



Snap Lake Environmental Monitoring Agency
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File: Water Licence MV2001L2-0002

October 22, 2010

RE: AEMP 2008 and 5-Year AEMP Review

Dear Ms. Hayden,

Snap Lake Environmental Monitoring Agency (SLEMA) has engaged Mr. Barry Zadjlik to review the Aquatic Effects Monitoring Program 2008 Annual Report (AEMP 2008). He also made comments and recommendation for the AEMP 5-Year Review in the follow-up meeting on September 17, 2010, on behalf of SLEMA.

The full report of Mr. Zadjlik's review is attached as appendix, and his presentation on September 17, 2010 is already posted in the public registry of Mackenzie Valley Land and Water Board. SLEMA would like to highlight some of his comments/recommendations as follow.

1. Monitoring for the sake of monitoring is a waste of time and money. Monitoring to detect early changes that lead to adaptive management so as to prevent undesirable changes is what an AEMP should do. Unfortunately if there are no action levels the AEMP may not be very helpful - like having a television crew filming a disaster when there is no rescue team - great coverage but no help.
2. It is in De Beers best interest to sample intensively along isopleths corresponding to cutpoints for spatial extent of levels of change (1%, 10% and 20% of the Snap Lake), which were defined in the Environmental Assessment Report (De Beers 2002, Table 9.4-15). The reason is that, in accordance with the EA, decisions are made on the basis of percentage of Snap Lake that is adversely affected.
3. In general, the AEMP 2008 report is very well laid out with the necessary information presented in the appropriate sections in a logical and clear manner.



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4. If follow-up blasting monitoring program prescribed by MVEIRB in 2003 is not carried out, it should be implemented.
5. Mercury (Hg) concentrations should be watched carefully due to proximity to the CCME Guideline for the Protection for Aquatic Life. Also Hg in edible fish tissues should be monitored and possibly also in small bodied fish or benthic macroinvertebrates to provide an early warning of undesirable changes.
6. De Beers should commit to consistent long-term monitoring using the same techniques, locations and depths. Synoptic sampling of all measurement endpoints is strongly encouraged.
7. De Beers should investigate adjustment of the plankton monitoring stations to make all plankton sampling locations consistent with water quality monitoring stations which is standard practice for monitoring the aquatic environment.
8. De Beers should also collect 1cm sediment samples in conjunction with the samples being collected now (the top 5 cm from an Ekman grab) to enable a correlation to be established. Once a suitably strong correlation is established the deeper sampling may be discontinued.
9. Every reasonable effort should be made to ensure that holding times of samples are not exceeded.

If you have any questions whatsoever please feel free to contact 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.

Attach:

Dr. Zajdlik's Report – Review of Snap Lake AEMP, August 2010