



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

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November 16, 2011

Kathy Racher
Technical Director
Wek'eezhii Land and Water Board
#1-4905 48th Street
Yellowknife NT
X1A 3S3

Dear Kathy

**Re: Agency Comments on the 2011 Wastewater and
Processed Kimberlite Management Plan**

The Independent Environmental Monitoring Agency has taken a keen interest in the Ekati Wastewater Processed Kimberlite Management Plan (WPKMP) given the importance of maintaining downstream water quality. In this covering letter the Wek'eezhii Land and Water Board (WLWB) will find some general comments regarding the WPKMP and some specific comments that did not warrant a place in the accompanying comment table.

General Comments

The Agency notes that the 2011 WPKMP is generally clearer than other recent versions and that the flow and amount of information has improved. We were pleased to see that BHPB has reinstated the use of a version numbering system. The 'conformity table' in Appendix A is a new, and helpful, addition. Appendix D (EKATI Mine 2011 FPK Deposition Alternatives Study) is an important contribution as it provides a sound and updated technical basis for revising the tailings deposition operation in LLCF. It also addresses some of our earlier concerns around inadequate information for supporting the plan components.

As it has done on previous occasions, the WLWB should request that BHPB submit the various supporting documents for the 2011 WPKMP identified in Appendix D, especially the LLCF Water Quality Prediction Model, Version 3.0. The reasons for this is that water quality related to PK (specifically the tailings pond) is one of the most important issues and there are many stakeholders aside from BHPB who can assist in making sure this aspect is well managed. Circulating the model would help.



There are several places in the WPKMP where BHPB indicates that various water treatments may be undertaken but no criteria are provided regarding when such management practices will be used (see Appendix A to this letter). The Agency has raised this issue in the past. We recall the WLWB proposing to set up a separate process to address the issue of how much information should be required in management plans, and would like to reiterate our keen interest in this and our willingness to assist in this process in whatever way the Board might find helpful.

The Agency is also of the view that there should be an explicit water quality and water stability monitoring program for Beartooth pit so we can all gain a better insight into what is happening there and to better evaluate future pit options and risks at Ekati. The use of a pit for minewater, and potentially for processed kimberlite disposal, is a new development for northern mining and there is likely to be much to learn.

Specific Comments

- Pg. 1-2, 1.1 General, there is reference to the Misery pushback activities having commenced. BHPB had committed to provide a brief project description but this has not been distributed to date.
- Pg. 1-4, 1.3.3 Processed Kimberlite, a definition of EFPK should be provided at this point even though it occurs later in Appendix D.
- Pg. 4-13, 4.8.3.3 Dike C Raise/Cell C West, second sentence, change “exciting” to “existing”.

We thank you for the opportunity to submit comments and we would be happy to discuss them with you and others at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "W.A. Ross". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Bill Ross
Chairperson

cc. Society Members
Bruce Hanna, Fisheries and Oceans
Lisa Lowman, Environment Canada

Appendix A. Water Management Contingencies in the 2011 WPKMP

The Agency's January 11, 2011 letter on the conformity check of the 2009 WPKMP raised concerns around the lack of detail on various water management contingencies. The wording of the respective sections in the 2011 WPKMP (pg. 2-2 and 2-3) remains essentially unchanged.

Pg. 2-2, 2.1.1 An in-line treatment plant may be used to add flocculent, but no details are provided on the criteria used to determine when flocculent will be used, anticipated quantities or characteristics of the flocculent (note further information provided in s. 4.5 is helpful, but does not provide criteria).

Pg. 2-3, 2.1.4 Fox Site section states that an in-line treatment plant may be used to add flocculent, but no details are provided on the criteria used to determine when flocculent will be used, anticipated quantities or characteristics of the flocculent.

Pg. 2-3, 2.2.3 Misery Pit section states that an in-line treatment plant may be used to add flocculent, but no details are provided on the criteria used to determine when flocculent will be used, anticipated quantities or characteristics of the flocculent.

Pg. 4-3, 4.3 Processed Kimberlite states that control room operators vary the amount of flocculent and coagulant depending on the settling characteristics of the plant feed. How is this determined? What criteria are used to add flocculent and coagulant?

Pg. 2-4, 2.2.4 Beartooth Pit section states that minewater has been diverted "when it is beneficial to divert certain minewater sources away from the LLCF", but no details are provided on the criteria used to determine when this happens, anticipated quantities or characteristics of the minewater. This information would be important to know in terms of any pit water quality modelling or pit water quality predictions for Beartooth and understanding when minewater will be discharged into the LLCF.