



MELIADINE GOLD MINE

2024 Annual Report

Prepared for:

Nunavut Water Board
Nunavut Impact Review Board
Government of Nunavut
Fisheries and Oceans Canada
Crown-Indigenous Relations and Northern Affairs Canada
Kivalliq Inuit Association

Prepared by:

Agnico Eagle Mines Limited – Meliadine Division

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ABBREVIATIONS

Agnico Eagle	Agnico Eagle Mines Limited
ABA	Acid/Base Accounting
AEMP	Aquatic Ecosystem Monitoring Program
AP	Acid Potential
ARD	Acid Rock Drainage
AWAR	All Weather Access Road
BAP	Best Applicable Practices
BAT	Best Available Technology
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
BV	Emission Services Group of Bureau Veritas
CALA	Canadian Association of Laboratory Accreditation (CALA)
CCME	Canadian Council of Ministers of the Environment
CDMO	Cyanide Management Decommissioning Overview
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CLO	Community Liaison Officer
COQ	Certificate of Qualification
CP	Collection Pond
DDH	Diamond Drill Hole
DFO	Department of Fisheries and Oceans Canada
EAP	Employee Assistance Program
EC	Electrical Conductance
ECC	Employment and Culture Committee
ECCC	Environment and Climate Changes Canada
EEM	Environmental Effect Monitoring
E&I	Energy & Infrastructure
ERT	Emergency Response Team
EWTP	Effluent Water Treatment Plant
FDP	Final Discharge Point
FEIS	Final Environmental Impact Statement
FTE	Full Time Equivalent
GHGRP	Greenhouse Gas Emissions Reporting Program
GN	Government of Nunavut
GPS	Global Positioning System
GTC	Ground Temperature Cable
GWMP	Groundwater Management Plan
HC	Health Canada
HDET	Heavy Duty Equipment Technician
HHS	Hunter Harvest Study
HR	Human Resources
ICMC	International Cyanide Management Code
ICMI	International Cyanide Management Institute
ICRP	Interim Closure and Reclamation Plan
IEP	Internal Environmental Permit
IIBA	Meliadine Inuit Impact and Benefit Agreement
IOL	Inuit Owned Land
IQ	Inuit Qaujimajatuqangit

ISV	Inuit Societal Values
KEAC	Kivalliq Elders' Advisory Committee
KETAP	Kivalliq Employment and Training Action Plan
KHTO	Kangiqliniq Hunter Trapping Organization
KIA	Kivalliq Inuit Associated
KivIA	Kivalliq Inuit Association
KLMA	Kivalliq Labour Market Analysis
KvSEMC	Kivalliq Socio-Economic Monitoring Committee
LOA	Letter of Advice
LMS	Learning Management System
LOM	Life of Mine
LSA	Local Study Area
MAC	Mean Annual Concentration
MAMMC	Maximum Authorized Monthly Mean Concentration
MDL	Method Detection Limit
MDMER	Metal and Diamond Mining Effluent Regulations
MELCC	Ministère de l'Environnement et de la Lutte contre les Changements Climatique
MF	Mid-Field
MiHR	Mining Industry Human Resources Council
MMSO	Marine Mammal and Observation
MoU	Memorandum of Understanding
MSB	Multi-Service Building
MWMP	Mine Waste Management Plan
NDVI	Normalized Difference Vegetation
NIRB	Nunavut Impact Review Board
NMHSF	Northern Mining Health and Safety Forum
NP	Neutralization Potential
NPAG	Non-Potentially Acid Generating
NPR	Neutralization Potential Ratio
NWB	Nunavut Water Board
OMS	Operation, Maintenance and Surveillance
OP	Ore Storage Pad
OSMP	Ore Storage Management Plan
PAG	Potentially Acid Generating
PPV	Peak Particle Velocity
PRISM	Program for Regional and International Shorebird Monitoring
PVS	Peak Vector Sum
QA/QC	Quality Assurance and Quality Control
QEP	Qualified Environment Professional
RIBR	Rankin Inlet Bypass Road
RO	Reverse Osmosis
RPD	Relative Percent Difference
SAO	Senior Administrative Official
SEMC	Socio-Economic Monitoring Committee
SEMP	Socio-Economic Monitoring Program
SEMR	Socio-Economic Monitoring Report
SEMWG	Socio-Economic Monitoring Working Group

SETP	Saline Effluent Treatment Plant
SOP	Standard Operating Procedure
SMP	Shipping Management Plan
SP	Saline Pond
STP	Sewage Treatment Plant
TAG	Terrestrial Advisory Group
TC	Transport Canada
TDS	Total Dissolved Solids
TEMMP	Terrestrial Environment Management and Monitoring Plan
TEMMP Report	Terrestrial Environment Management and Monitoring Plan Report
TIRI	Tiriganiaq Open Pits
TMS	Training Management System
TOR	Term of Reference
TSF	Tailings Storage Facility
TSP	Total Suspended Particulate
TSS	Total Suspended Solids
VEC	Valued Ecosystem Component
WBWQM	Water Balance and Water Quality Model
WRSF	Waste Rock Storage Facility
WTC	Water Treatment Complex

Units

%	Percent
°C	Degrees celsius
dBA	Decibels A
ft	feet
kg	Kilogram
kPa	Kilopascal
L	Litre
Leq	Equivalent Continuous Noise Level
m	Metre
m ³	Cubic metre
m ³ /day	Cubic metre per day
m ³ /year	Cubic metre per year
mg/kg	Milligram per kilogram
mg/L	Milligram per litre
mm	Millimetre
mm/s	Millimetre per second
Mm ³	Million cubic metre
ppm	Parts per million
t	Tonne
tCO ₂ e	Tonne carbon dioxide equivalent
uS/cm	Microsiemens per centimetre

DOCUMENT CONTROL

Version	Date (YMD)	Section	Page	Comment
1	2025/03/31	All	All	This has been reviewed by Environmental Staff and will be incorporated into training for all mine staff on behalf of the Mine Manager and Senior Management

Prepared By: Meliadine Environment Department

Approved By:



Sara Savoie
Environment Superintendent

SECTION 1. INTRODUCTION

As required by Water Licence 2AM-MEL1631 Part B Item 2: *The Licensee shall file an annual report with the Board no later than March 31st in the year following the calendar year being reported. The annual report shall be developed in accordance with Schedule B.*

And

As required by Water Licences 2BB-MEL1424 Part B Item 6 and 2BE-MEL2434 Part B Item 2: *The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported*

The Meliadine Gold Mine (the Mine) operated by Agnico Eagle Mines Limited - Meliadine Division (Agnico Eagle) is located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. Situated on the western shore of Hudson's Bay, the Mine is located on a peninsula between the east, south, and west basins of Meliadine Lake (63°1'23.8"N, 92°13'6.42"W), on Inuit Owned Land (IOL). The Mine components include the 30 km All Weather Access Road (AWAR) between Rankin Inlet and Meliadine, the Itivia fuel farm and laydown area, and the mine site.

Commercial production began at Meliadine on May 14th 2019.

The various components and activities associated with the Mine require a number of different authorizations, leases and permits from regulatory agencies including the Nunavut Water Board (NWB), the Nunavut Impact Review Board (NIRB), the Government of Nunavut (GN), Kivalliq Inuit Association (KivIA), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC); Environment and Climate Change Canada (ECCC), Department of Fisheries and Oceans Canada (DFO) and Transport Canada (TC).

This report is written to address the 2024 annual reporting requirements for the Mine under the following authorizations:

- NWB Type A Amended Water Licence 2AM-MEL1631;
- NWB Type B Water Licence 2BB-MEL1424;
- NWB Type B Water Licence 2BE-MEL2434;
- NIRB Project Certificate No. 6 (Amendment No. 002);
- KivIA Permit KVCA07Q08;
- KivIA Permit KVCA11Q01;
- KivIA Production Lease KVPL11D01; and
- The Meliadine Inuit Impact and Benefit Agreement (IIBA).

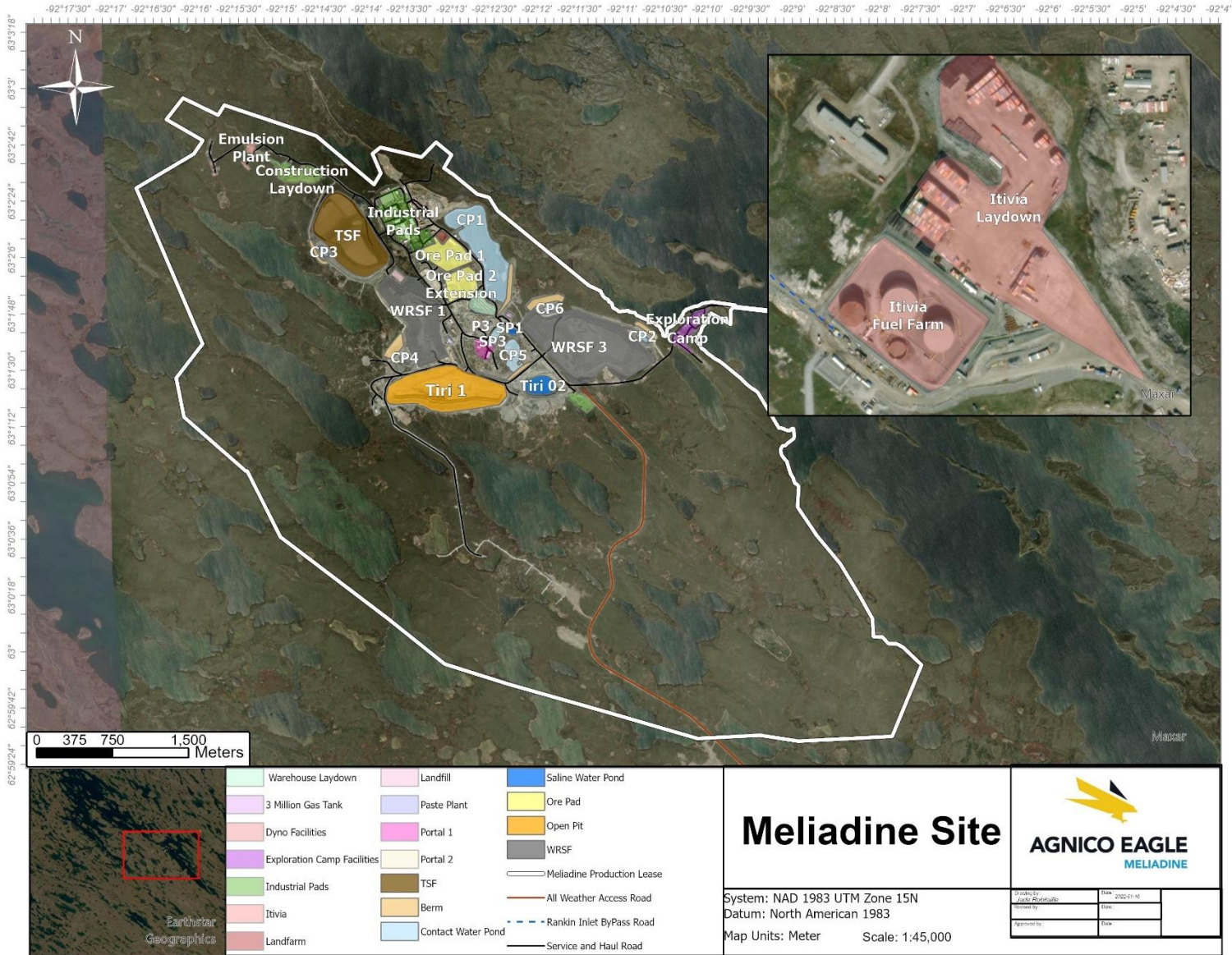
On July 22nd, 2024, the NWB issued the 2BE-MEL2434 Water Licence, replacing the 2BB-MEL1424 Water Licence. Required reporting under both 2BB and 2BE Licences is included in this report. For the 2025 Annual Report and onward, reporting as required under the 2BE-MEL2434 will be included.

On October 25th, 2024, the NWB issued the amended 2AM-MEL1631 Water Licence, which was approved by the Minister of Northern Affairs on November 22nd, 2024. The Annual Report requirements as described in Schedule B of the amended Licence remain unchanged from the previous Licence.

Reporting requirements for the Metal and Diamond Mining Effluent Regulations (MDMER) have been submitted directly to ECCC; results are presented herein to comply with the NWB Type A Water License.

Several appendices complement this report. A summary table of the 2024 Annual Report Appendices is provided in Appendix 1.

The following Figure 1 shows the Meliadine site and Itivia facilities.



SECTION 2. SUMMARY OF ACTIVITIES

2.1 2024 ACTIVITIES

2.1.1 Exploration activities

As required by Water Licence 2BB-MEL1424 Part B, Item 6i: A summary of drilling activities and progressive reclamation of drill/trench sites; and

As required by Water Licence 2BE-MEL2434 Part B Item 2h: A summary of drilling activities and progressive reclamation of drill sites

A total of 318 holes were drilled under Type B Water Licence. The drill site locations are provided in Appendix 2. No trenches were dug in 2024.

The contractor for the drilling was Sarliaq Orbit Garant, and drilling was conducted using diamond drills between January and December 2024. Activities included both on-ice and on-land drilling. Drill site reclamation included removing remaining material and drill casings at each site once drilling was completed. Casings were cut at ground level when they could not be removed.

As required by Water Licence 2BE-MEL2434 Part B Item 2a: A summary of Water use and Waste disposal activities related to Water use, deposit of Waste to Water or the Appurtenant Undertaking

Water use activities under the Type B Licence are reported under Section 3.1.1. 2024 drill cuttings locations are presented in Appendix 2.

As required by Water Licence 2BB-MEL1424 Part B, Item 6j: Report all artesian flow occurrences; and

As required by Water Licence 2BE-MEL2434 Part B, Item 2i: Report all artesian flow occurrences as required under Part F, Item 6

There were no occurrences of artesian flow in 2024.

2.1.2 Construction activities

As required by Water Licence 2AM-MEL1631 Part D Item 4: The Licensee shall provide a brief summary of the Construction Summary Report required by Part D, Item 3, within the Annual Report required by Part B, Item 2; and

As required by NIRB Project Certificate No.006 Condition 18: The Proponent shall provide the NIRB with copies of as-built drawings and final design plans for Project infrastructure as they are developed/finalized to assist with the Board's ongoing monitoring efforts.

In 2024 and early 2025, Agnico Eagle submitted the following Construction Summary (As-Built) Reports:

- CP6 Ramp Extension on March 18th, 2024;
- Landfill Stage 4 Berm Raise on March 18th, 2024;
- Replacement of the Itivia Laydown Culvert on July 5th, 2024;
- Dike Modification of Itivia Fuel Storage Tank Farm on September 6th, 2024;
- West Air Intake Fuel Farm on October 24th, 2024;

- Horizontal Directional Drilling (HDD) at Itivia on December 19th, 2024; and
- New tanks at Rankin Inlet Fuel Farm on February 28th, 2025.

Submitted as-built reports and drawings can be found on the NWB Public Registry at the following link: <https://public.nwb-oen.ca/>.

The main 2024 construction activities are summarized in Table 1 below.

Table 1: Status of the construction activities undertaken in 2024

Activity	Status as of Dec 31, 2024
Continuation of Waste Rock Storage Facility 1 (WRSF1)	Ongoing
Continuation of Waste Rock Storage Facility 1 (WRSF3)	Ongoing
Continuation of Tiriganiaq Open Pit 1 (TIRI01)	Ongoing
Construction of Water Treatment Complex	Ongoing
Addition of second grinding thickener tank	Completed
Addition of cement handling facility at the Paste Plant	Completed
Construction of the CIL/Filter Press extension	Completed
Construction of the Vertimill facility	Completed
Construction of the Power Plant extension	Completed
Expansion of the Itivia Fuel facility and construction of new fuel tanks	Completed
P3 Pond Backfill, Ditch and Sump construction	Completed
Rehabilitation/maintenance of different infrastructures on site: CP6 access road, Channel 4, Channel 5, downstream channel of D-CP1, CP3 and Berm 2.	Completed
Replacement of Culverts 10 and 11 at AWAR KM16.5 and Bypass Road KM3	Completed
Construction of Paste Line C	Completed
Construction of the waterline discharge to sea	Commenced in 2023. To be completed in 2025
Horizontal Directional Drilling (HDD) at Itivia (waterline)	Commenced in 2024 To be completed in 2025
Construction of the secondary air intake ventilation system	Completed
Construction of haul and access roads to the Pump deposit area	Ongoing
Construction of communications tower at the Pump deposit area	Ongoing

2.1.2.1 **Waterline Construction Update**

In 2024, Agnico Eagle continued the construction of the waterline along the AWAR, focusing on the section from KM5.5 to KM15. Construction of the waterline and of associated infrastructures (e.g., required earthworks, containers to shelter drain valves at low points, containers at high points for release of air in waterline, traditional land use crossings, fiber optic leak detection system, markers, and construction pull outs) will continue in 2025. The status of the waterline construction is detailed below:

- 2024 season:
 - Piping, optic fiber, and earthworks from KM15 to KM5.5
 - Remaining mechanical installation
 - Directional drilling at Itivia
- 2025 season:
 - Piping, optic fiber, and earthworks from KM06 to Itivia
 - Directional drilling at Itivia and diffuser installation
 - Commissioning.

All required sections of the waterline installed to date were covered by material to ensure passage of wildlife (80-90% of the waterline is covered). As per the TEMMP, construction activities are suspended according to the caribou work suspension protocol. In 2024, the waterline construction took place after the caribou migration near the Meliadine Mine was completed.

2.1.3 Mining Activities

The Meliadine Gold Mine began commercial gold production on May 14th 2019.

In 2024, the Meliadine Gold Mine continued commercial gold production from the Tiriganiaq Open Pit 1 (TIRI01) and underground operations.

In 2024, a total of 606,000 tonnes of overburden waste and 5,262,000 of waste rock were excavated from TIRI01. A total of 561,000 tonnes of ore was mined from the pit.

In 2024, no overburden waste, waste rock or ore were mined from Tiriganiaq Open Pit 2 (TIRI02). Mining activities at TIRI02 were paused since Q2, 2021 and TIRI02 is currently being used for underground saline contact water storage.

From the underground operation, a total of 470,000 tonnes of underground waste was trucked to surface, and a total of 1,463,000 tonnes of ore was mined and trucked to surface.

As mentioned in Section 1, on October 25th, 2024, the NWB issued the amended 2AM-MEL1631 Water Licence, which was approved by the Minister of Northern Affairs on November 22nd, 2024. The previous Type A Water Licence (2AM-MEL1631) authorized the mining undertaking at Tiriganiaq open pits and underground. The recently amended Water Licence also includes mining of the Wesmeg/Wesmeg North, Pump, F Zone, and Discovery deposits that were included in the 2014 Final Environmental Impact Statement (Agnico Eagle 2014) and NIRB Project Certificate No.006. Mining of new deposits (i.e., Pump) is planned to begin in 2025 (see Section 2.2).

2.2 2025-2026 MINE WORK PLAN

The 2025-2026 Mine Plan for the Meliadine Gold Mine, prepared for the KivIA as required by Production Lease KVPL11D01, is provided in Appendix 3.

In 2025, Agnico Eagle's mining plan is to continue to operate Tiriganiaq Underground Mine and Open Pit 1 (TIRI01) at the Meliadine Mine site. In addition, mining at the Pump deposit area will begin, with open pits Pump01 and Pump02 commencing. A general site print is available in Appendix 4.

Environmental monitoring (wildlife, aquatic effects, groundwater, geochemistry, noise and air) will continue through 2025 in support of all operational undertakings at the Meliadine site as required by the NWB Type A Amended Water License 2AM-MEL1631, NWB Type B Water License 2BE-MEL2434, NIRB Amended Project Certificate No.006, and Metal and Diamond Mining Effluent Regulations (MDMER) regulations.

In 2025 and 2026, Agnico Eagle is planning to conduct the following activities under production lease KVPL11D01, pending reception of required approvals.

2025:

- Start of the Water Treatment Complex (WTC) expansion work;
- Construction activities related to Pump Deposit area:
 - Construction of haul roads
 - Construction of Berm CP9, Channel 11 and Berm 4
 - Start of Waste Rock Storage Facility 6 (WRSF6)
 - Completion of telecommunication tower
 - Dewatering and fish salvage of Lake A8
 - Construction of ore pad and laydown area
 - Installation of water management infrastructures (pipelines, pumping stations) to connect with the current system
 - Power electrical installation
 - Service building installation (compressed air system, brine system)
 - Fuel containment facility
- Construction activities related to Wesmeg Deposit area:
 - Construction of haul roads

2026:

- Construction of dikes D-SP6 North and D-SP6 West and their access roads
- Construction of Water management infrastructures for SP6 (Pipeline & Pumping stations to connect with current system)
- Dewatering and Fish out of Lake B7
- Temporary ventilation system at Pump
- Completion of haul roads at Pump deposit area
- Completion of haul roads at Wesmeg deposit area
- Construction of haul and access roads to the F Zone deposit area
- Installation of water management infrastructures (pipelines and pumping stations) to connect F Zone with current water system
- Dewater and fish out Lake A6

2.2.1 Culvert repairs work update

Two meetings took place between Agnico Eagle and DFO at the end of 2023 to discuss specific issues identified by DFO during previous inspections, mitigation measures/actions to address those issues, and tentative timelines.

A Request for Review was submitted to DFO on December 22, 2023, to replace Culverts 7 and 10 along the AWAR and Culvert 11 along the Rankin Inlet Bypass Road at crossing locations containing salmonids. Replacement of the culverts is required to ensure safe fish passage. On February 29, 2024, DFO issued a Letter of Advice authorizing the works.

Culverts 7 and 10 were installed in the winter of 2024. Culvert 11 has not yet been installed.

Two additional culverts were identified as needing replacement (i.e., AWAR 8.8, EXPLO 1.1) and one new culvert (AWAR 15.4) was determined to be needed along the AWAR. Fish habitat and hydraulic assessments, as well as fish community sampling via minnow trapping, backpack electrofishing, and eDNA sampling were completed in July 2024 at the two AWAR locations and one location on Exploration Camp Road (EXPLO 1.1). A Request for Review was submitted to DFO on December 22, 2024, for this culvert work. Agnico Eagle has responded to two requests for additional information from DFO and expects to receive a Letter of Advice to complete the work in early 2025. Installation of the culverts is anticipated in 2025.

Through various discussions with DFO, Agnico Eagle is also investigating the application of a modular open-bottom culvert system that maintains a watercourse's natural bottom substrate and hydraulic capacity. A trial has been proposed to determine if this type of crossing can be practically implemented in arctic regions. Design work related to this trial is underway and installation is expected in 2025.

2.3 QUARRIES

In 2024, no material was crushed from borrow pits under permits KVCA11Q01 and KVCA07Q08.

Material used for construction in 2024 had been extracted (crushed) in 2023 and stored in piles for later use.

The total amount of material taken to date under permit KVCA11Q01 is 515,356 m³ and the maximum allowed quantity to be taken is 750,000 m³, as per the 2024 Quarry Permit KVCA11Q01 Renewal Agreement.

The total amount of material taken to date under permit KVCA07Q08 is 420,744 m³. The maximum allowed quantity is 740,000 m³, as per the 2024 Quarry Permit KVCA07Q08 Renewal and Amending Agreement.

SECTION 3. WATER MANAGEMENT ACTIVITIES

3.1 WATER MOVEMENT

3.1.1 Fresh water obtained from Meliadine Lake

As required by Water Licence 2AM-MEL1631, Schedule B, Item 2: *Monthly and annual volume of fresh Water obtained from Meliadine Lake.*

Monthly and annual volume of fresh Water obtained from Meliadine Lake (MEL-11) under Licence type A.

A total of 519,502 m³ of fresh Water was withdrawn from Meliadine Lake in 2024, or approximately 50% of the total authorized volume of fresh water (1,100,296 m³/year) under the current Licence. The monthly distribution of fresh Water use is presented in Table 2.

Table 2: Monthly and annual volume of Fresh Water withdrawn from Meliadine Lake at monitoring station MEL-11 in 2024 under Licence A.

	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total
Water withdrawn, m ³	46,859	40,057	43,273	42,794	33,136	40,333	50,559	53,277	42,069	42,869	39,961	44,316	519,502

As required by Water Licence 2BB-MEL1424 Part B, Item 6a: *The daily, monthly and annual quantities in cubic meters of all freshwater obtained from Meliadine Lake at Monitoring Station MEL-1 and MEL-2.*

Monthly and annual volumes of fresh Water obtained for camp or domestic uses from Meliadine Lake (MEL-1) and for drilling from Meliadine, A8 Lakes or small lakes and ponds proximal to the drilling targets (MEL-2) under Licence type B.

And

As required by Water Licence 2BE-MEL2434 Part B, Items 2b and 2c:

- *Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-Owned Lands for the reporting period*
- *Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands reporting period;*

The monthly distribution and annual water usage volumes from MEL-2 are summarized in Table 3 below; a total of 3,167 m³ or approximately 3% of the total authorized volume (299 m³/day; 109,434 m³/year in 2024) was withdrawn in 2024. Freshwater was obtained from A8 Lake or small lakes and ponds proximal to the drilling targets on IOL, for drilling purposes. No water from MEL-1 was used in 2024.

Table 3: Monthly and annual quantity of freshwater obtained from Meliadine Lake at monitoring station MEL-2 in 2024 under Licence B.

	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total
Water withdrawn, m ³	0	0	385	1,001	182	0	497	788	314	0	0	0	3,167

3.1.2 Fresh water obtained from Meliadine River.

As required by Water Licence 2AM-MEL1631 Schedule B, Item 4: *Monthly and annual volume of fresh Water obtained from Meliadine River for road dust suppression activities.*

In 2024, no water was obtained from Meliadine River for road dust suppression activities. Further, no water from ponds proximal to the road was used for dust suppression on the AWAR in 2024.

As required by Water Licence 2AM-MEL1631 Schedule B, Item 3: *Monthly and annual volume of fresh Water transferred to Meliadine Lake as a result of dewatering activities.*

No dewatering activities where water was transferred to Meliadine Lake took place in 2024. Dewatering activities took place in 2024 in preparation for mining in the Pump area. The dewatered water was transferred to CP4 and CP1.

3.1.3 Mine Water pumped from underground

As required by Water Licence 2BB-MEL1424 Part B, Item 6b: *The daily, monthly and annual quantities, in cubic meters, of Mine water pumped from the underground.*

And

As required by Water Licence 2BB-MEL1424 Part B, Item 6j, and Water Licence 2BE-MEL-2434 Part B, Item 6i: *Report all artesian flow occurrences.*

There were no occurrences of artesian flow in 2024. The monthly and annual volumes of mine water pumped from the underground are summarized in Table 4 below.

Table 4: Monthly and Annual flow volumes of underground mine water pumped to surface in 2024.

	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total
Water pumped, m ³	7,395	8,511	6,945	6,624	9,143	10,552	11,078	12,844	13,298	13,042	9,634	6,313	115,377

3.1.4 Effluent discharged from CP1 to Meliadine Lake

The monthly and annual volumes of effluent discharged from CP1 to Meliadine Lake over 2024 are summarized in Table 5 below.

Table 5: 2024 Monthly and Annual volumes of water discharged from CP1 to Meliadine Lake

	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total
Water pumped, m ³	-	-	-	-	-	171,936	72,724	0	370,142	246,675	-	-	861,476

3.1.5 Sludge produced by the EWTP-WTC and SETP-WTC

The monthly and annual volumes of sludge production from the Effluent Water Treatment Plant (EWTP-WTC) treatment process over 2024 are summarized in Table 6 below. Sludge produced by the EWTP-WTC treatment process was pumped to Tiri02. Sludge management is further discussed in section 3.9.4.3 of the Water Management Plan and in Section 7.3.3.

Table 6: 2024 Monthly and Annual volumes of sludge produced by the effluent water treatment plant

	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total
Water pumped, m ³	-	-	-	-	29	100	733	684	1,240	1,272	-	-	5,958

3.1.6 Saline Effluent Discharged to Marine Environment at Melvin Bay

No saline effluent was discharged to sea in 2024.

3.1.7 Adaptive Management of Discharge to Meliadine Lake

As required by Water Licence 2AM-MEL1631, Schedule B, Item 6: Summary of the Adaptive Management procedures implemented to minimize the discharges into Meliadine Lake during the pre-freshet, open-water and pre-freeze periods.

Schedule B, Item 6 of the Amended Water Licence 2AM-MEL1631 will come into effect following commissioning of the waterline and as per the Adaptive Management Plan for Water Management (Agnico Eagle, 2024).

Operation of the waterline for discharge to Itivia Harbour will be primarily used for the removal of saline groundwater from site. Residual capacity of the waterline will then be used to minimize or eliminate discharges to Meliadine Lake as an Adaptive Management approach throughout the open water season

each year. A summary of the Adaptive Management procedures implemented following commissioning of the Waterline will be available in future annual reports, once the Waterline is operational.

More information regarding applicable Adaptive Management strategies can be found in the Adaptive Management Plan for Water Management (Agnico Eagle, 2024).

3.1.8 TDS Concentrations Reporting to CP1

As required by Water Licence 2AM-MEL1631, Schedule B, Item 8: *Discussion on the behavior of the Total Dissolved Solids (TDS) concentrations in surface Contact Water reporting to Contact Water Ponds during the reported year, and, if any TDS concentration peaks are observed, identification of potential sources that might have contributed to higher loads of TDS.*

Total Dissolved Solids (TDS) has been a chemical parameter of interest since the onset of operations at Meliadine. Frequent measurements of electrical conductance (EC) of surface contact water were collected from the surface contact water collection ponds and other surface contact runoff infrastructure from the onset of freshet to the start of ice formation during the year. The intent of this monitoring program is to identify any anomalous trends in TDS loading behaviours across the site.

The processes which may impact TDS patterns in surface runoff on site are numerous and their interactions are complex:

- freshet often brings large volumes of runoff with low TDS concentrations into the water management system, contributing to the dilution of existing surface waters within the mine collection ponds;
- once ice and snow covers are melted, surface runoff following significant rainfall events exceeding the ground infiltration capacity could allow the mobilization and connection of water that has a higher TDS content (e.g., surficial ponding water on pads, pore water in waste rock or ore) with the collection ponds;
- thawing of the active layer may result in the release of solutes locked in the soil from the previous year active layer freeze-back;
- significant rainfall events may flush pre-event solutes from the active layer or may result in infiltration-excess overland flow of rainfall entering collection ponds, depending on the antecedent soil moisture conditions;
- exclusion of solutes as water freezes in ponds can cause TDS concentrations to rise in the water held below-ice during winter (cryo-concentration).

The results of the monitoring program are provided in units of mg/L-TDS rather than the field measurement units of $\mu\text{S}/\text{cm}$ -EC for ease of comparisons with the laboratory analyzed TDS datasets and with the TDS concentration limits required by the Licence for discharge to Meliadine Lake.

TDS was computed using the following equation:

$$TDS = k_e \cdot EC$$

where TDS is in mg/L and EC is measured in $\mu\text{S}/\text{cm}$ at 25°C (specific conductance). The correlation factor, k_e , used in the conversions of EC to TDS in the monitoring program was 0.6, derived as an approximate average from ratios of TDS to EC analyzed in MEL-14 samples collected.

Field parameter readings of surface contact runoff collection ponds were generally collected on a daily to weekly basis. This frequency ensured a robust dataset of potential TDS fluctuations could be captured following normal pond water level rise and fall throughout the season.

When establishing a monitoring program for EC data in the collection ponds on site, variation in the water quality within the vertical water column must be considered. One process significantly driving variation across the water column is due to a TDS-exclusion effect in which ice formation leads to migration of TDS from ice into the underlying water (Zhang et al., 2012). Freeze-thaw cycles – particularly in water bodies which not only maintain a volume over the winter but also do not freeze to the bottom – may result in stratified layers of varying TDS concentrations, often coinciding with thermoclines (Zhang et al., 2012). This process can be amplified by the influent of high volumes of runoff with low TDS concentrations which, due to warmer temperatures and lower density, may create an additional stratified layer on the surface of the water body. Thus, readings collected at a single elevation within the water column could misrepresent the average TDS of the total volume contained within the collection pond.

Measurements of EC were normally collected at an approximate depth of one meter below each pond surface, generally coinciding with the location of pump intakes in the ponds (to account for stratification of water quality) and subsequently the approximate quality of the water being discharged directly to (in the case of CP2, CP5 and CP6) and towards (in the case of CP3 and CP4 via Channel 1) CP1. Given the shallower nature of CP5, EC measurements at one meter depth were not always possible. As such, measurements were collected near the bottom of the water column in CP5 which was noted to be mostly representative of the rest of the water column.

3.1.8.1 **CP1 Water Volume**

Figures 2 to 7 below provide the results of the EC monitoring conducted at each surface runoff collection pond on site: CP1, CP2, CP3, CP4, CP5, and CP6. TDS-converted EC measurements are supplemented with TDS data collected from compliance monitoring stations associated with each collection pond (e.g. MEL-12 for CP1, MEL-19 for CP2, etc.). TDS-converted EC measurements of CP1 were also supplemented with TDS-converted EC measurements from continuous monitoring of the EWTP-WTC treatment stream, as well as TDS data collected from the final-discharge-point compliance station MEL-14. The figures also present the water volume data for each pond to highlight TDS behaviours associated with changing water volumes.

In 2024, all ponds remained below their maximum operating water level (MOWL) except CP5, which briefly exceeded the MOWL on October 7th. This was a result of heavy rainfall in early October and a temporary pumping suspension. Although the volume in CP5 briefly exceeded the MOWL, it remained below the maximum inflow design flood (IDF) level, posing no risk to the dike (D-CP5).

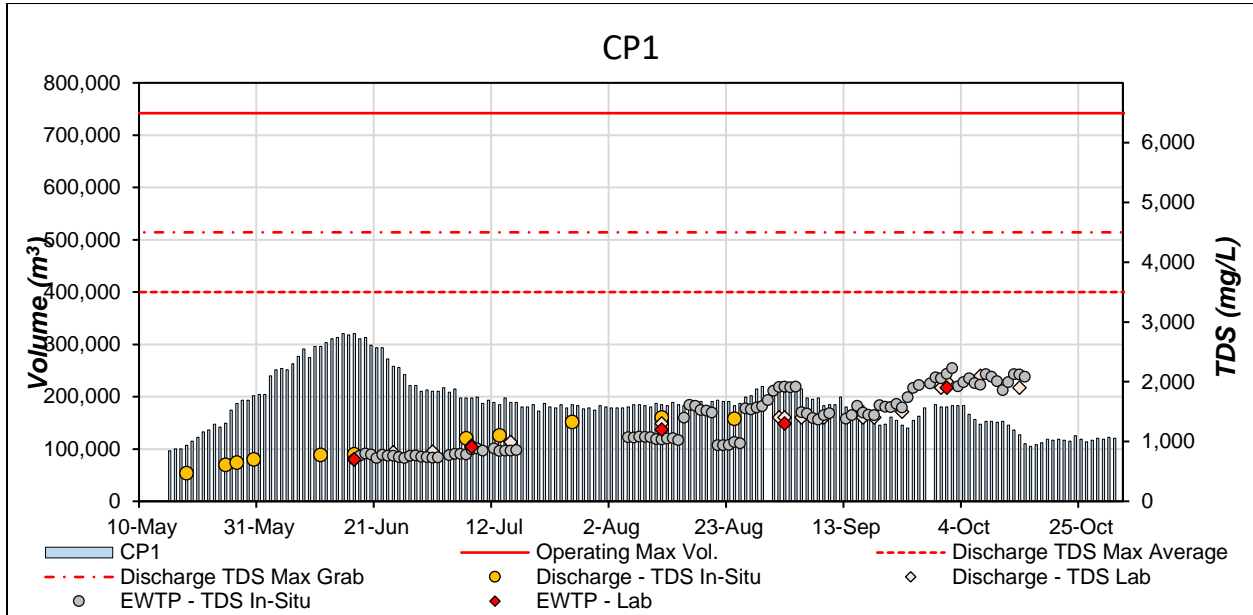


Figure 2: CP1 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

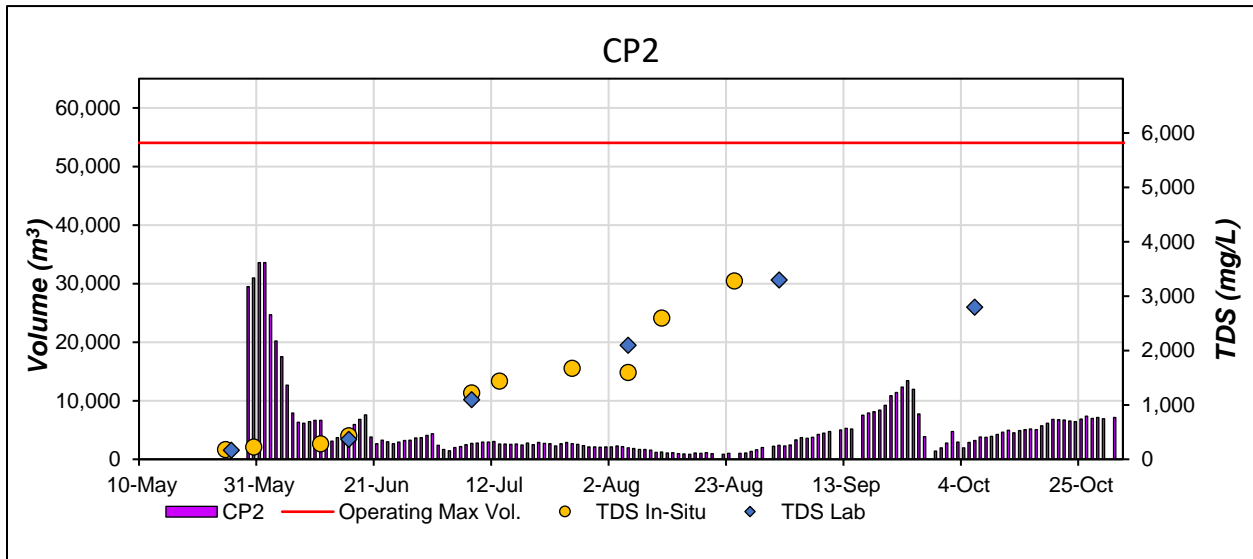


Figure 3: CP2 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

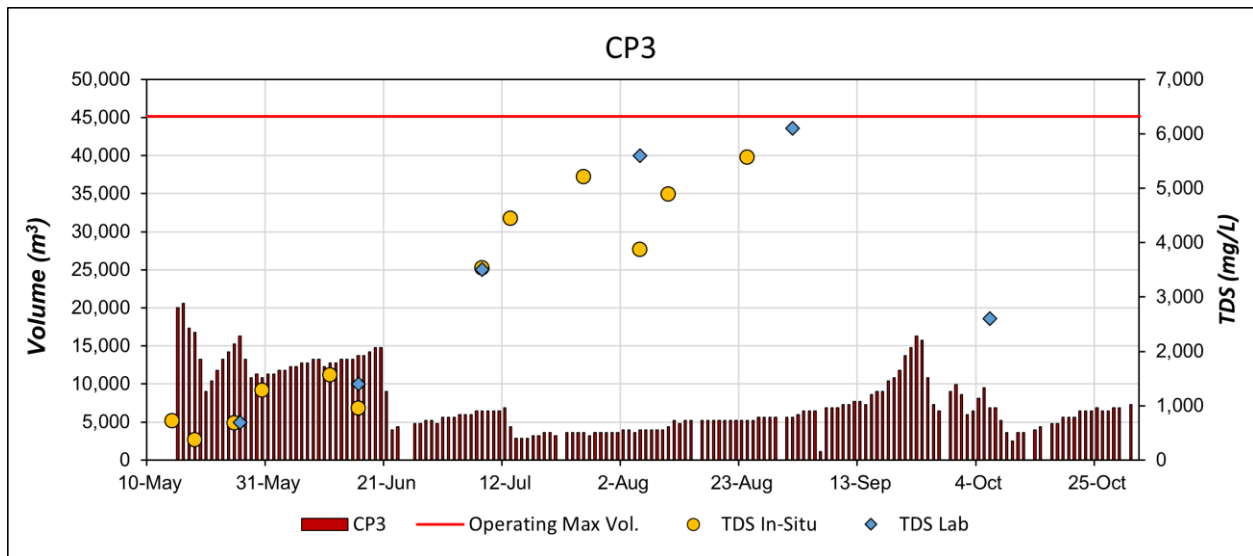


Figure 4: CP3 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

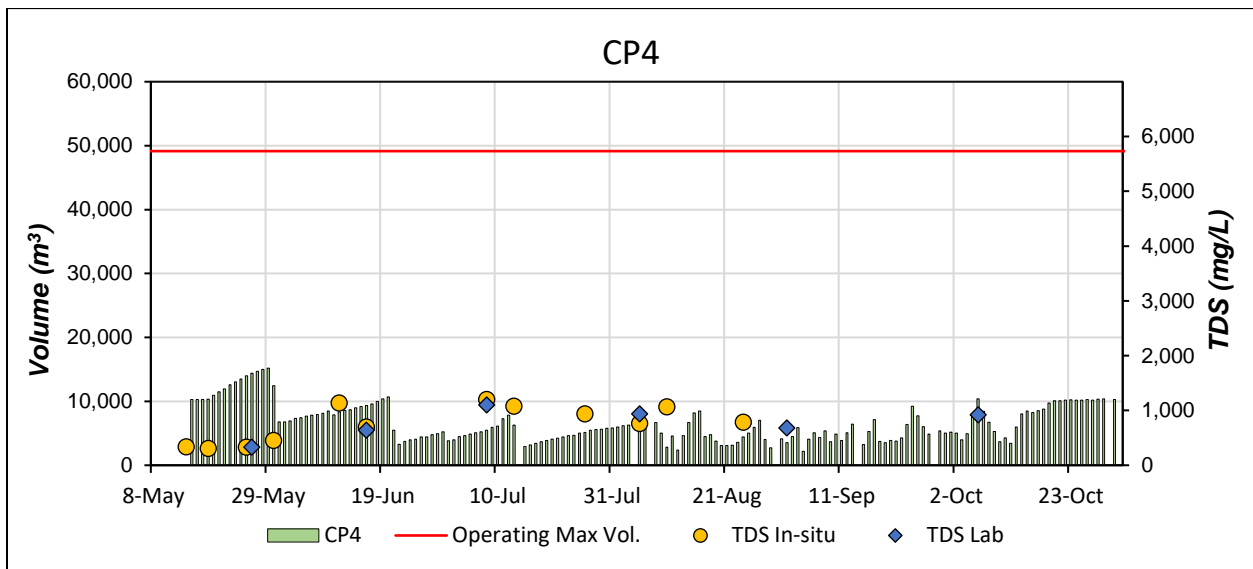


Figure 5: CP4 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

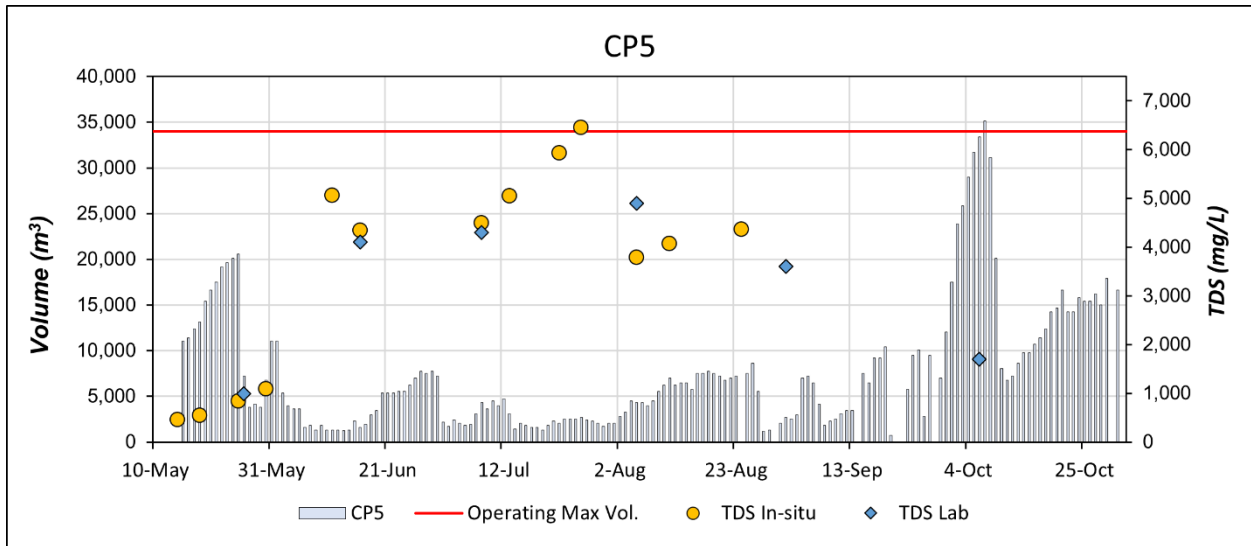


Figure 6: CP5 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

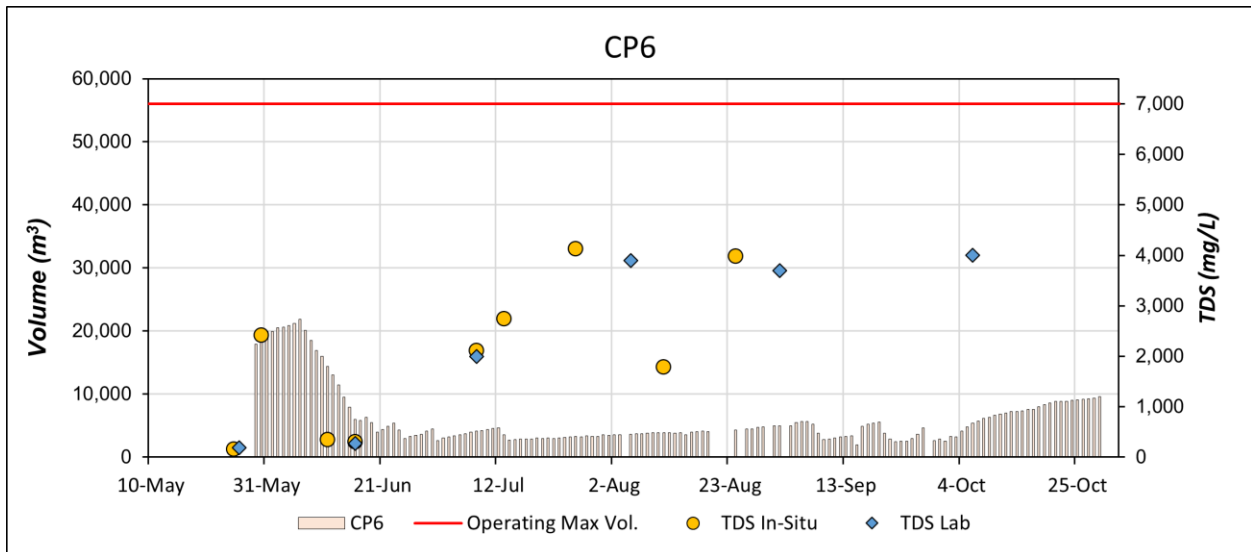


Figure 7: CP6 pond volumes and TDS measurements from lab water quality analyses and in situ EC readings in 2024.

