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November 10th, 2011

File: W2009L2-0001

Mr. Karl Schubert
BHP Billiton Diamonds Inc.
#1102, 4920-52nd Street
Yellowknife, NT X1A 3T1

Re: Approval of Version 2.4 of BHP's Interim Closure and Reclamation Plan

Dear Mr. Schubert,

On November 7th, 2011, the Wek'èezhìi Land and Water Board approved Version 2.4 of BHP's Interim Closure and Reclamation Plan (ICRP), which was submitted to the Board on August 31, 2011. The Board has determined that BHP has satisfied the conditions of Water Licence W2009L2-0001 relating to closure and reclamation and the December 10th, 2010 directive, appropriate for this stage of the mine's life. The Board will circulate Reasons for Decision to all parties following the next WLWB Board meeting, currently scheduled for early December.

A number of parties have inquired about what approval of the ICRP means. In general, approval means that any proposed change to the current plan requires evidence to support those changes. However, the ICRP is expected to change as closure planning progresses and some aspects of the plan are preliminary, while others are more developed.

BHP is required to submit its first Annual ICRP Progress Report on December 31st 2012, and annually thereafter, according to the attached annotated outline. BHP may include additional information in the Progress Report, or improve upon the layout provided in the outline. BHP should work with Board staff during preparation of the first report to agree on any significant changes to the outline.

The Board will inform BHP of the submission date for Version 3.0 of the ICRP at least 6 months in advance; this date will be based on the progress demonstrated in the Annual ICRP Progress Reports. The Board will determine whether a fourth ICRP (Version 4.0) will be necessary later in the closure planning process prior to submission of the final closure and reclamation plan.

If you have any questions, please feel free to contact Ryan Fequet at rfequet@wlwb.ca or Patty Ewaschuk at pewaschuk@wlwb.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "V. C. Blondin". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

Violet Camsell-Blondin
Chair, WLWB

Attachments:

- Staff Report and attachments
- Annotated Outline for BHP's Annual ICRP Progress Report



| | |
|---|--|
| Company: BHP Billiton Canada Inc. (BHP) | |
| Location: Lac de Gras | License: W2009L2-0001 |
| Date Prepared: November 3, 2011 | Meeting Date: November 7 th , 2011 |
| Subject: Review of the BHP Interim Closure and Reclamation Plan, Version 2.4 | |

Purpose

The purpose of this report is to present Version 2.4 of BHP Billiton Canada’s Interim Closure and Reclamation Plan (ICRP) to the Board. Water Licence W2009L2-0001 requires BHP to submit this plan for approval (Part L, Items 1, 2, 3, and 4). BHP prepared this version in response to the Board’s Directive, dated December 10th, 2011.

Background

The following chronology includes the closure and reclamation plans BHP has submitted to date as well as some significant milestones within the closure planning process:

1997: Following the completion of the Environmental Impact Statement (EIS) and approval for the mine was granted, BHP submitted an initial Abandonment and Restoration Plan (A & R Plan) as required by Part K of their Water Licence; N7L2-1616.

2000: The Environmental Agreement (Article VIII section 8.1) also required a Closure and Reclamation Plan, so to streamline these requirements the 1997 A & R Plan was updated to address the requirements from both the Water Licence and Environmental Agreement. This plan was submitted to the Mackenzie Valley Land and Water Board (MVLWB) in 2000 and subsequently approved in 2002.

2003: BHP submitted an update to the 2000 Closure and Reclamation Plan to include the Sable, Pigeon and Beartooth kimberlite pipes as required by their 2nd Class ‘A’ Water Licence; MV2001L2-0008. This closure plan was not approved by the MVLWB on the basis that it didn’t contain sufficient detail should the mine close earlier than the expected end of mine life.

2005: BHP renewed their main Class ‘A’ Water Licence (originally N7L2-1616) which meant that the company was now operating under Water Licence MV2003L2-0013 for the main site and under MV2001L2-0008 for the Sable, Pigeon, and Beartooth developments. Both of these water licences

required the company to update the closure and reclamation plan for the EKATI site and Part J of Water Licence MV2003L2-0013 required the company to propose a Terms of Reference (TOR) that would guide the update to the ICRP. The Wek'èezhii Land and Water Board (WLWB) established a Working Group to review and comment on the TOR for the ICRP and to make recommendations on the ICRP Working Draft and the Final ICRP Working Draft.

2008: BHP submitted the Final ICRP Working Draft to the WLWB.

2009: A public hearing was scheduled for May to hear interventions regarding BHP's Interim Closure and Reclamation Plan. However, on May 12, 2009, BHP submitted a motion to clarify:

"Whether the Wek'èezhii Land and Water Board, in the context of BHP Billiton Diamonds Inc.'s obligations relating to closure and reclamation of the EKATI Diamond Mine, has the jurisdiction to require that BHP Billiton Diamonds Inc. establish and maintain fish or fish habitat in the closed pit lakes or the Long Lake Containment Facility at the EKATI Diamond Mine".

On July 15, 2009 the WLWB held a public hearing to hear argument on the motion from the Independent Environmental Monitoring Agency (IEMA), the Tlicho Government and a combined submission from the Department of Fisheries and Oceans (DFO) and Aboriginal Affairs and Northern Development (AANDC). The WLWB issued its Reasons for Decision on July 26, 2009 ruling that:

"BHP Billiton has not convinced the WLWB that its jurisdiction is limited or even affected in any way by the 1996 Agreement. Therefore the WLWB rules that it does have the authority to require BHP Billiton to create fish habitat in the exercise of its reclamation authority. "

On August 25, 2009, BHP filed an Originating Motion with the NWT Supreme Court beginning the process of judicial review on the WLWB's decision. On October 22, 2009, the WLWB directed the company to update its Reclamation Research Plans in an effort to continue to develop the ICRP while all parties waited for the courts to carry out the judicial review.

2010: The Originating Motion from BHP was heard in the NWT Supreme Court on February 3, 2010. BHP submitted its revised RRP's to the Board on February 26, 2010, which were subsequently circulated to reviewers for comment on March 4, 2010. The NWT Supreme Court distributed its Reasons for Judgement on March 15, 2010; the main conclusion of Justice J.Z. Vertez was that *"the application for judicial review is dismissed as premature."* The WLWB held a public hearing on September 28-29, 2010 in Behchoko to hear interventions on BHP's ICRP. The Board issued a Directive (see Attachment #1) along with its Reasons for Decision on December 10, 2010.

As outlined in the December 10, 2010 WLWB Directive (see Attachment #1):

"Board staff will conduct a conformity check to ensure BHP Billiton has fulfilled the conditions of approval; this may involve further information requests to the company. The WLWB will notify all stakeholders when the conditions of approval have been confirmed."

Discussion

BHP provided a conformity table (see Attachment #2) along with their submission of Version 2.4 of the ICRP which addressed both the commitments outlined in the company's April 14, 2009 response to the WLWB's information request (all of the outstanding commitments from the working group process) and the items outlined in the WLWB's December 10, 2010 Directive.

Board staff went through each line item in the conformity table to verify that all of the changes listed in the conformity table had been made to Board staff's satisfaction. There were several minor questions where Board staff requested clarification or additional information from BHP; this email correspondence is included below (see Attachment #3).

There were also two specific items from the December 10, 2010 Directive that Board staff believe have a particularly qualitative aspect, were the focus of discussions over the last two years, and that we would like to bring to the Board's attention to ensure the company has addressed the intent of the Board's December 10, 2010 Directive. These two items, as quoted from the directive are:

"1.0 Closure Objectives and Criteria

1.1 Open Pits

Include the closure objective of facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes as discussed in sections 1.0 to 1.3.5 of the Reasons for Decision. The closure criteria should state that the pit perimeters and any other feature necessary to promote the objective is 'built as designed'. This criterion is recommended with the understanding that best efforts will be made in the design of the pit perimeters and connector channels and that the final design will be for Board approval. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective.

