



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

**Prepared for:**

Nunavut Water Board

**Prepared by:**

Agnico Eagle Mines Limited – Meliadine Division

## Table of Contents

SECTION 1 •	BACKGROUND.....	1
SECTION 2 •	WATER MANAGEMENT.....	1
2.1	WATER USAGE.....	1
2.2	DEWATERING ACTIVITIES.....	1
2.3	WATER DISCHARGE.....	1
2.4	SEEPAGE AND RUNOFF FROM THE LANDFILL AND LANDFARM .....	2
2.5	SEWAGE TREATMENT PLANT .....	2
2.6	MONITORING ANALYTICAL DATA .....	2
SECTION 3 •	MATERIAL MANAGEMENT.....	3
3.1	LANDFILL / LANDFARM .....	3
3.2	ORE, WASTE ROCK STORAGE FACILITY, TAILINGS.....	4
SECTION 4	SPILL MANAGEMENT .....	5
4.1	INTERNAL AND REPORTABLE SPILLS .....	5

## 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 January 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 <sup>1</sup>	m <sup>3</sup>	40,096	-	-	-	-	-	-	-	-	-	-	-	40,096
Dust suppression <sup>2</sup>	m <sup>3</sup>	0	-	-	-	-	-	-	-	-	-	-	-	0
Dust suppression <sup>3</sup>	m <sup>3</sup>	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).

---

<sup>1</sup> Camp, Mill, Dust suppression

<sup>2</sup> Water obtained along AWA/Meliadine River

<sup>3</sup> 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 <sup>3</sup>	0	-	-	-	-	-	-	-	-	-	-	-	0
MEL-26	m <sup>3</sup>	0	-	-	-	-	-	-	-	-	-	-	-	0
MEL-25	m <sup>3</sup>	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 <sup>3</sup> )		4,973	-	-	-	-	-	-	-	-	-	-	-	4,973
Sewage Sludge	Amount (m <sup>3</sup> )	12	-	-	-	-	-	-	-	-	-	-	-	12
	Disposal Location	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 <sup>3</sup>	33,105			-			-			-			-
Landfarm (Survey)	m <sup>3</sup>	849 <sup>4</sup>			-			-			-			-
Landfarm <sup>5</sup>	m <sup>3</sup>	2	-	-	-	-	-	-	-	-	-	-	-	2

<sup>4</sup> 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.

<sup>5</sup> 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	-	-	-	-	-	-	-	-	-	-	-	158,386
Waste Rock	Removed from open pit mining	382,704	-	-	-	-	-	-	-	-	-	-	-	382,704
	Removed from underground mining	99,563	-	-	-	-	-	-	-	-	-	-	-	99,563
	Used as underground dry rockfill	44,117	-	-	-	-	-	-	-	-	-	-	-	44,117
Tailings	Send to TSF	128,762	-	-	-	-	-	-	-	-	-	-	-	128,762
	Used as paste underground backfill	29,624	-	-	-	-	-	-	-	-	-	-	-	29,624

## 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. Also, 8 of the non-reportable spills were reported to the NT/NU Spill Line following guidance received from CIRNAC inspector in late 2024 that all spills should be reported moving forward. Further guidance was received on January 24 (see Stakeholder table below) that spills should be reported to the NT/NU Spill Line in accordance with the thresholds found in the Nunavut Spill Contingency Planning and Reporting Regulations document (refer to the blue shading in Table 4.1). Four (4) reportable spills 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
Friday, January 03, 2025 4:30:00 AM	Hydraulic oil	20 L	E&I Parking	While grading the E&I parking, the employee realized that oil was leaking from his grader. Some snow had build-up and froze around the O-Ring of the hydraulic line, causing it to loosen the O-Ring and creating the 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 Landfarm.
Friday, January 03, 2025 9:00:00 AM	Waste Oil	1000 L	Dome 3	A skid steer operator was moving a tote of used oil from a boom truck deck at Dome 3, Portal 1. During the process, the forks punctured the bottom of the tote, causing 1,000 L of used oil to spill onto the ground.	The worker promptly attempted to contain the spill using spill pads and contacted their Supervisor and the Environment Department. Both departments assisted in the cleanup efforts. The cleanup crew primarily used absorbent pads and booms to contain the spread of the oil to reduce the contaminated area. Some contaminated material was shoveled into drums, while the rest was collected by a loader and placed in the contaminated snow cell for treatment through the oil-water

