



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

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

File: MV2001L2-0002

January 4, 2012

RE: Toxicity Testing of Treated Mine Effluent

Dear Ms. Potten,

The Snap Lake Environmental Monitoring Agency (SLEMA) has reviewed the toxicity testing reports of treated mine effluent samples for 2011, and would like to provide the Mackenzie Valley Land and Water Board (MVLWB) with the following comments.

Of the five Ceriodaphnia tests for treated mine effluent (SNP 02-17B and SNP 02-17) conducted in 2011, one test showed adverse effects for mortality and four tests showed adverse effects on reproduction.

In De Beers responses to Information Request #6 during the process of Water Licence Renewal, it was identified that of the 25 Ceriodaphnia tests between November 2005 and October 2010, three test showed adverse effects for mortality and 15 tests showed adverse effects on reproduction. De Beers claimed that although chronic toxicity does occur in the treated mine water, it does not show a trend of increasing frequency or severity.

By adding the data in the two periods together, the results are that, of the 30 Ceriodaphnia tests from 2005 to 2011, four tests showed adverse effects for mortality and 19 tests showed adverse effects on reproduction.

SLEMA is uncomfortable with the chronic toxicity testing results for Ceriodaphnia and De Beers responses to Information Request #6. SLEMA recommends that De Beers conduct further study on toxicity of treated mine effluent on Ceriodaphnia, and also would like to see one appropriate regulator, MVLWB or AANDC or EC or DFO thoroughly examine the toxicity testing results from 2005 to 2011.



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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Weyallon'.

Johnny Weyallon
Chairperson