1.2 Fish Passage

Include the closure objective of making the pit lakes and Cell E safe for fish passage as discussed in section 1.4 to 1.4.4 of the Reasons for Decision. One of the closure criteria for this objective is a requirement that all parties, including DFO, agree that conditions are safe for fish before fish passage is allowed. Refine any objectives or criteria that refer to fish barriers around the pit lakes or Cell E so that it is clear that barriers may be necessary, but, if installed, will be removed by BHPB following agreement that conditions are safe for fish passage and as directed by the WLWB. Also, remove the closure objective(s) and any references to permanently preventing fish passage to the open pits and Cell E. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective. (RFD - section 1.4-1.4.4)"

In addressing these requirements in Version 2.4, BHP has updated sections 5.2.7 and tables in Appendix 5.1-1 a & d to include closure objectives and their respective closure criteria:

| Closure Objective | Closure Criteria |
|--|---|
| Facilitate the establishment of a self-sustaining aquatic ecosystem in the pit lakes | Pit perimeters and any other features necessary to promote the objectives are built as designed |

| | |
|-------------------------------------|---|
| Pit lakes are safe for fish passage | The WLWB, through consultation with regulators and communities, agrees that conditions are safe for fish before fish passage is allowed |
|-------------------------------------|---|

The key update to the ICRP that, in Board staff's opinion, express BHP's commitment to these new closure objectives and criteria regarding fish habitat and fish passage is the text of section 5.2.8.1, which explains BHP's 'Open Pit Reclamation Strategy':

5.2.8.1 Open Pit Reclamation Strategy

Reclamation of the open pits at EKATI includes facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes. This means constructing an environment in the pit lakes that may naturally evolve over time into an aquatic ecosystem that may support fish and that may be naturally self-sustaining.

BHP Billiton will prepare a design report for the Board's approval that describes the works to be constructed in pit lake littoral zones and connector channels. The final design of the pit lakes littoral zones and connector channels (also see Section 5.2.5.2) will be on a pit-by-pit basis, working within the unique physical and environmental constraints of each pit lake, and will also take into consideration the level of facilitation effort appropriate to those pit lakes where the likelihood of success is reduced by physical or biological impediments. Littoral zones can not be constructed in areas that would interfere with nearby infrastructure such as WRSA or unstable ground. The final extent, configuration and design of the littoral zones and connector channels will be achieved through good engineering practices and best efforts in design, meaning that BHP Billiton will make the good faith efforts that a reasonable and well-informed person would believe to be sufficient to achieve the best design considering the information available at the time of the design. The design report will be developed as part of an Engineering Study which will address uncertainties associated with the pit perimeter areas such as beach shores and riparian zones, access and egress areas for people and wildlife, connector channel design, and the stability of remaining highwalls (Engineering Studies # 1 and 2, Appendix 5.1-5). Approval of the final design for littoral zones and connector channels will represent the WLWB's complete review of the work that is required to achieve the facilitation objective. Specifically, the concepts of 'facilitating', 'establishment', 'self-sustaining' and 'aquatic ecosystem' will be fully resolved with approval of the final design. The facilitation objective and the 'built as designed' criteria will be fully achieved when BHP Billiton has constructed according to the approved final design using good engineering practice. BHP Billiton is not responsible for monitoring or proving the establishment of a self-sustaining aquatic ecosystem.

Note that all references to permanently preventing fish passage through and between the pits have been removed in Version 2.4. The commitment to construct littoral zones in the pit perimeters as well as outflow/connector channels between pits after flooding is also made in Tables 5.2-11 to 5.2-16 which lists reclamation activities for each pit. Finally, research and engineering studies to help fulfill these new objectives have been included in Version 2.4 (e.g., Appendix 5.1-5, Engineering study 2 and Appendix 5.1-4, Reclamation Research Plans, plans 1-5 etc.)

Conclusion

Overall, Board staff believe BHP has reflected and incorporated the direction provided in the Board's December 10, 2010 Directive and has expressed an appropriate level of commitment throughout the ICRP to facilitate the establishment of a self-sustaining aquatic ecosystem in the pit lakes and allow for safe fish passage. At this stage, Board staff believe that approval of the ICRP will mean that major design concepts and research plans are fixed unless and until evidence is provided to support a change. Other aspects of the closure plan may be more flexible, such as closure criteria and post-closure monitoring.

Next Steps

Closure Objectives and Closure Criteria

During the last two years of discussion regarding closure objectives for fish habitat and passage within the pit lakes at the EKATI minesite, the Board's process for the development of closure and reclamation plans and understanding of the closure and reclamation planning process has evolved significantly. Board staff suggest that since the refinement of closure criteria is one of the next major steps for BHP in its closure planning process, that it's essential for BHP to ensure their closure objectives align with the current understanding and definition of closure objectives¹ so the closure process is carried out as efficiently as possible.

If BHP identifies any inconsistencies with their closure objectives Board staff would recommend that since having solid objectives is fundamental to developing and refining appropriate closure criteria, that BHP inform the Board within their next Annual ICRP Progress Report.

Board staff would also like to note that the Wek'èezhii Land and Water Board is scoping out the role of regulators in developing closure criteria for northern developments. Considering that BHP and Diavik are now at similar stages of mine life and closure planning, we would recommend that they participate in this initiative and coordinate with one another – understanding that site-specific closure criteria will be necessary in many instances.

¹ Definition of Closure objective - "*Objectives describe what the reclamation activities are aiming to achieve.*"

Clarification: The mine component closure objectives should support or be consistent with the closure goal and any global objectives. Where appropriate, the objective should discuss intent. Closure objectives should take into consideration the physical stability, chemical stability, and future use and aesthetics at the site. Closure objectives specific to a mine component (e.g., waste rock pile) must be measurable to determine whether the objectives and site goal have been met. Closure objectives must be achievable.

Annual ICRP Progress Report

According to the Board`s December 10, 2010 Directive, *“The Board also requires that under Part K, Item 1 of Water Licence W2009L2-0001, BHP Billiton submit an Annual CRP Progress Report. This report, which will be circulated for review, will fulfill this Directive as well as conditions under Part B, Item 1u), v), and w).”*

Just to reiterate, each Annual ICRP Progress Report should include at minimum, an updated estimate of the current mine reclamation liability, progressive reclamation completed within the last year and proposed progressive reclamation for the upcoming year, a list of research tasks that have been completed to demonstrate that closure planning is on schedule, a description of any important research results that will be used to inform closure planning going forward, any studies or designs that are critical and should be reviewed (e.g. LLCF Cover design, design of the LLCF Pilot Revegetation Study, updated LLCF Water Quality Prediction Model, etc.) and any other information that will achieve the goal of keeping parties aware of the closure planning process and ensuring that closure and reclamation at EKATI is on track.

If there are any proposed changes to the ICRP or its research plans, the Annual CRP Progress Report should include a section that explains these proposed changes, as this section of the progress report would be for Board approval.

Board staff also expect and recommend that more detailed scopes of work will be developed for the tasks within the reclamation research plans when they are within 3 years of implementation and these updates reported in the Annual ICRP Progress Report, and subsequently in Version 3.0 of the ICRP.

Recommendations

Based on the analysis above, Board staff offer the following recommendations:

1. The Board approve Version 2.4 of BHP’s Interim Closure and Reclamation Plan;
2. The Board direct BHP to submit an Annual ICRP Progress Report approximately a year from now (Board staff and BHP staff can determine a date that best suits this annual submission);
3. The Board direct BHP that conditions of Water Licence W2009L2-0001 related to the ICRP and the December 10, 2010 have now been fulfilled;
4. The Board can select the submission date for Version 3.0 of the ICRP (approximately three years from the approval of Version 2.4) based on the progress demonstrated in the Annual ICRP Progress Reports;
5. The Board can determine whether Version 4.0 of the ICRP (sometime around 2017) will be necessary later on in the closure planning process; and
6. The Board formally initiate a review of the security liability at the EKATI minesite.

