145 King Street East, Suite 400
Toronto, Ontario M5C 2Y7
416-947-1212

Sent by Email

September 28, 2024

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

Re: August 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.

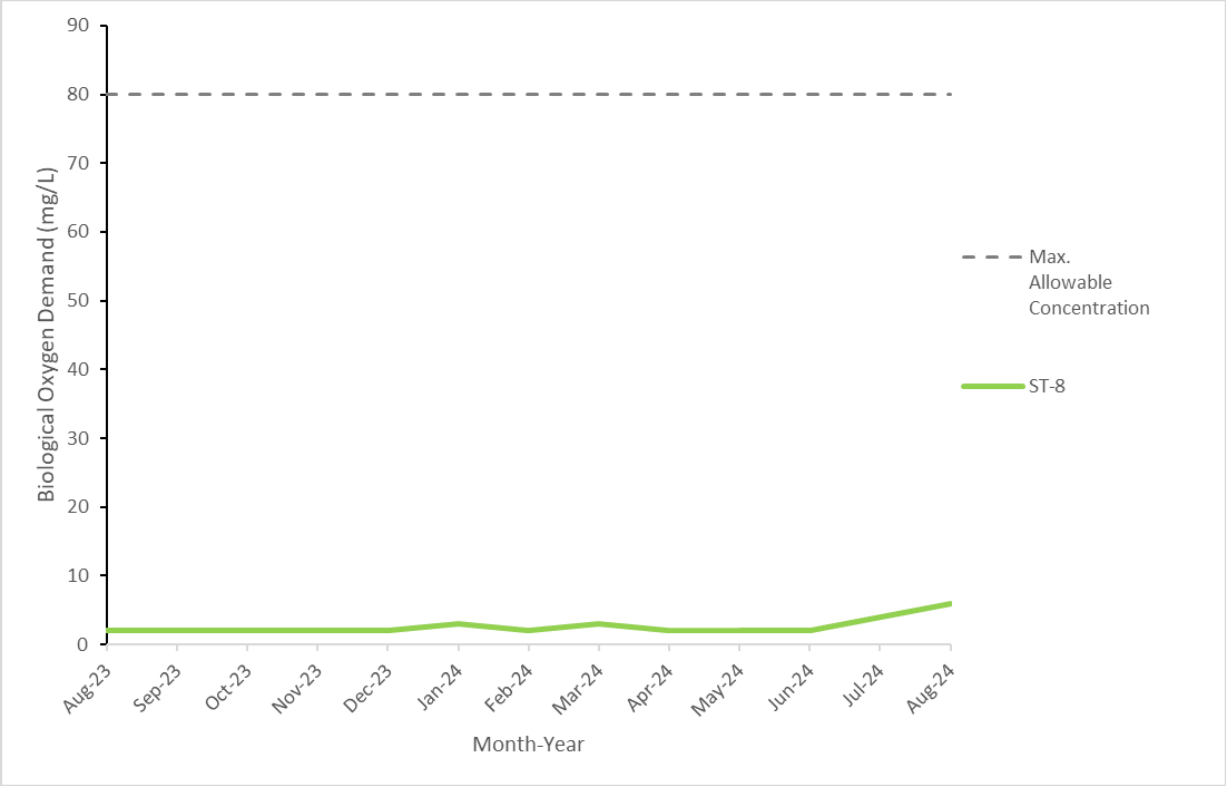
Site Wide Water Quality Monitoring Program (Part I Item 3 and Schedule I)

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.

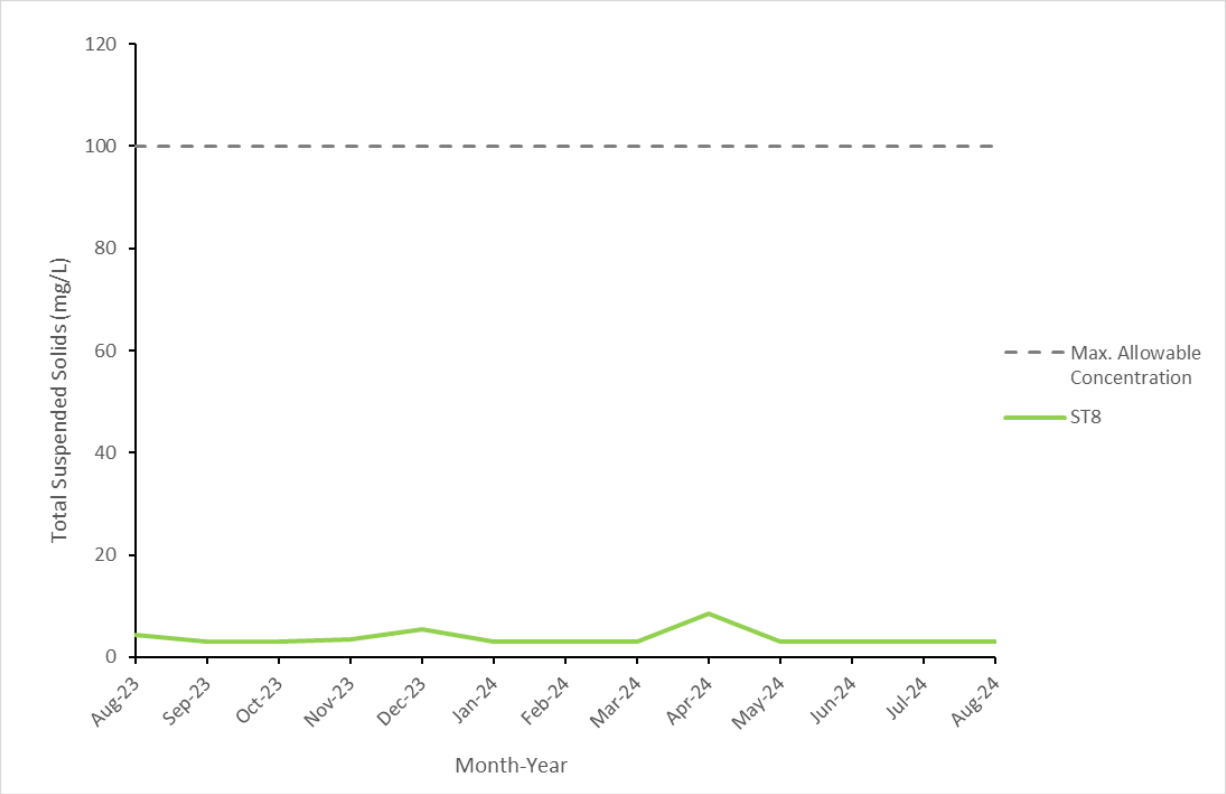
Figure 1 and 2 illustrates effluent quality characteristics for parameters of interest at select monitoring stations.

