



Jan – Feb 2021
Environmental Update
for SLEMA Board
March 5, 2021

Outline

1. Mine Update
2. SNP Reports
3. Water Monitoring
4. Inspections
5. Regulatory News
6. SLEMA's Activities
7. Recommendations



Acronyms

- AEMP – Aquatic Effects Monitoring Program
- ARD – Acid Rock Drainage
- DFO – Fisheries and Oceans Canada
- ECCC – Environment and Climate Change Canada
- ECM – Extended Care and Maintenance
- ENR – Department of Environment and Natural Resources, GNWT
- EQC – Effluent Quality Criterion
- GNWT – Government of the Northwest Territories
- MVEIRB – Mackenzie Valley Environmental Impact Review Board
- MVLWB – Mackenzie Valley Land and Water Board
- PK – Processed Kimberlite
- SNP – Surveillance Network Program
- TDS – Total Dissolved Solids
- WEMP – Wildlife Effects Monitoring Program
- WTP – Water Treatment Plant



1. Mine Update

- The Snap Lake Mine is currently in Extended Care and Maintenance (ECM);
- Activities at the mine site finalized on August 25, 2020, when all personnel left the site, and the Mine entered Zero Occupancy until next year, 2021



2. SNP Reports

- From January 1st to March 1st, DeBeers submitted the following SNP Reports:
 - December 2020 SNP Report, submitted on Feb 1st, 2021; and
 - January 2021 SNP Report, submitted on March 1st, 2021.
- No incidents were reported in neither of the Reports (spills or wildlife).
- SNP Reports describe care activities at the mine site during zero occupancy: Remote monitoring and site visits.



2. SNP Reports

- Remote Monitoring by cameras included:
 - Perimeter Sumps, Water Management Pond and Fuel Tank Farm;
 - North Pile, ditch and perimeter sump monitoring.

- Activities also included:
 - Compilation of site-specific weather data;
 - North Pile thermistor and piezometer monitoring & data collection;
 - Building inspection.



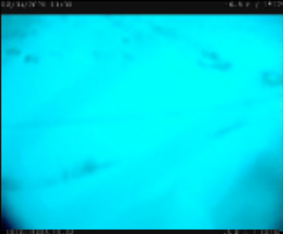


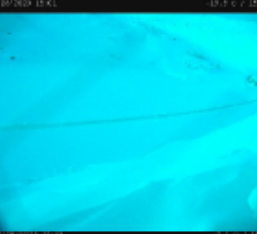
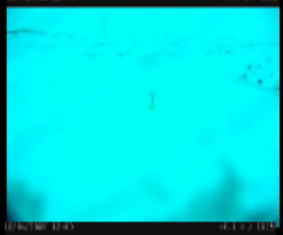







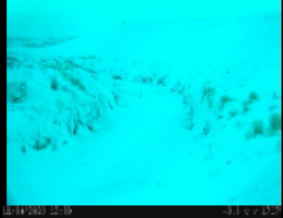



2. SNP Reports

Site visit campaigns occurred on the following dates:

- December Monthly Campaign on December 14, 2020;
- January Monthly Campaigns on January 04 and 25, 2020



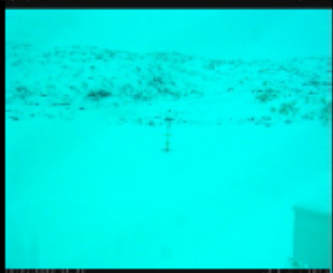











2. SNP Reports

Water Control Structure	Remote Camera Photos			
	Week 1 (December 01-08)	Week 2 (December 09-16)	Week 3 (December 17-24)	Week 4 (December 25-31)
Perimeter Sump 1				
Perimeter Sump 2				
Perimeter Sump 3				
Perimeter Sump 4				

December –Remote Monitoring Photos




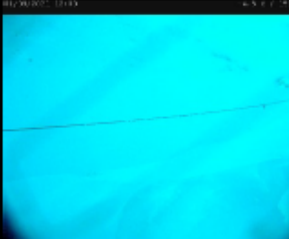
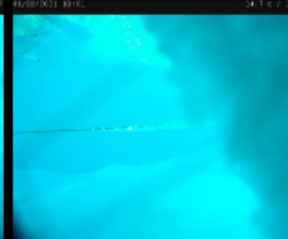
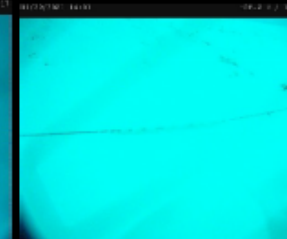
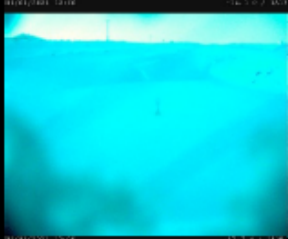

