



**Meliadine Gold Mine
NWB 2AM-MEL1631
February 2025 Monthly Report**

Prepared for:
Nunavut Water Board

Prepared by:
Agnico Eagle Mines Limited – Meliadine Division

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SECTION 1 • BACKGROUND

As required under Part I, Item 9 of amended Type A Water License 2AM-MEL1631, this report documents the water management and monitoring activities at the mine site and provides a summary of spills/actions for the month of February 2025.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Table 2.1 details monthly water usage approved under Water License 2AM-MEL1631.

Table 2.1: Summary of the monthly water usage in 2025

Usage	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2025 Total
MEL-11 ¹	m ³	40,096	44,128	-	-	-	-	-	-	-	-	-	-	84,223
Dust suppression ²	m ³	0	0	-	-	-	-	-	-	-	-	-	-	0
Dust suppression ³	m ³	0	0	-	-	-	-	-	-	-	-	-	-	0

2.2 DEWATERING ACTIVITIES

No dewatering activities took place during the month.

2.3 WATER DISCHARGE

Table 2.3 details monthly water discharge, including:

- discharge from the EWTP to Meliadine Lake via the Final Discharge Point (MEL-14);
- discharge of treated saline effluent to Melvin Bay via the Final Discharge Point (MEL-26), and
- discharge from the Itivia fuel containment facility (MEL-25).

¹ Camp, Mill, Dust suppression

² Water obtained along AWAR/Meliadine River

³ Reclaim water obtained from CP1 or other Contact Water management facilities and used for dust suppression on site

Table 2.3: Summary of the monthly water discharge in 2025

Location	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2025 Total
MEL-14	m ³	0	0	-	-	-	-	-	-	-	-	-	-	0
MEL-26	m ³	0	0	-	-	-	-	-	-	-	-	-	-	0
MEL-25	m ³	0	0	-	-	-	-	-	-	-	-	-	-	0

2.4 SEEPAGE AND RUNOFF FROM THE LANDFILL AND LANDFARM

The 2AM-MEL1631 landfill and landfarm were commissioned in November 2017. No seepage or runoff was observed during the month.

As per the approved Landfill (Stage 4) Berm Raise Design Report and Monitoring station MEL-24 description Modification, water accumulated inside the landfill is pumped towards Pond H13, which is the current location seepage from the landfill flows towards.

2.5 SEWAGE TREATMENT PLANT

Table 2.5 details monthly discharge from the Sewage Treatment Plant (STP), including the treated wastewater discharge to CP1 and sludge removed and disposed of in the WRSF.

Table 2.5: Summary of the monthly disposal/discharge from the STP in 2025

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2025 Total
Wastewater Discharge (m ³)		4,973	4,474	-	-	-	-	-	-	-	-	-	-	9,447
Sewage Sludge	Amount (m ³)	12	10	-	-	-	-	-	-	-	-	-	-	22
	Disposal Location	WRSF3	WRSF3	-	-	-	-	-	-	-	-	-	-	-

2.6 MONITORING ANALYTICAL DATA

One (1) sample related to the Water Licence was taken during the month. The analytical results are presented in Appendix.

SECTION 3 • MATERIAL MANAGEMENT

3.1 LANDFILL / LANDFARM

Table 3.1 details quarterly Landfill and Landfarm survey results, as well as the amount of material placed in the Landfarm every month.

Table 3.1: Summary of the monthly disposal in the Landfarm and quarterly survey volumes of Landfill and Landfarm

Location	Unit	Q1			Q2			Q3			Q4			2025 Total
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Landfill (Survey)	m ³	33,105			-			-			-			-
Landfarm (Survey)	m ³	849 ⁴			-			-			-			-
Landfarm ⁵	m ³	2	0.8	-	-	-	-	-	-	-	-	-	-	2.8

⁴ From landfarm survey conducted in November 2024. Surveys of the Landfarm are generally not conducted during the winter months, as the presence of snow would not allow a representative survey of the soil quantity.

⁵ Amount of contaminated solid material (soil) placed in the Landfarm or lined sorting area.

3.2 ORE, WASTE ROCK STORAGE FACILITY, TAILINGS

Table 3.2 details monthly material management, including processed ore, waste rock, and tailings.