Respectfully submitted,



Patty Ewaschuk, P. Eng
Board Support Coordinator



Ryan Fequet, B.Sc.
Technical Coordinator



Kathleen Racher, PhD
Technical Director

Attachments:

1. The Board's December 10, 2010 Directive regarding BHP's ICRP
2. Conformity Table provided by BHP as part of their submission of Version 2.4 of their ICRP
3. Email correspondence between Board and BHP staff regarding queries during the conformance check
4. BHP's 2010 ICRP (Version 2.4) (CD)



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#1-4905 48th Street, Yellowknife, NT X1A 3S3
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(BHPB & Diavik)

December 10, 2010

Files: W2009L2-0001

Mr. Karl Schubert
BHP Billiton Diamonds Inc.
#1102, 4920-52nd Street
Yellowknife, NT X1A 3T1

Dear Mr. Schubert,

Re: BHP Billiton's 2008 Interim Closure & Reclamation Plan

Following the public hearing in Behchoko on September 28-29th, 2010, the Wek'èezhìi Land and Water Board (WLWB) met on September 30th, October 7th, November 15th, and December 6th to consider BHP Billiton's 2008 Interim Closure and Reclamation Plan (ICRP) required under Part K of Water Licence W2009L2-0001.

The WLWB has decided to conditionally approve BHP Billiton's ICRP as described in the *Reasons for Decisions (RFD)*, provided that the company complete the tasks listed below.

1.0 Closure objectives and Criteria

1.1 Open Pits

Include the closure objective of facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes as discussed in sections 1.0 to 1.3.5 of the *Reasons for Decision*.

The closure criteria should state that the pit perimeters and any other feature necessary to promote the objective is 'built as designed'. This criterion is recommended with the understanding that best efforts will be made in the design of the pit perimeters and connector channels and that the final design will be for Board approval. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective.

1.2 Fish Passage

Include the closure objective of making the pit lakes and Cell E safe for fish passage as discussed in section 1.4 to 1.4.4 of the *Reasons for Decision*. One of the closure criteria for this objective is a requirement that all parties, including DFO, agree that conditions are safe for fish before fish passage is allowed. Refine any objectives or criteria that refer to fish barriers around the pit lakes or Cell E so that it is clear that barriers *may* be necessary, but, if installed, will be removed by BHPB following agreement that conditions are safe for fish passage and as directed by the WLWB. Also, remove the closure objective(s) and any references to permanently preventing fish passage to the open pits and Cell E. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective. (*RFD* - section 1.4-1.4.4)

1.3 Hydrocarbon Remediation Standards

BHPB must revise the ICRP to reflect an 'agricultural standard' for the remediation of hydrocarbon contaminated soils, including appropriate closure criteria where necessary (Appendix 1 of the *RFD* - IEMA-14).

1.4 Wildlife

See requirement below (section 2.5c) for an additional reclamation research plan to set component-specific wildlife closure objectives and closure criteria. Considering that these closure objectives need to be set before other uncertainties (e.g. wildlife movement) can be clarified, developing these closure objectives is a top priority and this should be reflected in the RRP timelines. The Board expects the company to demonstrate progress on this issue and report on this in the first *Annual CRP Progress Report* (see section 4.0 of this Directive).

2.0 Reclamation Research Plans (RRP)

In addition to the references indicated below, please see *RFD* - section 2.0 for discussions regarding changes to reclamation research plans.

2.1 Research Plan #2

Please make the following changes:

- a. Table 1 should be updated to reflect current expectations of timelines and the RRP should mention the completion of the fish habitat assessment report for Upper Exeter and Ursula and how it will be used to inform closure planning at EKATI (Appendix 1 of the *RFD* – DFO-7);

2.2 Research Plan #13

Please make the following changes:

- a. modify the plan to include BHP Billiton's proposed approach for collecting deep pore-water samples in the LLCF, including potential sample locations and any additional studies that may be necessary to strengthen model predictions (Appendix 1 of the *RFD – INAC-4*);
- b. modify 'Task 9' of the plan to ensure that the 'Consolidation and Freeze Concentration Testing Study' is done on a range of grain sizes representative of the different depths within the LLCF (Appendix 1 of the *RFD – INAC-5*).

2.3 Research Plan #14

Please make the following changes (Appendix 1 of the *RFD – IEMA-8*):

- a. Include field investigations to evaluate the extra-fine processed kimberlite (EFPK) stabilization measures as a research task;
- b. Include the investigation of other storage options for EFPK as a research task;
- c. Discuss in more detail how BHP Billiton will use all of the information they are collecting on the properties and characteristics of EFPK to confirm containment post-closure;
- d. Update the proposed timelines to ensure that all of the tasks are completed and the results analyzed prior to the anticipated date for when a decision would be made regarding pumping processed kimberlite into Cell D.

2.4 Research Plan #16

Please make the following changes:

- a. Add the two tasks, as explained in BHPB's response to IEMA – 10 in Appendix 1 of the *RFD*, along with sufficient details of how these tasks will be carried out and inform the closure planning process.

2.5 Other Reclamation Research & Engineering Study Requirements

Please incorporate the following into BHP Billiton's Reclamation research:

- a. The research necessary to achieve the objective of facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes. This will require, at a minimum, research described in section 3.7.1 of the *Terms of Reference for the Sable, Pigeon, Beartooth Pit Lakes Studies*. (*RFD – sections 1.3 and 2.2*).
- b. Ensure that appropriate investigations regarding the inclusion of emergent and submergent vegetation in the littoral zones of the pit lakes and habitat within the connector streams are included within the Reclamation Research Plans (*RFD – section 1.3.5*);
- c. Refine the 'Engineering Objective' for Engineering Studies Plan #4 to accommodate the potential need for temporary fish barriers (*RFD – 1.4.2 and 1.4.4*);
- d. Add a new Reclamation Research Plan to identify appropriate wildlife closure objectives and closure criteria for the EKATI site (Appendix 1 of the *RFD – IEMA-13*).

- e. As required by Part K, Item 3, the company should include a detailed plan for the progressive reclamation of the Panda Diversion Channel, including the widening of the canyon and decreasing the shoreline slopes, timelines, a discussion of uncertainties, and details of any subsequent research or engineering studies required (Appendix 1 of the *RFD – DFO-8*).

3.0 Reclamation Security

Initiate discussions with appropriate parties immediately on developing an updated estimate for the EKATI mine reclamation liability and submit an updated estimate as required by Part B, Item 1w (Appendix 1 of the *RFD – INAC-1*).

4.0 Annual CRP Progress Report

The Board also requires that under Part K, Item 1 of Water Licence W2009L2-0001, BHP Billiton submit an *Annual CRP Progress Report*. This report, which will be circulated for review, will fulfill this Directive as well as conditions under Part B, Item 1u), v), and w).

Each *Annual CRP Progress Report* should include at minimum, an updated estimate of the current mine reclamation liability, progressive reclamation completed within the last year and proposed progressive reclamation for the upcoming year, a list of research tasks that have been completed to demonstrate that closure planning is on schedule, a description of any important research results that will be used to inform closure planning going forward, any studies or designs that are critical and should be reviewed (e.g. LLCF Cover design, design of the LLCF Pilot Revegetation Study, updated LLCF Water Quality Prediction Model, etc.) and any other information that will achieve the goal of keeping parties aware of the closure planning process and ensuring that closure and reclamation at EKATI is on track.

If there are any proposed changes to the closure and reclamation plan or research plans, the *Annual CRP Progress Report* should include a section that explains these proposed changes, as this section of the progress report would be for Board approval.

Following the annual submission of this report, the WLWB may require BHP Billiton to present the information to stakeholders. Because of the forthcoming process for revision, the WLWB will advise BHP Billiton at least 6 months in advance of when the first *Annual CRP Progress Report* will be due.

