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**May 31, 2022**

Licensing  
Nunavut Water Board  
P.O. Box 119  
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**Re: April 2022 – Monthly Monitoring Report for Water Licence 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 licence), and additional requirements from CIRNAC.

On February 2, 2021 TMAC was purchased by Agnico Eagle Mines Limited (Agnico Eagle) and became a wholly owned subsidiary of Agnico Eagle. Effective as of January 1st, 2022, Agnico Eagle and TMAC amalgamated and continued under the Agnico Eagle name. Accordingly, by operation of law and without any further acts or steps necessary, TMAC ceased to exist and continued as Agnico Eagle, and Agnico Eagle possessed all of the property, rights, privileges and franchises and is subject to all liabilities, including civil, criminal and quasi-criminal, and all contracts, disabilities and debts of TMAC.

In March 2022, Agnico made the decision to maintain the suspension of production activities at the Doris Mine site and Madrid North Portal, in order 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.

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.

Dewatering of the Tailings Impoundment Area (TIA) and the Doris underground workings through the Robert's Bay Discharge System was halted on November 29, 2021, to remain compliant with MDMER and was not restarted this month. Dewatering of the Doris underground workings through the mill tailings system to the TIA also continued this month.

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.

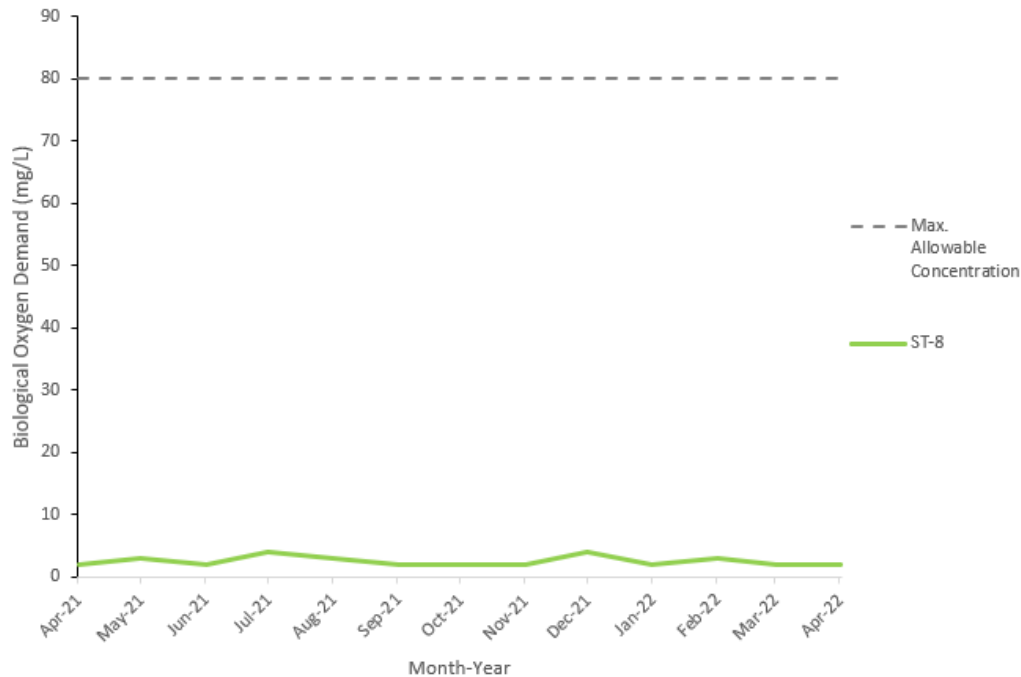
**Site Wide Water Quality Monitoring Program (Part I Item 3 and Schedule I)**

Water quality sampling was conducted in April 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.

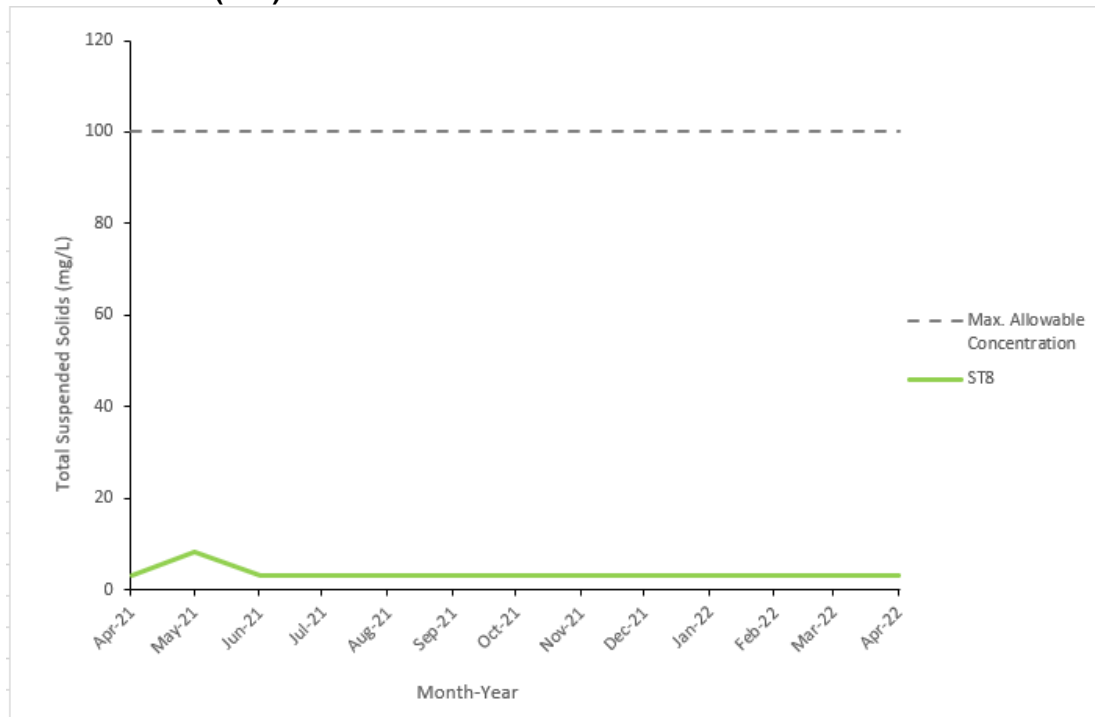
Figure 1 and 2 illustrates effluent quality characteristics for parameters of interest at select monitoring stations.

