



NOV - DEC 2022
Environmental Update
for SLEMA Board
January, 2023

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



Outline

1. Mine Update
2. SNP Reports
3. Water Managment
4. Site Inspections
5. Incidents at Site
6. Updates on the WL and LUP
7. Environmental Agreement Update
8. SLEMA's Activities



1. Mine Update

- Snap Lake Mine has been in an Extended Care and Maintenance state since 2017
- On March 1, 2022, De Beers began activities associated with the Closure Phase, as described in the Final Closure and Reclamation Plan and as authorized by the corresponding Land Use Permit and Water Licence MV2019L2-0004
- Mine closure activities were initiated by MetNuna JV, who has assumed care and control of the Mine during Closure



2. SNP Reports

- The following Mine closure and reclamation activities were reported during October – November 2022
- Demolition of the process complex, smoking room, kitchen warehouse, underground services building, underground compressor building
- Ongoing demolition of the services complex and buildings at the fresh air raise
- Ongoing construction of the South Ditch and North Ditch, East Influent Storage Pond (ISP) and West ISP, including:
 - Bedrock cleaning in the North Ditch



2. SNP Reports

➤ Closure and reclamation October – November 2022

ISP-related work (Cont.)

- Formwork assembly in the North Ditch and concrete batching for dental concrete pours in preparation for liner installation
- Re-design and construction and completion of wildlife ramps in the West Influent Storage Pond
- Drilling and blasting at the South Ditch



2. SNP Reports

- Closure and reclamation activities October – November 2022 (Cont.)
 - partially completed demolition of overland pipes
 - partially completed demolition of Project Offices
 - completed demolition of Services Building structural components (97% demolition of interior completed)
 - completed demolition of FAR Buildings
 - commenced demolition of 12M Liter Fuel Tank Farm



2. SNP Reports

- Closure and reclamation activities October – November 2022 (Cont.)
 - Ongoing excavation and placement of materials in various cells on the North Pile Facility
 - Material generation - crushing operations – production of rip rap and erosion protection material and hauling crusher feed from various areas
 - Demolition debris and coarse and grit cover placement in the North Pile landfill (Cell1/Cell 2)



2. SNP Reports

- Closure and reclamation activities October – November 2022 (Cont.)
- Water Management Pond (WMP) sediment excavation and placement in North Pile Cell 5
- Organics excavated from the WMP and hauled to the organic stockpile
- Common fill placed in Perimeter Sump 2 as per design
- Set up and commissioning of modular potable water treatment plant and winterization of freshwater line



3. Water/ Waste Management at Site

- Fresh water is routinely extracted from Snap Lake
- The Sewage is collected and treated by the Sewage Treatment Plant
- Since October Effluent discharge from the Water Treatment Plant to Snap Lake has stopped
- In September the Inspector authorized to pump underground Noncompliant Water from the Water Management Pond
- Further, in October more noncompliant water was pumped underground



3. Water / Waste Management at Site

- Sept 19, 2022 Inspector's Authorization to Discharge Water Underground
 - On September 19, MetNuna personnel requested permission to discharge water underground
 - As part of the closure of Snap Lake Mine sediments from the Water Management Pond (WMP) needs to be removed
 - Water with high content of Total Suspended Solids (TSS) remained in the pond at the time of the request



3. Water / Waste Management at Site

- Authorization to Discharge Water Underground (Cont.)
 - At the time of request, the water level in the WMP had reached a level low enough that the treatment of the water was no longer practical in the time frame required to commence excavation of the WMP
 - As per the approved Water Management Plan (V. 5.1) “water not meeting EQC guidelines may be pumped underground upon approval of the Inspector”



3. Water/Waste Management at Site

- Authorization to Discharge Water Underground (Cont.)
- The Inspector approved the request to pump water to the underground
- MetNuna was to ensure that the volumes pumped were tracked daily
- Additionally, MetNuna was to ensure that the UG water levels were monitored daily at the Conveyor Portal



