



AGNICO EAGLE

HOPE BAY MINE

Waste Rock, Ore and Mine Backfill Management Plan

**JANUARY 2026
VERSION 12**

Revisions

Revision #	Date	Section	Changes Summary	Author
1	2010		Approved Plan under 2AM-DOH1323	SRK
2	April 2015	Throughout	TMAC as current licensee for the Hope Bay region.	SRK
		Throughout	Addition of Pad T for waste rock storage	
		Sec 3.3	Introduction of the low salt drilling procedure	
		Throughout	Update classification of Gabbro as Low NP basalt	
3	June 2015	Throughout	Changes to document structure for operational suitability and efficiency	TMAC with contributions from SRK
		Sec 1	Addition of Glossary and list of List of Acronyms, related TMAC documents, revised Plan Management responsibilities	
		Sec 2	Revised waste rock classification and segregation	
		Module A	Concordance with 2AM-DOH1323, revised Mine development plan to include placement of waste rock on Pad T, Ore storage on Pad U	
4	August 2016	Sec 2.4	Limiting backfill of ANFO spill impacted material to permafrost zones of the underground mine	TMAC with contributions from SRK
		Sec 2.6	Limiting backfill of hydrocarbon impacted material to permafrost zones of the underground mine	
		Sec 2.1 and Sec 3.2	Monitoring of the available mine void space and backfill volumes being placed underground	
		Sec 2.3	New section pertaining to detoxified tailings	
		Sec 2.1	Inclusion of monitoring for Total Cyanide as part of the surface water monitoring program	
		Sec 5	References updated	
		Sec 2.1.1	Removal of segregation into mineralized and non-mineralized	
			Approved Plan under 2AM-DOH1323 Amendment No.1	
5	December 2017	Throughout	Replaces the plan for waste rock from Doris (Phase 1). Now includes waste rock from Madrid North, Madrid South and Boston (Phase 2) and Doris.	TMAC with contributions from SRK

Revision #	Date	Section	Changes Summary	Author
		Sec 1.2	Change in overall management of waste rock explained	
6	January 2019	Throughout	Updates to conform to amended water license and use of waste rock for construction	TMAC with contributions from SRK
7	March 15 2019	Sec 2.3.1 Sec 3.1.5	Sec 2.3.1 references Sec 2.1.1 which does not exist. Sec 3.1.5 indicates a composite at TL7a (detox solids), but this is only done for TL6. TL7a is a monthly discrete sample.	TMAC
8	March 18 2019	Throughout	Appendix A updated as per comments received from CIRNAC and other typos addressed as per comments from ECCC and CIRNAC	TMAC
9	March 2022	Sec 1.6 Sec 2.2.4, 2.3.1, 3.1	Updated Roles and Responsibilities Updates for inclusion of Cemented Rockfill as backfill	Agnico Eagle
10	June 2022	Section 2.2.4 and Figure 2.2	Updated Figure 2.2 with Madrid WRSP as-built and expansion	Agnico Eagle
11	March 2024	Throughout	Updates made to reflect more detail in the Document Control table and Agnico Eagle rebrand.	Agnico Eagle Permitting Department
12	January 2026	Throughout	Changes throughout this version of the plan include minor clarifications and updates. Additions are marked in the right-hand margin as follows: 	Agnico Eagle
		Throughout	Replaced mention of detoxified tailings with paste tailings as detoxified tailings	
		Section 1.2	Updates made to reflect storage of waste rock on surface stockpiles	
		Section 1.3	Removed detoxified tailings and included revisions for paste tailings.	
		Table 1-2	Included additional geochemical characterization reports completed to date and removed mention of detoxified tailings.	
		Table 1-3	Updates roles to reflect accurate titles.	
		Section 2.2	Edited wording to reflect expectation that majority of material being used as backfill.	
		Section 2.2.1.2	Included updated testing results and Patch 7 results.	
		Section 2.2.3 Section 2.2.4.1	Included option to use paste tailings as backfill.	

Revision #	Date	Section	Changes Summary	Author
		Section 2.2.4.2	Included reference to Water Management Plan for water management of designated surface facilities.	
		Section 2.5.1.4	Updated last sentence of section to reflect commitment to comment (ECCC-TC-01) from 2023 NWB Annual Report.	
		Section 3.3	Updated documentation and reporting information.	
		Section 4.3	Updated to reflect current mine plan.	

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Conformity Table

Licence	Part	Item	Topic	Report Section
2AM-DOH1335	D	2	Rock for construction	Sec 3.2 and Sec 4.2
		11	Construction Summary Report	Sec 3.3
		12	Use of waste rock for construction	Sec 3.2
		18	Quarry rock monitoring	Sec 3.1.6
		19	Surface seepage collection	Sec 2.1.1
	F	12	Waste rock segregation	Sec 3.2
		13,14,15,	Waste rock and quarry monitoring and management	Sec 2.1, Sec 3.1, Sec 3.2 and Sec 3.3
		15	Manage underground backfill and placement	Table 1-3, Table 3-2, and Sec 3.1
		19j	Use of detoxified tails as backfill in permafrost	Table 1-3 and Sec 2.2
	I	5d, 5e	Monthly volumes	Table 1-3 , Sec 3.1 and Table 3-2
	I	6b	tonnage of tails placed underground	Table 1-3, Sec 3.1, Table 3-1 and Table 3-2
	Provisions in Schedule B		Annual reporting	Sec 3.3
	Provisions in Schedule D		Waste Rock and Quarry Monitoring report	Sec 3.1, Sec 3.2, Sec 3.3 and Sec 4.3
2AM-BOS1835	D	1	Waste rock and quarry monitoring and management	Sec 2.1, Sec 3.1, Sec 3.2 and Sec 3.3
		2	Rock for construction	Sec 3.2 and Sec 4.2
		11	Construction Summary Report	Sec 3.3
		18	Surface seepage collection	Sec 2.1.1
		20	Quarry rock monitoring	Sec 3.1.6
	F	13	Waste rock segregation	Sec 3.2
		14	Waste rock and quarry monitoring and management	Sec 3.1.6, Sec 2.1, Sec 3.1, Sec 3.2 and Sec 3.3
		16	Manage underground backfill and placement	Table 1-3, Table 3-2, and Sec 3.1
		23	Use of waste rock for construction	Sec 3.2
	I	6b	tonnage of detoxified tailings placed underground	Table 1-3, Sec 3.1, Table 3-1 and Table 3-2
		5f	Monthly Tonnes of Waste Rock	Table 1-3 , Sec 3.1 and Table 3-2
	Provisions in Schedule B		Annual reporting	Sec 3.3
	Provisions in Schedule D		Waste Rock and Quarry Monitoring Report	Sec 3.1, Sec 3.2, Sec 3.3 and Sec 4.3
2BB-MAE1727	G	1,4	Construction Summary Report	Sec 3.3
		5	Quarry rock monitoring	Sec 3.1.6

