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February 8, 2024

Licensing
Nunavut Water Board
P.O. Box 119
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Re: January 2024 – Monthly Monitoring Report for Water License 2AM-DOH1335

This report is comprised of the monitoring requirements set out in Part I and Schedule I of water licence 2AM-DOH1335 Amendment 2 (the license), and additional requirements from CIRNAC.

In March 2022, Agnico Eagle made the decision to maintain the suspension of production activities at the Doris Mine site and Madrid North Portal to dedicate the infrastructure of the Hope Bay site to exploration activities. As such, the mill operation will remain suspended and underground activities will focus on exploration development. As the mill will not be operational for the foreseeable future, Table 4: Volume of Reclaim Water from the TIA for Process Water has been removed.

In February 2023, Agnico Eagle made the decision to temporarily cease underground development of the Doris mine. The final blast occurred on April 19, 2023 and all waste rock haulage was completed on April 24, 2023. Until development is restarted, the main focus underground will be on care and maintenance.

During the subject period of this report, the focus of activities at Doris was water management, environmental compliance, and the maintenance of the underground mine.

Sampling locations monitored under this licence (seasonally or when facilities are operational) are provided in Figure 6 through Figure 8 at the end of this report.

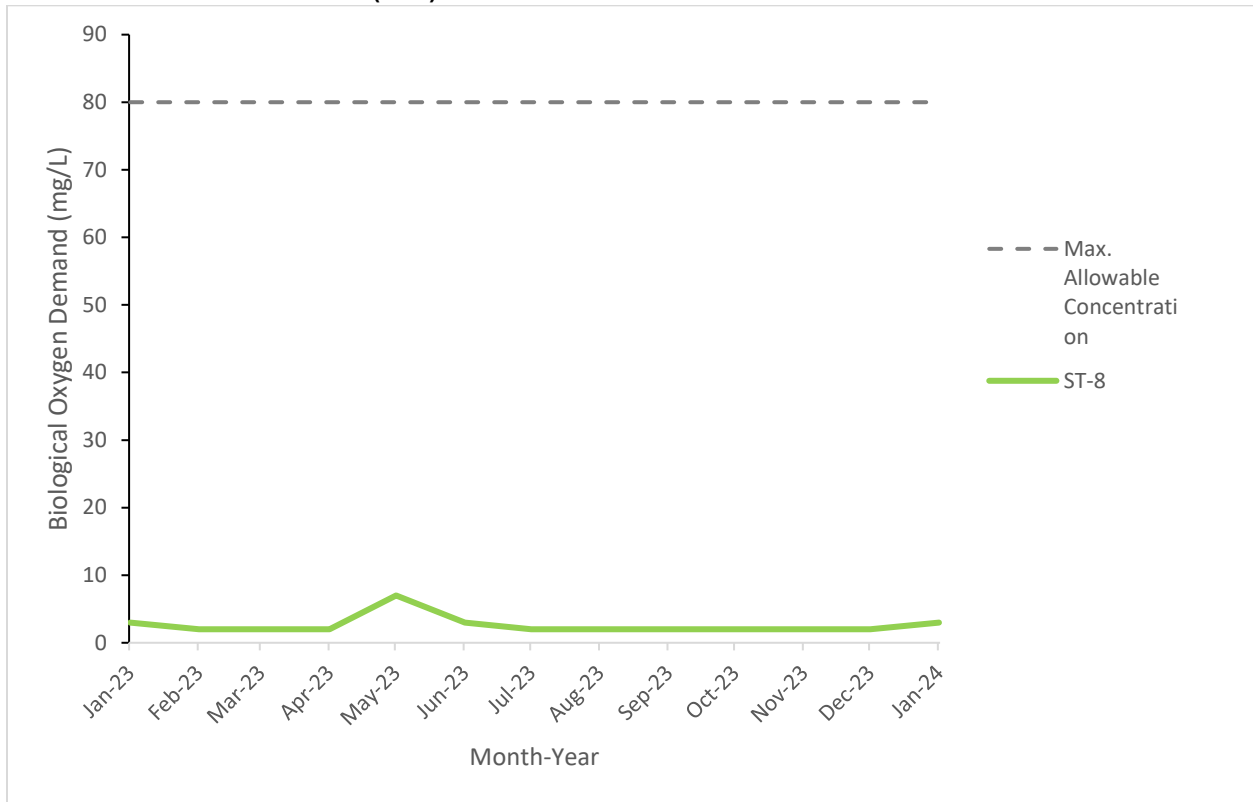
Site Wide Water Quality Monitoring Program (Part I Item 3 and Schedule I)

