



145 King Street East
Suite 400,
Toronto, Ontario M5C 2Y7
416-628-0216

Sent by Email

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Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0B 1J0

Re: March 2023 – 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 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.

During the subject period of this report, the focus of activities at Doris was water management, environmental compliance, and a ramp down of underground mining.

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).

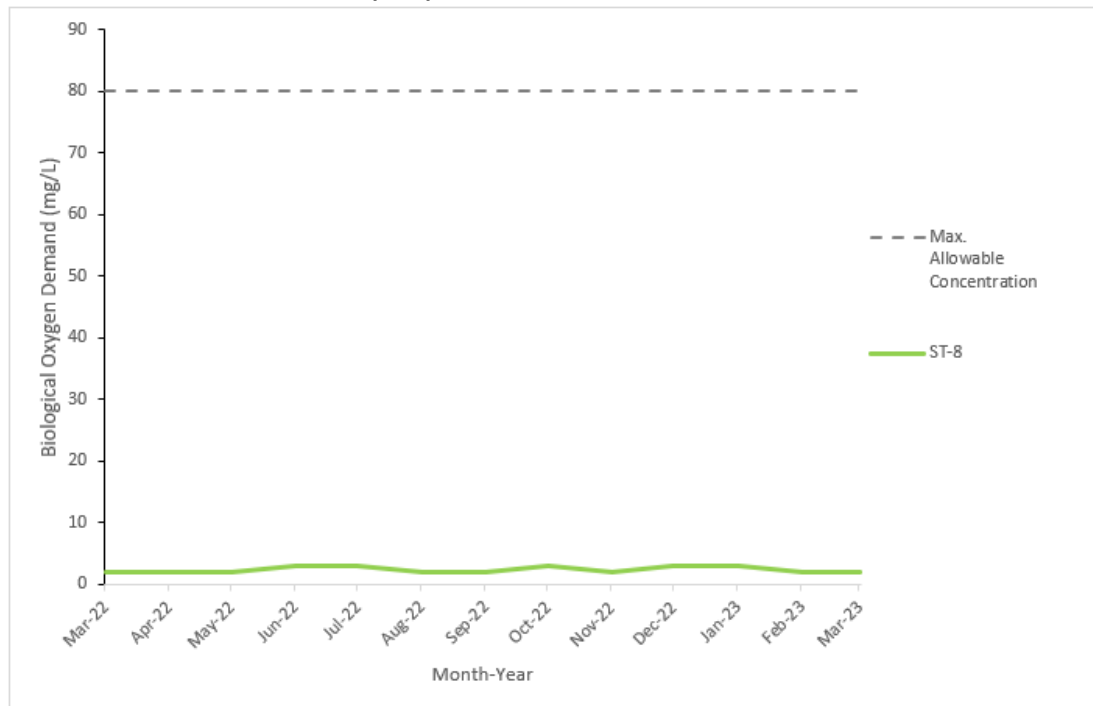
All parameters were compared to the applicable effluent quality limits outlined in Part D and Part F of the licence. No exceedances of effluent quality limits were observed in any samples collected this month. Results of all water quality monitoring are provided in Appendix A attached to this report.

A reporting error was noted in Table 4 – Doris Waste Rock and Ore Volumes. The initial cumulative volume for 2023 was incorrect and should have read 741, 861 tonnes, as was the initial net UG void volume for 2023, which should have read 848, 809 m³. Furthermore, the calculation of the cumulative volume available for backfill was incorrect with created volume being subtracted from the total instead of being added. All the data in that column was updated and the error in our calculations corrected.

A further reporting error was noticed in Table 6 – Doris Lake Water Level for the month of January 2023. The mean water level should have read 22.013 masl. The correction was made, along with the resulting calculated variations in monthly water level.