Licence	Part	Item	Topic	Report Section
		13	Rock for construction	Sec 3.2 and Sec 4.2
		13	Use of waste rock for construction	Sec 3.2
		5	Waste rock and quarry monitoring and management	Sec 2.1, Sec 3.1, Sec 3.2 and Sec 3.3
	E	13	Surface seepage collection	Sec 2.1.1
	B	2	Annual reporting	Sec 3.3

Glossary

Term	Definition
AANDC	Aboriginal Affairs and Northern Development Canada (now CIRNAC)
ABA	Acid base accounting
Agnico Eagle	Agnico Eagle Mines Limited
ANFO	Ammonium nitrate – fuel oil mixture
AP	Acid potential
ARD	Acid rock drainage
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CWP	Contact Water Pond
EC	Electrical conductivity
GPS	Global positioning system
HBML	Hope Bay Mining Ltd.
ICP	Inductively coupled plasma
ICP-MS	Inductively coupled plasma – mass spectrometry
MDZ	Madrid Deformation Zone
MEND	Mine Environmental Neutral Drainage
ML	Metal leaching
MVLWB	Mackenzie Valley Land and Water Board
Non-PAG	Non-potentially acid generating
NP	Neutralization potential
NWB	Nunavut Water Board
ORP	Oxidation-reduction potential
PAG	Potentially acid generating
pH	Hydrogen ion concentration
SNP	Surveillance Network Program
TDS	Total dissolved solids
TSS	Total suspended solids
The Plan	Waste Rock, Ore and Mine Backfill Management Plan
The Mine	Hope Bay Mine
TIA	Tailings Impoundment Area
TIC	Total inorganic carbon
TMAC	TMAC Resources Inc.
WSCC	Workers' Safety and Compensation Commission

1. Introduction

The Waste Rock Ore and Mine Backfill Management Plan (the Plan) is intended primarily for use by Agnico Eagle Mines Limited (Agnico Eagle) and its contractors to ensure that best practices for minimizing potential environmental impacts and potential environmental liabilities associated with waste rock, ore, and mine backfill storage are understood and managed.

The document outlines Agnico Eagle's approach to waste rock, ore and mine backfill management as it pertains to all Agnico Eagle Hope Bay developments. The Plan is structured in a manner such that one document pertaining to waste rock, ore and mine backfill management is approved and implemented across all Agnico Eagle's Hope Bay sites, while still addressing site- and licence-specific needs.

1.1. Objectives

The objective of the Plan is to provide guidance and procedures required to deposit, manage and monitor waste rock, ore and mine backfill stored on-site in accordance with the current mine and closure plans for Doris, Madrid and Boston and licenses associated with development of the Hope Bay Mine (the Mine).

A secondary objective of the plan is to implement a monitoring plan that will support mitigative action, as required, in the unanticipated event that deleterious water quality is observed in drainage from the surface stockpiles or underground.

The third objective is to outline the process for establishing suitable waste rock for use in the construction of pads, roads or other construction uses consistent with the flexibility authorized under Agnico Eagle-Hope Bay's Type A and B licenses. Waste rock that is determined suitable for construction is not considered waste rock once utilized as such.

1.2. Scope of the Plan

The design of the management plan is consistent with Agnico Eagle – Hope Bay's current mine and closure plans. Specifically it addresses:

- Waste rock brought to surface is stored in designate surface stockpiles.
- Prior to closure, the majority of this material is planned to be transported underground for use as backfill. The final quantity of waste rock placed underground will depend on the extent to which paste tailings are utilized for backfilling, as they may replace a portion of the waste rock in underground voids.
- At closure, some waste rock characterized as suitable will be utilized for construction of surface infrastructure.
- Waste rock will not be segregated on surface based on geological management units.

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- Management of quarry rock (if needed) that is placed on the waste rock stockpile for its intended use as mine backfill.
- The geochemical requirements to demonstrate the geochemical suitability of waste rock for use as construction material.

Furthermore, this Plan:

- Does not address the waste rock and ore currently on surface at Boston camp as part of underground exploration carried out in 1996/97. The management plan for these materials is documented in the *Water and Ore/Waste Rock Management Plan for the Boston Site, Hope Bay Project, Nunavut* as part of the Boston Advanced Exploration Project 2BB-BOS Water Licence.
- Supersedes any previous version of the Plan that was presented.

1.3. Background

The Hope Bay Mine is a gold mine owned and operated by Agnico Eagle. The Mine is located 705 km northeast of Yellowknife and 153 km southwest of Cambridge Bay in Nunavut Territory, and is situated east of Bathurst Inlet. The Mine comprises three distinct areas of known mineralization plus extensive exploration potential and targets. The three areas that host mineral resources are Doris, Madrid, and Boston.

In 2010 and 2011, approximately 2,670 m of lateral and 76 m of vertical underground development were completed at the Doris Mine by Hope Bay Mining Ltd. (HBML). This development resulted in production of approximately 183,000 t of waste rock, including 86% non-mineralized and 14% mineralized waste rock. Additionally, 329 m of ore development occurred resulting in the production of 9,400 t of ore (HBML 2012).

Throughout this period, HBML placed the rock according to the approved interim management plans described in Revision 01 of the *Waste Rock Management Plan*, which included segregation of mineralized and non-mineralized waste rock within the footprint of the Temporary Waste Rock Pad (on Pad I; Pads F and G were temporarily used as laydown areas, and placement of ore on Pads Q and H/J). HBML's waste rock program included segregation of waste rock based on lithology and sulphide content to create a stockpile of waste rock with low risk of metal leaching (ML)/ acid rock drainage (ARD). The segregation program was designed to meet the objectives of the HBML mine plan and closure objectives, specifically using the segregated stockpile of low risk ML/ARD waste rock as construction material and/or leaving this stockpile on surface at closure.

