

BHP Billiton Diamonds Inc.

Operator of the EKATI Diamond Mine

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July 2, 2009

Wek'èezhìi Land and Water Board P.O. Box 2130 Yellowknife, NT X1A 2P6

Attn: Ms. Violet Camsell-Blondin, Chair

Dear Ms. Camsell-Blondin:

Re: BHP Billiton Diamonds Inc. Reply Submissions on Motion Regarding Board Jurisdiction over Fish Habitat

BHP Billiton Diamonds Inc ("BHP Billiton") is submitting the attached Reply Submissions pursuant to BHP Billiton's Motion to the Wek'èezhìi Land and Water Board ("Board") regarding jurisdiction over fish and fish habitat (the "Motion"). Interventions were received by:

- (a) The Tłicho Government ("Tłicho Government");
- (b) The Independent Environmental Monitoring Agency ("IEMA"); and
- (c) A combined submission of the Department of Fisheries and Oceans ("DFO") and the Department of Indian Affairs and Northern Development ("INAC") (together "DFO/INAC").

These Reply Submissions address various issues raised by the Interveners in their Submissions to the Board.

BHP Billiton agrees with the Department of Fisheries and Oceans and the Department of Indian Affairs and Northern Development that advance notice of the rules and procedures that will govern the July 15, 2009 hearing would help to ensure an effective and efficient hearing process.

Specifically, BHP Billiton requests that the Board clarify that the parties may rely on only those material and arguments provided to all parties in advance of the hearing and in accordance with the schedule contained in the Board's May 25, 2009 letter. BHP Billiton submits that the Board's May

25 letter provided ample time for all parties to prepare their submissions and materials. The admission of arguments and materials not received in advance of the hearing would be contrary to the principles of procedural fairness.

Please contact Eric Denholm, Superintendent- Traditional Knowledge and Permitting, at 669-6116 if you have any questions.

Yours truly,

BHP Billiton Diamonds Inc.

Laura Tyler, Manager – Environment, Community, Communications and Planning

EKATI Diamond Mine

WEK'ÈEZHÌI LAND AND WATER BOARD INTERIM CLOSURE AND RECLAMATION PLAN FOR BHP BILLITON DIAMONDS INC.'S EKATI MINE

MOTION: BOARD JURISDICTION OVER FISH HABITAT

REPLY OF BHP BILLITON

INTRODUCTION

- 1. In response to the Motion submitted by BHP Billiton Diamonds Inc. ("BHP Billiton") on the jurisdiction of the Wek'èezhìi Land and Water Board (the "Board"), the Board has received interventions from the following parties:
 - (a) The Tłįcho Government ("Tłįcho Government");
 - (b) The Independent Environmental Monitoring Agency ("IEMA"); and
 - (c) A combined submission of the Department of Fisheries and Oceans ("DFO") and the Department of Indian Affairs and Northern Development ("INAC") (together "DFO/INAC").
- 2. This Reply addresses the Intervenors' submissions together under the issues that they have raised:
 - (a) Issue Before the Board;
 - (b) Reclamation Goal;
 - (c) Source of Board Jurisdiction;
 - (d) Contractual nature of the Compensation Agreement; and
 - (e) Past BHP Billiton Comments regarding Fish and Fish Habitat.
- 3. As a procedural note, attached as Schedule "A" to this Reply is a revised version of the brief chronology of the ICRPs which was attached as Schedule "C" to BHP Billiton's Submissions dated May 12, 2009.

ISSUE BEFORE THE BOARD

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

- 4. The issue is specific and in the particular context of the 1996 Fish Habitat Compensation Agreement ("1996 Compensation Agreement"). BHP Billiton submits that the 1996 Compensation Agreement and associated Fisheries Authorizations have the effect of limiting the jurisdiction of the Board to require that BHP Billiton establish and maintain fish or fish habitat in the closed pit lakes or the Long Lake Containment Facility at the Mine (collectively, the "Pit Lakes").
- 5. The submissions made by the Intervenors have attempted to restate the issue by characterizing BHP Billiton's motion as being "overly narrow", framed as a contest between conflicting statutes, or as constituting a collateral attack on the requirement to undertake reclamation:

"The jurisdiction of the WLWB to deal with reclamation is not in conflict generally, or in the specific context of this case, with the authority of DFO to deal with fish and fish habitat pursuant to the *Fisheries Act*. To the contrary they are complementary and integral components to the statutory regime that applies to the Ekati mine site during the life of the mine." (DFO/INAC, page 4, Part I, subpara. 3 of their submissions).

"Therefore, BHP concludes, interpreting the *MVRM Act* to give jurisdiction to the Board to order BHP to restore fish habitat would conflict with the *Fisheries Act*." (IEMA, para. 5 in their submissions).

"As Licensee, BHP is not in a position to now challenge the validity of those parts of its License bearing on Closure and Reclamation Plan requirements. Yet that is the implication of the argument that it has made, since it has chosen to frame the argument as one respecting the Board's jurisdiction." (Tlicho, page 2 of their submissions).

- 6. For clarity, BHP Billiton does not deny that the Board has jurisdiction to impose requirements relating to fish or fish habitat in the context of reclamation generally. Rather, it is BHP Billiton's position that under the specific circumstances of the regulatory history of the Mine (and especially the 1996 Compensation Agreement) the jurisdiction of the Board is limited such that the Board may not require the creation and maintenance of fish and fish habitat in the Pit Lakes in the context of reclamation of the Mine.
- 7. Although they submitted that BHP Billiton has framed the issue too narrowly, DFO/INAC appear to agree that the issue is specific rather than general when they state at para. 8 of their submissions:

"To fully understand the issue that has been raised one must start from the premise that the matter is not solely about the Wekeezhi Land and Water Board's (WLWB) jurisdiction or authority with respect to fish and fish habitat. The issue in reality turns on how the WLWB's jurisdiction with respect to reclamation generally under the MVRMA operates considering the pre-existence of the 1997 HADD Authorization (Authorization No. SCA96021 issued by DFO pursuant to

- s. 35(2) Fisheries Act) and corresponding Fish Habitat Compensation Agreement."
- 8. In DFO/INAC's submission at para. 12 they clarify that the Board does not have jurisdiction to override other regulatory instruments, such as the 1996 Compensation Agreement, stating:

"DFO and INAC are not however arguing that the jurisdiction of the WLWB with respect to reclamation allows it to "override or interfere" with measures authorized by DFO, as BHP Billiton has framed the issue."

and again in para. 67 of their joint submission:

- 67. In any given case, it will ultimately fall to the WLWB to interpret its own authority in light of existing regulatory instruments and other authorizations to ensure the resulting ICRP has coordinated the necessary requirements and has not generated conflict.
- 9. In its Motion BHP Billiton is asking the Board to do exactly this, to "interpret its own authority in light of the existing regulatory instruments and other authorizations", which in the case of the Mine includes the 1996 Compensation Agreement. BHP Billiton submits that the 1996 Compensation Agreement is a critical factor in that determination, which by its presence, limits the Board's exercise of its reclamation authority in respect of requiring the creation of fish habitat in the Pit Lakes.

RECLAMATION GOAL

- 10. IEMA at para. 41 of its submissions argues that the Reclamation Goal adopted by BHP Billiton requires BHP Billiton to establish fish habitat in the Pit Lakes. DFO/INAC's submission at paras. 14 and 105 infers a similar conclusion. A careful analysis of the meaning of the Reclamation Goal, however, indicates that this is not the case.
- 11. The Reclamation Goal is set out in the 2008 Interim ICRP as follows:

Reclamation of the mine site is guided by the Reclamation Goal to return the EKATI Mine site to viable, and wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

12. The Reclamation Goal provides a statement of the overall vision for reclamation of the minesite. The Reclamation Goal provides direction to development of the various component-specific objectives and criteria. As such, the goal is most appropriately interpreted as applying to the mine-site as a whole. Each specific component of the site has specific objectives and criteria that work towards achieving the goal. An ecosystem is an area that contains a dynamic set of organisms that interact with each other and their non-living environment. Thus, the breadth of what would commonly be considered to be a viable ecosystem also dictates that the Reclamation Goal needs to be viewed at a scale broader than one single reclamation component.