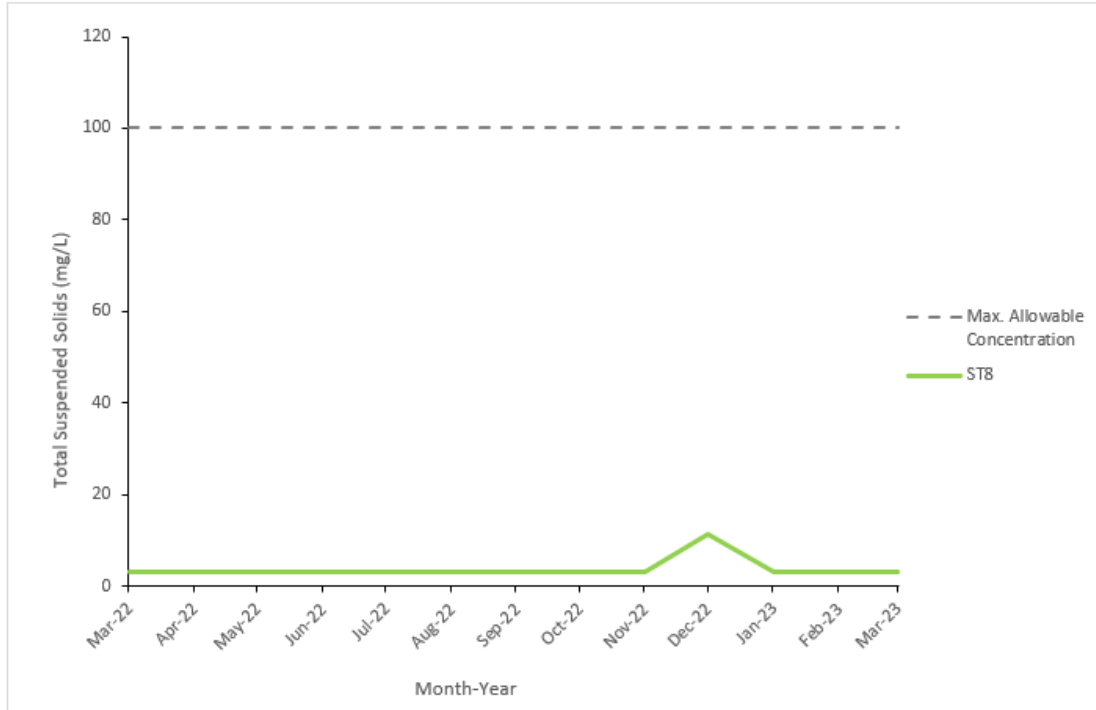
Figure 1 and 2 illustrates effluent quality characteristics for parameters of interest at select monitoring stations.

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, March 2023

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	Tundra Discharge 13W 432878 7563130	Part F Item 18(b)
Doris Sewage Treatment Plant, Effluent	ST-8	781	0	Tundra Discharge 13W 432933 7559057	Part F Item 5(b-c)
Doris Sewage Treatment Plant, Sludge	N/A	28.1	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	49,219	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, March 2023

Month	Number of days of discharge	Discharge Volume (m ³)	Exceedances of Discharge Criteria*
January	0	0	0
February	0	0	0
March	0	0	0
Annual Cumulative	0	0	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, March 2023

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	973	0	1,604	0	0	0	0	690	1,560	4,827
February	1,147	22	532	0	0	29	0	662	480	2,872
March	1,020	8	511	0	0	0	0	1,498	0	3,037
Annual Total	3,139	30	2,647	0	0	29	0	2,850	2,040	10,735
Annual Allowance	43,800					1,930,000				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, March 2023

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	-	-	-	-	-	741,861	-	1,727,676	848,809	-	-	-
January	10,557	0	0	0	10,557	752,418	10,557	1,738,233	852,580	0	0	0
February	9,523	0	0	2,401	9,523	759,540	9,523	1,747,756	855,981	0	0	0
March	11,977	0	0	4,369	11,977	767,148	11,977	1,759,733	860,258	0	0	0
Cumulative Total	32,057	0	0	6,770	32,057		32,057			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, March 2023

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
February	0	0	0	0	0	0	0	0	0	0
March	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), March 2023

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	21.979	22.043	22.013	0.000	0.000
February	21.985	22.042	22.013	0.056	-0.030
March	21.971	22.016	21.992	0.045	-0.021

* 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 March, 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 March. 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 March. 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 2023.

Figure 3. Diversion berm during March 2023



Incident Reporting

No incidents pertaining to this licence occurred this month.

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

Yours sincerely,

A handwritten signature in cursive script, reading "Guillaume Dumont-Vandewinkel".

Guillaume Dumont-Vandewinkel
Environmental Coordinator
Hope Bay Project
(819) 759-3555 ext. 4600101

Cc:

Jonathan Mesher, Water Resources Officer, CIRNAC

Eric Steinmetzer, General Manager – Hope Bay, Agnico Eagle

Nancy Duquet-Harvey, Environmental Superintendent – Hope Bay, Agnico Eagle

Figure 6. 2AM-DOH1335 SNP Monitoring Locations



Figure 7. 2AM-DOH1335 SNP Monitoring Locations



Figure 8. 2AM-DOH1335 SNP Monitoring Locations

