181 University Ave
Suite 300, P.O. Box 33
Toronto, Ontario M5H 3M7
416-628-0216

Sent by Email

March 30, 2021

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

Re: February 2021 – 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 (Agnico) but TMAC continues to exist as a legal entity and is now a wholly owned subsidiary of Agnico. All rights, obligations, liabilities of TMAC continue to reside with TMAC until or if an amalgamation with Agnico occurs later in 2021.

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

Mine water was diverted to the Tailings Impoundment Area during the month of February.

In February, Agnico made the decision to pause mining activities at Madrid North to allow further evaluation of the mine plan for this area and focus on activities at Doris. Underground mining activities at the Madrid North Portal were suspended and remain inactive at this time.

Sampling locations monitored under this licence (seasonally or when facilities are operational) are provided in Figure 4 through Figure 6 at the end of this report.

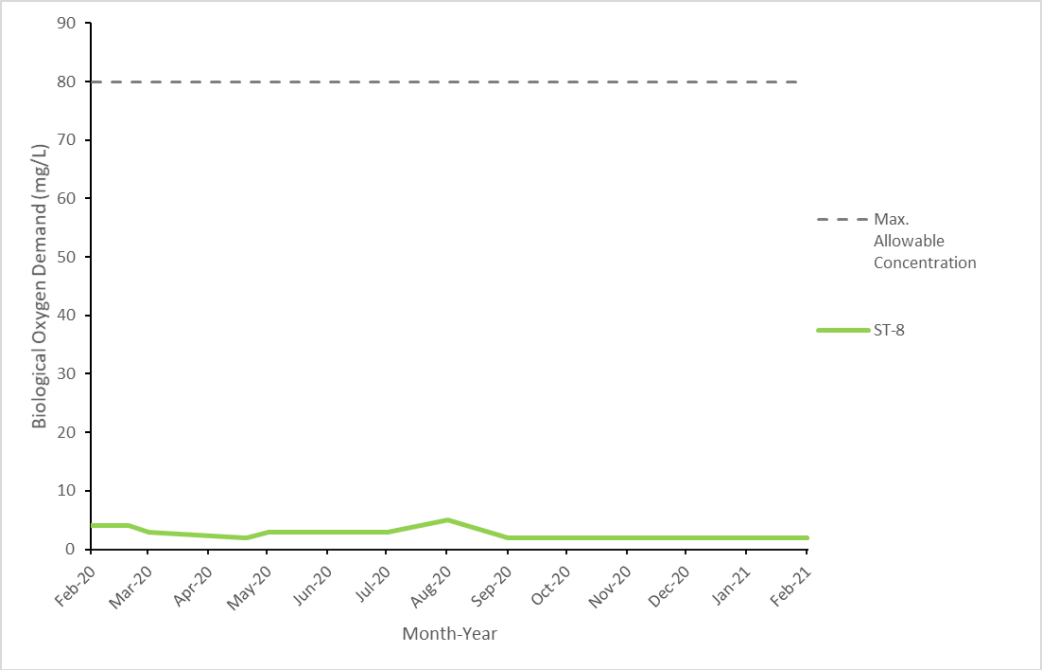
Site Wide Water Quality Monitoring Program (Part I Item 3 and Schedule I)

Water quality sampling was conducted in February 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. Due to a delay with the contract laboratory, February results for TL6 and TL7A were not received in time for inclusion in this report. Results of the February samples for these stations will be included in the March 2021 report.

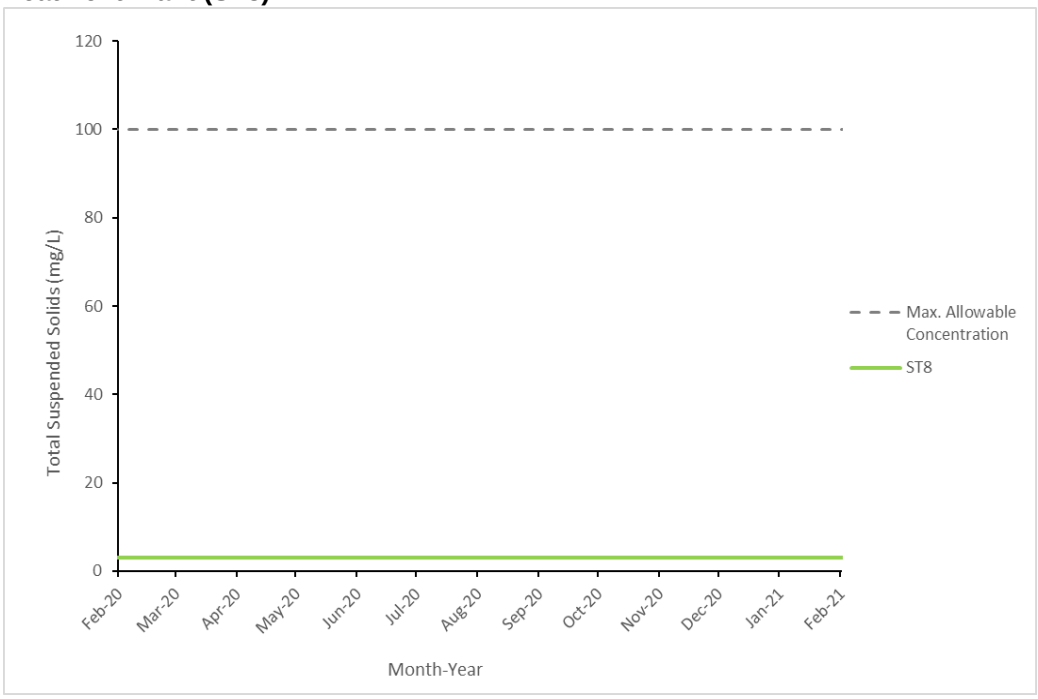
Figure 1 and 2 illustrates effluent quality characteristics for parameters of interest at select monitoring stations.

