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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI

File: 2AM-JER0410/L5

February 26th, 2007

Greg Missal
Vice-President Nunavut Affairs
Tahera Diamond Corporation
130 Adelaide Street West, Suite 1900
Toronto, Ontario M5H 3P5

Subject: NWB review of the submitted Quality Assurance/Quality Control Plan

Dear Mr. Missal:

The Nunavut Water Board (NWB) requests further clarity on issues related to the Jericho Diamond Mine Quality Assurance/Quality Control Plan (**Part L, Item 5**). The following documents were consulted in reviewing the Quality Assurance/Quality Control Plan:

i. **Quality Assurance/Quality Control Plan** – *Tahera Diamond Corporation – Jericho Diamond Project – Quality Assurance/Quality Control Plan, AMEC Earth & Environmental* (received: April 22nd, 2005)
ii. **General Operational Monitoring Plan** – *Tahera Diamond Corporation – Jericho Diamond Project – General Operational Monitoring Plan, AMEC Earth & Environmental* (dated: March 2005)[1]

The NWB has retained the external expertise of Dr. Paul Wilkinson of Paul F. Wilkinson & Associates Inc. (PFWA) to review the Plan. PFWA conducted its review in collaboration with Mary Jean Buchanan of Met-Chem Canada Inc. and Stéphane Lorrain of Environnement Illimité Inc. After a review of the above correspondence, it has been determined that further clarity is needed. Please find below PFWA's review and within the reviews the NWB has included highlighted (yellow) bold text giving TDC direction in formulating a response and the additional information TDC is to provide. Where appropriate, the NWB references **Schedule L, Item 2** of the water licence **2AM-JER0410** (formerly NWB1JER0410).

1. As per NWB Licence Part L, Item 5:

> ***"The Licensee shall submit to an Analyst for approval within three (3) months of the effective date of this License, a Quality Assurance/Quality Control (QA/QC) Plan that includes field and laboratory procedures and requirements. This report shall be developed in accordance with Schedule L, Item 2."***

[1] As the General Operational Monitoring Plan was annexed to the Quality Assurance/Quality Control Plan submission is has been considered as an annex. To this date the NWB has not received a General Operational Monitoring Plan under a separate cover and has not considered this document as a stand alone document as per Part L, Item 1.

Schedule A to the Licence defines "Analyst" to mean an analyst designated by the Minister of Indian and Northern Affairs Canada under Section 85(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. The effective date of the Licence was December 21, 2004. TDC submitted the Plan to the Nunavut Water Board (NWB) on April 22, 2005, which was four months after the effective date of the Licence. For record purposes, NWB acknowledges that TDC was in technical breach of Part L, Item 5 of the Licence by submitting the Plan one month after the expiration of the three-month deadline specified therein.

2. The Plan does not identify its authors or list their relevant qualifications and experience.

   The Board request that the document be signed for authorship and professional qualification.

3. Given that the Plan will be read by many persons who are not specialists in QA/QC, it would have been useful for it to state clearly what it means by *Quality Assurance* and *Quality Control*. It could usefully have adopted the definitions of INAC & NWTWB (July 1996), as follows:

   > ***Quality Assurance****: is the system of activities designed to better ensure the quality control is done effectively; while*
   > ***Quality Control****: is the use of established procedures to achieve standards of measurement for the three principal components of quality: precision, accuracy and reliability.*

   Does the applicant agree that providing a definition of Quality Assurance and Quality Control within the document would provide clarity to the reader? The Board requests that these definitions be included in the document.

4. The List of Appendices refers to a single appendix (Appendix A), described as "General and Aquatic Effects Monitoring Plans" (the "GAEMP"). The GAEMP seems to be composed of AMEC (March 2005), SRK (August 2004) and Mainstream Aquatics (March 2005). The GAEMP contains over 480 pages, but only six pages explicitly address QA/QC (AMEC (March 2005) pp 13-16; Mainstream Aquatics (March 2005) pp 20-21). It is unnecessarily complex for the reader to have to refer to several documents and almost 500 pages of text to find what can be expressed in less than 20 pages. We recommend that the next iteration of the Plan be self-contained and without unnecessary appendices.

   Does the applicant agree to increase the clarity of the document, appendices should only contain relevant information related to the QA/QC plan?