- 13. Any single component of a larger ecosystem, such as a lake, need not necessarily include all possible organisms or groups of organisms, such as fish. Indeed, numerous natural lakes in the vicinity of the EKATI Mine Site do not contain fish even thought they are important components of the larger ecosystem.
- 14. The Ekati Mine claim block has a vast number of lakes that exhibit a wide range of morphometry. That is, these lakes vary greatly in area, volume, depth, shape and substrate. Due to this natural diversity, wide variability is found in chemical and biological components of these lakes, leading to differences in productivity. Similarly, pit lakes, due to differences in morphometry from natural lakes, may be expected to support different ecosystems than those found in natural lakes. These ecosystems may not include fish.
- 15. The Reclamation Goal contemplates that the ecosystem established be "compatible with" rather than the "same as", the surrounding environment. This proposition is also recognized in the 2003 and 2004 Interim ICRP, which states in relation to Pit Lake ecosystems (2003 Interim ICRP, s. 4.1.2.4., p. 42; 2004 Interim ICRP, s. 7.5.1.3., p. 120):

It is not expected, however, that all of the lakes will have the same ecology. It is well recognized in the literature that under natural conditions, two very similar lakes of the same size may have different ecologies. An example of this is the Equity Silver Mine, where one lake is meromictic while the other is seasonally mixed, giving rise to ecosystem differences. Since nature is forever changing due to complex natural biological rhythms (e.g., climate changes, circadian, or daily rhythms, predator/prey oscillations), no one criterion can be used to satisfy a regulation that requires any lake to have a "natural" ecology (Dr. Tim Parsons, meeting of the Pit Lake Advisory Committee, April 14, 2003).

(emphasis added)

The wording "compatible with" works similarly to the wording "as practicable" in the reclamation Goal to rightly acknowledge that the ecology of pit lakes would be expected to be different than natural lakes.

16. Therefore, the Reclamation Goal should be interpreted as establishing a vision for the mine-site as a whole. However, by its nature, the vision itself does not define the details of its implementation. Natural conditions show that each pit lake can not be viewed as isolated, stand-alone ecosystem complete with all possible species. The Reclamation Goal does not extend to the level of specificity of prescribing fish habitat in Pit Lakes.

SOURCE OF BOARD JURISDICTION

17. Each of the Intervenors (IEMA at para.74, DFO/INAC at para. 90, and Tłįcho Government at p. 2) submit that this Motion fails to disclose any conflict between legislative or regulatory instruments, allowing the Board to deal with the creation of fish habitat as part of its reclamation authority; but their submissions are framed at a general level and fail to adequately consider the 1996 Compensation Agreement.

- 18. As stated by DFO/INAC in their submission, DFO has jurisdiction over fish and fish habitat pursuant to the *Fisheries Act* (DFO/INAC Submissions, paras. 34-35, 44). DFO is the only regulatory agency with direct jurisdiction over fish and fish habitat.
- 19. The Board does not have express or implicit jurisdiction over fish or fish habitat per se.
- 20. As noted in the submission of DFO/INAC (at paras. 50-51) and IEMA (at para. 33), the Board does have jurisdiction over water.

NWT Waters Act, s. 12; MVRMA, ss. 58, 58.1, 101.1

Additionally, the Board has jurisdiction to include a condition in a licence relating to "future closing or abandonment".

NWT Waters Act, s. 15(1); DFO/INAC Submissions, para. 52; IEMA Submissions, para. 34.

- 21. However, this jurisdiction does not expressly or by implication include jurisdiction over fish or fish habitat. In fact, it remains unclear to BHP Billiton what express statutory authority DFO/INAC and IEMA rely on for their submission that the Board has the authority to require the reclamation of fish or fish habitat in an Interim Closure and Reclamation Plan.
- 22. The Intervenors also rely on the *Tlicho Land Claims and Self-Government Act* (the "*Tlicho Act*") as providing for the paramountcy of the MVRMA. IEMA summarized this submission at para. 31:

Clearly, the language in the *MVRM Act* establishing the WLWB and conferring jurisdiction on the Board in respect of land and water use and the deposit of waste was intended to be, and is in fact, largely identically to the language in the Tlicho Agreement. Therefore, the paramountcy clause (Section 5) in the *Tlicho Act* applies to the *MVRM Act*, such that in the event of a conflict between that Act and the *Fisheries Act*, the *MVRM Act* prevails.

(emphasis added)

- 23. The *Tlicho Act* does not give direct jurisdiction over reclamation of fish habitat and so the paramountcy clause does not come into operation. Additionally, the fact that the *MVRM Act* contains some similar provisions to the *Tlicho Act* does not mean that the paramountcy clause contained in the *Tlicho Act* applies to the MVRMA. There is no principle of statutory interpretation that provides that where one statute contains a paramountcy clause, similarly worded statutes are also subject to the paramountcy clause.
- 24. At pages 1-2 of their submissions, the Tłicho Government argue that the terms of the Tlicho Agreement because of its status as a Land Claim Agreement is afforded the protection of s. 35 of the *Constitution Act*, 1982 and must be given a broad and paramount interpretation.

Although BHP Billiton agrees that the Tlicho Agreement is protected by s. 35, it is respectfully submitted that there is no authority for extending that protection through to the MVRMA.

25. BHP Billiton is not seeking to determine the bounds of the Board's general reclamation jurisdiction but rather submits that a requirement by the Board to create or maintain fish or fish habitat at the Pit Lakes would be in direct conflict with the 1996 Compensation Agreement in which Canada agreed that the future destruction of fish habitat in the Pit Lakes had been appropriately compensated for and that such compensation was sufficient for the life of the project, which includes mine reclamation.

CONTRACTUAL NATURE OF COMPENSATION AGREEMENT

- 26. In paras. 39-44 of their submissions, DFO/INAC submit that the 1996 Compensation Agreement is not a binding contract.
- 27. In support of this submission, DFO/INAC point to two decisions: *R v. BHP Diamonds Inc.* 2001 NWTTC 2 and *R v. BHP Diamonds Inc.* 2002 NWTSC 74 (DFO/INAC Submissions, para. 43). DFO/INAC imply that BHP Billiton, in those cases, stated that the 1996 Compensation Agreement was "not a contract". A careful reading of para. 75 of the 2001 decision reveals that BHP Billiton pled in its defence that the Fisheries Authorizations, not the 1996 Compensation Agreement, were not contracts. The contractual nature of the 1996 Compensation Agreement was not directly before the court. Consequently, these decisions are of little assistance in determining the nature of the 1996 Compensation Agreement.
- 28. In further support of their submission that the 1996 Compensation Agreement is not a contract, DFO/INAC state that the 1996 Compensation Agreement "can hardly be said to exhibit the hallmarks of a private law contract, including the freedom of contract" (DFO/INAC Submissions, para. 42). However, this is contrary to the DFO/INAC's own submission at para, 42 that BHP Billiton was "certainly consulted in the drafting of its terms". Further, had the terms being negotiated proven to be too onerous for BHP Billiton, the Company was free to reject the proposed terms and forego the mine.
- 29. DFO/INAC also submit that the 1996 Compensation Agreement was entered into under the statutory authority of DFO to act as a regulator pursuant to the *Fisheries Act*, and consequently, is not a private contract (DFO/INAC Submissions, para. 39). The submission that the 1996 Compensation Agreement is not a contract due to the statutory authority of DFO under the *Fisheries Act* is not supported by the terms of the *Fisheries Act* or its regulations. The 1996 Compensation Agreement was not statutorily mandated; it was negotiated between the parties.
- 30. The *Fisheries Act* does not mandate or provide for an agreement such as the 1996 Compensation Agreement. Instead, the *Fisheries Act* states that the Minister may issue an authorization under s. 35(2) of the *Fisheries Act* authorizing a person to undertake the harmful alteration, disruption or destruction of fish habitat. The *Fishery (General) Regulations* ("*Regulations*") provide that that an authorization given under s. 35(2) must be in the form set out in Schedule VII (*Regulations*, s. 58(2)). There is no form proposed in the Regulations for Compensation Agreements.