An increasing trend in TDS is observed at most facilities over the duration of the open water season. This seasonal trend has been observed in previous years and is generally attributed to active layer thaw, resulting in the release of any solutes trapped in the active layer, and evaporative processes. A strong correlation between water volume and TDS concentration can also be observed in each pond, in which larger volumes of water correlate to reduced concentrations of TDS. Examples of this can be seen where lower TDS concentrations are observed during the freshet period and subsequently increase after pumping commences and water is drawn down in each facility. In 2022, a drop in TDS was observed after significant rainfall events. In 2024, a consistent rise or consistently higher TDS values are observed for all ponds after freshet, followed by a slight decreasing trend in all ponds in the fall when increased rainfall and runoff occurred.

While heavy fall precipitation in 2024 increased pond volumes, spring and summer remained relatively dry, resulting in correspondingly low storage volumes. These dry conditions favoured higher concentrations of TDS relative to normal climate years, but did not increase TDS loads to CP1. TDS concentrations in CP1 remained well below Licence criteria for discharge to Meliadine Lake (Figure 2). No anomalous sources of TDS loads were observed in 2024 in surface Contact Water reporting to CP1.

3.1.9 Use of Reclaim Water from Contact Water management facilities

As required by Water Licence 2AM-MEL1631 Part E, Item 4: *The Licensee shall maximize to the greatest practical extent, the use of Reclaim Water from Contact Water management facilities for use in the mill, drilling, and for dust suppression. The Licensee may use Reclaim Water for dust suppression in areas where any direct flow into a waterbody is not possible and no additional impacts are created.*

In 2023, a trial was conducted to evaluate the potential use of the Reverse Osmosis (RO) Plant permeate water as a source of reclaim water for the mill. The intention with this study was to simulate the treatment of site contact water to provide a low salinity source of reclaim water to the mill. As the salinity of permeate would be lower when treating surface contact water, impacts to milling processes and tailings salinity would be minimal. At present, the RO Plant is used to treat higher salinity sources of water on site (described in section 3.9.6 of the Water Management Plan) and thus the permeate water salinity is not low enough for direct mill water feed based on the reasoning previously described. Once the waterline is available, AEM will further assess using the RO Plant to treat surface contact water for the purpose of generating low salinity reclaim water for use at the mill.

In 2024, no Contact Water reclaimed for milling purposes. The average pore water salinity of the tailings was slightly below the design assumption in 2024. However, from January to September, salinity was consistently above the design assumption. A significant decrease in tailings salinity is observed during the last quarter lowered the annual average below the design assumption. The downward trend observed from late 2020 until 2023 did not continue in 2024; the average salinity increased by approximately 1%. Despite this slight increase, the range of salinity results in 2024 and late-year decrease suggest deviation from the downward trend of the salinity design assumption.

Saline moisture from the underground ore elevates filtered tailings pore water salinity. Previously, using contact water for milling significantly increased tailings salinity. As pore water salinity of the filtered tailings can negatively impact the TSF's thermal performance, monitoring will continue throughout 2025 to confirm the downward salinity trend of tailing and protect the TSF thermal stability.

Approximately 7,250 m³ of Reclaim Water was used for dust suppression. Water withdrawn from CP2 and a natural depression on the south side of WRFS3 (within the mine water management footprint) was used for dust suppression localized to the mine footprint. Runoff from these areas is captured by the Contact Water management facilities.

1,944 m³ of Reclaim Water was used for surface drilling in 2024. The water was picked up from a natural depression on the south side of WRFS3 and delivered to the drills. The drills were operating within the mine's runoff footprint.

3.2 WATER BALANCE WATER QUALITY MODEL REPORTING SUMMARY

As required by Water Licence 2AM-MEL1631 Schedule B, Item 5: *Updated Water Balance and Water Quality Forecast, as required under Part E, Item 13*

The Licensee shall, at a minimum of once every year following commencement of Operations, submit to the Board for review an updated Water Balance and Water Quality Forecast. This update shall include all monitoring parameters and shall identify which Mean Annual Concentrations are within 10% of the respective maximum authorized Monthly Mean Concentrations for regulated parameters. Additionally, the Mean Annual Concentrations for all monitoring parameters in the current reporting year shall be compared to those reported in the previous year, and if the respective concentrations are increased by more than 20%, a detailed technical assessment identifying specific sources of loadings and the proposed parameter forecasts shall be provided to the Board for review.

And

As required by Water Licence 2AM-MEL1631 Schedule B, Item 7: *Discussions on the available storage capacity for both saline and fresh Water, including the volumes of Water transported to Melvin Bay and the volumes of Water discharged to Meliadine Lake, as well as the projected volumes of water requiring storage in the upcoming year.*

Water transfers and impact on water quality at Meliadine is modelled by a Water Balance and Water Quality Model (WBWQM) developed in the GoldSim modelling platform (v14). The WBWQM is set up to run on a daily time-step. The primary modelling objective is the prediction of water volume and solute load transfers across the mine site and following treatment and discharge to the receiving environment. The water balance component of the model is based on a distributed catchment approach, where water volumes are estimated from water inputs (i.e., rainfall and snowmelt) and runoff coefficients calibrated for natural or undisturbed areas, and for each distinct altered area of the site (e.g., facilities, stockpiles, TSF, open pits and underground mine). Like the distribution of the runoff coefficients, water quality across site is modelled using reference signatures (source terms) assigned to non-contact (undisturbed) and altered areas. The combination of source terms with the modelled flows allows the prediction of the water quality using a mass balance approach. Water management facilities (i.e., collection ponds, sumps, open pits, etc.) are represented by 'pool' elements in GoldSim. The pool elements allow the model to track multiple inflows and outflows simultaneously, and to simulate the mixing of the mass balance simulated water quality of the inflows, while also ensuring the conservation of all elements mass within the pool.

The purpose of this section is to summarize the updates made to the model and provides an overview of the resultant water balance and water quality forecast for the mine. More information regarding the WBWQM, including input sources and model methods can be found in section 5 of the Water Management Plan.

In January 2024, a WBWQM model was submitted to the NWB as part of the Water Licence Amendment application (Lorax 2024). The model, hereafter referred to as the WLA WBWQM, was also developed using the GoldSim platform and has a similar framework to that used for operational forecasting purposes (the Operational WBWQM). However, the WLA WBWQM includes additional project components related to the additional mining deposits as permitted by the WLA and is set up to provide forecast results for the operations (2025-2031), closure (2032-2038), and post-closure (2039-2048) phases.

In 2025, Agnico Eagle will transition from the Operational WBWQM to the WLA WBWQM to capture future model updates, which includes changes to the mine plan and the use of observed data (such as

precipitation and temperature measurements and pumping and discharge volumes) as inputs to the model. For the 2024 reporting year, the water balance and water quality forecast are discussed in the Meliadine Mine Water Balance and Water Quality Model – Technical Report (Lorax 2024).

The following sections provide the results of the Operational WBWQM after being updated to incorporate observed data from 2024. Time-series are provided for the key surface and saline contact water collection infrastructure (CP1 and Tiri02, respectively).

3.2.1 CP1 Water Balance Results

Figure 8 (from the Operational WBWQM) shows the predicted CP1 volumes for previous years up to 2025. The trend demonstrates a good alignment between predicted volumes and observed volumes throughout 2024 and previous model years. Predicted volumes in 2025 and onward are reflective of the mine plan prior to the approval of the WLA and thus do not incorporate inflows from new components included in the WLA such as waterbody dewatering and new infrastructure. Figure 9 (from the WLA WBWQM) presents the CP1 volumes, inflows, and outflows for the operations, closure, and post-closure phases. It should be noted that the following key changes are anticipated in 2025 that are not currently reflected in the WLA WBWQM results:

- Lake B7 dewatering will not occur in 2025.
- Lake A8 dewatering will occur in 2025.
- Commissioning and operation of the Waterline will not occur in 2025.
- Transfer of water from TIRI02 to SP6 (B7) will not occur in 2025.

Changes to the mine plan for 2025 including waterbody dewatering schedules, and details on the waterline and saline storage can be found in the Water Management Plan. Despite these changes, preliminary modeling of CP1 indicates volumes remain well below the maximum operating level, and based on the influence of dewatering activities, will be similar to the 2026 model year as presented in Figure 9.

Updated water balance results from the Operational WBWQM for collection ponds CP1 to CP6 can be found in Appendix 5 (Figures 1 to 7).

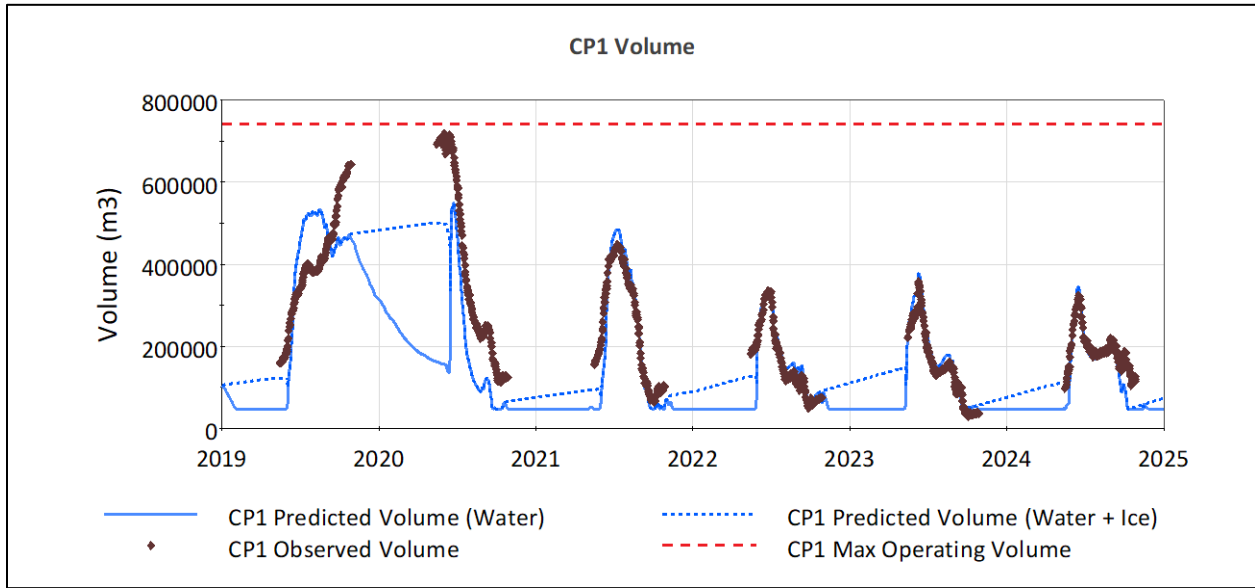


Figure 8: CP1 observed and predicted volumes for the Operational WBWQM.

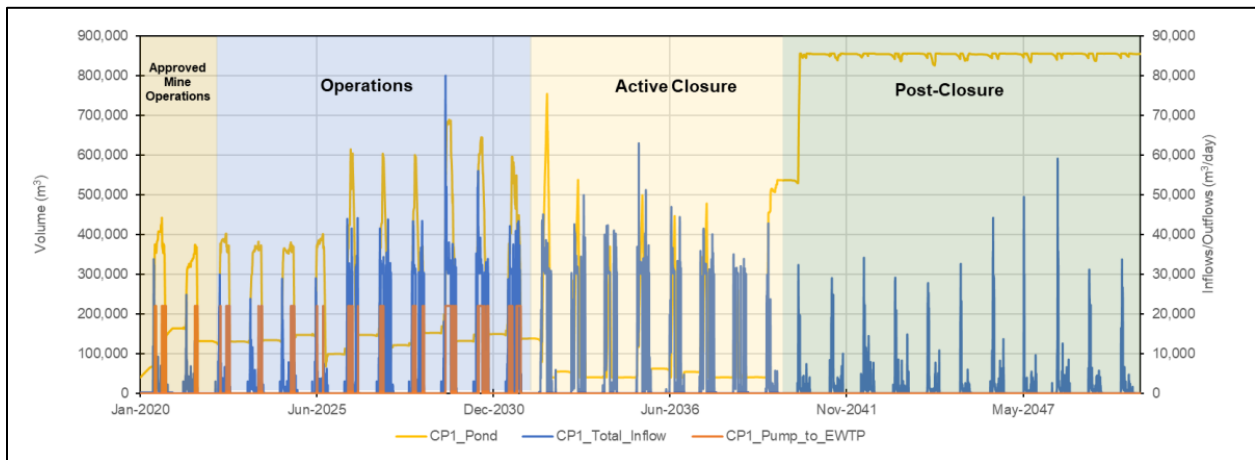


Figure 9: Volumes, inflows, and outflows to the CP1 Pond for the Operations, Active Closure, and early post-Closure phases. Reprinted from Meliadine Mine Water Balance and Water Quality Model – Technical Report (Lorax 2024).

3.2.2 TIRI02 Water Balance Results

Figure 10 (from the Operational WBWQM) shows the predicted TIRI02 volumes for previous years up to 2026. The trend demonstrates a good alignment between predicted volumes and observed volumes throughout 2024 and previous model years. While predicted volumes in 2025 are reflective of the mine plan prior to the approval of the WLA, new mine components included in the WLA do not significantly alter the forecast for TIRI02 based on inputs primarily being limited to groundwater inflows to the pit and surface runoff within the pit catchment.

The predicted volumes in TIRI02 presented in Figure 5-4 of the Meliadine Mine Water Balance and Water Quality Model – Technical Report (Lorax 2024), as well as the predicted inflows to TIRI02 presented in Figure 10, are driven primarily by the groundwater inflow model used for the WLA WBWQM, which differs

from the groundwater inflow model used by the Operational WBWQM. The inflow rates of both models, as well as a summary of the differences between both models, is described in Section 2.1 of the Groundwater Management Plan. In summary, the predicted groundwater inflow rates used in the WLA WBWQM are much higher than those used in the Operational WBWQM, due to a greater underground mine footprint as part of the WLA as well as a different model calibration approach used, which yields more conservative estimates for the WLA.

Furthermore, the TIRI02 forecast presented in Figure 5-4 of the Meliadine Mine Water Balance and Water Quality Model – Technical Report (Lorax 2024), as well as the predicted inflows to TIRI02 presented in Figure 10, assumes the transfer of water from TIRI02 to SP6 (dewatered B7) will take place in 2025. As mentioned in the model changes previously described section 3.2.1, the dewatering of B7 will not occur in 2025.

In conclusion, for 2025, it is anticipated that the volume prediction for TIRI02 will closely reflect what is shown in Figure 10.

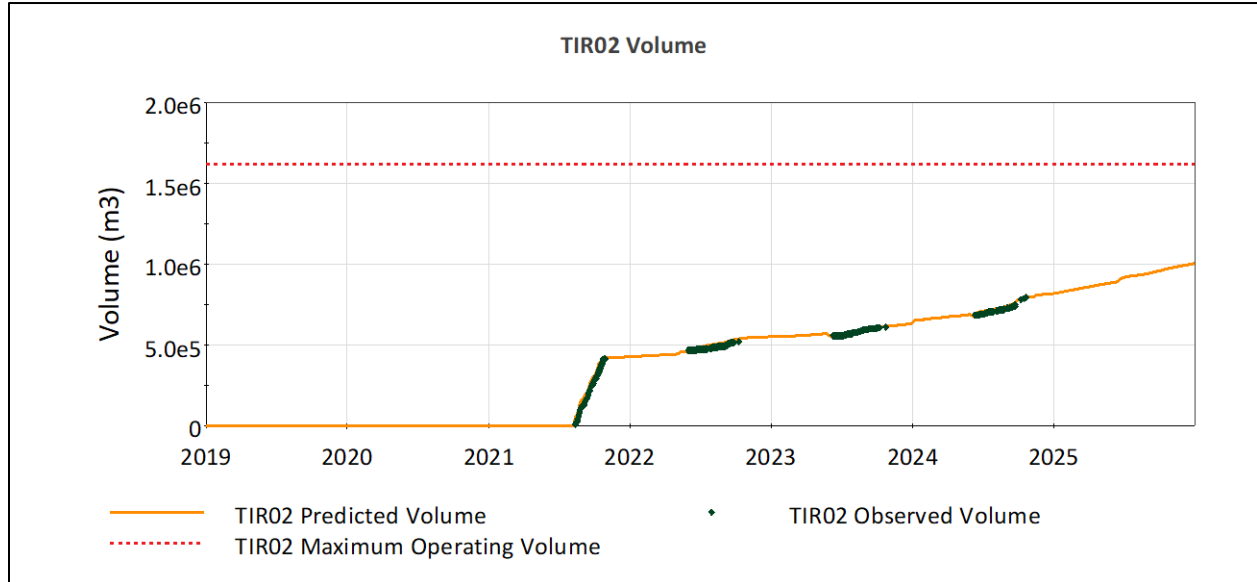


Figure 10: TIRI02 observed and predicted volumes from the Operational WBWQM.

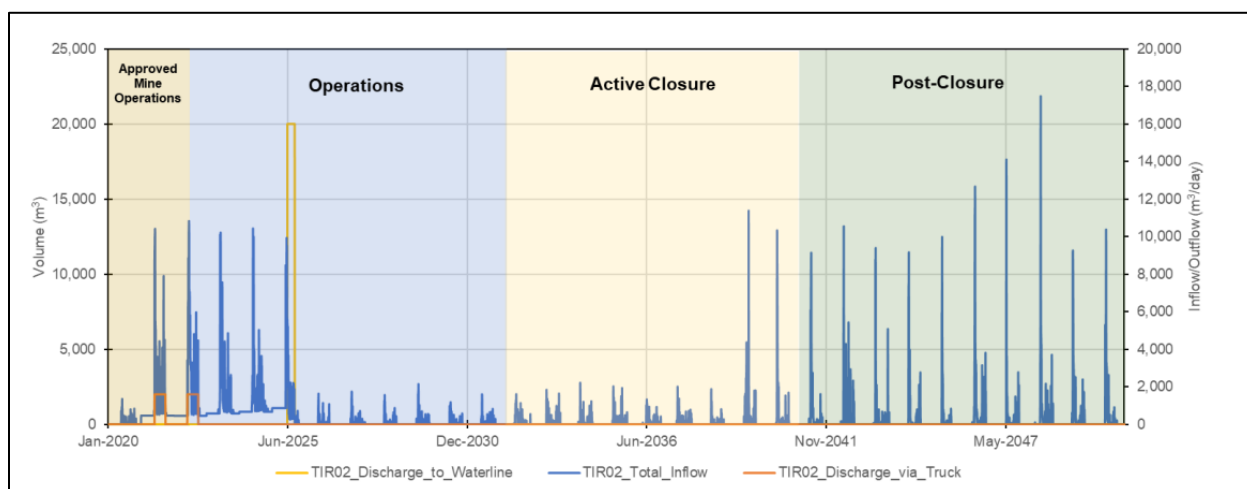


Figure 11: Inflows and outflows to the TIR02 Pit for the Operations, Active Closure, and early post-Closure phases. Reprinted from Meliadine Mine Water Balance and Water Quality Model – Technical Report (Lorax 2024).

3.2.3 CP1 Water Quality

Trends showing updated CP1 water quality results from the Operational WBWQM for Licence parameters can be found in Appendix 5 (Figures 8 to 17).

In previous annual reports, it was indicated that model predictions overestimated the concentrations of total ammonia-nitrogen and phosphorous compared to observed concentrations in CP1. This was once again observed following the 2024 update of the operational WBWQM.

A desktop study was conducted in 2023 to investigate whether natural attenuation in CP1 can explain the discrepancy between modelled and actual concentrations of ammonia-nitrogen and phosphorous in CP1. The results of this investigation were presented in Appendix 5 of the 2023 Annual Report. The study concluded that while the ammonia removal mechanism is still unclear in CP1, data shows that natural attenuation by algal growth plays a dominant role in this process. Work to implement a second prediction for ammonia and phosphorous within the WBWQM, which will include a limited calibration that will better reflect the natural attenuation process in CP1, is still ongoing.

3.2.4 MEL-14 Final Discharge Point Water Quality

As per the Water Licence Part E, Item 13, results from the WLA WBWQM were compared to Maximum Authorized Monthly Mean Concentrations (MAMMCs) to identify forecasted Mean Annual Concentrations (MACs) that fell within 10% of their respective MAMMCs. Additionally, observed MACs from the current reporting year were compared to those reported in the previous year to identify parameters whose concentrations have increased by more than 20% year-over-year.

No parameters had concentrations within 10% of their respective MAMMCs. While concentrations of some parameters increased by more than 20% year-over-year, all concentrations were below the Water Licence Limits (Water Licence Part F, Item 3). The results are discussed below and can be found in Appendix 5, Table 3.

The initial portion of the assessment was conducted using MEL-14 monitoring station data and the forecasted concentration (2025 to Post-Closure) were extracted from the WLA WBWQM results (Lorax 2024). MAC results produced by the WBWQM represent dissolved concentrations as TSS is not a modeled parameter. To correct for this, a conservative TSS assumption is applied. It is assumed that treated MEL-14 effluent (represented in the model by CP1 water quality during periods of discharge) contains the MAMMC of 15 mg/L TSS. As a majority of material disturbed by mining operations is comprised of waste rock, the particulate composition of TSS was assumed to have the average elemental concentration of waste rock produced by the project. Table 7 presents the particulate fraction concentration per 15 mg/L TSS that was applied to the MAC results from the WBWQM. These particulate fraction values are determined based on the composition of waste rock (ppm or mg of element per kg of waste rock).

Table 7: Suspended Solids Composition and Contribution to total concentrations at MEL-14.

Element	Particulate Composition (ppm or mg of element per kg of rock)	Particulate fraction concentration (mg/L) per 15 mg/L TSS
Al	62700	0.941
As	65.7	0.000985
Cu	70.4	0.00106
Ni	71.6	0.00107
Pb	7.19	0.000108
Zn	84.7	0.00127

Assessment of the TSS-adjusted forecasted MACs identified no parameters falling within 10% of their respective MAMMCs over the life of mine (LOM).

In accordance with the second part of the Licence requirement, year-over-year increases greater than 20% from 2023 to 2024 were identified for 6 elements, namely ammonia-nitrogen, total cyanide, total aluminium, total arsenic, total nickel, and total zinc.

Ammonia-Nitrogen

The observed mean annual concentration of ammonia-nitrogen in 2024 is 0.86 mg/L, representing a yearly increase of 182 % from 2023 (0.31 mg/L). Mean annual ammonia concentration observed this year correspond to 6 % of the MAMMC (14 mg/L) limit for this parameter. The higher mean annual concentration of ammonia-nitrogen in 2024 arises from four samples analyzed in fall, at the end of the open-water season between September 30 and October 14, 2024. These samples exhibit an average concentration of 3 mg/L, whereas the rest of the year is marked by an average concentration of 0.21 mg/L. The fall of 2024 was characterized by numerous and voluminous rain precipitation events, increasing surface run-off and consequently increasing ammonia-nitrogen concentrations reporting to CP1. Notwithstanding, ammonia-nitrogen mean annual concentration observed in 2024 remains below the forecasted mean annual concentration (7 mg/L).

Total Cyanide

The observed mean annual concentration of total cyanide in 2024 is 0.0018 mg/L, representing a yearly increase of 139 % from 2023 (0.0007 mg/L) and corresponding to <1 % of the MAMMC (0.5 mg/L) limit for this parameter. Despite the increase in total cyanide observed in 2024 compared to 2023, mean annual

concentration in 2024 is within a range of normal historical variability. Concentrations of total cyanide observed in 2024 are below the 2024 forecasted mean annual concentrations (0.003 mg/L).

Total Aluminium

The observed mean annual concentration of total aluminium in 2024 is 0.48 mg/L, representing a yearly increase of 31 % from 2023 (0.36 mg/L) and corresponding to 24 % of the MAMMC (2 mg/L) limit for this parameter. Based on the decreasing rates from 2021 (0.38 mg/L) to 2022 (0.37 mg/L), and the magnitude of the total aluminium in 2024 MAC in comparison to the MAMMC, the increase of 31 % observed in 2024 is expected to be within a range of normal variability at the low concentrations observed. Concentrations of total aluminium observed in 2024 are below the 2024 forecasted mean annual concentrations (0.95 mg/L).

Total Arsenic

The observed mean annual concentration of total arsenic in 2024 is 0.0085 mg/L, representing a yearly increase of 72 % from 2023 (0.0049 mg/L) and corresponding to 3 % of the MAMMC (0.3 mg/L) limit for this parameter. Concentrations of total arsenic observed in 2024 are below the 2024 forecasted mean annual concentrations (0.0280 mg/L). Regardless of the slightly higher mean annual concentration of total arsenic observed in 2024, concentrations observed throughout the year remain below the historical range of concentrations observed at Meliadine.

Total Nickel

The observed mean annual concentration of total nickel in 2024 is 0.0063 mg/L, representing a yearly increase of 37 % from 2023 (0.0046 mg/L) and corresponding to 1 % of the MAMMC (0.5 mg/L) limit for this parameter. Based on the decreasing rates from 2021 (0.0057 mg/L) to 2022 (0.0045 mg/L), and the magnitude of the total nickel in 2024 MAC in comparison to the MAMMC, the increase of 37 % observed in 2024 is expected to be within a range of normal variability at the low concentrations observed. Concentrations of total nickel observed in 2024 are below the 2024 forecasted mean annual concentrations (0.018 mg/L).

Total Zinc

The observed mean annual concentration of total zinc in 2024 is 0.0041 mg/L, representing a yearly increase of 34 % from 2023 (0.0030 mg/L) and corresponding to 1 % of the MAMMC (0.4 mg/L) limit for this parameter. Based on the decreasing rates from 2021 (0.0119 mg/L) to 2022 (0.0057 mg/L), and the magnitude of the total zinc in 2024 MAC in comparison to the MAMMC, the increase of 34% observed in 2024 is expected to be within a range of normal variability at the low concentrations observed. Concentrations of total zinc observed in 2024 are below the 2024 forecasted mean annual concentrations (0.007 mg/L).

3.2.5 Meliadine Lake Outflow Monitoring

Monitoring of the Meliadine Lake outflows was initiated in late 2024 to enhance the understanding of the lake's hydrology. The project, focused on developing a water balance model for the lake will also assess the potential effects of climate change on the hydrology of the lake. Over the next two years, the project will incorporate instrumentation, monitoring, surveys and development of a numerical model of the lake water balance. Key activities in 2024 included:

- **Lake level monitoring:** Water-level sensors were installed in the late summer to record changes in water levels and to calculate volume changes for model validation.

- **Discharge quantification:** Outflow volumes were monitored at two locations (northern and southern outflows, Figure 12). Optimal gauging sites were established, and rating curves developed for continuous flow estimation.

The project will enable climate change simulations to assess potential impacts on lake dynamics and mass balance for parameters of interest.

As these stations were not established until late in the season 2024 data will be included in the 2025 assessment and Annual Report.

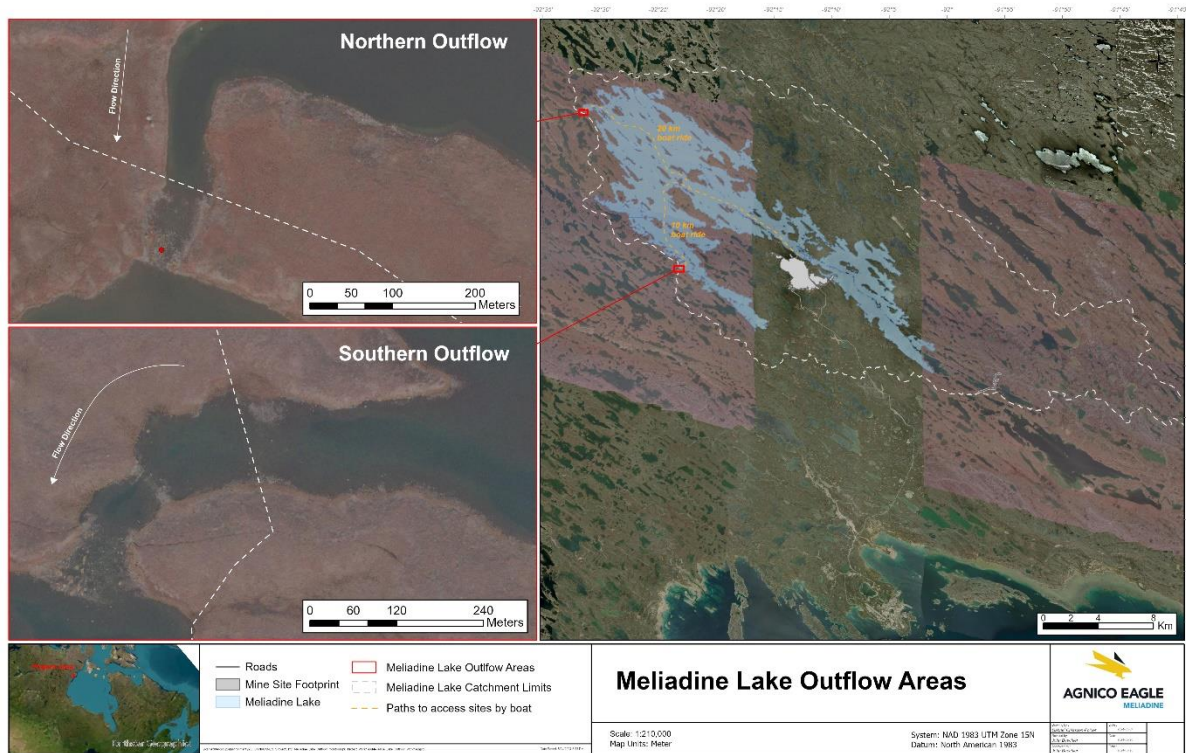


Figure 12: Locations of northern and southern outflows for data collection, 2024 to 2026.

3.3 ADDITIONAL INFORMATION

As required by Water Licence 2AM-MEL1631 Schedule B, Item 26: *Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported; and*

As required by Water Licence 2BB-MEL1424 Part B Item 6n: *Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported; and*

As required by Water Licence 2BE-MEL2434 Part B Item 2m: *Any other details on Water use or Waste disposal requested by the Board by November 1 of the year being reported.*

No additional information was requested in 2024.

SECTION 4. CRITICAL INFRASTRUCTURE MANAGEMENT ACTIVITIES

4.1 GEOTECHNICAL MONITORING

The safe and responsible management of critical infrastructure is a core activity for Agnico Eagle. A primary objective of Agnico Eagle's governance policy for critical infrastructure is to assure a high standard of care is applied to the entire lifecycle: design, construction, operation, closure and legacy (for elements of critical infrastructure that must function beyond closure).

The primary elements of the policy are:

- The development of specific roles with specific responsibilities;
- Regular and consistent reporting;
- Accountability at all levels, from operations to corporate;
- The use of Best Available Technology (BAT) and Best Applicable Practices (BAP); and
- The use of a risk-based approach to manage the risks associated with critical infrastructure.

As required by Water Licence 2AM-MEL1631 Part I, Item 14: *The Licensee shall submit to the Board as part of the Annual Report required by Part B, Item 2, a Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan addressing each of the Geotechnical Engineer's recommendations.*

And as required by Water Licence 2AM-MEL1631, Schedule B, Item 1:

a. An overview of methods and frequency used to monitor deformations, seepage and geothermal responses

The performance of the dikes (D-CP1 and D-CP5) is assessed according to the guidelines provided in the Operation, Maintenance and Surveillance (OMS) manual for the facilities. This program consists of both documented visual inspections and geotechnical instrumentation monitoring. In 2024, visual inspections were conducted according to the following schedule:

- Daily – Conducted by personnel working on or adjacent to the water management infrastructure as part of their daily activities, such as environmental technicians, survey staff and dewatering crews.
- Weekly - Conducted during open water season by a qualified engineer or technician;
- Monthly – Conducted during open water season by the Agnico Eagle Responsible Person; and
- Annual – Conducted by a third party consulting engineer (Tetra Tech) during open water season.

The visual inspections include observations of cracking, settlement, seepage and deformation in addition to photographs. Any areas of movement are marked both physically on the dikes themselves by spray painting the locations and on plan drawings of the facilities in order to track changes in conditions.

In addition to the monthly documented visual inspection (during open water), a review of the operational performance and assessment of the geotechnical monitoring instrumentation is conducted every month by the Responsible Person. The schedule of collecting monitoring data in 2024 generally followed the OMS guidelines and is summarized in Table 8.

Table 8: Summary of 2024 Permanent Dike Geotechnical Monitoring Program

Instrumentation	Frequency of Data Collection
Thermistors	Updated twice per day (data loggers)
Survey Monuments	Monthly
Upstream Water/Ice Elevations	Daily (Open water); Monthly (Ice)

The performance of all other water management and earthworks structures were assessed in 2024 during the Annual Geotechnical Inspection conducted by Tetra Tech. The results of this inspection are available in Appendix 6.

b. A comparison of measured versus predicted performance

Based on the visual inspections and geotechnical monitoring data, the permanent water retention dikes (D-CP1 and D-CP5) are generally performing as expected, with no significant geotechnical concerns identified in 2024. Deformation, seepage and geothermal response will continue to be monitored as per the OMS guidelines throughout 2025.

No significant geotechnical concerns were noted with any other water management infrastructure during the annual inspection. The results of this inspection and detailed analysis are available in Appendices 6 to 8.

c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;

There were no unanticipated observations in 2024.

d. As-built drawings of all mitigation works undertaken;

Mitigation works undertaken in 2024 included the following;

- Maintenance of CP6 access road;
- Maintenance of Channel 4;
- Maintenance of Channel 5,
- Maintenance of the downstream channel of D-CP1;
- Maintenance of CP3; and
- Maintenance of Berm 2.

No as-built drawings are submitted for the mitigation work listed above, since it is considered maintenance, and no modifications to the infrastructures were undertaken.

e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality

Run-of-mine rockfill was added to the structures listed above to improve the performance of the structures. No meaningful changes are expected to the water quality of these structures and there are no expected changes to the water balance.

f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data

It should be noted that some data presented in subsections 4.1.1 to 4.1.8 below was collected from instrumentation at the end of year (November and December 2024).

4.1.1 Instrumentation at D-CP1

Horizontal ground temperature cable (GTC) plots indicate a warming trend of approximately 0.5°C/year observed from 2019 to 2024, except the cooling trend (average -0.3°C) observed between 2021 and 2022. The average temperature increased by 1.1°C between June 25, 2023 and June 25, 2024 in the base of the key trench. The decrease in temperature between 2021 and 2022 is considered due to a combination of a cold 2021/2022 winter and reduced snow accumulation on the dike. The plots are shown in Appendix B of the 2024 Annual Geotechnical Inspection Report (Appendix 6). Temperatures in the key trench ranged from an average high of -3.8°C in early January 2024 to an average low of -6.1°C in early June 2024. Generally, the average horizontal ground temperature cable nodes at the base of the key trench have remained below -2.0°C throughout the year.

Vertical ground temperature cable plots shown in Appendix B of the 2024 Annual Geotechnical Inspection Report (Appendix 6) indicate that the dike remained below 0°C until June 2024 and after November/December 2024, while the foundation remained below 0°C throughout 2024.

D-CP1 survey monitoring points M-1 to M-6 indicate a range of total vertical displacement between 39 mm and 98 mm since they were installed on September 19, 2017. The dike operating water levels were based on a settlement of 120 mm; the measured settlement has been less than this to date.

4.1.2 Instrumentation at D-CP5

Horizontal ground temperature cable plots shown in Appendix F of the 2024 Annual Geotechnical Inspection Report (Appendix 6) indicate a slight warming on average of 1.4°C and 0.4°C in the key trench from May 2023 to May 2024 and September 2023 to September 2024, respectively. The vertical ground temperature cables indicate a slight warming trend on average of 0.9°C and 0.6°C in the foundation of the dike from May 2023 to May 2024 and September 2023 to September 2024, respectively. The average temperatures in the key trench ranged from -6.7°C in May 2024 to an -2.1°C in December 2024.

Three settlement survey monuments were installed over the liner crest in the dike. CP5 survey monitoring points indicate a settlement between 9 and 45 mm since installation as of December 2024. The dike operating water levels were based on a settlement of 100 mm; the measured settlement has been less than this to date.

4.1.3 Thermistors in the P-Area

The P-Area (P1 and P2) was decommissioned in 2020-2021. The thermistors previously located on berm DP1B (DP1B-1 and DP1B-2) were removed in 2021. The thermistors on berm DP2A (DP2A-1) and berm DP3A (DP3A-1, DP3A-2, and DP3A-3) are still in place and temperature measurements are read periodically.

4.1.4 Thermistors in Berm CP2

Three (3) GTCs (GTC-01, GTC-02, and GTC-03 Berm CP2) were installed in Berm CP2 to measure the active layer depth in the berm and subgrade ground temperatures. The GTC plots are shown in Appendix C of the 2024 Annual Geotechnical Inspection Report (Appendix 6). The maximum active layer depth in 2024 was 2.5 m in August 2024. The original ground surface temperatures ranged from -4.3°C to -4.4°C on December 25, 2024.

4.1.5 Thermistors in Berm CP3

Three (3) GTCs (GTC-01, GTC-02, and GTC-03 Berm CP3) were installed in Berm CP3 to measure the active layer depth in the berm and subgrade ground temperatures. The GTC plots are shown in Appendix D of the 2024 Annual Geotechnical Inspection Report (Appendix 6). The maximum active layer depth in 2024 was 3.2 m based on the collected ground temperatures in the past years. The original ground surface temperatures ranged from -1.3°C to -2.3°C on December 25, 2024.

4.1.6 Thermistors in Berm CP4

Two (2) GTCs (GTC-01, GTC-02 Berm CP4) were installed in Berm CP4 to measure the active layer depth in the berm and subgrade ground temperatures. The GTC plots are shown in Appendix D of the 2024 Annual Geotechnical Inspection Report (Appendix 6). The maximum active layer depth on September 25, 2024 was 3.4 m. The ground temperatures at the original ground surface was -3.5°C on December 25, 2024.

4.1.7 Thermistors in Berm CP6

Three (3) GTCs (GTC-01, GTC-02, GTC-03 Berm CP6) were installed in Berm CP6 to measure the active layer depth in the berm and subgrade ground temperatures. The GTC plots are shown in Appendix G of the 2024 Annual Geotechnical Inspection Report (Appendix 6). The maximum active layer depth on September 25, 2024 was 2.6 m. The ground temperatures at the original ground surface ranged from -3.3°C to -3.8°C on December 25, 2024.

GTC-02 has stopped reading since the last measurement was taken on May 25, 2022. Berm CP6 is a thermal berm and its function is to maintain frozen conditions within the original ground beneath the center of the berm. Berm CP6 is performing as intended. The two remaining thermistors are adequate to assess the berm's performance.

4.1.8 Other Thermistors

In addition to recently installed thermistors to monitor temperatures in and below critical water management infrastructures, numerous other thermistor cables have been installed around the mine site to monitor natural ground temperatures as part of previous ground investigation campaigns. In 2024, no new thermistors were installed.

Top priority (P1) is given to reading thermistors installed in existing infrastructure, with these readings typically taken on a monthly basis for the first year then quarterly afterwards, with the exception of the dikes and the TSF. Shallow GTCs installed in areas of potential future expansion are given the next priority (P2)

with a quarterly reading frequency, followed by deep thermistors in future deposition areas which are read bi-yearly (P3). Also read twice per year are any additional cables located around the site (P4). The updated location of these thermistors is provided in the 2024 Geotechnical Inspection Report (Appendix 6).

Seven (7) of the previously installed site thermistors were functional in 2024. Readings taken in 2024 in the remaining operational site-wide thermistors are generally consistent with previous trends.

WRSF3 is performing as intended. The two remaining thermistors are adequate to assess the WRSF's performance at this time. Additional thermistors will be installed as the facility is completed as per the design. Agnico Eagle and the Design Engineer (Tetra Tech) review the instrumentation design yearly. If it is identified that additional instrumentation is required before the facility is completed, it will be installed as per recommendations.

g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and berms

As discussed above in Sections *d* and *e*, run-of-mine rockfill was added to Berm CP3 and between the access road to CP6 and Berm CP6. The finished surface of the rockfill placed near CP's was graded towards their respective pond. The fills were placed to limit water ponding and improve the performance of the structures. Berm 2 was reshaped with no additional fill placed. No meaningful changes are expected to the water quality of these structures and there are no expected changes to the water balance.

