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March 14, 2007

Ms. Violet Camsell-Blondin
Chairperson
Wek'eezhi Land and Water Board
c/o Box 2130
Yellowknife NT X1A 2P6

Dear Ms. Camsell-Blondin

Re: BHP Billiton Ekati Interim Closure and Reclamation Plan

The Agency is pleased to submit our comments on Section 1 (Chapters 1-5 and Appendices A and C) of the Ekati Interim Closure and Reclamation Plan (ICRP) to your Board. You should also be aware that the Agency has also sent a separate letter, copied to you, that poses questions regarding other matters in the ICRP with BHP Billiton (BHPB) in the interest of obtaining clarification from the company.

Our comments on Section 1 are found below and generally relate to the confusion surrounding the site closure goal, objectives and criteria. The Agency has consistently recommended to BHPB the need for clarity amongst these concepts, particularly the need for site-specific objectives for each mine component and the need for measurable closure criteria that will serve to provide benchmarks for when satisfactory closure has been achieved. Having reviewed Section 1, we believe that a major revision is needed due to the lack of clarity and specificity amongst BHPB's closure goal, objectives and criteria, as presented in the Introduction (Chapter 1) and Appendix C. This work should be done before the Working Group can start a meaningful review of each of the mine components and the related closure objective and criteria.

Closure Goal

The ICRP uses the Whitehorse Mining Initiative definition for mine closure that specifies that BHPB will "return the EKATI mine site to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities." This goal is a sound one, but it must be fleshed out with objectives that fulfill its intent. This means that there need to be more explicit links between the goal and the objectives, as well as leading to measures (closure criteria) that would demonstrate that the resulting ecosystems are self-sustaining.

Closure Objectives

Need to develop component specific objectives—The Agency has continually stressed the need for mine component-specific objectives so we were very surprised to see the list of eight closure objectives as set out by the company. We understand the need for site-wide closure objectives as required in water licence 0013 (Part J.1.a) but there is no systematic attempt to provide component specific closure objectives, although many of the so-called criteria set out in the tables of Appendix C might be more usefully categorized as objectives.

Some closure objectives are operating principles—There are at least two of BHPB's so-called closure objectives that simply should not be approved by the WLWB as objectives under the water licence. The two objectives described below, are more properly described as 'operating principles' or primarily of interest to the company alone as shown through its corporate Closure Standard. There is nothing wrong with the company adopting these objectives, but we think would be it improper for the WLWB to approve them. We note that BHPB was also unable to generate any measurable criteria that ought to be used to determine site closure for these two so-called objectives from our review of Appendix C.

The first objective relates to compliance with regulatory obligations, and although BHPB has listed these for each general mine component in the tables in Appendix C and rightfully is of the view that the company will fulfill these commitments, this is not in itself a closure objective that relates to how the site should look and perform from an environmental point of view.

The second portion of objective six relates to the return of securities to BHPB as soon as practicable. While the Agency generally supports an efficient approach to progressive reclamation, what is far more fundamentally important to all parties than the return of securities to the company, is the achievement of an agreed upon set of closure objectives through measurement of performance of key environmental indicators as set out in proper criteria. The early return of securities is obviously important to the company. We think that the WLWB should not approve this as a regulatory objective.

The eighth objective relating to the reputation of BHPB, is obviously of interest to the company and its shareholders, but of no consequence in terms of whether the mine site is returned to an acceptable landscape. We think that the WLWB should not approve this as a regulatory objective.

Closure objectives should be based on desired state of VECs—We suggest that the company should also develop a series of closure objectives for each mine component, that relate to the desired state of VECs (Valued Ecosystem Components). Closure criteria could then be developed for each of the objectives. Example tables are shown in Attachment 1 for pits and waste rock storage areas.

Closure Criteria

Need for consistently detailed and measurable criteria—We note from the tables in Appendix C that there are some measurable criteria for closure of some mine components such as the 35° angle of repose for the waste rock storage areas, capping of various types of rock and waste with a specific layer of clean waste rock, dump heights of no more than 50 m, design for 1 in 100 year storm events, the Table 15 effluent quality discharge limits, and the Canadian Ambient Air Quality Objectives. While we applaud BHPB's efforts in setting at least several specific measurable closure criteria, the overwhelming majority of the criteria identified in these tables are not specific enough or measurable.