Water quality sampling was conducted throughout the month at monitoring stations identified in Schedule I of the licence (ST-1 through ST-13, TL-1 through TL-12 and MMS-1 through MMS-10). Water quality samples were not collected for monitoring stations that were inactive during the month being reported (e.g., facilities that had not yet been constructed, were frozen during the month, or were not operationally active).

All parameters were compared to the applicable effluent quality limits outlined in Part D and Part F of the licence. No exceedances of effluent quality limits were observed in any samples collected this month. Results of all water quality monitoring are provided in Appendix A attached to this report.

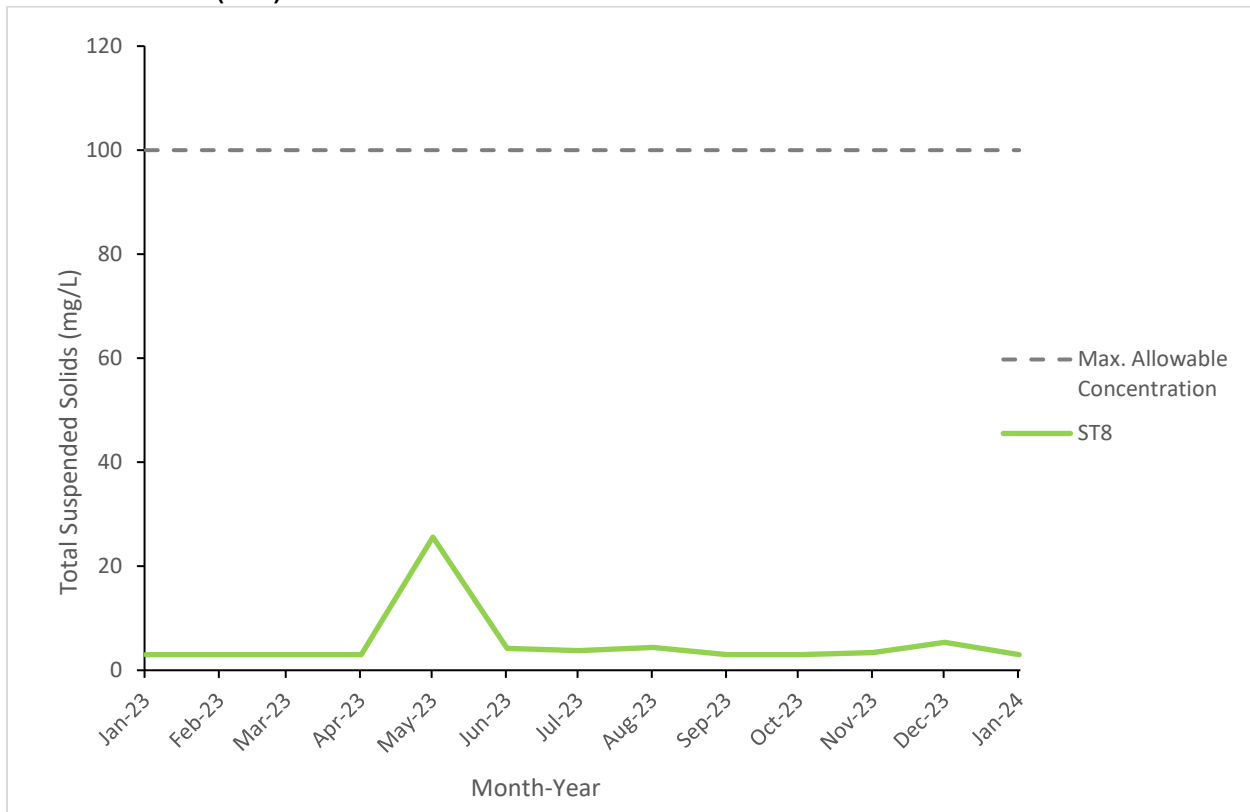
Figure 1 and 2 illustrates effluent quality characteristics for parameters of interest at select monitoring stations.