4.1.9 Permafrost monitoring

In general, permafrost aggrades into the fills placed on the natural ground. Some localized permafrost degradation has been observed within/adjacent to some of the water management structures. These areas correspond to areas where ice rich materials are present within the natural ground and where the natural vegetation has been removed and/or where water is allowed to accumulate. Agnico Eagle monitors these areas and repairs them when required. Additionally, the lessons learned from the performance of older infrastructure is being implemented into new infrastructure to minimize future permafrost degradation.

Information on permafrost monitoring for each Mine infrastructure is presented in the 2024 Annual Geotechnical Inspection Report (Appendix 6).

In summary:

- Some subsidence was observed in Channels 1, 2, 4, 5, and 7.
- The cracks and thaw subsidence are an indication of thermal degradation at localized areas and were likely caused by surface runoff flow over the area between WRSF1 and Channel 4.
- Thaw subsidence and cracking were observed at various areas between Channel 9, Channel 10, and WRSF3.
- Further subsidence was observed between Channel 4 and WRSF1 compared to previous years.
- Possible thaw settlement or erosion of the lake bed settlement was observed in a few locations along the east side of the CP6. The east slope of CP6 appears stable at this time.
- Some cracks and thaw subsidence were observed along the southern shoulder of Channel 9 and Channel 9 berm were likely caused by construction disturbance and surface runoff flow over the

area between WRSF3 and Channel 9. The infrastructure is overall performing well with no noticeable geotechnical concerns at the time of inspection.

- Minor areas of thaw subsidence were observed along the upstream slope of Channel 10. The infrastructure is overall performing well with no noticeable geotechnical concerns at the time of inspection.
- Some cracks observed since 2020 in the southwest corner of the SP 1 crest that may be due to thaw subsidence or movement of the overburden slope. No other permafrost degradation was observed and no significant changes noted in 2024.

Mitigation measures are applied as per the Design Engineer's recommendations (refer to Appendix 7 and Appendix 8).

No permafrost degradation was observed/noted at the time of the inspection for other infrastructures, including the TSF, WRSFs, Site Roads, Pads, AWAR, Bypass Road, Borrow sources, etc. (refer to Appendix 6 for complete information).

4.2 GEOCHEMICAL MONITORING

This section provides a summary of geochemical monitoring results conducted in 2024. Additional information, including summary statistics and complete Acid/Base Accounting (ABA) and elemental composition results, can be found in the 2024 Metal Leaching and Acid Rock Drainage Monitoring Report in Appendix 9 of the Annual Report.

In accordance with Water License 2AM-MEL1631 Schedule B, Item 9: *Geochemical monitoring results including:*

a. Operational acid/base accounting and paste pH test work used for waste rock designation (PAG and NPAG rock);

The ABA and paste pH test work used for waste rock designation is in the 2024 Metal Leaching and Acid Rock Drainage Monitoring Report located in Appendix 9 and summarized below.

b. As-built volumes of waste rock used in construction and sent to the Waste Rock Storage Facilities with estimated balance of acid generation to acid neutralization capacity in a given sample, as well as metal toxicity;

Waste rock from the mining activities in the open pits and underground was placed in WRSF1, WRSF3 or was used for construction purposes in 2024. As built volumes of waste rock used in construction and sent to the WRSFs are presented in the Mine Waste Management Plan (MWMP) (Appendix 29-9).

All monitoring data with respect to geochemical analysis carried out at the Meliadine Mine in 2024 can be found in the 2024 Metal Leaching and Acid Rock Drainage Monitoring Report located in Appendix 9.

c. All monitoring data with respect to geochemical analyses on site and related to roads and quarries;

All monitoring data with respect to geochemical analysis carried out at the Meliadine Mine in 2024 can be found in the 2024 Metal Leaching and Acid Rock Drainage Monitoring Report located in Appendix 9.

d. Leaching observations and tests on pit slope and dike exposure;

Leaching was not observed on the dike exposures (D-CP1 and D-CP5) or the pit slopes (TIRI01, TIRI02, SP1, SP4, CP2, CP3, CP4, and CP6).

e. Any geochemical outcomes or observations that could imply or lead to environmental impact;

One result from the Pump Road construction sampling returned as *uncertain*, meaning that there is an uncertain chance that the sample in question has the potential to produce Acid Rock Drainage (ARD). The location of this sample will be resampled in 2025, with further sampling stepping out from that point for confirmation and delineation of the uncertain material, and to determine if remediation is required.

The majority of the geochemical samples taken from Tiriganiaq Open Pit 1, Tiriganiaq underground and from the tailings were observed as having low potential for ARD generation (i.e., non-potentially acid generating or non-PAG). Three samples of underground waste rock were classified as uncertain or PAG. Eight samples from Tiriganiaq Open pit 1 were classified as PAG, meaning there is the potential for the rock to produce ARD, and three samples were classified as uncertain. This represents 1.6% of total open pit samples collected in 2024 falling within the uncertain or PAG classification.

These 14 samples from underground and open pit waste rock are considered a low risk given the excess neutralization in all other waste rock samples collected and represent a minor proportion of all waste rock samples collected in 2024 (i.e., 504 samples for open pit and underground waste rock, excluding duplicate samples). The material represented by these 14 samples were either used as backfill in the UG mine, sent to the WRSF3, or milled and sent to the TSF as tailings. It also should be noted that a considerable quantity (450,000 tonnes) of underground waste rock was kept underground for backfilling purposes.

f. Geochemical data associated with tailings solids, tailings, cyanide leach residue, and bleed from the cyanide destruction process including an interpretation of the data;

The geochemical monitoring data associated with the filtered tailings is included in Appendix 9 with a summary explained below in section 4.2.4.

g. Results related to the Borrow pits/ quarries and roads, including the All-Weather Access Road.

The geochemical monitoring data associated with the Borrow pits/quarries and roads is included in Appendix 9.

4.2.1 ARD Assessment Methodology***Neutralization Potential***

Based on Agnico Eagle's Geochemical Characterization Guide (2021), results of Modified Sobek Neutralization Potential (NP) should be compared with NP calculated from carbonate, and subsequently the more conservative method used to represent NP in NPR calculation and ARD assessment.

From 2022 onward, NP quantified from the Modified Sobek titration method (NP-mod) was consistently lower when compared with NP calculated from carbonate (NP-Ca) and therefore NP-mod was used for ARD assessment. It should be noted that prior to 2021, NP-Ca was used since it was the more conservative parameter at the time of interpretation. The change to NP-mod in 2021 compared with previous years is attributed to carbonate content which was biased low in laboratory analyses conducted prior to April 2021 with the pyrolysis method, as discussed in Section 3 of the 2021 Metal Leaching and Acid Rock Drainage Monitoring Report.

Acidic Potential

Acid Potential (AP) was calculated based on the amount of sulphide sulphur, calculated by difference of total sulphur and sulphate sulphur, as per Agnico Eagle's Geochemical Characterization Guide (2021). As stated in Agnico Eagle's 2020 Metal Leaching and Acid Rock Drainage Monitoring Report, project prediction studies indicated that the main sulphide minerals in the waste rock was pyrite, but also with arsenopyrite and lesser pyrrhotite, and chalcopyrite (Golder 2014). As a result, the main consideration for AP is the presence of sulphide minerals at Meliadine.

ARD Assessment

The potential for ARD was assessed using NP/AP ratios (or neutralization potential ratios, NPR). Ratios below 1 were used to indicate potential for ARD (PAG or Potentially Acid Generating), whereas ratios above 2 indicate low potential for ARD (non-PAG). Ratios between 1 and 2 are considered uncertain, meaning that there is an uncertain chance that the samples in question have the potential to produce ARD.

4.2.2 Underground waste rock

ARD Potential

ARD classification for 2024 samples is presented in Appendix 9. As predicted by Golder (2014), the majority of operational waste rock samples collected to date are non-PAG.

Of the 90 samples collected and analysed in 2024, three (3) of underground waste rock samples fall within the uncertain or PAG classification – 2 samples were PAG and 1 was uncertain. These samples represent a total of 5,151 tonnes, which were distributed between being kept underground for backfilling purposes and brought to surface. Of the total tonnage, 868 tonnes were brought to surface. Underground waste is brought to surface to be placed on the TSF for progressive reclamation covering.

These samples are considered a low risk given the excess neutralization in all other samples collected.

Metal Leaching

Metal leaching was predicted by Golder (2014) to be low enough that management of waste rock to inhibit leaching was not required. However, based on project screening studies, arsenic was determined to be the main element of interest and analysis of this element (and all regulated elements) were part of operational monitoring since mining began.

To confirm arsenic concentrations are within project predictions, results have been compiled and compared against average and maximum arsenic concentrations reported by Golder (2014). Solid phase arsenic

concentrations mainly fall within the average concentration, with only five samples in the past seven years exceeding the maximum concentration reported by Golder (2014). A statistical summary for arsenic with complete element composition are provided in Appendix 9.

4.2.3 Tiriganiaq Open Pit 1 Waste Rock

ARD Potential

Eight samples collected in 2024 had an NPR below 1, 3 samples with an NPR between 1 and 2 and all remaining samples in 2024 yielding NPRs greater than 2.

Through investigation of the PAG results, it has been determined that they are associated with rock samples collected in proximity to ore bearing material. All eight of the sample results that returned as PAG were from blast patterns that were designated as ore patterns. As such, the material hauled from these patterns either went to be milled or was sent to WRSF3 for depending on how far from the ore zone the material was.

For the sample results that came back within the uncertain range, the majority of the material associated with these was either kept in pit for ramp construction or moved to WRSF1 or WRSF3. There were 2 blasts for which there is potential that uncertain material was used in the construction of the Pump Road. In one blast, 1,000 tonnes from a 5,700 tonnes blast was moved to Pump Road. The other blast contained 63,000 tonnes, of which 22,000 tonnes was moved to Pump Road. It is important to note that the classification is based on drill hole sampling and that the material associated with each drill hole is approximately 300 tonnes, meaning that the total volume moved from a blast is not necessarily all classified as uncertain, only a portion of it.

Overall, the PAG or uncertain samples represent 2.9% of the total open pit waste rock samples collected and are considered low risk given the excess neutralization potential in the other samples collected in 2024.

Metal Leaching

Metal leaching was predicted by Golder (2014) to be low enough that management of waste rock to inhibit leaching was not required. However, based on project screening studies, arsenic was determined to be the main element of interest and analysis of this element (and all regulated elements) were part of operational monitoring since mining began. A statistical summary for arsenic with complete element composition are provided in Appendix 9.

To ensure arsenic concentrations are within project predictions, results have been compiled and compared against average and maximum arsenic concentrations reported by Golder (2014). Solid phase arsenic concentrations mainly fall within or near the average concentration, with four samples exceeding the maximum concentration reported by Golder (2014) between 2021 and 2024.

4.2.4 Filtered Tailings

ARD Potential

Samples collected in 2024 had an average NPR of 1.93, while one (1) sample had an NPR below 1. Most tailings samples fall within the uncertain category.

Despite the presence of tailings samples classified as PAG and uncertain from 2019 to 2024 sampling, Agnico Eagle does not consider the tailings to pose an ARD risk for the site because generation of acidic water requires exposure of potentially acid generating material to air and water, sufficient timescales for neutralization potential to be consumed, as well as sufficiently warm temperatures to facilitate sulfide oxidation at meaningful rates. By compacting the placed tailings, sloping the facility to shed water, and allowing permafrost to freeze-back within the facility, infiltration of water and diffusion of oxygen into the facility is inhibited. Following freeze-back, sulfide oxidation rates are expected to be negligible.

While the delay to ARD onset has not been specifically calculated for PAG tailings owing to the small portion of PAG samples identified over the LOM, the delay to ARD onset for similar materials is typically on the scale of decades. Based on the design analysis, the tailings temperatures are expected to fall below -1.8°C starting about 4 years after placement. So far, the measured temperatures seem to align well with the expectations and most of the tailings are already below -1.8°C . Based on the above, the potential for development of localized acidic weathering conditions within the TSF before freeze back is very low.

In the theoretical event that localized masses of the most reactive PAG tailings did develop acidic porewater prior to freeze-back, there is enough carbonate present within the non-PAG tailings to neutralize acidic porewaters along flow paths such that net acidic drainage would not likely occur.

Therefore, in practice, sulfide oxidation is not expected to occur at meaningful rates within the TSF due to several mitigating factors (e.g., limited air and water ingress, co-disposal with non-PAG materials, freezing conditions), and neutralization potential is expected to be sufficient to buffer acidity in the long term.

Metal Leaching

Given the presence of arsenic in the ore rock and background concentrations in the area, results for this element are summarized below and presented in Appendix 9.

Arsenic concentrations in filtered tailings samples ranged from a minimum of 6,200 mg/kg to a maximum of 13,000 mg/kg, with a median of 9,100 mg/kg in 2024. These values are higher when compared to waste rock since ore is associated with increased abundances of sulphides, including arsenopyrite.

Forecasted arsenic concentrations in surface contact water across life of mine are provided in the WBWQM as part of the Annual Report (section 3.2).

4.2.5 Construction Rock Sampling

Waste rock from TIRI01 is frequently used for construction of infrastructure at site. Though the material has been sampled in the pit before use for construction, as due diligence, a sampling program was conducted in 2024 to confirm that rock used for construction is classified as non-PAG. Seven construction projects were sampled in 2024.

The sampling of the construction projects was based on taking one sample for every 12,500 tonnes placed. This represented one sample collected every 130 m on Pump Road, every 175m on the road connecting the Pump Road to the IT tower at KM27 and one or two samples per construction project for the other

infrastructures. In addition, the borrow pit material used for the construction of the waterline in 2024 was also sampled for every 12,500 tonnes removed from the borrow pits.

One sample collected from the Pump Road returned as uncertain. In 2025 and as mentioned above, a confirmatory sample will be taken at the same location, along with step out sampling from this point to confirm the presence of uncertain material and delineate its extent.

4.2.6 Filtered Tailings Supernatant

Sampling of the filtered tailings supernatant began in June of 2019 and continued in 2024 with sampling occurring on a regular basis. Since this water is recycled through the mill, it also contains cyanide leach residue and the bleed from the cyanide destruction circuit. Water is filtered off the tailings from the filter press and samples are collected from the effluent downstream of the filter press. Since this effluent is recycled through the mill and is not discharged, with the exception of the water contained in the filtered tailings, it is expected to see the metals and general parameters becoming concentrated as the mill uses little fresh water to make up the water that is entrained with the filtered tailings.

Appendix 10 presents the results of the tailings supernatant sampling in 2024. In 2024, the metals and other parameters concentrations were in general consistent throughout the year and similar to previous years. Dissolved metals are discussed below rather than total metals as there may be some interference from the solid tailings if the filter press is not functioning as per design.

The minimum value of dissolved arsenic was 10.7 mg/L with the maximum value at 21.6 mg/L. The dissolved arsenic mean value for 2024 was 14.9 mg/L, compared to a historical average of 24.02 mg/L. These arsenic levels are expected as the gold is associated with sulphides, such as arsenopyrite, and the water is recycled through the mill. Total cyanide values were variable during the year with a high concentration of 171 mg/L and a low of 39.2 mg/L; the mean for 2024 was 105.79 mg/L.

It is important to state again that the water in the mill is recycled and only a small portion of the mill effluent is entrained in the filtered tailings. As discussed in section 7.3.1.18, Agnico Eagle is monitoring the water quality in CP3 (which collects runoff from the Tailings Storage Facility) as per the Water Licence requirements.

4.3 WASTE ROCK AND ORE STOCKPILED ON SITE

In accordance with Water Licence 2BB-MEL-1424 Part B Item 6c: *An estimate of the current volume of waste rock and ore stockpiled on site*

See Table 3.1 of the MWMP for as-built and expected waste rock usage on site per major location. Plans and sections of WRSF1 and of WRSF3 at the end of 2024 are presented in Appendix 11. Waste rock was placed in accordance with MWMP.

See Table 4.4 of the Ore Storage Management Plan (OSMP) for end of year and expected ore stored on site at OP2.

An estimate of waste rock temporally stored in OP1 and OP2 and ore stockpiled on OP1 is provided in Table 9 below. The monthly cumulative stockpiles vary (and can go down) according to production and construction needs.

Table 9: Ore and waste rock stockpiles on site excluding major locations (Tonnes) ¹

Date	Underground Ore	Open Pit Ore	Cumulative Ore	Waste Underground	Waste Open Pit	Waste Cumulative
19-Jan			176,779			101,661
19-Feb			170,116			148,632
19-Mar			138,423			195,971
19-Apr			117,832			208,337
19-May			105,348			123,660
19-Jun			125,705			20,280
19-Jul			127,396			16,966
19-Aug			113,351			22,843
19-Sep			118,412			12,360
19-Oct			123,236			18,384
19-Nov			129,868			49,420
19-Dec			144,088			499,600
20-Jan	192,736	-	192,736			83,489
20-Feb	220,468	-	220,468			110,236
20-Mar	199,258	-	199,258			85,623
20-Apr	151,789	-	151,789			No Survey
20-May	101,101	546	101,647			74,544
20-Jun	79,320	9,852	89,172			No Survey
20-Jul	61,716	22,316	84,032			13,173
20-Aug	61,192	31,358	92,550			31,952
20-Sep	61,547	38,956	100,503			10,620
20-Oct	72,106	48,205	120,311			46,017
20-Nov	71,357	82,890	154,247			No Survey
20-Dec	59,886	120,719	180,605			22,539
21-Jan	107,237	57,802	165,039	1,188	-	1,188
21-Feb	103,517	74,224	177,741	-	-	-
21-Mar	99,629	51,213	150,842	1,055	2,100	3,155
21-Apr	112,868	56,981	169,849	1,164	11,261	12,425
21-May	135,807	70,344	206,151	1,164	5,149	6,313
21-Jun	155,799	7,163	162,962	-	5,149	5,149
21-Jul	135,738	11,654	147,392	880	-	880
21-Aug	148,165	33,289	181,454	880	-	880
21-Sep	185,426	50,689	236,115	880	11,825	12,705
21-Oct	178,361	113,103	291,464	-	-	-
21-Nov	202,190	187,688	389,878	-	-	-

¹ Major locations refer to WRSF1 and WRSF3 for the waste rock, and OP2 for the ore. As mentioned above, as-built and expected waste rock and ore stockpiled at major locations on site are provided in the MWMP and OSMP, respectively.

Date	Underground Ore	Open Pit Ore	Cumulative Ore	Waste Underground	Waste Open Pit	Waste Cumulative
21-Dec	204,988	217,296	422,284	-	-	-
22-Jan	2,169	-	2,169	1,571	1,364	2,935
22-Feb	1,273	-	1,273	-	-	-
22-Mar	289	-	289	10,880	-	10,880
22-Apr	658	-	658	84	-	84
22-May	720	-	720	13,819	-	13,819
22-Jun	2,292	-	2,292	18,885	4,445	23,330
22-Jul	1,068	-	1,068	5,620	-	5,620
22-Aug	1,013	-	1,013	8,653	-	8,653
22-Sep	777	-	777	1,180	-	1,180
22-Oct	3,009	-	3,009	10,275	1,469	11,744
22-Nov	1,312	-	1,312	2,746	-	2,746
22-Dec	1,820	-	1,820	54,176	-	54,176
23-Jan	4,966	-	4,966	2,746	-	2,747
23-Feb	468	-	468	67,538	-	67,538
23-Mar	3,526	-	3,526	57,731	1,628	59,359
23-Apr	1,908	-	1,908	84,125	9,984	94,108
23-May	1,095	-	1,095	58,254	111	58,365
23-Jun	2,965	-	2,965	5,686	-	5,686
23-Jul	936	-	936	9,347	-	9,347
23-Aug	781	-	781	13,294	-	13,294
23-Sep	3,891	-	3,891	13,274	-	13,274
23-Oct	1,123	-	1,123	13,686	-	13,686
23-Nov	7,185	-	7,185	4,701	-	4,701
23-Dec	1,860	-	1,860	12,308	-	12,308
24-Jan	248	-	248	4,588	-	4,588
24-Feb	5,104	-	5,104	5,481	-	5,481
24-Mar	922	-	922	1,026	-	1,026
24-Apr	1,269	-	1,269	4,652	-	4,652
24-May	2,796	-	2,796	5,271	-	5,271
24-Jun	1,265	-	1,265	5,188	-	5,188
24-Jul	2,184	-	2,184	5,129	-	5,129
24-Aug	3,591	-	3,591	2,138	-	2,138
24-Sep	1,323	-	1,323	2,460	-	2,460
24-Oct	7,062	-	7,062	328	-	328
24-Nov	8,674	-	8,674	3,044	-	3,044
24-Dec	2,815	-	2,815	3,044	-	3,044

As per answers to 2021 Annual report Comments provided to the NIRB (CIRNAC-4), Table 10 below presents year-over-year quantities of actual waste rock and ore tonnage compared to the Final Environmental Impact Statement (FEIS) predicted quantities.

Table 10: Actual waste rock and ore tonnage compared to FEIS predictions

Year	Actual Waste Rock tonnage ¹	FEIS Waste Rock predicted tonnage ²	Actual Ore Tonnage ³	FEIS Ore predicted tonnage ²
2019	718,955	13,416,000	1,108,666	661,000
2020	4,003,532	38,017,000	1,402,899	2,370,000
2021	5,081,872	37,826,000	1,960,544	3,501,000
2022	3,625,178	9,428,000	1,778,834	1,658,000
2023	4,119,386	16,781,000	1,725,644	2,942,000
2024	6,182,000	13,006,000	2,024,000	2,835,000

¹ From MWMP, Table 3.1

² From FEIS SD 2-8 Mine Waste Management Plan – Meliadine Gold Project, Nunavut, Table 1 (Agnico Eagle 2014), numbers for Tiriganiaq deposit only.

³ From OSMP, Table 3.2

4.4 TAILINGS STORAGE FACILITY

4.4.1 Tailings Storage Facility Capacity

As required by Water Licence 2AM-MEL1631 Schedule B, Item 10: *Update on the current capacity of the Tailings Storage Facility.*

Active tailings placement into the TSF continued throughout the year. A total of 935,000 m³ (1,543,000 t) of tailings were placed in the facility in 2024 for a remaining design capacity of 1,960,000 m³ (3,240,000 t) as shown in Table 11. Plans and cross sections of the TSF at the end of 2024 are presented in Appendix 12.

In addition to tailings, a total of 101,000 m³ (201,000 t) of waste rock was placed as progressive cover material around the side-slopes of the facility in 2024. According to design specifications, an additional 653,000 m³ (1,230,000 t) of rock remains to be placed. Tailings were placed in accordance with MWMP.

Table 11: 2024 Volumes of Material Placed in TSF

	Tailings Placed (m ³)	Waste Rock Placed (m ³)
January	100,286	10,750
February	73,706	32,424
March	76,342	13,370
April	62,317	6,683
May	60,293	6,406
June	51,529	17,443
July	78,009	5,335
August	96,545	1,360
September	78,752	1,931
October	90,796	436
November	81,042	2,127
December	85,379	2,247
Total 2024	934,996	100,512
Total at end of 2024	4,657,620	621,797
Remaining Capacity	1,960,639	653,328

4.4.2 Tailings Freeze-back and Capping Thickness

As required by Water Licence 2AM-MEL1631 Schedule B, Item 19: *A summary of on-going field trials to determine effective capping thickness for the Tailings Storage Facility and Waste Rock Storage Facilities for the purpose of long term environmental protection.*

No field trials to determine effective capping thickness for the TSF were undertaken in 2024. Tailings freeze-back however, was monitored through the four (4) thermistors installed in 2019, four (4) thermistors installed in 2022 and an additional five (5) thermistors installed in 2023 to monitor the tailings at elevations above the original instruments. The data indicates that tailings material monitored by the thermistors were generally frozen throughout the year, except near the placement elevation during the non-freezing months.

Temperatures in the original ground below the TSF were continuously below 0°C throughout 2024. Figures displaying the GTC data from the various TSF thermistors are located in Appendix J of the 2024 Geotechnical Inspection Report (Appendix 6).

SECTION 5. WASTE MANAGEMENT ACTIVITIES

As required by Water Licence 2AM-MEL1631 Schedule B, Item 12: *Summary report of all general Waste disposal activities including monthly and annual quantities in cubic metres of Waste generated and locations of disposal.*

And

As required by Water Licence 2BE-MEL2434 Part 2, Item 2d: *Quantity of Waste backhauled to approved facility for disposal.*

The following section describes activities related to hazardous waste management, and waste management at the Landfill, Landfarm, and on site incinerators.

5.1 HAZARDOUS WASTE MANAGEMENT, LANDFILL AND LANDFARM MONITORING

Hazardous Waste Management

Hazardous waste (including paint, environmentally hazardous substances, hydrocarbon contaminated soil non-treatable at the Landfarm, oily contaminated solids etc.) is segregated according to material type, stored in sea containers, and shipped south during the sealift season.

Residual and hazardous wastes were shipped from site by Nunavut Sealift and Supply Inc. to the Port of Bécancour and managed by Environmental 360 Solutions (E360S), a company specialized in waste management.

Wastes were transported to authorized disposal facilities.

In 2024, a total of approximately 1,261 tonnes of hazardous and non-hazardous waste was shipped from Meliadine. Waste was either recycled, reused, landfilled, incinerated, treated and/or used for energy recovery.

Documentation for the transfer of hazardous waste can be found in Appendix 13.

Landfill

The Type B landfill has not been in operation since 2017 and its footprint is under WRSF1.

The Type A landfill was commissioned in November 2017. No seepage was observed from the landfill in 2024. Monitoring and inspection will continue on a regular frequency. 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. Seepage is further discussed in Section 7.4.

General waste, such as glass, concrete, wood and incinerator ash is landfilled on-site and off-site. In September 2018, the Type A landfill was expanded to contain an extra 11,000 m³ (landfill stage 2). In September and October 2020, the landfill stage 3 expansion works raised the perimeter berm by a nominal amount to increase the storage capacity by 2,696 m³, to a total storage volume of 22,201 m³. In December

2022, a Design report was submitted to the NWB for the landfill Stage 4 berm raise, to increase the total landfill capacity to 60,725 m³. Construction of the landfill (Stage 4) expansion was carried out from September to December 2023 and a Construction summary (As-built) report was submitted to the NWB on March 18th, 2024.

Similar to previous years, measures were applied in 2024 to improve waste segregation at the source, allowing for increased volumes of wood and cardboard being burnt rather than landfilled. Waste segregation at the source, in addition to landfill material being compacted mitigates dust emissions from the landfill. Progressive capping of the landfill with rock fill has started in 2023 and will continue in areas where the waste has been placed to full height, compacted and levelled. The progressive capping mitigates the risk of windblown debris.

The volume of landfilled waste is estimated through periodic surveys, and the waste placed into Type A landfill during 2024 is estimated at 4,978 m³, while it was estimated at 2,461 m³ in 2023. The increase of waste landfilled compared to 2023 may be due to construction activities which took place in 2024, including the renovation of the accommodation wings. It should be noted that these volumes are based on surveys conducted in the winter (early January), and snow accumulation may have an impact on the surveys' accuracy. Quarterly landfill surveys are conducted and reported in the monthly reports to the NWB.

Landfarm

In 2024, soil remediation activities took place in Landfarm A and Landfarm B. Windrows were aerated, and additional nutrients were added twice at Landfarm A and once at Landfarm B.

On July 29, 2024, soil samples were collected in Landfarm A's soil windrows and sent for analysis of petroleum hydrocarbons fractions 1 to 4 (F1-F4), benzene, toluene, ethylbenzene, and xylene (BTEX) at an accredited laboratory. Results were compared to the Government of Nunavut (GN)'s Environmental Guideline for Contaminated Soil Remediation (GN, 2009) for the agricultural/wildlife and industrial land uses, as per the Landfarm Management Plan. Ten (10) out of 13 samples results did not meet the GN's environmental guideline for contaminated soil remediation (industrial criteria), and therefore the soil in Landfarm A will undergo further remediation in 2025. This result was expected due to this being the first summer of remediation for the new soil windrows added to Landfarm A at the end of 2023.

On July 29, 2024, soil samples were collected in Landfarm B's soil windrows and sent for analysis of petroleum hydrocarbons F1-F4 and BTEX at an accredited laboratory. All sample results were compliant with the GN's Guideline (11 complied with the agricultural criteria and 1 complied with the industrial criteria). Approximately 376 m³ of remediated soil was moved from Landfarm B to WRSF3, which accounted for all the soil in Landfarm B. It should be noted that this soil volume differs slightly from what was reported as the total Landfarm B soil volume in the 2023 Annual Report (approximately 567 m³) due to inconsistencies in survey method.

Following the successful remediation and removal of all soil in Landfarm B, the reclamation process was initiated. The Landfarm B berm and base were sampled on October 17, 2024, on a 10 m grid to determine if these soils were free from petroleum hydrocarbon (PHC) contamination, as per the Landfarm Management Plan. Sixteen (16) composite samples were taken from the berm, and nine (9) composite samples were taken from the base from their respective grids. Of those samples, only 2 samples, 1 from the base and 1 from the berm, were above the GN's Environmental Guideline for Contaminated Soil

Remediation industrial criteria. All the other samples were within the guidelines. Additional excavation of the surface layer of soil occurred in these 2 locations (grids) and they were re-sampled on November 14, 2024. The collected contaminated soil was brought to the Landfarm A for further remediation. The results for the resampled locations were within the GN guidelines (agricultural/wildlife criteria). Landfarm B is located in the future footprint of WRSF3 and will be covered with at least 2 m of waste rock for reclamation, as per the Landfarm Management Plan.

An estimate of 71.7m³ of contaminated soil was placed in Landfarm A in 2024 from spill clean up, monthly volumes are indicated in Table 12.

Table 12: 2024 Volume of waste transferred to the Landfarm

Month	Volume of contaminated soil placed in Landfarm A (m³)
January	1.80
February	0.02
March	3.25
April	7.28
May	2.30
June	32.52
July	3.78
August	7.47
September	2.05
October	3.70
November	3.53
December	4.00
Total	71.7

5.2 INCINERATOR

As per Water Licence 2AM-MEL1631 Schedule B, Item 13: *Report of Incinerator test results including the materials burned and the efficiency of the Incinerator as they relate to water and the deposit of waste into water.*

Food waste, including food packaging, was incinerated to avoid landfilling the material, and attracting wildlife.

Agnico Eagle hired Consulair to perform an atmospheric emission characterization program at the outlet (stack) of the 2 incinerators on site. The objectives of this program, which took place from August 12 to 22, 2024, were as follows:

- Obtain an overview of the atmospheric emissions in current conditions;
- Evaluate the concentration and emission rate of the main parameters of interest emitted by the two incinerators (Eco Waste and Ketek);
- Compare the results to the applicable emission standards;
- Ensure that the sampling work meets quality control recognized criteria.

Results were compared to the Environmental Guideline for the Burning and Incineration of Solid Waste” published by the Department of Environment of the Government of Nunavut based on the Canadian Council of Ministers of the Environment (CCME) Canada - Wide Standards for Dioxins and Furans and Mercury Emissions. Three (3) tests were conducted at each incinerator and the average result for the 3 tests is compared to the applicable guideline. As shown in Table 13, tests complied with the applicable guideline for mercury (Hg). The average dioxins and furans value slightly exceeded the applicable guideline for the Eco Waste Incinerator. The complete 2024 Stack Testing Report can be found in Appendix 14.

Table 13: 2024 Stack Testing Mercury and Dioxins and Furans Results

Parameter	Unit	Average	Applicable Standard	Compliance
Incinerator 1 (Eco Waste)				
Mercury	µg/m ³ R at 11% O ₂	<0.371	20	Yes
Dioxins and Furans (PCDD/F)	ng TEQ/m ³ R at 11% O ₂	0.104	0.08	No
Incinerator 2 (Ketek)				
Mercury	µg/m ³ R at 11% O ₂	<0.384	20	Yes
Dioxins and Furans (PCDD/F)	ng TEQ/m ³ R at 11% O ₂	0.0293	0.08	Yes

As per the Incineration Management Plan, Agnico Eagle also proceeded with incinerator ash testing. Samples from both incinerators were collected on a monthly basis and results compared to the GN's Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (GN, 2011). Leachable metals annual averages since 2019 are presented in Table 14, while 2024 monthly results are presented in Table 15. Four (4) samples exceeded the Guideline during the first half of 2024, for leachable arsenic and/or chromium.

Non-compliant ash was packed and shipped offsite to a certified waste management facility, in accordance with the Incineration Management Plan.

Table 14: 2019 – 2024 Annual Averages - Incinerator Ash Monitoring

Leachable Metals	Guideline for Industrial Waste Discharge (mg/L)*	Unit	2019	2020	2021	2022	2023	2024
Arsenic	2.5	mg/L	0.25	0.375	1.88	4.53	1.14**	2.29**
Barium	100	mg/L	0.57	0.25	0.25	0.28**	0.63	0.39**
Cadmium	0.5	mg/L	0.095	0.05	<0.05	<0.3	<0.05	< 0.05
Chromium	5	mg/L	6.25	0.275	0.50	0.21**	1.77**	2.16**
Lead	5	mg/L	0.10	0.1	<0.1	<0.1	<0.1	< 0.1
Mercury	0.1	mg/L	0.0010	0.001	<0.001	<0.001	<0.001	< 0.001
Selenium	1	mg/L	0.10	0.1	<0.1	<0.1	<0.1	< 0.1
Silver	5	mg/L	0.010	0.01	<0.01	<0.01	<0.01	< 0.01
Zinc	500	mg/L	0.10	0.1	4.83	3.54**	0.08**	0.09**

*Government of Nunavut Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (2011).

** Detection limit values were divided in half in average calculation

An investigation is ongoing to determine the cause of the 2023 and 2024 stack testing exceedance for dioxins and furans, along with the cause of leachable metals exceedances in ash.

In 2024, an ash sampling campaign was conducted in an effort to investigate the source of exceedances (in addition to regular monthly sampling). Ash was sampled separately from both incinerators, in bins stored outside and inside the incinerator building and the sampling frequency was increased to every 2 weeks for approximately 2 months. The sampling campaign did not reveal the exceedances were associated with one incinerator in particular, nor to the location of the bins sampled. These results may point towards waste sorting practices (i.e., nature of the waste incinerated) as potential cause for the exceedances.

In 2023 and 2024, significant focus and efforts were placed on waste management awareness at site. Toolbox presentations were regularly conducted by the Environment department to stress the importance of waste segregation with the various departments from the Mine. Regular reminders on waste management were provided site-wide via email (within the daily Health and Safety “Meliadine Minute”). Waste bins throughout the site are regularly inspected by the Environment department to ensure appropriate waste sorting. As can be seen in Table 15, no metals exceedance in ash was observed in the second half of 2024.

In February 2025, the firm Eco Waste Solutions (EWS) conducted a 3-day waste management audit at Meliadine. It is planned EWS will also conduct an audit of the incineration practices at Meliadine in the coming months. Results from these audits may help identify the source of the exceedances in stack testing and ash sampling, and related mitigation measures.

The investigation will continue in 2025, and results from the EWS audit will be presented in the 2025 Annual Report. Additional actions may be taken, as applicable, following the results of the investigation. To ensure the good functioning of the incinerators and appropriate ash management, monthly sampling will be continued throughout the year.

Table 15: 2024 Incinerator Ash Monitoring

Leachable Metals	Guideline for Industrial Waste Discharge (mg/L)*	Unit	1/20/2024	2/25/2024	3/2/2024	4/3/2024	5/4/2024	6/2/2024	7/7/2024	8/3/2024+	8/3/2024*	9/3/2024+	9/3/2024*	10/4/2024	11/7/2024	12/3/2024
Arsenic	2.5	mg/L	2.9	0.8	5.5	< 0.2	16	3.5	1.4	< 0.2	1	0.3	0.9	< 0.2	< 0.2	1.6
Barium	100	mg/L	0.2	0.3	0.3	0.9	0.2	1.1	0.4	0.3	0.2	0.3	0.7	< 0.2	0.3	0.7
Cadmium	0.5	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	5	mg/L	0.2	7.2	< 0.1	9.7	< 0.1	5.4	2.9	< 0.1	1.8	1.8	0.2	1.5	1.5	0.1
Lead	5	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mercury	0.1	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Silver	5	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	500	mg/L	0.6	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

*Government of Nunavut Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (2011).

+Ash sampled from Eco Waste incinerator

* Ash sampled from Ketek incinerator

5.3 ADDITIONAL INFORMATION

As required by Water Licence 2AM-MEL1631 Schedule B, Item 26: *Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.*

And

As required by Water Licences 2BB-MEL1424 Part B Item 6n and 2BE-MEL2434 Part B, Item 2m: *Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported*

The Board did not request any additional details on waste disposal in 2024.

SECTION 6. ENVIRONMENTAL INCIDENT MANAGEMENT

As per Water Licence 2AM-MEL1631 Schedule B, Item 14: *List and description of all unauthorized discharges including volumes, spill report line identification number and summaries of follow-up action taken.*

And

As required by Water Licences 2BB-MEL1424 Part B Item 6f and 2BE-MEL2434 Part B, Item 2f: *A list of unauthorized discharges and a summary of follow-up actions taken*

In 2024, a total of 38 reportable incidents occurred at Meliadine compared to 31 reportable incidents in 2023. Amongst these incidents, 35 were reported under Water Licence 2AM-MEL1631 and 3 were reported under Water Licence 2BB-MEL1424. The total reportable and non-reportable incidents numbers for years 2019 to 2024 are provided in Figure 13 below.

Lessons learned from previous years are applied to take corrective actions and proactive measure. Toolboxes are completed with all departments to discuss the most common occurrences of spills, and to gain insights on how to mitigate them. Further details are provided below.

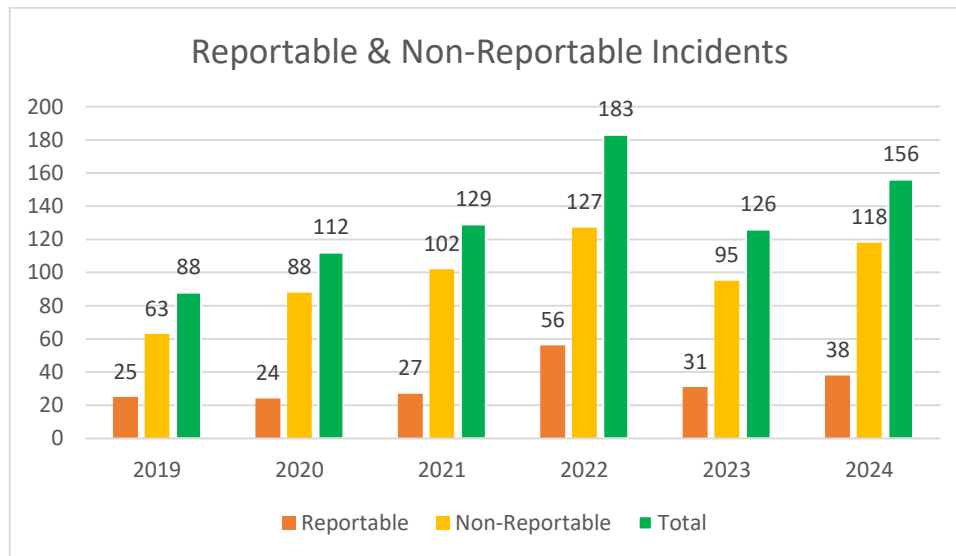


Figure 13: Total Reportable and Non-Reportable Incidents from 2019 to 2024

All reportable spills were reported to the 24-hour spill reporting line as required by the GN's Environmental Protection Act, paragraph 5.1 (a), the conditions under the NWB 2AM-MEL1631 Water Licence, Part H, Item 8(b) or the conditions under the NWB Licences 2BB-MEL1424 and 2BE-MEL2434, Part H, Item 4(b). For all reportable spills, a follow up report was submitted 30 days or less following the event as required under the Water Licences.

2024 reportable spills/exceedances are summarized in Table 16, and complete spill reports and follow up reports can be found in Appendix 15. Non-reportable spills are summarized in Appendix 16.

Table 16: 2024 Reportable spills or exceedances

Date of spill/exceedance	Spilled Material	Quantity for spills or analyses results for exceedance	Unit	Location	Cause of the spill
2-Jan-24	Sewage	150	L	Crusher Water Transfer station	Equipment Failure
7-Jan-24	Sewage	100	L	Wing 12 Lift Station	Equipment Failure
10-Jan-24	Sewage	1000	L	Explo Camp	Human error
10-Jan-24	Sewage	50	L	Main Camp Sewage Treatment Plant (STP)	Equipment Failure
13-Jan-24	Sewage	15	L	Main Camp STP	Human error
14-Jan-24	Sewage	5	L	Wing 6	Human error
14-Jan-24	Sewage	215	L	STP	Equipment Failure
22-Jan-24	Sewage	30	L	Crusher Water Transfer station	Equipment Failure
28-Feb-24	Sewage	7	L	(Multiservice Building) MSB Lift Station	Equipment Failure
24-Mar-24	Emulsion	12	Kg	Emulsion Plant	Human error
19-Apr-24	Greywater	120	L	Wing 9	Equipment Failure
25-Apr-24	Lubricant	10	L	Lake B5	Human error
3-May-24	Sewage	30	L	Main Camp STP	Human error
7-May-24	Sewage	1000	L	Main Camp STP	Human error
9-May-24	Diesel Fuel	0.5	L	Lake B59	Human error
18-May-24	Total Suspended solids	330	mg/L	MEL-SR-1	Freshet (refer to Spill Follow-up Report)
21-May-24	Contact water	100	L	Channel 4	Infrastructure maintenance
24-May-24	Thickener Water	70	m ³	Process Plant	Equipment Failure
6-Jun-24	Sewage	1.5	m ³	Main Camp STP	Human Error
7-Jun-24	Snowmelt water	3600	m ³	AWAR B12 Borrow Pit (KM15)	Human error
9-Jun-24	Sewage	50	L	C-Wing	Equipment failure

19-Jun-24	Hydraulic Oil	200	L	OP2 Extension	Human Error
23-Jun-24	Sewage	50	L	MSB Lift Station	Equipment Failure
28-Jun-24	Sewage	100	L	Wing 13 Lift Station	Equipment Failure
29-Jun-24	Sewage	615	L	Main Camp STP	Equipment Failure
1-Jul-24	Sewage	100	L	Wing 16 Lift Station	Equipment Failure
7-Jul-24	Hydraulic Oil	200	L	Portal 1	Human error
10-Jul-24	Process water	5	m ³	Process Plant	Equipment failure
16-Jul-24	Potable Water	10	m ³	Power House	Human error
21-Jul-24	Process Water	200	L	Process Plant	Equipment Failure
12-Aug-24	Sewage	20	L	MSB Lift Station	Human error
20-Aug-24	Waste Oil	400	L	Dome 3	Human error
28-Sep-24	Contact water	2	m ³	Waste Rock Storage Facility 3	Heavy rainfall
4-Oct-24	Total Suspended Solids	140	mg/L	AWAR KM 8.8	Inadequate Infrastructure and heavy rainfall
12-Oct-24	Treated water	200	m ³	D-CP1	Equipment Failure
9-Nov-24	Sewage	60	L	Wing 4 Lift Station	Equipment Failure
20-Dec-24	Sewage	90	L	Orbit Dome	Equipment Failure
26-Dec-24	Potable water	20	m ³	Kitchen Water Supply Line	Equipment Failure

**Green indicates incidents reported under Water Licence 2BB-MEL1424 *Blue indicates exceedances*

Following all environmental incidents, Agnico Eagle works towards understanding the causes and what remedial actions can be implemented to avoid re-occurrence.