No underground development occurred during 2012-2014. The Doris mine was re-opened in 2015 and constructed Pad I for waste rock storage. Consistent with TMAC Resources Inc.'s (TMAC) mine plan (TMAC 2015) and revised waste rock management plan, waste rock was not segregated on Pad I and a new pad (Pad T) was constructed. Pad T is currently the main Temporary Waste Rock pad and ore is being stockpiled on Pad T according to the approved *Waste Rock, Ore, and Mine Backfill Management Plan*.

Waste rock stockpile material are maintained, including volumes of:

- Waste rock placed on the stockpile, according to deposit;
- Quarry rock placed on the pad, according to source Quarry;
- Material returned underground, categorized as either waste rock (rockfill and/or cemented rockfill) or paste tailings; and
- Voids created in the mine.

1.4. Relevant Legislation and Guidance

The following table lists federal and territorial regulations governing the management of waste rock and ore associated guidelines.

Table 1-1. Regulations and guidelines pertinent to the Waste Rock, Ore and Mine Backfill Management Plan

Regulation	Year	Governing Body	Relevance
Nunavut Waters Regulation (NWB 2013)	2013	Nunavut Water Board (NWB)	Licence for mining and milling undertaking to use water and deposit of waste in relation to the construction, operation, closure and reclamation.
Mine Health and Safety Act and Regulations (WSCC 2011)	2011	Workers' Safety and Compensation Commission (WSCC)	Waste rock pile design and operations safety requirements. Designs to be approved by Chief Inspector.
Guideline	Year	Issued by	Relevance
Prediction Manual for Drainage Chemistry for Sulphidic Geologic Materials, Report 1.20.1 (MEND 2009)	2009	Mine Environmental Neutral Drainage (MEND)	Guidance on determining the type, magnitude, location and timing of measures required to prevent significant environmental impacts by drainage from disturbed rock.
Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (MVLWB/AANDC 2013)	2013	Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the Mackenzie Valley Land and Water Boards (MVLWB)	Guidance on closure and reclamation expectations.

1.5. Related Documents

Table 1-2 provides a list of documents to be considered in conjunction with this Plan.

Table 1-2. List of documents related to the Waste Rock, Ore and Mine Backfill Management Plan

Document Title	Relevance
Boston Water Management Plan	Identifies water management areas, facilities and procedures
Quarry Management and Monitoring Plan	Describes management of rock for all quarries, including identification of quarry rock suitable for use as construction material and/or mine backfill. Monitoring programs for quarry rock are outlined.
Spill Contingency Plan	Spill response procedure
Air Quality Management Plan	Outlines how fugitive dust, associated with blasting, hauling and end dumping is managed and monitored.
Explosives Management Plan	Contingency procedure for disposal of spilled ammonium nitrate – fuel oil mixture (ANFO)/emulsion
Kinetic Testing of Waste Rock and Ore from the Doris Deposits, Hope Bay (SRK 2015a) and Supporting Data (SRK 2015b)	Geochemical characterization of waste rock, ore, quarry rock and tailings.
Static Testing and Mineralogical Characterization of Waste Rock and Ore from the Doris Deposit, Hope Bay (SRK 2015c) and Supporting Data (SRK 2015d)	
Geochemical Characterization of Waste Rock and Ore from the Madrid North and Patch 7 Deposits (SRK 2025c)	
2025 Geochemical Characterization of Overburden and Quarry Rock, Doris and Madrid (SRK 2025d)	
Geochemical Characterization of Naartok West Metallurgical Tailings, Hope Bay Project (SRK 2024)	
Geochemical Characterization of Naartok East Metallurgical Tailings, Hope Bay Project (SRK 2025e)	
Updated Geochemical Source Term Predictions, Hope Bay Project (SRK 2025f)	Source term estimates for rock stockpiles and underground mines containing backfill.
Doris Madrid Water Management Plan	Identifies water management areas, facilities, procedures and surveillance network program (SNP) monitoring for contact water from surface stockpiles and underground mine.
Groundwater Management Plan	Identifies underground sump water monitoring procedures.

1.6. Plan Management

This Plan is reviewed annually and updated as necessary. Revisions to the Plan will be submitted as necessary to address future water licence conditions. Personnel responsible for implementing and updating the Plan identified in Table 1-3.

Table 1-3. Roles and Responsibilities

Role	Responsibility
Mine General Manager	<ul style="list-style-type: none"> Overall responsibility for implementation of this management plan; Provide the on-site resources to operate, manage, and maintain waste rock and ore management infrastructure such as pads, stockpiles and ponds; Ensure underground practices are continually improved to reduce brine and blast residues in waste rock; and Provide input on modifications to handling and operational procedures to improve operational performance.



Role	Responsibility
Geotechnical Engineer (alternate: Mining engineer)	<ul style="list-style-type: none"> Conduct regular inspections of the pads, stockpiles and containment ponds to determine compliance with the plans, regarding, slopes, volumes, safety berms, snow removal etc; Provide deposition plan and guidance to Mill Operations Supervisor; Facilitate Geotechnical Inspection, when required; and Update and manage design and deposition plan.
Environmental Superintendent	<ul style="list-style-type: none"> Updating the Plan; Providing the necessary resources for completing the water sampling programs; and Coordinate: <ul style="list-style-type: none"> Waste Rock and Quarry Monitoring Report; and Monthly Monitoring Report.
Environment Supervisor	<ul style="list-style-type: none"> Ensure water sampling programs are completed as needed; Keeping records of onsite analysis, observations, photographs, and laboratory analysis; Conduct or facilitate seep sampling program on surface and underground as required; and Conduct monthly and annual regulatory reporting as required
Mine Geologist	<ul style="list-style-type: none"> Execute construction qualification sampling program to identify the material as non-PAG; Inspect the working face on a regular basis to confirm geology; and Instruct the mucking crew regarding waste rock and ore placement on surface.
Underground Supervisor	<ul style="list-style-type: none"> Ensure removal waste rock and placement ore in the intended and designated location
Construction Supervisor	<ul style="list-style-type: none"> Ensure use of waste rock confirmed as non-PAG material for construction; and Provide quantities of waste rock used for construction to mine engineer monthly.
Mine Engineer	<ul style="list-style-type: none"> Record quantity of material sent to each of the stockpiles in daily record; Record quantity, source and destination of backfill material sent to underground in daily record; Provide waste rock and backfill movement totals to Environment Superintendent monthly; Provide long term material balance to Geotechnical Engineer for planning, design and compliance purposes; and Provide monthly topographic survey of the waste pile to the Geotechnical Engineer.
Mill Operations Supervisor	<ul style="list-style-type: none"> Follow and ensure compliance with deposition plan including snow removal for the Doris Ore and Waste pads; and Provide guidance to Underground Supervisor for the removal of waste rock and placement of ore at surface.
Site Services Supervisor	<ul style="list-style-type: none"> Ensure placement of waste rock and removal of ore in the intended and designated location for the Madrid area; and Ensure snow removal at the Madrid Waste Rock Management area.