3. Water/Waste Management at Site

➤ 2022 SUMMARY OF WATER MANAGED AT SITE

Water/	Jan m3	Feb m3	Mar m3	Apr m3	May m3	Jun m3	Jul m3	Aug m3	Sep m3	Oct m3	Nov m3	Dec m3
Fresh water (SL)	577	485	785	672	828	876	784	956	888	6,804	911	
Sewage	165	315	333	190	385	417	411	463	24,525	525	542	
Effluent disch	-	-	-	-	42	61,321	76,333	29,206	24,525	-	-	
Water Pumped Under ground									5,719	21,674		



3. Water/Waste Management at Site

➤ WASTE MANAGEMENT: Summary of Monthly Waste Quantities

Waste Type	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Domestic (Incinerated at site)	1,669 Kg	2,014 Kg	2,220 Kg	1795 Kg	3,255 kg	4,397 kg	2,504 kg	2,078 kg	
Domestic & Industrial (to landfill)	5,145 Kg	2,510 Kg	2,129 Kg	1,411 (t)	2,980 kg	3,560 kg	262,57 kg	302	
Hazardous (sent offsite)							3.02 m3		



3. Water/Waste Management at Site



Fig 1: SNP Sampling Stations



3. Water/Waste Management at Site

2022 WATER MONITORING SCHEDULE

Monitoring Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
02-02 North Pile	N	N	N	N	N	✓	✓	✓	✓	✓	N	
02-05 Run off Rock Pad	N	N	N	N	✓	N	N	✓	✓	N	N	
02-06 Runoff Quarry	N	N	N	N	✓	N	N	N	N	N	N	
02-11 WMP Dam	N	N	N	N	N	N	N	N	N	N	N	
02-14 WMP	N	N	N	N	N	✓	✓	✓	✓	✓	N	

N= None

✓= Sampled



3. Water/Waste Management at Site

2022 WATER MONITORING SCHEDULE

Monitoring Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
02-15 Water Intake	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
02-16i Sewage Effluent	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
02-17b Treated Effluent	N	N	N	N	✓	✓	✓	✓	✓	N	N	
02-20d 02-20e 02-20f Diffuser Stations	N	N	N	✓	N	✓	✓	✓	✓	N	N	

N = None

✓ = sampled



3. Water/Waste Management at Site

2022 WATER MONITORING RESULTS

- 2022 Reported TDS at Snap Lake mixing zones:

	TDS mg/L					
MONTH/ STATION	Apr	May	Jun	Jul	Aug	Sep
SNP 02-20d	252	N	196	197		193
SNP 02-20e	257	N	196	266		194
SNP 02-20 f	252	N	197	215		196



4. Regulatory Inspections

November 2 Site Inspection

The following areas were inspected by Inspector Tom Bradbury, Resource Management Officer III.

This is a summary of his report.

- Waste Management Area
 - Much of the staged material has been removed from this location and placed in the temporary hazardous waste area for removal on the winter road
 - Material remaining is also earmarked for removal via winter road
 - Drums were well organized with proper labels, strapping and placed on pallets
 - No leaks or staining was observed during inspection of the area



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

- Temporary Hazardous Waste Area
 - All material stored in this area will be removed
 - Totes and drums are well organized with proper labels present
 - No observable leakage or staining during inspection
- Crusher
 - The crusher was in operation
 - The crushed material will be used as erosion control, rip-rap, and bedding
 - The material originates through the construction of perimeter sumps and blasting on site, and is then crushed and redistributed where required



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

- Water Management Pond
 - Construction at the WMP involved sediment removal as part of the redesign for the east Influence Storage Pond (ISP)
 - The former pumping infrastructure has also been disconnected
 - Water is no longer being pumped underground (see below authorizations), as flow has subsided due to weather conditions



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

- Perimeter Sumps/Cells- Cell 1
 - Cell 1 is a former landfill. Some material has been buried there
- Perimeter Sumps/Cells- Cell 2
 - Currently active and is where demolition material is buried. Several 600 mm lifts have already been completed
 - Before being buried in 600 mm lifts the process involves the building being handed over to QM(contractor) to be demolished
 - The demolition material is placed specifically into the designated cells which are then covered with coarse and grits and compacted



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

- Winter Road
 - Snap Lake personnel are hoping to get an earlier start on winter road construction. Equipment has been staged for the build-out of the spur road.
- 12 Million Litre Tanks
 - The tanks have been pumped down but still have minimal fuel. The tanks are most likely to be demolished and buried on site.