Implemented in 2022 and pursued in 2024, the Internal Environmental Permit (IEP) aims to reduce the risk of environmental incident occurrence. This form requires the Environment Department review and sign-off on relevant workplans. As mentioned in the 2022 Annual Report, continuous interdepartmental communication and including Environment Department representatives in planning of the various projects as site also mitigate environmental incident occurrence.

In 2023, an interdepartmental working group was implemented and initiated efforts to mitigate the occurrence and severity of sewage spills at the mine site. The sewage spills working group activities continued throughout 2024. Multiple audits were conducted on the sewage management system, with many action items completed or budgeted for 2025 based on the audits' recommendations. A significant reduction in sewage spills was observed between the first half (16 spills) and the second half (4 spills) of 2024.

In addition, and as per previous years practice, to help prevent spills and also ensure all spills are reported internally, spill prevention training continued to be provided to employees in 2024. Employee's increased spill management awareness leads to more events being properly identified as spills and reported as such. The spill training program is improved on a continuous basis by the Environment Department.

Training activities include the following:

- All employees and contractors must participate in an induction session online prior to the arrival at the mine site, which includes a training section on spill management (prevention, reporting and cleaning);
- Every employee and contractor who operates a vehicle on site must participate in training on vehicle operation. Spill management is a component of this training session;
- Toolbox talks on spill management are regularly conducted by the environment department, with focus on high risk departments.
- All site personnel receive quarterly updates on environmental performance including total reportable and non-reportable spills;
- Intelix spill reporting software training is provided to department managers on a monthly basis where required.

An annual mock spill exercise was completed on September 21th, 2024, at Itivia as per applicable regulations. A total of ten (10) individuals participated in the mock spill scenario, including nine (9) Agnico Eagle Emergency Response Team (ERT) members, and four (4) Agnico Eagle employees from the Environment and Logistic Departments. The Rankin Inlet Fire Department was also contacted but were unable to participate in the mock spill event. The exercise included the following: an in-class overview of the Itivia OHF and Oil Pollution Emergency Plan/Oil Pollution and Prevention Plan (OPEP/OPPP) contents, a review of emergency response equipment and a mock spill exercise. The mock scenario involved seal failure at the joint connecting the ship's fuel hoses to the dockside pipeline. This pipeline channels fuel to the main storage area (Itivia OHF). The fuel starts to leak significantly, spraying over the secondary containment measures in place. As a result, the spilled fuel, estimated to be around 2,000 liters of diesel, begins to spread towards Melvin Bay. Agnico Eagle's ERT captain led the exercise. The exercise allowed participants to gain experience in spill intervention and awareness of spill management equipment. Overall, the participants actions and responses to the mock spill were satisfactory. It was determined that all participants had a sufficient understanding of the roles and responsibilities of all spill responders. Lessons learned from the event will ensure a more efficient response in the future, if needed. The detailed mock scenario report can be found in Appendix 17.

SECTION 7. MONITORING

Site water quality monitoring stations and Aquatic Effects Monitoring Program (AEMP) monitoring stations are illustrated in Figure 14 and Figure 15, respectively.

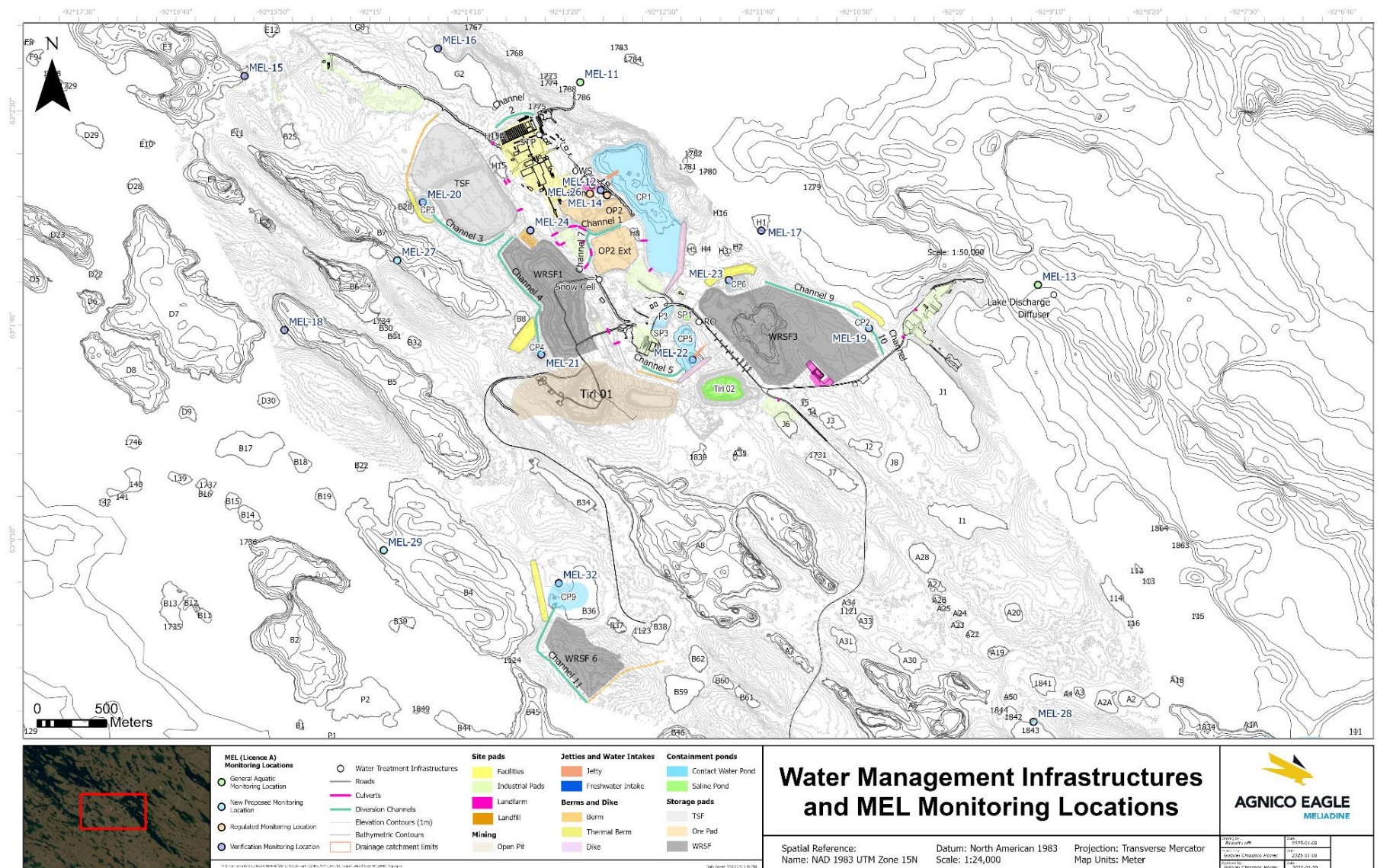
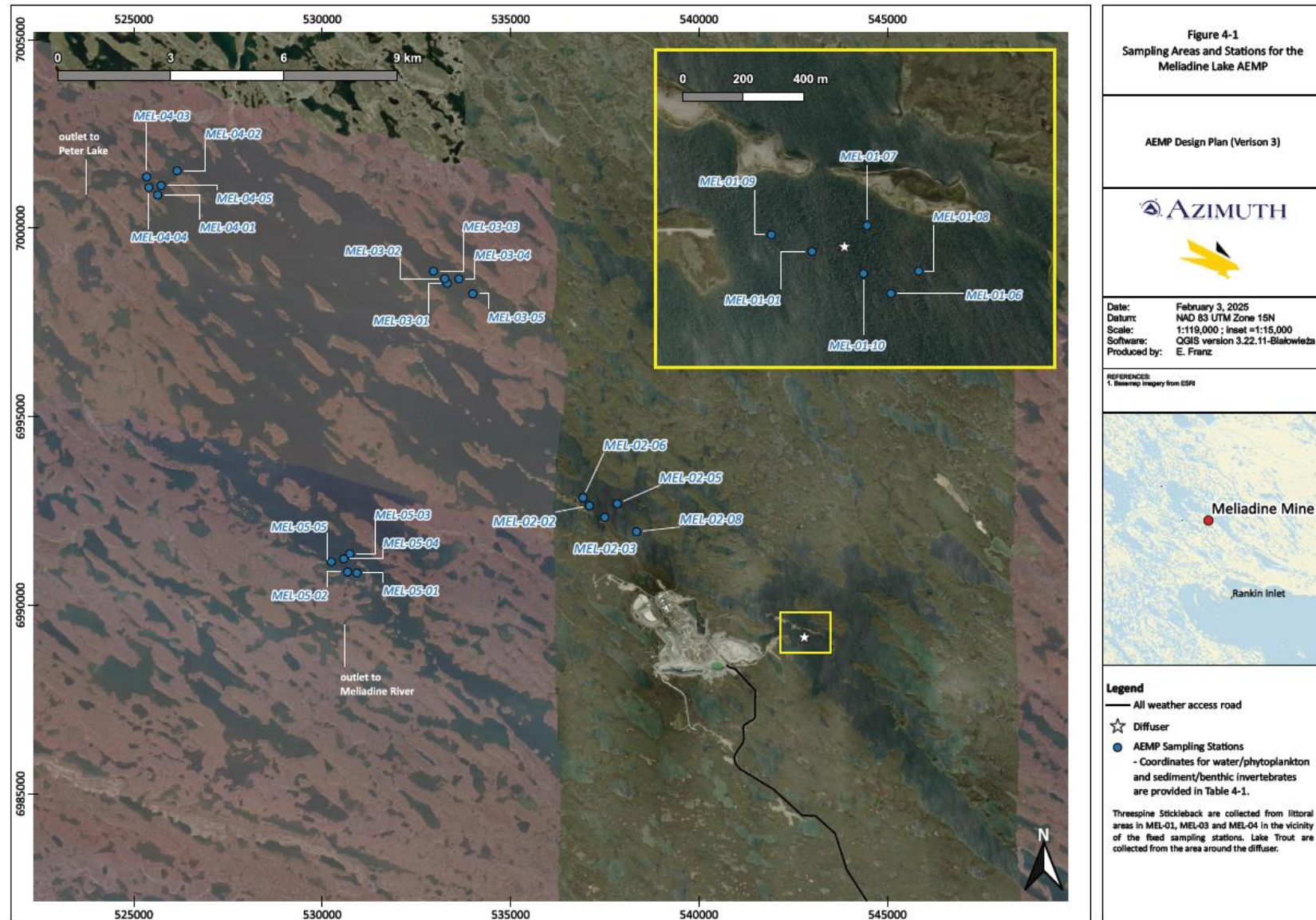


Figure 14: Meliadine Site Water Quality Monitoring Stations



As required by Water Licence 2AM-MEL1631 Schedule B, Item 17: *The results of monitoring related to the Environmental Management and Protection including:*

a. Aquatic Effects Monitoring Program;

Refer to section 7.1, all results can be found in Appendix 18.

b. Metal and Diamond Mining Effluent Regulation (MDMER) Monitoring;

Refer to section 7.2, all results can be found in Appendix 19.

c. Mine site Water quality monitoring, including groundwater monitoring; and

Refer to section 7.3, all results can be found in Appendix 19 and Appendix 20.

d. Visual AWAR Water quality monitoring

Refer to section 7.5.

and

As required by Water Licence 2BB-MEL1424 Part B Item 6d: *Tabular summary of all data generated under the Monitoring Program, Part J,*

And

As required by Water Licences 2BB-MEL1424 Part J, Item 14 and 2BE-MEL2434 Part J, Item 16: *The Licensee shall include in the Annual Report as required under Part B, Item 2, all data, monitoring results and information required by Part J.*

Monitoring is no longer required for most items listed under Part J of the Type B Water Licence. Details are provided in section 7.3.1 and in Appendix 31 (NWB Water Licences Concurring Table).

Results of the samples collected below lake ice before and after winter drilling are presented in Appendix 19.

7.1 AQUATIC EFFECTS MONITORING PROGRAM (AEMP)

The AEMP is the monitoring program used to evaluate short-term and long-term effects of the mine on the aquatic environment and verify that the mine is operating as planned. Other objectives of the AEMP include evaluating the accuracy of predictions in the FEIS and providing information to inform management decisions. A summary of the 2024 AEMP is provided below, while the complete AEMP report can be found in Appendix 18.

7.1.1 Meliadine Lake Study

The Meliadine Lake study follows a control-impact design with a gradient approach, where water quality and biological monitoring are conducted at multiple locations to assess potential mining-related effects.

Sampling focuses on the near-field area (MEL-01), where treated water is released, the mid-field area (MEL-02) downstream, and far-field reference areas beyond the Mine's influence.

The program includes annual monitoring of surface water quality and the phytoplankton community, while assessments of the benthic invertebrate community, sediment quality, and fisheries occur every three years. In addition to the study areas in Meliadine Lake, two regional reference lakes (Peter Lake and Atulik Lake) are included in the Lake Trout study to assess whether the health and tissue chemistry of Lake Trout in Meliadine Lake differ from those in other lakes in the region.

Regional Climate Considerations

Water quality in Meliadine Lake can change due to both natural processes and human activities. While mining-related influences are closely monitored, climate-driven factors can also play a significant role. A key objective of the AEMP is to distinguish between mining-related changes in water quality and ecological conditions and those driven by regional climate patterns.

The summer of 2024 was one of the warmest on record since 1981, with very little precipitation. As a result, minimal runoff was collected, treated, and discharged to Meliadine Lake after the initial spring freshet. The prolonged dry period in June, July, and August led to a temporary suspension of water discharge for approximately six weeks, from mid-July to early September. Due to the lack of discharge, water quality in the East Basin (MEL-01) remained relatively stable throughout the summer.

By September, weather patterns shifted importantly, bringing one of the highest monthly rainfall totals on record. This increased precipitation allowed for the resumption of treated water discharge to Meliadine Lake. The potential effects of this record rainfall on water quality will be closely monitored as part of the 2025 AEMP.

Meliadine Lake Water Quality

In 2024, there were no effluent quality issues, with all measured concentrations remaining below the limits set by the Water Licence. Monthly effluent toxicity tests confirmed no effects on Rainbow Trout or aquatic invertebrates. This year also marked ten consecutive years of water quality monitoring in Meliadine Lake under the AEMP. No exceedances of Health Canada's drinking water quality guidelines or aquatic life guidelines were reported, and most parameters continue to remain well below limits to protect human health and aquatic life.

Long-term monitoring data indicate that regional climate patterns play a significant role in influencing temporal trends for water quality parameters. As expected, effluent discharge has contributed to increased concentrations of certain major ions, nutrients, and metals in the East Basin; however, total dissolved solids (TDS) and chloride concentrations remain well below predictions outlined in the 2014 Final Environmental Impact Statement (FEIS) and subsequent water quality modeling conducted in 2020.

Given these findings, no additional management actions are required based on the 2024 surface water quality monitoring results, and routine monitoring will continue as planned in 2025.

Phytoplankton Community

Effluent contains nutrients and minerals that can stimulate algal growth and contribute to changes in primary productivity. The phytoplankton study was expanded in 2024 to include sampling in July and September, in addition to the annual August sampling event.

In 2024, phosphorus concentrations in Meliadine Lake remained stable, consistent with trends observed throughout operations, particularly since 2020. Chlorophyll-*a* concentrations, which had been increasing from 2018 to 2023 at MEL-01 (near-field) and MEL-02 (mid-field), did not follow this pattern in 2024. Instead, the average chlorophyll-*a* concentration at MEL-01 was similar to levels observed before and during early Mine operations, while concentrations at MEL-02 remained comparable to the past two years. Chlorophyll-*a* levels at reference locations were slightly higher than in previous years but remained lower than those at MEL-01.

Phytoplankton biomass in 2024 was lower in the East Basin than in 2023 but remained within the range of values recorded in past monitoring years. Unlike previous years, biomass in MEL-01 was not higher than in the mid-field and reference areas at one sampling event. However, total biomass at MEL-01 was higher than in other areas during other sampling events, suggesting that the East Basin may naturally support greater productivity.

Indicators of phytoplankton community structure showed that the algal community in MEL-01 differed from the communities in the mid-field and reference areas. Additionally, slight shifts were observed in the phytoplankton communities across all sampling areas compared to 2023. It remains unclear whether these differences are linked to effluent discharge as predicted in the 2014 FEIS, or if they result from other local or regional environmental factors.

Routine monitoring of chlorophyll-*a* and phytoplankton community structure will continue in 2025 to assess potential changes in primary productivity and community composition.

Sediment Chemistry

Sediment monitoring in Meliadine Lake is conducted every three years, in coordination with the benthic invertebrate program. While water chemistry provides a snapshot of conditions at a given time, sediment chemistry reflects the long-term accumulation of compounds, offering insight into trends that may not be immediately evident in water samples. Additionally, sediment characteristics such as grain size and total organic carbon play a key role in shaping the benthic invertebrate community. In 2024, sediment samples were collected in August from the near-field (MEL-01), mid-field (MEL-02), and reference areas (MEL-03, MEL-05) to assess physical habitat characteristics and metal concentrations.

Some metals occur at naturally elevated concentrations at MEL-01 compared to other areas of Meliadine Lake. However, variability in metal concentrations within and between study areas is primarily influenced by natural habitat differences—such as grain size—and spatial variation in iron and manganese levels. There is no evidence that mining activities have contributed to a measurable increase in metal concentrations or changes in sediment quality in Meliadine Lake.

Benthic Invertebrate Community

In 2024, the benthic invertebrate community at MEL-01 showed statistically significant differences in density compared to reference areas (MEL-03 and MEL-05), but the magnitude of this difference remained below

the Critical Effect Size (CES) threshold for biological significance. No differences in species richness were detected between exposure and reference areas.

Community composition indicators showed that MEL-01 and MEL-02 differed from the reference areas, suggesting some variation in species structure and taxonomic composition. However, despite these differences, the benthic invertebrate community at MEL-01 has remained stable since 2018, consistently dominated by chironomid larvae and fingernail clams. This long-term stability suggests that effluent discharge to Meliadine Lake has not caused adverse effects on the benthic invertebrate community at MEL-01.

These findings align with predictions from the 2014 FEIS, which anticipated no significant changes to benthic invertebrate structure despite increased nutrient concentrations in the East Basin and potential shifts in primary productivity.

Small-bodied Fish (Threespine Stickleback)

Health Assessment

Threespine Stickleback is the small-bodied sentinel fish species for the harmonized fish health assessment under the AEMP and Environmental Effects Monitoring (EEM) program. Unlike Lake Trout, which migrate throughout the lake, Threespine Stickleback have a small home range, making them well-suited for assessing potential effects of effluent discharge in Meliadine Lake. The study includes one exposure area (MEL-01) and two reference areas (MEL-03 and MEL-04) to compare fish health indicators such as survival, growth, and condition. The 2024 health assessment marked the third monitoring cycle since the Mine transitioned to operations in 2018.

Results from 2024 showed notable differences in growth between MEL-01 and the reference sites. Males at MEL-01 were significantly longer, heavier, and older than those at reference sites, with weight differences between MEL-01 and both reference areas exceeding the critical effect size of 25%. In contrast, females showed smaller differences in weight at age, and the only significant differences were also observed between the two reference areas.

Both males and females at MEL-01 were heavier for their length and had larger livers, with most differences exceeding CES thresholds. While male liver weight did not differ significantly between MEL-01 and MEL-03, female total weight and liver weight were significantly higher at MEL-01 than at both reference sites. Collectively, these results suggest that fish at MEL-01 have greater access to energy or use it more efficiently than those in the reference areas. This aligns with 2014 FEIS predictions, which anticipated that nutrients from effluent discharge could enhance food availability and habitat suitability for forage fish such as Threespine Stickleback.

Tissue Chemistry

Threespine Stickleback tissue chemistry monitoring is conducted alongside the health assessment study to evaluate bioaccumulation and the trophic transfer of contaminants within the food web, linking lower trophic levels to predatory fish species such as Lake Trout.

For most parameters monitored under the AEMP, there is no evidence that mining activities have contributed to elevated metal concentrations in Threespine Stickleback from the East Basin of Meliadine

Lake. However, arsenic—and to a lesser extent, uranium—were consistently higher in fish from MEL-01 compared to reference areas in both 2021 and 2024, suggesting the increase is localized to the East Basin. The available data do not confirm whether this trend is linked to effluent discharge, climate-related factors, or both. Regardless of the source, findings from the Threespine Stickleback health assessment confirm that the population in the East Basin is not showing signs of toxicological impairment.

Large-bodied Fish (Lake Trout)

Health Assessment

The 2024 assessment marked the second cycle of monitoring during operations to evaluate potential effects of mining activities on Lake Trout health, a key species in northern freshwater ecosystems. The study followed the same design as EEM Cycle 2, comparing survival, growth, and condition between Meliadine Lake and two regional reference lakes (Peter Lake and Atulik Lake).

In 2024, mean age of Lake Trout was 17.4 years in Meliadine Lake, 18.6 years in Peter Lake, and 12.1 years in Atulik Lake. While fish in Meliadine and Peter Lakes were significantly older than those in Atulik Lake, there was no difference between Meliadine and Peter Lakes. This contrasts with 2021, when Lake Trout in Meliadine Lake were significantly older than those in the reference lakes. The younger fish observed in 2024 may be due to the timing of the survey, which followed a four-week shutdown of effluent discharge. Larger Lake Trout may preferentially inhabit the area near the diffuser during discharge, benefiting from greater ionic strength, which reduces the energy needed for osmoregulation.

Growth results showed no significant difference in age-adjusted weight between Meliadine and Peter Lakes, while Lake Trout in Meliadine Lake were 31.6% heavier than those in Atulik Lake. This pattern, also observed in 2021, suggests that growth differences reflect regional variability rather than mine-related effects.

There were no significant differences in condition (weight-to-length ratio) between Meliadine Lake and the reference lakes, though fish in Atulik Lake had 11% higher condition values than those in Peter Lake, highlighting natural variation. Liver weight was 16.6% higher in Meliadine Lake compared to Atulik Lake, but remained below the 25% CES threshold.

The absence of significant differences in key health indicators and the lack of consistent trends over time reinforce that Lake Trout health in Meliadine Lake is not adversely affected by mining activities. These findings emphasize the importance of multiple reference lakes in distinguishing natural fluctuations from potential mine-related effects.

Tissue Chemistry

Domestic fishing is an important part of Inuit life, and Lake Trout are valued both for subsistence use and as a sport fish. To ensure the Mine does not impact traditional fisheries, a fish tissue sampling program is conducted every three years, coinciding with the Lake Trout health assessment.

Results from the 2024 monitoring program show that most metal concentrations in Lake Trout muscle from Meliadine Lake have remained stable or decreased since the baseline and pre-construction phase. For

parameters showing an increasing trend, similar changes were observed in the regional reference lakes, suggesting that these patterns are not mine-related.

Findings from two monitoring cycles (2021 and 2024) confirm predictions from the 2014 FEIS, which anticipated no changes in fish tissue quality due to mining operations.

7.1.2 Peninsula Lakes Study

Snowpack Chemistry

Snow core chemistry results suggest that mitigation measures put in place in recent years have helped reduce the movement of dust.

Peninsula Lakes Water Quality

Water quality monitoring was conducted in Lake D7, Lake A8, and Lake B7 in July and August, with additional sampling at Lake B7 in September and October. Lake A8 is located south of Tiriganiaq Pits 1 and 2, while Lake B7 is west of the Tailings Storage Facility (TSF). Lake D7, situated in a watershed not directly impacted by the Mine, serves as a baseline comparison to differentiate mine-related effects from natural variability and climate-driven changes.

Monitoring results from 2024 indicate that mining activities have not directly impacted water quality in Lake D7. While some parameters have increased compared to baseline, these changes are likely due to natural variability, interannual climate fluctuations, and broader climate change effects rather than mine-related influences.

In contrast, construction and operation of the Mine have contributed to water quality changes in Lake A8 and Lake B7, with major ions (calcium, sodium, chloride, and sulphate), arsenic, and barium being the most affected parameters.

No early-warning water quality triggers (Action Levels) were exceeded in 2024 for Lake D7 or Lake A8. However, in August 2024, arsenic concentrations in Lake B7 were above the AEMP Action Level, reaching 25 µg/L. This increasing trend has been noted in previous AEMP reports, with the likely source being dust from the TSF that migrated offsite during winter 2019/2020. Snow core chemistry results suggest that mitigation measures put in place in recent years have helped reduce the movement of dust. However, arsenic levels in Lake B7 have continued to increase, and one possible explanation is that arsenic in the lake sediment is released into the water after ice melts in the spring. Agnico Eagle conducted additional surface water sampling in 2023 and 2024 to understand the seasonal trend, and the results show arsenic concentrations peak in August before declining in the fall. Monitoring will continue in 2025 to track these trends.

Starting in 2025, Lake A8 will no longer be included in the AEMP, as it will be dewatered and fished out before development of nearby open pit deposits. A new study lake (Lake E3) will be added to the monitoring program to replace Lake A8 in the study design.

7.1.3 Conclusions from the 2024 AEMP

- There were no exceedances of limits in the Water Licence in 2024. Effluent was also non-toxic to Rainbow Trout and daphnids in the four monthly acute toxicity tests. Concentrations of several

major ions, TKN, organic carbon, and a few metals have increased throughout Meliadine Lake since the baseline period. For most of the parameters of interest, upward temporal trends were evident before the mine began discharging effluent into Meliadine Lake in 2018. Results to date suggest that natural factors—such as increased runoff associated with permafrost thaw and record rainfall in 2019 and 2021—were primarily responsible for the observed changes in water quality in recent years. Ongoing water quality monitoring, combined with a three-year regional reference lakes study starting in 2025, will help provide a better understanding of the potential causes of these changes.

- Water quality has changed in all three lakes compared to baseline conditions. Data from Lake D7 suggests that most parameters have increased due to the combined effects of natural variability and climate-related factors, including earlier freshet, higher summer temperatures, and variable/extreme precipitation events. However, mining activities have likely contributed to increases in TDS, sulphate, arsenic, and barium in Lake B7 and Lake A8 since 2019. The primary source of these changes is believed to be off-site migration of dust, which has transported metals and other constituents to these lakes. Encouragingly, results from the snow chemistry monitoring program indicate that efforts to minimize dust migration have resulted in lower concentrations of metals in the snowpack in recent years.
- The phytoplankton community in Meliadine Lake does not appear to be adversely affected by the discharge of treated effluent from 2018 to 2024. This conclusion is based on various metrics and analyses used to evaluate changes in productivity and the structure of the phytoplankton community.

7.2 MDMER AND EEM SAMPLING

This section relates to the monitoring programs conducted under the Metal and Diamond Mining Effluent Regulations (MDMER) and its Environmental Effects Monitoring (EEM) Studies. Reporting requirements for MDMER have been submitted directly to Environment and Climate Change Canada; the list of sampling location Global Positioning System (GPS) coordinates can be found in Table 17.

Table 17. MDMER and EEM GPS coordinates

Station ID	GPS coordinates
MEL-14 (Effluent characterization)	63°2'15.5"N 92°13'06.3"W
MEL-13 (Water Quality Monitoring Exposure Area)	63°01'44.6"N 92°09'14.6"W
MEL-03-01 (Water Quality Monitoring Reference Area)	63°06'52.2"N 92°20'23.6"W
MEL-26 (Effluent characterization)	62°48'01.99"N 92°06'00.05"W
MWE-1/WC (Water Quality Monitoring Exposure Area)	62°47'49,24"N 92°05'52,97"W
MWREFA-2 (Water Quality Monitoring Reference Area)	62°46'55,38"N 92°07'0,43"W

In 2024, discharge of treated effluent from CP1 to Meliadine Lake (MEL-14) occurred from June 17 to July 16, and September 1 to October 15, 2024. No discharge to Itivia Harbour (MEL-26) occurred in 2024.

As requested in Schedule 6 of the Metal and Diamond Mining Effluent Regulations, monthly mean concentrations, pH range and volume of effluent (generated) were submitted directly to ECCC and can be shared upon request.

7.3 MINE SITE WATER QUALITY

As required by Water Licence 2AM-MEL1631 Schedule B, Item16: *The results and interpretation of the Monitoring Program in accordance with Part D, Part I and Schedule I.*

7.3.1 Licensed Water Sampling Stations

Below is a short description of each of the monitoring stations from the Type A and Type B Water Licences. All water sampling results can be found in Appendix 19. Also, for stations regulated by MDMER or Water Licence limits, graphs with critical parameters are presented.

7.3.1.1 MEL-1 Raw water supply intake at Meliadine Lake

MEL-1 is the raw water supply intake at Meliadine Lake for the exploration camp under the Type B Licence. No sampling is required, only volume records. As mentioned in section 3.1.1, no water was taken from MEL-1 in 2024.

7.3.1.2 MEL-2 Raw water supply intake at Pump, A8 or other Lakes

MEL-2 is the raw water supply intake at A8 or other lakes under the Type B Licence. No sampling is required, only volume records as provided in section 3.1.1.

7.3.1.3 MEL-5 Bermed Fuel Containment Facilities

MEL-5 was the point of discharge for the bermed fuel containment facilities for the exploration camp under the Type B Licence. Since it was decommissioned, sampling is not required any longer. MEL-5 was removed in the 2BE-MEL2434 (current) Water Licence.

7.3.1.4 MEL-6 Landfarm Treatment Facility

MEL-6 is the effluent from the Landfarm B Treatment Facility prior to release under the Type B Licence. As mentioned in section 5.1, the Type B landfarm is in the process of being decommissioned. No water was released from this facility since 2016 as the water was transferred to the Landfarm A oil separator system and treated before being discharged in CP1.

7.3.1.5 MEL-7 Effluent from Exploration camp STP

MEL-7 is the final effluent discharge from the biodisk and the bionest at the exploration camp under the Type B Licence. Since November 2017, the treated water from the exploration STP is trucked to CP1 or to the Main Camp STP depending on recent water quality trends. Monitoring for this station still occurs when the exploration camp STP is in operation to ensure the efficiency of the treatment system, but discharge directly to Meliadine Lake no longer occurs. In 2024, no samples were collected from monitoring station MEL-7 since the exploration camp STP was not in operation.

7.3.1.6 **MEL-8 Point of discharge or runoff from the Non-Hazardous Waste Landfill**

MEL-8 was the point of discharge from the non-hazardous waste landfill for the exploration camp under the Type B Licence. Since it was decommissioned, sampling is not required anymore. MEL-8 was removed in the 2BE-MEL2434 (current) Water Licence.

7.3.1.7 **MEL-SR-TBD**

MEL-SR-TBD are surface runoff sampling points pertaining to runoff downstream of construction areas at Meliadine Site and Itivia Site, seeps in contact with roads, earthworks and any runoff and/or discharge from borrow pits and quarries. These are regulated monitoring stations in the Water Licence which includes water quality criteria that must be achieved to maintain compliance. TSS results for all MEL-SR samples collected in 2024 are presented in Figure 16.

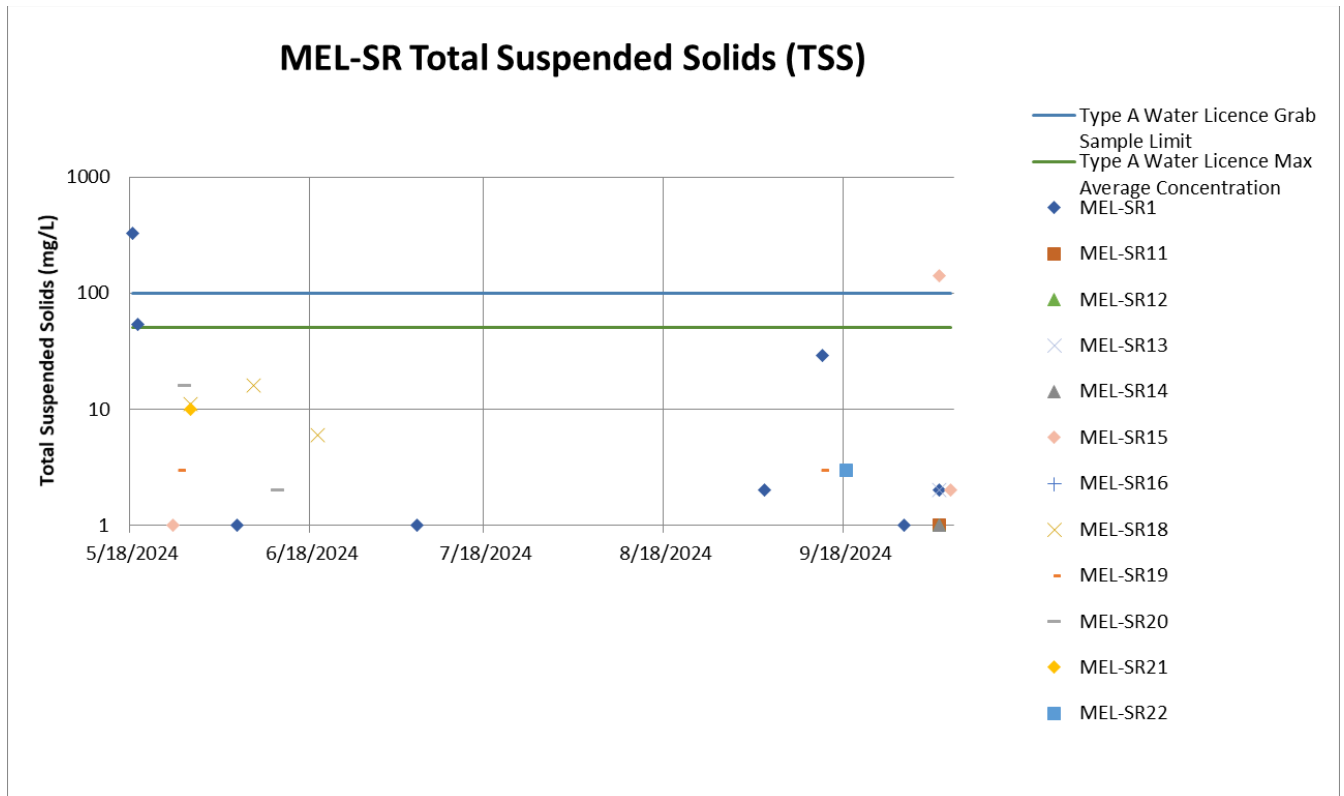


Figure 16. Total Suspended Solids (TSS) results for MEL-SR samples

Two (2) TSS exceedances occurred in 2024, one at the monitoring station MEL-SR1 on May 18 and one at the monitoring station MEL-SR15 on October 4. Below is a brief description of the two events and the mitigating actions taken to prevent further exceedances at these locations. The complete follow-up reports can be found in Appendix 15.

May 18 TSS Exceedance

On May 18, 2024, at approximately 16:00, surface runoff was observed at monitoring station MEL-SR-1, located at the south end of the Itivia site. Field turbidity measurements indicated a potential exceedance of the TSS effluent quality limits listed under Part D, Item 18 of the 2AM-MEL1631 Water Licence. Samples were collected at monitoring station MEL-SR-1 and sent to an external laboratory for analysis. Upstream monitoring indicated that sediment-laden runoff was entering the Itivia lease boundary and was not a result of the activities or infrastructure within the Itivia lease. Analytical results reported a concentration of 330 mg/L TSS, above the allowable TSS effluent quality limits listed under Part D, Item 18 of the 2AM-MEL1631 Water Licence.

Discharge from the MEL-SR-1 monitoring location combines surface runoff from Rankin Inlet and the Itivia site. Runoff passes through a series of rock check dams and a settling basin designed to reduce water velocity and allow suspended solids to settle out prior to flowing through the MEL-SR-1 culvert to Melvin Bay.

As per the Sediment and Erosion Management Plan, complementary erosion and sediment control (ESC) measures were deployed to reduce the sediment load in the water flowing through the Itivia site, and visual and analytical monitoring occurred the following two days after, on May 19th and May 20th. Both demonstrated the efficacy of the additional ESC in reducing TSS at MEL-SR1.

October 4 TSS Exceedance

On October 4, 2024, a notification was sent to CIRNAC Resource Management Officer Kyle Amsel that ponded water would be pumped across the AWAR at KM8.8 to prevent road erosion and sediment transport. Ponded water had accumulated against the road and threatened to overtop the road due to the significant quantity of rainfall experienced in the days prior to the event. Pumping started at approximately 12:00 p.m. on October 4, 2024, through a temporary sleeve that was placed on the surface of the road.

At approximately 9:00 p.m., construction work began to excavate a shallow trench in the road for placement of a temporary 16" HDPE drainage pipe. AWAR KM8.8 is an area with a low profile relative to the adjacent terrain. A semi-circular barrier made of backfill material was constructed upstream of the excavation to prevent the flow of water through the construction workings.

At approximately 10:00 p.m., surface runoff flowing downstream of the construction area was observed to be carrying sediment, which was confirmed by field turbidity measurements.

As per the Sediment and Erosion Management Plan, complementary ESC measures were deployed to mitigate the sediment transport on the construction site:

- Erosion and sediment controls were installed downstream of the construction area
- Pump being used to draw down ponded water was shut down to reduce the water flow downstream of the construction area
- The HDPE pipe was laid in the trench and a tarp was installed over the inlet to prevent the flow of sediment laden water through the pipe
- Analytical and visual monitoring was conducted through the event and the following two days after, on October 5th and October 6th.

7.3.1.8 **MEL-11 Water Intake**

MEL-11 is the water intake from Meliadine Lake. It is an aquatic monitoring location subject to compliance assessment to confirm that sampling is carried out using established protocols, including quality assurance/quality control provisions, and addresses identified issues. General monitoring is subject to change as directed by an Inspector, or by the Licencee, subject to approval by the NWB.

7.3.1.9 **MEL-12 Water treatment plant (Pre-treatment)**

MEL-12 represents pre-treatment CP1 water located at the EWTP-WTC. The sample is collected from an inlet pipe within the plant and is not collected directly from CP1. It is a verification monitoring program, which is to be carried out for operational and management purposes by the Licencee.

7.3.1.10 **MEL-03-01 Reference area in Meliadine Lake (MDMER reference station)**

MEL-03-01 is sampled in Meliadine Lake. It is also the MDMER reference station for final discharge. It is a general aquatic monitoring location subject to compliance assessment to confirm sampling is carried out using established protocols, including quality assurance/quality control provisions, and addresses identified issues. General monitoring is subject to change as directed by an Inspector, or by the Licencee, subject to approval by the NWB.

In 2024, all TSS sample results were at or below 2mg/L, and all Total Dissolved Solids (TDS) (calculated) sample results were at or below 46 mg/L, with an average of approximately 44.7 mg/L. TSS and TDS results from sampling at this monitoring station in 2024 are presented in Figure 17 and Figure 18, respectively.

7.3.1.11 **MEL-13 Mixing Zone in Meliadine Lake (MDMER exposure station)**

MEL-13 is sampled in the mixing zone in Meliadine Lake. It is also the MDMER exposure station for final discharge. It is a general aquatic monitoring location which is subject to compliance assessment to confirm sampling is carried out using established protocols, including quality assurance/quality control provisions, and addresses identified issues. General monitoring is subject to change as directed by an Inspector, or by the Licencee, subject to approval by the NWB.

In 2024, all TSS sample results were at or below 2 mg/L, and all TDS (calculated) sample results were at or below 73 mg/L, with an average of approximately 64 mg/L. TSS and TDS results from sampling at this monitoring station in 2024 are presented in Figure 17 and Figure 18, respectively.

7.3.1.12 **MEL-14 Water treatment plant (Post-treatment)**

MEL-14 is the final discharge point (FDP) monitoring station and is sampled in the EWTP-WTC prior to the water being discharged to the environment. It is a regulated monitoring station in the Water Licence and in the MDMER. It includes discharge water quality criteria that must be achieved to maintain compliance.

In 2024, TSS results for MEL-14 did not show any particular trend, with no significant increase or decrease of concentration. The yearly average concentration was 3.81 mg/L and the highest result was 6 mg/L. No exceedance occurred in 2024 for this parameter with all grab samples and monthly average concentrations within permitted limits (30 and 15 mg/L, respectively). TSS results from sampling at monitoring station MEL-14 in 2024 are presented in Figure 17.

With regards to TDS (calculated), all MEL-14 samples were compliant with the 3,500 mg/L maximum average calculated TDS concentration and 4,500 mg/L maximum grab calculated TDS concentration from the amended Type A Water Licence. The average calculated TDS concentration at MEL-14 was 1,379 mg/L and the highest measured calculated TDS concentration was 2,100 mg/L. TDS results from sampling at monitoring station MEL-14 in 2024 are presented in Figure 18. A discussion pertaining to the TDS loading sources on site can be found in Section 3.1.8.

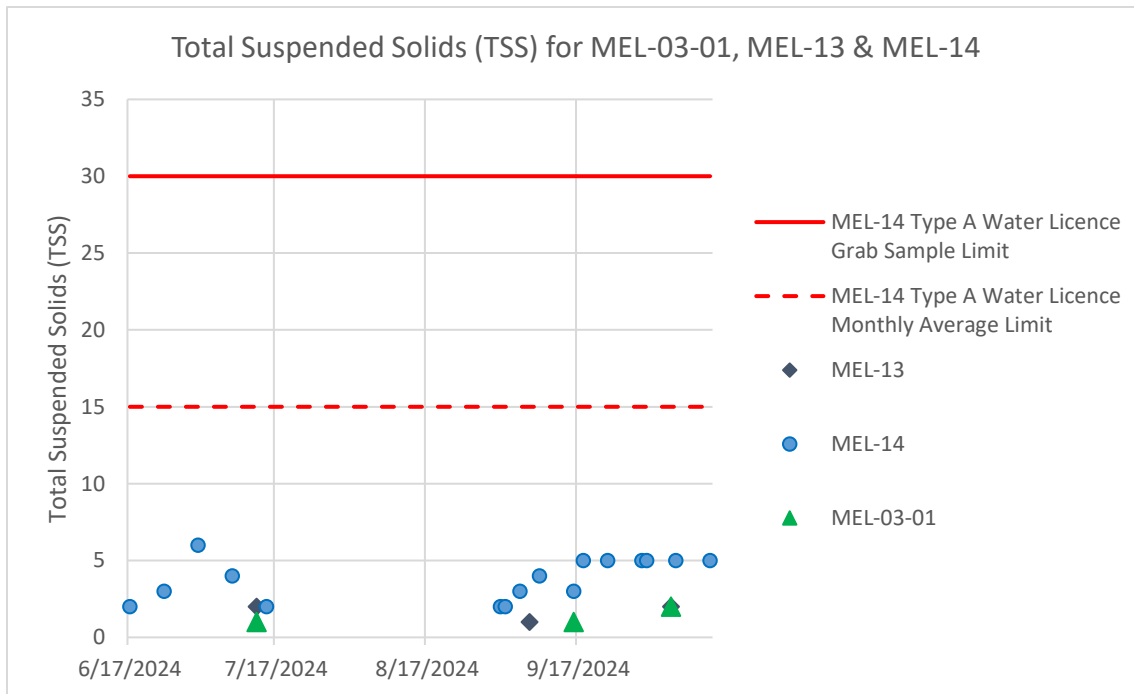


Figure 17. Total Suspended Solids (TSS) results for MEL-03-01, MEL-13, and MEL-14 monitoring stations.