5. The Plan itself is poorly structured, making it difficult for the reader to grasp the overall objectives and methods. It contains much unnecessary information. Given its length, it devotes too much attention to general principles and statements, often at the expense of detailed specifications. For example, Section 3.2.3 states, that *Strict sampling protocols are adhered to*… for nonvertebrate aquatic biota, but it does not specify what those protocols are. In the same vein, AMEC (March 2005: Section 3.1.6) fails to specify the instrumentation that will be used. …we recommend that it contain numbered and labelled subsections corresponding to the 10 elements identified under Schedule L, Item 2 and that descriptions of general principles be kept to a minimum.

   The Board requests additional detail to address the reviewer's comments. Does MHBL agree that restructuring the document, as described above, in addition to providing all Licence requirements within a comprehensive, independent and self-

contained document issued by a single author, would provide clarity to Licence requirements?

6. A series of flow charts describing the sampling program (what, when, where and how) would facilitate the understanding of the reader.

   Does the applicant agree that providing the above mentioned flow charts within the document would provide clarity to the reader? The Board requests that a series of flow charts, as described above, be included in the document.

7. Section 1.3 of the Plan notes that the Analyst had not been appointed when the Plan was drafted. The Analyst has now been appointed but has not yet reviewed the Plan.

   TDC is reminded that according to Schedule L, Item 2 of the licence, the detailed QA/QC plan shall include approval of the plan by an analyst (Schedule L, Item 2b) and information on the analyst (Schedule L, Item 2c). The NWB requests this information.

8. Section 1.5 of the Plan provides adequate references to general QA/QC principles through reference to the eight management principles recognized by the ISO 9001 standard (International Standards Organization 2000). Adhesion to the practices set out in INAC & NWTWB (July 1996) helps to ensure an acceptable level of scientific rigour. The Plan discards Principle 1 (customer focus) and Principle 8 (mutually beneficial supplier relationships) on the basis that they do not apply to environmental monitoring at the Jericho Mine. It would not be unreasonable, however, to consider the population of Nunavut, as represented in this case by the NWB, as the customer. In the same vein, Principle 8 could be applied to the relationship with external laboratories.

   Does TDC agree with the reviewer's comments?

9. The following items should have been identified as an integral part of the Plan:

   - quality assurance organization: personnel (Tahera) responsibilities and qualifications;
   - quality assurance policies;
   - quality control procedures and forms;
   - sample custody and documentation (field operations and laboratory operations);
   - calibration procedures;
   - analytical procedures and methods;
   - internal quality control checks;
   - performance and system audits;
   - corrective actions.

   The Board requests additional detail to address each of the reviewer's bulleted points to further satisfy licence requirement Schedule L, Part 2d.

10. According to Schedule L, Item 2, Sub-paragraph (d), the Licensee must indicate how the elements of the Plan will be implemented on site. As indicated in the ISO 9001 standard, completed forms constitute the most appropriate evidence of compliance. The Plan does not include any examples of written procedures or field forms.
    The Board requests additional detail to address the reviewer's comments.

11. Section 2.1 of the Plan lists the monitoring of water and sediment chemistry among its elements. There is, however, no description of sampling techniques for either

suspended sediments or bottom sediments. The statement in Section 3.2.1 that *Sediment QA procedures will be similar* to those for water quality is inadequate. Bottom sediments can illustrate change over time: core sampling prior to or at the start of a project provides baseline, or reference, data; periodic subsequent sampling at intervals to be determined according to accumulation rates can then illustrate any changes in the chemistry of the sediments over time. Changes in water chemistry are more difficult to interpret because their variability is greater.

The Board requests additional detail to address the reviewer's comment which discusses the strengths and weaknesses of water and sediment samples. Additionally, the Board requests a description of sampling techniques and quality assurance procedures for sediment samples.

12. Information regarding field sampling locations, project phase and frequency for receiving environment water quality monitoring is provided in Table 2 of Schedule 1 of AMEC (March 2005), which also lists the water quality test group parameters to be analyzed. Table 2 is complete and is in compliance with Table 2 of Schedule K of the Licence. The Plan does not, however, provide information on the types of markers used to identify the locations of all sampling stations, as required by INAC & NWTWB (July 1996).

    The Board requests additional detail to address the reviewer's comments.

