



Snap Lake Environmental Monitoring Agency
Main Floor, Lahm Ridge Tower
4501 Franklin Avenue
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Phone: 867-765-0961 FAX: 867-765-0963
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Shannon Hayden
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O.Box 2130
Yellowknife, NT X1A 2P6

File: MV2001L2-0002
Mine Closure and Reclamation

March 18, 2011

RE: 2010 Annual Mine Reclamation Status Report

Dear Ms. Hayden,

Snap Lake Environmental Monitoring Agency (SLEMA) is pleased to provide Mackenzie Valley Land and Water Board (MVLWB) with the following comments on the above report.

Implications of any Variances for the Closure and Reclamation Plan

It is reported that “the major deviation from the production schedule is that the paste backfill system has not yet been finalized; however there are no project variances that have implications on the current Closure and Reclamation Plan”.

De Beers current practice for processed kimberlite (PK) deposition is that the dry coarse PK is delivered to the Starter Cell by dump truck and the **wet slurry** via pipe. This is different from the design of the North Pile, which is intended to contain dry coarse PK and **PK paste**.

Furthermore, the LUP Inspection Report on March 1, 2011 pointed out a few concerns associated with the delayed paste backfill system.

- At least 2 geotechnical (stability) concerns, and
- 3 closure and reclamation concerns exist with the North Pile containment facility.

Clarification is requested.

Processed Kimberite Deposition

It is reported that “no work on in situ strength or beach slope of the slurry was conducted in 2010”, and “De Beers instead put its resources into the research of



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a proper recipe for PK paste”. However, “at this time there are no reportable results on the PK paste research”. It is requested that De Beers provide SLEMA one copy of the PK recipe research report when it is available.

It is also recommended that De Beers present the drawings and/or maps for the North Pile development, progressive PK deposition, location of piezometers and thermistors, location of Permanent Sample Plots (PSPs) to facilitate the description and/or discussion of the North Pile facility, dust control, stability and deformation, temperature and seepage, cryoconcentration, North Pile cover depth, and revegetation (sub-sections of Section 4 Part I Condition 8 c)).

Editorial Comments

- Visual inspection of the North Pile might not be conducted by the independent Professional Engineer as stated in Section 4.3 (page 5). He or she inspected the dams of the Water Management Pond (WMP) in the previous years. A registered Professional Engineer from Golder and Associates (De Beers consultant) conducted annual geotechnical surveys in the North Pile as stated in Section 5 (page 8). Correction is requested if applicable.
- It is stated in Section 4.7 that a Vegetation Monitoring Program (VMP) was prepared for the Mine in 2005 (De Beers 2005). However, the VMP appears to be updated in 2008. Correction is requested if applicable..

In general, submission provides more details than 2009 Annual Report, and fulfills the reporting requirement of reclamation status.

If you have any questions whatsoever please feel free to contact the undersigned or David White at 867-765-0961 / dwhite@slema.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Weyallon', is written over a light blue rectangular background.

Johnny Weyallon
Chairperson

cc: De Beers Canada Inc.
Indian and Northern Affairs Canada
Environment and Natural Resources, GNWT
Environmental Canada