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

○ Building Demolition

- Process Plant: it has been demolished and awaits disposal. There is potential to bring scrap material off site via winter road for re-use
- Main Complex: This includes offices, environmental lab, truck shop, mine dry, and ERT, which are totally demolished and awaiting disposal
- Powerhouse: It has been demolished and awaits disposal
- Batch Plant: Also known as “Big Top” has been demolished and has been disposed of on-site (Cell 2)



4. Regulatory Inspections

November 2 Site Inspection Areas inspected (Cont.)

- Fresh Air Raise (FAR)
 - Components have been separated and are earmarked for removal via winter road upon which Lenmark will acquire the components for re-sale on the secondary market
 - Concrete caps have been poured to seal the underground



4. Regulatory Inspections

November 2 Site Inspection (Cont.)

- Lenmark Industries has entered partnerships with both De Beers and MetNuna
- Lenmark is a business which provides alternatives to traditional auctions for the purpose of buying and selling equipment
- The association is for the purpose of salvaging mining infrastructure
- This is an excellent opportunity to reduce waste which would normally be placed in landfill



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)

- Geotechnical Inspection Report
 - On September 29 De Beers submitted the annual Geotechnical Inspection Report, as required under Part F, Item 11
 - On October 26, Board staff requested confirmation on whether the implementation plan regarding construction of the north and south perimeter ditch will be completed prior to 2023 freshet and in the event construction is delayed is there a contingency for managing the water such as the Design and Construction Plan?



4. Regulatory Inspections

November 2 Site Inspection: Geotechnical Inspection Report (Cont.)

De Beers provided follow-up on November 2 as follow:

- Section 3.3.1 of the Water Management Plan states that “During events such as the annual freshet, it is often necessary to maintain water storage in the sumps below the design maximum volume level
- To prepare for freshet, water is often pumped out of the sumps to ensure each sump has sufficient capacity remaining to contain the freshet inflows expected
- The determination as to whether this is required is made each year depending on water levels within the sumps, snowpack, and pumping capacity”



4. Regulatory Inspections

November 2 Site Inspection Geotechnical Inspection Report(Cont.)

Also, De Beers stated that

- “If the construction of south and north perimeter ditches is completed prior to 2023 freshet
- then there are no preparations required for freshet as the capacity will be sufficient to retain all potential inflow from the North Pile
- However, given that there is the potential that the construction of the ditches could be delayed, the engineer of record recommends that freshet management will be required, like previous years



4. Regulatory Inspections

November 2 Site Inspection: Geotechnical Inspection Report (Cont.)

- That is the intention of the referenced “contingency water management plan”
- which is meant for Snap Lake site to confirm that there is adequate pumping capacity available to manage expected freshet inflows and to increase storage capacity by removing snow from within catchment areas
- In addition, there are contingency options in the Water Management Plan
- They will be explored should those be required if water does not meet EQC's



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



1. Waste Management Area – drums awaiting removal



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



2. Waste Management Area – Drums properly labeled and strapped on pallets



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



3. Temporary Hazardous Area – Drums are well staged and labelled



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



4. Crusher Area – Material is separated based on size and used for rip-rap, bedding and erosion control



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



Water Management Pond – construction to remove sediments



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



6. Cell 2 – Demolished material awaiting burial



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



7. Fuel Tank Farm – 12 million litre tanks – awaiting demolition



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



8. Process plant demolition



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



Main Complex demolition



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



10. Powerhouse demolished and awaiting disposal



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



11. Fresh Air Raise. Lenmark to salvage components for secondary market



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



12. Fresh Air Raise



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



13. Fresh Air Raise



4. Regulatory Inspections

November 2 Site Inspection Report (Cont.)



14. Fresh Air Raise – Underground has been capped with concrete



4. Regulatory Inspections

December 12 Site Inspection

The following areas were inspected by Inspector Tom Bradbury, Resource Management Officer III

- Building Demolition
- Waste Storage Areas
- Perimeter Sumps/Construction
- Snow Dumps
- Laydown 1

There were no concerns noted during the inspection.



