



BHP Billiton Diamonds Inc.

Operator of the EKATI Diamond Mine

BHP Billiton Diamonds Inc.
#1102 4920-52nd Street
Yellowknife NT Canada X1A 3T1
Tel 867 669 9292 Fax 867 669 9293
bhpbilliton.com

Our File: 4.6.11.2
4.6.6.1

August 31, 2007

Wek'eezhii Land and Water Board
#1, 4905 – 48th Street
Yellowknife, NT
X1A 3S3

Attention: Ms. Violet Camsell-Blondin, Chair

Dear Ms. Camsell-Blondin:

**Re: Updated Wastewater and Processed Kimberlite Management Plan (WPKMP),
ENVR-SWP-PKWW-05, Water Licences MV2003L2-0013 and MV2001L2-0008**

BHP Billiton Diamonds Inc. is pleased to submit an updated Wastewater and Processed Kimberlite Management Plan (WPKMP) as requested by the Wek'eezhii Land and Water Board (the Board) in their approval letter of September 12, 2006. The letter of approval listed five requirements to be included in the updated version of the WPKMP. A summary response to each of these requirements is provided below and a complete response to each has been incorporated into the updated WPKMP. No additional changes have been made to the WPKMP beyond the responses to the five items identified by the Board. Also a general update on tasks completed since the WPKMP was approved in 2006 is provided below.

Several important tasks related to the WPKMP have been completed at EKATI since the WPKMP was approved in 2006. These include:

- construction of the Cell B west road;
- construction (ongoing) of the Cell B Processed Kimberlite pipeline and discharge spigots along the western side of Cell B;
- raising of Dyke C to 456 m then to 459 m;
- design and modification of Dyke C; and
- construction of additional surface sumps situated around the surface expression of the Koala Pit.

Further, additional tasks could be completed over the next year or two, which include:

- construction of the Cell A Processed Kimberlite pipeline and discharge spigots below the topographical divide; and
- construction of water diversion structures east of Cells B and C and west of Cells D and E.

A summary response to each of the Board's requirements, (a) to (e), is provided below and a complete response to each has been incorporated into the updated WPKMP.

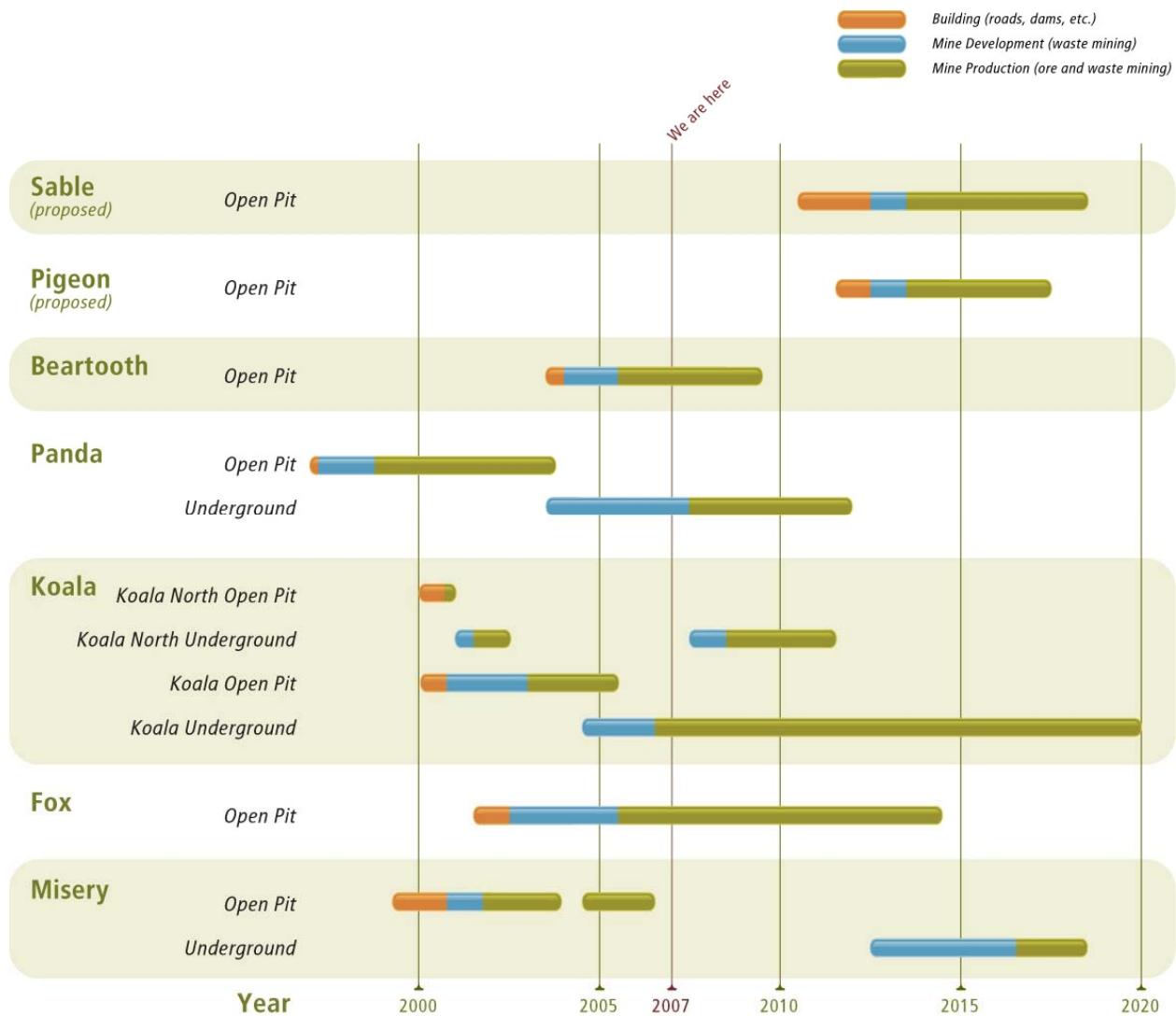
a) Revise the wording in the “Objectives” section to reflect that “exceed licence criteria” means “better than the licence criteria” as per comment EC-5 in BHP Billiton’s WPKMP – Comment/Response Table – July 14, 2006.