Fishery (General) Regulations (SOR/93-53), s. 58(2)

- 31. A s. 35 Authorization is the only regulatory instrument authorizing the harmful alteration, disruption or destruction of fish habitat contemplated under the *Fisheries Act*. The 1996 Compensation Agreement, as an additional inter-related agreement, does not act as an authorization in itself.
- 32. The 1996 Compensation Agreement was entered into by DFO on behalf of Canada pursuant to the DFO's general powers under the *Fisheries Act*. However, that fact alone does not deprive it of its private contract character. In fact, the courts have recognized that even where the Crown enters into a contractual relationship the terms of which governed by a statute, that fact alone does not detract from the contractual nature of the agreement.
- 33. In *Eagleridge Bluffs & Wetlands Preservation Society v. H.M.T.Q.*, the B.C. Court of Appeal considered whether an agreement between the B.C. Minister of Transportation and Sea to Sky Highway Investment Limited Partnership was contractual. The agreement was entered into pursuant to the *Transportation Act* and the *Transportation Investment Act*, which expressly directed that the agreement must contain certain provisions. Despite this statutory regime, the court held that the agreement was still a contract governed by private law principles. The court stated at paras. 16-17:
 - [16] A concession agreement is given statutory recognition by the *Transportation Act* and the *Transportation Investment Act*. Section 3 of the *Transportation Act* authorizes the Minister of Transportation to enter into contracts for transportation-related activity but does not circumscribe the Minister's power to contract. Section 3 of the *Transportation Investment Act* directs that a concession agreement must contain certain provisions...
 - [17] The appellants contend that this provision gives a statutory imprimatur to the Concession Agreement and requires Sea to Sky as concessionaire, and by extension Kiewit, to comply with higher highway standards to the extent specified in the Concession Agreement. They argue that the EMP requirement is such a higher standard. The statute, however, does not itself set a higher standard but allows the terms of the Concession Agreement to set standards higher than for a comparable public highway. The Concession Agreement is a contract and it is basic contract law that parties to an ordinary contract are free to vary its terms by common agreement and it is not open to third parties to object. There is no suggestion that "standards applicable to a comparable public highway" would be impaired by Phased EMPs and any higher standards are contractual matters not pre-determined by the statute. The parties were free to define those standards in the concession agreement, and under basic contract principles to vary them by common agreement. In our view, there is nothing in the statutory framework surrounding the Concession Agreement that could be seriously argued to preclude the parties' agreement to Phased EMPs.

(emphasis added)

Eagleridge Bluffs & Wetlands Preservation Society v. H.M.T.Q., 2006 BCCA 334, paras. 16-17

34. Similarly, in both *Health Care Developers Inc. v. Newfoundland* and *Emery Construction Ltd. v. St. John's (City) Roman Catholic School Board* contract law was applied in situations that were governed by a statutory regime.

Health Care Developers Inc. v. Newfoundland, (1996), 136 D.L.R. (4th) 609, [1996] N.J. No. 149 (Nfld. C.A.) and Emery Construction Ltd. v. St. John's (City) Roman Catholic School Board (1996), 28 C.L.R. (2d) 1 (Nfld. C.A.)

- 35. The 1996 Compensation Agreement is a binding contract entered into between BHP Diamonds Inc., now BHP Billiton, and the Crown pursuant to the royal prerogative to enter into private law contracts. Both BHP Billiton and the Crown consented to the terms of the 1996 Compensation Agreement and are now bound by them.
- 36. At paras. 68-79 DFO/INAC further argue that the concept of "adaptive management" in the context of reclamation means that BHP Billiton should have expected that its obligations relating to reclamation would change over time as the Mine plan developed. While BHP Billiton agrees that the process of finalizing the reclamation plan entails the application of "adaptive management", that acknowledgement does not give the Board jurisdiction to override or vary the specific commitments made between BHP Billiton and Canada in the 1996 Compensation Agreement. As noted in the *Eagleridge Bluffs* case above, the right to vary contractual terms rests with the parties to the contract.
- 37. The fact that DFO no longer enters into agreements like the 1996 Compensation Agreement (para. 40, DFO/INAC submission) does not affect the nature of the 1996 Compensation Agreement or the duty of the Crown to honour those commitments.
- 38. IEMA at para. 77 submits that "BHP's remedy is to enforce its contract, not to use the existence of the agreement in an attempt to constrain the Board's jurisdiction." It is through this Motion and recognition of the constraints that such agreement places on the Board's broad reclamation jurisdiction that BHP Billiton is seeking to give force to the 1996 Compensation Agreement.
- 39. Further, at para. 51 of its submissions, IEMA quotes from s.8 of the 1996 Compensation Agreement and submits that one of the "other responsibilities for environmental protection is reclamation". While s.8 recognized the role of other regulatory bodies in the reclamation process, it did not expressly accord Canada the right to take the agreed compensation in lieu of the future re-creation of fish habitat and then later order the re-creation of fish habitat in the same location.
- 40. The Tłįcho Government at page 3 of their submission state: "It [the 1996 Compensation Agreement] did not buy the lakes for all purposes for all time." BHP Billiton submits that the 1996 Compensation Agreement did conclusively deal with the issue of fish and fish habitat in the Pit Lakes for the life of the Ekati project including reclamation, but notes that in so doing it provided DFO with funding to consult with Aboriginal peoples to identify and undertake habitat creation and enhancement elsewhere.

PAST BHP BILLITON COMMENTS REGARDING FISH AND FISH HABITAT

- 41. In their submissions to the Board, IEMA specifically and DFO/INAC and the Tłįcho Government generally submit that BHP Billiton committed to creating fish habitat in various reclamation documents provided to the Board.
- 42. BHP Billiton submits that, read in the context of the whole document, the excerpts cited by the Intervenors do not establish a commitment on the part of BHP Billiton to create fish habitat in the Pit Lakes. On the contrary, those excerpts show that BHP Billiton made a comprehensive assessment of all reclamation options and then, once compensation was selected over reclamation by DFO as the option to pursue in the case of the Pit Lakes, BHP Billiton responsibly proposed reclamation steps that provided for safety and good water quality and that could have the ancillary benefit of facilitating the natural evolution of fish habitat or for DFO or others to facilitate fish and fish habitat in the Pit Lakes should circumstances then warrant.
- 43. While not exhaustive, **Schedule "B"** attached to these Reply Submissions addresses most of statements relied on by the Intervenors, placing them in the context of the whole document and, where relevant, the events and proceedings that gave rise to each.
- 44. BHP Billiton has proposed the construction of shallow zones and placement of plants to stabilize the shoreline to facilitate the natural and safe use of the Pit Lakes by wildlife and humans; but that proposal cannot and should not be stretched to found an alleged commitment to create fish habitat, especially in the face of already having provided compensation for loss of that habitat for the life of the Mine.
- Various options were proposed by BHP Billiton as compensation for the projected loss of fish habitat when planning the Mine, including the creation of fish habitat in the Pit Lakes, fish habitat enhancement in surrounding water bodies, and the payment of monetary compensation to DFO. DFO consistently expressed concern regarding the feasibility of the option of creating fish habitat and determined instead that compensation for the loss of fish habitat in the Pit Lakes could best be addressed by monetary compensation. Consequently, BHP Billiton agreed to negotiate and entered into the 1996 Compensation Agreement with DFO.
- Each of the several iterations of the ICRP builds on the knowledge and planning contained in the previous version. The ICRPs were not written as, nor are they intended to be, immutable commitments by BHP Billiton on how the fundamental reclamation concepts will be implemented. Indeed, they could not be, since each ICRP details multiple options for dealing with a variety of reclamation components. Instead, the purpose of an ICRP is to provide a flexible guideline for progressive and future reclamation based on the fundamental reclamation concepts that are described in the initial, conceptual plan. Flexibility is maintained to enable the mine site operator to assess and propose reclamation objectives in a way that is responsive to changes in the Mine plan and the concerns of the various stakeholders. That the ICRP is meant to be a flexible document is clear from the fact that conceptual, interim and final versions of the ICRP are all contemplated.