13. Information regarding water quality parameters is provided in Table 1 of Schedule 1 of AMEC (March 2005). This table is generally compliant with Schedule K of the License, but it should be modified to reflect the exact requirements of Schedule K, such as by adding a reference to a 24- or 32-metal scan or equivalent and replacing the reference to "orthophosphate" by a reference to "orthophosphorus".

    The Board requests TDC to address each of the reviewer's comments to satisfy Licence requirements.

14. The Plan identifies the following sample types: site water quality (Section 2.2.1); receiving water body water quality (Section 2.2.2); water and sediment quality (Section 3.2.1); nonvertebrate aquatic biota (Section 3.2.3); and fish tissues (Section 3.2.4). The last three form part of the Aquatic Effects Monitoring Program. Section 2.1 of the Plan states that solids geochemistry, thermal monitoring and ground ice will form part of the monitoring programme, but it contains no QA/QC procedures for them. AMEC (March 2005: 5-6) provides some details, but they do not include any QA/QC procedures.

    The Board requests additional detail to address the reviewer's comments and identify QA/QC procedures for all of the parameters forming part of the monitoring program.

15. More details regarding sampling procedures for nonvertebrate aquatic biota and fish tissues are provided in the Mainstream Aquatics Ltd (March 2005: section 3.8.1) which was attached as Appendix A to the Plan. The Plan does not, however, refer to the relevant provisions of Mainstream Aquatics Ltd (March 2005). It is not clear, therefore, if the sampling methods and QA procedures identified there are intended to form part of the Plan.

    The Board requests additional detail to address the reviewer's comments.

16. Information regarding sample containers and preservation is provided on page 6 of the Plan by means of a reference to the protocols of the United States. Environmental Protection Agency. The References section does not, however, direct the reader to the relevant documents.

    The Board requests additional detail to address the reviewer's comments.

17. Section 2.2.2.1 of the Plan states that duplicates for some of the water samples taken will be submitted for analysis *To check on the precision of the samplers*. Field

duplicates provide insights into variability at the sampling sites, but they do not assist in judging the precision of the samplers. The precision or effectiveness of the samplers is verified by such means as checking for full closure, adequate sample volume, checking the depth at which the sample was taken, confirming that the sampler was properly oriented relative to the direction of currents and looking for the presence of debris in the sample that might affect the chemistry of the sample.
The Board requests additional detail to address the reviewer's comments that detail how effectiveness of the sampler will be determined.

18. Section 2.2.2.1 of the Plan notes that trip blanks, which it defines as …*a set of bottles filled with demineralized - de-ionized water (supplied by the lab) and processed in the same manner as a collected water sample*, will be employed to ensure that no contamination is introduced into water samples from the bottles or preservatives. In order to provide valid comparative results, the source of water for the blanks should be analyzed, so that reference results are available to compare with the analysis of the trip blanks upon their return to the laboratory. All blanks provided to the laboratory should come with a laboratory certificate stating the purity of the water used in them. This does not mean that all trip blank bottles have been analyzed, but that the batch of water used to prepare those blanks has been analyzed. If a certified laboratory is used to provide analytical services, they will have the proper procedure to produce such a certificate.
The Board requests additional detail to address the reviewer's comments. Will laboratory blanks be certified by the laboratory stating the purity of the water in them? Additional detail is requested into how trip blanks will be treated in the field. Will trip blanks be opened and exposed to the same conditions as the regular samples?

19. The Plan lacks important details on field practices relating to water sampling. For example, it does not specify that, if boats or vehicles are used, the engines must be turned off before samples are collected, and samples must be collected up-wind from the engines. If the person handling the outboard motor is also in contract with the samples or the containers, clean gloves must be worn when handling the samplers. The Plan does not specify how samplers should be carried and handled in the field. For example, will they be wrapped in clean plastic bags?
The Board requests additional detail to address the reviewer's comments that describe field practices pertaining to water sampling.

20. The Plan does not include a description of the system used to identify samples. Chain of custody records are referred to only in Section 2.2.2.2, which addresses quality assurance management for the laboratory. Chain of custody and proper identification of samples begin with field sampling data, and these are not addressed in the Plan. Section 3.0 of Mainstream Aquatics (March 2005: 13) refers to methods and the proper procedure for sample identification with regard to phytoplankton, as follows: *All samples were labeled with the station and replicate identifier, time, date, depth, volume sampled, preservative amount, and name of the collector*.
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2f. How come the instructions for sample logging described in Section 3.0 Mainstream Aquatics are not use for all types of samples? Does the applicant agree that this information would be beneficial to the QA/QC program and sample identification? How will samples be numbered and identified?