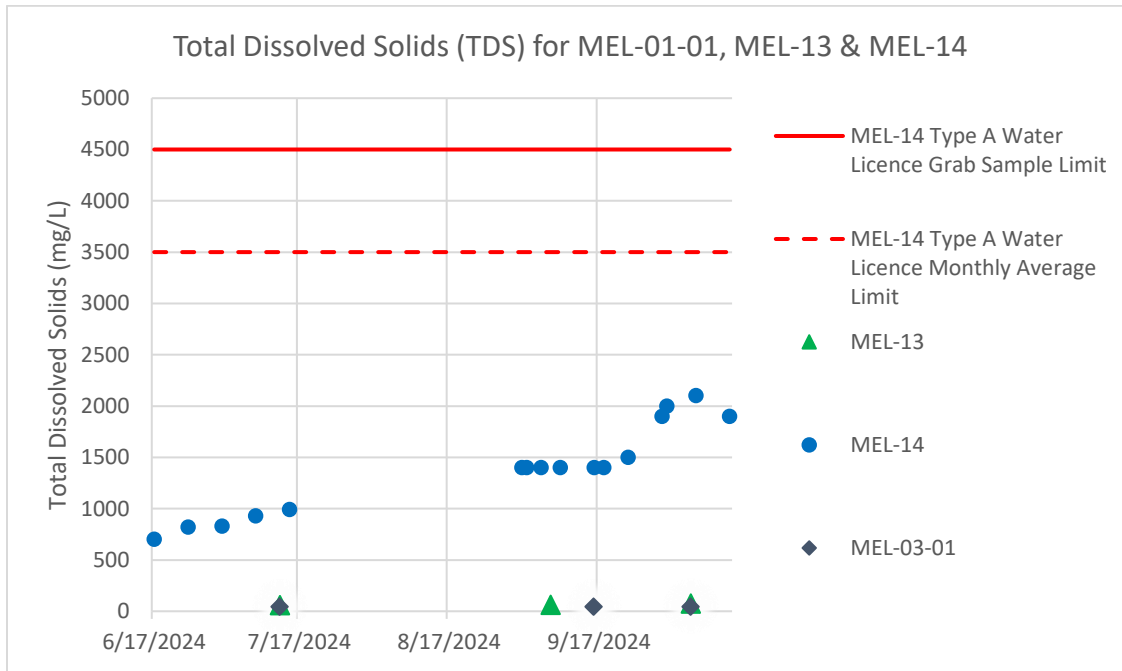


Figure 18. Total Dissolved Solids (TDS) results for MEL-03-01, MEL-13, and MEL-14 monitoring stations.

7.3.1.13 **MEL-15 Local Lake E3**

MEL-15 is sampled in lake E3 located west of the mine site. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

7.3.1.14 **MEL-16 Local Lake G2**

MEL-16 is sampled in lake G2 located north west from the mine site. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

7.3.1.15 **MEL-17 Local Pond H1**

MEL-17 is sampled in lake H1 located east from the mine site. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

7.3.1.16 **MEL-18 Local Lake B5**

MEL-18 is sampled in lake B5 located south-west from the mine site. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

7.3.1.17 **MEL-19 CP2**

MEL-19 is sampled in CP2 (collection pond) which is the collection of drainage from WRSF3. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

7.3.1.18 **MEL-20 CP3**

MEL-20 is sampled in CP3 which is the collection of drainage from the TSF located west of the mine site. It is a verification monitoring location sampled for operational and management purposes by the Licencee.

7.3.1.19 **MEL-21 CP4**

MEL-21 is sampled in CP4 which is the collection of the drainage from the WRSF1 located west of the mine site. It is a verification monitoring location sampled for operational and management purposes by the Licencee.

7.3.1.20 **MEL-22 CP5**

MEL-22 is sampled in CP5 which collects the drainage from WRSF1 and the Portal 1 area. CP5 is located in the previous footprint of Lake A54 and is located south of the mine site. It is a verification monitoring location sampled for operational and management purposes by the Licencee.

7.3.1.21 **MEL-23 CP6**

MEL-23 is sampled in CP6 which collects the drainage from WRSF3 located east of the mine site. It is a verification monitoring location sampled for operational and management purposes by the Licencee.

7.3.1.22 **MEL-24 Seepage from the landfill**

MEL-24 is defined as seepage from the landfill between the landfill and Pond H13 or water pumped from the Landfill and directed to Pond H13. It is a verification monitoring location which is sampled for operational and management purposes by the Licencee.

The Operation Landfill (Stage 4) utilizes a pumping system to facilitate the removal of water ponded against the perimeter berm if the rate of seepage is insufficient for water removal. Water pumped from the Landfill is directed to Pond H13, which is the current location seepage from the Landfill flows towards.

7.3.1.23 **MEL-25 Secondary Containment at the Itivia Fuel Storage Facility**

MEL-25 is sampled from the secondary containment area at the Itivia Site Fuel Storage and Containment Facility. It is a regulated monitoring station in the Water Licence. It includes discharge water quality criteria that must be achieved to maintain compliance.

In preparation for the construction of the new fuel tanks within the existing Fuel Storage and Containment Facility, snow removal was completed before the freshet, therefore limiting the amount of snowmelt to manage during the open water season. One notice for discharge from MEL-25 was sent in 2024 to the appropriate regulatory bodies. Water was sampled to confirm compliance with the Water Licence criteria (Part F, Item 6). However, due to operational constraints, water was pumped into trucks to be transported back to site and discharged into CP1. No discharge from MEL-25 onto land occurred in 2024.

7.3.1.24 **MEL-26 Itivia Harbour Final Discharge Point for treated saline effluent**

MEL-26 is sampled at the final discharge point in Itivia Harbour (FDP; end of pipe before offsite release) for treated saline effluent. It is a regulated monitoring station under MDMER. It includes discharge limits that must be achieved to maintain compliance.

In 2024, no water was discharged to Itivia Harbour through MEL-26.

7.3.1.25 **MEL-27 SP6**

MEL-27 will be sampled in SP6 which will collect saline water from the underground mine and other saline ponds and sumps, as well as runoff from the TSF. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. SP6 is not constructed yet, so no sampling took place in 2024.

7.3.1.26 **MEL-28 CP7**

MEL-28 will be sampled in CP7 which will collect saline water from WRSF7 and prevent contact water from flowing into F Zone open pits. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. CP7 is not constructed yet, so no sampling took place in 2024.

7.3.1.27 **MEL-29 CP8**

MEL-29 will be sampled in CP8 which will collect surface contact water from open pits and mine operations. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. CP8 is not constructed yet, so no sampling took place in 2024.

7.3.1.28 **MEL-30 CDP1**

MEL-30 will be sampled in CDP1 which will collect surface contact water from WRSF9 and DIS01 open pit. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. CDP1 is not constructed yet, so no sampling took place in 2024.

7.3.1.29 **MEL-31 CDP2**

MEL-31 will be sampled in CDP2 which will collect surface contact water from the Discovery laydown. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. CDP1 is not constructed yet, so no sampling took place in 2024.

7.3.1.30 **MEL-32 CP9/Pump01 Pit**

MEL-32 will be sampled in CP9 (Pump 01 Open Pit) which will collect surface contact water from WRSF6 and Pump area. It is a verification monitoring location which will be sampled for operational and management purposes by the Licencee. MEL-32 was added to the amended Water Licence as per the NWB's approval of the Modification request dated January 10, 2025 (see section 9.3). CP9 is not constructed yet, so no sampling took place in 2024.

7.3.2 Underground sampling

Underground contact water and non-contact groundwater monitoring is carried out as per the Groundwater Management Plan. The monitoring program is used to verify trends in the quantity and quality of water, and to conduct adaptive management when those trends diverge from those anticipated.

Water samples collected in the underground mine over 2024 include diamond drill hole (DDH) water intersects and underground saline contact water.

DDH water intersects are flushed prior to sample collection as a means to provide representation of “non-contact” groundwater within the fractured rock surrounding the underground mine. DDH water samples were collected quarterly at a minimum and as water was intersected (6 total samples over 2024). Samples were analyzed for relevant parameters to provide a representation of the background connate groundwater quality, which is the primary contributor of saline water received by the underground mine.

Water quality results for DDH samples collected in 2024 are provided in Appendix 20. In general, results for the 6 samples indicate stable and consistent concentrations for most parameters. Results showed an average TDS concentration of 47,433 mg/L, ranging from 28,700 mg/L to 54,000 mg/L. This represents a increase of 5% compared to the average TDS from samples collected in 2023.

Metals listed under MDMER Schedule 4 (arsenic (As), copper (Cu), lead (Pb), nickel (Ni), and zinc (Zn)) were below the MDMER limits for all DDH samples collected in 2024. In fact, most concentrations for these parameters (As, Cu, Pb, Ni, Zn) are below the laboratory detection limits. Few samples showed total metal concentrations equal to or slightly above the laboratory detection limits.

Underground contact water samples were collected monthly for water quality analysis from the Level 200 Pumping station, which is the last storage of underground contact water before being pumped to surface. The sampling locations are located post clarification treatment and prior to redistribution of the water to surface contact saline water storage (TIRI02). The sampled water is a combination of sump (contact) water originating from the various levels of the mine, including groundwater, make-up water, drilling water, and paste line flushing water. Further information about the groundwater quality monitoring program is available in Section 3 of the Groundwater Management Plan.

7.3.3 Sludge

As per the Water Management Plan, and the EWTP-WTC design report, sludge produced as part of the TSS removal processes at the EWTP-WTC is currently discharged into saline water storage. The sludge is sampled monthly to determine potential impact on the receiving SPs. Additionally, internal analysis of the solids content of the sludge is conducted, and results are presented below. Table 18 presents the results of these internal solids analysis, while Table 19 summarizes the results of the external water quality analysis.

Table 18: EWTP-WTC Internal Sludge Solids Analysis (2022-2024)

Year 2022	% solid	Year 2023	% solid	Year 2024	% solid
2022-07-18	0.19	2023-07-31	3.47	2024-08-26	0.27
2022-07-26	0.32	2023-08-21	0.61	2024-09-09	0.40
2022-08-01	0.10	2023-09-18	0.72	2024-09-16	0.20
2022-08-29	0.39	2023-09-25	1.15	2024-09-30	0.20
2022-09-12	0.21			2024-10-01	0.60
2022-09-19	0.31			2024-10-14	0.10
Average	0.25	Average	1.49	Average	0.30

Table 19: EWTP-WTC External Sludge Water Quality Analysis (2021-2024)

Parameters	Min	Max	Average
TSS (% solid)	0.064	0.58	0.31
pH (Unit)	7.35	7.55	7.45
Conductivity (mS/cm)	1.36	3.41	2.29
Total Ammonia-Nitrogen (mg N/L)	0.35	16.0	5.72
Total Phosphorus (mg P/L)	2.40	9.80	4.99
Orthophosphate (mg P/L)	0.01	0.05	0.02
Total Arsenic (mg/L)	0.02	3.11	1.12
Total Copper (mg/L)	0.00	0.174	0.085
Total Lead (mg/L)	0.00	0.1007	0.042
Total Nickel (mg/L)	0.01	0.180	0.074
Total Zinc (mg/L)	0.01	1.06	0.22
Radium-226	0.005	0.11	0.026

The EWTP-WTC sludge is mostly composed of water, indicated by the % solids presented in Table 18. A notable change in sludge solids composition occurred in 2023 following an optimization at the EWTP-WTC, resulting in a thicker sludge being sent to Tiri02.

In Q2 2024, a scenario Analysis was conducted to evaluate alternative sludge management strategies for the WTC, including the sludge produced by the EWTP-WTC and the Saline Effluent Treatment Plant (SETP-WTC). The studied alternatives included mechanical dewatering (such as centrifuges, screw presses, and filter presses) and dewatering using Geobags. These technologies can dewater liquid sludge (with a dryness of approximately 0.1 to 0.5 % w/w) to approximately 5-20% w/w dryness, allowing the dewatered sludge to be transported to one of the WRSFs at the mine for disposal.

Results from the scenario analysis study show that both Geobags and centrifuges are technically viable for dewatering sludge from the EWTP-WTC and SETP-WTC. However, practical challenges exist with implementing these technologies, and there exist some safety concerns with operating Geobags.

In Q1 2025, a study was conducted to evaluate the impact of discharging the EWTP-WTC sludge on the water quality of TIRI02, a practice ongoing since the 2021 open water season. Key findings from this study include:

- **Water Quality Profiles:** Using eleven water quality profiles of TIRI02 dated between 2021-12-20 and 2024-09-22, the average concentration of twelve parameters (total aluminum, dissolved aluminum, total ammonia-nitrogen, total arsenic, total copper, total cyanide, total lead, total nickel, pH, total radium-226, TSS, and total zinc) were calculated.
- **Stable or Decreasing Parameters:** The concentration of nine of these parameters (dissolved aluminum, total arsenic, total copper, total cyanide, total lead, total nickel, pH, total radium-226, and total zinc) were found to be either stable, or decreasing over time.
- **Increasing Parameters:** The concentration of three of these parameters (total aluminium, total ammonia-nitrogen and TSS) were found to increase over time. An increase in total aluminium, paired with a decrease in dissolved aluminium, indicated that most of the total aluminum is present as undissolved particulates (i.e., TSS). This assumption is consistent with the increase of TSS observed. Both particulate aluminium and TSS aren't deemed problematic in TIRI02, since the SETP-WTC is designed to remove these parameters prior to discharge to Itivia Harbour.
- **Total Ammonia-Nitrogen:** The average concentration of total ammonia-nitrogen in the sludge is 5.72 mg N/L between 2022 and 2024, while the average concentration in TIRI02 was approximately 75 mg N/L between 2021 and 2024. Therefore, it is unlikely the upward trends observed for the concentration of this parameter in TIRI02 is the result of EWTP-WTC sludge disposal and is more likely the result of ammonia-nitrogen released in the underground mine (and related to explosives usage).

Based on the information presented above, Agnico Eagle concludes that the discharge of EWTP-WTC sludge has limited and manageable impact on the water quality of TIRI02. Removal of TSS by coagulation/flocculation at the SETP-WTC relies on the same treatment approach and chemicals as the EWTP-WTC. Flowrates of each plant are similar as well. Therefore, Agnico Eagle estimates that the characteristics and volume of sludge produced by the TSS treatment at the SETP-WTC will be approximately equal to the EWTP-WTC.

In 2025, Agnico Eagle intends on only commissioning the TSS treatment portion of the SETP-WTC. Agnico Eagle is currently designing a treatment system for ammonia nitrogen to meet the MDMR, including acute toxicity testing on *A. tonsa*. This system will replace breakpoint chlorination for treatment of ammonia nitrogen, and preliminary data suggest that the sludge to be produced by the SETP-WTC will be very similar to what is produced at the EWTP-WTC.

For these reasons, the installation of a dewatering technology at the WTC is not deemed necessary. This technology would require the permanent storage of dewatered sludge in one of the mine WRSFs, where the contaminant mobility of the sludge is unknown and could pose a risk to the surface runoff management system.

Furthermore, it is important to note that any water discharged from TIRI02 to the final discharge point at Itivia Harbour is subject to the effluent monitoring requirements set out in the Metal and Diamond Mining Effluent Regulations (MDMER). As such, regardless of potential impacts posed by sludge on TIRI02 water quality, Agnico Eagle will ensure that the water is treated and compliant with these regulations and in accordance with the approvals laid out for the operation of the Waterline.

7.3.4 QA/QC Sampling

The objective of quality assurance and quality control (QA/QC) is to assure that the chemical data collected represent the material being sampled, are of known quality, are adequately documented, and are scientifically defensible. Data quality was assured throughout the collection and analysis of samples using specified standardized procedures, by employing external Canadian Association of Laboratory Accreditation (CALA) laboratories and by staffing the program with experienced technicians.

All analytical chemistry analyses are performed by external CALA-accredited laboratories. In most cases, these analyses are performed by Bureau Veritas (BV) Laboratories, an accredited facility located in Nepean, Ontario. Agnico Eagle may also require the services of other laboratories, such as BV Laboratories in Edmonton (Alberta), ALS (BC), SGS in Lakefield (Ontario) and H2Lab in Val d'Or (Quebec). All data from these laboratories undergo a rigorous internal QA/QC process, including the use of duplicate samples.

Acute and sublethal toxicity tests were performed by AquaTox Testing & Consulting Inc. in Puslinch, Ontario. Testing was conducted as stipulated in the corresponding Environment Canada Biological Test Methods. QA/QC measures were implemented by the laboratory, including the use of reference toxicants. Test validity criteria as specified in the test method were satisfied for all toxicity tests conducted in 2024.

Field blanks and duplicates were collected in 2024 as part of the internal quality control procedures. A field blank is a sample prepared in the field using laboratory-provided deionized water to fill a set of sample containers, which is then submitted to the laboratory for the same analysis as the field water samples. Field blanks are used to detect potential sample contamination during collection, shipping and analysis. Duplicate field water quality samples are collected simultaneously in the field at the same sampling location and using identical sampling procedures. They are used to assess sampling variability and sample homogeneity. In 2024:

- MDMER monitoring programs consisted of 3 duplicate samples and 3 field blanks which were collected from a total of 22 samples, representing 13.6% of samples taken.
- Surface water monitoring programs consisted of 16 duplicate samples, 14 field blanks which were collected from a total of 104 samples, representing respectively 15.4% and 13.5% of samples taken.
- Overall, collected and analyzed duplicate samples represent approximately 14% of the water samples collected throughout 2024 under the Water Licence or MDMER, which is higher than the QA/QC duplicate program objective of 10%.

No samples were taken from the STP (MEL-07) in 2024 due to the station being non-operational for the entirety of the year.

Analytical precision is a measurement of the variability associated with duplicate analysis of the same sample in the laboratory. Duplicate results were interpreted using the relative percent difference (RPD) between measurements. The equation used to calculate the RPD is:

$$RPD (\%) = \frac{(A - B)}{(A + B)/2} \times 100$$

Where A is the field sample concentration, and B is the duplicate sample concentration.

Large variations in RPD values are often observed between duplicate samples when the concentrations of analytes are low and approaching the method detection limit. Consequently, a RPD equal to or higher than 20% for concentrations of field and duplicates samples that both exceed 10 times the method detection limit (MDL) is considered notable. The analytical precision of one QA/QC sampling event is characterized as:

- High, when less than 10% of the parameters have variations that are notable;
- Medium, when 10 to 30% of the parameters have variations that are notable;
- Low, when more than 30% of the parameters have variations that are notable.

Results of the QA/QC data (RPD calculations) are presented in the tables included in Appendix 19. for the MDMER and Surface Water monitoring programs. The following is a summary of the QA/QC results, per sampling program:

- MDMER: All duplicate samples collected were considered as having high analytical precision. None of the duplicates collected for MDMER and EEM showed notable RPD values.
- Surface Water: All duplicate samples collected were considered as having high analytical precision. Some duplicates collected at stations MEL-20 and MEL-21 showed notable RPD values, for less than 10% of analyzed parameters.

Results show that the QA/QC plan was followed, and samples were collected by qualified technicians. QA/QC methods are further discussed in the Quality Assurance/Quality Control Plan.

Temperature, pH, dissolved oxygen, turbidity and specific conductivity are measured in the field using hand held meters such as HACH test kit – 2100 Q Portal Turbidimeter (turbidity), YSI (pH, dissolved oxygen, temperature and conductivity) and Eureka Manta II (pH, dissolved oxygen and conductivity). The instruments are calibrated as required prior to conducting sampling to ensure optimal performance and record of the calibration are kept in a calibration log. The calibration data regarding these instruments is presented in Appendix 21.

QA/QC methods and results for specific field programs (e.g., AEMP, geochemical monitoring, air quality monitoring, etc.) are discussed separately in their respective reports which are provided in appendices.

7.4 SEEPAGE AND RUNOFF

As required by Water Licence 2AM-MEL1631 Schedule B, Item 11: Summary of quantities and analysis of Seepage and runoff monitoring from the Landfill, Landfarm, Waste Rock Storage Facilities, Borrow pits and Quarries.

In 2024, no seepage or discrete runoff was observed from the landfill or landfarm.

On May 21, as presented in Table 16 and as reported in detail in the follow-up report for spill #2024-179 in Appendix 15, it was noted during a routine inspection of water management infrastructure that water was overflowing the berm of Channel 4 (located west of WRSF1), releasing approximately 100 L of water onto the tundra. The incident was a result of accumulated snowmelt within Channel 4 during freshet, and Channel 4 requiring maintenance. Results from the full suite of water quality analysis supported the assessment that the water is primarily from the melting of snow that had accumulated within the channel. As reported in section 4.1, maintenance of Channel 4 was conducted in 2024 to ensure its performance as per design.

On September 28, as presented in Table 16 and as reported in detail in the follow-up report for spill #2024-374 in Appendix 15, it was noted during a routine inspection of water management infrastructure that accumulated water along the southern toe of WRSF3 was overflowing a low-profile area of the exploration camp road. An estimated 2 m³ of runoff water made its way into the tundra at the MEL-SR-16 location. The accumulation of water was the result of several days of heavy rainfall leading up to the event, along with record precipitation received during the month of September. Results from the full suite of water quality analysis were compared to the effluent quality limits outlined in Water Licence 2AM-MEL1631 Part F, Item 3. The water quality was within acceptable limits and supports the assessment that the water was not indicative of contact water.

Pooling water was observed at Borrow Pits B10 and B12, located at KM 20 and KM 15 along the AWAR, respectively, during environmental inspections in May and June. Following snowmelt, water accumulated inside the borrow pits, which required dewatering. Water was discharged onto tundra (or a wooden pallet to prevent erosion) upon reception of results meeting the Licence criteria (Part D, Item 18). In one instance on June 7, as presented in Table 16 and as reported in detail in the follow-up report for spill #2024-223 in Appendix 15, the discharge of water from Borrow pit B12 occurred one day before the end of the 10-day discharge notice issued to the Inspector and before the pre-discharge water quality results were received from an accredited laboratory. Samples collected on May 28 (pre-discharge) and on June 8 showed results were compliant with the effluent quality limits listed under Part D, Item 18 of the 2AM-MEL1631 Water Licence.

No other seepage or runoff was observed in the other borrow pits located along the AWAR throughout the open water season.

7.5 EROSION AND SEDIMENT CONTROL MONITORING

Inspections were regularly conducted at Itivia, along the AWAR, Bypass Road and at construction areas throughout the year, and in response to rainfall. Any visible turbidity plumes or erosion at these locations were documented by Environmental personnel.

Pre-freshet and freshet weekly inspections were conducted at Itivia, crossings along the AWAR, and Bypass Road to monitor various environmental risks, including blockages, ponding, erosion, and turbidity plumes. These inspections allowed to promptly address concerns such as deploying straw logs and informing the Energy & Infrastructure Department of maintenance needs. In 2024, seven inspections were conducted at Itivia and ten on the AWAR/Bypass Road during pre-freshet and freshet, from May 1st to June 17th. Although no major events occurred, water pumping was required at KM5, KM8, KM25 and KM27 to prevent snowmelt from overtopping the road and to mitigate sediment transport.

Two releases of surface runoff containing TSS above the Water Licence criteria occurred in 2024; one at Itivia (monitoring station MEL-SR1) on May 18, and one at KM 8.8 along the AWAR (monitoring station MEL-SR15) on October 5. The events are described in section 7.3.1.7 and in their respective follow-up reports in Appendix 15 (spills #2024-168 and 2024-463).

In addition, regular inspections of construction areas on site were conducted by Environment personnel to ensure identification and mitigation of any erosion/sedimentation risks as required.

In 2024, Agnico Eagle retained Kigour & Associates Ltd. (KAL) to provide environmental support for the waterline construction and Horizontal Directional Drilling (HDD) at Itivia. This support focused on ESC monitoring, including the implementation of ESC measures, water quality monitoring, and fisheries compliance monitoring, which included wildlife relocation efforts. The ESC monitoring activities conducted by KAL in 2024 are summarized below.

Waterline construction monitoring

To ensure compliance with the Nunavut Water Board Water License and Fisheries and Oceans Canada (DFO) Letter of Advice 24-HCAA-00619, a Qualified Environmental Professional (QEP) from KAL conducted daily on-site inspections of construction along the AWAR. Informal inspections along the AWAR occurred from May 7 to May 30 during spring freshet, followed by formal daily inspections beginning July 15 and continuing until October 21, 2025. During periods of rainfall, the QEP increased monitoring frequency, performing multiple inspections throughout the day to address potential environmental concerns. Inspections involved assessing the condition of ESC measures in active work areas along the waterline, including the installation of silt fences and straw logs as sediment control measures, and identifying areas of concern that could lead to the release of sediment to the receiving environment. They also included verifying that equipment and machinery was appropriately stored outside of sensitive areas and checking for signs of spills or leaks from machinery. These inspections aimed to identify and mitigate potential environmental hazards from construction activities in collaboration with the construction crew.

Near fish-bearing waterbodies, preventative ESC measures, mainly straw logs, were installed to mitigate sediment runoff. Turbidity monitoring was conducted throughout construction activities and confirmed no construction-related impacts to fish habitats. For waterline sections crossing fish-bearing waterbodies, fish removals were conducted prior to any in-water construction activities, which occurred at Km 6, 8.8, 10.5, 13.7, and 16, with work areas isolated using block nets. Fish within the isolated areas were removed using backpack electrofishing and relocated upstream. Turbidity monitoring was conducted both within and downstream of the site before, during, and after construction activities to ensure any potential sediment release into fish-bearing habitats was closely monitored. During periods of significant rainfall in the fall, mitigation measures such as reinforcing bedding material, were installed to enhance durability of the

waterline bedding material and mitigate potential risks of sediment release from future heavy rainfall and the spring freshet.

Effective communication between several stakeholders amongst which the Environment Department, KAL, and the Construction Team ensured the successful completion of the waterline construction while mitigating risks to the environment.

Horizontal Directional Drilling (HDD) Project

Before reaching the diffuser, the final waterline section will traverse a rock outcrop to access the water in Melvin Bay which will minimize disturbance to the nearshore area and protect the waterline from ice damage during the winter. HDD was conducted through the rock outcrop for this installation. While the HDD work was planned to be completed by fall of 2024, a drill alignment issue caused the work to be halted for the season. HDD work is planned to resume in summer 2025, pending regulatory approvals are in place.

Between July 7 and 15, 2024, an access road and drill pad were constructed in Melvin Bay's intertidal zone without causing environmental or ESC concerns. Before construction activities began, turbidity curtains were installed as a preventative measure along the eastern and western edges of the HDD pad to prevent potential sediment release into the aquatic environment.

Baseline turbidity conditions were established prior to construction, and a turbidity–total suspended solids (TSS) relationship was developed using linear regression analysis. This analysis determined that turbidity could serve as a proxy measurement for TSS in the event of a sediment release during construction. The model confirmed that turbidity generally correlates with TSS; however, the calibration data indicated appreciable variability in TSS along the turbidity gradient, requiring caution when directly deriving TSS values from turbidity measurements in the field using this model.

Trigger points were established prior to monitoring to suspend construction activities if turbidity exceeded a specified threshold. Daily inspections, including turbidity monitoring were conducted (July 15 to October 21) to ensure sediment control mitigation measures were functioning as planned. Notably, turbidity levels never reached a trigger point throughout construction activities.

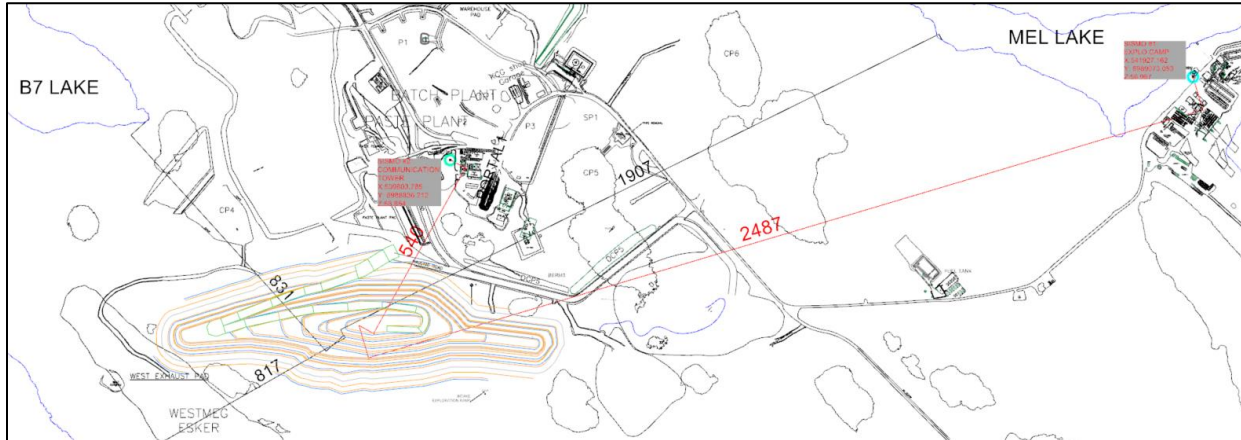
7.6 BLAST MONITORING

In compliance with Term and Condition 11 of NIRB Project Certificate No. 006, Agnico Eagle has developed a Blast Monitoring Program. The objective of the Blast Monitoring Program is to minimize the effects of blasting on fish and fish habitat, water quality and terrestrial Valued Ecosystem Components (VECs).

Peak particle velocity (PPV) and overpressure monitoring data were recorded throughout 2024 during blasting activities at Meliadine. In 2024, one surface location was monitored: TIRI01. No blasting activities occurred at TIRI02 (or other surface mining areas) in 2024. The locations of the blast monitoring stations used in 2024 are shown in Table 20. TIRI01 & TIRI02 Surface blast monitoring station coordinates and Figure 19 below.

Table 20. TIRI01 & TIRI02 Surface blast monitoring station coordinates

LOCATION	EASTING	NORTHING	DESCRIPTION
Explo Camp	541927.162	6989073.053	Permanent location used for TIR01 & TIR02 (installed 2020-08-20)
Comm Tower P1	539803.785	6988836.212	Permanent location used for TIR01 & TIR02 (installed 2020-08-20)


Figure 19. Surface Blast Monitoring Station Locations used for TIRI01 Blasts (Distance in Meters)

Blasts were monitored using an InstanTel Minimate Blaster, which is fully compliant with the international Society of Explosives and Engineers performance specifications for blasting seismographs (InstanTel, 2005). The transducer is installed as per the model specifications and measures transverse, vertical and longitudinal ground vibrations. Transverse ground vibrations agitate particles in a side-to-side motion. Vertical ground vibrations agitate particles in an up and down motion. Longitudinal ground vibrations agitate particles in a back-and-forth motion progressing outward from the event site (InstanTel, 2005). The Minimate Blaster calculates the PPV for each geophone and calculates the vector sum of the three axes. The result is the Peak Vector Sum (PVS) and is the resultant particle velocity magnitude of the event:

$$PVS = \sqrt{T^2 + V^2 + L^2}$$

Where:
T = particle velocity along the transverse plane
V = particle velocity along the vertical plane
L = particle velocity along the longitudinal plane

Detailed blast monitoring data compilation and results are available in Appendix 22. In 2024, no PPV or pressure value exceeded the guidelines, of 13 mm/s and 50 kPa, respectively. The average PPV value for 2024 was 1.89 mm/s, with a minimum of 0.19 mm/s (at Meliadine Lake) and a maximum of 8.30 mm/s (at Lake B5). The average pressure value for 2024 was 2.45 kPa, with a minimum of 0.25 kPa (at Meliadine Lake) and a maximum of 10.90 kPa (at Lake B5).

The 2024 Blast Monitoring Report is presented in Appendix 22.

7.7 NOISE MONITORING

7.7.1 Outdoor Ambient Noise Monitoring

In accordance with NIRB Project Certificate No. 006, and as described in the Noise Abatement and Monitoring Plan, Agnico Eagle monitors outdoor ambient noise levels at the Meliadine Mine. The objective of the noise monitoring program is to measure noise levels at three or four previously determined outdoor monitoring locations over at least two 24 h periods. Results are compared to the mine's Final Environmental Impact Statement (FEIS, Golder 2014) predictions for the 24-h L_{eq} , the $L_{eq-nighttime}$ design target, and the site's noise monitoring criteria (24-h L_{eq}).

Since high winds in the area tend to significantly reduce the amount of available valid data, technicians aim to conduct two or more monitoring events for each station, lasting two or more days each. In 2024, Agnico Eagle conducted two or three successful noise surveys for all required stations (NPOR006a, NPOR008, and NPOR017a) plus opportunistic surveys at NPOR014b. Monitoring at NPOR014a is not yet required because construction or operational activities related to the Discovery Pit area are not ongoing.

Noise monitoring stations are illustrated on following Figure 20.

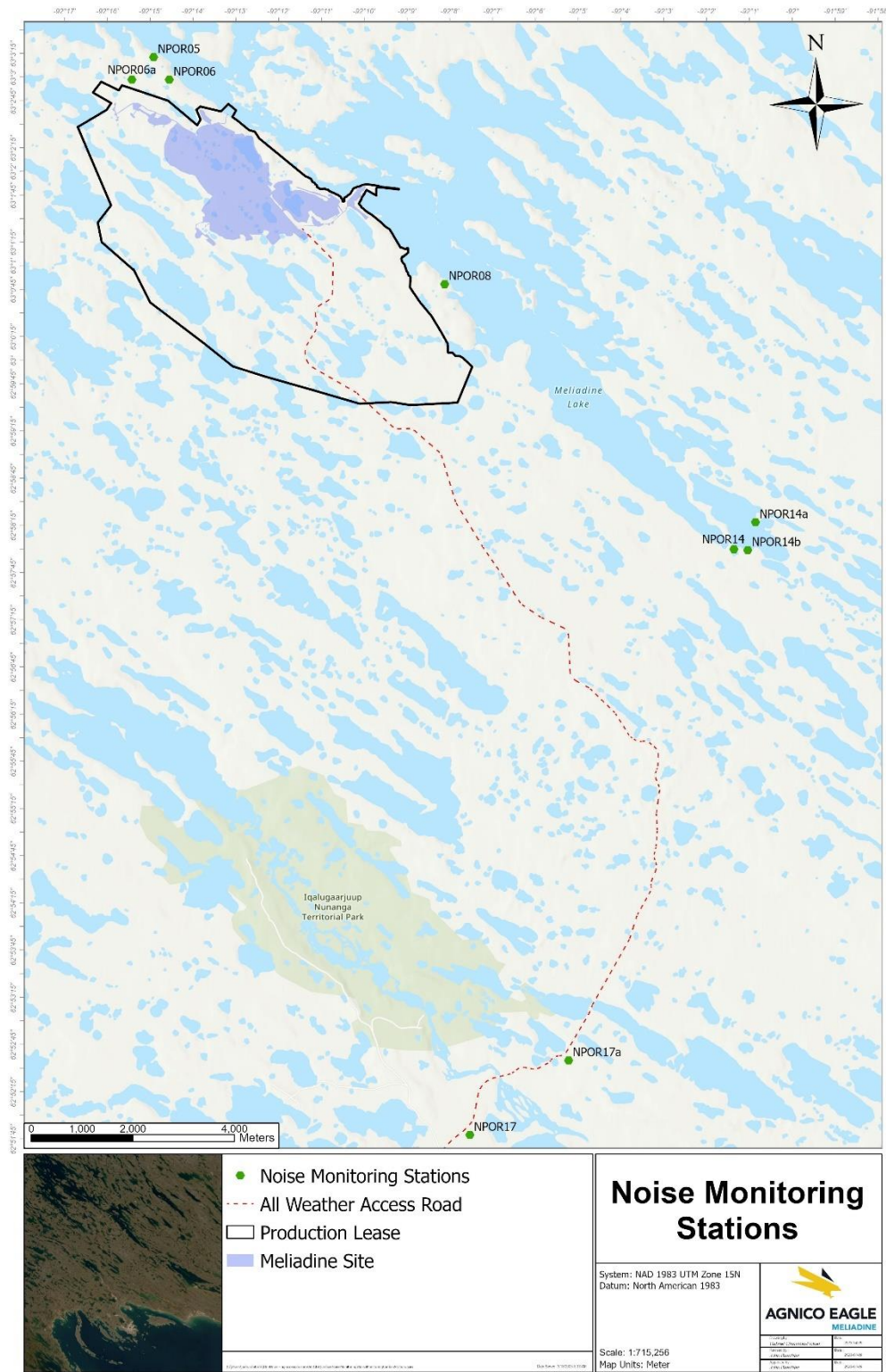


Figure 20. Meliadine Noise Monitoring Locations

A summary of the noise monitoring results for 2024 is provided in Table 21. For all stations, sufficient valid data was available to calculate a minimum of two 24-h and night-time L_{eq} values for comparison to FEIS predictions, design targets (where applicable), and noise monitoring criteria.

For six of nine noise surveys, calculated L_{eq} values were less than FEIS predictions, night-time design targets (where applicable), and the site's noise monitoring criteria. At station NPOR006a, the measured 24-h L_{eq} slightly exceeded the FEIS prediction in both surveys, and ongoing mine works were audible in sound recordings, along with wind interference. These two surveys were conducted within a 10-d period in mid-September and material hauling to the adjacent plant following receipt of barge shipments (occasional occurrence) is considered to have contributed to the elevated acoustic environment at the time, along with locally elevated winds. In both cases, however, measured 24-h L_{eq} values were less than the site's noise monitoring criterion (45 dBA), so no further actions are planned. At station NPOR008, the 24-h L_{eq} value was elevated in one of three events due to frequent helicopter overflights. Helicopters are used regularly in the region and may not be related to mine operations. Due to their seasonal use and infrequent occurrence, they were also not included in FEIS noise modelling. As a result, surveys dominated by helicopter noise (as in this case) are not considered suitable for comparison to the FEIS prediction and noise monitoring criterion. Two additional surveys were conducted for this location and results did not exceed predictions or monitoring criteria.

To date, no noise-related complaints have been received for the Meliadine Mine, and no changes to existing noise monitoring plans and mitigation measures are proposed at this time.

The complete Noise report can be found in Appendix 23.

Table 21. Summary of outdoor ambient noise monitoring results in 2024.

Location	Recording Start	Recording End	Noise Monitoring Criterion <i>Leq</i> (24 h) (dBA)	FEIS Prediction <i>Leq</i> (24 h) (dBA)	Measured <i>Leq</i> (24 h) (dBA)	Design Target <i>Leq</i> (nighttime) (dBA)	Measured <i>Leq</i> (nighttime) (dBA)
NPOR006a	2024-09-07 11:08	2024-09-08 15:49	45	39.8	40.8	-	40.8
	2024-09-12 16:36	2024-09-16 1:06			42.4		43.1
NPOR008	2024-07-18 11:11	2024-07-20 11:16	45	41.7	41.7	40	38.2
	2024-07-26 16:26	2024-07-29 14:07			(46.9)*		32.5
	2024-09-29 11:13	2024-09-30 14:52			32.6		31.2
NPOR014b	2024-08-16 15:40	2024-08-20 7:31	45	44.7	34.1	-	32.2
	2024-09-12 15:51	2024-09-16 9:53			37.1		32.2
NPOR017a	2024-07-12 17:30	2024-07-14 17:08	45	43.4	39.1	-	40.3
	2024-09-07 15:18	2024-09-08 15:55			40.1		38.9
“-” = Not applicable							
* <i>Leq</i> elevated due to frequent helicopter flyovers; not suitable for comparison to noise criteria or FEIS predictions (see text).							

7.7.2 Indoor Noise Monitoring

While the Mine Health and Safety Act and its regulations do not mandate the ongoing assessment and mitigation of noise exposure during off-duty periods, Agnico Eagle recognizes that noise in sleeping quarters can have an impact on the wellness of employees. In response to comments from Health Canada received in June, 2024, Agnico Eagle conducted indoor noise monitoring in off-duty worker sleeping quarters at the Meliadine Mine in November, 2024. The objective of this program was to characterize sound levels in these spaces during “sleeping hours” under the mine’s noise policy (9 pm to 5 am; 9 am to 5 pm).

To fulfill the monitoring objective, noise surveys were conducted in three rooms during the period of November 9 – 11, 2024. In total, one daytime and two night-time surveys were conducted, using a Bruel and Kjaer Model 2250 integrating sound level meter. The noise meter logging rate was set at 1-minute intervals, and logged parameters included:

- Integrated equivalent A-weighted sound level (*LA_{eq}*);
- Statistical data (L10, L90 - hourly);
- Maximum sound level (*L_{max}*) in dBA; and
- Minimum sound level (*L_{min}*) in dBA

Recorded sound levels were downloaded for assessment using the Bruel and Kjaer 5503 Measurement Suite software, with some calculations performed using Microsoft Excel. Recorded one-minute *LA_{eq}* values

were used to calculate equivalent-energy noise levels for the specified sleeping periods. Datapoints associated with the beginning and ending of surveys were also filtered out as needed to remove noise from technician activity, while preserving as much data as possible and ensuring more than 30 min contributed to hourly averages.

Several jurisdictions have suggested guidelines for indoor noise, for a variety of uses (e.g. World Health Organization (WHO), US Environmental Protection Agency, US National Institute for Occupational Safety and Health). The WHO's "Guidelines for Community Noise" (1999) are used in this assessment, for general reference purposes, as identified in Health Canada's "Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise" (January, 2017). For prevention of sleep disturbance, the WHO provides a guideline of 30 dBA for continuous noise during the sleep period and suggests that LA_{max} should not exceed approximately 45 dBA more than 10 – 15 times per night. For the purposes of this assessment, recorded LA_{90} values for the sleep period are compared to the WHO target of 30 dBA. The LA_{90} statistic is generally considered representative of background continuous noise, such as from air handling equipment, and represents the sound level exceeded for 90% of the specified time period. The number of noise events during which recorded LA_{max} values exceeded 45 dBA are also identified for comparison to the WHO guideline of 10 – 15 events. Finally, the overall LA_{eq} (measure of average sound level) and LA_{10} (the sound level exceeded for 10% of the survey) for each monitoring event are presented.

For each noise survey, recorded 1-min LA_{eq} , LA_{max} , and LA_{min} values are shown in Figure 21, Figure 22 and Figure 23. Summary data (LA_{eq} , LA_{90} , LA_{10} , # peaks above 45 dBA) are presented in Table 22.

Table 22. Final calculated LA_{eq} , LA_{90} , and LA_{10} for each of three noise surveys, and number of noise events during which LA_{max} exceeded 45 dBA. *Events above 46 dBA, as further described in text.

Room	Start	Stop	Analysis Period	LA_{eq}	LA_{90}	LA_{10}	$LA_{max}>45$ dBA
1238	2024-11-09 6:20	2024-11-09 16:22	9 am – 4 pm	68.5	34.2	35.1	6
826	2024-11-09 17:01	2024-11-10 4:31	9 pm – 4:30 am	27.3	25.0	27.7	19
1502	2024-11-10 16:09	2024-11-11 6:31	9 pm – 5 am	42.5	41.8	43.2	(15)*

The first noise survey (Room 1238) was conducted from 6:20 am to 4:22 pm on November 9, and data from 9 am to 4 pm was used in the evaluation, to correspond as much as possible with the site's "sleep hours" for night-shift workers of 9 am to 5 pm. The overall LA_{90} (representative of background noise) during this time was 34.2 dBA, which slightly exceeds the WHO (1999) target of 30 dBA. Typically, a sound pressure level increase of less than 3 dBA is not perceptible, so the measured background sound level is not expected to be heard as meaningfully louder than a 30 dBA environment in the context of this study. Although the overall LA_{eq} was elevated at 68.5 dBA, this occurred because of a single noise event lasting 3 minutes from 2:11 – 2:14 pm, during which LA_{max} values were recorded at 97 – 98 dBA (Figure 21). The cause of this event is unknown, but if it is excluded from the analysis, the overall LA_{eq} is reduced to 34.8 dBA. LA_{max} values exceeded 45 dBA during 12 minutes of the 420 minute dataset. These values are associated with six distinct noise events, which is within the WHO target of 10 – 15 times per night.