- 47. DFO/INAC at para. 63 of their submissions state that the goal of reclamation relates to "ensuring bank stabilization, prevention of erosion, safe exit from the pits, ensuring there is sufficient information on how to construct and where to construct the littoral zones with these objectives in mind, and assuming that water quality objectives are met, allowing for fish to return to the system". BHP Billiton submits that the history of the ICRPs that follow reflect that the core drivers for reclamation measures in the Pit Lakes are stabilization, erosion prevention, and safe exit. Any ancillary benefits that those reclamation measures might have regarding the future return of fish or the provision of habitat that would foster that return are positive benefits, but they not the purpose of nor should they be made the measure of success for those core drivers.
- 48. Taken as a whole, it is submitted that BHP Billiton has reasonably and fairly relied on the provisions of the 1996 Compensation Agreement both in its decision to construct and operate the Mine and in its reclamation planning and funding. That 1996 Compensation Agreement with Canada settled the issue of compensation for the projected loss of designated water bodies at the Mine (the Pit Lakes). BHP Billiton respectfully submits that for the Board to now impose on the company reclamation measures that require the creation or maintenance of fish and fish habitat within the Pit Lakes would constitute an inappropriate and excessive exercise of its reclamation jurisdiction.

All of which is respectfully submitted.

Dated: July 3, 2009

FASKEN MARTINEAU DuMOULIN LLP Per:

Kevin O'Callaghan (signed electronically)

Counsel for BHP Billiton Diamonds Inc

SCHEDULE "A"

Chronology of ICRP Versions

Date	Event
October 1, 1997	1997 Interim Abandonment and Restoration Plan submitted by BHP Billiton. This was the first version of the interim plan submitted by BHP Billiton. The Interim A&R Plan contains a detailed summary of reclamation activities, objectives and schedules. The Board requested revisions to this version of the Interim A&R Plan.
October 30, 1997	1997 Interim Abandonment and Restoration Plan submitted by BHP Billiton with corrections.
February 19, 1998	1997 Interim Abandonment and Restoration Plan approved by the NWT Water Board.
December 31, 1998	1998 Interim Abandonment and Restoration Plan submitted to NWT Water Board along with a comments/response table addressing comments from the Technical Advisory Committee.
June 29 1999	Board approves Interim Abandonment and Restoration Plan
February 2000	2000 Abandonment and Restoration Plan submitted by BHP Billiton to the NWT Water Board. This document updated the December 1998 Abandonment and Restoration Plan to comply with the requirement of the Environmental Agreement for a Closure and Reclamation Plan.
June 2001	2000 Abandonment and Restoration Plan revised by BHP Billiton to include Falcon Road as part of the Sable, Pigeon and Beartooth Environmental Assessment.
May 13, 2002	2000 Abandonment and Restoration Plan approved by the Mackenzie Valley Land and Water Board.
July 30, 2003	2003 Interim Closure and Reclamation Plan submitted to the Mackenzie Valley Land and Water Board. This document updated the 2000 Closure Plan to include the Sable, Pigeon and Beartooth kimberlite pipes. This version of the ICRP was not approved by the Board on the basis that it did not contain sufficient detail should the mine close before the expected end of the Life of Mine.

April 9, 2004	2004 Interim Closure and Reclamation Plan submitted to the Mackenzie Valley Land and Water Board. Revisions to the ICRP were requested by the Board and this version of the ICRP was not approved.
December 2005	ICRP Terms of Reference Working Group established by the Board to review and comment on the Terms of Reference for the ICRP which were proposed by BHP Billiton. The Working Group included representatives from the communities, regulatory agencies, the Independent Environmental Monitoring Agency and BHP Billiton.
September 2006	Ekati Diamond Mine Terms of Reference for the ICRP submitted to the Board in June 2006. This document summarizes what the next version of the ICRP will contain. Submitted to the Board in approved form in September 2006.
January 2007	Draft ICRP submitted to the We'kèezhii Land and Water Board.
December 12, 2008	2008 ICRP submitted to the Board. This version of the ICRP updated the Draft Interim Closure and Reclamation Plan submitted in 2007.

SCHEDULE B

Environmental Impact Statement for the EKATI Main Site and 1995 Conceptual ICRP

- 1. Options for reclamation at the Main Site were first addressed in the Environmental Impact Statement submitted by BHP in 1995 (the "EIS"). In particular, the EIS included a Conceptual ICRP in section 9 (the "1995 Conceptual ICRP") which provided an overview of reclamation options for the Main Site. The EIS, including the 1995 Conceptual ICRP, underwent public review by the Environmental Assessment Panel. The Panel recommended approval of the project, subject to a number of recommendations.
- 2. IEMA submitted at para. 46 of its submissions that: "BHP acknowledged in its EIS that restoration of fish habitat would be necessary to re-establish one of the primary land uses of the area: use by wildlife, including fish".
- 3. While the 1995 Conceptual ICRP recognized that re-establishing productive use of the land was one reclamation goal, it also recognized that where it was not possible or reasonably feasible to re-establish the productive use of land, other mitigation measures could be utilized, including the payment of compensation. In particular, the EIS noted that DFO supported an approach that recognized that where habitat reclamation was not reasonably feasible, compensation could be paid in lieu of habitat creation. The EIS notes the following suggestion from DFO at s.8.1.1:

In April 1995, DFO suggested to the Proponent the establishment of a NWT Fisheries Habitat Fund to offset the loss of habitat due to the dewatering of six lakes and the infilling of a seventh.

4. In reclaiming the EKATI Pit Lakes, the 1995 Conceptual ICRP emphasized the need to ensure the open pits were safe for wildlife and people, rather than on efforts to create fish habitat in the Pit Lakes (for example see s. 9.3.2.6 and s. 9.6.1). Although the potential for enhancing raptor habitat was contemplated, the creation of fish habitat was not. Section 9.3.2.6 states:

Lake productivity would be limited due to the small amount of littoral development possible in the lake on account of the steep pit slopes. However, pit slopes that extend above the high water level may provide the opportunity to create nesting habitat for raptors (Cairns 1980). The opportunities for habitat enhancement will be further explored as the mine develops.

June 1996 Report of the Environmental Assessment Panel on the EIS

5. The Report of the Environmental Assessment Panel on the EKATI Main Site (the "Panel Report") reviewed the EIS and the 1995 Conceptual ICRP and supported the approval of the project subject to several recommendations.

- 6. In dealing with the reclamation of the EKATI Pit Lakes, the Panel Report notes that the 1995 Conceptual ICRP contemplated the natural filling of the EKATI Pit Lakes over a period of 6-212 years.
- 7. IEMA submitted in its Intervention that the Panel did not address specifics of reclamation (para. 48). However, in the conclusion of the Panel Report on Closure and Reclamation, the Panel stated: "The Panel concludes that the reclamation plan described in the EIS represents an acceptable framework for reclamation." As discussed in detail above, the reclamation plan in the EIS does not contemplate the creation of fish habitat in the pit lakes, although it does discuss habitat for raptors.
- 8. IEMA additionally submitted that the Panel Report, when discussing fish in s. 4.4 was not contemplating reclamation. However, the Panel Report notes that, based on DFO's policy of "no net loss" of productive fish habitats, discussions had commenced between BHP and DFO. In these discussions, DFO took the position that replacing fish habitat in the EKATI Pit Lakes was not viable. Consequently, DFO proposed compensation by way of the establishment of a monetary fund. The Panel Report states at p. 37-38 that:

Since opportunities for replacement of lake habitat could not be identified within the affected watershed, and because the time required to refill mined-out pits as well as their bathymetry precludes the <u>re-creation of fish</u> habitat, DFO and BHP agreed that financial compensation would be suitable in this case.