21. The Plan does not describe procedures regarding the maintenance of a log of samples delivered to the laboratory, as required by INAC & NWTWB (July 1996).
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2f with respect to logging of samples.

22. As indicated in INAC & NWTWB (July 1996), the Plan must describe how samples from each station are to be preserved, including such details as the concentration and amount of preservatives to be used. Some information (sample containers and preservatives) is provided in Section 2.2.2.2, but there is no detailed description of the sample handling and preservation methods to be used for all field samples.
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2f with respect to sample preservation.

23. A description of how sample integrity will be ensured from the time of collection to completion of delivery, as required by INAC & NWTWB (July 1996), is not addressed in the Plan.
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2f. The Board requests a description of the steps to be taken to ensure sample integrity from collection in the field to delivery at the laboratory.

24. Chain of custody and documentation are important components of a sampling program. Thorough documentation is required to adequately track samples from the field through the laboratory and to prevent sample loss. Procedures should be clearly established to provide information regarding the content and the location of all documents related to field samples, and they should specify how access to the samples is to be controlled. Limited information regarding chain of custody documentation is provided in Section 2.2.2.2 (Laboratory) of the QA/QC Plan. Reference to field parameters information to be collected for each station is made in Table 3.2 of AMEC (March 2005).
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2f. Additionally, the Board requests an example of the Request for Analysis form that might be submitted to the selected Analytical Laboratory.

25. INAC & NWTWB (July 1996) requires that the Plan provide information regarding the rationale behind the choice of field equipment, as well as a description of how the equipment is maintained and calibrated.
The Board requests additional detail to address the reviewer's comments to comply with licence Schedule L, Part 2g with respect to equipment selection, maintenance and calibration procedures for each of the following:

    a. Some references to field instrumentation are made in the Plan, as follows: Section 2.2.2.1 addresses DO meter, pH meter, conductivity meter and thermometer; Section 2.3 addresses water height recorder; Section 2.4 addresses in-stream current meter. Section 3.1.4 of AMEC (March 2005) refers to the use of thermistors, but the model to be used and the reason for its selection are not described.
    The Board requests additional details with respect to equipment model selection.

    b. Information regarding calibration requirements is provided in the Plan for DO meter, pH meter, conductivity meter, thermometer, water height recorder, in-stream current meter and multi-probe, but those for thermistors are not provided.
    The Board requests additional details pertaining to equipment calibration.

    c. Section 3.2.2 does not, however, describe the procedure for calibrating the DO multi-probe and does not state whether it will be calibrated for saturation or concentration. The DO meter may have to be adjusted frequently if the multi-parameter probe does not adjust automatically for changes in barometric pressure. The Plan should describe a procedure for inter-calibration that will have to be performed to correct all

data against a reference instrument when different brands of instrument are used for a single purpose.
The Board requests additional details pertaining to equipment calibration.

d. The make and model of field instrumentation are generally not described or justified in the Plan. Information on a water level recorder and a radio link equipment is given in Appendix B of AMEC (March 2005), but Section 3.1.6 thereof states that the equipment shown may not be what is used in the monitoring program.
The Board requests clarification to address to the reviewers comments.

e. Section 2.3 of the Plan refers to calibrating the height-recorders by establishing a minimum of three benchmarks on bedrock near them.
The Board requests additional details pertaining to this calibration procedure.

f. Section 2.4 of the Plan specifies that calibration of the in-stream current meters will be undertaken at a minimum every two years in one of several towing tanks available in Canada. Without knowing what model of current meter will be used, it is impossible to know whether the proposed calibration frequency is adequate. If, for example, a Price IIA current meter is used, it needs to be calibrated annually and whenever the rotor is banged or damaged. Notwithstanding the statement in the Plan, we are aware of only one towing basin in Canada that is recognized for purposes of calibrating current meters. It is located at Environment Canada's National Water Research Institute, Burlington, Ontario.
The Board requests additional detail into stream current meter type and calibration. Additionally, the Board requests contact information for each organization that is qualified to calibrate current meters.