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, February 2021

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	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	782	0	Tundra Discharge 13W 432933 7559057	Part F Item 5(b-c)
Doris Sewage Treatment Plant, Sludge	N/A	25.9	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	43,121	N/A	Robert's Bay; Tailings Impoundment Area	
Madrid North Contact Water Pond	MMS-1	0	0	Tundra Discharge 13W 433203 7549806	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	No dewatering occurring at this time	
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	Facility not constructed	

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, and Doris Plant Site Fuel Storage Area.

Table 2. Discharge from TIA to Roberts Bay, February 2021

Month	Number of days of discharge	Discharge Volume (m^3)	Exceedances of Discharge Criteria*
January	0	0	0
February	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, February 2021

Month	Windy Lake (ST-7A)			Doris Lake (ST-7)					Total Usage
	Domestic Water*	Industrial**	Winter Track	Domestic Water*	Surface Exploration	Industrial Usage**	Dust Suppression	Winter Track	
January	964	224¥	14	0	0	213	0	1	1,416
February	878	236	142	0	0	0	0	15	1,271
Annual Total	1,842	469	156	0	0	213	0	16	2,687
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.
¥ Updated value due to data entry error in January.

Table 4. Volume of Reclaim Water from the TIA for Process Water, February 2021

Month	Reclaim Water (m^3) *
January	85,079
February	77,385
Annual Cumulative	**162,464**

* 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, February 2021

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 (m^3)	Quantity of Ore Processed** (tonnes)	Total Dry Tailings Placed in TIA** (tonnes)	Total Dry Detoxified Tailings Placed Underground** (tonnes)
December Balance	-	-	-	-	647,948	-	1,487,357	700,312	-	-	-
January ¥	11,573	13,297	3,000	-1,724	643,224	4,636	1,569,370	674,455	34,755	33,793	962
February	26,063	15,016	0	11,047	654,271	17,793	1,551,577	680,810	22,027	22,026	1,389
Cumulative Total	37,636	28,313	3,000	9,323		22,429			56,782	55,819	2,351

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

** As per Part I Item 6

¥ Values for January reconciled

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, February 2021

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	-	-	-	-	-	350,426	-	-	-	-
January ¥	2,369	0	0	0	2,369	348,057	-254	360,939	128,907	0
February	1,313	0	0	0	1,313	346,744	-141	360,545	128,766	0
Cumulative Total	3,682	0	0	0	3,682		-395			0

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

** As per Part I Item 6

Waste rock produced in January and February 2021 was removed from the underground decline and placed for backfill into the Naartok East Crown Pillar Recovery Trench.

Note: Void space created from mining activities is determined as the sum of the initial void space as calculated in December 2020 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.

¥ Totals for January waste rock produced were reconciled after the January SNP report was submitted. Values have been corrected in the table above.

Table 7. Doris Lake Water Level (ST-12), February 2021

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	21.785	21.810	21.798	-0.009	-0.004
February	21.785	21.807	21.795	0.022	-0.003

* 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 February, TMAC shipped hazardous waste offsite via empty cargo aircraft. Table 8 below summarizes the type and volume of waste shipped offsite during this month. Five totes of waste oil were received by Buffalo Airways Ltd. in Yellowknife for recycling in waste oil heaters at that facility. All other waste was received by KBL Environmental in Yellowknife for final remediation and/or disposal.

Table 8. Waste Backhaul Summary, February 2021

Waste Type Shipped	Volume Shipped* (m^3)
Used Oil	7
Used Oil and Polymer	1
Rags & Pads with Hydrocarbons	12
Waste Leachate - Mix	2

* Numbers rounded to the nearest cubic meter.

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 February. 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 2021.

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. All other water management structures (e.g. culverts) were frozen.

No issues were identified at the Diversion Berm and associated check dam in February. Photos of this infrastructure are provided in Figure 3 below.

Figure 3. Diversion berm during February 2021

Incident Reporting

Spill #2021-039- On February 14, 2021, an operator conducting snow clearing in the area, identified an open cavity and water within a snowbank in proximity to the Sewage Treatment Plant (STP) effluent discharge pipeline. This water was suspected to be emanating from the STP discharge pipeline approximately 30 meters from the permitted tundra discharge location. A three-way valve located in this area was believed to be a possible source of the leak which was buried under a substantial amount of snow with no road access. Due to these constraints a full investigation could not be completed within 24hrs.

At the time the report was submitted the spill source and volume had not yet been confirmed and was under further investigation. A spill report was submitted despite this lack of information to ensure the report was submitted within the defined 24hr reporting window.

Site Services excavated and hand dug along the pipeline and the surrounding area to expose the discharge pipeline and valves. There was no evidence of water or ice found along the pipe. It was identified that the insulation around an inactive section of the STP discharge pipe was cracked thus exposing the active heat trace causing the surrounding snow to melt. No spill of STP effluent occurred.

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

Yours sincerely,

Andrea Hrynkiw
Environmental Coordinator
Hope Bay Project
(867) 988-6882 ext. 101

Cc:
Omer Pasalic, Water Resources Officer, CIRNAC
Eric Steinmetzer, General Manager – Hope Bay, Agnico Eagle
Sarah Warnock, Environmental Superintendent – Hope Bay, Agnico Eagle

Figure 4. 2AM-DOH1335 SNP Monitoring Locations

Figure 5. 2AM-DOH1335 SNP Monitoring Locations

Figure 6. 2AM-DOH1335 SNP Monitoring Locations