The word exceeds was removed from the “Objective” sections which now generally read as follows: *“To only discharge water to the receiving environment that meets or will be better than the Water Licence discharge criteria and to ensure no significant adverse environmental effect occurs to the downstream receiving environment.”*

b) Include the Life of Mine Plan.

The current Life of Mine plan is included in Section 1.1 on page 7 of 88 of the updated WPKMP. The current Life of Mine plan (also shown below) includes the mining of the Fox Pit, Beartooth Pit, Panda Underground, Koala Underground and the sequential development of Koala North Underground, Sable Pit, Pigeon Pit and Misery.

The Life of Mine plan shows the current approach to full and responsible utilization of mineral resources. This is a flexible, living document which continually changes with many outside factors and is therefore subject to continual change over the tenure of the WPKMP and to the expected end of mining in 2020. Some of the factors that may change the Life of Mine plan, for example, include exploration of additional kimberlite pipes, economic factors and other conditions.



c) Any assumptions used to make management decisions shall be summarized and supported by evidence (historical experience, monitoring results, etc.).

One of the key inputs into the WPKMP is the recommendations made by the 5-Year Performance Review of the Long Lake Containment Facility (LLCF) that BHP Billiton conducted in 2005. The issues and concerns expressed by organizations and individuals who participated in the 5-Year Review of the LLCF have been incorporated into the WPKMP.

The WPKMP is an operational document designed to assist the operators with making decisions regarding day-to-day operations of the LLCF, King Pond and other holding and treatment facilities. Managing waste water and processed kimberlite is an iterative process that is based on established procedures as well as ongoing monitoring and adaptation to new conditions.

Kimberlite is a heterogeneous conglomeration of minerals that causes variability in the wastewater created during mining and processing. This management plan makes assumptions concerning the nature and behaviour of the processed kimberlite and the quality and volumes of wastewater that will result from processing kimberlite based on BHP Billiton's processing experience at EKATI over the last 8 years. BHP Billiton carries out the necessary monitoring and adaptation plans to verify that the assumptions remain valid and environmental performance is satisfactory under the terms of its licences.

d) Uncertainties and information gaps, and the work being undertaken to resolve these, are to be summarized.

In accordance with BHP Billiton's adaptive management approach, several studies have been implemented at EKATI during 2006 and 2007 to address identified information gaps related to the WPKMP. BHP Billiton had previously committed to undertake some of these studies during the Technical Information Sessions held in Yellowknife in late February and early March 2006 associated with our 2006 Environmental Impact Report process.

The quality of water in the LLCF continues to be tracked and modeled as was previously mentioned in the comments-response table for the 2006 WPKMP (tracking item #2).

BHP Billiton is continuing to work with reviewers to answer complex technical questions. Since the questions are of a complex scientific nature, the studies that are underway require adequate time to develop complete responses and we are moving these studies along as quickly as practical.