Figure 1. Biological Oxygen Demand Results Consistently Below Discharge Criteria for Wastewater Treatment Plant (ST8)



Note: Maximum Average Concentration as per Part F Item 4(b).

Figure 2. Total Suspended Solids Results Consistently Below Discharge Criteria for Wastewater Treatment Plant (ST8)



Note: Maximum Average Concentration as per Part F Item 4(b).

Flow and Volume Measurements (Part F, Part I and Schedule I)

Table 1. Effluent discharge, January 2024

Facility	Station Code	Discharge Volume (m ³)	Exceedances of Discharge Criteria	Discharge Location	Licence Reference
Doris Sedimentation Pond *	ST-1	0	N/A	Tailings Impoundment Area	Part F Item 17
Doris Contact Water Pond #1	ST-2	0	N/A	Doris sedimentation pond	Part F Item 17, 18(a)
Non-Hazardous Landfill Sump	ST-3	0	0	Facility not constructed	Part F Item 18(a)
Land farm Sump	ST-4	0	0	Tailings Impoundment Area	Part F Item 18(b)
Doris Plant Site Fuel Storage Area	ST-5	0	0	Tailings Impoundment Area	Part F Item 18(b)
Rob Bay Single 5ML Fuel Storage Area	ST-6a	0	0	Tundra Discharge 13W 432954 7563407	Part F Item 18(b)
Rob Bay Fuel Storage and Containment Berm	ST-6b	0	0	Doris sedimentation pond	Part F Item 18(b)
Doris Sewage Treatment Plant, Effluent	ST-8	455	0	Tundra Discharge 13W 432933 7559057	Part F Item 5(b-c)
Doris Sewage Treatment Plant, Sludge	N/A	7.2	N/A	Tailings Impoundment Area	Part I Item 5(f)
Doris Reagent and Cyanide Storage Facility Sump	ST-11	0	N/A	Tailings Impoundment Area	Part F Item 17
Doris Contact Water Pond #2	ST-13	0	N/A	Facility not constructed	Part F Item 17
Doris Mine Water Discharge	TL-12	52,982	N/A	Tailings Impoundment Area Roberts Bay	
Madrid North Contact Water Pond	MMS-1	0	0	Tailings Impoundment Area	Part F Item 17, 18(a)
Madrid South Primary Contact Water Pond	MMS-2	0	N/A	Facility not constructed	Part F Item 17, 18(a)
Madrid South Secondary Contact Water Pond	MMS-3	0	N/A	Facility not constructed	Part F Item 17, 18(a)
Madrid South Fuel Storage Facility	MMS-5	0	0	Facility not constructed	Part F Item 18(b)
Madrid North Connector	MMS-7	0	N/A	Facility not constructed	
Madrid North Fuel Storage Facility	MMS-8	0	0	Facility not constructed	Part F Item 18(b)
Madrid Mine Water Discharge	MMS-10	0	N/A	Tailings Impoundment Area	

Records of visual monitoring of discharge to tundra are maintained on file as per Part I Item 11.

* Note: Volume reported includes effluent transferred from the Doris Contact Water Pond #1, Landfarm Sump, Doris Plant Site Fuel Storage Area and Madrid North Contact Water Pond.