Table 3.2: Summary of the monthly material management in 2025

Material (tonnes)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Cumulative 2025
Processed Ore		158,386	189,690	-	-	-	-	-	-	-	-	-	-	348,076
Waste Rock	Removed from open pit mining	382,704	369,748	-	-	-	-	-	-	-	-	-	-	752,452
	Removed from underground mining	99,563	87,430	-	-	-	-	-	-	-	-	-	-	186,993
	Used as underground dry rockfill	44,117	47,159	-	-	-	-	-	-	-	-	-	-	91,276
Tailings	Send to TSF	128,762	161,625	-	-	-	-	-	-	-	-	-	-	290,387
	Used as paste underground backfill	29,624	28,065	-	-	-	-	-	-	-	-	-	-	57,689

SECTION 4 SPILL MANAGEMENT

4.1 INTERNAL AND REPORTABLE SPILLS

Spills reported internally are listed in the table 4.1 and were managed according to Agnico Eagle's spill contingency plan. Spills were contained and cleaned up, contaminated material was disposed of in an appropriate manner, and the clean-up actions were monitored closely by the Environment Department. One (1) reportable spill occurred during the month (Refer to the gray shading in Table 4.1).

Table 4.1: Summary of Agnico Eagle's Spill Reports during the month

Date and time of occurrence	Contaminant	Estimated quantity	Exact location of incident	Description of incident	Describe immediate corrective actions
Sunday, February 02, 2025 11:00:00 PM	Coolant	2 L	KCG Parking Lot	A worker observed a spill on the ground when walking in the parking area. Following investigation, it was found the water truck had been parked there, and the water pump for the radiator failed, resulting in a spill of coolant.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the snow cell.
Friday, February 07, 2025 2:45:00 AM	Hydraulic oil	6 L	WRSF6	The operators had left the power take off (PTO) running. The failure of a pressure relief valve allowed pressure to build up within the system, causing the weakest component (the O-ring) to fail, resulting in a 6 L spill of hydraulic oil.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in the Landfarm.
Friday, February 07, 2025 4:00:00 AM	Motor Oil	5 L	Dyno plant	Portable air compressor running outside of dyno had a 5 L motor oil leak during start up.	Contaminated material was scrapped and disposed of in the dyno plant sump.
Monday, February 10, 2025 7:30:00 AM	Emulsion	2 L	Emulsion loading area-portal 1	Empty Emulsion bin valve stayed open and caused a spill at the emulsion loading area at portal 1, which is a lined area.	Emulsion was scrapped and put back in the emulsion plant.
Wednesday, February 12, 2025 7:30:00 AM	Engine coolant	1 L	TIRI01	A driller noticed coolant dripping from the drill. The coolant hose was rubbing on a steel part of the drill and eventually wore out.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in a hazmat bin.

Wednesday, February 12, 2025 1:30:00 PM	Diesel	2 L	TIRI01	An employee noticed a spill under the pickup truck. The fuel line valve was slightly open resulting in a diesel spill of 2L.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.
Wednesday, February 12, 2025 3:00:00 PM	Hydraulic oil	20 L	Drill location 300-144	An hydraulic hose of a drill ruptured resulting in a 20L of hydraulic oil.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.
Sunday, February 16, 2025 2:30:00 PM	Hydraulic oil	94 L	Pump01 pit	The operator of the haul truck drove over a boulder which damaged a hydraulic oil hose located under the truck, resulting in a 94L hydraulic oil spill.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in the Landfarm.
Monday, February 17, 2025 12:00:00 AM	Engine coolant	47 L	Pump01 pit	Haul truck operator called the excavator operator to advise that something was leaking from behind the excavator. Operator shut off the engine right away to go look. Upon investigation, a hydraulic hose broke resulting in a 47L spill.	A secondary containment was placed under the spill. Contaminated material was scrapped and disposed of in a hazmat bin. Large boulders were placed in WRSF6.
Tuesday, February 18, 2025 11:00:00 AM	Emulsion	1135 Kg	Dyno plant	1135 kg of emulsion was spilled onto the ground at the Dyno Plant laydown. A loader operator from the Underground Construction department was providing Dyno Nobel with assistance in weighing emulsion bins while their loader was down for maintenance. While loading the first bin on the rack, the operator initially thought it was placed too deep. To adjust its position, he attempted to re-lift the bin, causing the bin to move even deeper on the rack and making it impossible to insert the forks into the bin cradle. As he lifted the bin from the ends of the fork to gain more purchase, it	The Dyno Nobel supervisor called the Environment coordinator to report the spill. Due to the thickness of the emulsion, cold air temperatures, and spill occurring on snow, the spill quickly gelled and was contained on the Dyno Plant pad. Dyno Nobel personnel then commenced remediation by recovering the spilled emulsion with a loader and putting the emulsion in a tote to be recirculated in the emulsion plant.