2. Waste Rock, Ore, and Mine Backfill Management

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2.1. Waste Rock Stockpile – ML/ARD Potential

The mine plans for all Hope Bay mines includes placement of structural backfill in underground stopes. Backfill material types may include waste rock (to be used as rockfill and/or cemented rockfill), paste tailings and/or quarry rock, depending on the material balance outlined in the mine plan. Waste rock is stored in surface stockpiles prior to placement in the underground stopes. Prior to closure, the majority of this material is expected to be hauled underground for use as backfill.

Contact water chemistry from waste rock stockpile materials will be a result of ML/ARD due to the weathering of sulphide minerals. Due to the high carbonate content of rock at Hope Bay, the risk of ARD for the waste rock stockpile is low however, neutral pH drainage issues can occur, depending on the mine, as discussed below.

2.2. Geochemical Characterization of Mine Backfill

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This section discusses the geochemistry of waste rock, quarry rock and tailings. For context, the geochemistry of ore is also presented. Contact water from the temporary waste rock stockpile pad is projected to remain pH neutral. At closure, the majority of this material is expected to be hauled underground for use as backfill.

2.2.1. Waste Rock

The geochemistry of waste rock varies according to geological deposit and is therefore discussed according to each mine. The geochemical characterization program for waste rock is documented in SRK (2015a, 2015b, 2015c, 2015d, 2017a, 2017b, 2017c, 2025c, 2025d). The results of operational monitoring of Doris waste rock are also documented (e.g. SRK 2017f, 2025g). This section presents a summary of the geochemistry of waste rock from each mine.

2.2.1.1. Doris

The baseline geochemical characterization program indicated that the majority of the samples were classified as non-potentially acid generating (non-PAG). Of the samples classified as PAG or uncertain, most were ore or a mixture of ore and waste rock. Diabase and some of the hornfelsed basalt had low sulphide, Neutralization Potential (NP) and Total Inorganic Carbon (TIC) content, and were classified as PAG or uncertain on the basis of low NP/TIC ratios, but contained such low concentrations of sulphide that buffering by silicate minerals is likely to be sufficient to maintain neutral pH conditions in these rocks. The risk of ARD/ML from Doris waste rock is low and demonstrated by operational monitoring of waste rock and associated seepage (e.g. SRK 2017f).

2.2.1.2. Madrid North and Patch 7

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The Madrid North and Patch 7 areas are aligned along the Madrid Deformation Zone (MDZ) and are geologically characterized by the same host and general stratigraphy. In both areas, A-Type and C-Type basalt are the host rock to the ore bodies and the most volumetrically significant waste rock lithologies at Madrid North and Patch 7.

Ore generally had higher sulphur content than waste rock for all rock types at both deposits (25th to 75th percentile concentrations between 1.2 to 4.1 %S). For waste, Hematite altered A-Type basalts and sediments at Madrid North and sediments at Patch 7 had the highest sulphur content (25th and 75th percentile concentrations between 0.28 to 4.9 %S). The sulfur content for other waste rock types ranged from 0.09 to 0.91 %S for the 25th and 75th percentile respectively.

The majority of ore samples were classified as non-PAG by all methods with 40% of samples (n=17) classified as uncertain or PAG due to high sulphur content.

Waste rock samples were classified as non-PAG by all classification methods except for 1.5% to 3% of samples which were classified as uncertain (on the basis of NP/acid potential (AP), TIC/AP or TIC_(Ca+Mg)/AP) and <1% which were classified as PAG (on the basis of NP/AP). The uncertain or PAG classifications were due to high sulphur or low NP and/or TIC.

For ore, 25th to 75th percentile concentrations of arsenic range from 220 and 1,000 ppm and were overall higher than waste rock. For waste rock, the arsenic content varied between rock types, with A-type basalts having the highest arsenic content (40 to 700ppm).

2.2.1.3. Madrid South

The most volumetrically significant rock types for the Madrid South deposit include mafic to ultramafic metavolcanics, intermediate volcanics, and late porphyry granitoids. Less significant rock types characterized include quartz veining, which is associated with gold mineralization, intermediate to felsic volcanics, early gabbro intrusives, late gabbro intrusive, late mafic dykes, and carbonate vein .

The waste rock and ore samples were characterized by low sulphur content, with 95% of samples containing less than 0.5% total sulphur. Levels of NP and TIC were high (median values for all rock types greater than 75 kgCaCO₃/t). All samples were classified as non-PAG.

The potential for ARD from Madrid South waste rock is low. Neutral pH metal leaching from the relatively small proportion of samples that contain higher sulphur concentrations is of concern, specifically related to arsenic and, to a lesser extent, cobalt, copper, nickel, molybdenum and uranium.

2.2.1.4. Boston

The most volumetrically significant waste rock lithologies are mafic metavolcanics and sedimentary units. The ore is hosted in quartz veins, mafic metavolcanics with sediments and mafic metavolcanics. Mafic

metavolcanics with sediments, late intermediate dyke and late gabbro are volumetrically less significant waste lithologies.

Sulphur levels for Boston (75th percentiles of 0.38%) were higher than Doris, Madrid North, and Madrid South (0.26, 0.28 and 0.11%, respectively). NP and TIC values were high (median values for all rock types greater than 85 kg CaCO₃/t).

The risk of ARD for Boston is low, with approximately 95% of the overall sample set classified as non-PAG. Boston ore samples were characterized by higher levels of total sulphur compared to waste. The humidity cell tests data indicated that arsenic leaching is related to solid-phase arsenic content, and arsenic, antimony, cobalt and nickel leaching are potential issues at neutral to alkaline pH values. Compared to the other Hope Bay deposits, arsenic content for mafic metavolcanics from Boston were higher than Madrid South and generally comparable to Madrid North.

2.2.2. Quarry Rock

Quarry rock typically has a low risk for ARD/ML and is suitable for use as construction material. It is anticipated that the majority of quarry rock backfill will have a low risk for ARD/ML. Quarries containing PAG rock that would be developed will be used as mine backfill only. The *Quarry Management and Monitoring Plan* outlines management of quarry rock.