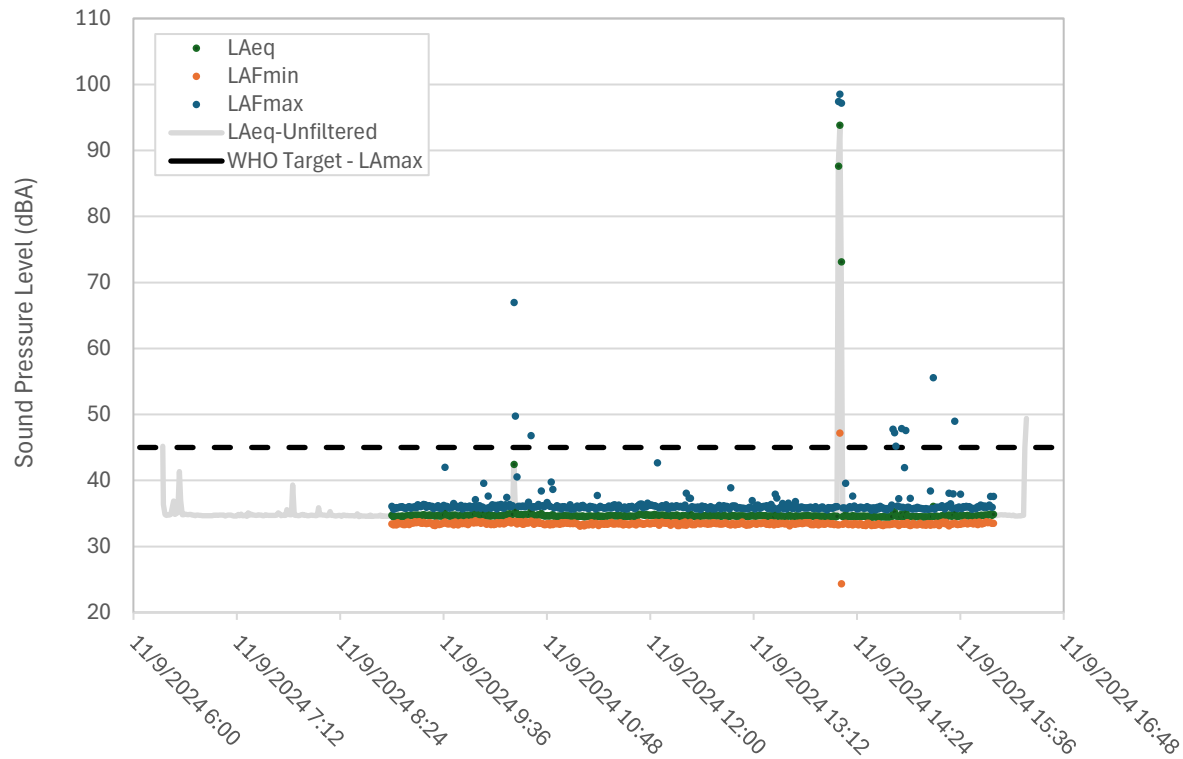


Figure 21. Measured 1-min LA_{eq} , LA_{min} , and LA_{max} values for noise survey 1 (Room 1238).

The second noise survey (Room 826) was conducted from 5:01 pm on November 9 to 4:31 am on November 10. Data from 9 pm to 4:30 am was used in the evaluation, to correspond as much as possible with the site's "sleep hours" for day-shift workers of 9 pm to 5 am. The overall LA_{90} and LA_{eq} for this time period (25.0 and 27.3 dBA, respectively) were both less than the WHO target of 30 dBA for continuous noise. The LA_{10} (27.7 dBA) was also less than 30 dBA. However, in this room with a relatively low background sound level, noise events causing peaks were more evident (Figure 22). Individual LA_{max} values (recorded at 1 min intervals) exceeded 45 dBA 29 times during the survey, to a maximum of 60 dBA. In total, these values are associated with 19 distinct noise events throughout the night, which is near the WHO target of 10 – 15 times.

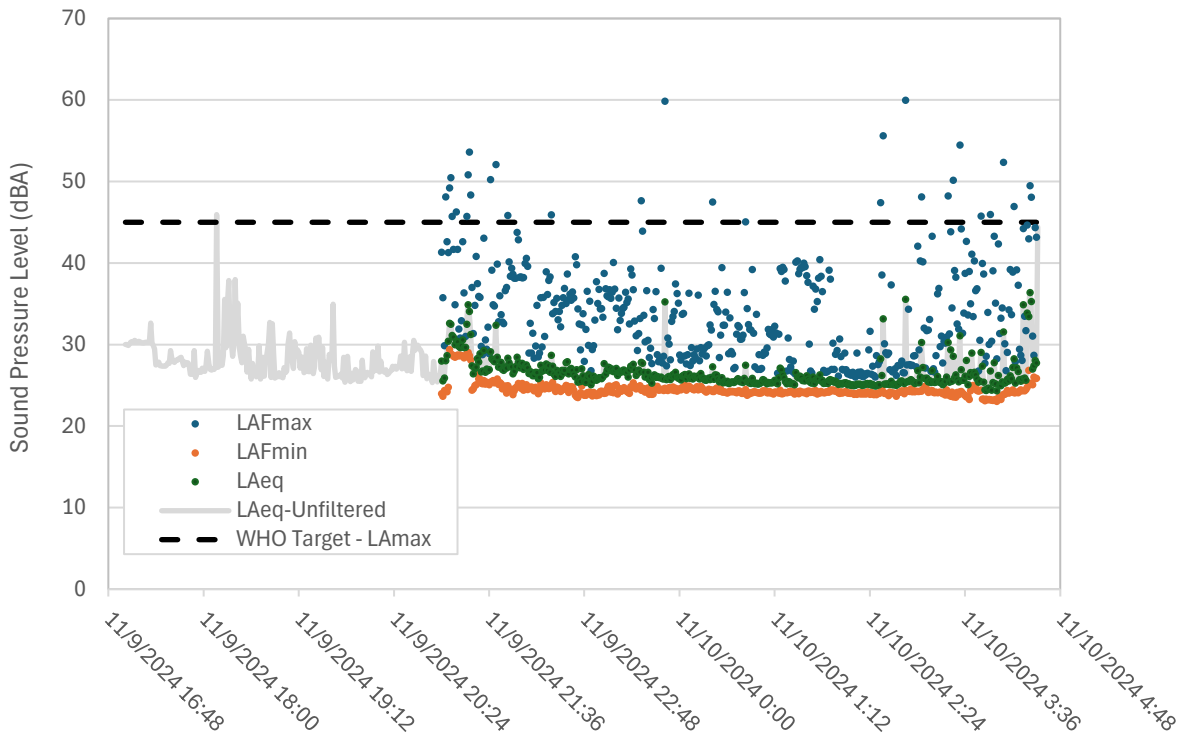


Figure 22. Measured LA_{eq} , LA_{min} , and LA_{max} values for noise survey 2 (Room 826).

The third noise survey (Room 1502) took place from 4:18 pm on November 10 to 6:30 am on November 11. Data from 9 pm to 5 am were used in the evaluation, to correspond with the site's "sleep hours" for day-shift workers of 9 pm to 5 am. During this time period, the overall LA_{90} (41.8 dBA) exceeded the WHO target of 30 dBA for continuous noise. As a result of the elevated background noise, LA_{max} was generally within 1 dBA of the WHO target of 45 dBA throughout the monitoring event (i.e. 44 – 46 dBA). However, limited sound peaks above this range occurred (Figure 23). In total, 15 noise events were recorded where maximum sound levels exceeded 46 dBA. Since the WHO guideline indicates that sleep disturbance may occur when 10 – 15 events exceed "approximately" 45 dBA, these results are considered within that range. The overall LA_{eq} (42.5 dBA), which is a measure of average sound level, only slightly exceeded the LA_{90} (41.8 dBA), and the LA_{10} was similar, at 43.2 dBA, indicating a relatively stable sound environment.

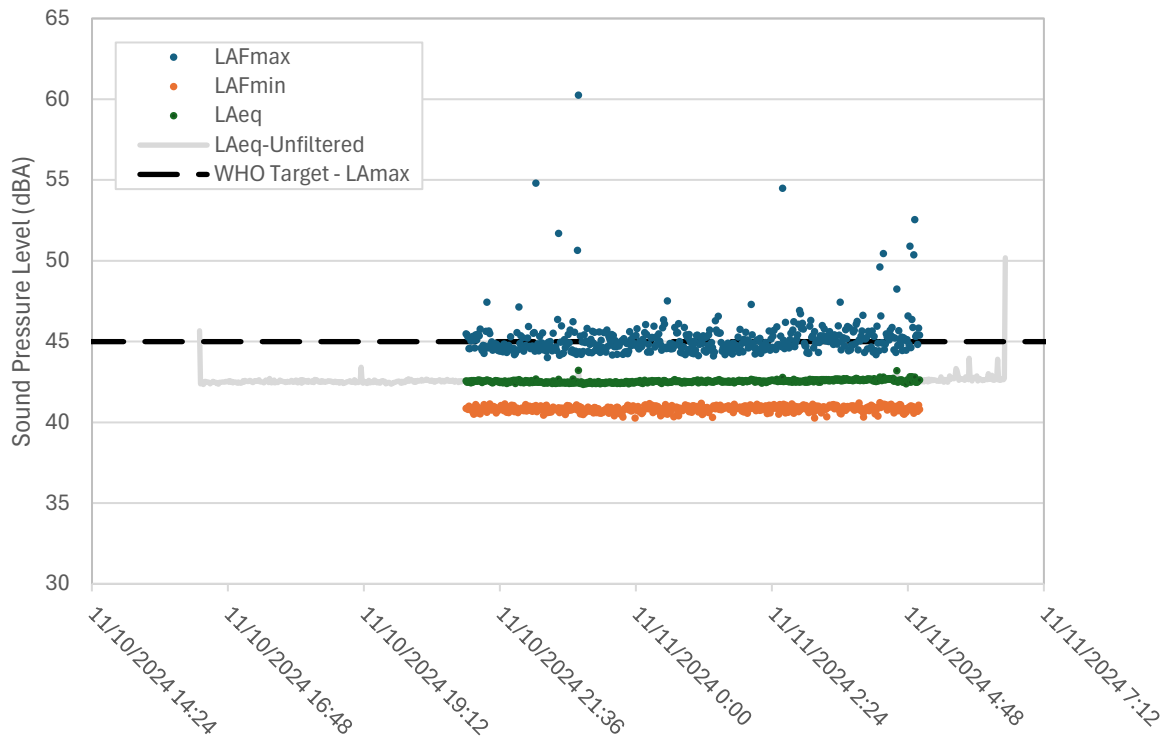


Figure 23. Measured 1-min LA_{eq} , LA_{min} , and LA_{max} values during noise survey 3 (Room 1502).

Overall, background sound levels varied between rooms (25 to 42 dBA), but peaks above 45 dBA that might be perceived as disruptive to sleep (particularly when background level is low), were relatively uncommon. Background noise levels during the designated sleep hours (day & night) in two of the three rooms evaluated (25, 34 dBA) were within or near the range of WHO guidelines for continuous noise (30 dBA). In all three surveys, the occurrence of sound events exceeding approximately 45 dBA (6 – 19 times) was within or near the WHO reference range (10 – 15 times).

Acoustic attributes of each room were not evaluated, and factors that could contribute to sound peaks or variation in background noise levels between rooms were not specifically noted during the 2024 surveys. These could include: mining activities, snow clearing operations, off-duty workers occupying neighbouring rooms, neighbouring washrooms, housekeeping activities in the wings, noise from laundry machines, fans, air heating/ ventilation systems.

In addition to administrative controls for minimizing noise in residential wings during sleep hours (e.g. avoid returning to your room during work hours, minimize TV volume, report noise complaints promptly, etc.), Agnico Eagle provides sleeping molded earplugs to employees, as requested. These custom-fit ear plugs are designed to effectively reduce noise levels, provide added comfort during rest periods, and help individuals sleep better if they feel the environment is still too noisy. At this time, Agnico Eagle is not planning additional ambient noise mitigation measures for off-duty workers.

7.8 AIR

7.8.1 Air Quality monitoring

Through its ambient air quality monitoring program, Agnico Eagle aims to measure airborne particulates, dustfall, and the gaseous compounds (NO_2 and SO_2) using a combination of active and passive sampling methods. In accordance with the Air Quality Monitoring Plan, monitoring in 2024 included year-round passive measurement of dustfall at four onsite sampling stations, as well as NO_2 and SO_2 at two locations, over one month averaging periods. Monitoring of suspended particulates (Total Suspended Particulates (TSP), $\text{PM}_{2.5}$, and PM_{10}) occurred year-round (on a 6-day cycle) at two onsite monitoring stations. Agnico Eagle also conducted summertime dustfall transect sampling (25, 50, 100, 300 m distances from the road) at three locations along the AWAR and (60, 120, 300, 1000 m distances from the road) one location along the Rankin Inlet Bypass Road.

Dustfall Locations are identified in Figure 24.

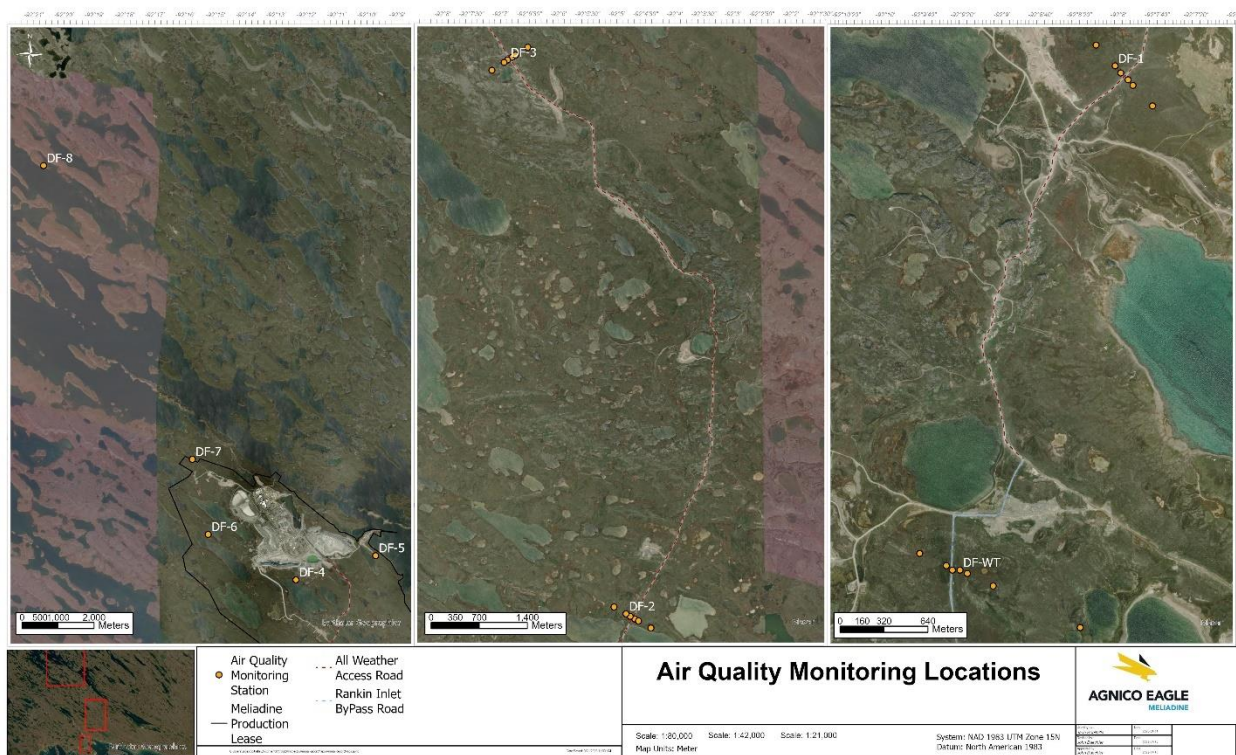


Figure 24. Dustfall Locations

Dustfall results are compared to various regulatory guidelines for recreational and industrial land uses (Alberta Environment and Parks, 2019; GNWT, 2023) for context. These guidelines relate to nuisance and aesthetic concerns only. Across all onsite dustfall monitoring stations (DF-4, DF-5, DF-6, and DF-7), three of 48 samples exceeded Alberta's industrial area guideline (AB-Ind), which is anticipated to occur occasionally. An additional five samples exceeded Alberta's recreational area guideline (AB-Rec) only. Dustfall rates were highest at DF-4, which is directly downwind of the mine site and in close proximity to

Tiriganiaq Open Pit 1. Generally, an increase in measured dustfall rates has occurred since mid-2017 as site activity has increased, as anticipated. An increase in the frequency of dustfall peaks occurred in 2024, particularly at location DF-4. With receipt of an amended production lease, this station is planned to be re-located in 2025 to allow for future mine development in this area.

For AWAR and Bypass Road dustfall monitoring transects (DF-1, DF-2, DF-3, and DF-WT, summer-only sampling), average rates of dustfall were similar to or less than those observed historically. Even in very close proximity to the road (25 m), average rates of dustfall over the summer season continue to be less than the AB-Rec guideline. Dust suppressant in the form of calcium chloride dry product was applied along the full length of the AWAR in June, July, and August.

Suspended particulates (TSP, PM_{2.5}, and PM₁₀) are scheduled to be measured over 24-h averaging periods every 6 days in two locations (DF-5 and DF-7) using two sets of Partisol air samplers. In 2024, minimal data loss occurred, and 348 of 366 possible samples were collected. With the exception of a single TSP sample (March 13, DF-7), and a single PM_{2.5}/PM₁₀ sampling date (August 10, both locations), all values were less than regulatory guidelines for the 24-h averaging time (relevant Government of Nunavut Ambient Air Quality Standards (GN, 2011), Canadian Ambient Air Quality Standards (CAAQS; CCME, 2012, 2020a & b), and/or BC Ambient Air Quality Objectives (BC, 2021)) and maximum model predictions in the Final Environmental Impact Statement (FEIS) (Golder, 2014). Measured concentrations of metals of relevance (cadmium and iron) in TSP were also less than FEIS-selected 24-h health-based screening values and FEIS maximum model predictions, with the exception of a single 24-h sample for iron at the northern/upwind (DF-7) sampling location². Occasional elevated values for suspended particulates in individual field samples are likely caused by localized events, and these results are not considered indicative of any trends towards mine-related air quality concerns. Annual averages for suspended particulates were less than relevant regulatory guidelines and 2014 FEIS predictions in all cases.

Using monthly-average measurements, calculated annual average concentrations of NO₂ and SO₂ did not exceed regulatory guidelines (GN guidelines, CAAQS) or 2014 FEIS maximum model predictions.

The 2024 Air Quality Monitoring report can be found in Appendix 24.

7.8.2 Greenhouse Gas Emissions

Agnico Eagle is required by Environment Canada's Greenhouse Gas Emissions Reporting Program (GHGRP) to track greenhouse gas emissions. Calculated emissions for the Meliadine site (including Rankin Inlet operations) were last reported on May 31, 2024 for the 2023 year. Total emissions were 138,128 tonnes CO_{2e}, which is less than the FEIS-predicted maximum of 317,000 tonnes CO_{2e}.

Environment Canada's Greenhouse Gas Emissions Reporting Program for the 2024 year will be completed by June 1st, 2025.

7.8.3 Climate

A permanent weather station is installed at the Meliadine site, to the northeast of camp. The station records various data including daily and hourly data for wind speed, wind direction, temperature, solar radiation, precipitation and relative humidity. Table 23 summarizes 2024 annual temperature and precipitations

² Additionally, the health-based screening value for iron is based on toxicity of particulate matter, not the iron itself, and on this sampling date, measured PM₁₀ and PM_{2.5} (inhalable PM fraction) were well below regulatory guidelines for particulates.

records (from both the site weather station and Environment Canada at the Rankin Inlet Airport weather station, for comparison).

Table 23. 2024 Climate Conditions

Environmental Variable	Environment Canada (Rankin Inlet Airport)	Meliadine Site Weather Station*
Temperature (°C)		
Mean Annual Temperature	-6.7	-6.9
Min. Annual Temperature	-41.2	-42.4
Max Annual Temperature	30.0	30.0
Precipitation		
Total Annual Snowfall (cm)	133.4	-
Total Annual Rain (mm)	250.1	-
Total Annual Precipitation (mm)	376.5	382.5

*Some erroneous values for temperature and precipitation from the Meliadine site weather station were corrected using the Rankin Inlet Airport weather station and used for the averages presented here

The maximum annual temperature (from Meliadine weather station) of 30°C was recorded on August 10, 2024 and the minimum annual temperature of -49.99°C was recorded on February 26 2024. The mean annual temperature was -7.1 °C. Total recorded annual precipitation at the Meliadine weather station was 382.5 mm and snowmelt began May 4, 2023 when the average daily air temperature began to near 0°C. Environmental variables continued to be monitored on an ongoing basis.

7.9 WILDLIFE MONITORING

In addition to planned surveys conducted by the Environment department, all Meliadine employees and contractors are required to report wildlife sightings. In November 2021, a new way to report wildlife sightings on site via text message was introduced to all employees. The text messaging was replaced by a QR Code in April 2023. All observations, problematic interactions, wildlife surveys conducted weekly along the AWAR, caribou migration, operation shut downs related to caribou migration, aerial observations when helicopters are active, onsite audits (i.e. for wildlife attractants) conducted by third parties, and mitigation actions taken following problematic issues are reported in the monthly report to the GN, the Kangiqliniq Hunters and Trappers Organization (KHTO) and KivIA.

In April 2023, a Wildlife Audit was conducted at Meliadine by the consultant Bearwise. Results of this audit were presented in the 2023 Annual Report.

In November 2024, an internal wildlife audit was conducted. Weekly environmental inspections were also conducted throughout the site to ensure proper waste management practices. Regular reminders are provided site-wide and year-round to mitigation attraction of wildlife.

Department toolbox meetings were completed in 2024 for environmental subjects including wildlife and caribou migration. In 2024, 19 toolboxes were conducted on the topic of wildlife attractants and foxes, and 14 toolboxes were conducted on the topic of caribou migration. The toolbox presentations can be found in Appendix 25.

Environmental inspections, training and reminders will continue to be provided to departments to ensure the recommendations from Bearwise and internal wildlife audits/inspections continue to be applied.

7.9.1 TEMMP

The objectives of the Terrestrial Environment Management and Monitoring Plan Report (TEMMP Report) are to summarize annual data collected from wildlife and vegetation monitoring programs, and to describe natural variation and potential Project-related effects to wildlife populations within and adjacent to the Project. The data was collected according to procedures and sampling or monitoring intervals outlined in the Project's Standard Operating Procedures (SOPs) and the Terrestrial Environment Management and Monitoring Plan (TEMMP). The 2024 TEMMP Report describes monitoring objectives and methods, 2024 survey results, mitigation activities, and management recommendations (i.e., adaptive management). The complete 2024 TEMMP Report can be found in Appendix 26, and a summary is provided below. Complementary studies (Caribou Behaviour, Caribou Trail Camera, Arctic Raptors, Hunter Harvest studies) were conducted in 2024 and are included in Appendices of the TEMMP Report. Wildlife observations can be found in Appendix 27

Incorporation of Inuit Qaujimajatuqangit

In 2024, Inuit Qaujimajatuqangit was collected during five meetings, one site visit, and seven cultural activities. Qaumajuq Environmental Ltd. an Inuit company from Rankin Inlet, led dewatering activities in 2024

Direct Habitat Loss

Direct habitat loss is assessed every three years and was last assessed in 2021. An updated assessment for Project-related direct habitat loss is included in this report, with the next assessment scheduled for 2027. A total area of 696 ha has been altered due to Project construction, representing 41% of the 2012 Project Approved footprint and 24% of the predicted Project Footprint. This represents a total of 63 ha of direct habitat loss between 2021 to 2024.

Indirect Habitat Loss

Indirect habitat loss for caribou and wildlife habitat (soils and vegetation) is assessed every three years and was last assessed in 2022. The next full assessment is scheduled for 2025. A summary of a detailed analysis completed in 2024 comparing noise emissions during different levels of operations, caribou hearing thresholds, and the influence of environmental factors is provided in this report.

Soil and Vegetation Monitoring

Soil and vegetation health monitoring (dust and metals survey) is assessed every three years and was last assessed in 2022. The next full assessment is planned for 2025.

Non-native Plants

Non-native plant surveys were completed along the All-weather Access Road (AWAR); no non-native plant species were detected.

Environmental Variables

The maximum annual temperature of 30.0°C was recorded on 10 August 2024 and the minimum annual temperature of -42.4°C was recorded 22 February 2024. The mean annual temperature was -6.9°C. Total recorded annual precipitation was 382.5 mm and snowmelt began 24 May 2024 when the average daily air temperature exceeded 0°C. The green-up date for the regional study area (RSA) was estimated to be

20 June 2024, based on normalized difference vegetation values averaged across the RSA (obtained from MODIS VI satellite). A multi-year summary of environmental variables is provided in this report.

Birds

Shoreline Surveys

A total of 33 nests of 6 species were detected in 2024.

Point Counts

A total of 72 counts were completed along 6 transects along the AWAR in 2024. A total of 6 passerine species were observed, with horned lark being the most commonly observed species. An additional 21 non-passerine species were also incidentally recorded.

Regional and International Shorebird Monitoring

A total of 24 Program for Regional and International Shorebird Monitoring survey plots were completed in 2024. A total of 27 bird species were observed, with horned lark being the most common. During surveys, breeding evidence was observed for 5 species, with a total of 11 nests recorded.

Raptors

Arctic Raptors conducted a formal survey and analysis for all known raptor nesting sites in the entire RSA in 2024. The study design included two surveys: one to assess the location of occupied territories during the pre-incubation and incubation periods, and one to assess site productivity during the late brood rearing period. Occupancy models were used to determine influence of disturbance on nest occupancy for peregrine falcons and rough-legged hawks. The analyses did not find an effect of distance to disturbance on nest occupancy for either species.

Pre-Clearance Surveys

Four bird nests were recorded during pre-clearance surveys in 2024, with one requiring mitigation. Two potential sandpiper nests were recorded based on behavioural observations; however, nests were never identified.

Wildlife Observations

Wildlife Sighting/Track Surveys

Wildlife sighting/track surveys were completed by Agnico Eagle personnel along the AWAR and Mine infrastructure throughout the year.

A total of 3,296 individuals from 15 identified wildlife species and 8 unidentified wildlife species groups (e.g., duck species [sp.], gull sp., loon sp., ptarmigan sp.) were recorded during surveys along the AWAR in 2024.

A total of 357 individuals from 12 identified wildlife species and 7 unidentified wildlife species groups (e.g., duck sp., gull sp., loon sp.) were recorded during surveys at Mine infrastructure other than the AWAR in 2024.

Wildlife Incidentals

There were 100 incidental observations recorded, representing 190 individuals of 11 species and two species groups (i.e., bird sp., ptarmigan sp.), around the Mine site (including the camp area) and the AWAR in 2024.

Den Sites

Surveys were completed for the Project between May and August 2024 to locate dens of Arctic fox, grey wolf, polar bear, grizzly bear, and wolverine.

Eleven historical dens were revisited, with seven being active, including two active fox dens. The remaining dens were active with Arctic ground squirrel (sik sik). No new dens were recorded in 2024.

Bird Nests

Ten incidental bird nests were observed on the Mine site or along the AWAR in 2024.

Incidents and Mortalities

A total of ten mortalities across five different species were reported at the Project from 20 January to 9 December 2024; all of these mortalities were suspected or confirmed to be caused as a direct result of Project activities, with the exception of two unknown cases. No caribou mortalities were reported in 2024.

Wildlife Deterrents

Wildlife deterrents (i.e., propane noise cannons and deterrent balloons) were implemented at ten locations to deter birds from nesting on site. All deterrents were removed prior to the caribou migration. Active deterrence, including hazing of incidental observations of wildlife, were also completed by environmental technicians; all activities were successful, with the exception of two instances, both involving Arctic fox.

Propane noise cannons were not used during the caribou migration period.

Barren-ground Caribou

Caribou Behaviour Monitoring

Statistical analyses of 2020 to 2024 data found that caribou farther from infrastructure (i.e., greater than 300 m) displayed lower proportions of response behaviours.

The proportion of response behaviours in caribou groups increased following disturbances, but behaviours usually returned to baseline levels within nine minutes.

Caribou displayed a greater likelihood of walking, alert, or running behaviours in surveys where there were disturbances such as vehicle traffic.

Environmental variables (e.g., temperature, wind speed, and insect harassment) were not related to proportion of response behaviours in caribou groups.

Caribou Remote Camera Study

Between 2020 and 2024, a study was conducted using motion-triggered cameras to study caribou interactions with the Project infrastructure during their annual migration, focusing on the AWAR. In 2023 and 2024, cameras were placed around the Mine site and along the proposed Discovery Road following guidance from the Terrestrial Advisory Group.

Detections of caribou were reduced compared to data from 2020 to 2023. Cameras did not detect caribou along the AWAR in 2024. While caribou have historically travelled through the Mine area post-calving, in 2024 most caribou stayed west of Meliadine Lake post-calving, then returned directly south based on GPS collared data and reports from community members.

Pooled data from 2022 and 2023 indicated that road height and road-side slope at each camera location was not related to the number of caribou observed at each camera location, suggesting that differences in the structure of the AWAR do not significantly influence the locations where caribou cross.

In 2024, caribou were predominantly detected northwest of the Mine site, closer to the west arm of Meliadine Lake, with detections occurring from 4 June to 7 July.

Peak detection of caribou among the cameras deployed along the proposed Discovery Road was in late June and early July, consistent with 2023.

Collared Caribou Inventory

Individuals from the Qamanirjuaq herd have been present in the RSA for 17 of the 32 years where collar data are available. Since 2011, collared Qamanirjuaq caribou have typically entered the RSA in late June to mid-July and have remained in the RSA for 1 to 5 days.

Individuals from the Qamanirjuaq herd have been present in the LSA for 16 of the 32 years where collar data are available. Collared caribou typically enter the LSA in early to mid-July and leave the LSA on the same day; some individuals enter the LSA several times over the course of one summer but remain in the LSA for a day or less during each interaction. The length of time Qamanirjuaq caribou are spending in the LSA has not varied since collared caribou began interacting with the LSA in 2006.

Fewer than 30% of Qamanirjuaq caribou come within 5 km of the Project and 99% of caribou that came within 5 km of the AWAR or Mine for a specific year remained for less than 24 hours. In consideration of these results, impacts to the Qamanirjuaq herd due to the Project have the potential for limited transboundary effects.

Caribou Advisory

Surveys to monitor migration of the Qamanirjuaq herd through the Project were performed from 12 May to 9 July 2024. Closure of the Mine site was triggered between 12 May to 23 May 2024, with additional closures of the tailings storage facility on 5 and 9 July 2024. No closures of the AWAR occurred in 2024.

Shutdowns affecting different components of the Mine were implemented to facilitate the safe migration of caribou through the Project. The AWAR was not closed during 2024, nor was waterline construction impacted. Vehicle traffic on site, open pit operations, and activities at the Exploration Camp were restricted for 254 hours across 12 days (i.e., 88% of the time across 12 days). Activities at the Main Camp were restricted shutdown for 260 hours across 14 days (i.e., 77% of the time across 14 days).

No flight cancellations related to the caribou migration occurred in 2024.

Hunter Harvest

The 2024 Hunter Harvest Study included 61 participants amongst which 41 reported harvesting caribou. A total of 709 caribou were reported as harvested in 2024.

In addition, a total of 24 muskox, 5 wolverine, and 5 wolves were harvested in 2024. Other reported harvested terrestrial mammals included five Arctic hare, one ermine, one moose, one muskrat, one red fox, and three polar bears. In the marine environment, ringed seal (47 individuals) was the most common species harvested followed by beluga (29 individuals), harp seal (5 individuals), walrus (4 individuals), bearded seal (3 individuals), narwal (2 individuals), and harbour seal (2 individuals).

More birds were harvested by Rankin Inlet participants in 2024 (441 birds) than in 2023 (202 birds), 2022 (136 birds), and 2021 (394 birds). In 2024, Canada goose and snow goose were harvested at the highest levels and made up 67% of all harvest bird species. Black guillemot, Common eider, greater white-fronted goose, gull sp., loon sp., northern pintail, owl sp., ptarmigan sp., rock ptarmigan, sandhill crane, snowy owl, and tundra swan were also harvested.

Arctic char (2,661 fish), lake trout (193 fish), and Arctic cod (19 fish) were the most common species caught by anglers. Relatively small numbers of Arctic grayling (six fish) and lake whitefish (1 fish) were caught in 2024.

7.9.2 Marine Environment

A Marine Mammal and Seabirds Observer (MMSO) program was completed again in 2024, in accordance with the requirements from the NIRB Project Certificate. The purpose of the MMSO program is to mitigate interactions between marine mammals and seabirds and Project vessels and to collect information on marine wildlife presence. The 2024 Marine Mammal and Seabird Annual Report is provided in Appendix 28 and summarizes the MMSO data collected during the 2024 sealift season by the shipping companies Groupe Desgagnés and Woodward Group of Companies (Woodward). At this time, the monitoring data does not warrant changes to the Shipping Management Plan or Marine Environment Management Plan. As per Agnico Eagle's adaptive management strategy and in line with NIRB PC T&C79, Agnico Eagle will continue to analyze monitoring data and make necessary changes as warranted.

To address Term and Condition 68 from the NIRB Project Certificate 006, a technical analysis was carried out on vessel traffic in Hudson Strait and Hudson Bay to review the Meliadine Mine's contribution to vessel activity in the area, and the results of a literature review conducted on vessel activity and marine bird mitigation in the study area. The technical analysis was presented in Appendix 29 of the 2022 Annual Report. Since 2020, the MMSO Report is coordinated for the shipping between the Meliadine Mine and the Meadowbank Complex (Meadowbank and Whale Tail Mines), contributing to cumulative effects monitoring.

In 2020 through 2024, training materials were delivered to vessel crew (both Groupe Desgagnés and Woodward) prior to the shipping season. These training materials were developed to improve the MMSO data collection of shipping companies, and included the following:

- setbacks from sensitive marine wildlife habitats such as marine mammal haul-outs and seabird colonies,
- mitigation procedures should marine mammals or seabirds be observed in or near the vessel path, and
- training materials for dedicated MMSO crew observers including detailed methods for marine mammal and seabird surveys, data sheets, and training videos.

When compared to pre-2020 levels, vessel participation in MMSO surveys has increased. In 2024, a total of 23 vessels serviced the projects between July and November: 7 for Meadowbank and 7 for Meliadine, while 9 serviced both Meadowbank and Meliadine. Datasheets were obtained from 19 of the 23 trips in 2024, which is similar to the last 4 years (18 of the 23 trips in 2023, 21 of 27 in 2022, 23 of 29 in 2021, and 19 of 25 in 2020), all of which were greater than in previous years (6 vessels providing datasheets in 2019, and only 2 participating vessels in 2018).

Setbacks from Sensitive Habitats

In compliance with Term and Condition 39 of Whale Tail Mine Certificate No. 008, Project vessels must follow a setback distance of 500 metres (m) from colonies and aggregations of seabirds and marine mammals while transiting through the Hudson Strait, Hudson Bay, and Chesterfield Inlet. In addition, vessels must follow a setback distance of 2 km from Marble Island, as per Meliadine's Shipping Management Plan.

Vessel tracks and identified sensitive areas for wildlife were mapped. Where detailed data were available, vessels were shown to avoid these areas where safe to do so. Groupe Desgagnés and/or Woodward vessel tracks crossed through the 2 km setback polygon at Marble Island on three occasions. Agnico Eagle continues to train vessel captains regularly and remind them of the importance of maintaining sensitive habitat buffers prior to shipping season.

Vessel Mitigation

Vessels are required to transit south of Coats Island whenever the weather is safe to do so. The majority (87 percent [%]) of vessels servicing the Meadowbank and Meliadine projects in 2024 travelled south of Coats Island. Vessels traveled north of Coats Island on three occasions, two in July due to unfavorable sea conditions along the route, and one in October due to inclement weather.

Marine Mammal Monitoring

In 2024, 62 transect and 88 stationary surveys for marine mammals were completed. There was a total of 23 marine mammal sightings (9 during surveys and 14 incidentally) during the 2024 shipping season, compared to 20 (surveys and incidentally) in 2023. Between 2017 and 2024, the majority of marine mammal sightings were recorded in the Hudson Strait or near Marble Island and Chesterfield Inlet. The number of marine mammal sightings was too low to allow for density analysis to be conducted. Groupe Desgagnés and Woodward did not record any marine mammal–vessel interactions (e.g., strikes) in 2024 or in previous years (2017 through 2023).

Seabird Monitoring

No accidental contact between vessels and seabirds was recorded in 2024 or in previous years. In 2024, a total of 97 transects and 136 stationary surveys were completed.

In 2024, 1,339 birds were recorded during moving vessel surveys. Among the 1,339 birds recorded, 22 different species were identified, with 7 different species remaining unidentified. The most common species recorded in 2024 during moving vessel surveys were razorbill ($n = 726$) and northern fulmar ($n = 150$). Seabird detectability and density were estimated using models that account for lower detectability of birds with greater distance from survey transects. Detectability estimates were mostly consistent between years,

with the highest estimate in 2022, followed by 2024. Differences in estimated density reflect variability in the effort and number of birds detected between years.

During stationary surveys in 2024, 530 seabird sightings were recorded, belonging to 10 identified species and 5 unknown species. The most commonly recorded species were herring gull (n = 290), unknown duck (n = 75), and razorbill (n = 58). The detection estimate for stationary seabird surveys were lower in 2024 than in previous years.

7.10 SOIL AND VEGETATION

As mentioned in the 2024 TEMMP Report in Appendix 26, soil and vegetation monitoring was first conducted in 2017 to inform the baseline conditions. Monitoring is completed on a three-year interval, first initiated in 2019 (first year of operations). The last soil and vegetation assessment was completed in 2022, and the next complete soil and vegetation assessment is planned for 2025.

In 2024, additional soil sampling was carried out to confirm sampling methodology for future TEMMP monitoring and reporting (including the 2025 assessment). The 2025 assessment and methodology will be reported on in the 2025 Annual Report.

Agnico Eagle also initiated additional analysis of the existing data from different media (tailings, soil, lichen, dust and snow chemistry) in the attempt to identify spatial trends and potential sources of metal concentrations (i.e., extent of naturally elevated metals and any project-related effects). This analysis will continue in 2025 and may inform on additional monitoring to be conducted in addition to the monitoring as outlined in the TEMMP. At this time, sampling over a larger area (at increased distance from the mine footprint) and co-location of sample types (for example, soil, vegetation and dust/snow samples) are being considered.

Agnico Eagle remains committed to investigate the potential project-related effects on soil and vegetation and to apply appropriate mitigation measures as required.

SECTION 8. PROGRESSIVE RECLAMATION

8.1 MINE SITE

As required by Water Licence 2AM-MEL1631 Schedule B, Item 18: Summary of any progressive reclamation and closure work undertaken, including photographic records of site conditions before and after completion of Operations, and an outline of any work anticipated for the next year, including any changes to implementation and scheduling; and

As required by Water Licence 2BB-MEL1424 Part B, Item 6k, and Water Licence 2BE-MEL2434 Part B, Item 2j: A description of all progressive and/or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;

In 2024, progressive reclamation of the TSF took place. As per the MWMP and Interim Closure and Reclamation Plan (ICRP), the closure plan for the TSF is to progressively place an engineered cover over the tailings surface. As-built (2019-2024) and expected quantities of material (waste rock and overburden) for progressive cover material at the TSF over LOM are presented in the MWMP.

A starter waste rock berm was initially placed along the outside perimeter to contain the initial lifts of the tailings; the berm will become a part of the closure cover. Additional lifts of compacted waste rock (with a maximum lift thickness of 1 m) are placed as the tailings surface is brought up as erosion and thermal protection. Safety berms are placed on each lift of the waste rock that also help to reduce dust generation from the tailings surface. In 2024, 201,000 tonnes of waste rock were used for the progressive closure cover of the TSF.

In 2024, reclamation process of the Type B Landfarm was initiated and is described in section 5.1.

No other reclamation occurred at the mine site.

8.2 AWAR

In 2024, no reclamation occurred along the AWAR.

8.3 QUARRIES AND BORROW PITS

In 2024, no reclamation occurred at quarries or borrow pits.

8.4 RECLAMATION COSTS

As required by Water Licence 2AM-MEL1631 Schedule B, Item 20: Updated estimate of the current restoration liability based on Project development monitoring, results of restoration research and any changes or modifications to the Appurtenant Undertaking.

And

As required by Water Licence 2BB-MEL1424 Part B Item 6h: An updated estimate of the current Meliadine West Gold Project restoration and liability, as required under Part B, Item 3, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan

A permanent closure and reclamation financial security cost estimate was prepared in March 2014 using the RECLAIM model, version 7.0. According to that estimate, the closure and reclamation of all Project facilities amounted to \$47,449,337. This estimate was included in the Preliminary Closure and Reclamation Plan (April 2015) prepared as part of the Type A Water License application. In negotiations between CIRNAC, Agnico Eagle and KivIA, the quantum of security was increased to \$49,555,000.

On July 1, 2017, the Production Lease KVPL11D01 between KivIA and Agnico Eagle came into effect; the security was confirmed at \$49,555,000. Agnico Eagle posted a Reclamation Security Deposit, equal to 50% of this estimate (\$24,777,500) with Kivalliq Inuit Associated (KIA).

In 2019, an Interim Closure and Reclamation Plan (ICRP) was prepared. CIRNAC's RECLAIM Reclamation Cost Estimating Model Version 7.0 workbook has been used for this estimate, as per the Guidelines for Closure and Reclamation Cost Estimates for Mines, issued by CIRNAC, Mackenzie Valley Land and Water Board and the Government of the Northwest Territories (CIRNAC, MVLWB & GNWT, 2017). The 2019 estimated closure and reclamation costs for the Meliadine Mine represented a total of \$ 59,514,717. This total included \$ 34,462,041 of direct costs and \$ 25,052,677 of indirect costs.

In 2020, a second version of the ICRP was prepared (SNC Lavalin Inc., April 2021). The general purpose of this ICRP was to update the interim closure and reclamation plan produced for the development phase of the Mine, including the activities part of the 2021 NWB Type A Water Licence Amendment. The detailed financial security cost estimate for the Meliadine ICRP 2020 was updated using the RECLAIM Version 7.0 workbook. The updated 2020 estimated closure and reclamation costs for the Meliadine Mine represented a total of \$69,687,246. This total included \$40,887,775 of direct costs and \$28,799,471 of indirect costs.

In January 2024, the ICRP was updated and submitted to the NWB as part of the Type A Water Licence Amendment application. It included an updated estimated closure and reclamation costs for the Meliadine Mine, which represented a total of \$132,887,060. This total included \$78,548,442 of direct costs and \$54,338,618 of indirect costs, and reflected agreements between parties.

In February 2025, the ICRP was updated and submitted to the NWB as per Part B, Item 14 of the amended Type A Water Licence (2024). The financial security amount and schedule were updated to reflect the amended Water Licence. As per Schedule C of the Water Licence, the Global Security Amount for the Meliadine Mine represents a total of \$158,450,658. The updated ICRP is provided in Appendix 29-8.