5.0 Other Items

Please ensure the following are incorporated into the revised ICRP:

- a. Incorporate the list of commitments as outlined within item 4 of BHP Billiton's April 14th, 2009, response to the Board's ICRP Information Request;
- b. Ensure that all 8 tasks from the approved *Terms of Reference for the Sable, Pigeon, Beartooth Pit Lake Studies* (the Pit Lake Studies) are incorporated into the ICRP as per the April 30th, 2007 WLWB Directive;

- c. All dates and timelines throughout the ICRP, and especially within the RRP, should be updated to reflect current expectations of deadlines and completion dates; and
- d. Any additional direction included in the comment table (Appendix 1 of the *Reasons for Decision*).

Next Steps

Board and BHP Billiton staff will meet to discuss reasonable timelines for the submission of the revised ICRP. A formal letter from the Board will be circulated notifying all parties of when they can expect the revised ICRP to be submitted.

The submission of the revised ICRP should include a conformity list appended to the cover letter, indicating where all of the changes, as directed above, have been incorporated into the Plan. Board staff will conduct a conformity check to ensure BHP Billiton has fulfilled the conditions of approval; this may involve further information requests to the company. The WLWB will notify all stakeholders when the conditions of approval have been confirmed.

The Board anticipates that after final confirmation that the revised ICRP has been approved, the next iteration of the ICRP would be submitted in approximately 3 years time.

If you have any questions, please feel free to contact Kathleen Racher at racherk@wlwb.ca or Ryan Fequet at rfequet@wlwb.ca

Sincerely,



Violet Camsell-Blondin,
Chair, Wek'èezhìi Land and Water Board

Copied: BHPB ICRP Distribution List

ICRP Version 2.4 Conformity Table – Contains BHP Billiton Canada Inc (BBCI) Proposed Revisions Provided to the WLWB April 14, 2009, and WLWB Revisions from Directive December 10, 2010.

| # | Revision Topic | Source of Request | Revision Details | Location of Final Edit |
|---|--|--|---|--|
| 1 | Formatting | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 1</i> | Section 1.1 Overview will be reviewed and updated to ensure that the reader has a clear description of the organization and presentation of the document. | Main Document, Section 1.1 |
| 2 | Formatting | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 1</i> | Tabs will be provided for major sections for ICRP reports circulated in hard copy. | Throughout Document |
| 3 | Research and Engineering Studies | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 3</i> | Appendix 5.1.4 A and B will be split over 2 Appendices. | Appendix 5.1-4 (Reclamation Research Plans) & Appendix 5.1-5 (Engineering Studies) |
| 4 | Water Quality Criteria | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 4</i> | The document will be reviewed to ensure that: <ul style="list-style-type: none"> 1. Discussion and closure criteria related to water quality in receiving environments will be based on Effluent Quality Criteria. 2. Discussion on water quality in end pit lakes is based on water quality criteria. <p>These criteria will be part of the closure water licence. Appx 5.1-1, Table 5.1.1D, Water 2 will be reviewed and corrected for consistency.</p> | Throughout Document. <u>Specifically</u> - Tables 5.1-1 A,B,C,D,E&F were updated with 'Water license criteria are met'. Pg 5.151 King Pond Dam, Pg 5.174, Pg 5.185, Pg 7.27, Pg 5.121, Pg 5.153, Pg 5.156. |
| 5 | Watershed Boundaries | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 5</i> | The document will be reviewed and watershed boundaries will be included on those figures which represent pre-disturbance, development status, and projected development. | Main Document, Chapter 5 |
| 6 | Revisions – data and information updates | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 6</i> | The following wording was included in the ICRP: “This document has been developed over a number of years of review and update. During this period BHP Billiton has attempted to maintain the alignment of the document to the 2005 LOM Plan to avoid confusion over scheduling and reporting. Where significant changes have already occurred in the EKATI LOM Plan these have been updated within this ICRP, specifically the use of Beartooth pit for water storage.” | Main Document, Executive Summary |
| 7 | Seepage Flow Clarification | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 7</i> | The figure and/or associated text will be edited to include reasoning for arrows and destination of seepage flow. | Main Document, Section 4.3 Figure 4.3-2 |
| 8 | Beartooth Pit as Mine Water Storage | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 8</i> | A mention will be included in the document that the use of Beartooth for mine water storage and the resulting change of timing of Beartooth pit reclamation are dependent on approval of the WWPKMP by the WLWB. | Main Document, Section 5.2.3.3. |
| 9 | Beartooth Pit Mine Water Storage | <i>BBCI ICRP Revisions Table, Apr 14 2009</i> | The research plan for pit lake water quality will be revised to incorporate concept level research (including research schedule) on the inclusion of | Appendix 5.1-4, Research Plan # 3. Task 1. |

| # | Revision Topic | Source of Request | Revision Details | Location of Final Edit |
|----|--------------------------|---|---|--|
| | Quantity | <i>Table, Apr 14 2009 Item # 13</i> | volume in the Misery Pit during suspension of operations. | Section 3.3.1, Task 9 |
| 13 | Fish Barriers | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 14</i> | The section will be updated to state that fish barriers will be designed for long term performance but in contemplation that they may ultimately be subject to removal after BHP Billiton has been released from all remaining liability for the site. | Main Document, Sections: 5.2.5, 5.2.7, 5.2.8, 5.2.9, 5.2.11, 5.5.5.6, 5.5.7, 5.5.9, Table 5.5-8. |
| 14 | Shallow Zones | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 15</i> | <p>Section 5.2.8.1 will be updated to state “Reclamation strategies for open pits at EKATI include the construction of shallow zones at pit water edges. The purpose of the shallow zones will be to provide safe access and egress areas at the pit perimeter for people and wildlife. Rock armoring and/or establishment of riparian vegetation will also be used to stabilize potential erosional areas around the pit perimeters. The following research plans and engineering studies are in place to address how pit perimeters will be reclaimed:</p> <ul style="list-style-type: none"> • Pit safety for wildlife during pit flooding, through the use of berms or other deterrent structures (Research Plan 1), Establishment of Self-Sustaining Plant Communities at Open Pits (Research Plan 4), • Vegetation Cover and Surface Stability at Open Pits (Research Plan 5), • Final Pit Perimeter Stability (Engineering Study 1), • Final Topography of Final Pit Perimeters (Engineering Study 2). <i>This study will be reviewed to ensure that concept shallow zones design has been included as a study task.</i> <p>Fish habitat will not be constructed in pit lakes based on formalized agreements (Fisheries Act Authorizations) between DFO and BHP Billiton, which are referenced in Section 1.2 and Appendix 1.1-4 of the ICRP. Therefore barriers will be constructed to prevent fish access into pit lakes. Fish barriers will be designed for long term performance but in contemplation that they may ultimately be subject to removal after BHP Billiton has been released from all remaining liability for the site.”</p> <p>The ICRP sections and tables will be reviewed to ensure the discussion on pit reclamation plans and activities aligns with the above.</p> | Main Document, Section 5.2.8.1 |
| 15 | Pit Lake Final Landscape | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 16</i> | <p>Citation will be included for completed research studies outlined on page 5-27.</p> <p>Citation will be included to support talik zone discussion on page 5-27.</p> | Main Document, Section 5.2.5.1. References, updated with appropriate references. |
| 16 | Beartooth Pit Figure | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 17</i> | The figure will be expanded to include northern portions of the developed area. | Main Document, Figure 5.2.3 |
| 17 | Pit Lake Channel | <i>BBCI ICRP Revisions</i> | In Section 5.2.5.2, Reference to Appendix 5.1-5, Research Plan 2 (Task | Main Document, Section 5.2.5.2. |