Table 2. Discharge from TIA to Roberts Bay, January 2024

Month	Number of days of discharge	Discharge Volume (m ³)	Exceedances of Discharge Criteria*
January	31	241,248	0
Annual Cumulative	31	241,248	0

* Discharge criteria as outlined in *Metal and Diamond Mining Effluent Regulations*.

Acute Lethality testing conducted as outlined in Part F Item 22 and Part I Item 14

Table 3. Water Usage, January 2024

Month	Windy Lake (ST-7A)				Doris Lake (ST-7)				Patch Lake	Total Usage
	Domestic Water*	Industrial**	Winter Track	Dust Suppression	Domestic Water*	Industrial Usage**	Dust Suppression	Winter Track	Winter Track	
January	583	0	0	108	0	0	0	0	35,772	36,463
Annual Total	583	0	0	108	0	0	0	0	35,772	36,463
Annual Allowance	43,800					1,930,000			60,000	2,033,800

* As permitted by water licences 2BE-HOP1222 and 2AM-DOH1335 Part E Item 1 and Part I Item 5(a)(b)

** Includes industrial uses such as underground drilling, core processing, milling, concrete batching, etc.

Table 4. Doris Waste Rock and Ore Volumes, January 2024

Month	Waste Rock Management						Underground Void Space			Ore Processing and Tailings Management		
	Produced from Mining Activity (tonnes)	Backfilled Directly to Mine (tonnes)	Returned Underground from Temporary Waste Rock Pile* (tonnes)	Waste Hauled for Surface Construction from Surface Stockpile (tonnes)	Moved to Temporary Waste Rock Pile (tonnes)*	Cumulative on Temporary Waste Rock Pile (tonnes)*	Volume Created from Mining Activities (tonnes)	Cumulative Volume Available for Backfill (tonnes)	Cumulative Volume Available for Backfill (m³)	Quantity of Ore Processed** (tonnes)	Total Dry Tailings Placed in TIA** (tonnes)	Total Dry Detoxified Tailings Placed Underground** (tonnes)
December Balance	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
January	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
Cumulative Total	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0

* As per Part I Item 5(d)(e)

** As per Part I Item 6

Note: Void space created from mining activities is determined as the sum of the initial void space as calculated in March 2017 and void space created each month from mining activities. A negative volume of void space created in a month indicates that a higher volume of waste rock and detoxified tailings was returned underground compared to the volume of void space created from new mining activities.

Table 5. Madrid North Waste Rock and Ore Volumes, January 2024

Month	Waste Rock Management						Underground Void Space			Ore Produced
	Produced from Mining Activity (tonnes)	Backfilled Directly to Underground Mine (tonnes)	Returned Underground from Temporary Waste Rock Pile* (tonnes)	Moved to Temporary Waste Rock Pile (tonnes)*	Moved to Naartok East Crown Pillar Trench for Backfill (tonnes)*	Cumulative on Temporary Waste Rock Pile (tonnes)*	Volume Created from Mining Activities (tonnes)	Cumulative Volume Available for Backfill (tonnes)	Cumulative Volume Available for Backfill (m³)	Quantity of Ore Produced** (tonnes)
December Balance	-	-	-	-	-	0	-	-	-	-
January	0	0	0	0	0	0	0	0	0	0
Cumulative Total	0	0	0	0	0	0	0	0	0	0

* As per Part I Item 5(d)(e)

** As per Part I Item 6

Note: Void space created from mining activities is determined as the sum of the initial void space as calculated in December 2021 and void space created each month from mining activities. A negative volume of void space created in a month indicates that a higher volume of waste rock was returned underground or backfilled in the Naartok East Crown Pillar trench compared to the volume of void space created from new mining activities.

Table 6. Doris Lake Water Level (ST-12), January 2024

Month	Minimum Water Level (masl)	Maximum Water Level (masl)	Mean Water Level (masl)	Monthly Water Level Variation (masl)*	Comparison of Mean Water Level from Month to Month (masl)^
January	21.510	22.217	27.798	0.268	6.033

* Monthly Water Level Variation is calculated as the difference between the Maximum Water Level and the Minimum Water Level measured during the month.