SECTION 9. STUDIES/REVISIONS/MODIFICATIONS

9.1 SUMMARY OF STUDIES

As required by Water Licence 2AM-MEL1631 Schedule B, Item 21: *A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.*

And

As required by Water Licences 2BB-MEL1424 Part B, Item 6l and 2BE-MEL2434 Part B, Item 2k: *A summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;*

No studies were requested by the NWB in 2024.

9.2 SUMMARY OF REVISIONS

As required by Water Licence 2AM-MEL1631:

Schedule B, Item 22: *Where applicable, revisions will be completed as Addendums, with an indication of where changes have been made, for Plans, Reports, and Manuals.*

And

Part B, Item 17:

The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of an Addendum to be included with the Annual Report required by Part B, Item 2, complete with a revisions list detailing where significant content changes are made, and should incorporate design changes and adaptive engineering required and implemented during construction and on the basis of actual site conditions and monitoring results over the life of the Project.

And

As required by Water Licence 2BB-MEL1424 Part B Item 6g: *Any revisions to the Spill Contingency Plan, Site Water Management Plan, Used Water Management Plan, Waste Management Plan, Waste Rock and Ore Storage Plan, Landfill and Landfarm Management Plans, Abandonment and Restoration Plan, as required by Part B, Item 12, submitted in the form of an Addendum;*

And

As required by Water Licence 2BE-MEL2434 Part B Item 2g: *Any revisions to the Spill Contingency Plan, Water Management Plan, Waste Management Plan, and Landfarm Management Plans, Abandonment and Restoration Plan, as required by Part B, Item 8, submitted in the form of an Addendum.*

No revisions were made to the Type B Licence Management Plans.

The following Table 24 provides a list of the Management Plans and identifies the ones updated and the main revisions brought to them. They are available in Appendix 29.

Table 24. Management Plan Revisions

Management Plan	Version	Notes/Revisions
Management Plans revised and submitted with 2024 Annual Report		
Air Quality Monitoring Plan	4	Addition of monitoring location DF-10 to coincide with future mine development in this area. Potential inclusion of continuous suspended particulate monitoring instead of Partisols units (including discontinuation of ongoing analysis of metals in TSP). Added comparisons to CAAQS (PM2.5, NO2, SO2). Added GNWT (2023) as a dustfall guideline value.
Blast Monitoring Program	7	General Update. Revised section 3.2 (Instrument surface installation for Pump), section 5 (addition of Figure 10 showing Pump pits).
Borrow pits and quarries Management Plan	8	Comprehensive review and update throughout.
Dust Management Plan	8	General update. Updated to include mine waste and ore dust sources, additional suppression measures and updated Table C.2
Explosives Management Plan	11	Updated Appendix A (Factory Licence).
Groundwater Management Plan	12	Inclusion of details on the two versions of the Groundwater model used for the inflow predictions, inclusion of SP6, and text edits.
Incineration Management Plan	8	Review of used oil and waste fuel environmental guidelines.
Interim Closure and Reclamation Plan	2.2	Updated to include mitigation measures for the protection of aquatic life as recommended by ECCC and as per Agnico Eagle's Response to Final Written Submissions on the 2024 Meliadine Water Licence Amendment Application 2AM-MEL1631.
Mine Waste Management Plan	12	Updated to reflect Meliadine operational status and quantities according to latest mine plan. Removed details on dust sources and suppression measures in Section 6 (these can be found in the Dust Management Plan).
Noise Abatement and Monitoring Plan	4	Updated list of monitoring locations to reflect current practices
Oil Pollution Emergency Plan / Oil Pollution Prevention Plan (OPEP/OPPP) ³	11	Updated to reflect the construction of 2 fuel tanks within the existing OHF in 2024 in section 4. Updated emergency equipment inventory in section 7. Updated tables 3 to 6 (radio channels, contact information). Added Appendix H: Environmental Emergency Regulations cross reference table.
Ore Storage Management Plan	7	Updated to reflect Meliadine operational status and quantities according to latest mine plan. Removed details on dust sources and suppression measures in Section 6 (these can be found in the Dust Management Plan).
Roads Management Plan	11	Updated to merge V9_NWB (submitted to the NWB for the 2024 Water Licence Amendment Application) and V10 (March 2024, submitted with 2023 Annual Report).
Sediment and Erosion Management Plan	5	Added effects of TSS on fish habitat. Text edits.
Shipping Management Plan	10	Updated to reflect the requirements of the current Ballast Water Regulations. Content reorganization and minor editorial changes and figures update. Updated Table 3.1 (regulations matrix)
Spill Contingency Plan	16	Updated Table 3-1 (Hazardous materials stored and used on site), Table 5-1 (Contractor Contact), Table 5-2 (Internal Contacts), 5-3 (External Contacts). Added Table 6-1 (General response procedures according to the hazard of the substance). Revised Table 7-2 (Contents of Mobile Environmental Emergency Trailer). Revised Section 8-1 to add clarifications on required training. Revised Appendices B to H to include incompatible substances..

³ The OPEP/OPPP will be updated again prior to the 2024 fuel transfer as per usual practice.

		Added Appendix K (Environmental Emergency Regulations cross reference table).
Terrestrial Environment Management and Monitoring Plan (TEMMP)	5	General Update, addition of new infographics, addition of section 3.1.4 on calving ground baseline information, update of section 4.1 Caribou Monitoring Protocol and section 4.5 Mitigation to include monitoring and mitigation during level 4, changes of road closer triggers.
Water Management Plan	15b	Updated section 3.9 to reflect Agnico Eagle is currently designing a treatment system for ammonia nitrogen to meet the MDMER which will replace breakpoint chlorination. Updated section 5.3.7 (Table 16 and related text).
Water Quality and Flow Monitoring Plan	5	Updated to reflect site updates and new monitoring stations from the 2024 Water Licence Amendment. Text edits.
Management Plans submitted to the NWB as part of the 2024 Water Licence Amendment and appended to the 2024 Annual Report		
Adaptive Management Plan for Water Management	2B	Plan submitted to the NWB as part of the 2024 Water Licence Amendment Process. August 2024.
Aquatic Effects Monitoring Program (AEMP) Design Plan	3_NWB	Addressed comments from the agencies; Update Peninsula Lakes, Adopted the fish population study that was implemented for the Cycle 3 EEM program, Incorporate the Federal Environmental Water Quality Guidelines. February 2025.
ARD/ML Sampling and Testing Plan	1_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Environmental Management and Protection Plan	10_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Freshet Management Plan	10	Plan submitted to the NWB as part of the 2024 Water Licence Amendment Process. February 2025.
Landfill and Waste Management Plan	9_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Risk Management and Emergency Response Plan	5_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Current Management Plans Not Submitted as Part of the 2024 Annual Report		
Ammonia Management Plan	4	NA
Analysis of the Risk of Temporary Mine Closure	1	NA
Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan (Meliadine facilities)	2_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Cyanide Management Plan	2	NA
Greenhouse Gas Reduction Plan	1	NA
Hazardous Materials Management Plan	6_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Itivia Bulk Fuel Storage Facility Environmental Performance Monitoring Plan	3_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Landfarm Management Plan	5_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.
Ocean Discharge Monitoring Plan	4	NA
Quality Assurance and Quality Control (QA/QC) Plan	5_NWB	Plan submitted to the NWB as part of the 2024 Water Licence Amendment application. January 2024.

9.3 MODIFICATIONS

As required by Water Licence 2AM-MEL1631 Schedule B, Item 15: *Summary of modifications and/or major maintenance work carried out on all Water and Waste related structures and facilities.*

And

As required by Water Licence 2BB-MEL1424 Part B Item 6e: A summary of modification and/or major maintenance work carried out on the Water Supply Facilities, Bulk Fuel Storage Facility, Bermed Fuel Containment Facilities, and Wastewater Treatment Facility, including all associated structures, and an outline of any work anticipated for the next year

And

As required by Water Licence 2BE-MEL2434 Part B Item 2e: A summary of modification and/or major maintenance work carried out on the water supply and wastewater treatment facilities, including all associated structures, and an outline of any work anticipated for the next year

No modifications or major maintenance work took place under the Type B Water Licence.

On January 24, a notice of modification was submitted to the NWB under the Type A Water Licence for the addition of 2 new fuel tanks at the Itivia Bulk Fuel Storage Facility, of 9ML and 4.5 ML, adjacent to the existing tanks and within the bermed and lined secondary containment. The NWB issued an approval letter on February 16, 2024 for the proposed modification. As described in section 2.1.2, the construction of the 2 new fuel tanks and secondary containment berm raise were completed in 2024. Construction summary (as-built) reports were submitted for this work.

At the end of 2024, a modification request was submitted to the NWB for the addition of CP9 (Pump 01 Pit) as a monitoring station (MEL-32) in Table 2 of Schedule I of the amended Type A Water Licence. The NWB approved the Modification in a letter dated January 10, 2025.

Maintenance and mitigation works carried out in 2024, and as presented in Table 1 and in Section 4.1, included the following:

- Rehabilitation/maintenance of different infrastructures on site: CP6 access road, Channel 4, Channel 5, downstream channel of D-CP1, CP3 and Berm 2; and
- Replacement of Culverts 10 and 11 at AWAR KM16.5 and Bypass Road KM3.

As presented in Section 2.2 and in Appendix 8, some rehabilitation work on different infrastructures on site is planned for 2025, including:

- Replacement of culverts (at AWAR KM8.8 and Explo KM 1.1);
- Maintenance on Channels 1 to 7 to promote drainage;
- Maintenance (rock filling) on the area between CP2, Channel 9, Channel 10 and WRSF3; and
- Repairs on crest of the berms from the 6M fuel farm.

SECTION 10. OTHERS

10.1 ACTIVE PERMITS

Below is the list of active permits and authorizations for Meliadine. DFO permits and approvals are listed in Appendix 33.

Table 25. List of active permits and authorizations for Meliadine

Issued By	ID	Description	Issue	Expiry
KivIA	KVPL11D01	Production Lease Amending Agreement	2024/12/11	2032/06/29
KivIA	KVCA07Q08	Quarry permit (on site), Renewal and Amending Agreement	2024/11/25	2029/11/25
KivIA	KVCA11Q01	Quarries permit (along AWAR), Renewal Agreement	2024/08/07	2026/06/30
KivIA	KVRW11F02	AWAR and Discovery Road Lease	2022/07/31	2032/07/31
KivIA	n/a	Water Compensation Amending Agreement	2024/09/12	2031/03/31
KivIA	IIBA	Inuit Impact & Benefit Agreement	2017/03/01	-
NWB	2BB-MEL1424	Bulk Sampling and exploration drilling Water Licence	2009/07/31	2024/07/21
NWB	2BE-MEL2434	Bulk Sampling and exploration drilling Water Licence	2024/07/22	2034/07/21
NWB	2AM-MEL1631	Mining undertaking Amended Water Licence	2024/11/22	2031/03/31
NIRB	006 Amendment 02	Project Certificate	3/02/2022	N/A
NIRB	16QN071	Screening decision (Itivia Quarry)	-	-
GN-ED&T	102631 or LE-03-320-0036	Itivia Laydown Area Lease	2021/07/01	2031/06/30
GN-ED&T	102893 or LE-03-320-0046	Bypass Road Lease	2017/07/01	2027/07/01
GN-CGS	L-51871BL	Right-of-Way permit AWAR on Municipal land	2023/06/28	2027/05/31
GN-CGS	L-51870BL	Bypass Road Lease	2023/06/28	2027/05/31
GN-CGS	Authorization Letter	Waterline Routing around Apache Pass	2022/06/01	2032/06/01
CIRNAC	55K/16-42-3	Saline Effluent Discharge and Diffuser Lease (amended)	2023/01/23	2034/07/17
TC	2010-600573	Approval, Meliadine River Bridge	2011/01/12	N/A
TC	2019-600003	Approval, Outfall/diffuser, Melvin Bay	2022/05/11	N/A
TC	2023-611495	Approval, No mandate and non-navigability assessment letter for Pump Ponds B36, B37, B38, B59, B61, B60, B62, B6	2024/06/24	N/A

In 2024, no research activities were undertaken that would trigger the requirement for a scientific research licence under the Nunavut Scientists Act.

The following tracking tables are provided in Appendix:

- NIRB Project Certificate Tracking Table in Appendix 30
- NWB Water Licences Tracking Table in Appendix 31
- 2023 Annual Report Comments Tracking Table in Appendix 32
- DFO Reporting Tracking Table in Appendix 33
- 2024 2AM-MEL1631 Water Licence Amendment (WLA) Commitments Tracking Table in Appendix 34

10.2 INSPECTIONS

As required by Water Licence 2AM-MEL1631 Schedule B, Item 24: A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

In 2024, Agnico Eagle worked with regulators throughout the year to develop in-person site visits and site inspections. Table 26 summarizes inspections and site visits that took place in 2024. Follow-up information to the site visits and inspections was provided to regulators by Agnico Eagle as applicable.

Table 26: Inspections and site visits by regulators in 2024

Date	Authority	Topic	Feedback/Outcome
March 4, 2024	CIRNAC	Site Inspection	<p>CIRNAC Resource Management Officer (Inspector) conducted an inspection focusing on evaluating the conditions of the TEMMP, specific T&C from Project Certificate No. 006, and Type A Water Licence items.</p> <p>The following locations were visited: Waste management laydown, Incinerators, Exploration camp, Exploration core shack and shop, wood/cardboard burning area on WRSF3, TSF, Landfill, Freshwater intake sea can and the back of the kitchen.</p> <p>No instances of non-compliance were noted in CIRNAC's inspection reports. CIRNAC requested Agnico Eagle to increase efforts to ensure sea can doors are closed when not in use.</p>
April 25, 2024	CIRNAC	Site Inspection	<p>CIRNAC Resource Management Officer (Inspector) conducted a Water Licence 2BB-MEL1424 inspection focusing on compliance with on-ice drilling conditions, and completed a follow up to Inspection Reports 2022-KIV02-CW 2BB-MEL, 2022-KIV03-CW 2BB-MEL and the warning letter 2022-KIV12-KA 2BB-MEL.</p> <p>The following locations were visited: Drill 7, Drill 10, and Drill 3 on Lake A8, Drill 1 and Drill 6 on Lake B5.</p> <p>One non-compliance was noted in CIRNAC's inspection report which was a failure to select an appropriate natural depression or a properly constructed sump for drill waste. Following this inspection, Agnico Eagle has made a concerted effort to improve the selection of locations used for drill waste depositions, including pre-selection of appropriate natural depressions and use of sediment controls to contain drill cuttings..</p>

May 22, 2024	CIRNAC	Site Inspection	<p>CIRNAC Resource Management Officers (Inspectors) conducted a Type A Water Licence inspection focusing on water management during freshet.</p> <p>The following locations were visited: water management infrastructures at site (CP2, CP3, CP4, CP5, CP6, D-CP1 and D-CP1 Sump, water intake, WTC, STP, channels 2, 3 and 4), TSF, open pits and WRSF3 burn pad.</p> <p>Three non-compliances were noted by CIRNAC in its inspection report: (1) failure to direct all sewage to the STP, (2) failure to direct all contact water to CP1, (3) failure not to open burn plastic.</p> <p>(1) The first non-compliance noted is related to the sewage spills occurring at site. In response to CIRNAC's observation, Agnico Eagle provided verbal updates on sewage audit during the following inspections.</p> <p>(2) The second non-compliance was related to the release of contact water from Channel 4 (described in section 7.4 and in Appendix 15). Maintenance of Channel 4 was completed in 2024.</p> <p>(3) The third non compliance was related to the presence of plastic at the burn pad at the time of the inspection. The inspector reminded Agnico Eagle that plastic shouldn't be burned at the burn pad.</p>
July 26 to 29, 2024	NIRB	Annual Site Visit	<p>NIRB conducted an annual site visit to assess compliance with Project Certificate No. 006.</p> <p>A general site tour was completed, and the following locations were visited: Itivia laydown and fuel farm, Bypass Road, AWAR, Exploration Camp and Mine site infrastructures (water collection ponds and treatment plants, water intake, weather station, Tiriganiaq Pit 1 and 2, underground, WRSFs, TSF, Fuel farms, Ore Pads, Paste Plant, Camp facilities, Emulsion plant pad, Landfill, Landfarm, Snow Cell, Incinerator and hazmat laydown, Process plant visit).</p> <p>The NIRB site visit report is available on the NIRB portal.</p>
July 31, 2024	CIRNAC	Site Inspection	<p>CIRNAC Resource Management Officer (Inspector) conducted an inspection under the 2BE-MEL2434 Water Licence, focusing on current drilling activities and historical drill sites.</p> <p>No items of non-compliance were noted in CIRNAC's inspection report, and it was requested to utilize appropriate cuttings disposal locations.</p> <p>Agnico Eagle provided a follow-up answer to the inspection report's observations on November 24. It was clarified that the flow observed from a drill cuttings deposit location could not flow into a waterbody, and no additional impacts were created. Also, it was clarified that the observation of older drill site sumps did not reflect current drilling practices, and that Agnico Eagle is committed to sustaining the improvements noted in future drilling campaigns.</p>

August 06, 2024	ECCC	Site Inspection	<p>On August 6th, ECCC representatives conducted an inspection focusing on the following locations: Itivia, general site tour and the drills sites.</p> <p>Following the inspection, ECCC requested information via email, including:</p> <ol style="list-style-type: none"> 1. Current spill contingency plans for MDMER and Environment Emergency Regulations. 2. Map of the Meliadine Project that includes the water body names. 3. Map with Pump area on it. 4. Drill site names and locations for 2024. 5. Inspection form of drill sites M24-4006. 6. Quantity of specific substances stored onsite. <p>Agnico Eagle provided the requested information via email.</p>
September 05, 2024	CIRNAC	Site Inspection	<p>CIRNAC Resource Management Officer (Inspector) conducted an inspection of the Water Licence 2AM-MEL1631 focusing on spill closure and follow up to report 2024-KIV5-KA, and inspection of Crown Lease 55K16-42-3.</p> <p>Multiple historical spill sites, the west vent raise, collection ponds, the Itivia Fuel Farm, the horizontal directional drilling site at Itivia and the AWAR waterline construction were visited.</p> <p>A water sample was also collected at monitoring station MEL-14. Agnico Eagle collected a duplicate.</p> <p>No items of non-compliance or actions were noted in CIRNAC's inspection reports.</p>
September 09, 2024	KivIA	Site Visit	<p>KivIA representatives conducted a site tour with objective to provide a clear visualization of what the site looked like and of operations during caribou migration.</p> <p>The following locations were visited: freshwater intake, Meliadine Esker, crusher ramp to get a view overlooking the Portal 2 automation pad, west vent raise, Pump road and Lake B36, TIRI-02, TSF, exploration camp and WTC.</p> <p>All questions raised during the tour were answered by Agnico Eagle representatives. KivIA representatives noted the general low level of noise emitted by the site in full operation.</p>
September 18, 2024	ECCC	Sampling	<p>Due to the fact that no effluent was discharged in August, ECCC representative returned to site on September 18th to conduct the sampling of MEL-14 at the EWTP-WTC. Agnico Eagle collected a duplicate sample.</p> <p>No follow-up information was requested by ECCC.</p>
October 07, 2024	KivIA	Site Visit	<p>KivIA representatives visited site and sampled CP5.</p> <p>No concerns were raised by KivIA representatives.</p>

Transport Canada did not conduct any inspection at Meliadine in 2024.

Transport Canada conducted an inspection focusing on the Transportation of Dangerous Goods (TDG) on November 19th, 2024, of the QSL International Ltd terminal in Bécancour, for dangerous goods shipped by Agnico Eagle from the Meliadine Mine. The inspection report, received on December 19th, 2024, contained action items pertaining to TDG corrective measures required. All findings in the inspection report were corrected.

An official document describing the corrective actions taken by Agnico Eagle to ensure future compliance and the safe transportation of dangerous goods will be submitted to Transport Canada in 2025.

10.3 AWAR

Table 27 shows the 2024 traffic observed on the AWAR in comparison to the FEIS predictions. The 2024 AWAR traffic data is presented in the TEMMP Report in Appendix 26. AWAR Traffic data is collected by the gatehouse personnel. Due to the important turnover in gatehouse personnel for a part of 2024, traffic data, which is normally recorded daily, was not recorded on a few isolated days. As a result, when a traffic data was not available for a few days in a month, an average of the available traffic data was used and extrapolated to the days with missing data. This could result in a minor deviation within the data, but it is still considered representative.

In order to monitor rates of dust deposition along the AWAR, Agnico Eagle has established 3 transects at kilometers 4, 10, and 23 (DF-1, DF-2, and DF-3, respectively). Each transect includes samples at 25 m, 100 m, and 300 m on the east (downwind) and west (upwind) side of the road. The use of transects rather than single samplers is in line with common practice and allows Agnico Eagle to verify if dustfall rates decline from the AWAR as predicted in the FEIS.

As discussed above in section 7.8 for AWAR and Bypass Road dustfall transects monitoring stations, average rates of dustfall were similar to or less than to those observed previously. Even in very close proximity to the road (25 m), average rates of dustfall over the summer season for AWAR stations were less than the AB-Rec guideline. Monitoring results are discussed in the Air Quality Monitoring Report in Appendix 24.

Table 27. 2024 AWAR monthly traffic summary

Month	Total traffic	Predicted traffic (FEIS)
January	1173	1178
February	1528	1064
March	1685	1178
April	2193	1140
May	1944	1178
June	2464	1062
July	3572	1087
August	3466	1099
September	3526	1056
October	2536	1178
November	1295	1140
December	1436	1178
Total	26818	13538

10.4 MARITIME TRANSPORTATION

During the 2024 shipping season, a total of 23 vessels, (2 that were tugs, 11 that were cargo, and 10 that were fuel) travelled to Meadowbank (7 vessels), Meliadine (7 vessels), or to both Meadowbank and Meliadine (9 vessels) between June 26 and November 19, 2024.

A summary of Groupe Desgagnés and Woodward Vessels during the shipping season is presented in Table 28. No incident (vessel strikes with marine mammals or marine birds) was reported during the 2024 maritime transportation. Agnico Eagle continued to implement in 2024, in accordance with the TEMMP, a protocol to ensure that all equipment and bulk supplies must arrive to Mine site free of soil or plant debris to minimize the risk of invasive plant introduction. Invasive plant inspection surveys were completed on cargo in Bécancour, prior to being loaded onto shipping vessel. Carrier had closely followed the procedure and have confirmed that each equipment/sea can was free of invasive plant. Inspection forms can be found in Appendix C of the 2024 TEMMP Report, in Appendix 26.

Table 28. Summary of Groupe Desgagnés and Woodward Vessels during the shipping season (July to November 2024)

Vessel Name	Fuel or Cargo	Project and Number of Trips			Total Trips
		Meadowbank	Meliadine	Meadowbank and Meliadine	
Kivalliq W	Fuel	-	-	2	2
Kitikmeot W	Fuel	-	1	-	1
Tuvaq W	Fuel	2	-	-	2
Marlin Hera	Fuel	-	-	2	2
Qikiqtaaluk W	Fuel	-	2	1	3
Nordika Desgagnés	Cargo	-	2	1	3
Atlantic Elm Tug	Cargo	1	-	-	1
Atlantic Beech Tug	Cargo	1	-	-	1
Marcellin A. Desgagnés	Cargo	-	1	1	2
Berthe A. Desgagnés	Cargo	1	-	-	1
Acadia Desgagnés	Cargo	-	1	-	1
Miena Desgagnés	Cargo	2	-	1	3
Zelada Desgagnés	Cargo	-	-	1	1
Total		7	7	9	23

10.5 INTERNATIONAL CYANIDE MANAGEMENT CODE CERTIFICATION

In 2022, the Meliadine Mine was audited for the first time for the International Cyanide Management Code (ICMC) Certification, for both Transport and Mine Operations protocols. Agnico Eagle received confirmation of certification from the International Cyanide Management Institute (ICMI) for both Transport and Mine Operations aspects of the ICMC early 2023.

The re-certification audit under the ICMC is expected to take place in 2025.

As per previous years, a cyanide information brochure was made available to employees and the public. Copies are available at the Agnico Eagle office in Rankin Inlet and are also online www.aemnunavut.ca/documents/.

SECTION 11. PUBLIC CONSULTATION

As required by Water Licence 2AM-MEL1631 Schedule B, Item 25: A summary of public consultation and participation with local organizations and the residents of the nearby communities, including a schedule of upcoming community events and information sessions.

And

As required by Water Licences 2BB-MEL1424 Part B, Item 6m and 2BE-MEL2434 Part B, Item 2l: A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;

And

As required by NIRB Project Certificate No.006 Condition 103: The Proponent is encouraged to consult with the Kangiqliniq Hunters and Trappers Organization and the Kivalliq Socio-Economic Monitoring Committee and to make all reasonable efforts to engage Elders and community members of the Kivalliq communities in order to have community level input into updates to its monitoring plans, programs and mitigative measures. This type of engagement will ensure that these programs and measures have been informed by traditional activities, cultural resources, and land use as such may be implicated or impacted by ongoing Project activities. All plans are to include a feedback mechanism for consulting with residents of the Kivalliq, including the provision of results from the Proponent's wildlife monitoring programs to each community. The Proponent shall submit updated plans to the NIRB within 30 days' of their revision and/or finalization.

11.1 COMMUNITY MEETINGS IN CHESTERFIELD INLET

In Chesterfield Inlet, a total of 5 engagements were recorded over the year, encompassing meetings, events, and an open house. Meetings were the most frequent form of communication, occurring three times. These meetings primarily involved the Hamlet of Chesterfield Inlet as the key stakeholder. Discussions included operational updates on projects such as Meliadine and Meadowbank, as well as logistical plans for sealift operations. The meetings provided an opportunity to keep the Hamlet leadership informed and to align specific community concerns, ensuring effective collaboration between the project teams and local governance.

One event, a community-based pre-employment training program, was conducted in partnership with Ilitagsiniq and opened to the public in Chesterfield Inlet. This 10-day program aimed to build local capacity by equipping participants with the skills needed to pursue employment opportunities tied to ongoing regional operations. This initiative highlighted the commitment to fostering long-term economic development within the community by addressing skill gaps and enhancing employability.

An open house (1) was also held, serving as a platform for direct interaction with community members. Stakeholders included the general public of Chesterfield Inlet, who were invited to ask questions, provide feedback, and learn more about project updates, such as the progress on Inuit Impact and Benefit Agreement (IIBA) initiatives and other operational activities. The open house promoted transparency and

strengthened trust with the local community by offering insights into how operations align with regional priorities and Inuit Qaujimajatuqangit (IQ) principles.

Overall, the engagements in Chesterfield Inlet reflect a commitment to transparent communication, skill-building, and meaningful collaboration with local stakeholders, reinforcing the importance of addressing community-specific needs and fostering strong partnerships.

11.2 COMMUNITY MEETINGS IN RANKIN INLET

In Rankin Inlet, a total of 103 engagements were documented over the year, reflecting a diverse range of communication types aimed at fostering collaboration and supporting community development. Meetings were the predominant form of communication, comprising 75 instances. These meetings often involved key stakeholders such as the Kivalliq Inuit Association (KivIA), Government of Nunavut representatives, and community members. For example, specific meetings included discussions with the KivIA IIBA Coordinator to enhance partnerships and with the Nunavut Arctic College (NAC) to strengthen educational opportunities for local residents. Additionally, meetings with government bodies, such as the Government of Nunavut's Family Services division, aimed to address regional priorities like employment, training, and youth career development.

In addition to meetings, 16 events were organized, ranging from informational gatherings to cultural and community-focused sessions, designed to engage broader audiences and highlight ongoing project updates. Public meetings, which occurred 4 times, provided a platform for open dialogue with community members and leaders, ensuring transparency and gathering feedback on key initiatives. Workshops, of which there were 3, focused on skills development and capacity building, often involving participants from local institutions such as the Nunavut Arctic College.

Site tours (3) were also conducted to familiarize stakeholders, including government officials and KivIA representatives, with the operations at Meliadine. These visits allowed stakeholders to gain firsthand insights into operations, environmental stewardship practices, and potential areas for collaboration. One open house event provided an informal setting for the community to interact with project representatives and learn about upcoming developments.

As part of the International Cyanide Management Code (ICMC), Agnico Eagle held an information session in Rankin Inlet in July 2024 to ensure community first responders were well-informed about the safe transportation of cyanide from Rankin Inlet to the Meliadine mine site. The session, led by Meliadine representatives, covered critical safety procedures and fostered an engaging discussion where participants shared questions and insights on safety protocols and potential road closures during transport operations. The session was attended by key community stakeholders, including the Rankin Inlet Fire Department, Hamlet of Rankin Inlet, Health Centre, coast guard and a representative from Sarliaq. To enhance public awareness, general safety information was shared before transportation via social media, radio announcements, Facebook pages, and the Agnico Eagle website. During transportation, road closures were communicated, and the gatehouse was staffed to ensure a rapid response in case of an incident. This initiative reflects Agnico Eagle's commitment to transparency, safety, and community collaboration, ensuring that proper protocols are in place to protect both responders and the broader community.

Overall, these engagements reflect a strong commitment to collaboration with local stakeholders, promoting community involvement, and ensuring that initiatives align with regional needs and cultural values.

11.3 MEETINGS WITH RANKIN KHTO

Agnico Eagle held seven meetings with the Rankin Inlet Hunters and Trappers Organization (HTO) in 2024, maintaining regular engagement on project activities. This included ongoing communication between the Meliadine Environment team and the Rankin Inlet HTO. Meeting topics covered the Meliadine Mine and Operation activities, a regional exploration update, and the NIRB decision concerning the Meliadine Extension, cabin location, and road monitoring.

In 2024, the Meliadine Environment department and KHTO Manager and Wildlife Coordinator kept communication regularly throughout the year through email and phone and punctual in person meetings. General topics included wildlife monitoring and the caribou migration.

Appendix 35 provides a comprehensive list of all the engagements, and consultations that took place with Rankin Inlet HTO in 2024.

11.4 COMMUNITY LIAISON COMMITTEE MEETINGS – RANKIN INLET

In 2024, Agnico Eagle continued to share operational updates and key initiatives with the Rankin Inlet community and regional stakeholders through its informational newsletter. This platform provides an avenue for sharing relevant updates while also encouraging constructive dialogue with various community groups, including youth, women, and Elders. The newsletter was distributed to community members, regional representatives, and other stakeholders, ensuring that those interested had access to timely information and a channel to share questions, concerns, or feedback with Agnico Eagle's management. To increase accessibility, the newsletter was also promoted on the Meliadine Mine Facebook page, enabling community members to view it online or request a copy via email. Agnico Eagle continues to seek opportunities to engage with community members, listen to diverse perspectives, and maintain transparent communication on matters of shared interest.

The 2024 newsletter is available in Appendix 36.

11.5 ELDERS AND IQ VALIDATION

In 2021, Agnico Eagle established the Kivalliq Elders Advisory Committee (KEAC), a group which provides invaluable guidance to Nunavummiut and our Nunavut operations teams.

Comprised of Elders from the communities of Baker Lake, Chesterfield Inlet, Rankin Inlet, Whale Cove, and Arviat, the KEAC not only keeps local communities informed about Agnico Eagle's mining activities and future plans, but it also provides Inuit Qaujimajatuqangit and Inuit Qaujimaningit (IQ), a body of Inuit traditional knowledge (TK), and Inuit Societal Values (ISV), a set of guiding community principles, so that it can be integrated into our exploration, planning, workforce, wellness, operational and closure plans.

The committee engaged in a schedule of activities during 2024, including nine meetings, twelve initiatives and two site visits, including one to discuss wildlife and caribou migration directly at the Meliadine Mine. For a comprehensive overview of these activities, please refer to the Kivalliq Elders Advisory Committee

2024 Summary Report in Appendix 37-1. The elders agreed to organize a subsequent meeting in 2025 to discuss in more detail the caribou protection measures at Meliadine.

On February 25th and 26th 2025, designated members on the KEAC participated in a workshop to understand from an IQ perspective impact of Meliadine mine on caribou. Discussions included if additional caribou protection measures should be taken and sensitive areas for caribou for Meliadine exploration activities. This workshop was done in collaboration with a graphic facilitator and results of the discussion are presented in Appendix 37-2.

The 2024 Socio-Economic Monitoring Report (SEMR) identifies where an ISVs relates to, have been followed, or are connected to the subjects being discussed. The purpose of this is to demonstrate Agnico Eagle's commitment to following and implementing IQ and to begin to move toward a more fulsome integration of Inuit worldviews in its monitoring and reporting. Throughout this report, the “**ISV**” symbol will be used as an indicator and easy reference to one or more ISV.

11.6 SITE TOURS FOR RANKIN INLET RESIDENTS

Agnico Eagle is committed to fostering transparency, education, and meaningful community engagement by providing opportunities for residents of Rankin Inlet and the broader Kivalliq region to visit the Meliadine Mine site. These visits serve as a platform for open dialogue, knowledge sharing, and firsthand exposure to mining operations, ensuring that community members, students, and Elders gain valuable insights into the industry.

Impactful Community Visits in 2024

Throughout the year, Agnico Eagle hosted a series of site visits that brought together key community groups for immersive experiences at Meliadine:

March 6 – Approximately 30 community members toured the open pit and mine site, gaining an in-depth understanding of operations. The visit also included interactive department booths, where visitors engaged with Agnico Eagle staff to learn about various aspects of the mining process. The experience was complemented by a shared meal, fostering a sense of community and connection.

September 26 – As part of Nunavut Mining Week, 14 students from Maani Ulujuk School participated in a specialized educational tour of Meliadine Mine. This initiative aimed to inspire and inform students about career opportunities in the mining sector, helping to cultivate interest in future workforce participation.

November 26 – Members of the Executive KEAC visited the site, where they engaged in discussions with the Human Resources and Environment department and were personally welcomed by the General Manager. This visit emphasized Agnico Eagle's commitment to respecting and incorporating the perspectives of Elders in its operations.

These visits reflect Agnico Eagle's ongoing efforts to maintain open communication and meaningful engagement with local communities. By providing opportunities for residents, students, and Elders to visit its operations, Agnico Eagle aims to foster awareness, dialogue, and mutual understanding about its role in the region.

11.7 COMMUNITY ENGAGEMENT INITIATIVES

Throughout the year, a total of **255 engagements** were conducted using a variety of communication methods tailored to specific objectives. Meetings formed the foundation of these interactions, accounting for **183** events and involving both in-person and virtual formats to ensure flexibility and accessibility. Key stakeholders included government entities such as the Government of Nunavut (GN), particularly the Family Services department, which participated in discussions focused on strategies for community support and program delivery. Organizations like the KivIA were actively engaged to ensure alignment with Inuit values and priorities, often facilitated through the involvement of the IIBA Coordinator. Meetings with local leaders were particularly instrumental in understanding the needs of the community, providing essential insights into challenges, expectations, and areas requiring focused support. Partnerships were also strengthened with educational institutions like NAC, emphasizing workforce development and youth training initiatives. Additionally, local organizations, including Catalyste+ and Abluqta, contributed insights and guidance on community-focused projects. These meetings were essential for planning, gathering feedback, and driving decision-making across various community development initiatives and projects.

In addition to meetings, **34 events** were organized to foster collaboration and raise awareness of ongoing initiatives. These events included stakeholder workshops, career days, regional conferences, elder counseling sessions, and training programs, which were often attended by representatives from community organizations, government departments, and community members. These engagements provided a platform for sharing progress, building consensus, and addressing questions. **Public meetings**, totaling **22**, served as a critical avenue for transparency and community involvement. These gatherings encouraged broad community participation by offering updates on projects, highlighting employment opportunities, and providing a forum for public feedback. Attendees included residents, community leaders, and representatives from Inuit organizations, with a strong emphasis on inclusivity, trust-building, and addressing concerns about the social and environmental impacts of development projects.

A total of **10 site tours** played a vital role in providing stakeholders with direct exposure to Meliadine operational site. These tours, involving representatives from the KivIA, GN, and local educational organizations, showcased on-ground activities, safety protocols, and operational transparency. They also supported training and development initiatives by offering participants practical insights into operational environments.

Agnico Eagle participated in **three** additional engagements supporting emergency response as part of its broader community efforts. The company demonstrated its commitment to community well-being through swift action during the Whale Cove Co-Op fire and Meliadine Lake Search and Rescue. Following the Whale Cove fire, which caused a power outage, the Exploration team quickly mobilized, coordinating with Camp Services and Human Resources at Meliadine. A helicopter delivered nonperishable food, while Public Affairs and Community Relations worked with local partners. Over two days, Agnico Eagle transported key technicians for power line and diesel tank repairs, and the Meliadine Kitchen provided 200 sandwich boxes, with additional food flown in over five trips, helping stabilize the community. Additionally, Agnico Eagle supported the Rankin Inlet Search and Rescue team in the successful rescue of two missing individuals at Meliadine Lake by deploying a helicopter and emergency response personnel. While not the primary focus, Agnico Eagle's involvement in search and rescue efforts highlighted its responsiveness to urgent community needs and reinforced its commitment to safety and well-being. Additionally, **two other engagements** were conducted, including specialized engagements such as strategy sessions and informal gatherings.

Overall, the **255 engagements** conducted throughout the year reflected a strong commitment to fostering partnerships, ensuring transparency, and promoting community involvement. Stakeholders ranged from government officials and Inuit organizations to local communities and educational institutions. Central themes included advancing regional development, aligning with IQ principles, and addressing community needs through collaborative approaches. Virtual platforms were extensively utilized, enabling broader participation and reducing logistical barriers. This comprehensive and adaptive communication strategy ensured that all stakeholders' voices were heard, creating a collaborative environment conducive to achieving shared goals.

The 2024 HHS Report is in Appendix L of the TEMMP Report (Appendix 26) and summarizes results of the 2024 HHS, accuracy of impact predictions and management recommendations. Additional recruitment efforts were made in 2024 during community visits in Rankin Inlet and with the use of social media, which resulted in increased participants compared to previous years. In addition, most guide outfitters operating out of the Hamlet of Rankin Inlet continued as participants in 2024 and reported harvest data.

In 2024, Agnico Eagle engaged with KWB and KEAC to discuss the design of a community-based shellfish monitoring program. In November, Agnico Eagle met with community members in Rankin Inlet to gather local knowledge regarding harvesting area and practices, community concerns of shellfish populations and health and more, with the goal to integrate this information into the program.

11.8 COMMUNITY COORDINATORS PROGRAM

Agnico Eagle remains committed to fostering direct and meaningful engagement with communities across the Kivalliq Region through its Community Coordinators Program. This initiative ensures that Community Liaison Officers (CLOs)—both full-time and part-time—are present in key hamlets, including Rankin Inlet, Baker Lake, Arviat, Chesterfield Inlet, and Coral Harbour. These officers serve as trusted local points of contact, facilitating communication between Agnico Eagle and community members, while also supporting employment, outreach, and engagement initiatives.

By enhancing local presence and accessibility, the CLOs play a critical role in bridging community needs with operations, ensuring that Agnico Eagle remains responsive and accountable. Their responsibilities extend across several key areas, including:

- **Supporting Employment and Recruitment:** Assisting the Human Resources (HR) department in locating employees, facilitating recruitment efforts, and promoting Inuit employment initiatives.
- **Facilitating Community Engagement:** Organizing and hosting information sessions on Agnico Eagle's projects, initiatives, and business opportunities.
- **Providing Regular Updates:** Ensuring that the Hamlet Council and key community stakeholders receive timely information on Agnico Eagle's activities.
- **Promoting Awareness and Participation:** Distributing company information, participating in Nunavut donation initiatives, and engaging in community events and education programs.

The expanded role of CLOs in 2024 has been instrumental in strengthening Agnico Eagle's engagement across Nunavut. By fostering direct communication and proactively addressing community concerns, this program not only supports recruitment objectives but also helps fulfill obligations under the NIRB and IIBA. The presence of five CLOs across key communities reinforces Agnico Eagle's commitment to local partnerships, cultural respect, and long-term sustainability in the region.

As Agnico Eagle continues to grow, the Community Coordinators Program remains a cornerstone of its Nunavut operations, ensuring that community voices are heard, employment opportunities are expanded, and mutual benefits are realized.

11.9 SHIPPING TOUR

Ahead of the 2024 barge season, Agnico Eagle conducted a community engagement tour in Coral Harbour, Chesterfield Inlet, Rankin Inlet and Baker Lake. These meetings provided an opportunity to share key information about the upcoming shipping season and gather community feedback that could help refine adaptive management practices.

Representatives from Agnico Eagle's Community Relations, Environment, and Logistics teams, alongside Nunavut Sealink & Supply Inc.–Desgagnés Transarctik and Woodward Group of Companies, participated in these discussions. As part of regulatory requirements, the Department of Fisheries and Oceans (DFO) was invited to attend the meetings.

Discussions covered a range of topics, tailored to the interests of each audience, including:

- Routing plans for the 2024 barge season
- Review of the 2023 sealift season, including vessel traffic and material shipments
- Hauling procedures and logistical considerations
- Overview of the Marine Mammal & Seabird Observer Program (MMSO)
- Findings from the 2023 MMSO season
- Review of AWAR "Rules of the Road"

These discussions provided valuable insights that will help inform ongoing efforts to align shipping operations with community expectations, environmental considerations, and logistical best practices.

11.10 COMMUNICATION

Expanding Digital Engagement to Strengthen Community Communication

Since launching the Meliadine Facebook page in 2018, Agnico Eagle has continued to enhance its digital communication efforts to ensure Kivalliq communities and employees remain informed about key operational updates, employment opportunities, and community initiatives. This platform was developed

based on stakeholder recommendations, including input from the Kivalliq Socio-Economic Monitoring Committee (KvSEMC), and has since become a key channel for real-time updates and engagement.

Strengthening Community Awareness Through Social Media

In 2024, Agnico Eagle leveraged social media to share timely updates and build awareness on various topics of interest to impacted communities, including:

- Community Office Hours – Updates on Baker Lake and Rankin Inlet office availability.
- Employment Information Sessions – Dates and locations for recruitment events in Kivalliq communities.
- Business Opportunities – Posts highlighting procurement and partnership opportunities.
- Sanajiksanut Program Launch – Promoting job openings and recruitment for Inuit employment programs.
- Sealift Season & Cyanide Transportation – Informing communities about logistics and safety measures.
- AWAR Awareness & Road Rules – Providing guidance on road safety during mine-related activities.
- Caribou Migration & Road Closures – Sharing updates on wildlife monitoring and conservation efforts.
- Community Development Initiatives – Highlighting collaborations that support local economic and social well-being.

In 2024, the Meliadine Facebook page saw a 33% increase in activity, with 229 posts compared to 172 in 2023, demonstrating Agnico Eagle's ongoing efforts to enhance transparency and outreach.

Expanding Reach Through Website & Blog Engagement

Beyond social media, Agnico Eagle continued to engage communities through its Nunavut website, featuring blog posts that celebrated cultural, economic, and workforce initiatives. Topics included:

- Agnico Eagle Perseverance Kajussissimainarniq Scholarship – Supporting educational aspirations.
- Inuit Culture Nights at Camp – Promoting cultural exchange and tradition.
- Mine Sites Country Kitchen Activities – Showcasing culinary traditions at site.
- Inuit Employee Training & Empowerment – Highlighting professional development opportunities.
- Business Mentorship Program – Supporting Nunavut entrepreneurs.
- Elders' Visits & Conservation – Connecting traditional knowledge with sustainability.
- Youth Empowerment Initiatives with RPAN – Investing in the next generation of Nunavummiut.

To extend reach and encourage community engagement, all blog content was reshared on the Nunavut Facebook pages, ensuring a broader audience could access and interact with these initiatives.

Evolving Community Engagement

Agnico Eagle continues to adapt its communication efforts to meet the evolving needs of Kivalliq communities. By maintaining active and responsive digital platforms, Agnico Eagle continues to provide

accessible, transparent, and relevant information, fostering stronger relationships and ongoing dialogue with impacted communities.

