



Independent Environmental Monitoring Agency

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June 16, 2006

Sarah Baines
Wek'eezhi Land and Water Board
c/o Mackenzie Valley Land and Water Board
Box 2130
Yellowknife NT
X1A 2P6

Dear Ms. Baines

Re: Additional Information Submitted by BHP Billiton on Use of Calcium Chloride

The Agency would like to respond to the information submitted by BHP Billiton on May 17, 2006 in response to questions from the Wek'eezhii Land and Water Board on the permanent use of calcium chloride.

The Agency is of the view that there should be no decision on the approval of the **permanent** use of calcium chloride at the process plant at Ekati until the company has submitted its full Long Lake water quality study, that contains modeling and predictions for Cell E, and there is an opportunity for the Board and interested parties to review and comment on it. The Agency makes the same recommendation with regard to the Tier II risk assessment for chloride. Without these two studies, it is not possible for the Agency to assess the implications of permanent use of chloride and potential discharges from the Long Lake Containment Facility (LLCF) into the receiving environment. This position is the same as that put forward by the Agency in our May 5, 2006 comment letter on the draft Wastewater and Processed Kimberlite Management Plan.

Although the Agency expressed no serious concerns with the addition of chlorides in our March 31, 2006 letter to the Board, the Agency has since seen the preliminary results of the Long Lake water quality study as presented by the company on April 13, 2006 in the MVLWB Boardroom. We are concerned with the predictions of chloride levels in Cell E of the LLCF, and possible discharges, that may be above those required to protect aquatic life.

If the Board finds it necessary to make a positive decision on the permanent use of chlorides at this point or in the future, the Agency recommends that a precautionary approach be taken and that chloride become a regulated parameter at the discharge point from the LLCF, SNP station 1616-30. The regulated limit for chlorides in the effluent

discharge from the LLCF should be no higher than 150 mg/L, which is the level required to protect downstream aquatic life. This is the level that is needed to protect the most sensitive life in the receiving environment, *Ceriodaphnia* [a cladoceran], as found downstream of the LLCF (as found in the 2003 AEMP report).

Sincerely,

-ORIGINAL SIGNED BY-

Bill Ross
Chairperson

cc. Brent Murphy, BHP Billiton Diamonds Inc.