g. The Plan also states that the difference between sequential measurements using the area and flow method must be <10%. This is not required if a detailed survey of the discharge transect is performed with a procedure to account for outliers and may also be unrealistics due to the level of effort and time required.
The Board requests additional details to address the reviewer's comments.

h. We did not find any indication on the discharge method. How many verticals per section, what depths are measurements taken? What is the calculation approach? When are repeat measurements needed if strange measurements occurred (i.e. not respecting the vertical logarithmic distribution)? When are one or two measurements on a vertical required? Terzi (1983) provides most, if not all, of the information. At least, this QA/QC document should reference available procedures if applicable.
The Board requests additional details to address each of the reviewer's comments.

26. As indicated in INAC & NWTWB (July 1996), the Plan should provide information regarding the use of field blanks, replicate samples, spiked samples and split samples. The Plan provides adequate information regarding methods of field checks, as follows: Section 2.2.2.1 for receiving water body water quality; Section 3.2.3 for nonvertebrate aquatic biota; and Section 3.2.4 for fish tissues. Information on field checks for solids geochemistry is found in Section 3.1.2 of AMEC (March 2005). There are, however, no field checks for sediment sampling.
The Board requests additional detail to address the reviewer's comments that addresses field checks for each sample type and analytical method.

27. Section 3.2.3 of the Plan states that *Consistency of identifications for each indicator is achieved by using the same person*. That approach may ensure consistency in the analysis of any given sample, but it does not contribute to ensuring accuracy. Moreover,

even the between-sample consistency is lost if the person in question ceases to be available.
The Board requests additional detail to address the reviewer's comments.

28. Section 3.2.3 of the Plan states that split samples collected from five per cent of the samples will be submitted as blinds. Splitting can be a major source of bias if it is not done properly. The Plan should describe in detail how it will be done, preferably by citing or reproducing the relevant parts of Environment Canada (2002).
The Board requests additional detail to address the reviewer's comments. Does TDC agree that Environment Canada (2002) is a good reference document with respect to sampling split procedures?

29. AMEC (March 2005: 8-9) refers to methods of analysis for general water parameters, total and dissolved metals and organic parameters. Additional information on methods of analysis is also provided in Section 3.2 of AMEC (March 2005) for acute toxicity, chronic toxicity, paste pH, ABA analysis, reactivity with HCl, total sulphur, ICP-metals and uranium analysis. Detailed methods of analysis for phytoplankton, zooplankton, periphyton, benthic macroinvertebrates and fish tissues are provided in Mainstream Aquatics Ltd. (March 2005). As required by INAC & NWTWB (July 1996), the commercial laboratory should provide descriptions of any methods of analysis that are not outlined in APHA, AWWA & WPCF (1989), and those descriptions should be added to the next version of the Plan.
The Board requests additional detail to address the reviewer's comments. What is the name of the commercial laboratory that will be conducting each of the analysis described above? The Board requests that the accreditation for each laboratory be provided along with a certificate describing the parameters and method of analysis not outlined in APHA, AWWA & WPCF for which it is accredited.

30. Section 2.2.2.2 of the Plan notes that a laboratory certified by the Canadian Association for Environmental Analytical Laboratories Inc. ("CAEL") will be used for analyses and that the same laboratory will be used year after year …*for continuity*…The implication that keeping the same laboratory will guarantee or contribute to repeatability is spurious. Any laboratory that is certified by the CAEL should provide the same quality of analytical performance.
The Board requests additional detail to address the reviewer's comments.

31. The Plan does not specify how the results of the laboratory analyses will be interpreted or what will be done in response to them. The Plan does not state if the chemist responsible for performing the analyses will be involved in evaluating and interpreting the results.
The Board requests additional detail to address the reviewer's comments. What process is in place to ensure that during evaluation and interpretation of the results, the findings will not be biased by analytical constraints? What is the proposed acceptance criteria and action taken if the acceptance criteria are not met? The Board requests details into how the acceptance criteria were derived along with clearly stated assumptions as to why certain types or degrees of change are deemed to be significant from an environmental perspective. TDC is reminded that consideration may be given to the potential for chemical results that are close to detection limits may show high variability linked to the precision of the analytical methods.