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| | Designs | <i>Table, Apr 14 2009 Item # 18</i> | 2) will be included. | |
| 18 | Underground Plugs | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 19</i> | Section 5.2.5.2. Reference to Appendix 5.1-5, Research Plan 6 will be included. Main Document - Removed this wording as Underground Plugs Research is no longer included. BBCI will conduct a risk assessment to determine whether to install plugs in the underground. | Main Document, Section 5.2.8.3 |
| 19 | Reclamation Activities Tables | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 20</i> | Tables in Chapter 5. The end of reclamation activities and the start of monitoring will be included in the Reclamation Activities tables. | Main Document: Tables 5.2-9 to 15 Tables 5.3-3 to 5.3-5 Tables 5.4-9 to 14 Tables 5.5-7 & 8 Tables 5.6-2 to 8 Tables 5.7-3 to 10. |
| 20 | Underground Facilities | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 21</i> | The section (Section 5.3-2) will be reviewed and checked to ensure that Table 5.3-1 contains the complete list of underground infrastructure. | Main Document, Table 5.3-1 |
| 21 | Underground Elevation Levels | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 22</i> | The section (Section 5.3-4) will be reviewed for approximate underground mine final elevations. | Main Document, Section 5.3.4 |
| 22 | WRSA Ground Temperature Data | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 23</i> | The relevant tables/figures in the ICRP (Section 5.4.3.4) will be updated to reflect current temperature readings. | Main Document, Figures 5.4-7 to 5.4-10 |
| 23 | WRSA Design Edits | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 24</i> | The wording and number in the table will be edited (<i>see comments from JW # 55, Comment Table Jan 2009</i>). The section (Section 5.4) will be reviewed and updated to ensure that it clearly states the table is operations design criteria, but that many of these designs will be carried into closure of the WRSA. | Main Document, Section 5.4, and Table 5.4-2 |
| 24 | WRSA Development Status | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 25</i> | The section and table will be updated where possible, to ensure all text, figures and tables are referencing concurrent information/data. | Main Document, Table 5.4-3 |
| 25 | WRSA Hydrocarbon Site Assessment | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 26</i> | An assessment of the top surface of the WRSA will be completed when WRSA are no longer required for mining operations. The Reclamation Activity tables will updated to ensure this is included. | Main Document, Tables 5.4-9 to 5.4-13 |
| 26 | Post Closure Monitoring Wording | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 27</i> | The word 'Parameter' will be replaced with a more appropriate description of focus areas for closure monitoring. | Main Document, Sections: 5.2.12, 5.3.10, 5.4.11, 5.5.12, 5.6.11, and Tables in Appendix 5.1-6 |
| 27 | Airstrip Lake | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 28</i> | A label for Airstrip Lake will be included in the Figure 5.5-1. | Main Document, Figure 5.5-1 |
| 28 | Processed Kimberlite | <i>BBCI ICRP Revisions</i> | The section (Section 5.5.3.2) will be reviewed and appropriate citation | Main Document, Section 5.5.3.2 |

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| | Deposition | <i>Table, Apr 14 2009 Item # 29</i> | included for the processed kimberlite volumes. | |
| 29 | LLCF Watershed Boundaries | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 31</i> | Watershed boundaries will be included in this figure (Figure 5.5-6). | Main Document, Figure 5.5-6 |
| 30 | LLCF Vegetation | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 33</i> | Reference to fertilizer applications will be inserted. | Main Document, Section 5.5.5.3 |
| 31 | LLCF Dikes | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 34</i> | The section (<i>Main Document Section 5.5.5.6</i>) will be reviewed to ensure effects to water quality downstream of filter dikes are included. | Main Document, Section 5.5.5.7 and Section 7.6 |
| 32 | Panda Diversion Channel | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 35</i> | The figure will be reviewed to ensure the transition area (cut area to non-cut areas) at the side of the channel is included. The following revision will be made to Section 5.6.4.2. Access to the channel benching would likely be provided by ramps constructed from the channel crest on either end of the stabilization zone. Site access will be finalized during design. | Appendix 5.1-2: Fig 5.1-2E (a) and Fig 5.1-2E (b) Main Document, Section 5.6.4.2 |
| 33 | Panda Diversion Dam Ground Temperature | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 36</i> | The figure will be updated to 2007 data. | Appendix 5.1-2: Fig 5.1-2F (a) and Fig 5.1-2F (b) |
| 34 | Bearclaw Lake Jetty | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 37</i> | The section will be reviewed to ensure the reason for the jetty to remain in place is included. | Main Document, Section 5.6.5.2 |
| 35 | King Pond HIS Scores | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 38</i> | A reference for HIS scores for King Pond Settling Facility will be included. | Main Document, Section 5.6.5.3 |
| 36 | Panda Diversion Channel Reclamation Activities | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 39</i> | The table (Table 5.6.5) will include a date for start of Reclamation Activities. | Main Document, Table 5.6-5 |
| 37 | Road Reclamation | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 40</i> | The section (Section 5.7.9.10) will be reviewed to ensure information is provided on reclamation of berms, stream crossings and road treatment for closure. Hazardous areas will be evaluated more closely at the time of reclamation activities. | Main Document, Section 5.7.9.10 |
| 38 | Buildings and Infrastructure Research | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 41</i> | The section (Section 5.7.7.1) will be reviewed to ensure appropriate references are included. | Main Document, Section 5.7.7.1 |
| 39 | Airport Vegetation Reclamation | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 42</i> | The section (Section 5.7.9.11) will be reviewed and an explanation of how the monitoring results inform reclamation success will be included. | Main Document, Section 5.7.9.11, and Research Plan # 24, Section 4.5 |
| 40 | Open Pits Closure | <i>BBCI ICRP Revisions</i> | Appendix 5.1-1, Table 5.1-1A Water 1 and 2 will be updated to ensure | Appendix 5.1-1. Table 5.1-1a – Water 1, b); Water 5 & 6. |

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| | Objectives and Criteria | <i>Table, Apr 14 2009 Item # 43</i> | <p>references are provided to appropriate documentation on lake and stream levels, and on water quality and fish habitat in source lakes.</p> <p>All tables in Appendix 5.1-1 will be reviewed to ensure all appropriate research and monitoring plans are referenced.</p> | Table 5.1-1d – Water 2 & 3. |
| 41 | Hydrocarbon Closure Objectives and Criteria | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 44</i> WLWB Directive Dec 10, 2010. | <p>The section (Section 5.7.9.13) will be updated to state that soil remediation standards for hydrocarbons will follow the the CCME guidelines. The numerical remediation criteria will be derived for the Final Closure and Reclamation Plan based on a site assessment using the Tier 1, 2 or 3 approach as described in the CCME documentation that is in effect at that time. At this time and based on the current CCME guidelines it appears that the agricultural land use classification is the most representative surrogate for the desired future land use of "wildlands" as described in the 1995 EIS as “<i>productive use of land, with wildlife designated as the principal land user, in addition to limited use of cultural and natural resources of the area by Aboriginals.</i>” BHP Billiton will continue to cleanup and report hydrocarbon spills at the minesite, followed up by INAC inspection.</p> <p>Please refer to the attached Memorandum on the Review of Closure Remediation Requirements for Hydrocarbon-Contaminated Soils at EKATI, completed by Rescan Environmental Services Ltd, April 14, 2009.</p> <p><u>From WLWB Directive Dec 10 2010. pp 2 of 5, Section 1.3:</u> BHPB must revise the ICRP to reflect an ‘agricultural standard’ for the remediation of hydrocarbon contaminated soils, including appropriate closure criteria where necessary (Appendix 1 of the <i>RFD - IEMA-14</i>).</p> | Main Document, Section 5.7.9.13, and Appendix 5.1-1 (Tables 5.1-1a; Table 5.1-1c; Table 5.1-1d; Table 5.1-1e; Table 5.1-1f). |
| 42 | Wildlife Closure Objectives and Criteria | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 45</i> WLWB Directive Dec 10, 2010. | <p>Tables in the Appendix 5.1-1 will be reviewed to ensure consistent wording is used for wildlife closure objectives and criteria, and that the WEMP is referenced appropriately.</p> <p><i>Tables in Appx 5.1-1 were updated to included the RRP # 27 – for Mine Component Wildlife Closure Objectives and Criteria.</i></p> <p><u>From WLWB Directive Dec 10 2010. pp 2 of 5, Section 1.4:</u> See requirement below (section 2.5c) for an additional reclamation research plan to set component-specific wildlife closure objectives and closure criteria. Considering that these closure objectives need to be set before other uncertainties (e.g. wildlife movement) can be clarified, developing these closure objectives is a top priority and this should be reflected in the RRP timelines. The Board expects the company to demonstrate progress on this issue and report on this in the first <i>Annual CRP Progress Report</i> (see section</p> | <p>Appendix 5.1-1, All Tables.</p> <p>Appendix 5.1-4, Research Plan # 27.</p> |

