

Snap Lake Environmental Monitoring Agency 5120 49th Street, 3rd Floor P.O. Box 95, Yellowknife, NT X1A 1P8

Phone: 867-765-0961 Website: www.slema.ca

Kierney Leach Technical Regulatory Specialist Mackenzie Valley Land and Water Board 7th Floor – 4910 50th Avenue P.O.Box 2130 Yellowknife, NT X1A 2P6

File: MV2017D0032

June 7, 2018

Re: Permit Amendment Application (MV2017D0032)

Dear Ms. Leach,

As requested by Board staff via e-mail on June 6, 2018, Snap Lake Environmental Monitoring Agency (SLEMA) would like to provide additional information on what is meant by "reasonable measures" and "provide clear directions in the amended Land Use Permit on remote monitoring" as follows:

- The Decision to be made by the MVLWB will establish a precedent for zero occupancy of a mine site without full reclamation. It is recommended that the MVLWB, in its decision letter, provide general terms for a zero occupancy scenario to ensure the public is comfortable with De Beers' zero occupancy at Snap Lake Mine and future requests for zero occupancy at other mine sites.
- In this context, "reasonable measures" would be:
 - "Any measures which a reasonable person tasked with the role of environmental steward of the water/land associated with the Snap Lake Mine would do, or would choose to not do, taking into account the potential or likely environmental risks associated with said activity".

In general, reasonable measures probably involve:

- The proponent shall determine the extent and severity of known risks associated with zero occupancy.
- The proponent shall monitor those potential and demonstrated risks
- The proponent shall mitigate those risks if any significant risk to the environment becomes likely.
- The proponent will increase monitoring frequency if efforts/measures in place to detect or resolve environmental



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impacts prove insufficient to meet environmental protection objectives.

- The proponent is required to monitor the effectiveness of remote sensing at detecting actual and potential negative environmental impacts and/or environmental risk. All remote monitoring must accurately portray environmental risk which can reasonably be expected/encountered under all normal weather regimes.
- Remote sensing must be capable of effectively and continually detecting breaches of containment (sump, fuel storage) under all weather regimes.
- The proponent will be responsible for mitigating any risks or environmental impacts detected by/resulting from remote sensing in a timely manner.
- The proponent will re-assess remote sensing on an annual or, if needed, case by case basis, to determine the effectiveness of remote monitoring (and refine if that review deems improvement is necessary).

Some specific recommendations are attached for reference.

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

Sincerely,

Original signed by

Philippe di Pizzo Executive Director

Attachment



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Recommendations for LUP Amendment Application

Recommendations for LOP Amendment Application			
	Preparation for Zero Occupancy	During Zero Occupancy	Monthly Site Visit/Inspection
Active Tank Farms	Ensure water free within the berm of tank farm.	Monitor fuel level within the tank via video camera (frost line) or sensors.	Remove snow or ice within the berm of all tank farms whenever capacity is less than 110%.
Site Water	Ensure water level in sumps and Water Management Pond (WMP) as low as possible. Set up posts in sumps/WMP with marked level indicating when dewatering/snow removal operation	Monitor water/snow/ice level in sumps/WMP via video	Remove snow or ice in sumps/WMP if
Management	should be carried out.	camera or sensors.	necessary.
Spill Response		Be ready to deploy the Spill Response Team to the Snap Lake mine while a spill is identified by the site surveillance system.	·
Reporting	Submit staff checklist of mine site visit/inspection and template of mine site visit/inspection report for Board approval.	Survemance System.	Submit Monthly Site/Inspection Visit Report for Board review.