Poorly defined criteria need to be explicitly linked to the reclamation research plan—In the event that BHPB is not able to set specific measurable closure criteria in this version of the ICRP, it would be reasonable to expect that there would be clear references and links to the reclamation research plan, but this is not the case for the tables in Appendix C. We appreciate the effort BHPB has put into the identification of management actions, but there are few if any links to the reclamation research plan. For the Agency, this is a critical shortcoming that should be rectified in a revision to Appendix C.

Other Matters

The Agency noted the Appendix A Terms and Definitions as a good start and appreciates the effort the company has put into securing translations of this material into Aboriginal languages. However, several of the definitions offered in English contain highly technical terminology and/or are circular in nature.

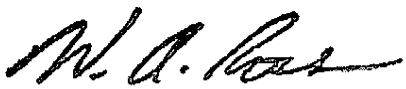
We would recommend that this section be reviewed and that BHPB may wish to contract some plain language specialists to assist with this task. One area that needs particular attention is the definitions used for the ground water regime. A number of definitions are non-standard and/or could cause confusion: connate water, ground water – surface, ground water – deep, mine water, pore water, and underground water. There are assumptions inherent in some of the current definitions which can only be proven by field or laboratory testing. Further comments on the terms and definitions are found in the Attachment 2 to this letter.

The physical stability criterion proposed by BHPB should consider the notion of planned and controlled failure of engineered and physical structures that may take place over the long-term rather than a simple approach of attempting to minimize erosion. In the chemical stability criterion there should be some recognition of the need to incorporate or use thresholds for chronic and acute exposure of relevant life forms as the measure of protection of the environment. For the biological stability criterion, more explicit matters relating to ecological stability should be included, as we suggested above, to reflect VECs and a final self-sustaining ecosystem at site.

Additional detailed comments are found in Attachment 2 to this letter.

In conclusion, we recognize the work done by BHPB to date on the ICRP but had hoped for much clearer objectives and criteria. Much work remains to be done and we would be pleased to discuss these concerns with you, the company and the other members of the Working Group.

Sincerely,



Bill Ross
Chairperson

cc. David Scott, BHP Billiton Diamonds Inc.
Laura Tyler, BHP Billiton Diamonds Inc.
Society Members

Attachment 1

Potential Use of Valued Ecosystem Components for Closure Objectives and Criteria

Open Pit

VEC	Objective	Criteria
Health & Safety (Human)	remaining high walls are stable/safe there is safe egress from pit lake	No slumping or instability noted/measured Low sloping sections in place and tested
Air	good air quality	TSP meets Canada Ambient Air Quality Objectives
Land	pit lakes reconnected with local drainage and local hydrologic regime retained	Pits are full and water is flowing through system; hydrological monitoring downstream shows flows within pre-project variability
	lake is safe for travel and hunting	Access concerns of Aboriginal and other partners are addressed One criteria for consideration is whether the pit lake ice conditions are similar to those in surrounding natural lakes. (or will there be ice conditions unique to the pit lakes that a traveller will have to know before venturing out on these lakes?).
	Surrounding area is stable and revegetation is successful	No major erosion observed/measured No permafrost melting detected Amended sites support vegetation and indigenous vegetation was used Suitable vegetation cover and growth rates measured after all effects of fertilisation are dissipated.
Water	water quality is good lake stratification is stable	discharge meets water license criteria (better yet, CCME criteria) with monitoring showing no trend toward deterioration of water quality stratification demonstrated by chemical/physical measurements
	Health of source water bodies was maintained	No excessive drawdown or change in chemistry during pumping from source water bodies, but set as a measurable criterion
Wildlife	Pits are safe for use by wildlife and birds	Pit perimeter berms are in place and are stable (set as a measurable criterion) No caribou or other large mammals enter lakes (probably impossible to keep leemings or weasels out)
	Fish are excluded from the pit lakes	Fish barriers in place and functioning (if this objective is approved)
Operational	Pit walls are stable	No slumping noted/measured over a given period of time
	Surface infrastructure and	Removal verified prior to pumping

