



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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Willard Hagen
Chair
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O.Box 2130
Yellowknife, NT X1A 2P6

File: Water Licence MV2011L2-0004

June 26, 2013

Re: Starter Cell Raise

Dear Mr. Hagen,

Snap Lake Environmental Monitoring Agency (SLEMA) has reviewed De Beers request on Starter Cell raise and the attached North Pile Starter Cell Phase IV Embankments Design Report, and would like to provide the Mackenzie Valley Land and Water Board (MVLWB) with the following comments.

De Beers requested to raise the Starter Cell by 3.5 meters to 489.5 meters above sea level (MASL) in order to continue active deposition and processing at the Snap Lake Mine. In the Design Report (page 6), North Pile maximum elevation of 503.654 MASL is set as one of the Additional Criteria for the Design.

The planned Starter Cell raise is not consistent with De Beers commitment during the Environmental Assessment. In the Environmental Assessment Report (EAR, Page 3-18), it is stated that

- *“At the end of operation, the north pile will have a maximum height of approximately 34 m (crest elevation 484 m). At this elevation, the pile will be approximately the same height as the highest point of natural ground in the immediate area of the project site.”*

SLEMA pointed out the inconsistency and required clarification via e-mail on June 20, 2013. De Beers responded on June 24 as follows.

- *“The higher value is related to the commitment that the pile will be no higher than the surrounding hills within the ZOI and recent reviews of actual elevations done by a surveyor as opposed to during the EA when it was a paper exercise.”*



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De Beers also provided a Technical Memorandum by Golder Associates, dated April 22, 2013 and titled North Pile Maximum Elevation and Surrounding Landforms, Snap Lake Mine, where a Zone of Influence (ZOI) is defined by a circle with a radius of 35 km, centered on the Mine site.

In comparison, the wildlife study area in the Wildlife Effects Monitoring Program is defined by a circle with a radius of 31 km, centered on the Mine site. It is noted that two reference lakes (Northeast Lake and Lake 13) and King Lake (KING 01 – downstream water quality monitoring station) are also within the circle.

The highest point within 35 km of ZOI defined by De Beers, is located north northwest of the North Pile, and appears to be outside the wildlife study area.

SLEMA believes that the immediate area of the project site described in the EAR should not be referred to the Zone of Influence (with a radius of 35 km).

During the Closure Options and Research Workshop on March 13, 2013, De Beers presented three closure options, which are in the 2003 and 2006 Interim Mine Closure and Reclamation Plans.

Waste Pile Characteristics	Option 1	Option 2	Option 3
Crest Elevation (m)	479	484	497
Height Above Lowest Land Form (m)	35	39	52
Height Above Highest Land Form (m)	-5	0	13
Pile Visibility	Lowest	Moderate	Highest
Foot Print (ha)	126	92	69
Perimeter Length (m)	5,600	4,200	3,200

During the Closure Workshop, De Beers did not intend to change the chosen closure option #2, which is consistent with the Environmental Assessment commitment.

SLEMA raises the following two concerns for the MVLWB to consider De Beers request.

- Planned Starter Cell raise is not consistent with De Beers commitment during the Environmental Assessment.



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- The approach to arguing a Starter Cell raise is not appropriate. In SLEMA's opinion, ZOI is not properly defined by De Beers.

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'.

Johnny Weyallon
Chairperson