

# Section 7.1 - Gut Content Identification

Gut content identification was completed as standard practice during all baseline sampling, including the 2004 AEMP. This parameter typically is of little value for monitoring purposes, so it was omitted from the AEMP. We will include gut content as a parameter in the final AEMP.

### Section 7.2 - Fish Sampling in Jericho Lake

Jericho Lake was included in the **1995** sampling program because at that time the concept was that Carat Lake may be drained and Jericho Lake would have been the first lake downstream of the mine. Please note that this was a very old concept that was looked at prior to a full understanding of the Jericho deposit.

Mercury in large fish is a common occurrence in the Contwoyto Lake area (and other large lakes in Nunavut and NWT that have been investigated). Mercury is not a problem metal associated with the project. Mercury accumulates only slowly in fish tissue. Sampling of mercury in fish tissue in Jericho Lake will only provide data after the fact, i.e., will be of no use in managing environmental impacts at Jericho even if there is an increase in fish tissue mercury as a result of mining activities.

Station labels will be adjusted.

### Section 7.3 – Table 7.4

Repeated fish sampling in 2005 is not recommended.

The opportunity to review the comments received by the NWB is appreciated and we trust that this will assist you in completing your approvals promptly.

Yours truly, Tahera Diamond Corporation

Greg Missal Vice President, Government and Regulatory Affairs

Cheryl Wray
Environmental Supervisor – Jericho Mine Site