					separator upon snowmelt, as per the Water Management Plan.
Monday, January 06, 2025 1:30:00 PM	Hydraulic Oil	10 L	WRSF3	Hydraulic hose broke on an equipment (Dozer) on the Waste Rock Storage Facility 3 resulting in a 30 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, January 10, 2025 11:00:00 AM	Glycol	200 L	Crusher area	A tote containing glycol was punctured by a skid steer at the primary crusher. The glycol tote was completely buried under snow from a recent blizzard, and the operator of the skid steer inadvertently hit and punctured the tote while performing snow removal. As a result, 200 L of glycol was released from the tote onto the industrial pad.	The leaking tote was placed on a secondary containment to avoid further spillage. The contaminated snow was then recovered and placed into a hazardous waste drum and stored at the hazmat laydown, to be sent offsite for disposal at a licensed disposal facility.
Monday, January 13, 2025 3:00:00 AM	Engine coolant	20 L	TIRI01	While a haul truck descended the ramp into the pit, a coolant hose ruptured resulting in a 20L of coolant 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 a drum.
Monday, January 13, 2025 7:00:00 AM	Hydraulic Oil	20 L	Dyno plant laydown	A worker noticed a 20L spill of hydraulic oil under a machine.	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, January 17, 2025 10:30:00 AM	Engine coolant	10 L	TIRI01	While a haul truck descended the ramp into the pit, a coolant hose ruptured resulting in a 20L 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 in drum.
Friday, January 17, 2025 1:00:00 PM	Diesel	150 L	Incinerator fuel tank.	The release occurred following a regular preventive maintenance inspection on the fuel tanks distribution line of	Upon identifying and closing the faulty valve to stop the spill, the spill was reported to the Environment department and E&I



				the incinerator fuel tank reserve. Upon conducting the inspection, fuel was observed above the filling cap. During the maintenance inspection, a 3-way valve was adjusted, which led to the diesel release.	department personnel then undertook the cleanup process. Due to the extreme cold that day (-58 °C), the diesel quickly gelled on the snow and did not appear to penetrate the ground surface. Contaminated snow was hand-excavated and brought to the contaminated snow cell to be treated by the Oil Water Separator, as per the Spill Contingency plan. In the spring when the ground thaws, the top layer of soil in the area will be hand-excavated and transferred to Landfarm A for remediation.
Friday, January 17, 2025 2:00:00 PM	Greywater	85 m <sup>3</sup>	Beneath the kitchen	<p>It was noted during a routine inspection of the kitchen installations that greywater had spilled underneath the kitchen building.</p> <p>The kitchen main drain line appeared to be leaking, and the greywater that was coming out of the line was accumulating underneath the kitchen, creating a thick layer as it was freezing. Based on pictures and the initial assessment of the employee who discovered the spill, it is estimated that approximately 85 m<sup>3</sup> of greywater was released under the kitchen building.</p>	<p>Upon discovering the spill, Energy and Infrastructure (E&amp;I) department personnel removed the snow accumulation around the pipe and started the cleanup process. A frost fighter was used to thaw the drain line and the frozen greywater that formed underneath the kitchen, while a vacuum truck was removing the greywater as it melted. They then assessed the line and repaired a mechanical coupler that failed, along with a few piping sections that were cracked. The recovered water was disposed of in the Multi-Service Building (MSB) lift station to be treated by the Sewage Treatment Plant.</p>
Saturday, January 18, 2025 4:00:00 AM	Engine coolant	5 L	TIRI01	A worker noticed a leak coming from the haul truck auxiliary heating system resulting in a 5L engine coolant.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated

