Subject: BHP Development Description Date: Sun, 5 Sep 1999 18:22:01 -0600

From: "Wilson, Anne [Yel]" < Anne. Wilson @EC.GC.CA>
To: "Louie Azzolini" < Iazzo@internorth.com>

CC: "Harbicht, Stephen [Yel]" < Stephen. Harbicht@EC.GC.CA>

Hi Louie, Attached is a list identifying some of the deficiencies with the project description submitted by BHP Feb. 1999. The comments may verge on technical issues, but that at least highlights areas where details are needed. I'll be out of town until the 29th, but Steve Harbicht can be contacted on this file in my absence. Anne

<<Deficiencies List .doc>>

Name: Deficiencies List .doc Type: Winword File (application/msword) <u>Deficiencies List .doc</u> **Encoding:** base64

Deficiencies List - BHP's Project Description for the Proposed Development of Sable, Pigeon, and Beartooth Kimberlite Pipes

The project description appears to rely too heavily on work done for the 1995 Environmental Impact Statement and does not provide sufficient information on the new pipes, nor the impacts associated with their development. It is noted that these pipes are to replace the Leslie pipe which has already been permitted, but unless BHP specifically removes the Leslie pipe from their permitted pipes, all development at the three new pipes must be considered to occur in addition to pipes already permitted, as development of Leslie could still occur.

The following information should be included:

- 1. Figure D-1 shows the pipes; topography, especially drainage directions should be shown as well.
- Discussion of loss of terrestrial and wetlands habitat which was not covered in the initial EIS. Birds in general are overlooked in this development description, and effects on them should be assessed.
- **3.** Has the potential for thermal erosion been assessed in relation to the altered drainages around Pigeon and Beartooth pits?
- **4.** Will kinetic testing as well as static be done to confirm there will not be acid generation from the waste rock and ores?
- 5. The potential to reduce the waste rock footprint may be realized by "backfilling" the mined out pits with the next pipe's waste rock, especially for those pipes which are in fairly close proximity. This will also reduce filling times. This alternative should be examined in the report.
- **6.** The project description should include data from studies conducted, as well as details of proposed monitoring.
- 7. Closure of each pipe will involve flooding and restoration of drainage. Have actual measurements of groundwater flow been made in the area?
- 8. The section on cumulative effects does not provide enough detail on the level of total effects for such areas as air emissions, and habitat loss and terrestrial disturbance in relation to total areas. The assessment must look at cumulative effects within the mine lease caused by the project, as well as looking at them on a regional basis. The scale should be relevant to the species being looked at, and may involve different spatial boundaries for different ecosystem components.

There are individual questions for each pipe development.

Beartooth: Will dewatering during October and November result in further flows into the Panda Diversion Channel which may freeze, causing flow problems in spring? Timing alternatives should perhaps be looked at. The report states that the Panda/Koala settlement pond will be constructed - what are the current details on this, and how will water be managed?

Pigeon: It is unclear where the residual Pigeon Pond will be that will require the drainage channel? Drainage direction for Big Reynolds Pond should be identified, and also closure details provided. There appears to be a contradiction in where the explosives storage will be.

Sable: No details are provided on lake habitat to be lost in Ulu, nor on the fisheries resources of Two Rock Lake. How will water quality in Two Rock Lake be protected?