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| | | | 4.0 of this Directive). | |
| 43 | Reclamation Research Plan | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 46</i> | The Reclamation Research Plans will be updated to that outlined in the WLWB Feb 4, 2008 letter. The Engineering Studies will also be updated, using the same format in the Research Plan. | Appendices 5.1-4 and 5.1-5 |
| 44 | LLCF Pilot Studies | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 47</i> | The section (Section 5.5.4.2) will be reviewed to ensure BHP Billiton states that opportunities for earlier research will be sought at the LLCF. | Main Document, Section 5.5.4.2 |
| 45 | Salinity Stability in Fox Pit Lake | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 48</i> | The text associated with Figure 7.4-1 will be updated to include a definition of salinity stability. | Main Document, Section 7.4.3 |
| 46 | Upper Exeter Substrate Composition | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 49</i> | The text associated with Figures 7.4-5 and 7.4-6 will be updated to include details of the methodology used to determine substrate percentages. | Main Document, Section 7.4.7.3 |
| 47 | Reference | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 50</i> | Section 7.8.3. The appropriate reference for ‘further work’ will be included. | Main Document, Section 7.8.3 |
| 48 | Units of Measure | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 51</i> | The document will be reviewed to ensure consistent units are used throughout the ICRP. | Full Document |
| 49 | Environmental Assessment | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 52</i> | <p>Chapter 7.0 will be updated to include a summary discussion of predictive water quality modeling for specific sites at EKATI, including the LLCF at closure and pit lakes.</p> <p>The TOR specified the requirement for a “site-wide predictive water quality model.” BHP Billiton and their consultants have reviewed this reference section and believe the development of a site wide model is neither technically appropriate or required, practical, nor reasonably manageable. Rather than developing a site-wide water quality model, BHP Billiton has developed a set of modeling tools to address water balance and water quality at EKATI. These have included published work on LLCF water balance, mass balance and water quality predictions (e.g. Rescan, 2008a,b), hydrodynamic modeling of downstream lakes (e.g. Rescan, 2007), and unpublished modeling work on water quality downstream of the LLCF. Ongoing work is in development to predict the water quality of EKATI pit lakes using a set of modeling tools. The nature of the water quality work undertaken for the EKATI site does not lend itself to a single unified site-wide model. Such a unified modeling approach would severely limit the applicability of the model by not allowing the most appropriate modeling tools to be used given the nature of the question being addressed and the available data. BHP Billiton believes its approach to water quality modeling at EKATI is technically more sound than using a single site-wide model.</p> | Main Document, Sections 7.4.2 and 7.4.3, and References |

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| | | | <p>Rescan. 2007. EKATI Diamond Mine: Proposed Discharge Criterion for the Sable Kimberlite Pipe Development (Water License MV2001L2-0008). Prepared for BHP Billiton Diamonds Inc. by Rescan Environmental Services Ltd., January 2007.</p> <p>Rescan. 2008a. EKATI Diamond Mine: Long Lake Containment Facility Water Quality Prediction Model Version 1.0. Prepared for BHP Billiton Diamonds Inc. by Rescan Environmental Services Ltd., March 2008.</p> <p>Rescan. 2008b. EKATI Diamond Mine: Long Lake Containment Facility Water Quality Prediction Model Version 2.0. Prepared for BHP Billiton Diamonds Inc. by Rescan Environmental Services Ltd., March 2008.</p> | |
| 50 | Environmental Assessment | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 53</i> | <p>This section was omitted in the December 2008 Final Draft of the ICRP. It will be included in Chapter 7.0.</p> <p style="text-align: center;">8.5 OTHER RESOURCE USERS</p> <p>Impacts to other resource users within the localized area of the minesite will be presented in this section.</p> | Main Document, New Section 7.9 |
| 51 | Environmental Assessment | <i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 54</i> | <p>This section was omitted in the December 2008 Final Draft of the ICRP. It will be included in Chapter 7.0.</p> <p style="text-align: center;">8.6 ENVIRONMENTAL IMPACTS</p> <p>Methods and procedures to stabilize and mitigate potential impacts to wildlife, terrestrial and aquatic environments during the reclamation process will be included for the overall minesite. These will include management of erosion, remediation of contaminated sites, groundwater contamination, impacts to aquatic environments, and wildlife safety.</p> | Main Document, New Section 7.10 |
| 52 | Open Pits | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. Pp 1 or 5, Section 1.1</u></p> <p>1.1 Open Pits Include the closure objective of facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes as discussed in Sections 1.0 to 1.3.5 of the <i>Reasons for Decision</i>.</p> <p>The closure criteria should state that the pit perimeters and any other feature necessary to promote the objective is 'built as designed'. This</p> | <p>Main Document, Section 5.2.5.1. Figure 5.2-13, Table 5.2-4. Section 5.2.7. Section 5.2.8.1. Tables 5.2-9 to 5.2.15.</p> <p>Appendix 5.1-1, Table 5.1-1A (Water 5 & 6). Appendix 5.1-1, Table 5.1-1D (Water 3)</p> |

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| | | | <p>criterion is recommended with the understanding that best efforts will be made in the design of the pit perimeters and connector channels and that the final design will be for Board approval. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective.</p> | |
| 53 | Fish Passage | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. Pp 1 or 5, Section 1.2</u></p> <p>Section 1.2 Fish Passage Include the closure objective of making the pit lakes and Cell E safe for fish passage as discussed in section 1.4 to 1.4.4 of the <i>Reasons for Decision</i>. One of the closure criteria for this objective is a requirement that all parties, including DFO, agree that conditions are safe for fish before fish passage is allowed. Refine any objectives or criteria that refer to fish barriers around the pit lakes or Cell E so that it is clear that barriers <u>may</u> be necessary, but if installed, will be removed by BHJPB following agreement that conditions are safe for fish passage and as directed by the WLWB. Also remove the closure objective(s) and any references to permanently preventing fish passage to the open pits and Cell E. The ICRP should be updated to include all of the reclamation activities and research necessary to achieve this objective (RFD – Section 1.4-1.4.4)</p> | Main Document, Section 5.2.5.2 & Section 5.2.7 Appendix 5.1-1, Table 5.1-1A (Water 5 & 6). Appendix 5.1-1, Table 5.1-1D (Water 3). |
| 54 | LLCF Permafrost Research | <p><i>BBCI ICRP Revisions Table, Apr 14 2009 Item # 55</i></p> <p>WLWB Directive Dec 10, 2010.</p> | <p>In the Feb 18, 2009 Verification Table # 97 the issue has been stated as resolved. This is not yet resolved since at the Feb 3, 2009 Working Group meeting INAC had not yet produced Chris Burn's review of the research plan, and BHP Billiton had not been given an opportunity to respond. BHP Billiton will review the comments received from INAC on the LLCF permafrost research and will continue to work with INAC on discussing LLCF permafrost issues, and any agreed updates will be made to Research Plan 13.</p> <p><u>From the WLWB Dec 10 2010 Directive (see Appendix 1 Table of that Directive. ID INAC-4):</u> BHP should update Research Plan # 13 to include the information identified by INAC. Also WLWB Directive (2.2a). Modify the plan to include BHP Billiton's proposed approach for collecting deep pore-water samples in the LLCF, including potential sample locations and any additional studies that may be necessary to strengthen model predictions.</p> | Appendix 5.1-4, Research Plan # 13 |
| 55 | LLCF Permafrost Research | WLWB Directive Dec 10, 2010. | <p><u>From the WLWB Dec 10 2010 Directive (see also Table in Appendix 1 of that Directive. ID INAC-5):</u></p> <p>BHP should update Research Plan # 13 to include the requested information as highlighted below.</p> | Appendix 5.1-4, Research Plan # 13 |

