3 October 2024

De Beers Canada Inc.
Suite 300 – 1601 Airport Road NE
Airport Corporate Centre
Calgary, AB T2E 6Z8

Water Licence
MV2019L2-0004

Attn: Ms. Michelle Peters,

Re: September GNWT Department of Environment and Climate Change Water Licence Inspection

A water licence inspection was conducted on September 26, 2024, at the Snap Lake Diamond Mine. The inspection was completed by Tom Bradbury, Resource Management Officer III, and accompanied by Ken Humby (General Superintendent).

As per the noted Water Licence and applicable Land Use Permits granted in accordance with the *Waters Act* and the *Mackenzie Valley Resource Management Act*, please be advised that the attached Inspection Report is part of the Public Registry and is intended to keep all interested parties informed of the manner in which Licence requirements are being met.

This report provides comments based on general observations and highlights any concerns or items that should be addressed by the Licensee. Attached is the full Inspection Report along with related site photographs.

The following areas were inspected and the details of the findings are included in the attached report:

- Perimeter Sumps/Construction/Water Management
- Refueling Station/Fuel Storage
- Waste Management Areas

There will remain some concerns regarding the East Inflow Storage Pond (EISP), until plans for water management have been provided by De Beers. De Beers continues to assess the seepage issue and has been working with the Inspector to address water management in the short term.

If you have any questions or concerns please contact the undersigned at (867) 446-9187 extension 24196 or cell at (867) 446-4487.

Thank you for your cooperation.

Sincerely,



Tom Bradbury
Resource Management Officer III
GNWT-E.C.C.
North Slave Region
tom_bradbury@gov.nt.ca

Cc:

Michelle Peters – Closure Manager, De Beers
Chris Petrovic – Senior Project Manager, MetNuna Logistics
Jordan Gunter - Senior Project Manager, MetNuna Logistics
Beth Cowan – Regulatory Specialist, Mackenzie Valley Land and Water Board
Shin Shiga – Executive Director, Snap Lake Environmental Monitoring Agency



INDUSTRIAL WATER USE INSPECTION REPORT

INSPECTION DATE: September 26, 2024 **COMPANY REP : Michelle Peters**

LICENSEE: De Beers Canada Inc. **LICENCE #: MV2019L2-0004**

Water Licence Expiry: June 13, 2035

WATER SUPPLY

Source: Snap Lake (Fresh Water Intake) **Quantity Used:** Cubic meters utilized through **Meter rdg:**

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected

Intake Facilities	N/I	Storage Structures	A	Treatment Systems	N/A	Recycling	N/I
Flow Meas. Device	N/I	Conveyance Lines	N/A	Pumping Stations	N/A	Modifications	N/I

WASTE DISPOSAL

Indicate: A - Acceptable U - Unacceptable N/A - Not Applicable N/I - Not Inspected

Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Underground	N/A		
Sewage:	Sewage Treat.	A	Tailings pond	N/A	Natural Water	N/A		
	Continuous Discharge	N/A	Inter. Discharge	N/I				
Solid Waste:	Open Dump	N/A	Landfill	A	Burn & Bury	N/A	Underground	N/A

Discharge Quality	A	Conveyance Lines	N/I	Disch. Meas. Dev.	N/I	Freeboard	A
Decant Structures	N/I	Pond Treatment	N/A	Dams, Dykes	A	Seepages	A*
Dyke Inspections	N/I	Runoff Diversion	N/A	Erosion	A	Spills	A*

GENERAL CONDITIONS

Indicate: A – Acceptable; U – Unacceptable; N/A – Not Applicable; N/I – Not Inspected; * – Cautionary Remark

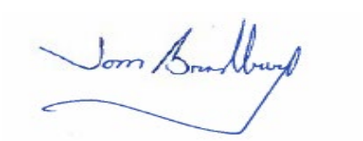
Ore & Waste Rock Stockpiles	N/A	Records & Reporting	A	Surv. Net. Prog.	A
Geotechnical Inspection	N/I	Posting, Signage	A	Contingency Plan	N/I
Reclamation Activities	A	New Construction	N/A	Fuel Storage	A
Mine Water Discharge	A	Chemical Storage	A	Annual Report	A

Licensee Representative's Title: Ms. Michelle Peters – Closure Manager

Licensee Representative's Signature: Inspection issues discussed with MetNuna Logistics personnel.

Inspector's Name: Tom Bradbury

Inspector's Signature



October 3, 2024

Comments Section on Specific Aspects Inspected:

Fuel Transfer

- This area now consists of a lone double walled 85,000 L mobile tank that will be filled as required. The tank has been relocated since the September 9 inspection, as the previous area is being reclaimed.
- Drip trays were available, along with a spill kit.
- The nozzle is placed in secondary containment (Photo 1).
- No leakage was observed from the tank, nozzle or hose and there was no hydrocarbon staining observed.
- There are 9 B-trains left on site for fuel supply, which are no longer in a lined area, as the liners were all removed as part of closure activities. The fuel remains in the old tank farm area, which remain bermed.

Waste Management/Storage Areas

- Almost all hazardous waste, sea cans, and miscellaneous materials have been relocated to the old tank farm and surrounding area for consolidation and ease of access purposes (Photos 2-3).
- Makeshift lined areas are in place for much of the hydrocarbon related products being used and for some of the waste products until removal from site.
- A large pile of material, mostly consisting of cables and wiring is to be salvaged for the metals component, such as copper. MetNuna staff stated that Precision North Recycling would be removing the materials from site via winter road.