DFO indicated that the amount of compensation likely would be based on an estimate of the cost of "whole lake replacement." DFO proposed to use the cash compensation to establish a NWT Habitat Management Fund to finance habitat restoration and enhancement projects as close to the affected area as possible.

(emphasis added)

9. It is submitted that the choice between reclamation of fish and fish habitat within the Pit Lakes and compensation was one of the key issues addressed by the Panel in s. 4.4 of the Panel Report. At page 38 the Panel Report notes:

It has been proposed that the loss of lake habitat would be compensated for by BHP providing funds to establish an NWT Habitat Management Fund. The Panel believes this approach may have merit but notes that both the establishment of this fund and the method for calculating the cash value of habitat lost may create precedents for other projects. Also, the Panel is left with the impression that DFO has not developed a systematic and generally applicable approach to calculate the value of fish habitat lost.

- 10. Consequently, the Panel recommended that:
 - (a) Cash compensation for the loss of fish habitat should be considered by the Department of Fisheries and Oceans (DFO) only when there are no viable options to avoid the loss of habitat or to re-create the lost habitat;

- (b) DFO develop a fair, realistic and transparent approach to the calculation of compensation for loss of fish habitat;
- (c) DFO settle compensation with BHP as quickly as feasible, reflecting the principles described in b) above;
- (d) If it is decided to proceed with the proposed Habitat Management Fund, an effective public consultation program including Aboriginal peoples be undertaken by DFO as soon as possible to identify projects that would be most appropriate; and,
- (e) The results of projects paid for by this fund be carefully monitored to ensure that the objective of habitat enhancement is achieved.
- 11. Thus, the Panel recognized that the approach to compensation for loss of fish habitat should be settled between DFO and BHP Billiton. The Panel also held that financial compensation should only be used where there are "no viable options to avoid the loss of habitat or to re-create the lost habitat". Accordingly, financial compensation was to be provided in lieu of, rather than in addition to, fish habitat re-creation.

Letter from Minister of Indian Affairs and Northern Development Approving Project

- 12. In their submissions DFO/INAC notes that the Minister of Indian Affairs and Northern Development issued a Project approval on behalf of the Government of Canada, along with a detailed commentary ("Government Approval"). DFO/INAC quoted from the Government Approval in part in relation to the Panels recommendation number 13(a).
- 13. A fuller understanding of the Government's position on Panel recommendation number 13(a) may be gleaned from those parts of the Government Approval not excerpted by DFO/INAC.
 - 13. a) Generally, the Government of Canada does not accept cash compensation for the destruction of fish habitat. It accepts this recommendation only as it applies to this project. <u>DFO's Policy for the Management of Fish Habitat clearly presents a hierarchy of preferences for compensating for altered, disrupted or destroyed fish habitat. Like-for-like replacement of lost habitat is the preferred option.</u>
- 14. It is clear from the Government Approval that monetary compensation had been selected from a "hierarchy of preferences" that included the option of creating fish habitat in the mined out pits. Monetary compensation was not intended to be in *addition* to habitat creation, but *instead* of habitat creation.

Purpose of ICRPs

15. Several iterations of the ICRP have been produced by BHP Billiton since the environmental assessment of the EKATI Project. Conceptual ICRPs for the Main Site development and the SPB development were included in their respective environmental

assessments. Interim ICRPs were submitted to the Board in 1997, 1998, 2000, 2001, 2003, 2004 and 2008.

- 16. Each iteration of the ICRP builds on the knowledge and planning contained in the previous version. The ICRPs were not written as, nor are they intended to be, immutable commitments by BHP Billiton. Indeed, they could not be, since each ICRP details multiple options for dealing with a variety of reclamation components.
- 17. Instead, the purpose of an ICRP is to provide a flexible outline of proposed progressive and future reclamation. Flexibility is necessary to enable the mine site operator, together with the appropriate regulators, to meet their reclamation objectives in a way that is responsive to new information and developments within the Mine plan. This approach is supported by INAC's 2007 Mine Site Reclamation Guidelines for the Northwest Territories (s.1.1, p.4), which states:

Interim Reclamation Plans provide conceptual detail on the reclamation of mine components which will not be closed until near the end of the mining operations, and operational detail for components which are to be progressively reclaimed earlier in the mine life. The Interim CRP should include increased detail and more specific closure criteria regarding reclamation components as these become available and as those areas of the mine are developed (e.g. rock piles that are completed or reclamation test studies that have been conducted).

18. In relation to the reclamation of the Pit Lakes, multiple options have been considered by BHP Billiton. These options, as well as their respective risks and contingencies, are explored in the ICRPs. One reason for exploring different options associated with the reclamation of the mined out pits is the level of uncertainty that exists with respect to the feasibility of the various options, such as facilitating the eventual creation of fish habitat in the Pit Lakes. This uncertainty was pointed out by DFO throughout the EKATI project development, including during the environmental assessments of the EKATI Main Site and SPB developments.

1997 Interim ICRP

- 19. The 1997 Interim ICRP was submitted to the NWT Water Board September 30, 1997, and approved by the NWT Water Board in June, 1999. The 1997 Interim ICRP updated and expanded on the reclamation measures described in the EIS and the 1995 Conceptual ICRP.
- While the EIS and the 1995 Conceptual ICRP recognized that there were various options available to compensate for the loss of fish habitat, the 1997 Interim ICRP was drafted after the issuance of the 1996 Compensation Agreement. As the 1996 Compensation Agreement provided for monetary compensation for the loss of fish habitat in the EKATI Pit Lakes, the option of fish habitat creation was not considered in the 1997 Interim ICRP. Instead, the primary reclamation goal of the 1997 Interim ICRP in relation to the EKATI Pit Lakes was ensuring their stability and safety for people and animals. However, consistent with BHP Billiton's Charter and Sustainable Development Policy, opportunities to facilitate the

possible natural recovery of fish habitat in the EKATI Pit Lakes were provided for in the 1997 Interim ICRP.

21. Section 3.4 of the 1997 Interim ICRP notes that fish habitat will be lost in the EKATI Pit Lakes and that compensation had been settled with DFO:

A total of 15 lakes will be affected by mining activities: pit development (5), tailings deposition (4), aggregate extraction (1), and waste rock stockpile construction (5). Thirteen of the lakes are within the Koala watershed and two are within the Lac de Gras drainange (sic). The primary impact associated with the loss of these lakes is the loss of fish habitat. Five of the lakes will be permanently lost while the remaining are expected to re-establish over a long period of time. Habitat compensation has been settled with the Department of Fisheries and Oceans (DFO) for these losses.

(emphasis added)

- In IEMA's submissions the inference is made that s. 4.2.1 of the 1997 Interim ICRP committed BHP Billiton to creating fish habitat within the pit lakes (IEMA Submissions, paras. 58-59). This is not the case. Section 4.2.1 deals with reclamation of open pits and although the 1997 Interim ICRP notes that opportunities for habitat enhancement within the pit "will be explored", it is clear that the focus in this sentence is on bird habitat.
- 23. Section 8.0 of the 1997 ICRP deals with post-closure monitoring. Post-closure monitoring is stated to include assessment of water quality in the EKATI Pit Lakes. However, because fish habitat creation is not contemplated, no provisions are included to monitor biodiversity in the EKATI Pit Lakes.

NWT Water Board Approval

- 24. The 1997 Interim ICRP was approved by the NWT Water Board on June 29, 1999 ("Board Approval").
- 25. The Board Approval states:

The Northwest Territories Water Board with the assistance of its Technical Advisory Committee (TAC) has reviewed the above mentioned plan as submitted to the Board on December 31, 1998.