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| | | | <p>Also WLWB Directive (2.2b) Modify 'Task 9 of the plan to ensure that the 'Consolidation and Freeze Concentration Testing Study' is done on a range of grain size representatives of the different depths within the LLCF.</p> | |
| 56 | EFPK in LLCF | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 3 of 5, Section 2.3.</u></p> <p>Please make the following changes (Refer also to Appendix 1 of the <i>RFD</i> – IEMA-8):</p> <ol style="list-style-type: none"> a. Include field investigations to evaluate the extra-fine processed kimberlite (EFPK) stabilization measures as a research task; b. Include the investigation of other storage options for EFPK as a research task; c. Discuss in more detail how BHP Billiton will use all of the information they are collecting on the properties and characteristics of EFPK to confirm containment post-closure; d. Update the proposed timelines to ensure that all of the tasks are completed and the results analyzed prior to the anticipated date for when a decision would be made regarding pumping processed kimberlite into Cell D. | Appendix 5.1-4, Research Plan # 14 |
| 57 | Vegetation Objective – Criteria for LLCF | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 3 of 5, Section 2.4a:</u></p> <p>Please make the following changes:</p> <ol style="list-style-type: none"> a. Add the two tasks, as explained in BHPB's response to IEMA – 10 in Appendix 1 of the <i>RFD</i>, along with sufficient details of how these tasks will be carried out and inform the closure planning process. <p><i>BHPB response to IEMA Intervention July 26, 2010:</i> <i>BHPB recognizes the importance of reviewing and determining applicable closure criteria to measure vegetation success. Research Plan # 17 focuses on plant cover and the appropriate percentage of cover on the LLCF that ensures surface stability. Closure objectives and criteria are also in place for native plan use.</i></p> <p><i>The company agrees that uncertainties exist around the types of plant communities that will establish on processed kimberlite and how the success of plant sustainability will be measured. Therefore Research Plan # 16 will be updated to address this uncertainty, through the following tasks:</i></p> <ol style="list-style-type: none"> a) <i>Determine what closure objectives and criteria can be used to</i> | Appendix 5.1-4, Research Plan # 16, Tasks 6 & 7 (Section 16.5.1). |

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| | | | <p>indicate that plant communities on the LLCF have reached a satisfactory level of resilience to natural and man-made perturbations, evidencing that the community will eventually reach a stable, self-sustaining state.</p> <p>b) Research plant community characteristics needed to indicate stability, and how they can be assessed using trend analysis.</p> | |
| 58 | Pit Lakes Aquatic Ecosystem | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 1 of 5, Section 2.5 a.</u></p> <p>The research necessary to achieve the objective of facilitating the establishment of a self-sustaining aquatic ecosystem in the pit lakes. This will require, at a minimum, research described in Section 3.7.1 of the Terms of Reference for the Sable, Pigeon and Beartooth Pit Lakes Studies (RFD – sections 1.3 and 2.2).</p> | Main Document, Section 5.2.11. Appendix 5.1-5, Engineering Study # 2. |
| 59 | Emergent Vegetation | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 3 of 5, Section 2.5b:</u></p> <p>b. Ensure that appropriate investigations regarding the inclusion of emergent and submergent vegetation in the littoral zones of the pit lakes and habitat within the connector streams are included within the Reclamation Research Plans (RFD – 1.4.2 and 1.4.4)</p> | Appendix 5.1-4, Research Plan # 5 |
| 60 | Fish Barrier Design | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 3 of 5, Section 2.5c:</u></p> <p>c. Refine the `Engineering Objective` for Engineering Studies Plan #4 to accommodate the potential need for temporary fish barriers (RFD – 1.4.2 and 1.4.4);</p> | Appendix 5.1-5, Engineering Study # 4, Section 4.2 |
| 61 | New Research Plan for Wildlife Objectives | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 3 of 5, Section 2.5d:</u></p> <p>d. Add a new Reclamation Research Plan to identify appropriate wildlife closure objectives and closure criteria for the EKATI site (Appendix 1 of the RFD – IEMA-13).</p> | Appendix 5.1-4, Research Plan # 27 |
| 62 | Panda Diversion Channel | WLWB Directive Dec 10, 2010. | <p><u>From Board Directive Dec 10 2010. pp 4 of 5, Section 2.5e:</u></p> <p>e. As required by Part K, Item 3, the company should include a detailed plan for the progressive reclamation of the Panda Diversion Channel, including the widening of the canyon and decreasing the shoreline slopes, timelines, a discussion of uncertainties, and details of any subsequent research or engineering studies required (Appendix 1 of the RFD – DFO-8).</p> | Main Document, Section 5.6.4.2 & Section 5.6.5.2, & References. |
| 63 | List of BHP Billiton | WLWB Directive | <u>From Board Directive Dec 10 2010. pp 4 of 5, Section 5.0a:</u> | Throughout Document |

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| | commitments Apr 14, 2009 | Dec 10, 2010. | a. Incorporate the list of commitments as outlined within item 4 of BHPB's April 14, 2009, response to the Board's ICRP Information Request. | |
| 64 | 2004 Pit Lakes Studies TOR | WLWB Directive Dec 10, 2010. | <p><u>From Board Directive Dec 10 2010. pp 4 of 5, Section 5.0b:</u></p> <p>b. Ensure that all 8 tasks from the approved Terms of Reference for the Sable, Pigeon, Beartooth Pit Lake Studies (the Pit Lake Studies) are incorporated into the ICRP as per the April 30th 2007 WLWB Directive.</p> | <p>Task 1 (Pit Lakes TOR) Review of the State of Knowledge of Pit Lakes - Delivered to WLWB Dec 2005.</p> <p>Task 2 (Pit Lakes TOR) Review Data Requirements – Delivered to WLWB Dec 2005.</p> <p>Task 3 (Pit Lakes TOR) Waste Characterization – Main Document Section 7.4, Appendix 5.1-4, Research Plan # 3, Task 1.</p> <p>Task 4 (Pit Lakes TOR) Water Balance at Closure - Main Document Section 7.4, Appendix 5.1-4, Research Plan # 3, Task 2.</p> <p>Task 5 (Pit Lakes TOR) Pit Lakes Stability Modeling – Main Document Section 7.4, Appendix 5.1-4, Research Plan # 3, Task 3.</p> <p>Task 6 (Pit Lakes TOR) Water Load Balance Modeling – Main Document Section 7.4, Appendix 5.1-4, Research Plan # 3, Task 4.</p> <p>Task 7 (Pit Lakes TOR) Analysis of Fish Habitat and Fish Communities. Pit Lakes Fish Passage Design - Main Document Section 5.2.5, Appendix 5.1-5 Engineering Study # 2; Water Extraction – Main Document Section 7.4, Appendix 5.1-4, Research Plan # 2.</p> <p>Task 8 (Pit Lakes Studies TOR) Studies to Develop Contingency Plans for Loss of Pit Lake Physical Water Column Stability – Main Document Section 7.4, Appendix 5.1-3, Appendix 5.1-4, Research Plan # 3, and Appendix 5.1-6 Section 5.</p> <p>Tasks 9 & 10 (Pit Lakes Studies TOR) Review Pit Infilling Scenarios and Preliminary Risk Assessment for Mine Pit Flooding Closure Options. Appendix 2.1-1 Sections 7 and 8. Appendix 5.1-3.</p> |
| 65 | Dates and Timelines | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 4 of 5, Section 5.0c:</u></p> <p>c. All dates and timelines throughout the ICRP, and especially within the RRP's, should be updated to reflect current expectations of deadlines and completion dates.</p> | Throughout Document |
| 66 | Additional dates/timelines | WLWB Directive Dec 10, 2010. | <p><u>From WLWB Directive Dec 10 2010. pp 5 of 5, Section 5.0d:</u></p> <p>d. Any additional direction included in the comment table (Appx 1 of the Reasons for Decision).</p> | Throughout Document |

Attachment #3

EMAIL CORRESPONDENCE DURING STAFF REVIEW OF THE ICRP

EMAIL 1

From: Butler, Helen HM [<mailto:Helen.HM.Butler@bhpbilliton.com>]

Sent: October-17-11 3:51 PM

To: Ryan Fequet

Subject: RE: WLWB Conformity Check of BHP ICRP

Ryan, here is the updated Table 5.4-3. It will be updated in the ICRP.