	contaminants were removed before flooding	
	Long-term care and maintenance will not be required	Engineered structures designed for 1:100 year storm Documentation maintained and filed No trends detected toward instability/erosion/etc.
People	Socio-economic impacts are minimized	Demonstrated training programs have been put in place Provision of opportunities to participate in closure activities and monitoring Mine employees have transitioned successfully to other commensurate work.
	Archaeological sites are retained	Negligible residual effects on recorded and/or new sites, set as a measurable criterion

Waste Rock Storage Area (WRSA)

VEC	Objective	Criteria
Health & Safety (Human)	Slopes are stable and safe for human use	Maximum 35 degree angle of repose, possibly with a specified crush size
	Public access was restricted during closure operations	
Air	Good air quality maintained and wind erosion minimized	TSP meets Canada ambient air Quality Objectives...
Land	Site is stable and permafrost regime maintained in piles	WRSA is a minimum of 100 m from adjacent lakes (including pit lakes) and 50 m from pit walls Thermistor monitoring trends indicate stability or aggradating permafrost Modeling indicates permafrost stability No major surface erosion due to wind or water, set as a measurable criterion
	Sites are suitable for human travel and hunting	Suitable access ramps are in place Access concerns of Aboriginal and other partners are addressed
	Landscape alteration is minimized	Final height no more than 50 m above highest intersecting topo point, a maximum size might also be set Lift heights 20 m max Quarry sites re-contoured to allow water runoff, set as a measurable criterion
	Wastes are properly encapsulated	Biotite schist covered with min 5 m of granite cover Landfill, landfarm, zone S and Snow Containment Area covered with min 5 m of granite cover and identified Coarse Rejects covered with min 2 m granite cover Waste kimberlite encapsulated with min 5 m granite cover or placed in open pit Topsoil storage sites contoured to surrounding topography and stabilized with vegetation Lake sediments/Till Storage stabilized to prevent erosion
	Planned re-vegetation is successful	Disturbed surfaces enhanced to encourage natural recovery of vegetation Suitable vegetation cover and growth rates measured after all effects of fertilisation are dissipated Modified/amended sites are able to support vegetation assemblages Indigenous vegetation was used for rehabilitation work

Water	No seepage of poor quality water	Seepage discharge meets seepage (or CCME) criteria Toeberms constructed, if required, performance measured
	No kimberlite ore contributing to seepage	Kimberlite ore removed (Misery & Fox)
Wildlife	Safe for wildlife use	Well designed access ramps installed to specific criteria, if this objective is appropriate
Operational	Surface infrastructure removed before closure	Buildings, pipelines, culverts removed and/or cut to surface
	Contaminants removed or encapsulated	Hydrocarbon storage sites and contaminated materials have been removed or remediated
	No adverse effects on borrow locations	
	Long-term care and maintenance will not be required	Engineered structures designed for 1:100 year storm Documentation maintained and filed No trends detected toward instability/erosion/etc.
People	Socio-economic impacts are minimized	Demonstrated training programs have been put in place Provision of opportunities to participate in closure activities and monitoring
	Archaeological sites are retained	Negligible residual effects on recorded and/or new sites, set as a measurable criterion

Attachment 2

Detailed Comments on Section 1 ICRP

Introduction (31-39)

Page	Topic	Comments
33-38	Table of Conformance	Table 4 in the Introduction should also reference the specific parts of the terms of reference for the ICRP as approved by the WLWB. Consideration of whether other regulatory conformance might be included (e.g. Fisheries Authorizations).
37	Progressive reclamation schedule	Schedule for progressive reclamation is not available yet some mine components, such as Beartooth will be reclaimed and closed before the next revision to the ICRP is made

Scope (40-51)

Page	Topic	Comments
46	Lessons learned	Some lessons cited do not appear directly relevant to Ekati.
40	Closure criteria	ICRP states that the criteria will provide the ability to measure the actual performance of closure activities but the text does not meet this standard of how the ICRP should be evaluated
41-43	Consultation	List of consultation is provided but not stakeholder comments and how BHPB used the comments
49-50	Employee Views	In section 3.4.3 BHPB presents employee views on closure. The company should discuss how these views were collected.

