



Environment Canada  
Environnement Canada

Environment Canada  
Prairie and Northern Region  
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Our File: 4780 005 004

Wek'eezhii Land and Water Board  
P.O. Box 32  
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Attention: Ryan Fequet

By email: [rfequet@wlwb.ca](mailto:rfequet@wlwb.ca)

**Re: Ekati Mine - Review of 2007 Waste Rock and Waste Rock Storage Area Seepage Survey Report (March 2008)**

On behalf of Environment Canada (EC) I have reviewed the above document. The purpose of the report is to summarize the results from the 2007 waste rock and seepage monitoring programs, and evaluate those results in the context of historical and reference site conditions. The report discusses results from the three separate waste rock storage areas and the two reference areas. The following comments are provided for your consideration.

*Panda/Koala/Beartooth Waste Rock Storage Area*

Seeps 018B and 019 continue to be of concern based on the increasing levels of trace metals, sulphate and nitrogen. The report states that some of the observed increases may be due to an increase in dust due to mining activity and disposal of recently-blasted Beartooth waste rock on the margins of the Panda/Koala/Beartooth WRSA. Nickel, sulphate and nitrate at Seep 019 are continuing on an increasing trend. The report suggests that the general increases at SEEP-018B are due to continued leaching of waste rock weathering products and blast residues.

*Misery Waste Rock Storage Area*

Seep 052 is continuing to show signs of increased metals, specifically zinc and nickel which remains a concern, as per the previous year. The increasing trend and development of maximum levels for some metals indicates that continued efforts to locate the cause of such increases are needed. Seep-081 is showing its highest observed levels to date of sulphate, conductivity, total calcium and total magnesium, with pH also at record levels in lab testing.

EC is please to see that Ekati has shown increased monitoring to those sites of concern, however there is no discussion of future implications, should increasing or harmful levels continue over time. Many of the seeps report to the LLCF, however this does not resolve issues at or near closure of the mine. EC is interested in a discussion surrounding how the effects of poor water quality, from the waste rock piles, will be addressed at closure. As the mine continues through progressive reclamation it will be

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important to examine how these water quality issues will be resolved should observed trends continue.

Please do not hesitate to contact me at (867) 669-4772 with any questions or comments regarding the foregoing.

Yours truly,

Savanna Levenson  
Environmental Assessment Specialist  
Environmental Protection Operations

cc: Carey Ogilvie (Head, Environmental Assessment - North, EPO)  
Anne Wilson (Water Pollution Specialist, EPO)