

Snap Lake Environmental Monitoring Agency Main Floor, Lahm Ridge Tower 4501 Franklin Avenue P.O. Box 95, Yellowknife, NT X1A 2N1 Phone: 867-765-0961 FAX: 867-765-0963

Website: www.slema.ca

Shannon Hayden Regulatory Officer Mackenzie Valley Land and Water Board 7th Floor – 4910 50th Avenue P.O.Box 2130 Yellowknife, NT X1A 2P6

File: MV2001L2-0002/AdMP

June 13, 2011

RE: Adaptive Management Plan (AdMP, 2011)

Dear Ms. Hayden,

Snap Lake Environmental Monitoring Agency (SLEMA) is pleased to provide Mackenzie Valley Land and Water Board (MVLWB) with the following comments related to the above document. The comment table is also attached.

## **Action Levels**

Section 3 of the AdMP identifies actions levels in relation to water license requirements. However, some of the action levels lack in supporting data or information, and some are questionable.

- Action level for chloride (from the British Columbia water quality guideline), in the 2004 AdMP, was removed.
- Action levels for the issues of Uncertainty in Lake Mixing and Density Stratification, and Nutrient Enrichment of Snap Lake partly depend on the update modeling efforts made during the period of 2010 to 2011. However, the modeling results are not presented in the AdMP.
- Water licence limits are used as action levels for the issues of Uncertainty in Lake Mixing and Density Stratification, and Increase in Total Suspended Solids. That is questionable, because it involves compliance issue.
- The effects threshold for calcium appears not to be provided, and the diffuser mixing zone not defined either.
- No specific action levels are provided for the issue of Nutrient Enrichment of Snap Lake.

It is recommended that De Beers address the above issues and provide explanation and/or further details via correspondence or in the upcoming Monitoring Response Plan.



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The AdMP provide a framework for De Beers to manage the uncertainties associated with the mining operation at the Snap Lake Mine site, but more details are needed to support the AdMP.

SLEMA is looking forward to reviewing the Monitoring Response Plan being submitted in the 4<sup>th</sup> quarter of 2011.

If you have any questions whatsoever please feel free to contact the undersigned or David White at 867-765-0961 / dwhite@slema.ca.

Sincerely,

(original signed by)

Johnny Weyallon Chairperson

cc: Indian and Northern Affairs Canada Environment and Natural Resources, GNWT Environmental Canada De Beers Canada Inc.