**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, April 2022

Facility	Station Code	Discharge Volume (m <sup>3</sup> )	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	Tailings Impoundment Area	Part F Item 17, 18(a)
Non-Hazardous Landfill Sump	ST-3	0	0	Facility not constructed	Part F Item 18(a)
Landfarm 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	686	0	Tundra Discharge 13W 432933 7559057	Part F Item 5(b-c)
Doris Sewage Treatment Plant, Sludge	N/A	21.3	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	48,550	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, April 2022**

Month	Number of days of discharge	Discharge Volume (m <sup>3</sup> )	Exceedances of Discharge Criteria*
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
<b>Annual Cumulative</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* 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, April 2022**

Month	Windy Lake (ST-7A)				Doris Lake (ST-7)					Total Usage
	Domestic Water*	Industrial**	Winter Track	Surface Exploration	Domestic Water*	Surface Exploration	Industrial Usage**	Dust Suppression	Winter Track	
January	784	14	10	55	0	0	0	0	0	863
February	1,087	12	493	223	0	0	0	0	0	1,815
March	1,017	16	1,114	386	0	212	0	0	300	3,045
April	745	0	288	0	0	0	0	0	80	1,113
<b>Annual Total</b>	3,633	42	1,905	664	0	212	0	0	380	6,836
<b>Annual Allowance</b>	<b>43,800</b>						<b>1,930,000</b>			<b>2,033,800</b>

\* 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. Volume of Reclaim Water from the TIA for Process Water, April 2022**

<b>Month</b>	<b>Reclaim Water (m<sup>3</sup>) *</b>
January	58,144
February	77,385
March	29,403
April	0
<b>Annual Cumulative</b>	<b>164,902</b>

\* As per Part E Item 5 and Part I Item 5(c)  
Numbers rounded to the nearest cubic meter.

Table 5. Doris Waste Rock and Ore Volumes, April 2022

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)	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	-	-	-	-	723,872	-	1,700,749	751,239	-	-	-
January	12,306	2,214	0	10,092	733,964	15,751	1,558,255	677,353	0	0	0
February	9,080	6,565	0	2,515	736,479	6,521	1,551,734	679,682	0	0	0
March	11,560	6,644	0	4,916	741,395	2,923	1,548,811	680,726	0	0	0
April	12,368	0	0	12,368	753,763	12,368	1,561,179	685,143	0	0	0
Cumulative Total	45,314	15,423	0	29,891		37,563			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 6. Madrid North Waste Rock and Ore Volumes, April 2022

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
April	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 7. Doris Lake Water Level (ST-12), April 2022**

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	21.774	21.802	21.788	-0.005	-0.010
February	21.755	21.790	21.774	0.035	-0.014
March	21.742	21.764	21.753	0.023	-0.021
April	21.718	21.753	21.735	0.035	-0.018

\* 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 April, Agnico shipped hazardous waste offsite via empty cargo aircraft. Table 8 below summarizes the type and volume of waste shipped offsite during this month. Four totes of waste oil were received by Buffalo Airways Ltd. in Yellowknife for recycling in waste oil heaters at that facility.

**Table 8. Waste Backhaul**

Waste Type	Volume Shipped* (m <sup>3</sup> )
Used Oil	4

## **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 April. 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 2022.

### **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 April. Photos of this infrastructure are provided in Figure 3 below.

Inspections were completed of site culverts throughout the month of September 2021. The culvert inspections have been suspended until freshet 2022 since they are no longer visible. No issues were identified with these water management structures as they were observed to be frozen due to the onset of winter.

**Figure 3. Diversion berm during April 2022**



### **Incident Reporting**

NU Spill #2022-13 – On April 23, 2022m a spill of less than 1 kg of ANFO (Ammonium Nitrate Fuel Oil) explosive pellets was reported to the snow-covered gravel pad commonly referred to as the Doris portal laydown. (spill location 68°8'16", 106°36'16")

The pad is used as a transit location for ANFO sea-cans and is where unloading of the bags occurs. The spill was identified by site personnel who were in the area and the spill was immediately cleared up and the contaminated material was appropriately disposed of in the next scheduled blast.

The discharge occurred 330m away from the nearest water body and was not on or near any other designated sensitive habitats. The pad is directly upstream of the Doris Contact Water Ponds which collect any run off from this area.

The investigation identified the cause of the spill as being due to a screw in the inside of the sea-can puncturing the bag.

### **Mitigation measures**

In order to avoid the repetition of such a spill, Agnico Eagle modified the shipping method to prevent the puncturing of ANFO bags by strapping the bags appropriately to the pallets. Workers

manipulating ANFO have also been informed of the requirements to install additional protection under the sea-cans and next to the doors to prevent material spills to the ground.

Should there be any questions regarding this monthly report, please contact me at

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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