4. Regulatory Inspections

December 12 Inspection – Comments on Inspected Areas

Waste Management Area

- Much of the staged material has been removed from this location and placed in the temporary hazardous waste area for removal on the winter road
- Material remaining is also earmarked for removal via winter road (Pic 1)
- Drums were well organized with proper labels, strapping and placed on pallets (Pic 2)
- No leaks or staining were observed during inspection of the area
- Incineration occurs on an as-needed basis (Pic 3)
- Crushed material is now being stored in the area and will later be used for erosion control, rip-rap, and bedding (Pic 4).



4. Regulatory Inspections

December 12 Site Inspection – Comments (Cont.)

Temporary Hazardous Waste Area

- All material stored in this area will be removed by the winter road
- Totes and drums are well organized with proper labels
- One drum was observed as having some staining in the surrounding snow. This drum was removed, and the area was cleaned during the inspection (Pic 5).

Crusher

- The crusher had been down for repairs from November 19 to December 8 but was up and running during the inspection. MetNuna personnel used the time to perform maintenance before returning it to operation.



4. Regulatory Inspections

December 12 Site Inspection – Comments (Cont.)

Crusher

- The different sizes of crushed material will be used as erosion control, rip-rap, and bedding during the closure and reclamation process (Pic 6)

Water Management Pond (WMP)

- Construction at the WMP (Pic 7) involved sediment removal as part of the redesign for the east Influence Storage Pond (ISP)
- Material is being separated into sediment and organics piles
- Earthworks involving reshaping for sloping and channel construction for flow will occur going forward, followed by erosion protection.



4. Regulatory Inspections

December 12 Site Inspection – Comments (Cont.)

Perimeter Sumps/Cell 1

- Cell 1 is a former landfill for Snap Lake. Domestic waste is buried there during the closure and reclamation phase

Perimeter Sumps/Cell 2

- Currently active and is where demolished buildings and infrastructure are being placed for burial
- The material is placed specifically into the designated cells which are then covered with coarse and grits and compacted
- Several 600 mm lifts have already been completed.

Winter Road

- The spur road to Snap Lake is currently only expected to be in use through the month of March 2023
- There are approximately 200 loads of material expected to be removed from the mine site.



4. Regulatory Inspections

December 12 Site Inspection – Comments (Cont.)

12 Million Litre Tanks

- The 3 tanks have been demolished and await disposal (Pic 8)

Building Demolition

- No other buildings were demolished (apart from the fuel tanks)
- There are very few structures left to be demolished that are not necessary for current operations



4. Regulatory Inspections

December 12 Site Inspection – Comments (Cont.)

Laydown 1

- This area is historically a storage yard for equipment. It consists of a multitude of equipment that is currently being re-used, shipped out or disposed of on site
- Approximately 50 % of the material will be buried at site (Pic 9)
- One of the 6 snow dump locations will be within this area

Snow Dumps

- There will be 6 snow dumps used for snow clearing at Snap Lake this season
- The locations were chosen to ensure proper water drainage and control of windblown debris during spring melt
- The locations have been provided in the map



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



Photo 1 – Waste Management Area – Totes and tanks awaiting removal via winter road.



Photo 2 – Waste Management Area – Drums properly labelled and strapped on pallets awaiting removal via winter road.