The Board <u>approves the interim plan as submitted</u> and have attached comments from the Technical Advisory Committee to be addressed by BHP Diamonds Inc. in the next annual revision of the plan.

(emphasis added)

26. IEMA noted in its submissions that attached to the Board Approval were comments from the Technical Advisory Committee ("TAC") to be addressed by BHP in the next revised version of the plan. In particular, the TAC comments suggested that BHP

Billiton's reclamation plans should include plans to "enhance the upper benches of the pit to develop a littoral zone" (IEMA Submissions, para. 59).

27. However, this comment was simply to be "addressed" by BHP Billiton in the next version of the ICRP. It does not reflect an order by the Board or acceptance of the comment or a commitment by BHP Billiton. The Board Approval clearly indicates that notwithstanding the TAC comment, the 1997 Interim ICRP was approved "as submitted". The TAC comment was addressed in subsequent versions of the ICRP.

2000 Interim ICRP

- 28. The 2000 Interim ICRP was submitted to the NWT Water Board during the regulatory process for the SPB Project but prior to the issuance of the SPB Water Licence or Fisheries Act Authorization. The 2000 ICRP was subsequently approved by the Mackenzie Valley Land and Water Board in May 2002.
- 29. The 2000 Interim ICRP included a Closure and Reclamation Plan, as required under the Environmental Agreement (Article VIII, 8.1). The 2000 Interim ICRP was also updated to reflect new information and to address concerns raised by various parties. In relation to the reclamation of the EKATI Pit Lakes, the 2000 Interim ICRP contains similar details to those contained in the previous Interim ICRP's, with updated technical information.
- 30. Like the previous Interim ICRP, the 2000 Interim ICRP notes that the dewatering of a number of lakes will result in the loss of fish habitat and that compensation had been settled with DFO for these losses. The ICRP states at s. 3.4, p. 9:

The primary impact associated with most of these lakes is loss of fish habitat. Habitat compensation has been settled with the Department of Fisheries and Oceans Canada (DFO) for these losses. Eight of the 14 waterbodies are expected to naturally re-establish. However, for those pits that will be allowed to fill naturally the estimated time would be decades, with the exception of Panda pit - which is predicted to take four years with the addition of processed kimberlite, or 58 years if it were to fill naturally.

(emphasis added)

- As with the previous Interim ICRP, because the issue of habitat compensation had already been settled with DFO, BHP Billiton focussed in the 2000 Interim ICRP on the physical safety and stability of the reclaimed Pit Lakes required to assist in their natural reestablishment, rather than on the creation of fish habitat (see, e.g. s.4.2.1, p.21).
- 32. The 2000 Interim ICRP also noted that "lake productivity after the pits fill with water is expected to be low because only limited littoral development will be possible on the steep pit slopes" (s.4.2.1, p.21). Consistent with the fact that compensation for lost fish habitat had already been provided to DFO, this statement recognized that fish habitat would not be replaced within the EKATI Pit Lakes.

33. Although habitat creation is not contemplated, the 2000 Interim ICRP does provide details regarding steps that could be undertaken that would have the ancillary benefit (emphasised by use of the term "as well as") of facilitating the eventual natural establishment of the pit lakes and possibly fish habitat. As noted by IEMA in their submissions, the 2000 Interim ICRP states at s.4.2.1, p.20-21:

The upper walls of the pits will be modified and the pit will be allowed to flood. Select areas of the pit lip will be sloped back at a shallow angle to form beach areas. The drop off to the first bench will occur at approximately 5 m depth of water. Waste rock will be used to form steep rocky slopes extending from the littoral zone down to the first bench. The constructed littoral zone will include esker material and crushed granite and boulders, for wave breaks, <u>as well as</u> fish refuge and spawning areas...

Lake productivity after the pits fill with water is expected to be low because only limited littoral development will be possible on the steep pit slopes. However, pit slopes that extend above the eventual high water level may provide perches for birds. Opportunities for habitat enhancement within the pit will also be explored as the mine develops. The option exists to fill the pits quicker by directing excess freshet flow from upstream watercourses into the pits or in the case of Misery, the use of Lac de Gras for pit infilling.

(emphasis added)

- 34. However, BHP Billiton's proposal in the 2000 Interim ICRP to selectively modify the physical characteristics of rock walls and rock bottoms in pit perimeters was not a commitment to create fish habitat. As noted above, the primary goal of the 2000 Interim ICRP was the safety and stability of the EKATI Pit Lakes.
- 35. IEMA in its submissions at para. 61 cites the above quote from s. 4.2.1 and infers that BHP Billiton has committed to creating fish habitat. However, read as a whole, the 2000 Interim ICRP contemplated the <u>natural</u> re-establishment of ecosystems, possibly but not necessarily including fish species, within the EKATI Pit Lakes.

Environmental Assessment for SPB and 2000 Conceptual SPB ICRP

- 36. An Environmental Assessment Report for the SPB Project (the "EAR") was submitted in 2000. The EAR, like the EIS, contained a Conceptual ICRP for the SPB project in Section 5.5 (the "2000 Conceptual ICRP"). Since the issue of compensation for dewatering and mining the Sable, Pigeon and Beartooth lakes had not yet been resolved with DFO, BHP Billiton put forth several options for compensation in the EAR and 2000 Conceptual ICRP, including the possible re-creation of fish habitat in the SPB Pit Lakes.
- 37. The jurisdiction of DFO in relation to fish habitat for the SPB Project is expressly recognized in section 5.6.2.2 of the EAR "Fisheries" which states at p. 5-40:

The Department of Fisheries and Oceans (DFO) as part of the Government of Canada is the regulatory body having jurisdiction over fisheries related matters.

The objective of the DFO Policy for the Management of Fish Habitat (1986) is to obtain a net gain in the productive capacity of fish habitat in Canada. This is achieved through:

- 1. conservation of existing habitats;
- 2. restoration of damaged habitats; and
- 3. development of new habitats.

With respect to development activities which affect fish habitat, the current productive capacity of existing habitats is maintained by applying the guiding principle of No Net Loss. Through this principle, existing fish habitat is protected and habitat removals are balanced by the development of new habitat.

When development activities affect fish habitat, mitigation measures are developed according to a hierarchy of preferences:

- 1. redesign or relocate the project;
- 2. incorporate mitigation measures into the design of the project such that impacts on fish habitat are avoided; and
- 3. compensate for impact on habitat in cases where it is impossible or impractical to relocate, redesign or mitigate, or where residual impacts still occur by:
- i. "like for like" replacement of habitat at or near the site,
- ii. "like for like" replacement off-site,
- iii. enhancement of existing habitat or development of new habitat off-site, or
- iv. artificial production to supplement the fishery.

. . .

BHP Diamonds Inc. has developed a number of habitat compensation strategies to replace habitat lost through the mine development (BHP, 1999c). Options for compensation include the re-construction of habitat in mined-out pits, the modification of unproductive lakes such that fish communities may be established, increasing the productivity of currently productive lakes, or monetary remuneration. Compensation will be provided that meets the approval of the DFO.

(emphasis added)

38. The EAR clearly contemplated that reclamation would either involve the recreation of fish habitat <u>or</u> the payment of compensation to DFO, not both. The quoted section also demonstrates that a determination of which option will be utilized in reclamation is one that must ultimately be decided by DFO in union with BHP Billiton. Additional references to the role of DFO in selecting the appropriate reclamation option are found throughout the EAR. For example:

"Reclamation plans involving the creation of fish habitat and the restoration of fish populations in pit lakes will be developed in consultation with the Department of Fisheries and Oceans" (s.4.5.1.6, p.4-76)

. . .

"Fish habitat and fish stocking programs will be planned in consultation with the Department of Fisheries and Oceans and will be carried out in accordance with agreements reached with regulatory agencies." (s. 4.5.2.3.1, p. 4-92).