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, August 2024

Facility	Station Code	Discharge Volume (m^3)	Exceedances of Discharge Criteria	Discharge Location	Licence Reference
Doris Sedimentation Pond *	ST-1	28,765	N/A	Tailings Impoundment Area	Part F Item 17
Doris Contact Water Pond #1	ST-2	10	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	836	0	Tundra Discharge 13W 432933 7559057	Part F Item 5(b-c)
Doris Sewage Treatment Plant, Sludge	N/A	27.5	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	31,188	N/A	Roberts Bay	
Madrid North Contact Water Pond	MMS-1	376	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, Land farm Sump, Doris Plant Site Fuel Storage Area and Madrid North Contact Water Pond.

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

Month	Number of days of discharge	Discharge Volume (m^3)	Exceedances of Discharge Criteria*
January	31	241,248	0
February	29	207,376	0
March	31	228,703	0
April	30	207,485	0
May	28	388,416	0
June	30	217,442	0
July	24	177,895	0
August	19	115,437	0
Annual Cumulative	**222**	**1,784,002**	**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

A water use calculation review for January 2023 identified water was incorrectly calculated and allocated to 2AM-DOH1335 the adjusted volumes are provided in Table 3.

Table 3. Water Usage, August 2024

Month	Windy Lake (ST-7A) (m^3)				Doris Lake (ST-7) (m^3)				Patch Lake(m^3)	Total Usage (m^3)
	Domestic Water*	Industrial**	Winter Track	Dust Suppression	Domestic Water*	Industrial Usage**	Dust Suppression	Winter Track	Winter Track	
January	583	44	0	0	0	0	0	0	29,100	29,726
February	568	41	0	0	0	0.25	0	0	7,806	8,416
March	634	70	0	0	0	0	0	0	120	824
April	740	66	0	0	0	0	0	0	0	806
May	862	63	0	0	0	0	0	0	0	925
June	945	82	0	32	0	0	543	0	0	1,602
July	956	35	0	1	0	0	918	0	0	1,910
August	1,010	39	0	0	0	0	510	0	0	1,559
Annual Total	6,298	439	0	33	0	0	1,971	0	37,026	45,767
Annual Allowance	**43,800**		**60,000**			**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, August 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 (m^3)	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
February	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
March	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
April	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
May	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
June	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
July	0	0	0	0	0	765,109	0	1,766,313	862,608	0	0	0
August	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, August 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 (m^3)	Quantity of Ore Produced** (tonnes)
December Balance	-	-	-	-	-	346,774	-	360,545	128,766	-
January	0	0	0	0	0	346,744	0	360,545	128,766	0
February	0	0	0	0	0	346,774	0	360,545	128,766	0
March	0	0	0	0	0	346,774	0	360,545	128,766	0
April	0	0	0	0	7,140	339,634	0	360,545	128,766	0
May	0	0	0	0	18,540	321,094	0	360,545	128,766	0
June	0	0	0	0	20,400	300,694	0	360,545	128,766	0
July	0	0	0	0	11,390	289,304	0	360,545	128,766	0
August	0	0	0	960	960	289,304	0	360,545	128,766	0
Cumulative Total	0	0	0	0	58,430	-	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), August 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	21.798	0.268	6.033
February	21.537	21.559	21.549	0.022	-6.249
March	21.436	21.799	21.585	0.363	0.036
April	21.550	21.567	21.557	0.017	-0.028
May	21.540	22.059	21.658	0.519	0.101
June	21.788	22.058	21.919	0.270	0.261
July	21.622	21.780	21.693	0.158	-0.226
August	21.535	21.619	21.572	0.084	-0.121

* 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 August, Agnico did not ship any hazardous waste offsite via cargo aircraft.

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 2024.

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))

Inspections of the diversion berm and site culverts were resumed prior to the 2024 freshet and will continue through the summer months.

Incident Reporting

Discharge of effluent to the ocean did not take place from August 17 to 26 2024. This was due to the TIA intake not coming back on-line after an unplanned power blackout on August 17. Repairs were completed and flow restored on August 26 and sampling resumed on August 27, 2024.

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

Yours sincerely,

Jason Inkster
Environment Coordinator
Hope Bay Project
(819) 759-3555 ext. 4600101

Cc:
Jonathan Mesher, Water Resources Officer, CIRNAC
Lonny Syvret, Director, Nunavut Services Operations, Agnico Eagle
Guy Dufour, Environment General Supervisor – Hope Bay, Agnico Eagle
Cyril Jenkins, Environment 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