1 & 2 Waste Management Area



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



3. Incinerators - Waste Management Area



4. Waste Management Area
– Stockpiled crush



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



5. Temporary Hazardous Waste Area – Leakage from drum.



6. Crusher Area



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



7. Water Management Pond – Construction to remove sediment



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



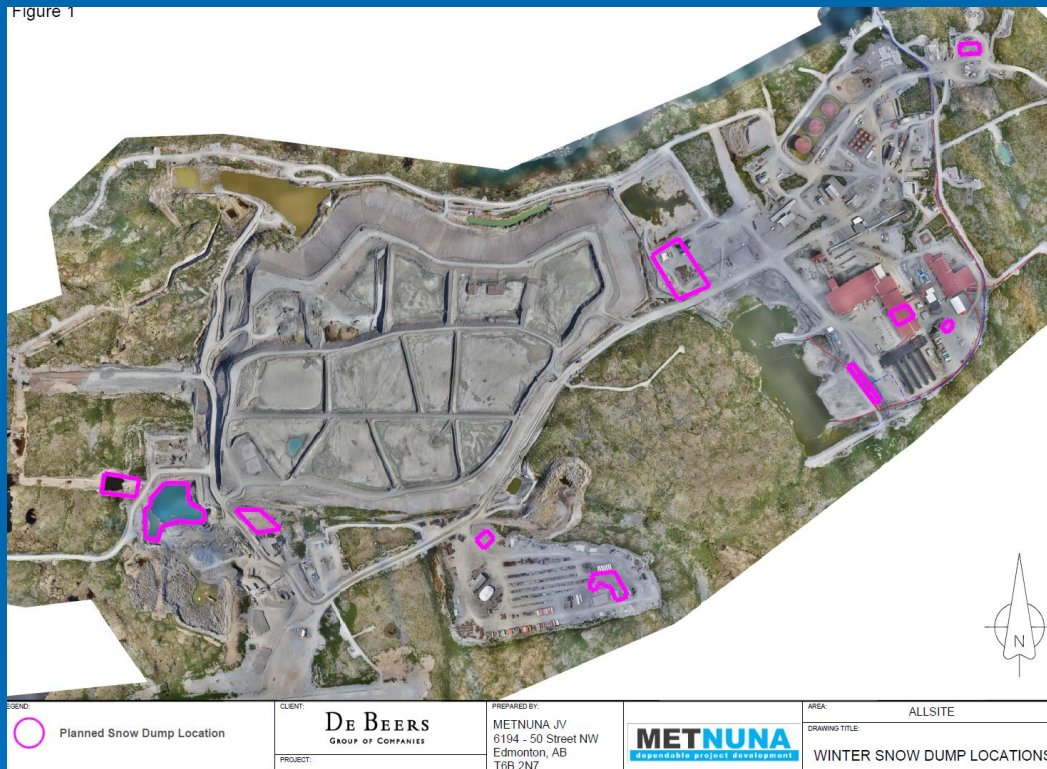
8. Fuel Tank Farm – 12 million litre tanks - Demolished material awaiting burial

9. Laydown 1 – Storage yard.



4. Regulatory Inspections

Dec. 12 Site Inspection Report (Cont.)



10. Winter snow dump locations



5. Incidents at Site

➤ Spill #2022505

On Nov. 17th DeBeers reported that Effluent discharged at Compliance Sampling Point SNP 02-17b exceeded the Water Licence Effluent Quality Criteria for max grab concentration of faecal coliforms (20 CFU/100 ml) on the following dates:

- August 9 – 32 CFU/100 mL (total discharged = 407 m³);
- September 6 – 27 CFU/100 mL (total discharged = 573 m³);
- September 20 – 140 CFU/100 mL (total discharged = 554 m³)

The exceedance was reported as spill to the MVLWB, GNWT Land's Inspector and the Spills Report Line



5. Incidents at Site

➤ Spill #2022505 (Cont.)

As one of the follow up actions, De Beers Spill Report states that:

“Site staff will regularly collect and analyze for faecal coliforms a duplicate sample at Station 02-17b

The field laboratory results will serve as an early indicator that will allow Site Operations to make adjustments to the water treatment process, or pre-emptively shutdown discharge to Snap Lake, and/or investigate further to ensure compliance with the Water License EQCs”

- Through email to De Beers, SLEMA recommended that the first action when there is noncompliance should be to shut down the Effluent discharge and report the exceedance to the Inspector



5. Incidents at Site

➤ Summary of Spills at Site

Table: Summary of Reportable Spills

Date	Substance	Volume	Location	NWT Spill #
April 7	Diesel Exhaust Fluid	400 L	Laydown 1	2022121
April 16	Sewage	20 L	New STP	2022133
June 19	Hydraulic Fluid	250L	Quarry	2022291
August 2	Effluent (untreated)	tbd	SP3	2022400
August 3	Sewage	30 liters	Sewage TP	2022405
Aug & Sep days	Noncompliant Effluent discharged		SNP 02-17b)	2022505



6. Regulatory Updates

- MVLWB's Decision on the 2021 Aquatic Effect Monitoring Plan Annual Report
 - The Board has approved the 2021 AEMP Annual Report with revisions required
 - De Beers is directed to revise the 2021 AEMP Annual Report and submit Version 1.1, by December 19, 2022, to reflect updates as agreed to during the regulatory proceeding
 - When AEMP Design Plan Version 1.3 is submitted for Board approval, the proposed updates pertaining to the GNWT Standards for Reporting Water Quality Information can be distributed for review.