Helen.

Table 5.4-3. Waste Rock Types in the Panda/Koala/Beartooth WRSA

| Material Type | Source | Location | Amount Placed Pre-2011 (Mt) | Amount to be Placed Post-2011 (Mt) | Re-usable For Closure |
|------------------------------|-----------------------|--|-----------------------------|------------------------------------|-----------------------|
| Granite | Panda | Used for co-disposal of waste and site-wide construction. Granite only on eastern side of WRSA (minimal other material types). | 76 | <1 | Yes |
| | Koala | | 61 | <1 | |
| | Koala North | | 3 | <1 | |
| | Beartooth | | 22 | <1 | |
| Diabase | Beartooth | Co-disposal in centre of WRSA. | <0.5 | none | No |
| Barren Kimberlite | Koala | Co-disposal in centre of WRSA. | 1 | none | No |
| Lake Sediment / Glacial Till | Panda and Koala North | Northern edge of WRSA. | 10 | none | Unknown |
| Topsoil | Koala | Northern edge of WRSA. | 9 | none | Yes |
| | Beartooth | Eastern bench of WRSA | 2 | none | Yes |
| Black Shale | Koala | In area of Till/Lake Bottom sediments storage area. | <0.5 | none | Yes |
| Coarse Kimberlite Rejects | Process Plant | CRSA - Western portion of WRSA partially on 5m thickness of granite to encourage permafrost growth. | 39 | 20 | No |

Mt = Metric tonnes

From: Butler, Helen HM [<mailto:Helen.HM.Butler@bhpbilliton.com>]

Sent: October-17-11 11:29 AM

To: Ryan Fequet

Subject: RE: WLWB Conformity Check of BHP ICRP

Hi Ryan,

For # 15, the wording in the column 'Revision Details' we tried to keep to the original text as that originally proposed (to avoid confusion). So Page 5-27 was the page in 2008 ICRP that the edit

was originally based on. Section 5.2.5.1 is the new location in the 2011 ICRP. You'll find the citations on the second to last para at the bottom of page 5-24, and in the first para at the top of page 5-26 in the 2011 doc.

For # 24 – I'll check on the numbers in Table 5.4-3. These should have been updated to current. I expect the changes will be to the Coarse Rejects and contribution from Beartooth. Will make changes and send you the updated table... This will be a change in the document.

Regards,
Helen.

From: Ryan Fequet [<mailto:rfequet@wlwb.ca>]
Sent: Friday, October 14, 2011 4:15 PM
To: Butler, Helen HM
Subject: WLWB Conformity Check of BHP ICRP

Hey Helen,

For #24 in your conformity table, it says Table 5.4-3 will be updated to include current information but it seems to reference 2007 as the cut-off date distinguishing between 'placed' and 'to-be placed'. Should this date have been updated or is there a reason for the use of this year?

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"If you're not part of the solution, you're part of the precipitate." *Steven Wrightfront*

From: Ryan Fequet [<mailto:rfequet@wlwb.ca>]
Sent: October-14-11 3:34 PM
To: 'Butler, Helen HM'
Subject: WLWB Conformity Check of BHP ICRP

Holy acronyms ☺

For #15 of your conformity table, there is no discussion or listing of completed research studies outlined on page 5-27, only figure 5.2-13?

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EMAIL 2

From: Ryan Fequet [<mailto:rfequet@wlwb.ca>]
Sent: Friday, October 21, 2011 12:55 PM
To: Butler, Helen HM
Subject: RE: WLWB Conformity Check of BHP ICRP

Afternoon Helen,

If you're near computer, just wondering when it was again that deposition into Cell D would begin if necessary??

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Annotated Outline for BHP's Annual ICRP Progress Report

Deadline: December 31, 2012 and annually thereafter

The purpose of the Annual ICRP Progress Report is to keep all parties informed about closure planning at the EKATI site and allow the Board to confirm that BHP remains on schedule. The outline below has been developed with this in mind. BHP may include additional information or improve upon the layout provided below. BHP should work with Board staff during preparation of the first report to agree on any significant changes to the outline.

The Board is requiring the Annual ICRP Progress Reports under Part K Item 1 and 4 and Part B Item 1 u, v, and w of Water Licence W2009L2-0001.

Certain proposed changes to the ICRP (e.g., to closure design concepts, closure criteria, etc.) may require approval but the annual ICRP progress report itself is not for approval. The report must be complete and provide sufficient information to ensure that reasonable progress is being made. The Board may issue direction to BHP based on the results reported in the Annual ICRP Progress Report, for example, to perform certain research tasks within a specified timeframe.

1. Report Summary

List the highlights of the progress report.

2. Community Engagement

Summarize any community engagement performed in the previous year and any updates or changes to BHP's engagement planning. Prior to submitting engagement records to the Board, it is best practice to provide the engaged parties with the opportunity to review the record to ensure there is no misinterpretation of any summarized information. Signatures from both the company and the engaged parties on the engagement record can greatly assist the Board's assessment of community engagement.

3. Reclamation Research Update

For each research plan in Appendix 5.1-4 of the ICRP, identify completed tasks and summarize results. Research or study results can be appended to the Annual ICRP Progress Report. Analyze results and provide conclusions, focusing on how the results impact closure activities, objectives, criteria, or other key aspects of the closure plan. Identify next steps and any proposed changes to research plans. Develop detailed scopes of work for each research task that is within 3 years of implementation and update the timelines for the completion of all research tasks.

4. Proposed Changes to Design Concepts

Identify any proposed changes to the preferred closure activities currently outlined in the ICRP and provide supporting rationale. Changes to closure activities for any mine components require approval, but will not need to be incorporated directly into the ICRP until Version 3.0. Submit diagrams clearly demonstrating the configuration of any proposed changes to major physical features of the site (e.g., tailings covers, waste rock pile configuration, etc.).

5. Closure Objectives and Criteria

Identify any proposed changes to closure objectives, including documentation of stakeholder input and report progress on refinement of closure criteria.

6. Progressive Reclamation

Report any progressive reclamation that occurred since submission of Version 2.4 of the ICRP. Describe the effectiveness of these activities, and identify any work expected for the upcoming year. Describe how the effectiveness of progressive reclamation will be monitored.

7. Schedule

Discuss whether the current closure planning schedule is on track (e.g., completion of research tasks within the specified timeframes, whether the LOM plan has been updated and changed, etc.). Identify the key milestones that must be completed within the next three years to ensure closure planning remains on track. Identify any unanticipated delays in the previous year or new threats to timely closure. This is one of the most important sections of the progress report, and BHP should provide sufficient detail to demonstrate that the company is on schedule.

8. Security Update

As required by Water Licence Part B Item 1w, provide an updated estimate of the current mine reclamation liability based on the results of reclamation research, monitoring, modifications to the mine plan, community input, etc.

9. Other Important Information

BHP should report any other information related to closure planning. At a minimum, this should include:

- Summary of any operational monitoring results (e.g., WRSA seepage monitoring) that impact closure
- Any significant changes to the estimates of amounts of reclamation materials that will be available or required,
- A description of any collaboration with DDMI or other companies on closure issues;
- New industry best practices or corporate requirements related to the mine's closure plan;

10. Record of Revisions to be made in Version 3.0 of the ICRP

As closure planning progresses, the need for more revisions to the ICRP will likely arise, and many of these will be documented in the Annual ICRP Progress Reports. To ensure that none of these revisions are forgotten, BHP should maintain a running list of changes that will be made in Version 3.0 of the ICRP.

The company will be expected to update all aspects of the ICRP for Version 3.0, not just those mentioned in this section of the Annual ICRP Progress Report.