



## ***INDEPENDENT ENVIRONMENTAL MONITORING AGENCY***

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April 27, 2007

Violet Camsell-Blondin  
Chairperson  
Wek'eezhi Land and Water Board  
Box 32  
Wekweti NT  
X0E 1W0

Dear Ms. Camsell-Blondin

### **Re: Comments on Option C for Ekati ICRP Approach**

As requested by your staff in a letter dated April 13, 2007, the Independent Environmental Monitoring Agency is pleased to provide the following comments on the proposed Option C for the structure and organization of the closure goal, objectives and criteria needed as part of BHPB's Interim Closure and Reclamation Plan (ICRP).

We commend the WLWB for taking the initiative in reviewing the submissions on section 1 of the ICRP and putting forward helpful materials for the consideration of the Working Group. The Agency was pleased to see that all but one of our comments on section 1 are considered within the scope and mandate of the WLWB, and we therefore do not offer any further comments on the accompanying table with the April 13, 2007 letter.

On Option C, the Agency offers the following general comments. Option C has good characteristics such as mine component specific closure objectives and related criteria, and separate operating principles. However, the Agency remains concerned with some problems with Options C as set out below:

#### Issue/Concern

Potential for duplication, excessive repetition and confusion amongst the closure objectives and criteria set out on the table that accompanies Option C.

#### Explanation or Rationale for Issue/Concern

The Agency has always stated the need for a clear overall site closure goal for Ekati and we believe that BHPB has adopted an appropriate goal. The agency has also strongly supported the need for closure objectives for each of the individual mine components at the site, and measurable criteria that can be used to determine whether an objective has been achieved.



The objectives and criteria flow from the closure goal. In our view, the closure objectives are best organized around the original VECs (valued ecosystem components) developed by BHPB during the original environmental assessment. The desired state of each VEC after closure and reclamation would form the basis for each objective with criteria set out to allow measurement of progress and to determine whether the desired state of a VEC has been achieved. This approach will encourage consideration of ecological systems and relationships.

We note that WLWB staff did not fill in the details of the table accompanying Option C. This may be partly due to the difficulty in separating out each VEC for attributes that can be specified according to physical stability, chemical stability, biological stability, and sustainability and Traditional Knowledge. Furthermore, the note on this table makes it clear that VECs may apply to multiple columns making for potential duplication and confusion.

If the full tables were developed for Ekati, there could be as many as 6 (site-wide closure objectives) X 6 (mine components) X 4 (closure objective categories) X 7 (VECs) or 1008 closure objectives specified in total and an even higher number of criteria developed to ensure that each closure objective is achieved. The Agency is of the view that this approach is too complex and will inevitably lead to confusion, unnecessary repetition and duplication.

#### Proposed Solution

The Agency would like to suggest a modified version of Option C that can avoid duplication, repetition and clearly set out the state of each VEC as it relates to individual mine components.

The modified version of Option C that we recommend sees BHPB's closure operating principles and site-wide objectives influencing the development of specific closure objectives for each mine component. The component-specific objectives are consistent with and flow from the overall closure goal. The closure criteria are developed to measure whether the desired state of each VEC is achieved in relation to each mine component. This approach will still allow the use of the sort of tables proposed by the Agency for each mine component without duplication of objectives and criteria based on the four objective categories suggested in the original Option C.

#### Issue/Concern

There are no explicit linkages between the closure objectives and criteria and research.

#### Explanation or Rationale for Issue/Concern

Where BHPB is unable to specify clear closure objectives and criteria, there should be linkages to the Reclamation Research Plan. Where there is uncertainty, it would be helpful for all interested parties to know how BHPB intends to address this issue and how it will develop more detailed closure objectives and criteria in subsequent closure and reclamation plans.

Proposed Solution

The Agency proposes that there be links shown in the conceptual diagram (see attachment) that illustrate the relationship between the closure objectives and criteria and the Reclamation Research Plan. We also suggest that any tables used to present closure objectives and criteria in the ICRP, include a column to indicate "Reclamation Research". This column would be used to identify those objectives and criteria that are insufficiently developed in this version of the ICRP, and would identify or cross-reference the specific research BHPB proposes to allow the appropriate level of certainty and specificity required to set measurable closure criteria.

We trust that these comments are helpful and will contribute to a better ICRP. We will be prepared to further discuss this submission at the May 3, 2007 Working Group meeting.

Sincerely,

-ORIGINAL SIGNED BY-

Bill Ross  
Chairperson

cc. Society Members  
Helen Butler, BHPB

**STRUCTURE FOR RECLAMATION GOALS, OBJECTIVES, CRITERIA**  
 IEMA – modification of WLWB staff option C – April 27, 2007