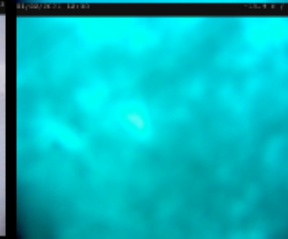





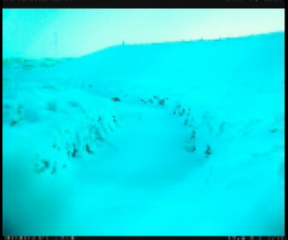


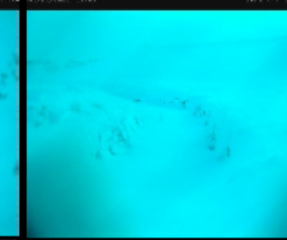
2. SNP Reports

Water Control Structure	Remote Camera Photos			
	Week 1 (December 01-08)	Week 2 (December 09-16)	Week 3 (December 17-24)	Week 4 (December 25-31)
Perimeter Sump 5				
Water Managemnet Pond				
Fuel Tank				

December –Remote Monitoring Photos







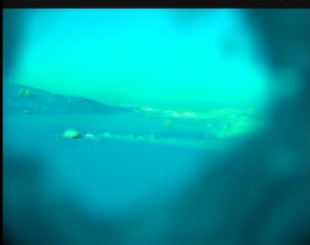

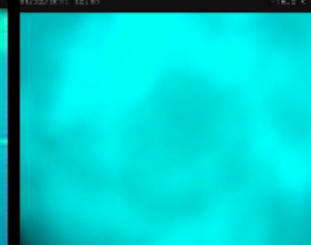





2. SNP Reports

Water Control Structure	Remote Camera Photos			
	Week 1 (January 01-07)	Week 2 (January 08-16)	Week 3 (January 17-24)	Week 4 (January 25-31)
Perimeter Sump 1				
Perimeter Sump 2				
Perimeter Sump 3				
Perimeter Sump 4				

January –Remote Monitoring Photos



2. SNP Reports

Water Control Structure	Remote Camera Photos			
	Week 1 (January 01-07)	Week 2 (January 08-16)	Week 3 (January 17-24)	Week 4 (January 25-31)
Perimeter Sump 5				
Water Managemnet Pond				
Fuel Tank				

January –Remote Monitoring Photos



3. Water Monitoring



Fig 1: SNP Sampling Stations



3. Water Monitoring

- No monitoring of water was carried out during this period.



4. Site Inspection

- No Regulatory inspections were conducted during this period



5. MVLWB Regulatory Update

- 1) Waste Management Plan Approved. The updated version of the Snap Lake Plan, Version 5.1 submitted by DeBeers on Jan 8, 2021 was approved by the Board on Jan 14, 2021.
- 2) Water Management Plan Not Approved. The Board decided not to approve the Water Management Plan Version 5 submitted by DeBeers in September 2020. The Board requires that De Beers submit the revised Plan by March 31, 2021



5. MVLWB Regulatory Update

3) Erosion and Sedimentation Plan Not Approved. The Board decided not to approve De Beers' Erosion and Sedimentation Management Plan V.1 submitted in September 2020. The Board required that De Beers submit a revised Plan by Feb 18, 2021.



6. SLEMA ACTIVITIES

➤ SLEMA reviews:

1) Review of the Surveillance Network Program - SNP monthly reports

SLEMA reviewed December and January SNP reports submitted by DeBeers and found them sound and according to the regulatory requirements with no major issues.



6. SLEMA ACTIVITIES

➤ SLEMA reviews

The following documents were sent out by the MVLWB for public review:

2) DeBeers' Proposed changes to the Surveillance Network Program to align the SNP with the approved Licence conditions.

3) DeBeers' Proposed changes to the Aquatic Effects Monitoring Program (AEMP) Design Plan Update for Care and Maintenance to be in use until the AEMP Design Plan for Closure and Post Closure is approved by the Board.



6. SLEMA ACTIVITIES

➤ SLEMA Bord Meeting in January

SLEMA meeting was held in YK, on January 21st 2021;

Participants were SLEMA regular Board Members, SLEMA Executive Director and Environmental Analyst.