2.2.3. Tailings

Currently, no tailings are being produced at the Hope Bay mine. Historically, detoxified tailings were pumped underground. Under the current mine plan, the generation of paste tailings may be prepared for backfilling the underground using tailings from the Tailings Impoundment Area (TIA). A geochemical characterization program is being completed for tailings that may be produced from Madrid North, specifically from the Naartok West and East area. An assessment was completed for three metallurgical tailings streams: flotation tailings, combined detoxified tailings and sulphide concentrate tailings. The results of this assessment classified sulphide concentrate tailings as PAG and flotation and combined detoxified tailings as non-PAG. Sulphate and trace metal concentrations were generally highest in sulphide concentrate tailings and lowest in flotation tailings. For all tailing streams, the sulphide mineralogy suggests the potential for neutral pH leaching for arsenic, cobalt, and nickel from gersdorffite and cobaltite, copper from chalcopyrite, covellite, and chalcocite, zinc, and cadmium from sphalerite and potentially molybdenum from molybdenite.

2.2.4. Management Response

2.2.4.1. Backfill Materials Management on Surface

Backfill material types may include waste rock, paste tailings and/or quarry rock, depending on the material balance outlined in the mine plan. Waste rock will be stored in surface stockpiles prior to placement in the underground stopes. Backfill use and available mine void space will continuously be

monitored to ensure that all backfill materials can be placed underground as proposed. The management of each backfill type is discussed below.

Waste Rock

Waste rock from Doris, Madrid South, Madrid North and Boston will be placed as backfill in the underground stopes as rockfill and/or cemented rockfill. Waste rock placed on surface will be placed on waste rock stockpile pads.

Quarry Rock

It is expected that waste rock volumes are sufficient to meet structural backfill requirements, however if quantities are inadequate, additional material will be required from imported sources. Once all mine waste rock has been exhausted, quarry rock will be developed and used for structural backfill underground.

As stated in the *Quarry Management and Monitoring Plan*, all quarry rock classified as PAG will be placed on the waste rock stockpile for placement as underground backfill. The rock will be stockpiled in the waste rock storage area prior to placement underground.

Paste Tailings

Detoxified tailings from the Doris processing plant were historically transferred to the underground stopes in the Doris mine as they were generated. Under the current mine plan, paste tailings may be prepared using material stored in the Tailings Impoundment Area (TIA) and pumped directly underground for use as backfill. Management and monitoring of the TIA is described in the *Water Management Plan*.

2.2.4.2. Designated Surface Facilities and Water Management

All seepage and runoff from the waste rock stockpile pads are directed to downstream lined collection ponds and managed according to the water management plans. Management and monitoring of the CWP is described in the *Water Management Plan*.

2.2.4.3. Volume Tracking and Mine Void Space

Backfill volumes will be tracked together with the mine plan, which contains available mine void space at any given time in the mine life. This record indicates progress towards ensuring that all mine waste is placed underground prior to the completion of mining. Backfill volume tracking will include tracking of waste rock (rockfill and/or cemented rockfill), paste tailings and quarry rock placement underground.

2.2.4.4. Monitoring

All monitoring of backfill materials temporarily stored on the waste rock stockpile pad is discussed in Section 3.1.

2.3. Underground Mine Backfill – ML/ARD Potential

Section 2.1 summarizes the geochemical properties of all backfill materials.

Mining of the Doris, Madrid North and Madrid South deposits is within permafrost but selected areas of the mine will intersect talik resulting in intercepted groundwater. The Boston mine is entirely within permafrost and accordingly, there will be no management of source load (water chemistry) resulting from mine backfill.

SRK (2025f) presents operational source term drainage chemistry estimates for the underground mine backfill based on the interaction of mine backfill with intercepted groundwater. At closure, all mine workings will be allowed to flood. When the mine is reflooded, all backfill will be either submerged or within permafrost, and therefore not oxidizing. The reflooded mine backfill source terms represent pore water chemistry in the mine "pool" or flooded portion of the mine workings when the water level is first allowed to recover, and oxidation products that have accumulated on the backfill material are released into the porewater. These source loads are considered backfill contact water and do not include the water chemistry of groundwater. The site-wide water and load balance combines the loads from mine backfill and groundwater sources (SRK 2025b). The source terms indicate that for operations and closure, backfill contact water chemistry at each mine will be pH neutral.

2.3.1. Management Response

2.3.1.1. Backfill

The mine plans for all Hope Bay mines includes progressive placement of structural backfill in the underground during operations. Backfill material types may include waste rock used for rockfill and/or cemented rockfill, paste tailings and/or quarry rock, depending on the material balance outlined in the mine plan.

2.3.1.2. Water Management

The management of groundwater is presented in the *Groundwater Management Plan*.

2.3.1.3. Monitoring

The monitoring of mine backfill and underground mine drainage is discussed in Section 3.1.

2.4. Ore Stockpile – ML/ARD Potential

The material from the stopes is classified as ore and will be processed in the mill. The ML/ARD potential of ore from each deposit is summarized in Section 2.2. This material tends to have a higher sulphide content and lower NP and TIC. Ore is more likely to be classified as uncertain or PAG. However, there is sufficient NP present that the development of acidic conditions is unlikely to occur during the short time that this material will be stockpiled on surface.

2.4.1. Management Response

Ore is temporarily stockpiled on surface prior to being processed in the mill to extract the gold. The ore stockpile locations and associated water management is described in the *Water Management Plan*.

There are no separate monitoring requirements for the ore stockpile.

2.5. Nutrient Release from Explosives

The majority of waste rock is blasted using a bulk form of ANFO. Nutrients may be released during mining from ANFO residue on rocks, packaging or ANFO spills. ANFO can be highly water soluble, with runoff able to release ammonia, nitrate and nitrite to the receiving environment.

2.5.1. Management Response

2.5.1.1. Surface Water Management

Water flows and seepage from waste rock and ore piles are captured in a series of ponds designed to prevent direct discharge of potentially contaminated water to the environment. All waste rock and ANFO-contaminated material will routinely be placed underground throughout operations and completely at closure.

Management of water is described in the *Water Management Plan*.

2.5.1.2. Groundwater Management

Material from clean-up of ANFO spills will only be placed in permafrost areas of the mine to limit mobility of nutrients.

