

DE BEERS

A DIAMOND IS FOREVER

MEMORANDUM

TO Glenda Fratton
DIVISION Mackenzie Valley Environmental Impact
Review Board

FROM Robin Johnstone
DATE April 14, 2003

COPY John McConnell
Gavin More, GNWT

File:

Re: 11 April 2003 Snap Lake Site Visit

This memo documents the proceedings and questions that were raised during the site visit to the Snap Lake Diamond Project on 11 April 2003.

Participants met at BBE at 8:30 a.m. on April 11, 2003. Jason Lepine of the NWTMN and Alfred Baillargeon of the YKDFN did not arrive at the appointed time and the flight departed for site at 9:15 a.m. with the following passengers:

Alan Ehrlich, MVEIRB
Glenda Fratton, Gartner Lee
Martin Haefele, MVEIRB
Sherry Sian, MVEIRB
John Stevenson, MVEIRB
Robert Anderson, Gartner Lee
Mark Watson, EBA Engineering
Gavin More, GNWT
Kevin LeDrew, DBCMI
Mike Padula, DBCMI

During the flight to Snap Lake some caribou tracks and 3 small groups of caribou were observed approximately 30-40 km southwest of the site.

The pilots circled the Snap Lake property twice for the tour to provide a general overview from the air. After landing and deplaning the group proceeded to the weather station hill area and a description / discussion of the North Pile and airstrip



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extension followed. The following questions/comments of note from the participants were made:

- Would the airstrip be widened both to the north and the south? The response was the airstrip would only be widened to the south as widening the strip to the north would encroach on an identified water body.
- Gavin More asked what kind of vegetation is in this area and in general on the peninsula. Response was that neither Kevin nor Mike could give the correct scientific description of the vegetation in the area. In general there are low to medium growing plants and bushes typically found in this area. Gavin noted that caribou eat this kind of vegetation and they may come on to the peninsula to feed.
- It was noted by some participants that the rolling hills on the peninsula would help the North Pile to blend in.

The group rode in the bus and drove down to the camp stopping along the way to view the North Pile area, the PKC and the waste rock piles. The following questions/comments of note from the participants were made:

- John Stevenson asked about the existing kimberlite stockpiles and pointed out that INAC was interested in them. The response was that the base of the stockpiles is metavolcanic material mined out during the 2000 AEP and that the stockpiles are diluted kimberlite drift material. The kimberlite would most likely be processed during commissioning and start up of the Process Plant.
- There was a general discussion on how the PKC works in its current configuration.

A presentation was given highlighting the site safety rules, what the peninsula will look like when the site is fully developed and the animation of the North Pile was presented. The following questions/comments of note from the participants were made:

- Questions were asked about the purpose and operation of the WMP during operation. A description of its role as an emergency storage facility was given. A follow up question on the relative sizing of the Water Treatment Plant



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was asked. Response was that the Water Treatment Plant would be sized to include catch up capacity.

- A question was asked about how the PK would get from the Plant to the North Pile. Response included description of thickening/pumping system and that the paste would have the consistency of toothpaste. A follow up question came from Gavin about if we would only pump to the North Pile in the summer months. Response included discussion on the requirement to pump to the North Pile year round, the mixing of cement with the PK for underground placement and the need to backfill mined out areas as they became available.

The group drove to Nuna's shop and walked over to the vent raise. It was noted to the group that this area of the peninsula is covered with rocks and boulders. The following questions/comments of note from the participants were made:

- Is this vent raise similar to the ones proposed for the north side of Snap Lake? Response was in general yes; except for the mine air heating system.
- John Stevenson commented that animals may be attracted to the vent raises because of the warm moist air and that the 2 metre high fence may not be sufficient to keep them out.

The group walked back to the portal area discussing prominent future site features such as the fuel farm, stockpile area, service complex and such.

- At the portal a general discussion of the underground workings was requested. The description included underground crushing, centralized blasting and conveying the ore to surface. Gavin More asked what size of equipment we would be using. He was given a tour of the underground equipment stored outside of Procon's area.
- Alan Ehrlich asked whether or not De Beers was going to need thermo-siphons in the North Pile and replied that given the thermal modeling it did not appear necessary.

The group met at camp and then began walking back to the airstrip in preparation for departure. The following questions/comments of note from the participants were made:



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- Question on if we planned to dredge the PKC/WMP to increase its capacity. Response was that there were no plans for dredging to increase the depth and capacity of the pond, although it is anticipated that the coarse processed kimberlite stored in the PKC at dam 2 would be recycled through the Process Plant at start up.
- A general comment on the closeness of the North Pile to Snap Lake and the issue of North Pile water management and seepage was made.
- Gail Seto (DBCMI Environmental Technician) took with Mark Watson out by snowmobile to view the footprint of the North Pile and the proximity to Snap Lake, from the lake.

The group departed Snap Lake at approximately 3:20 p.m.

Please feel free to contact myself with any questions or comments concerning this site visit.



