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October 12, 2021

File: MV2005L2-0015

William Liu  
Regulatory Specialist  
De Beers Canada Inc.  
Suite 300 – 1601 Airport Road NE  
Airport Corporate Centre  
CALGARY AB T2E 6Z8

Sent via E-mail

Dear William Liu:

**Re: AEMP Response Plan – Toxicological impairment and Nutrient Enrichment – Low Action Level Exceedance in 2020 – Approved**

The Mackenzie Valley Land and Water Board (MVLWB or the Board) met on October 7, 2021 and reviewed De Beers Canada Inc. (De Beers) AEMP Response Plan for triggering low action levels for Toxicological Impairment and Nutrient Enrichment in 2020, which was submitted under Part I, Condition 6 of Water Licence MV2005L2-0015.

The Board hereby approves the AEMP Response Plan as submitted.

The Board requires that De Beers submit, for Board approval, a standalone document, to be attached to the AEMP Design Plan, which shall contain De Beers' proposed triggers that would need to be met to initiate further studies on the spatial and seasonal extent of water with low dissolved oxygen in response to GNWT-ENR comment IDs 2 and 4, as summarized in Table 1 (attached). These are proposed changes to the triggers that require a focused review prior to the Board making its decision. Please submit the updates by October 27, 2021. Board staff will remind reviewers to comment on the revisions identified in De Beers' concordance table when the document is distributed for review.

The Board requires that De Beers adhere to the commitments made in their responses to all review comments as summarized in Table 2 (attached) as they relate to the Aquatic Effects Re-evaluation Report and/or the AEMP Annual Report.

If you have any questions or concerns, please contact [Jacqueline Ho](#) at 766-7455 or [Angela Love](#) at (867) 766 7456.

Yours sincerely,



Mavis Cli-Michaud  
Chair, Mackenzie Valley Land and Water Board

BCC'd to: Gahcho Kué Distribution List

Attached: Table 1: Board Directives for MV2005L2-0015 – AEMP Design Plan  
Table 2: Board Directives for MV2005L2-0015 – AEMP

**Table 1: Board Directives for MV2005L2-0015 – AEMP Design Plan**

Item	Revisions to AEMP Design Plan	Reference
a)	De Beers to submit the proposed action level triggers for a low dissolved oxygen special study and confirm initiation of this special study as a possible Low Action Level response in an AEMP Design Plan update submitted for Board approval by October 27, 2021.	GNWT-ENR-2, 4

**Table 2: Board Directives for MV2005L2-0015 – AEMP**

Item	Revisions to AEMP	Reference
a)	De Beers to include the triggers for a dissolved oxygen special study, once approved, during the assessment of data for the 2021 AEMP Annual Report as well as the next Aquatic Effects Re-evaluation Report.	GNWT-ENR-4
b)	De Beers to include consideration of the potential effect from algae dying off and settling out of the water column when interpreting the results for the 2021 AEMP Annual Report as well as the next Aquatic Effects Re-evaluation Report.	GNWT-ENR-6
c)	De Beers to continue to assess potential Mine-related effects, including the potential for indirect influence of the operational discharge into Lake N11, in relation to the observed low dissolved oxygen concentrations in Area 8 during the assessment of data for the 2021 AEMP Annual Report as well as the next Aquatic Effects Re-evaluation Report.	GNWT-ENR-7
d)	De Beers to include the consideration of the potential of a localized effect related to observed effects during the assessment of results for the 2021 AEMP Annual Report as well as the next Aquatic Effects Re-evaluation Report.	ECCC-2