6. Regulatory Updates

- MVLWB's Decision on the 2021 Aquatic Effect Monitoring Plan Annual Report
- The Board required De Beers to submit the Mercury Response Plan by December 19, 2022 to ensure sufficient time is allowed for review and Board decision before the next sampling program in 2023.
- The Board directed De Beers to include the commitment to include assessment of temporal trend for nitrate in future AEMP Annual Reports in the concordance table.



6. Regulatory Updates

➤ THE MVLWB's DECISION ON THE DEBEERS FINAL CLOSURE AND RECLAMATION PLAN (FCRP) V 1.2

On December 7, 2022, the MVLWB communicated that De Beers Snap Lake's FCRP Version 1.2 was approved with revisions required

Revisions will be for confirmation of conformity by Board staff except for closure criteria related to

- Fish Tissue (SW7-3a), and
- the Revegetation Plan (SW3-2d)

These criteria will require a focused public review prior to Board decision



6. Regulatory Updates

- THE MVLWB's DECISION ON THE FCRP V 1.2 (Cont.)
 - Closure Criterion related to Wildlife SW6-3a) was not approved

The MVLWB recommended the discussion on Closure and Post-Closure monitoring of Wildlife be set under the jurisdiction of the GNWT Department of Environment and Natural Resources



6. Regulatory Updates

➤ THE MVLWB's DECISION ON FCRP V 1.2 (Cont.)

1. MVLWB Decision On TK Panel Recommendations

1.1 TK Panel's Fish Tasting Recommendation:

- TK Panel recommended annual fish-tasting during active closure and five-year post-closure
- In response, De Beers notes that the TK fishing tasting schedule for closure has been approved as part of the AEMP Design Plan Version 1.2 , as follow:

Fish tasting will occur once during closure (i.e., 2024) and once during early post-closure (i.e., 2027), or as necessary to verify results of fish health and fish tissue chemistry programs.



6. Regulatory Updates

1. MVLWB Decision On TK Panel Recommendations (Cont.)

1.1 TK Panel's Fish Tasting Recommendation:

The MVLWB agreed with DeBeers' response and noted that:

- The AEMP has a response framework for fish tasting, fish health, and fish chemistry. If any action levels were exceeded, additional monitoring may be warranted
- The fish-tasting schedule during post-closure would have another opportunity to be assessed when the Aquatic Effects Re-evaluation Report is submitted
- prior to post-closure.



6. Regulatory Updates

1. MVLWB Decision On TK Panel Recommendations (Cont.)

1.2 TK Panel's Plant Revegetated Sites Recommendation

The MVLWB pointed out that

- The role of SLEMA representatives on the final evaluation of criteria SW7-3a, Plant Diversity on the revegetated sites is not clear;
- It is not well defined how the opinion of SLEMA representatives will impact the final evaluation of criteria SW7-3a).



6. Regulatory Updates

1. MVLWB Decision On TK Panel Recommendations

1.2 TK Panel's Plant Revegetated Sites Recommendation

The MVLWB pointed out that (Cont.)

- Also, the proposed revegetation species and the monitoring timeline (5 years of revegetation monitoring) do not address reviewer concerns and do not reflect the objective/spirit of SW5 “Landscape features (shape and vegetation) match aesthetics of the surrounding natural area”
- The Board directed De Beers to continue engaging with traditional land users on the acceptability of this criterion.



6. Regulatory Updates

1. MVLWB Decision On TK Panel Recommendations

1.3 TK Panel Site Inspections Recommendations

During the review, TK Panel recommended site visits / inspections by members of the TK Panel

These requests were answered by DeBeers and approved by the MVLWB as follows:

- De Beers will accommodate the traditional knowledge holders visiting the site annually during closure and every 5 years post-closure until closure criteria are achieved.