11.11 TERRESTRIAL ADVISORY GROUP

The 2024 Terrestrial Advisory Group (TAG) Annual Report documents the work conducted throughout 2024 within by the working group and is presented in Appendix 38.

The Term of References (TORs) were finalized early 2023. This document ensures compliance with Term and Condition 132 of the NIRB Project Certificate No.006-002 (PC No.006-002) which stipulates:

‘The Proponent shall, in consultation with the groups listed as Responsible Parties above, and any other parties considered by the Group to be necessary, establish a Terrestrial Advisory Group (TAG). The TAG shall hold its first meeting prior to any construction/installation of the waterlines. The central mandate of the TAG will be to continually review and refine impact management, mitigation, and monitoring details within the Terrestrial Environment Management and Monitoring Plan (TEMMP). The TAG Members will collaborate to share and consider methods, results, and analysis from caribou and terrestrial environment studies and monitoring Inuit Qaujimaningit, Inuit Qaujimajatuqangit, Traditional and Community Knowledge shared by knowledge holders, and other terrestrial environment monitoring data as it becomes available. The Proponent will consider the information shared by the TAG Members for incorporation into the Project’s impact management, mitigation, and monitoring measures related to the protection of terrestrial wildlife and wildlife habitat as appropriate. Agnico Eagle shall be responsible for demonstrating how the information shared and considered by the TAG has been incorporated into the Project’s impact management, mitigation, and monitoring measures related to the protection of terrestrial wildlife and wildlife habitat as appropriate.’

A total of five TAG meetings took place in 2024 in January, March, May (2), and December. Three meetings were held online. Two meetings (January and December) took place in Winnipeg, Manitoba (MB). All meetings were virtually accessible through videoconference using Microsoft Teams. The focus of 2024 was the revision of the Terrestrial Environment Management and Monitoring Plan (TEMMP). Multiple subjects were discussed with a focus on caribou.

SECTION 12. SOCIO ECONOMIC

12.1 SOCIO-ECONOMIC MONITORING PROGRAM (SEMP, SEMC, SEMWG, SEMR)

As required by NIRB Project Certificate No.006 Condition 87: *The Proponent is strongly encouraged to participate in the work of the Kivalliq Socio-Economic Monitoring Committee along with other agencies and the communities of the Kivalliq region, and to identify areas of mutual interest and priority for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the Kivalliq region as a whole.*

And

As required by NIRB Project Certificate No.006, Condition 88: *The Proponent is encouraged to work in collaboration with other socio-economic stakeholders including for example, the KIA, GN, AANDC, and communities of the Kivalliq region, to establish a socio-economic working group for the Project to develop and oversee the Meliadine Socio-economic Monitoring Program. The working group should develop a Terms of Reference which outlines each member's roles and responsibilities with regards to, where applicable, project-specific socio-economic monitoring throughout the life of the Project. The Terms of Reference are to be provided to the NIRB upon completion, and within one year of issuance of the Project Certificate.*

And

As required by NIRB Project Certificate No 006, Condition 89: *The Proponent shall develop the Meliadine Socio-economic Monitoring Program to monitor the predicted impacts outlined in the FEIS as well as regional concerns identified by the Kivalliq Socio-economic Monitoring Committee (SEMC). Where possible, the Proponent is encouraged to work in collaboration with all other socio-economic stakeholders such as the KIA, GN, AANDC and the communities of the Kivalliq region in developing this program, which should include a process for adaptive management and mitigation in the event unanticipated impacts are identified. Details of the Meliadine Socio-economic Monitoring Program are to be provided to the NIRB upon finalization, and within one year of issuance of the Project Certificate.*

And

As required by NIRB Project Certificate No 006, Condition 91: *To capture and provide analysis of Project-specific and regional data during Project closure(s), and to clarify mitigation measures related to closure. Within 3 months of the NIRB's acceptance of the Proponent's analysis of the risk of temporary mine closure referenced above, the proponent is expected to update its Socio-Economic Management Plan or to include within a newly developed plan or framework, a description of its plan to collect and analyze Project-specific and regional data at closure and post-closure phases, as well as its defined measures to help mitigate impacts which may result from Project closure(s), both temporary and final.*

The Socio-Economic Monitoring Program (SEMP) is a framework used to monitor and evaluate the various indicators, metrics, units of measurements, etc., that are outlined in the Project Certificates. Agnico Eagle commits to reporting on the SEMP annually. In 2024, no changes were brought to the program.

The SEMP is designed and implemented with the support from the established Kivalliq Projects Socio-Economic Monitoring Working Group (SEMWG). As per the SEMWG Terms of Reference, the SEMP will

be updated 2 years prior to closure to include data collection, analysis, and mitigation measures for potential socio-economic impacts in the closure and post-closure phases.

The SEMP can be found in Appendix 33 of the 2023 Annual Report.

The SEMWG traditionally included GN and CIRNAC, however, in 2020 KivIA officially joined the SEMWG. The aim of this working group is to support Agnico Eagle's SEMP and the KvSEMC. In December 2024, Agnico Eagle organized one (1) teleconference with the SEMWG to receive comment and feedback from the most recent post-covid SEMC (Fall 2023).

The KvSEMC meets annually to present data and consider socio-economic impacts and benefits of mining projects generally on the Kivalliq region. Members of the KvSEMC include GN (including specific departmental representation), Government of Canada, KivIA, HTOs, Community representatives, community organizations and Project owners. The GN chairs the KvSEMC. Feedback provided in the KvSEMC informs the final Socio-Economic Monitoring Report (SEMR). Additionally, the KvSEMC can recommend additional monitoring priorities. In 2024, the Kivalliq Socio-economic Committee (KvSEMC) meeting was organized from December 3 -5 where various stakeholders collaborated to discuss impacts of socio-economic projects in the region.

The SEMR is the annual report on the SEMP. It is a comprehensive socio-economic monitoring report that contains Project-level data (data collected by Agnico Eagle at each Project site or regionally) and community-level data (data provided by or in communities), including data that is mandated by the Project Certificate. It was reviewed by the SEMWG prior to its submission, to allow those groups to provide insight. The 2024 Agnico Eagle Kivalliq Projects SEMR can be found in Appendix 39.

12.1.1 Socio-Economic Monitoring Report (SEMR)

As required by NIRB Project Certificate No.006, Condition 111: *In its annual reporting to the NIRB, the Proponent is strongly encouraged to provide detailed descriptions of all employee programs and training including:*
a. Descriptions of the goals of each program offered; b. Language of instruction; c. Schedules and location(s) of when each program was offered; a. Uptake by employees and/or family members where relevant, noting Inuit and non-Inuit participation rates; and, b. Completion rates for enrolled participants, noting Inuit and non-Inuit rates.

And

As required by NIRB Project Certificate No.006, Condition 97: *The Proponent's project-specific socio-economic monitoring program should be updated to address the potential impacts to education and training which may arise from temporary, final and/or post-closure phases.*

And

As required by NIRB Project Certificate No.006, Condition 98: *The Proponent is encouraged to work with the members identified as potential stakeholders in the socio-economic monitoring working group and with the Kivalliq Socio-Economic Monitoring Committee to review and monitor education utilization rate trends on an on-going basis to understand if the Project can be determined to be having an impact on the education system of the Kivalliq region and/or on any communities in particular.*

And

As required by NIRB Project Certificate No.006 Condition 108: *The Proponent is encouraged to consider providing access to counseling and treatment programs for substance and gambling addictions, and programs which address domestic, parenting, and marital issues that could affect employees and/or their families.*

And

As required by NIRB Project Certificate No.006, Condition 101: *The Proponent shall include with its annual reporting to the NIRB a summary of employee origin information as follows: a. The number of Inuit and non-Inuit employees hired from each of the Kivalliq communities, specifying the number from each; b. The number of Inuit and non-Inuit employees hired from each of the Kitikmeot and Qikiqtani regions, specifying the number from each; c. The number of Inuit and non-Inuit employees hired from a southern location or other province/territory outside of Nunavut, specifying the locations and the number from each; and d. The number of non-Canadian foreign employees hired, specifying the locations and number from each foreign point of hire.*

And

As required by NIRB Project Certificate No.006, Commitment 99: *The Kivalliq Socio-Economic Monitoring Committee and its membership are encouraged to engage in the monitoring of demographic changes including the movement of people into and out of the Kivalliq communities and the territory as a whole. This information may be used in conjunction with monitoring data obtained by the Proponent from recent hires and/or out-going employees in order to assess the potential effects of the Project on migration.*

And

As required by NIRB Project Certificate No.006, Commitment 109: *The Proponent is encouraged to work with the Kivalliq Socio-Economic Monitoring Committee to monitor potential indirect effects of the Project, including indicators such as the prevalence of substance abuse, gambling issues, family violence, marital problems, rates of sexually transmitted infections and other communicable diseases and others as deemed appropriate.*

And

As required by NIRB Project Certificate No.006, Condition 110: *The Proponent shall provide the NIRB with a description of wellness and cultural diversity/acceptance programming made available to employees and family or community members and shall report the following information with respect to each program to the NIRB annually: a. Language of instruction; b. Uptake by employees and/or family members where relevant, noting Inuit and non-Inuit participation rates; c. Completion rates for enrolled participants, noting Inuit and non-Inuit rates; and d. Issues as may relate to program content which may have been noted or present either on site or in the community and which affect Project employment or employee wellness.*

And

As required by NIRB Project Certificate No.006, Condition 115: *The Proponent is encouraged to work collaboratively with the Government of Nunavut Department of Health to monitor the impacts of the Meliadine Gold Project on health services within the LSA communities and specifically, Rankin Inlet.*

And

As required by NIRB Project Certificate No.006, Condition 93: *The Proponent is encouraged to register all trades occupations, journey persons and apprentices working with the Project and to register any trades occupations listed in its forecast, as well as to provide the Government of Nunavut with information regarding the number of registered apprentices and journeypersons from other jurisdictions employed at the Project during each year of the Project's life.*

The section below summarizes Agnico Eagle's key socio-economic reporting, related primarily to employment and training.

For the full report on the Project's socio-economic monitoring, please refer to Appendix 39. Reports can also be viewed on the SEMC website www.nunavutsemc.com or on Agnico Eagle's website <http://aemnunavut.ca/media/documents/>. "

Reports can also be viewed on the SEMC website www.nunavutsemc.com or on Agnico Eagle's website <http://aemnunavut.ca/media/documents/>.

12.2 WORKFORCE

Agnico Eagle calculates the workforce based on headcount (snapshot of active employees taken at the end of the year, which includes full-time and part-time employees) and Full-Time Equivalents (FTE) (number of full-time positions based on hours worked, where one full time position is equivalent to 2,184 hours worked in a year).

- The number of active Agnico Eagle employees (headcount) working at Meliadine on December 31, 2024, was 741, of which 110 employees were Inuit employees.
- The number of contractors employed at the project is only calculated using FTEs due to the cyclical nature of contractor work. Therefore, during 2024 there were approximately 641 FTE contractor positions, of which approximately 97 are filled by Inuit.

Taken together, there were 1,589 active employees (Agnico Eagle permanent, temporary, on-call, students and contractors), working full- and part-time jobs, at the end of 2024.

Agnico Eagle defines job statuses as follows:

- Permanent employee: an employee whose current job is not specifically tied to a short-term project and the position is expected to be required throughout the LOM.
- Temporary employee: an employee whose current job will not continue beyond a specified period.
- On-call employee: an employee who has an undefined contract and is called upon when the need arises. It is expected that on-call employees will move to temporary or permanent positions as they become available.

The Table 29 below indicates the employment demographics for community of hire by headcount.

Table 29. Home communities of Agnico Eagle Inuit employees (by headcount)

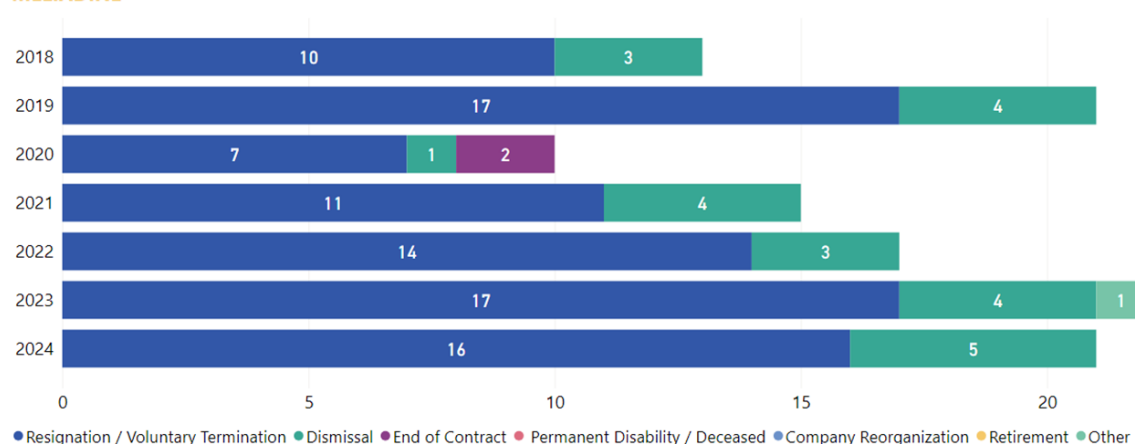
Community of Hire	2022 Agnico Eagle headcount	2023 Agnico Eagle headcount	2024 Agnico Eagle Headcount
Arviat	11	10	9
Baker Lake	5	6	8
Naujaat	1	1	1
Rankin Inlet	40	38	35
Chesterfield Inlet	4	5	7
Whale Cove	3	6	6
Coral Harbour	18	12	9
Kitikmeot	0	0	0
Qikiqtani	1	0	0
Outside of Kivalliq	31	36	35
Total	114	114	110

Agnico Eagle pays for the transportation of all Kivalliq-based employees from their home community to the mine for each work rotation. For employees coming from Arviat, Baker Lake, Chesterfield Inlet, and/or Whale Cove, Agnico Eagle has a service contract with Calm Air to transport employees by charter plane to Rankin Inlet. For employees coming from Coral Harbour and/or Naujaat, a commercial ticket is bought from their home communities to the Rankin Inlet airport. All employees are then driven by bus to site, including those from Rankin Inlet. For all other employees not located in the Kivalliq region, transportation is provided from Mirabel and Val-d'Or via a charter flight operated by Nolinor Aviation.

12.2.1 Employee retention

Figure 25 provides a breakdown of Inuit turnover (employees who leave Agnico Eagle's employment each year) by reason for leaving Meliadine.

MELIADINE

**Figure 25: Breakdown of Inuit turnover by reason for leaving Meliadine.**

In 2024, 21 Inuit employees departed, 16 of whom accounted for termination and the remaining turnover (5 Inuit employees) attributed to dismissal. When compared to the previous year, there was a decrease in resignations / voluntary departures by 6% (17 to 16 Inuit employees) and an increase in dismissals by 25% (4 to 5 Inuit employees).

Agnico Eagle conducts one-on-one exit interviews to gather information on reasons for resignation and voluntary departure. Exit interviews collect qualitative information on common reasons why employees have left.

The reasons for the 16 departures at Meliadine included:

- Moving to another job (2),
- Family situation (9),
- Not liking camp life and / or missing family (2),
- Not liking the job (2),
- Conflict with an employee / supervisor (1).

The turnover rate for Inuit employees at all Agnico Eagle projects is consistently higher than that for non-Inuit employees. At Meliadine, Inuit employee turnover was 19% in 2024 compared to 6% for non-Inuit. Overall, Inuit employee turnover increased slightly in 2024 for Meliadine, while the turnover rate for non-Inuit decreased.

12.2.2 Summer Student Employment Program

Agnico Eagle is committed to empowering the next generation of Nunavummiut by providing hands-on work experience, career development, and exposure to the mining industry through its summer employment programs. By fostering early engagement with students, strengthening ties with educational institutions, and creating direct pathways to employment, the company is helping to build a skilled and informed workforce for the future.

Recognizing the need for proactive outreach, Agnico Eagle has taken deliberate steps to strengthen interest in its summer employment programs by collaborating with NAC, community leaders, and regional education initiatives. These engagements serve to educate, inspire, and connect students with real-world opportunities in the mining sector.

Building Stronger Partnerships with NAC

- **Introducing Students to Mining Careers:** Agnico Eagle engaged with Albert Netser, responsible for NAC's Environmental Technology Program (ETP), to discuss a direct outreach initiative. Plans were set in motion for Agnico Eagle to visit ETP students in Iqaluit, introduce them to environmental careers in mining, and promote summer internship opportunities. NAC expressed strong interest, and an in-person planning meeting was scheduled.
- **Meet & Greet with ETP Students:** Agnico Eagle hosted an interactive session with first- and second-year ETP students, where representatives from Community Relations, Meliadine and Meadowbank Environmental departments introduced them to:
 - Agnico Eagle's Nunavut operations and life at camp
 - Summer employment and internship opportunities
 - Meliadine Environmental Monitoring Programs and the Meadowbank Closure Plan
 - Potential long-term career paths in the environmental field

- o Impact: 17 students attended, engaging in active discussions. Three students expressed strong interest in summer internships. The session sparked numerous questions, demonstrating a high level of engagement and enthusiasm.
- Environmental Technology Conference at NAC: Another session specifically focused on career opportunities in environmental monitoring and mining sustainability.
 - o Impact: 13 students participated, expressing interest in internships for summer 2025.

Delivering Meaningful Summer Employment in 2024

Through these efforts, Agnico Eagle welcomed five summer students in 2024, providing them with direct exposure to operations and professional development opportunities:

- 1 student at Meliadine, working with the Human Resources department.
- 1 student in Baker Lake, supporting the Community Relations department.
- 1 student in Rankin Inlet, with rotations at Meliadine, assisting the Permitting department.
- 2 students as Wildlife Monitors for the MMSO program with the Meadowbank Environmental department.

Agnico Eagle remains dedicated to offering meaningful work experiences, while also ensuring that employment opportunities are structured, safe, and aligned with business needs. The company has implemented clear eligibility requirements to maintain workplace safety and accessibility:

- Students must be 18 years or older to work at mining sites.
- Students 16 years or older may work in Baker Lake or Rankin Inlet offices.

By taking a proactive approach to student engagement, Agnico Eagle is not only creating employment opportunities but also investing in the long-term sustainability of Nunavut's workforce. Through direct engagement with students, internship opportunities, and strengthened partnerships with educational institutions, Agnico Eagle is helping to build career pathways that extend beyond summer jobs. Looking ahead, Agnico Eagle will continue working closely with NAC, regional training organizations, and community leaders to empower the next generation of Inuit professionals.

Success Story: From Summer Internship to Inuit-Led Environmental Business

Agnico Eagle's Summer Student Program plays a crucial role in developing local talent, providing hands-on experience, and creating long-term economic opportunities for Inuit youth. This initiative has helped foster career growth, equipping participants with the skills and knowledge needed to excel in the mining and environmental sectors.

In summer 2023, a participant joined Agnico Eagle's Environmental Department as an intern, gaining first-hand experience in environmental management and conservation efforts. Demonstrating perseverance and dedication, they were awarded the Perseverance (Kajussissimainnarniq) Scholarship, offered through the Young Mining Professional Scholarship Fund (YMPSF). This recognition further fueled a passion for environmental stewardship and sustainable business development.

With the experience and knowledge gained from the internship, the participant went on to found an Inuit-owned environmental consulting company based in Rankin Inlet. The company was created to support environmental conservation efforts while providing employment opportunities for Inuit workers in the region.

In 2024, the company secured a contract with Agnico Eagle, in collaboration with Kilgour & Associates, to conduct fish salvage efforts in preparation for the Pump Area development project. This contract not only reinforced the business's capabilities but also contributed to local employment and workforce development. Impact of the 2024 Project:

- Nine Inuit employees hired (six from Rankin Inlet)
- Eight seasonal positions, one full-time role created
- Specialized fish salvage training provided to all staff
- Project duration: August 5th to August 29th, 2024
- Total gross income for Inuit staff: \$152,000

This success story highlights how mentorship, skill development, and business support can create long-term economic opportunities for Inuit communities. The transition from a summer internship to launching an Inuit-led environmental business demonstrates the effectiveness of the Summer Student Program in supporting Indigenous entrepreneurship and workforce development. By investing in youth employment and professional development, Agnico Eagle continues to contribute to sustainable economic growth, Inuit business partnerships, and community resilience—helping ensure that opportunities extend beyond the life of mining operations.

12.2.3 Counselling and Treatment Programs

Prioritizing Employee Well-Being and Mental Health Support at Agnico Eagle

Agnico Eagle continues to foster healthy and supportive work environment by offering comprehensive wellness programs to meet the unique needs of its on-site employees. These initiatives focus on mental health, physical well-being, cultural enrichment, and family support, ensuring that employees have access to the resources they need to thrive both at work and at home.

Wellness Programs for On-Site Employees

Agnico Eagle provides a range of wellness initiatives designed to promote preventative health, mental well-being, and cultural connection, including:

- Mental Health & First Aid Training – Conducted at both sites by external trainers, health professionals, and key community stakeholders, including nurses, RCMP, and KivIA representatives.
- Preventative Health Outreach – Providing employees with resources and information on sexual health, mental health, and overall well-being.
- Spouse Visits During the Holidays – Offering overnight site visits for spouses of employees over Christmas and New Year, strengthening family connections.
- Mental Health Awareness – Monthly wellness topics and resources from BCH, ensuring employees have ongoing support.
- Employees have access to mental health talks, telepsychology services, and counseling sessions, with dedicated on-site spaces for telehealth consultations.
- Site clinics provide acute mental health assessments, ensuring immediate support for workers in need.

Celebrating Culture and Fostering Cross-Cultural Understanding

Agnico Eagle recognizes the importance of cultural identity and belonging in employee well-being. As part of its wellness program, the company actively promotes cross-cultural engagement by hosting:

- Arts and crafts events featuring local talent.
- Nunavut Days celebrations, showcasing Inuit traditions.
- Exhibits of traditional hunting gear, clothing, and games, led by Elders and Inuit families.
- Opportunities for local artists to present and sell their work to employees at mine sites.

Expanding Mental Health Support & The Inunnguiniq Initiative

Agnico Eagle has consulted with community members and local partners to better understand mental health support needs and develop effective, culturally appropriate strategies. These discussions reinforced that long-term well-being and resilience are essential to creating a sustainable legacy for current and future Inuit generations.

To address this, Agnico Eagle launched Inunnguiniq, a \$5 million investment dedicated to improving mental health and overall well-being in Nunavut. Through this initiative, the company is committed to:

- Encouraging active lifestyles – Partnering with Ilitaqsiniq to offer on-the-land experiences and wellness activities.
- Addressing food security – Collaborating with the Breakfast Club of Canada to support nutrition programs.
- Strengthening Inuit-led organizations – Sponsoring Inuit-driven non-profits in partnership with The Arctic Rose Foundation, ensuring sustainable, community-led impact.

On-Site Mental Health Training & Awareness Initiatives

In 2024, Agnico Eagle expanded its efforts to ensure mental health awareness is integrated into daily operations:

- A dedicated trainer provided mental health training to all supervisors, equipping them to better support employees and recognize early signs of distress.
- Mental health workshops were incorporated into toolbox meetings, ensuring all workers received practical strategies for mental well-being.
- Ongoing communication efforts, including mental health posters and awareness campaigns across mine sites, provided accessible resources and points of contact for those in need.

Sustained Commitment to Employee Well-Being

The Employee Assistance Program (EAP) was accessed 92 times in 2024, reflecting a continued utilization of mental health resources. While this marks a slight decrease from 110 uses in 2023, Agnico Eagle continues to adapt its support systems to meet the evolving needs of its workforce.

By integrating mental health awareness, cultural initiatives, and community partnerships, Agnico Eagle continues to take a proactive approach to employee well-being. Agnico Eagle continues to create a

workplace that prioritizes health, respects cultural identity, and fosters a strong sense of community among its workforces.

12.3 TRAINING

Agnico Eagle's Training Management System (TMS) and the Learning Management System (LMS) track and report on training activities. The list of training courses provided can be found in Appendix 40.

Agnico Eagle considers that most of the trainings provided would be transferable to other employment opportunities. Agnico Eagle ensures that all training records are contained in everyone's employee file in the Nunavut TMS. If requested by an employee, the Training Department can export and provide the list of completed training.

Additionally, Agnico Eagle has been exploring different options of giving employees a "skills passport" to promote skills transferability under Inuit Growth. Agnico Eagle contacted Mining Industry Human Resources Council (MiHR) to find ways to collaborate in providing training to Agnico Eagle employees and or trainers. However, after careful deliberation and research, an agreement was reached to shelf and reconsider this program later, when the program gains more industry-wide acceptance. Agnico Eagle continues to explore other options to promote skills transferability.

12.3.1 Sanajiksanut Program

Agnico Eagle remains committed to supporting Inuit employment and career development through the Sanajiksanut Program, which facilitates access to job opportunities, provides targeted training, and strengthens recruitment efforts. While recognizing the unique challenges associated with employment in remote regions, Agnico Eagle continues to collaborate with community partners and Inuit organizations to enhance its approach in a way that aligns with both community needs and operational requirements.

The Sanajiksanut Program is built around four key principles that guide Agnico Eagle's efforts in expanding Inuit workforce participation:

- Partnership with Ilitaqsiniq (Nunavut Literacy Council): Agnico Eagle collaborates with Ilitaqsiniq to integrate community-based training into its recruitment process. The pre-employment training program, designed by Inuit for Inuit, is delivered by an Inuit instructor, ensuring that training aligns with local needs and cultural values.
- Inuit Workforce Planning: Recruitment planning is conducted alongside operational teams to ensure Inuit employment opportunities are identified and supported within the company's workforce strategy.
- Recruitment Process Enhancements: To increase accessibility, Agnico Eagle has adapted communication channels to better reach Inuit candidates, ensuring they receive timely job opportunity updates.
- Mining Awareness and Career Outreach: The program works to engage younger generations through career awareness initiatives in Kivalliq schools and colleges, promoting long-term interest in the mining industry.

Step 1: Expanding Access Through **Employment Information Sessions**

To enhance outreach, Agnico Eagle organized employment information sessions across Kivalliq and beyond, aiming to provide clear guidance on job opportunities and application processes.

In 2024, 20 sessions were conducted (compared to 19 in 2023) across six Kivalliq communities (Rankin Inlet, Baker Lake, Arviat, Naujaat, Coral Harbour, and Chesterfield Inlet), as well as in Winnipeg and Ottawa to connect with Inuit job seekers living outside Nunavut.

492 Inuit participants attended these sessions in 2024, a significant increase from 183 participants in 2023. Some scheduled sessions were impacted by logistical challenges, including weather conditions, accommodation availability, and CLO presence. However, efforts were made to reach as many potential candidates as possible through alternative engagement methods.

Step 2: **Online Application Process** Facilitated by Employment Information Sessions

To facilitate job applications, Agnico Eagle provides localized support through CLOs stationed in five Kivalliq communities: Rankin Inlet, Baker Lake, Arviat, Coral Harbour, and Chesterfield Inlet. In 2024, CLOs and the Sanajiksanut Coordinator provided one-on-one assistance to job seekers, both in-person and remotely.

Employment information sessions were expanded to Naujaat, where Sanajiksanut team members helped potential applicants navigate the job application process.

A new digital application tool was introduced, allowing applicants to submit their information via a simple online form accessible through a QR code.

Step 3: Building Job Readiness Through **Pre-Employment Training**

Recognizing the importance of skill development, Agnico Eagle supported seven Pre-Employment Training programs in 2024, fully facilitated by Ilitaqsiniq (Nunavut Literacy Council).

47 participants successfully completed training programs across five communities:

- Rankin Inlet: 2 sessions, 7 participants
- Chesterfield Inlet: 1 session, 3 participants
- Baker Lake: 2 sessions, 21 participants
- Arviat: 1 session, 7 participants
- Coral Harbour: 1 session, 9 participants

These programs align with pilimmaksarniq—a core Inuit value that emphasizes skill-building through learning experiences—ensuring that participants develop both technical and workplace skills to support long-term employability.

Step 4: Labour Pool List Coordinated by the Labour Pool Coordinator

Agnico Eagle maintains a Labour Pool List, tracking candidates who have completed the Sanajiksanut Program and are eligible for job opportunities within the company or with contractors.

Since the implementation of recruitment process changes in 2022, Agnico Eagle has successfully hired 430 Inuit employees. In 2024 alone, 105 Inuit employees were hired through this program.

The Sanajiksanut Program continues to adapt based on ongoing feedback from community partners and evolving operational priorities. Agnico Eagle remains committed to supporting workforce development initiatives that help facilitate job readiness and career growth for Nunavummiut.

In 2024, discussions with the GN Department of Family Services have focused on aligning employment initiatives with broader workforce strategies and identifying areas where collaboration can further support Inuit employment. Key areas of discussion have included:

- Enhancing collaboration on apprenticeship training and workforce development to support Inuit workers in transitioning into skilled trade positions.
- Improving recruitment accessibility by strengthening pre-employment training and community outreach efforts.
- Exploring ways to recognize and develop transferable skills, ensuring broader career pathways for Inuit job seekers.
- Ongoing discussions regarding employment certifications and training opportunities to align workforce development with industry needs and community aspirations.

While logistical challenges such as weather, accommodation availability, and operational constraints may occasionally affect program delivery, Agnico Eagle remains committed to working collaboratively with the GN, Inuit organizations, and community stakeholders to explore opportunities for enhancing employment access and creating meaningful career pathways.

12.3.2 Training Hours

In 2024, Agnico Eagle made the following categories of training programs available for employees:

- **Mandatory:** Mandatory training related to compliance with the Nunavut Mine Act, as well as training that is mandated according to Agnico Eagle Health and Safety policies. Many of these training sessions are offered via e-learning prior to employee's arrival on site.
- **General:** Training activities required at a departmental level and covers many employees working in different departments. General training includes training on light duty equipment as well as enterprise software systems and cross-cultural training.
- **Specific:** Focused on developing individual competencies related to a specific position. This training qualifies individual workers for promotion following their progression through the Career Path. These training programs are provided by in classroom (theory) learning as well as practical (one-on-one) learning.
- **Emergency Response Training.**
- **Education:** Focused on developing individuals' competencies for Inuit employees.

Table 30 provides the training hours provided to Agnico Eagle employees at Meliadine (excluding contractors) in 2024:

Table 30. Training hours provided to Agnico Eagle employees at Meliadine

Type of Training	Inuit	Non-Inuit	Total
Mandatory	785	8,128	7,211
General	514	5,182	5,696
Specific	11,322	14,269	25,591
Specific Practical Evaluation	895	792	1,687
Specific Primary Evaluation	0	0	0

ERT	100	4,144	4,244
Total	13,616	32,515	46,131

12.4 TRAINING PROGRAMS

12.4.1 E-learning

Before coming to an Agnico Eagle site for the first time, newly hired employees must complete their Mandatory Training online, which consists of six (6) modules: General Induction, WHMIS, Fire Suppression, Job Hazard Analysis and Work Card, Spill Response, and Occupational Health and Safety (Personal Protective Equipment, Ladder Safety, Surface Standard Operating Procedure).

The General Induction chapter provides general information about Agnico Eagle and working life at the mines, waste management, as well as information on the IIBAs and archaeological awareness. The e-learning training material has been translated into English, French, and Inuktitut.

In 2024, three online courses were developed during the year: one (1) for Meliadine and two (2) for both the Meadowbank Complex and the Meliadine divisions. Only one of them has been launched in the LMS during the year. The others are planned to be launched later.

In 2024, a few tools have been developed in the TMS in order to improve user experience and the tracking of the training compliance. Also, the Training team has delivered many training sessions to improve the level of knowledge and skills on the Training Chart, which is an important tool for supervisors and management regarding the training compliance of the employees.

12.4.2 Cross-Cultural

Advancing Cultural Awareness Training for a More Inclusive Workplace

Agnico Eagle continues to refine its Cultural Awareness training to foster a deeper understanding of Inuit culture, values, and perspectives in the workplace. After an evaluation in 2022, it was determined that the previous training did not fully enhance cultural awareness and was too focused on Agnico Eagle's internal structure. To address this, Aqquimavvik was selected to redesign the training, incorporating IQ and ISV, along with interactive hands-on learning activities.

Progress and Implementation in 2023 to 2024

In 2023, significant strides were made in developing and piloting the revamped Cross-Cultural training program: A workshop was delivered to enhance understanding of different cultures and improve workplace communication. Finalized course content was delivered by Aqquimavvik in summer 2023. Three pilot sessions were conducted at Meliadine in fall 2023, with support from an Inuk HR agent at the site. In January 2024, trainers were prepared to lead the sessions, with Inuit site representatives supporting the IQ portion of the training. The program was officially rebranded as Cultural Awareness to better reflect its objectives.

Cultural Awareness Training in 2024

In 2024, Agnico Eagle conducted 37 Cultural Awareness courses, with 17 sessions held at the Meliadine Site. The training was primarily facilitated by an Adult Educator, occasionally assisted by Inuit employees to present the IQ segment. Throughout the year, seven Inuit employees were onboarded as co-facilitators to help deliver the course. While none of these employees currently feel comfortable leading the sessions full-time, discussions are ongoing to explore long-term solutions for sustainable course facilitation. The onsite reception for the course has been very positive, with employees expressing appreciation for the interactive and engaging approach of the training.

On June 12, 2024, two representatives from KivA reviewed the course content and provided constructive feedback, most of which was favorable and has since been incorporated into the program.

This training continues to evolve, with a focus on building cultural understanding, improving workplace inclusion, and ensuring meaningful participation from Inuit employees in both the design and delivery of the program.

12.4.3 Career Paths

Agnico Eagle operates the Career Path program, which outlines the step-by-step progression that employees must follow to advance in their chosen career. The objective of the Career Path Program is to achieve 100% internal promotions for Inuit and no external candidates (southerners) hired to fill a position that is part of the program.

Enhancing Career Development Through Program Revisions

In 2024, the Training Department, in collaboration with operational teams, initiated a comprehensive review of career pathways within Energy & Infrastructure (E&I), Warehouse, and Process Plant departments. This revision aims to align career development opportunities with evolving operational needs, ensuring that employees have clear, structured pathways for professional growth and skill advancement within these key areas.

12.4.4 Apprenticeship Program

Supporting Inuit Career Growth Through Apprenticeship Opportunities

The Apprenticeship Program integrates on-the-job training with technical instruction, providing Inuit employees with the opportunity to develop skilled trades expertise. Over the course of three to four years, apprentices gain hands-on experience and classroom knowledge in their chosen trade, with the potential to challenge the Certificate of Qualification (COQ) exam to obtain their Gold Seal Journeyman certificate. Those who meet the requirements may also pursue the Red Seal Exam, further expanding their career prospects. Agnico Eagle currently provides apprenticeship opportunities in six key trades: Millwright, Electrician, Heavy Duty Equipment Technician, Welder, Plumber, and Housing Maintainer.

Apprenticeship Program Activity in 2024

At Meliadine, three apprentices attended technical training in Alberta. Of those, two successfully passed their exams, while one is preparing for a re-write. Additionally, two new apprentices joined the program—one in plumbing and another in oil heating systems technology. One apprentice transitioned out of the program on good terms to pursue work closer to family in town.

Recognizing the importance of building foundational skills for success in trades, the adult educator provided study and learning resources to five Inuit employees who were eager to re-test for the Heavy-Duty Equipment Technician (HDET) pre-trades entrance exam after not passing on their first attempt.

While outcomes may vary based on individual experiences, the apprenticeship program remains an avenue for Inuit employees to develop technical skills and industry experience that can contribute to their long-term career development in the skilled trades.

12.4.5 Trainee Programs

Advancing Workforce Training Initiatives in 2024

Agnico Eagle continues to explore ways to enhance training opportunities across its projects, aiming to provide workplace skills development for employees in various disciplines. In 2024, several training initiatives took place, with participants gaining hands-on experience in key operational areas.

- E&I Trainee Program: One trainee participated in the program and successfully completed it.
- Assay Lab Trainee Program: Two trainees took part in separate cohorts; one withdrew, and the other was unable to complete the program successfully.
- Underground Trainee Program: Three cohorts, totaling six trainees, all successfully completed the program.
- Process Plant Trainee Program: One cohort of two trainees, both of whom successfully completed the program.

In 2024, the Training team adjusted its approach to prioritize program quality, opting to limit the number of participants to ensure stronger learning experience. Toward the end of the year, an additional trainer was hired with the intent to increase participant capacity in 2025 while maintaining program effectiveness.

These training efforts continue to evolve, providing participants with exposure to industry practices and technical skill development that can continue to support future career growth.

12.4.6 Adult Educator

In 2018, Agnico Eagle implemented an on-site education strategy at its Nunavut sites, starting with the appointment of a permanent Adult Educator at Meadowbank. The primary objective of the Adult Educator is to provide support to Agnico Eagle employees in enhancing their numeracy, literacy and soft skills. These skills are crucial for employees to access higher job positions and succeed in their apprenticeship journey. In 2023, the Adult Educator position extended to the Meliadine Mine site as well.

Enhancing Workplace Learning Through Adult Education Support

In 2024, a full-time Adult Educator was present at Meliadine Mine Site, providing targeted learning support to employees participating in training and leadership development programs. The Adult Educator played a role in assisting both apprenticeship participants and Inuit employees in leadership roles, offering guidance to strengthen technical, academic, and workplace skills.

At Meliadine, the Adult Educator worked with five Inuit apprentices, focusing on math skills, test-taking strategies, reading comprehension, and science concepts relevant to their technical training. Additionally, life skills training—including safe travel practices—was incorporated to help ensure participants were well-prepared for their next phase of education and on-the-job learning. For Inuit employees in relief supervisor and leadership roles, the Adult Educator provided one-on-one coaching to develop communication, resilience, managerial confidence, organizational skills, and professionalism—all of which are critical for leadership growth in a dynamic work environment.

These educational efforts provided valuable learning resources to employees looking to advance their skills and career development within their chosen fields.

12.4.7 Emergency Response Team (ERT) Training

The Meliadine Mine Emergency Response Team (ERT) remains a vital component of site safety and emergency preparedness, with 71 active members, including one Inuit team member, ready to respond to a range of critical situations. These highly trained responders are equipped to handle fires, medical emergencies, search and rescue operations, underground incidents, hazardous materials containment, and spill response.

Among the team, 20 members have obtained certification in ice and water rescue, further enhancing their ability to operate in Nunavut's challenging environmental conditions. To bolster response capabilities, the ERT fleet has been expanded with two key additions:

- The Sherp, a specialized vehicle designed to enhance search and rescue operations in extreme terrain.
- The MRV 9000, a critical asset for prolonged underground emergency situations, ensuring sustained support in complex rescue efforts.

These enhancements reflect ongoing efforts to maintain a well-equipped and highly trained emergency response team, ensuring a rapid and effective response to potential incidents at Meliadine Mine.

Agnico Eagle's Emergency Response Team Demonstrates Excellence on the Global Stage.

In 2024, Agnico Eagle's Emergency Response Team (ERT) showcased its exceptional skills, teamwork, and preparedness in two major mine rescue competitions, reinforcing the company's commitment to safety and emergency preparedness.

At the NMHSF Mine Rescue Competition in Yellowknife, Agnico Eagle fielded a highly trained Surface team, demonstrating their ability to respond effectively to real-world emergency scenarios. Meanwhile,

responders from Meadowbank, Meliadine, and Hope Bay came together to represent Agnico Eagle on the international stage at the International Mine Rescue Competition in Colombia. Competing against top teams from around the world, their dedication, precision, and expertise led them to secure first place overall, a testament to the rigorous training and emergency response culture embedded within Agnico Eagle's operations.

These achievements highlight the elite level of emergency preparedness within Agnico Eagle, ensuring that its teams are equipped to handle any crisis with confidence, skill, and efficiency, both in competition and in real-world emergencies.

12.5 GENERAL SOCIO-ECONOMIC PROVISIONS

12.5.1 Housing and Home Ownership

As required by NIRB Project Certificate No.006 Condition 112: *The Proponent is encouraged to investigate measures and programs designed to assist Project employees with pursuing home ownership or accessing affordable housing options.*

And

As required by NIRB Project Certificate No.006 Condition 114: *The Proponent is encouraged to collaborate with the Government of Nunavut – Nunavut Housing Corporation prior to the development and inception of its programs relating to financial literacy and planning to ensure that relevant and accurate information about housing and home ownership is available and considered for inclusion.*

Agnico Eagle recognizes the importance of housing accessibility as a key factor in supporting the long-term stability and well-being of its workforce in Nunavut. In alignment with Project Certificate requirement 112 and 114, the company has engaged in collaborative discussions with the GN and the Nunavut Housing Corporation to explore potential measures that support home ownership and access to affordable housing for project employees in the Kivalliq region.

In 2024, Agnico Eagle, alongside government agencies and community stakeholders, explored innovative solutions to address Nunavut's housing infrastructure needs. These discussions focused on:

- Identifying energy-efficient building materials and potential training programs to enhance local construction capabilities.
- Exploring strategies to assist employees with home ownership.

Agnico Eagle is exploring preliminary discussions on the potential impact of housing accessibility on workforce retention. These early conversations aim to assess housing-related factors that may influence long-term employment stability for Inuit workers, while considering broader regional workforce dynamics.

To help employees navigate financial planning and home ownership, Ilitaqsiniq's pre-employment curriculum includes training in:

- Financial literacy
- Personal budgeting
- Financial planning

This program ensures that new hires gain fundamental financial skills, which can contribute to long-term economic stability and housing readiness.

While challenges such as housing availability, affordability, and funding structures remain, Agnico Eagle will continue its collaboration with the GN, Nunavut Housing Corporation, and other stakeholders to explore practical solutions that align with both community needs and project goals.

12.5.2 Labour Force

Agnico Eagle submitted the latest staff schedule on May 27, 2019. The 2021 Kivalliq Labour Market Analysis Report was presented in Appendix 39 of the 2021 Annual Report and Appendix 39 of the 2022 Annual Report.

Kivalliq Labour Market Analysis (KLMA)

In 2023, the Employment and Culture Committee (ECC), comprising representatives from KivIA and Agnico Eagle, signed a Memorandum of Understanding (MOU) on updates to the Kivalliq Labour Market Analysis (KLMA) as part of IIBA obligations. Recognizing the need for a more effective timeline, the ECC recommended to the Implementation Committee (IC) that the KLMA cycle be adjusted to a three-year schedule. This change would allow sufficient time for comprehensive analysis, stakeholder collaboration, and the development of actionable workforce strategies.

In early 2023, the IC approved the ECC's recommendation, aligning the KLMA timeline with the IIBA's three-year review process. As a result, the KLMA was completed in 2024, ensuring that workforce projections and planning efforts remain aligned with broader regional economic and labour force trends. The KLMA serves as a strategic tool to:

- Assess the regional workforce composition and trends
- Forecast future labour market shifts and influencing factors
- Develop collaborative workforce strategies between Agnico Eagle and KivIA to strengthen Inuit participation in mining opportunities

The executive summary of the KLMA findings is provided in Appendix 41, outlining key insights and recommendations for workforce development in the Kivalliq region.

12.5.3 Training and Development

Agnico Eagle works with training organizations and government departments regularly through the KvSEMC, through the IIBA with the KivIA, through the Memorandum of Understanding with the GN, and through one-on-one partnerships and collaboration with organizations such as the Hamlet of Arviat, the Illitagsiniq (Nunavut Literacy Council), NAC, Aglu Consulting, and more.

The listing of formal certificates and licenses was sent to NIRB on November 7, 2018. There have not been any updates since the last submission.

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