A summary and update regarding four such studies is as follows:

1. LLCF fine processed kimberlite porewater characterization.

The porewater quality of fine processed kimberlite in Cell B was tested to provide an estimate of porewater quality of deposited wastes within the LLCF that are subject to physical and chemical weathering and annual water flushing. Cell B was selected as the test area as the wastes deposited in this location were the first wastes produced by the mine.

The test results indicate that the porewater samples are in equilibrium with the solid phases constituting the PK tailings. The porewater therefore may be regarded as a proxy for long term water quality emanating from the beached PK material. A final report in this study was provided to the Wek'eezhii Land and Water Board on August 17, 2007.

2. Field performance of potentially reactive wastes.

This is a field study where crushed rock and processed kimberlite of various types is placed into open barrels at the mine site and natural precipitation is allowed to infiltrate. Seepage water from the barrels is collected and analysed. We anticipate that it will be several years before adequate data is collected that would provide for useful technical discussions.

The rationale for this study is that the field performance of waste rock and processing residues may be influenced by tundra contact effects. These controlled field tests

should show field weathering effects without the effect of tundra leaching. For this reason, it is important that fresh (unweathered) material is obtained for these tests. To date, the following barrel tests have been established:

- o Granite
- o Metasediment (schist)
- o Waste kimberlite rock
- o Kimberlite
- o Fine processed kimberlite
- o Coarse kimberlite rejects

3. ARD classification of kimberlite wastes.

This study investigated whether the current classification of kimberlite waste rock as not-potentially acid generating (PAG) might be influenced by the specific type of minerals that are measured as neutralizing potential through standard tests. The test results indicate that the neutralizing minerals are dominated by calcite and dolomite, which are readily reactive. Therefore the current method for calculating neutralization potential (NP) from carbonate content and the classification of kimberlite as not-PAG are valid.

A final report for this study was provided to the Wek'èezhìi Land and Water Board on July 19, 2007.

4. Further evaluate the origin of acidity in SEEP-019 waters.

This is a field and desktop study to investigate the origins of seepage water that has pH lower than the natural runoff, using SEEP-019 on the north toe of the Panda waste rock pile as a test case. One speculated explanation is the emergence of iron-rich water that results in pH depression, possibly involving an ion exchange mechanism. This study is specifically designed to assess this concept (including ion-exchange). An understanding of the mechanism responsible for lower pH water will help to indicate potential for future changes in pH.

We anticipate that a study report will be available for the Board later in 2007.

e) Confirm elevation data for water levels in Cell E as per comment IEMA-17 in BHP Billiton's WPKMP-Comments/Response Table-July 14, 2006.

The IEMA-17 comment is as follows: "The WPKMP states that the final water level of Cell E will 'be lowered to approximately elevation 450 m'. This is inconsistent with Figures 9-11 that show Cell E level at 447 m through mine life." The reason for this apparent inconsistency in the WPKMP is that Cell E serves as a settling pond and provides storage capacity to contain all process affected water until it is released. To provide this storage capacity, the water level in Cell E is pumped down to approximate elevation 447 m and this lower than normal water level is maintained by pumping. This lower water level is necessary only during the operating phase of the mine.

The current Cell E dam crest elevation is approximately 462 m with the frozen core elevation of approximately 459 m. The LLCF has been designed to facilitate closure of the facility and residual ponds in Cells A, B and C have been integrated into the operations and design of the LLCF. The dykes that now function as filter dykes will become water level control structures used to pass flow over the dykes (with culvert, weirs, etc.) and the Cell C pond will decant into Cell D and ultimately into Cell E before release. The Cell E dam will be decommissioned to achieve and maintain the final water level at the outlet of Long Lake to an approximate elevation of 450 m, which also happens to be the approximate current crest elevation of Dyke D which will eventually become one of these water control structure (see Figure 15 of February 2006 WPKMP).

The quality or water at the outlet of Long Lake will be enhanced by the permanent system of ponds that will dissipate energy and provide settling basins for suspended soils. It should also be noted that the final lowering occurs at the decommissioning of the frozen core dam at the end of Cell E. It is not something that will be done during the operational life of mine or this version of the Plan.

We trust that the update of the Wastewater and Processed Kimberlite Management Plan meets with your requirements. If you have any questions or concerns regarding this report, please do not hesitate to contact the undersigned at 669-6116.

Sincerely,
BHP Billiton Diamonds Inc.



Eric Denholm
Superintendent – Permitting and Traditional Knowledge
EKATI Diamond Mine

ED/cjm...

Attachment