					material was scrapped and disposed of in drum.
Sunday, January 19, 2025 6:30:00 PM	Engine coolant	10 L	Pump pit	As a driller began to move the drill, he realized that coolant was leaking from the drill.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in drum.
Tuesday, January 21, 2025 4:00:00 PM	Diesel		3 Million Fuel Farm	As an operator was fueling equipment, the nozzle got stuck and didn't turn off. All the spilled fuel was caught in the drip pan.	Cleaned the drip pan with spill pads and placed the spill pads in the appropriate bin.
Wednesday, January 22, 2025 3:00:00 AM	Hydraulic oil	15 L	TIRI01	When starting the hydraulic system warmup of the drill, the operator smelled burnt oil. Upon inspection, a 15L hydraulic oil leak was discovered.	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, January 24, 2025 1:00:00 PM	Hydraulic oil	25 L	Crane pad	While extending the boom on crane, the boom hydraulic hose failed resulting in a 25L 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 at the snow cell.
Saturday, January 25, 2025 6:30:00 AM	Engine oil	50 L	WRSF3	While warming up the hydraulic system of the excavator, the operator noticed the equipment was not responding as usual. Upon investigation, it was discovered that one flange for the hose was missing 3 out of 4 bolts.	Contaminated material was scrapped and disposed of at the snow cell.
Sunday, January 26, 2025 3:30:00 AM	Hydraulic oil	20 L	TIRI01	The bolt holding the flange connection on an excavator has come loose, causing the O-ring to break and the hydraulic oil to leak.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.
Tuesday, January 28, 2025 5:30:00 AM	Hydraulic oil	4 L	E&I operation parking west side msb	An hydraulic hose broke on a loader, resulting in a 4L 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 at the snow cell.
Wednesday, January 29, 2025 3:00:00 AM	Hydraulic oil	20 L	OP2	The push plate cylinder broke on the haul truck, spilling 20 liters of hydraulic oil.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.
Wednesday, January 29, 2025 10:00:00 AM	Coolant	0.5 L	KCG Laydown	A worker observed a coolant spill from a leak on a parked tractor truck. The extreme cold allowed the fitting to contract, resulting in a very slow leak.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin. Contaminated material was scrapped and disposed of in quatrex bag.
Wednesday, January 29, 2025 11:10:00 PM	Hydraulic Oil	1 L	KCG Laydown	A leaking hydraulic fitting was discovered on a haul truck.	Spill pads were deployed to clean up the spill and disposed of in the appropriate bin.

## **Appendix – Monitoring Analytical Data**

<b>MEL-11</b>		1/6/2025
<b>Parameter</b>	<b>Unit</b>	
<b>WQ02- Conventional Parameters</b>		
pH	pH units	7.55
Turbidity	NTU	0.2
Conductivity	ms/cm	0.148
Hardness, as CaCO <sub>3</sub>	mg/L	42.2
Total alkalinity, as CaCO <sub>3</sub>	mg/L	43
Carbonate, as CaCO <sub>3</sub>	mg/L	< 1.0
Bicarbonate, as CaCO <sub>3</sub>	mg/L	42
TDS	mg/L	75
TDS, calculated	mg/L	85
TSS	mg/L	< 1
Total organic carbon	mg/L	4.0
Dissolved organic carbon	mg/L	3.9
<b>WQ03- Major Ions</b>		
Chloride	mg/L	20
Cyanide	mg/L	< 0.00050
Cyanide (free)	mg/L	< 0.0020
Cyanide (WAD)	mg/L	< 0.00050
Silica	mg/L	0.83
Sulfate	mg/L	13
<b>WQ04- Nutrients and Chlorophyll a</b>		
Ammonia Nitrogen (as N)	mg/L	< 0.050
Nitrate (as N)	mg/L	< 0.10
Nitrite (as N)	mg/L	< 0.010
Total Kjeldahl nitrogen	mg/L	0.23
Total phosphorus	mg/L	< 0.020
Orthophosphate (P)	mg/L	< 0.010
<b>WQ06- Total Metals</b>		
Aluminum	mg/L	0.0038
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00085
Barium	mg/L	0.0125
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00098
Iron	mg/L	0.017
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020

Manganese	mg/L	0.0057
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	0.0733
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
<b>WQ07- Dissolved Metals</b>		
Aluminum	mg/L	0.0043
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00080
Barium	mg/L	0.0126
Beryllium	mg/L	< 0.00010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium (Dissolved)	mg/L	13.1
Chromium	mg/L	< 0.0010
Copper	mg/L	0.00102
Iron	mg/L	0.0077
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium (Dissolved)	mg/L	2.23
Manganese	mg/L	< 0.0010
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium (Dissolved)	mg/L	1.39
Selenium	mg/L	< 0.00010
Silver	mg/L	< 0.000020
Sodium (Dissolved)	mg/L	9.47
Strontium	mg/L	0.0708
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)-BTEX	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