2.5.1.3. Minimization of Residual ANFO during Detonation

Any wet holes will be evident at the time of drilling and during the cleaning of each blast hole. The blaster, being responsible for the loading and firing of the holes, begins the loading process by checking the actual depth of each hole and records unusual conditions, such as water in the blast-holes. The inadvertent loading of ANFO into a wet blast hole could result in residual from an incomplete detonation of the product. In the event a wet hole is encountered, one of two charging methods is employed to ensure complete detonation of the explosives:

- The hole is dewatered using compressed air. This is common on the bottom (lifter) holes in underground mining.
- If the hole cannot be dewatered, or if it is seeping water, the hole will be loaded with an alternative explosive that is effective under wet conditions.

After blasting, the blaster is required by regulations to inspect the blasted area, make note of blast holes that may have experienced incomplete detonation, and mark those locations with paint. Information from the blaster's inspection will be noted in the daily operations shift log and will be communicated to all underground supervision personnel.

Material considered un-detonated or high in ANFO residue, which will contain potentially elevated level of nutrients (primarily ammonia), will be used for backfill of permafrost areas of the mine.

2.5.1.4. Minimization of ANFO Spills

To minimize the risk of spills during loading, the loader hose is pushed to the end of the hole and is slowly withdrawn as the ANFO is blown into the hole, thereby filling the hole. Once the end of the loading hose is near the top (collar) of the hole, the loader is stopped to prevent spillage of ANFO.

In the unlikely event that a spill of ANFO occurs during charging of the blast holes, the ANFO will be cleaned-up immediately upon the completion of all loading operations, in accordance with the *Spill Contingency Plan*. Spilled ANFO will be reused where possible, and residue that can't be recovered will be mixed with broken rock material and safely disposed in designated permafrost areas of the mine.

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2.6. Underground Brine Water

Water is used as a lubricant for drilling, as a means of cleaning off the face and walls for geological mapping, and for dust suppression in the underground mine. Salt may be added to the make-up water to lower the freeze point and thereby keep the water supply lines from freezing. This water is called underground brine water. Any excess brine water that ends up at the mine face is pumped to a settling sump and is recycled for use at the face. However, some of the water is absorbed by the blasted rock, which is hauled to the surface stockpiles.

Excessive use of salt can result in impacts to the structural integrity of infrastructure components arising from ground thaw, increased or alternative requirements for wastewater treatment and disposal, increased challenges associated with waste rock and tailings disposal and stabilization, and limitations on using the waste rock for construction.

Agnico Eagle has procedures for reducing the concentration and amount of brine that is used in the underground mine. These procedures are outlined below. The *Groundwater Management Plan* provides details on the collection and fate of underground sump water management.

2.6.1. Management Response

Agnico Eagle Hope Bay follows a Low Salt Underground Brine Water Use Procedure to minimize the amount of calcium chloride use in the Mine, and therefore minimize the amount of salt that is entrained in waste rock and ore. The procedure includes:

- Locating brine mixing tanks in the mine or within an enclosure to control temperatures, and thereby limit the amount of salt used in the brine;
- Using hose nozzle atomizers and/or foggers to reduce the amount of water used for dust suppression; and

- Recycling brine water during drilling activities, bolt inflation, and washing activities.

2.7. Fuel and Lubricants

Any fuel or lubricant spills, including leaks from mobile equipment, have the potential to become mixed with the waste rock; and therefore, effect the quality of water entrained in the waste rock. Therefore, prevention and management of spills is particularly important for ensuring that the waste rock can be used for construction activities outside of the contact water containment system.

2.7.1. Management Response

If re-fuelling of mobile equipment is required in the mining or waste deposition areas, it will be conducted at a location and time that will ensure that any spill of fuel or lubricants will be effectively contained and clean-up can be easily accomplished.

Every operator is required to inspect their light or heavy equipment at the beginning of every shift. In the event that leaks are detected, the vehicle will be taken out of service and must be repaired prior to resuming use.

In the unlikely event that a spill occurs, clean-up of the spilled material will be initiated immediately as per the requirements specified in the *Spill Contingency Plan*.

Hydrocarbon contaminated rock will be placed in a designated area of the mineralized waste rock piles, for use in backfill of permafrost areas of the mine only. Engineering should create Deswik layers to track contaminated materials stored underground.

2.8. Dust

Fugitive dust can arise from blasting, haul traffic and end dumping. Fugitive dust poses a potential risk to human and ecological health through both ingestion and deposition.

2.8.1. Management Response

The *Air Quality Management Plan* outlines procedures for managing fugitive dust including:

- Watering traffic surfaces and active end dumping areas;
- Controlling vehicle speeds; and
- Applying approved dust suppressants to high traffic areas.

2.9. Geotechnical Stability

The stability of the waste rock piles is an important consideration for traffic safety and for containment of the waste rock.

The waste rock piles are designed such that the foundation pad extends 2.5 to 3 m beyond the toe of the waste rock pile. The outer edge of the pads also have a safety berm that will prevent any large boulders from rolling off of the pad during construction. The waste rock piles have been designed with slopes of 2H:1V, and will be constructed in lifts, which will result in a configuration that provides a high degree of geotechnical stability. Stability calculations confirm that there are no stability concerns associated with stockpile design. Inspection of the berms and slopes are also conducted to ensure visual degradation.

2.9.1. Management Response

Based on a factor of safety (FOS) of 1.0, a minimum safe distance from the crest of the waste rock pile (1.2 m) should be maintained for haul trucks dumping waste rock close to the crest of the waste rock pile.

3. Monitoring and Evaluation

3.1. Mine Backfill Monitoring

The monitoring program for mine backfill materials (waste rock, quarry rock and/or paste tailings) was designed to generate the required data set to support any unanticipated drainage quality and associated mitigative measure in consideration that characterization of mine backfill materials is more practical before placement underground. The objectives of the geochemical monitoring plan are described as follows:

- Monitor water quality from waste rock stockpiles and the underground as an indicator of the geochemical performance of backfill materials with respect to ML/ARD;
- Monitor the geochemical properties (ML/ARD) of the waste rock, quarry rock and/or paste tailings placed underground in each mine; and
- Inventory quantities of each material type placed as backfill according to the mine plan, including cemented rockfill.

Table 3-1 summarizes the operational monitoring programs, including program objectives and monitoring. An overview of the programs includes:

- Inventory of available backfill;
- Maintaining records of backfill volumes according to material type (waste rock, paste tailings and/or quarry rock);
- Geological mapping inventory of waste rock from the underground workings;
- Annual inspections of the waste rock stockpile, including a freshet seepage survey and waste rock sampling program;
- Geochemical monitoring of paste tailings and quarry rock backfill; and
- Routine water quality monitoring of contact water quality from surface stockpiles and underground mine sumps.