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EA-Snaplake

From: EA-Snaplake [EA-Snaplake@mveirb.nt.ca]
Sent: Tuesday, April 22, 2003 11:14 PM
To: 'Alan Ehrlich'; 'Anne Wilson (E-mail)'; 'Bridgette Larocque'; 'Buddy Williams (E-mail) ' (E-mail)'; 'Burgess Margo (E-mail)'; 'CARC (E-mail) ' (E-mail)'; 'Chamber of mines ED (E-mail) ' (E-mail)'; 'Chris (E-mail) ' (E-mail)'; 'Chuck Blyth (E-mail) ' (E-mail)'; 'Colleen English (E-mail)'; 'CPAWS (E-mail) ' (E-mail)'; 'Dawn' Kelly (E-mail)'; 'Dennis Bevington (E-mail) ' (E-mail)'; 'DFO David (E-mail) ' (E-mail)'; 'Doug Soloway (E-mail) ' (E-mail)'; 'Ecology North (E-mail) ' (E-mail)'; 'Elaine Blais (E-mail)'; 'Eric Denholm (E-mail) ' (E-mail)'; 'Fairman Fraser (E-mail) ' (E-mail)'; 'Football Adeline (E-mail) ' (E-mail)'; 'Galbraith Empson (E-mail) ' (E-mail)'; 'Gavin More (E-mail) ' (E-mail)'; 'General MVLWB (E-mail) ' (E-mail)'; 'Glenda Fratton (E-mail)'; 'Golder Green Leslie (E-mail) ' (E-mail)'; 'Golder Machtans Hillary (E-mail) ' (E-mail)'; 'Government Akaitcho (E-mail) ' (E-mail) ' (E-mail)'; 'J. Michael Thoms NSMA (E-mail) ' (E-mail)'; 'Jagtar Sandhu (E-mail) ' (E-mail)'; 'Janet Hutchison (E-mail) (E-mail) ' (E-mail)'; 'Jason Lepine (E-mail)'; 'Jason McNeill (E-mail)'; 'Jean Teillet (E-mail)'; 'Jennifer Keith (E-mail) ' (E-mail)'; 'Joan Freeman (E-mail) ' (E-mail)'; 'John Donihee (E-mail) ' (E-mail)'; 'John Donihee (E-mail2) ' (E-mail)'; 'John McConnell (E-mail) ' (E-mail)'; 'John Ramsey (E-mail)'; 'Judy Langford (E-mail) ' (E-mail)'; 'Julie Dahl (E-mail) ' (E-mail)'; 'Kevin Ledrew (E-mail) ' (E-mail)'; 'Kris Johnson (E-mail)'; 'Letha MacLachlan lethla (E-mail) ' (E-mail)'; 'Lisa Best (E-mail)'; 'LKDFN Wildlife Lands Environment Ctte (E-mail) ' (E-mail)'; 'Louie Azzolini (E-mail)'; 'Lutsel K'e Dene First Nation (E-mail) ' (E-mail)'; 'Lutselk'e Agatha (E-mail) ' (E-mail)'; 'Mark Dahl (E-mail) ' (E-mail)'; 'Mary Tapsell (E-mail) ' (E-mail)'; 'Matt Bender (E-mail) ' (E-mail)'; 'Mike Fournier [Yel] (E-mail) ' (E-mail)'; 'Morison Steve (E-mail) ' (E-mail)'; 'Nick Lawson (E-mail) ' (E-mail)'; 'NSMA Bob Turner (E-mail) ' (E-mail)'; 'Nunavut Impact Review Board (E-mail) ' (E-mail)'; 'Rachel Crapeau (E-mail)'; 'Rae-Edzo Metis Local #64 (E-mail) ' (E-mail)'; 'Robin Johnstone (E-mail)'; 'Roy Ellis (E-mail) ' (E-mail)'; 'S. Kristyn (E-mail) ' (E-mail)'; 'Stephen Harbicht (E-mail) ' (E-mail)'; 'Steve Mathews (E-mail) ' (E-mail)'; 'Steve Wilbur (E-mail) ' (E-mail)'; 'Sue I. (E-mail) ' (E-mail)'; 'Tamara Hamilton (E-mail) ' (E-mail)'; 'Tim Byers (E-mail) ' (E-mail)'; 'Tony Pearse (E-mail) ' (E-mail)'; 'Vern Christensen, Executive Director'; 'Vuzi Opel (E-mail)'; 'Wha Ti First Nation (E-mail) ' (E-mail)'; 'William (Bill) Carpenter (E-mail) ' (E-mail)'; 'WWF - Peter J. Ewins (E-mail) ' (E-mail)'; 'WWF Tony Y. (E-mail) ' (E-mail)'; 'YK Chamber of Commerce (E-mail) ' (E-mail)'; 'Zabey Nevitt (E-mail)'
Subject: Site visit record - Snap Lake , *comments by MVEIRB on the site visit notes*

Please find attached De Beers' record of the April 11th site visit to Snap Lake. The MVEIRB generally concurred with the notes, but provided two comments on the notes to De Beers in an email, which is pasted below. Note that a powerpoint presentation was also provided during the site visit and will be posted to the MVEIRB website by tomorrow:
<http://www.mveirb.nt.ca/Registry/EADeBeers/EADeBeers.html>

Robin:

I reviewed De Beers' record of the April 11th site visit to Snap Lake, and will distribute them as is. However, I have two comments , which I will also file to the public registry:

- Page 2 notes that "John Stevenson asked about the existing kimberlite stockpiles and pointed out that INAC was interested in them". In fact, it was Mark Watson (EBA Engineering) who asked about the existing kimberlite stockpiles and pointed out that INAC commented on the stockpiles in their Technical Report.
- Page 3 notes that "John Stevenson commented that animals may be attracted to the vent raises because of the warm moist air and that the 2 metre high fence may not be sufficient to keep them out". Mr. Stevenson offered that it may be the warm moist air from the vent raises that attracts animals to these structures; however, Mr. Stevenson did not make the specific comment that the 2 metre high fence may not be sufficient to keep animals out. There was some discussion between Robert Anderson and De Beers about GNWT's concern (in their technical report) over the effectiveness of using chain-link fencing for keeping wildlife away from the ventilation raises. Adequacy of the height of the fencing was briefly discussed in relation to drifting snow in a depression.

Thanks,

Glenda

Glenda Fratton

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MVEIRB Site Visit
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