

Snap Lake Environmental Monitoring Agency Main Floor, Lahm Ridge Tower 4501 Franklin Avenue P.O. Box 95, Yellowknife, NT X1A 2N1

Phone: 867-765-0961 FAX: 867-765-0963

Website: www.slema.ca

Shannon Hayden Regulatory Officer Mackenzie Valley Land and Water Board 7th Floor – 4910 50th Avenue P.O.Box 2130 Yellowknife, NT X1A 2P6

File: Water Licence MV2001L2-0002

January 21, 2010

RE: Updated Management Plans

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 updated management plans below:

- Domestic Waste and Sewage Management Plan (June 2009),
- Water Management Plan (August 2009),
- Hazardous Materials Management Plan (July 2009), and
- Ore Storage, Waste Rock, and Processed Kimberlite Management Plan (January 2010).

It is noticed that cross referencing among the above plans is problematic. Some documents referenced are out of date. The most recently updated management plans (including Emergence Response and Spills Contingency Plan, June 2009) should be properly cross referenced.

Domestic Waste and Sewage Management Plan (June 2009)

No major concerns are identified but a few editorial comments:

- The List of Appendices the list is inconsistent with the real order of the mine operating procedures.
- Section 3.3 the second "carpeting" should be removed from the category of "building and bulk debris". How will light bulbs be collected and disposed of? There is one typo in the last sentence of the first paragraph.
- Section 4.0 is there a mine operating procedure available for the recyclable materials?



Snap Lake Environmental Monitoring Agency Main Floor, Lahm Ridge Tower 4501 Franklin Avenue P.O. Box 95, Yellowknife, NT X1A 2N1

Phone: 867-765-0961 FAX: 867-765-0963

Website: www.slema.ca

Water Management Plan (August 2009)

There are lots of inconsistencies among Figure 3-1, Table 3-1 and related sections. In addition to those editorial problems identified by Environment Canada (comments dated on December 18, 2009), there are more:

- Section 2.3 (Table 2-1) any decision of MVLWB about SNP 02-03 and SNP 02-16i modification should be incorporated into Table 2-1.
- Section 3.1- There is one typo in the second line.
- Table 3-1 Data Source (Equations) for Q1, Q7, Q12, Q18 and Q20 appears not to be right. The Sign Convection for Q18 might be "+ to WTP". It appears that the Plan will be valid only from January 2009 to December 2010. The Plan has to be updated before 2011 because of the construction and operation of the East Cell in the following years.
- Section 4.2.3 and Section 4.3.3 are there trucked delivery service for potable water and sewage at the mine site (both surface and underground)? If yes, the related information should be incorporated into these two sections.
- Section 5.1.3 it is stated that "water is pumped via pipeline out of the underground workings directly to the WTP", while the third objective in Section 5.1.1 is "convey water collected in sumps to the WMP". Clarification is requested.
- Section 5.2 the section title is North Pile Starter Cell, and it might not be proper. North Pile Drainage System might be more appropriate title for this section.
- Section 5.2.3 only temporary sumps in the north of the North Pile were mentioned in the section, but currently there are two perimeter sumps (SP1 and SP2) in the south of the North Pile. The Plan should include the water management of these two perimeter sumps because they are also part of the North Pile drainage system.
- Section 5.3.2 the flow path numbering needs correction.
- Section 5.3.4 any decision of MVLWB about SNP 02-3 modification should be incorporated into this section.
- Section 5.6.2 the flow path numbering needs correction.

It is recommended that De Beers resubmit the Plan after improvement.



Snap Lake Environmental Monitoring Agency Main Floor, Lahm Ridge Tower 4501 Franklin Avenue P.O. Box 95, Yellowknife, NT X1A 2N1

Phone: 867-765-0961 FAX: 867-765-0963

Website: www.slema.ca

Hazardous Materials Management Plan (July 2009)

No major concerns are identified but a few editorial comments:

- Table of Contents no section is available for references.
- List of Tables –Table 1 is not listed.
- Section 1 Table 1 is not presented in this section.
- Table 2 the storage location of ammonia nitrate and sodium nitrate should be updated.
- Section 3.2 what will happen if there is a purchase plan for new chemicals?
- Figure 1 although the site plan is helpful, it is recommended that one specific map be provided for hazardous materials storage locations. The same comment applies to Section 5.3, Section 6.3 and Section 7.3.
- Section 3.7 the NWT Water Board's 1987 "Guidelines for Contingency Planning" has been updated and expanded. Indian and Northern Affairs Canada (INAC), NWT Region, will update these Guidelines annually by means of external and internal reviews. A new updated version will be available in April of each New Year (http://www.ainc-inac.gc.ca/ai/scr/nt/ntr/pubs/SCP-eng.asp).
- Section 4 the transportation plan only describes the transportation of hazardous material to the Snap Lake Mine site. Where are the off site transportation plan of hazardous wastes and operating procedures? It is recommended that SLM SHE OP 0021 be attached to the Plan
- Section 5.2 and Section 7.2 Table 1 is not presented in the Plan.
- Throughout the Plan Spills Contingency Plan is referenced in the Plan, but the full title for it is should be Emergency Response and Spills Contingency Plan.



Snap Lake Environmental Monitoring Agency Main Floor, Lahm Ridge Tower 4501 Franklin Avenue P.O. Box 95, Yellowknife, NT X1A 2N1 Phone: 867-765-0961 FAX: 867-765-0963

Website: www.slema.ca

Ore Storage, Waste Rock, and Processed Kimberlite Management Plan (January 2010)

The submission has been updated based on the comments from stakeholders. No further comments could be provided at the time.

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

Sincerely,

(original signed by)

Rachel Crapeau Vice Chairperson

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