^ Comparison of the change in water level from month to month. This value is calculated by subtracting the Mean Water Level of the current month from the Mean Water Level of the previous month (e.g. February Mean Water level - January Mean Water level). A positive value from this calculation indicates a rise in water level since the previous month; a negative value from this calculation indicates a drop in water level since the previous month.

Waste Management (Part F Item 10 and 11)

In January, Agnico shipped hazardous waste offsite via empty cargo aircraft. Table 7 below summarizes the type and volume of waste shipped offsite for disposal during this month.

Table 7. Waste Backhaul

Waste Type	Volume Shipped* (m ³)
Kitchen grease	2

Summary of Assessments of Water Balance and Water Quality Model

(Part F Item 24 and Part I Item 12 c)

Average monthly water quality, hydrologic, and climatic monitoring data were collected while in operations during January. Data will contribute to the assessment of the water and load balance model and will be compared to the predicted water quality and elevation within the TIA and will be reported in the annual report for 2023.

Thermal Monitoring (Part I Items 7, 8 and Schedule I)

Thermal monitoring undertaken as per Part I Items 7, 8 and Schedule I is reported in the annual Geotechnical Report.

Site Freshet and Precipitation Conditions (Part I Item 12(d))

Visual monitoring was conducted at the Diversion Berm this month. No issues were identified at the Diversion Berm and associated check dam in January. Photos of this infrastructure are provided in Figure 3 below.

Inspections were suspended of site culverts throughout the month of December due to snow build up. Inspections are due to be resumed in freshet of 2024.

Figure 3. Diversion berm during January 2024



Incident Reporting

Spill 2023-540 On January 06, 2024, at 07:40 pm, a spill of approximately 300L of sewage was noted by operators, coming from a leak in a frozen sewage line underneath the core shack. The coordinates remain the same as the initial report and the impacted area is approximately 9m².

On January 07, 2024, at approximately 02:15 pm, the Nunavut Spill Line was notified via email (spills@gov.nt.ca) of a spill of approximately 300L of sewage. This follow-up report provides supplemental information based on the results of the incident investigation.

During regular operations, the sewage line in question transports raw sewage from the core shack to the sewage treatment plant (STP). After noticing an interruption in the water management system of the core shack, the spill was identified.

Following an investigation, it was concluded that the root cause of the spill was related to the sewage pipe breaking due to the pressure exerted by the fluid inside the pipe freezing. It was further established that the heat trace on that section of the line had remained on the factory setting, set at 30C, which was not high enough to maintain the line's temperature above freezing during the rapid drop in temperature experienced in the days prior.

Once the spill was noticed by the operators, the area was secured, and the frozen sewage material was cleaned up. Clean-up efforts were hampered by the limited access to the spill area and the frozen pad. A maximum of the frozen sewage was removed, and the line was repaired to prevent further spillage. Once the ground has thawed after freshet, the gravel from the pad beneath the core shack will be excavated and disposed of appropriately to ensure that any potentially contaminated materials are removed. It is not expected that any sewage will be entrained from the pad during freshet, however any potential run-off would be captured by the catchment sumps that are downstream of the pad and would be identified in the monthly samples that are required to be taken in those locations. The broken pipe section was replaced and additional insulation was fitted.

In order to reduce the risk of reoccurrence, the heat trace on the line has been increased to 10 oC and all heat tracing on-site has been checked to ensure they are at the required minimum temperature. Additionally, a temperature set-point check has been added to the monthly preventative maintenance schedule of the heat tracing system.

Should there be any questions regarding this monthly report, please contact me at brett.fairbairn@agnicoeagle.com.

Yours sincerely,



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Figure 6. 2AM-DOH1335 SNP Monitoring Locations



Figure 7. 2AM-DOH1335 SNP Monitoring Locations



Figure 8. 2AM-DOH1335 SNP Monitoring Locations