				began to pivot, causing the base plate to press against the bottom of the forks, which resulted in the base plate breaking and the bin tipping over.	
Tuesday, February 18, 2025 4:30:00 PM	Hydraulic oil	3 L	Dion dome parking lot	An E&I supervisor reported a spill under a parked telehandler at the Dion Dome. Upon investigation, no mechanical problem was found. It probably leaked after being dropped off at the Dion dome.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.
Thursday, February 20, 2025 7:30:00 PM	Hydraulic oil	26 L	WRSF6	A bulldozer operator was pushing a load at the WRSF6 when he noticed the equipment was spilling. The flange bolt has broken, causing the hose O-ring to rupture and spilling 26L of Hydraulic oil	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was temporarily placed in WRSF6, identified with candles, and will be moved to the Landfarm.
Friday, February 21, 2025 4:30:00 PM	Engine coolant	36 L	TIRI01	Auxiliary heating system hose broke on an excavator resulting on a coolant spill.	Spill occurred on the Ore pad. Ore will be processed at the Process plant.
Saturday, February 22, 2025 7:00:00 AM	Engine coolant	84 L	Pump01 pit	A coolant hose broke on an excavator resulting on an 84L spill.	A secondary containment was placed under the spill. Remaining contaminated material was placed in WRSF6 as per the Spill Contingency Plan.
Sunday, February 23, 2025 11:00:00 PM	Diesel fuel	75 L	Core shack	When the fuel truck was parked, operators saw fuel coming out of the vent/overflow..	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin
Monday, February 24, 2025 4:30:00 PM	Coolant	2 L	East side of process plant parking	A water pump failure caused a 2L coolant leak from a pick-up onto the ground while parked on the east side of the process plant.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin
Thursday, February 27, 2025 7:00:00 AM	Power steering fluid	1 L	MSB parking lot	While conducting pre-op of a pick-up, operation noticed reservoir of power steering fluid was empty and the presence of power steering fluid on the ground. Cold temperature was	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in a hazmat bin.

				identified as the root cause.	
Friday, February 28, 2025 12:00:00 AM	Hydraulic oil	30 L	OP2 SHG	The operator of a haul truck was not able to dump. The operator got out of his truck and noticed a 30L spill of hydraulic oil.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and processed at the Process plant.
Friday, February 28, 2025 12:00:00 PM	Fire water	20 L	South of ERT stairwell	While thawing out the frozen fire suppression system, there was a sudden release of fire water from the pipe. Some of the water flowed out the door onto the ground.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of at the snow cell.

Appendix – Monitoring Analytical Data

MEL-11		2/3/2025
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.37
Turbidity	NTU	0.2
Conductivity	ms/cm	0.160
Hardness, as CaCO ₃	mg/L	43.3
Total alkalinity, as CaCO ₃	mg/L	28
Carbonate, as CaCO ₃	mg/L	< 1.0
Bicarbonate, as CaCO ₃	mg/L	28
TDS	mg/L	75
TDS, calculated	mg/L	80
TSS	mg/L	< 1
Total organic carbon	mg/L	4.3
Dissolved organic carbon	mg/L	4.3
WQ03- Major Ions		
Chloride	mg/L	21
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	0.0040
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.86
Sulfate	mg/L	15
WQ04- Nutrients and Chlorophyll a		
Ammonia Nitrogen (as N)	mg/L	< 0.050
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
WQ06- Total Metals		
Aluminum	mg/L	0.0057
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00085
Barium	mg/L	0.0132
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00109
Iron	mg/L	0.014
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0043

Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Strontium	mg/L	0.0738
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ07- Dissolved Metals		
Aluminum	mg/L	0.0089
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00085
Barium	mg/L	0.0131
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	13.3
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00103
Iron	mg/L	0.0160
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium (Dissolved)	mg/L	2.58
Manganese	mg/L	< 0.0010
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.47
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	10.2
Strontium	mg/L	0.0725
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
WQ10- Volatile Organics		

Benzene	mg/L	< 0.00020
Ethylbenzene	mg/L	< 0.00020
Toluene	mg/L	< 0.00020
Xylenes	mg/L	< 0.00040
m,p-Xylenes	mg/L	< 0.00040
o-Xylene	mg/L	< 0.00020
F1 (C6-C10)-BTX	mg/L	< 0.025
F1 (C6-C10)	mg/L	< 0.025
F2 (C10-C16)	mg/L	< 0.09
F3 (C16-C34)	mg/L	< 0.2
F4 (C34-C50)	mg/L	< 0.2