6. Regulatory Updates

2. MVLWB Decision On Monitoring Timelines

- The monitoring timelines of Effluent and Snap Lake water quality and TDS at Node 22 were set for ten years

The MVLWB thinks that minimum 10-year monitoring for water quality is adequate until more monitoring data becomes available

Also, the Board acknowledged the uncertainty about whether the monitoring timeline was sufficient mentioning that the monitoring criteria and data could be reassessed in the following documents:

- the Performance Assessment Report and
- the Post-Closure and Reclamation Monitoring and Maintenance Plan



6. Regulatory Updates

Invitation to submit recommendations for AEMP Response Plan - Mercury in Fish Tissue

On Dec. 22, reviewers were invited to submit recommendations on De Beers submission of its Aquatic Effects Monitoring Program Response Plan for exceeding a mercury low action level in fish tissue V.1

Review comments were due by
January 24, 2023



6. Regulatory Updates

2021 AEMP Annual Report Version 1.1 – Approved

On Dec 20, the MVLWB received the 2021 Aquatic Effects Monitoring Program (AEMP) Annual Report Version 1.11 submitted by De Beers as opportunely requested by the Board.

Board staff have conducted a conformity check and determined that the submission meets the requirements set out in the Board's Decision Letter.



7. Environmental Agreement Update

ENR-GNWT Approval of DeBeers request to deviate from the Air Quality and Emissions Monitoring and Management Plan V. 2 (AQEMMP)

On December 1st, ENR, in consultation with SLEMA on De Beers' request, granted temporary relief not physically to visit the meteorological station this winter.

This request appears reasonable given the increased access difficulty and the new ability to remotely view and download data.



7. Environmental Agreement Update

- Request to ENR to not Perform Weekly Checks on their Met Station this winter

Also, ENR stated that

Should De Beers QA/QC's review uncover red flags with the data, personnel should attend the station as needed and weather permitting to ensure accurate measurement of meteorological data.

Approval would be granted for this winter season 2022-2023 only and De Beers is expected to report back to ENR for any future deviations.



7. Environmental Agreement Update

➤ Satisfactory Determination of the De Beers Canada Inc. 2021 Snap Lake Environmental Agreement Annual Report

On October 11, De Beers submitted the 2021 Environmental Agreement Annual Report required under Article 10.1 (a) of the Snap Lake Environmental Agreement

Next, the GNWT - Department of Environment and Natural Resources (ENR), requested parties to the Agreement and SLEMA to provide comments

On Dec 21, GNWT communicated that it is satisfied that the contents of the Annual Report are in accordance with Article 10.1 of the Agreement and finds the 2021 Annual Report to be satisfactory.



7. Environmental Agreement Update

➤ DeBeers' Request to Cease the Snap Lake Hydrology Monitoring Program

On December 5, ENR-GNWT sent out for comments

De Beers request to cease monitoring and reporting of the Hydrology Monitoring Program at the Snap Lake Mine

The Hydrology Program is required by the Snap Lake Environmental Agreement and established to monitor for potential and predicted changes to surface water quantity in Snap Lake and other local water bodies

De Beers is proposing that the Hydrology Program is now entirely redundant and warrants modifications to reflect a closed mine rather than an operating mine



8. SLEMA ACTIVITIES

➤ SLEMA CORE GROUP MEETING

A Core Group Meeting was held in Yellowknife on December 2nd, 2022

Topics:

Action Items from the previous meeting

2023-2024 Budget

Financial Update (Q3)

Environment Update



8. SLEMA ACTIVITIES

➤ GNWT/DB Vegetation Monitoring Plan - Discussion

On Nov. 9, a zoom meeting was hosted by DeBeers aimed to discuss the comment made by GNWT during the review of the VMP.

- The Vegetation Monitoring Plan does not appear to provide a linkage to wildlife habitat restoration objectives.
- The Vegetation Monitoring Plan should incorporate habitat objectives linked to the key wildlife species being monitored as part of the Environmental Agreement



8. SLEMA ACTIVITIES

- SLEMA Review of DeBeers Request to ENR to not Perform Weekly Checks on their Snap Lake Hill Meteorological Station (Met Station) this winter

On Nov 7, ENR received a request from De Beers asking for the winter of 2022/2023, to remotely check the MET Station for data quality, instead of physically

They proposed to decrease the frequency to perform physical inspection this winter, from weekly to monthly.

SLEMA reviewed the request and indicated that it did not have significant concerns

The request appears reasonable given the increased access difficulty and the new ability to remotely view and download data