32. Section 2.2.2.2 of the Plan provides information regarding general requirements for quality control in commercial laboratories. It is not clear if control samples will be

submitted to a second commercial laboratory as recommended by INAC & NWTWB (July 1996).
The Board requests additional detail to address the reviewer's comments. Additionally, the Board requests additional details of the quality assurance/quality control program of the commercial laboratory selected to perform the work.

33. INAC & NWTWB (July 1996) mentions that the plan should indicate what information will be reported. The Plan should contain any control charts or graphs that will display the precision and accuracy of the methods used to analyze the samples. It should also indicate the number of replicate samples that will be collected and submitted with the report. Section 4.2 of the Plan refers to reporting, but it is limited to the qualitative aspects of reporting, such as the review of reports by consultants and Tahera's environmental personnel. The list of reports to be provided to NWB is given in Section 5.2 of AMEC (March 2005). The Plan itself should contain a comprehensive description of the proposed reporting protocols.
The Board requests additional detail to address the reviewer's comments. Does the applicant agree that it would be beneficial to include details pertaining to control charts or graphs to display precision and accuracy of the methods?

34. The Plan does not describe how data will be verified. Will there be a system of double entries in the databases? Will a given percentage of the data be verified? Will standard field sheets be used?
The Board requests additional detail to address the reviewer's comments on how data will be verified.

35. The Plan does not address techniques of statistical analysis, but there are reasons to believe that it could usefully do so. AMEC (March 2005: Section 5.1.2.5) identifies the statistical techniques that will be used to examine the data on water chemistry. ANOVA is proposed for the quantitative analysis of spatial trends at the stations within the Jericho River. Given that the water bodies in question are interconnected, it is possible that spatial autocorrelation occurs between the parameters measured. ANOVA is not an appropriate technique if there is spatial autocorrelation. The possibility of spatial autocorrelation should be examined when the data are processed, bearing in mind that the data from some stations could be discarded or pooled. ANOVA also requires that all data be available for each sampling station at each sampling event. Given the numerous variables to be analyzed for each station and each sampling event, Principal Component Analysis might offer a simpler way of determining spatial and temporal trends.
The Board requests additional detail to address the reviewer's comments on statistical analysis techniques.

References Cited:

AMEC [AMEC Earth & Environmental]. March 2005. *Tahera Diamond Corporation. General Operational Monitoring Plan Water Licence* ***NWB1JER0410*** *Jericho Diamond Mine Nunavut, Canada*.

AMEC [AMEC Earth & Environmental]. April 2005. *Tahera Diamond Corporation. Quality Assurance/Quality Control Plan Water Licence* ***NWB1JER0410*** *Jericho Diamond Mine Nunavut, Canada*.

APHA [American Public Health Association], AWWA [American Water Works Association] & WPCF [Water Protection Control Federation]. 1989. *Standard Methods for the Examination of Water and Wastewater*. 17th edition.

Environment Canada. 2002. *Revised Guidance for Sample Sorting and Sub-sampling Protocols for EEM Benthic Invertebrate Community Surveys*. Ottawa, Ontario: National EEM Office, Environment Canada.

INAC [Indian and Northern Affairs Canada] and NWTWB [Northwest Territories Water Board]. July 1996. *Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements and for Submission of a QA/QC Plan*.

International Standards Organization. 2000. ISO-9001: 2000. Quality Management Principles. Available at www.iso.org. Cited in AMEC (April 2005).

Mainstream Aquatics Ltd. March 2005. *Jericho Diamond Project Aquatic Biota AEMP-2004*.

SRK [Steffen Robertson and Kirsten (Canada) Inc.]. August 2004. *Technical Memorandum N. Estimates of Receiving Water Quality for the Jericho Project, Nunavut*.

Terzi, R.A. 1983. Manuel pratique de levés hydrométriques – Jaugeage des cours d'eau. Inland Water Directorate, Environment Canada.

In summary the Board requests a formal response to each of the above stated provisions. Sufficient detail and an avoidance of ambiguity should be followed in submitting response materials to the listed provisions. If you require assistance whatsoever please feel free to contact Dr. Jamie Van Gulck, P.Eng. at (519) 577-4129 or vangulck@vggconsulting.com.

Sincerely,

Original signed by:

Joe Murdock
Director Technical Services