



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

P.O. Box 1192, Yellowknife, NT X1A 2N8 • Phone (867) 669-9141 • Fax (867) 669-9145
Website: www.monitoringagency.net • Email: monitor1@yk.com

October 19, 2007

Laura Tyler
Manager-Environment, Community, Communications and Planning
BHP Billiton Diamonds Inc.
#1102 4920-52nd Street
Yellowknife NT
X1A 3T1

Dear Laura

Re: 2007 Wastewater and Processed Kimberlite Management Plan

The Agency has had an opportunity to review the *2007 Revised WPKMP*, and has identified several questions raised by the new document. The questions are substantive, but relate importantly to the next stage of ICRP review and, therefore, it would be most helpful to hear from you on these issues at an early date, if possible.

1. The *WPKMP* (p.23) notes that there are “numerous unknowns” currently with the processing of Fox ore and with the discharge of underground saline water. It also states, for example at p.24, that “a number of studies are currently in progress regarding these issues.” Again, at p.39 the plan notes that investigation studies ‘are at this time not adequately advanced to enable revised design or operation criteria to be established for the LLCF.’ The *Plan* also notes that future development of the LLCF ‘must anticipate the volume of EFPK that will report to ponds and provide adequate pond volume in order to ensure deposition. Studies of the long-term consolidation characteristics and investigations of the nature, behaviour, management and operation requirements for the EFPK are on-going.’ All this suggests that significant uncertainties about the long-term efficiency and closure feasibility of the LLCF remain. It would be very helpful to understand the specific questions that are being investigated by BHPB with respect to Fox tailings and the operation of the LLCF, and to have some understanding of the research activities and timelines being adopted to answer the questions. This information will be key to reviewing BHPB’s proposed closure methods for the LLCF as part of the ICRP process.
2. It should be noted that the above issue was also a concern of the WLWB when it approved the 2006 *WPKMP*. One of the conditions of approval was that the revision (due March 31, 2008) summarize ‘the uncertainties and information gaps,

and the work being undertaken to resolve these.’ We agree with the Board that this is an important task, and should be incorporated into the plan when it is submitted in 2008.

3. The *Plan* notes [p.24] that one of the design objectives for the LLCF is to provide a stable landscape so that the facility ‘may be progressively reclaimed’. This is not further explained in the 2007 *WPKMP* and, given the stated design objective, some indication of how this objective will be met would be helpful. Again, this information will be important for the ICRP review.
4. At p.28 it is noted that vegetation studies ‘are on-going to review potential environmental risks (metal uptake studies) and to optimize methods and practices.’ No further details are provided, but would be most helpful in understanding how BHPB is minimizing environmental risk for closure planning.
5. The *WPKMP* notes that the EFPK, which consists of very low density smectite fines, is highly erodible and would not support dry covers. For closure, therefore, the *WPKMP* states [p.30] that ‘water covers (shallow lakes) would serve to prevent erosion.’ On p.32, however, the *Plan* notes that ‘EFPK will be stabilized by utilizing a deep water cover.’ Has BHPB determined that establishing a clear water cover for the EFPK material will be effective? It appears that this question is not yet resolved, and it would be helpful to understand what investigations BHPB might be doing to determine whether this closure approach is feasible or not.

Please contact us if you require any clarification on the above issues before responding. In closing, we would like to say generally that the 2007 *WPKMP* is well written, and comprehensively covers how wastewater and processed kimberlite are being handled at the site.

Sincerely,

-ORIGINAL SIGNED BY-

Bill Ross
Chairperson

cc. Society Members