

# ***NORTH SLAVE MÉTIS ALLIANCE***

*PO Box 2301 Yellowknife, NT X1A 2P7*



Laura Tyler  
BHP Billiton  
[Laura.Tyler@bhpbilliton.com](mailto:Laura.Tyler@bhpbilliton.com)

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## **Ekati 2006 Aquatic Effects Monitoring Program Summary Report**

Dear Ms. Tyler,

The North Slave Métis Alliance (NSMA) has reviewed the aforementioned report. We would like to offer the following comments:

- **Zooplankton Diversity at Koala:** It is unclear in the Summary Report if zooplankton diversity increased in the Koala watershed. Within the text it is stated that “the proportion of cladocerans in the zooplankton of Moose Lake has decreased” (pg. 3-3) however in the corresponding figure (Figure 3-1) there is no noted decrease in zooplankton diversity at Moose Lake from baseline. Was the decrease in proportion of cladocerans in comparison to baseline? If so, how was the decrease in proportion of cladocerans measured if not in a decrease in zooplankton diversity? We feel this should be made clear in the Summary Report without having to refer to the Appendices.
- **Figures 3-2 to 3-13 and 4-2 to 4-13:** These figures provide much information and are a great addition to the report. However, due to the length of monitoring the figures have become difficult to read and the columns are becoming hard to distinguish. We ask that this is addressed in future AEMP reports and options be considered to increase the column width for each year without removal of any of the data currently presented.
- **Copper and Aluminium in Kodiak Lake:** In the text on page 3-1 it is mentioned that “Kodiak lake (not downstream from LLCF) had an increase in pH and sulphate relative to baseline, and aluminium (July) and copper (August) were above CCME guidelines.” From observing the figures in Appendix A, it is possible to compare the values that exceed CCME guidelines with the baseline data and data from the Reference Lakes. We feel that these figures should be in the Summary Report; otherwise the sentence can be taken out of context and could cause concern.
- **Sulphate in Koala:** We are concerned with the high values of sulphate in lakes downstream of the LLCF. Even though there is no Water License criteria and no CCME guideline, the BC guideline<sup>1</sup> for this compound states that a maximum concentration should never exceed 100mg/L and if values exceed 50mg/L the health of aquatic mosses should be monitored. The values at SNP 1616-30, Leslie Lake and Moose Lake are

<sup>1</sup> Ambient Water Quality Guidelines for Sulphate, BC Government, November 2000  
(<http://www.elp.gov.bc.ca/wat/wq/BCguidelines/sulphate/sulphate.html>)

above 50mg/L and current trends could have them approaching 100mg/L. Reference Lakes do not show this same trend and baseline values were much lower. There should be a description of the adaptive management actions that BHPB has, or plans to, put in place to address this issue.

- **Molybdenum in Koala:** We are concerned with the high values of molybdenum in lakes downstream of the LLCF. The current trend is that the molybdenum concentrations at SNP 1616-30, Leslie Lake and Moose Lake will exceed CCME guidelines. Reference Lakes do not show this same trend and baseline values were much lower. There should be a description of the adaptive management actions that BHPB has, or plans to, put in place to address this issue.
- **Nitrate at Koala:** For the second year in a row nitrate levels at SNP 1616-30 have exceeded CCME guidelines for nitrate. Concentrations at Leslie Lake and Moose Lake are also near this guideline. There should be a description of the adaptive management actions that BHPB has, or plans to, put in place to address this issue, and there should be a discussion of the potential environmental implications.
- **Hardness:** Since hardness is an important determinant in many of the CCME guidelines (e.g. nickel and copper), we ask that in future the AEMP Summary Reports include a figure showing hardness. We find the hardness values from Figures 3-12 and 4-10 awkward to read.

Sincerely,



Sheryl Grieve  
Manager, Environment and Resources  
[lands@nsma.net](mailto:lands@nsma.net)

c.c

IEMA: [monitor1@yk.com](mailto:monitor1@yk.com)

DIAND: [livingstoned@inac.gc.ca](mailto:livingstoned@inac.gc.ca)

EMAB: [emab1@arcticdata.ca](mailto:emab1@arcticdata.ca)

DFO: [HannaB@DFO-MPO.GC.CA](mailto:HannaB@DFO-MPO.GC.CA)