



**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](http://www.slema.ca)**

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

File: Water Licence MV2001L2-0002

November 5, 2009

**RE: De Beers Snap Lake Mine – Request for Amendment to Surveillance Network Program: SNP Station 02-03 and SNP 02-16i**

Dear Ms. Hayden,

Snap Lake Environmental Monitoring Agency (SLEMA) is pleased to provide Mackenzie Valley Land and Water Board (MVLWB) with the following review comments related to the above mentioned request.

SNP 02-03

- No samples had been taken from station SNP 02-03 from 2004 to 2006. 7 samples were taken in 2007 and high concentrations of Total Dissolved Solids (TDS) and nitrate were detected in all samples, which might indicate a chemical spill occurring nearby. 2 samples were taken in 2008 and the monitoring results showed no abnormality. As a result, the setup of the monitoring station is meaningful.
- Temporary termination of SNP 02-03 is acceptable. The monitoring station has to be re-established after the ore is processed. Permanent termination of the monitoring station can be considered during Water Licence renewal.
- SNP 02-03 is requested to be terminated because the station is lost due to the ore storage pile relocation. The impact of the ore storage pile relocation on SNP 02-03 should have been predicted, and the remedial actions should have been considered and implemented. It is recommended that De Beers improve its proactive planning of activities.

SNP 02-16i

- Weekly sampling is acceptable but De Beers has to make sure appropriate alternation of Sunday to Thursday sampling.



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- To reduce the impact of missing data of Friday and Saturday samples, it is recommended that De Beers conduct in-house monitoring of time sensitive parameters of samples taken on every other Friday and Saturday, alternately (i.e. Friday, second Saturday, third Friday, fourth Saturday, etc.), and report the results in monthly SNP reports.

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

Sincerely,

(original signed by)

Rachel Crapeau  
Vice Chairperson

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