Table 3-1. Overview of Mine Backfill Monitoring Programs and Objectives for the Hope Bay Mine

Component	Report Section	Monitoring Program	Objective	Frequency
Waste Rock	3.1.1	Material handling records	Inventory of waste rock backfill, including source mine.	Reported monthly
	3.1.2	Routine geological mapping of blast round face and back ¹	The geochemical characterization of waste rock for each mine was determined according to rock type therefore, the operational inventory of waste rock geology also provides an inventory of baseline ML/ARD potential of waste rock backfill, e.g. SRK 2017a.	As determined by geology
	3.1.3	Annual inspection of waste rock stockpile and geochemical characterization of waste rock	Visual inspection of waste rock stockpile and sampling and geochemical characterization of waste rock for comparison with baseline geochemical characterization, e.g. SRK 2017a.	Annually
	3.1.4	Annual seepage monitoring	Monitor stockpile contact geochemistry and confirm appropriate capture of contact water	Annually at spring freshet
Paste Tailings	3.1.1	Material handling records	Inventory of tailings placed as backfill (if any)	Daily
	3.1.5	Geochemical characterization of tailings	Geochemical characterization of tailings for ML/ARD potential.	Monthly
Quarry Rock	3.1.1	Material handling records	Inventory of quarry rock placed underground (if any), including source quarry.	Reported monthly
	3.1.6	Geochemical characterization of quarry rock (as backfill)	Geochemical characterization of quarry rock used as backfill.	Two samples per year when quarry active.
Waste rock stockpile	3.1.7	Water quality monitoring of contact water in downstream collection ponds.	Monitor water chemistry from waste rock stockpiles	Monthly
Ore stockpile	3.1.7	Water quality monitoring of contact water in downstream collection ponds.	Monitor water chemistry of waste rock and ore stockpiles.	Monthly
	3.1.4	Annual seepage monitoring	Confirm appropriate capture of contact water	Annually at spring freshet
Underground mine	3.1.2	Mine void space	Inventory of available mine void space for backfill	Reported monthly
	3.1.7	Water quality monitoring of mine sumps	Monitor water chemistry of underground mine (mine backfill, blast residues and drilling brines)	Monthly

¹ Conducted as part of the mine geological mapping program

3.1.1. Backfill Volume Tracking and Mine Void Space

Backfill volumes will be tracked together with each mine plan, which contains available mine void space at any given time in the mine life. This record indicates progress towards ensuring that all mine waste is placed underground prior to the completion of mining. Backfill volume tracking will include tracking of waste rock used for rockfill and cemented rockfill, paste tailings and quarry rock placement underground. Waste rock geochemistry varies by mine and quarry rock geochemistry can vary by quarry. Accordingly, the volumes of waste rock and quarry rock backfill will also be traced according to source location to allow for geochemical tracking of backfill. This is in relation to Madrid North, which has waste rock backfill also sourced from the Doris and Madrid South mines. Quarry rock from multiple sources may also be placed as backfill at Madrid North and Boston.

3.1.2. Geological Mapping of Mine Workings

Geology routinely conducts geological mapping of each blast round within the underground workings. This program includes logging of the waste rock lithology, thereby allowing the tracking of waste rock according the ML/ARD potential, as established by the geochemical characterization program of waste rock and ore, e.g. SRK 2017d. The operational geochemical monitoring of waste rock is discussed in Section 3.1.3.

3.1.3. Annual Inspections and Geochemical Characterization of Waste Rock

Material in the waste rock stockpiles is inspected by a qualified geochemist on an annual basis. The purpose is to examine the waste rock for signs of sulphide oxidation and weathering, and conduct the operational waste rock geochemical monitoring program. The geochemical sampling and testing frequency of the underground waste rock is a minimum of one sample per 20,000 tonnes of rock, with a minimum of one sample per year.

A representative sample set of the waste rock in the stockpile will be collected (approximately 5 to 20 samples based on volume and geology). Both location of origin and the location where the material is placed in the waste rock pile will be established and recorded. The samples will be submitted to a commercial testing laboratory for full acid base accounting (ABA) (including total sulphur, sulphur speciation, inorganic carbon, and modified Sobek NP), TIC and trace metals by inductively coupled plasma (ICP) digestion. The -2 mm fraction of a subset of samples will be submitted for shake flask extractions to assess the soluble content, including residues from blasting and drilling brines.

Samples will be approximately 1 to 2 kg in size. The following information will be recorded at the time of sampling:

- GPS coordinates of the sample location;
- Approximate location of where the associated waste rock was deposited (location in the pile);
- The name of the person who collected the sample;

- Date and time of sampling; and
- Geological description, including rock type, estimated sulphide and carbonate content.

Data from confirmatory testing and geological inspections would be compared to the baseline ML/ARD characterization of waste rock. Results of the inspections and waste rock geochemical characterization are provided in the annual report to the NWB.

In addition, annual visual inspections of all pads, berms and containment ponds by the Agnico Eagle geotechnical engineer are to be completed to determine if the facilities are operating as designed and to assess maintenance requirements.

3.1.4. Seep Survey

Spring seep surveys are conducted to characterise ML and confirm appropriate capture of mine backfill runoff. Areas include the down-gradient toe of the waste rock pile, and below the CWP and associated pads.

Seep surveys are completed annually during freshet each year where mine backfill and material is stored on a surface pad. Seep surveys are completed along all safely accessible areas along the down-gradient toe of the mine backfill piles and pads below the CWP and access roads to the pads that contain mine backfill. The surveys are completed during the latter part of the spring freshet, concurrent with other seep surveys completed elsewhere on-site.

Seeps are identified by walking along the down-gradient toe of the roads, piles and pads looking and listening for signs of flowing water. Samples of seepage water are collected for analysis where seepage flow exits the pads to the surface. A survey stake is installed to mark the location of each seep sampled and the following information is recorded:

- Description of the seep location;
- GPS location of the seep;
- A photographic record of the seep;
- A description of the flow pattern and magnitude of flow; and
- Field pH, Chloride, Electrical Conductivity (EC), Oxidation reduction potential (ORP) and temperature readings.

Field pH, chloride, EC, ORP and temperature measurements are also to be established at reference sites located in a similar geological, and physiographic setting, but away from the influence of mine-related activities. These reference stations may also be shared with the quarry monitoring programs.