. . .

"As with the existing Fisheries Authorization, No Net Loss and compensation provisions will be specified in the new Authorization by DFO (s.4.8.3.3, p.4-212)

. . .

- "Lake restoration will be conducted in accordance with the DFO policy of No Net Loss and the present BHP Interim Abandonment and Restoration Plan" (s. 5.5.8, p.5-25)
- 39. IEMA in its submissions at paras. 62 and 63 quotes only from s. 4.5.1.6 at pages 4-75 to 4-76, which detail the option of creating fish habitat. However, that was not the only option identified. Based on the proposition that any compensation will ultimately be determined by DFO, the EAR goes on to explore various mitigation measures and options for dealing with loss of fish habitat in the SPB Pit Lakes. Options included the re-creation of fish habitat in the SPB Pit Lakes or the payment of monetary compensation to DFO. Additional details are provided for each of the proposed options. However, it was never contemplated that BHP Billiton would implement all of the options discussed. Rather, it was intended that DFO, together with BHP Billiton, would select the most appropriate option to compensate for the proposed loss of fish habitat in the SPB Pit Lakes.
- 40. While BHP Billiton proposed to DFO that compensation for the SPB Pit Lakes be provided as either habitat creation within the reclaimed SPB pits or through enhanced fish habitat at nearby White Lake, both options were ultimately rejected by DFO because of the stated uncertainties involved. Instead, DFO agreed with BHP Billiton to take Leslie Lake (which formed part of the 1996 Compensation Agreement and BHP Billiton no longer intended to dewater) in exchange and as full compensation for the dewatering of the SPB lakes.
- 41. With the issuance of Authorization SC99037 by DFO, all other options proffered by BHP Billiton in the EAR and 2000 Conceptual ICRP for reclamation of the SPB Pit Lakes became moot.

Mackenzie Valley Environmental Impact Review Board's Report on Environmental Assessment of the SPB

42. In the MVEIRB Report, which also predated Authorization SC99037, the Board found that there would be no significant adverse effects based on the reclamation of the Sable, Pigeon and Beartooth pits as set out in the EAR.

43. As noted by IEMA at para. 64, the MVEIRB Report contains an overview of BHP Billiton's proposed reclamation activities in s. 5.2:

BHP proposes to reclaim all three pits such that natural hydrological regimes would be re-established within their respective watersheds. As part of the reclamation process, BHP is also attempting to address DFO's requirement that the development have "no net loss" on fish habitat by modifying the pits to create suitable aquatic habitat.

The first step in BHP's reclamation process for the pits is to select areas to be sloped back at a shallow angle to form beaches. Screened esker material and/or crushed granite would be used as substrate. Boulders would be placed at select locations to provide wave breaks and refuge areas for smaller fish. The upper pit walls would be modified and the pit flooded. The lakes will be monitored during flooding to determine any need for nutrient supplement or fish restocking.

(emphasis added)

44. With respect to fish and fish habitat, the MVEIRB Report expressed concerns regarding BHP Billiton's confidence that it could mitigate for lost fisheries habitat in s. 4.6.2.2.1.1:

The Review Board notes that the evidence provided on this issue during the EA process is sparse and plagued with uncertainties. The Review Board notes that BHP is confident that it can mitigate for lost fisheries habitat through the reclamation of the Beartooth pit and the restoration of streams.

<u>DFO</u> is not confident that the Beartooth Pit can be restored as viable fish habitat due to potential unacceptable water quality. The Review Board notes that BHP did not provide alternatives or contingencies as a backup to the reclamation proposal should it prove not feasible.

45. Noting DFO's primacy in matters affecting fish and fish habitat, the MVEIRB recommended approval of the SPB development subject to 62 recommendations, including the following recommendation relating to the SPB Pit Lakes and reclamation:

The Review Board recommends that the Mackenzie Valley Land and Water Board consider the following:

. . .

- 38) That BHP continues negotiating with DFO to satisfy the "no net loss" objective.
- 46. IEMA in the quote it has chosen to highlight from the MVEIRB Report, focuses the Board's attention on the words "fish restocking", without taking the Board to the context of that statement. Read as a whole, the MVEIRB Report recognized that multiple options for compensation for the loss of fish habitat in the SPB Pit Lakes existed, and that this matter

would ultimately be determined by DFO. That determination was made in January 2003 when DFO accepted Leslie Lake in lieu of the habitat to be destroyed by the SPB Pits and issued Authorization SC99037.

2001 and 2002 Reclamation Liability Estimates

- 47. Estimates of BHP Billiton's reclamation liability associated with the Project were provided to the MVLWB by BHP Billiton in 2001 and 2002. The 2001 Liability Estimate deals exclusively with the Main Site, while the 2002 Liability Estimate includes reclamation costs for the SPB Site as well as the Main Site.
- 48. These estimates were based on BHP Billiton's reclamation plans as set out in the Interim ICRP and the SPB EA. Each pre-dated the issuance of Authorization SC99037.
- 49. IEMA, at para. 65, has focused on the fact that the 2001 and 2002 Liability Estimates note that BHP Billiton will attempt to facilitate the establishment of fish habitat. However, neither report states that BHP Billiton is committing to the establishment or maintenance of fish habitat. The observation is simply a restatement of BHP Billiton's general policy to facilitate natural reclamation of the Mine Site where it is possible to do so and where such facilitation is consistent with BHP Billiton's primary reclamation goal for the Pit Lakes: the achievement of safe and stable Pit Lakes.
- 50. That BHP Billiton did not assume responsibility for the creation of fish habitat in the Pit Lakes is supported by the cost breakdowns provided in the 2001 and 2002 Liability Estimates. In particular, while the reports include cost estimates for tasks such as building rock berms, pump flooding the open pits and constructing littoral zones, no cost estimates are included for tasks that would be necessary to establish viable fish habitat (2001 Liability Estimate, Appendix III, "Estimated Reclamation Costs"; 2002 Liability Estimate, Appendix IIAi: "Estimated Median Costs for Liability Units").
- 51. Additionally, the accompanying monitoring program attached to both the 2001 and 2002 Liability Estimates contains no provision for monitoring activities related to fish.

2003 Interim ICRP

- 52. The 2003 Interim ICRP was submitted to the Mackenzie Valley Land and Water Board in July 2003. It was not approved, so a slightly revised form was submitted in April 2004.
- 53. The 2003 Interim ICRP updated the 2000 Interim ICRP to include the Sable, Pigeon and Beartooth project. However, the 2003 Interim ICRP was not approved due to what the Board characterized as insufficient information on contingency plans for mine closure before the expected end of the Life of Mine.
- 54. In relation to the Pit Lakes, in keeping with the progressive nature of updates to the ICRP, additional information was added. For example, the concept of pump filling the Pit Lakes was incorporated into this plan (see section 4, table 2, "Reclamation schedule and strategy for landscape development units (LDUs) at the Ekati Diamond Mine").

55. Since compensation for the destruction of lakes relating to the SPB Project had already been provided to DFO under Authorization SC99037, the 2003 Interim ICRP notes at s. 3.4.1, p. 13:

The primary impact associated with most of these lakes is loss of fish habitat. <u>Habitat compensation has been settled with DFO for these losses.</u> ...Some of the smaller lakes do not support fish due to their shallow nature.

