

DE BEERS

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November 27th, 2017

File: L020

Kierney Leach

Technical Regulatory Specialist
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th St.
PO Box 2130
Yellowknife, NT
X1A 2P6

**Re: De Beers Canada Snap Lake Mine
Request to amend SNP 02-16j
Items Water License #MV2011L2-0004**

Dear: Ms Leach,

As you are aware, Snap Lake is currently in Extended Care and Maintenance (ECM). As a part of this process, flights to site have been reduced to every two weeks (Appendix 1). Currently, the Surveillance Network Program for SNP 02-16j requests weekly sampling when pumping for several parameters (Table 1). As such De Beers requests that the SNP requirements be amended to reduce the frequency of external sampling to every two weeks. In house sampling will still continue as per usual for fecal coliforms. Sample results for SNP 02-16j have remained consistent throughout ECM and there is no indication that this would change.

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Table 1: Sampling schedule for SNP 02-16i

Description:	Sewage effluent from Sewage Treatment Plant, prior to mixing with Water Treatment Plant effluent (Surveillance Network Program station 1735-10 under "B" license – N1L2-1735)		
	Surveillance Network Program station 02-16, as referred to in Licence MV2001L2-0002, was removed from the Surveillance Network Program and replaced by 16i (Nov 15, 2007). The only change to sampling requirements is to change the frequency of sampling from every six (6) days to once a week to harmonize with outgoing flights from the Snap Lake Mine Site (change approved by Board on December 3, 2009). SNP station 02-16i was replaced by 02-016j on May 26, 2015 to reflect relocation of the Sewage Treatment Plant.		
Location:	n/a		
Sampling Frequency:	Continuously, by in-line monitoring during periods of operation	Once a week on alternate dates during pumping operations	Annually if in operation
Sampling Parameters:	Flow, pH, temperature, conductivity, turbidity	Biological oxygen demand (BOD), Nutrients ² , Total Oil and Grease, TSS, <i>E. Coli</i> , Faecal Coliforms	CCMS scan ³ (total and dissolved), total mercury, total arsenic
Rationale:	Operational monitoring: to evaluate whether sewage has been adequately treated before mixing with other Waste streams in the Water Management Pond.		
Status:	Active		

I trust that this satisfies your information request. Should you have any questions or concerns, please feel free to contact me by phone at (867) 766-7308 or by email at Alexandra.Hood@debeersgroup.com .

Sincerely,
DE BEERS CANADA INC.



Alexandra Hood
Regulatory Specialist
De Beers Canada

cc.
T. Covey
M. Morapeli, M. Peters, A. Williams

GNWT
De Beers

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Snap Lake Flight Schedule			
Date	Aircraft	Description	Reason
23-Nov-17	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
30-Nov-17	Single Engine	To replace holiday coverage personnel and bring in one BWC Staff.	Extra flight
7-Dec-17	Dash-7	Personnel rotation change, food and engine oil shipment.	Regular schedule with increased freight.
21-Dec-17	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
4-Jan-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
18-Jan-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
1-Feb-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
15-Feb-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
1-Mar-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight
15-Mar-18	Twin Otter	Personnel rotation change & food/supplies delivery.	Regular Scheduled flight