Project Background (52-59)

Page	Topic	Comments
59	Lessons Learned	Coverage presented in Table 9 is a good start but there is little coverage of northern experience with mine closure outside of the Brewery Creek examples presented. References and a further review of the literature would be helpful.

Mine Overview (64-79)

Page	Topic	Comments
72	Exploration Sites	A map of the exploration sites with the claims block should be added to section 5.5.1 to aid the reader.
74	Volume of Waste	What are the projections of the amount of waste to be landfilled and/or backhauled during the remainder of the Life of Mine Plan, including closure and what is the capacity of existing sites to handle these materials?

77-78	Organizational Structure	Section 5.8 sets out at a very general level, BHPB's organizational structure for closure. We had expected to see a greater level of detail here regarding roles and responsibilities and whether BHPB intends to contract out some or all of the work involved in post-closure monitoring and closure activities (see J.1(o) in each of the water licences).
74	Volume of waste	The total volume of waste generated from now until closure should be accounted for and compared against the remaining capacity.
249	Figure 72	Roads – does not include new road construction around cell B

Appendix A – Terms and Definitions (1-52)

In general, the Agency believes that the company does itself a disservice in defining terms inaccurately or using other technical words to define technical terms. This is because the Aboriginal terminology depend on clear, accurate English. There is evidence from previous BHPB regulatory proceedings that confusion and misinformed opposition can turn on the mistranslation of even one word. (See Ellis in *ARCTIC* . 58(1):66-77. 2005)

Here are some suggested changes to help clarify specific terms and definitions:

Defined Word	Word Used	Suggested New Word or Phrase
Amendment	Substrate	Ground surface
Available Nutrients	Assimilated	taken in / absorb
Benthic	pertaining to	relating to
Benthos	Assemblage	group
Berm	Impede	block or stop
Cave Cone	Subsidence	gradual sinking or collapse
Coarse Textured Soil	Predominantly	mostly or mainly
Cultivars	Propagated	grown
Environmental Assessment	Assessed	evaluated
Esker	sinuous and stratified	winding and layered
Fine Textured Soil	Predominantly	mostly or mainly
Flocculents	Aggregate	Combine or stick together
Glacial Till	Unstratified	not layered
Ice Lense	encapsulated and entrained	surrounded by and trapped
Natural Colonization	Propagules	?
Temporary	Suspends	delay or put on hold

Suspension of Operations		
Thermocline	Stratified	layered
Till	Unstratified	not layered
Weathering	Substrate	ground materials
Zone of Instability	subsidence zone	sinking or collapse

Page	Topic	Comments
6	Behavioural response definition	Suggests an improved definition for behavioural response related to external stimuli
10	Definition of carnivore	Improved definition suggested

Appendix C – Closure Goal, Objective and Criteria (112-145)

Page	Topic	Comments
111	Beartooth schedule	This page states that Beartooth will be finished in 2009, figure 9 (page 76 states 2010, page 134 states 2011. These inconsistencies need to be fixed.
112-113	Definitions	Definitions of closure objectives and criteria are favourable, but not applied in the Tables.
116	TK Research	This section should spell out how TK research will contribute towards better closure and development of objectives and criteria. Details on this should also be found in Tables 21-26.
128	Pit research	Plan looks acceptable other than timing of PK fill research
119	Closure criteria – biological stability	Closure objective 4 – biological stability and wildlife use of open pits This is too vague and allows for loose interpretation.
All	Sustainability and TK (Tables 21-26)	Separation between economic opportunity and TK/environment protection is preferred
All	Criteria Tables 21-26	It is also not clear to the Agency how aesthetics were factored into the criteria presented by the company in the tables in Appendix C as required in section J 1(n) of each water licence.