

# DE BEERS

GROUP OF COMPANIES

October 11, 2017

File: MV2005C0032 & MV2005L2-0015

Mavis Cli- Michaud  
Mackenzie Valley Land and Water Board  
7th Floor – 4922 48th Street  
PO Box 2130  
Yellowknife, Northwest Territories  
X1A 2P6

Dear: Mrs. Cli-Michaud,

**Re: 2016 AEMP Annual Report – Approved  
De Beers Canada Inc. – Gahcho Kué Mine**

## **ECCC comment ID-9**

Please accept this letter in response to a request made in the Mackenzie Valley Land and Water Board's (MVLWB or the Board) letter of approval of the Gahcho Kué 2016 AEMP Annual Report, dated September 14, 2017.

The Board directed De Beers to clarify, by October 19, 2017, the conclusion in its response to ECCC comment ID-9, that no statistically significant effect was detected for several parameters despite small changes in water chemistry, because the 2016 AEMP Annual Report suggests a significant effect.

The specific line item that the Board is referring in De Beers' response to ECCC ID-9 reads as follows:

- “TP [total phosphorus] in Lake N11 did not differ from the measurements made in the reference lakes, and considering previous years' measurements, did not have a significant BACI effect in under-ice or open water compared to either of the reference lakes.”

De Beers wishes to clarify that the terminology used in the response to ECCC ID-9 was not consistent with the terminology used in the 2016 AEMP Annual Report when referring to the BACI results. Where the response reads “no significant effect”, the response should have read “no statistically significant differences indicative of a Mine-related effect.”

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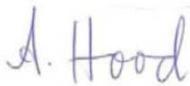
As outlined in Section 5.2.3.2.3 of the 2016 AEMP Annual Report, when interpreting the results of the statistical analysis, it was assumed that only a response showing an overall *increase* in concentration of a parameter in a core lake relative to *both* reference lakes was considered to be indicative of a Mine-related effect.

Water quality results presented in the 2016 AEMP Annual Report showed that:

- During the ice-cover season, a significant press effect (long-term; *BA x CI* interaction term) with a positive magnitude was detected compared to Lake 3, for TP in Lake N11. A significant pulse effect (short-term; *CI x Time(BA)* interaction term) was detected for TP compared to East Lake; however, further testing did not detect significant BACI effects relative to either baseline year (2011 or 2013), and directions of the non-significant differences were different relative to the two baseline years. Based on these results, the overall response was inconsistent between the two reference lakes, and therefore did not provide evidence of a Mine-related effect (Tables 5.4-30 and 5C-3b).
- During the open-water season, there was no significant effect for TP in Lake N11 compared to either reference lake (Tables 5.4-32 and 5C-4f).

We trust that this letter provides the clarification that the Board was looking for. Should you have any further questions or concerns, please feel free to contact me by phone at (867) 766-7352 or by email at [Alexandra.Hood@debeersgroup.com](mailto:Alexandra.Hood@debeersgroup.com).

Sincerely,



Alexandra Hood  
Regulatory Specialist

cc S. Maclean, P. Kramers  
T.Covey, GNWT