(emphasis added)

As noted by IEMA in their submissions, section 4.1.1 sets out BHP Billiton's proposal for the reclamation of the pits. IEMA infers from this quotation that BHP Billiton committed to creating fish habitat. This is not the case. Since compensation had already been provided for the loss of fish habitat, the primary goal of pit reclamation was to ensure the safety and stability of the Pit Lakes. However, in undertaking measures to ensure this primary goal, BHP Billiton also recognized that steps could be taken where feasible to facilitate the natural establishment of fish habitat. The 2003 Interim ICRP states at p. 31:

As each pit is closed, a productive post-closure pit lake will be developed <u>if possible</u> in accordance with the Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories (NWTWB/DIAND, 1990). The upper walls of the pits will be modified and the pit will be allowed to flood. Select areas of the pit lip will be sloped back at a shallow angle to form beach areas. The drop off to the first bench will occur at approximately 5 m of water depth. Waste rock will be used to form steep rocky slopes extending from the littoral zone down to the first bench. The constructed littoral zone will include esker material and crushed granite and boulders, for wave breaks, as well as fish refuge and spawning areas. Pit lakes will be monitored during the final stages of flooding, to determine whether there is a need for nutrient supplement (BHP & DiaMet Minerals, 2000).

(emphasis added)

57. The establishment of the Pit Lakes is set out more fully in s. 4.1.2. The 2003 Interim ICRP states that each of the Pits Lakes will be larger and deeper than the original lake basin as well as being "altered in their physical character and possibly in their chemical and biological characteristics" (p. 33). The Pit Lakes are stated to "eventually support aquatic life, and be connected to the natural drainage and aquatic ecosystems within their watersheds" (p. 33-34). Again, these comments clarify that what BHP Billiton was proposing was not the creation of fish habitat, but the facilitation of conditions to assist the natural establishment of fish habitat. The primary goal of the 2003 Interim ICRP, as with prior versions, was to ensure the stability and safety of the Pit Lakes.

2004 Interim ICRP

58. The 2003 Interim ICRP was not approved and was resubmitted in a revised form by BHP Billiton in 2004 (the "2004 Interim ICRP"). This version of the ICRP contains similar provisions to the 2003 Interim ICRP in relation to proposed reclamation strategies for

the Pit Lakes; however, additional information was added for completeness. The 2004 ICRP was also not approved.

59. Like the 2003 Interim ICRP, the 2004 Interim ICRP notes that habitat compensation has been provided to DFO to compensate for loss of fish habitat. Section 4.1 states at p. 54:

The primary impact associated with most of these lakes is loss of fish habitat. Habitat compensation has been settled with DFO for these losses.

(emphasis added)

60. Consequently, the reclamation plans for the Pit Lakes are focused on ensuring the safety and stability of landscape components, not habitat creation. These reclamation goals are set out in s. 1.2, p. 3:

The goal of reclamation is to prevent progressive degradation, and to <u>enhance</u> <u>natural recovery</u> of areas affected by mining. Landscape reclamation is driven by the following specific objectives:

- 1. To re-establish stable landforms;
- 2. To protect the water resources in the local area; and
- 3. To <u>facilitate natural recovery</u> of areas affected by mining.
- 4. To re-establish productive use of the land (Aboriginal and wildlife).
- 61. Section 5.2 sets out the anticipated reclamation schedule, including Table 7, "Reclamation Schedule and Strategy for Reclamation Units (RUs) at EKATI Diamond Mine". For the Pit Lakes, the following reclamation strategies are listed:
 - Berms constructed around perimeter to prevent wildlife access
 - Flooding of pits by pumping and water diversion from adjoining streams and lakes
 - Creation of beach areas that promote fish habitat
 - Monitoring for water quality

(emphasis added)

62. These activities are in keeping with BHP Billiton's commitment to facilitate natural recovery. As noted by IEMA, additional details regarding the reclamation of open pits are found in s. 5.3, p. 68:

As part of the mine's reclamation program, each of these exhausted pits will become a pit lake that will be much larger and deeper than the original lake basin

(BHPB, 2003a), and altered in their physical character and possibly in their chemical and biological characteristics. These pit lakes will <u>eventually</u> support aquatic life, and be connected to the natural drainage and aquatic ecosystems within their watersheds.

(emphasis added)

63. Contrary to the inference drawn in IEMA's submissions, the emphasis in the 2004 Interim ICRP is on the facilitation of the natural recovery of fish habitat, if possible, rather than on the creation by BHP Billiton of fish habitat.

Terms of Reference for Sable, Pigeon and Beartooth Pit Lake Studies

- 64. In October 2004, BHP submitted Terms of Reference for Pit Lake Studies ("Pit Lake TOR").
- 65. The Introduction to the Pit Lake TOR states (s. 1, pg 1-1):

BHP Billiton Diamonds Inc. (BHPB) is investigating closure options for the Sable, Pigeon and Beartooth open pits at the EKATI Diamond Mine. Conversion of the Sable, Pigeon and Beartooth mine pits into pit lakes is one of the options being considered. In the water licence granted for the development of the Sable, Pigeon and Beartooth kimberlite pipes, the Mackenzie Valley Land and Water Board (MVLWB) outlined the requirements for terms of reference (TOR) for studies needed to evaluate the pit lakes option.

- 66. The Pit Lake TOR were intended to outline the studies required to determine whether or not it was feasible for the Pit Lakes to eventually support fish habitat. This is consistent with BHP Billiton's position that it will facilitate, where possible, the natural establishment of fish habitat in the Pit Lakes while ensuring that the primary reclamation goal the establishment of safe and stable landforms is achieved.
- 67. The Pit Lake TOR also recognize that compensation for the loss of fish habitat had already been provided to DFO (s. 1, pgs. 1-1 to 1-2):

Under Fisheries Authorization, Department of Fisheries and Oceans (DFO) (No. SC99037) (January 17, 2003), the Harmful Alteration, Disruption, or Destruction (HADD) of Sable, Pigeon and Beartooth lakes was accepted by DFO through compensation by BHPB. This agreement included the exchange of compensation originally applied to Leslie Lake to the Sable, Pigeon and Beartooth HADD Authorization SC99037. The Fish Habitat Compensation Agreement (No. SCA96021) between DFO and BHP NWT Diamonds Project (December 17, 1996) allowed for financial compensation from BHP to DFO which was to be directed towards habitat restoration and enhancement projects off site of the EKATI Diamond Mine. DFO closure requirements for the Sable, Pigeon and Beartooth Pit Lakes are for the provision of fish passage.

- 68. Because compensation for the loss of fish habitat had already been settled with DFO, BHP Billiton was not required to create fish habitat in the Pit Lakes. However, the studies contemplated in the Pit Lake TOR were meant to provide additional information on how to facilitate the natural establishment of fish habitat.
- 69. In their submissions, IEMA infers that s. 3.7.1 of the Pit Lake TOR committed BHP Billiton to creating fish habitat. This is not the case. Instead, this section examines ways in which the natural establishment of fish habitat might be enhanced. In particular, IEMA emphasized the following quotation from s. 3.7.1 of the Pit Lake TOR:

General designs have been discussed for the creation of littoral habitat in the flooded pits, however, the usefulness of this habitat for fish communities may lie in the details of the ultimate design.

- 70. This section on its face indicates that BHP Billiton was considering assessing the "usefulness" of various designs and measures that might facilitate the natural emergence of fish habitat, rather than obliging the Company to create fish habitat.
- 71. That the creation of fish habitat was not contemplated in BHP Billiton's draft of the proposed Pit Lake TOR is also clear from a reading of the entire document, which expressly states that the loss of fish habitat has already been compensated for.

Discrepancies in Quotations

- 72. In reviewing IEMA's quotations from various BHP Billiton historical documents, BHP Billiton notes that a number of errors were made. For example, paragraph 45 of IEMA's Submissions quotes s. 3.1.1.2. of the EIS as stating that "When the dewatered lakes eventually refill, <u>unlimited</u> amount of steep littoral habitat for benthos and fish will be restored". However, this quote should read "When the dewatered lakes eventually refill, <u>a</u> limited amount of steep littoral habitat for benthos and fish will be restored".
- 73. Errors were also found in quotations cited at paragraph 55 (Water Licence 2003L2-0013, Part C, Item 3); paragraph 58 (1997 Interim ICRP, s. 4.2.1); paragraph 61 (2000 Interim ICRP, s. 4.2.1); and paragraph 65 (2001 Reclamation Liability Estimate).