North Pile/Surrounding Areas

General Activities

- MetNuna staff have indicated that the plan is to be completed all North Pile earthworks by October 13, 2024.
- Small sections of the North Pile are still being backfilled and sloped (Photos 4-5), as the last of the site waste is being cut and disposed of. Remaining waste earmarked for disposal consists of sea cans and lighting/electrical components removed from the airstrip (Photo 6), and culverts that are to be pulled from the main road (between the EISP and outlet channel) and the airstrip.
- Cell 3 will remain open until the last of the materials earmarked for site disposal occurs, which are metal-related.

Miscellaneous Closure Activities

- MetNuna staff have stated that the airstrip will now allow small aircraft to land going forward (beyond closure), where previously it was noted the entire airstrip would be scarified and not accessible to any aircraft. The remainder of site staff will now exit site via small aircraft at the end of October.
- There are sections around site which are still being contoured for passive drainage.
- Swales continue to be constructed in areas where drainage is to be directed to flow in a specific direction.
- One of the last stages pertaining to earthworks will be to place topsoil (former organics stockpiled material) in earmarked areas to promote natural vegetation (Photo 7). This will occur once scarification is completed.
- One incinerator will remain on site, while the other will be removed from site by Lenmark (affiliated company involved in mining equipment sales on the secondary market).
- The Bulk Sample Pit will have a 2 metre berm constructed to deter wildlife from accessing the area.
- MetNuna personnel stated that October 31, 2024 would be the last day for site staff.
- A small crew will arrive at site for the spur road construction which will continue through January/February 2025.
- The spur road will be open through March to allow the removal of the remainder of hazardous waste, B-trains, and miscellaneous materials not earmarked for site disposal, along with the temporary camp.

Perimeter Sumps

General Activities

WISP

- Pumping has ceased, as MetNuna determined the desired elevation of water has been reached and there remains sufficient capacity for inflows during freshet 2025 (Photo 8).
- Pumping ceased on September 24, 2024.
- TSS remained below EQC during the pumping process.

*EISP

- You can now visually observe the outflow of water on the North side of the sump (Photo 9), towards Snap Lake.
- There is approximately 75-100 meters distance between the EISP and Snap Lake.
- Seepage flow rates need to be ascertained to determine the loss of water from the sump.
- Water continues to be pumped from the EISP outlet channel to Snap Lake to ensure adequate capacity during freshet (Photo 10).

A summary of events pertaining to the seepage related spill at EISP is detailed below:

- De Beers provided notification to the Inspector via phone call on July 5, 2024. At this time drawdown of the EISP was being executed to lower the volume.
- Samples were taken at the EISP and sent to the lab July 8.
- A routine monthly inspection was conducted at Snap Lake on July 11, whereby updates to the EISP were discussed.
- An update was provided to the Inspector on July 16, which included surveyed water elevations of the EISP and surrounding topography, sample results of the EISP and surrounding locations, and next steps. It is important to note that the sample results provided by De Beers demonstrated that the water quality of the EISP met EQC, and could therefore be discharged to Snap Lake with authorization from the Inspector.
- Another update was provided to the Inspector on July 20 which included a statement that the Engineer of Record was working on assessment of the potential seepage rate and quantities from the EISP. Drawdown of water in the EISP was continuing and it was more apparent that seepage was occurring on the North side of the EISP (closest to Snap Lake).
- On August 13 another monthly inspection was conducted and the Inspector stated to De Beers staff that there was enough evidence that the excessive seepage from the EISP was most likely entering Snap Lake from the North side of the sump, and that loss of containment was reason enough to file a spill report.
- On August 16 the Inspector requested De Beers file a spill report and De Beers obliged that same day.
- A meeting was held between De Beers and the Inspector on August 20, and a comprehensive update was requested to be submitted by August 23.
- As discussed, De Beers provided a more thorough update to the Inspector on August 23.
- Upon review of the August 23 report it was determined that there remained inadequate information to get a clear idea of how water management at site would be managed for the remainder of 2024 and through to freshet 2025.
- A second meeting was held between the Inspector and De Beers on August 28 whereby the Inspector explained that more information needed to be provided with emphasis on water volumes coming into site versus the capacity of site infrastructure.
- Correspondence was provided to De Beers on August 30 requesting site specific water balance criteria to be submitted no later than September 13, 2024.
- De Beers provided and update to the EISP on September 13.
- Water is being pumped back to the EISP to investigate loss of containment.
- Flow rate loss out of the EISP is being monitored to assess an approximate volume or volume range of water which entered Snap Lake.

<u>*Spills</u>

Spill-2024317

- Assessment of seepage for this spill remains ongoing. De Beers staff have stated that a volume for seepage will be provided in the 30-day follow-up report. Spill will remain open until mitigation measures are proposed.



Photo 1 – Refuelling Area – Secondary containment, drip trays and spill kit in place.



Photo 2 – Waste Storage Area – All materials have been consolidated.



Photo 3 – Waste Storage Area – Most materials are earmarked for removal.



Photo 4 – North Pile – Backfilling and sloping (1).



Photo 5 – North Pile – Backfilling and sloping (2).



Photo 6 – Airstrip – Waste from airstrip reclamation designated for Cell 3 disposal.



Photo 7 – Old Accommodations Area – Earmarked for topsoil placement.



Photo 8 – WISP – Pumping has ceased as desired volume was reached.



Photo 9 – EISP – Seepage observed on the north side of the sump, closest to Snap Lake.



Photo 10 – EISP Outlet Channel – Water being pumped to Snap Lake.