In the immediate area of the waste rock pile, water samples are collected from all distinct seepage locations. Where there are clusters of seeps within 50 m of each other, the one with the dominant flow

will be sampled, appropriately preserved, labelled, and submitted to an accredited laboratory for analysis. The following information is recorded per sample:

- The name of the person who collected the sample;
- Date and time of sampling; and
- Date of analysis.

Following receipt of analytical results, the following are maintained on-site to support annual Water Licence reporting and record keeping:

- Name of person who completed the analysis;
- Analytical methods or techniques used; and
- Results of the analyses, including pH, total dissolved solids (TDS), acidity and/or alkalinity, sulphate, total ammonia, nitrate, total cyanide, and a full suite of metals by ICP-mass spectrometry (MS).

3.1.5. Geochemical Monitoring of Paste Tailings

Monitoring requirements for paste tailings will be developed and implemented if and when paste tailings are generated during operations.

Results of the monitoring will be provided in the annual report to the NWB.

3.1.6. Geochemical Monitoring of Quarry Rock Backfill

The geochemical monitoring of quarry rock backfill is outlined in the *Quarry Management and Monitoring Plan*. In brief, the geochemical characterization program includes collection and analysis of two samples per year when the quarry is operating.

Results of the monitoring program are provided in the annual report to the NWB.

3.1.7. Water Quality Monitoring

The water quality monitoring program includes the following:

- Monthly sampling of contact water ponds downstream of all waste rock and ore stockpiles for parameters indicative of ML/ARD, blast residues and drilling brine;
- Monthly sampling of underground mine sump water at Doris, Madrid North and Madrid South for parameters indicative of ML/ARD, blast residues and drilling brine; and
- Monthly sampling of underground mine sump water at Boston for parameters indicative of blast residues and drilling brine.

Results of the monitoring program are provided in the annual report to the NWB.

3.1.8. Ore Stockpile

There are no specific monitoring requirements for the ore stockpile. The seepage and water quality monitoring programs also address the monitoring of contact water from this area.

3.2. Use of Waste Rock for Construction

Testing is required to demonstrate the geochemical suitability of waste rock for construction, including having a low risk of ARD and/or ML. The control of drill brines and blast residues is managed at the source through operating procedures (Section 2.5 and 2.6) and monitored via the annual seep survey which evaluates the successful performance of these control measures.

Given the potential variability of waste rock within a given mine and between different mines (Section 2.1), each potential source needs to be assessed on a case-by-case basis.

The process flow diagram provides the steps to determine if waste rock is suitable for construction. After the initial confirmation of suitability of the local geology and rock type, rock samples are submitted for testing prior to the onset of blasting, and then at a frequency of one sample for every 5,000 tonnes for underground development or every 20,000 tonnes otherwise (i.e., when waste rock is generated for the construction of infrastructure by way of surface excavations or cut and fill activities). At these intervals, a representative sample is collected. In the event that the results return a sulphur value of greater than (>) 0.1 % sulphur, the samples will be subjected to ABA and other confirmatory test work. The monitored parameters are consistent with the quarry rock sampling program (SRK, 2025d).

3.2.1. Post Construction

If qualified waste rock is used for construction outside of the water control area, the following post-construction inspections of infrastructure are to be conducted:

- An annual seep survey during spring freshet, as outlined in the *Quarry Management and Monitoring Plan*, will be carried out in the first 3 years following construction;
- Visual inspection of infrastructure with an emphasis on geology (lithology and sulphides);
- Seep sampling of pH, conductivity, sulphate, acidity, alkalinity, chloride, fluoride, nitrate, nitrite, phosphorus, ammonia, TDS, total suspended solids (TSS), total cyanide, and low-level dissolved metals; and
- ABA and trace element content (aqua regia digestion) test work on the -1 cm fraction collected from the infraction. Samples are to be collected at a frequency of 1 samples per 50,000 tonnes of rock or for a linear corridor, one sample every 500 m at pre-determined locations. The -2 mm fraction of a subset of samples will be tested by shake flask extraction to assess the soluble load of the construction material.

All results will be reported to the Board in the annual report. Should the material show evidence of acid rock drainage, the Board and Agnico Eagle will determine the best course of action.

Table 3-2. Waste Rock, Ore and Backfill Management Plan and Monitoring Summary

Aspect	Monitoring Activity	Monitoring Type	Data Management and Reporting
Mining Operations, including Waste Rock Deposition and Backfill	Pre-blast inspection by blaster	Identify “wet holes” and clean spilled ANFO	Maintain field notes
	Post-blast inspection by blaster	Confirm there were no misfires	Maintain field notes
	Visual inspection of blast face by mine geologist	Geological mapping of map faces and backs of accessible mine workings	Maintain field notes and internal record.
	Inventory of available mine void space and waste rock mined; amount waste rock and quarry rock stockpiled on surface and location; Amount of material used for backfill (source and final location) is recorded by the mine engineer.	Material quantities (cubic m and tonnes) summarized on a monthly basis	Maintain record for Annual Reporting
	Amount of paste tailings used for backfill is recorded by the mine engineer.	Material quantities (cubic metres and tonnes) summarized on a daily basis	Maintain record for Annual Reporting
	Waste rock stockpile inspection and monitoring	Visual inspection and geochemical monitoring.	Maintain field notes. Discuss findings with site geologists. Report findings in Annual Report
	Annual seep survey of materials on surface by Environmental personnel	Water samples submitted for pH, total sulphate, total ammonia, nitrate, alkalinity, and metals by ICP-MS	Maintain field notes. Report findings in Annual Report
	Monthly Water Licence monitoring by Environmental personnel	Water samples and samples of tailings submitted for analysis of parameters specified in the Water Licence	Maintain field notes. Report findings in Monthly or Annual Reports to NWB as required
	Twice annually survey by Environmental personnel	Visual inspections for seepage and if present water samples submitted for analysis of parameters specified in the Water Licence	Maintain field notes. Report findings in Monthly or Annual Reports to NWB as required
Infrastructure Construction and Post-Construction	Amount of waste rock used for construction, and location of placement tracked by Construction Supervisor	Material quantities (tonnes) and geochemical monitoring	Maintain records for Annual Reporting
	Geochemical inspections and sampling of infrastructure areas constructed using waste rock by Environmental personnel	As per Quarry Management and Monitoring Plan	As per Quarry Management and Monitoring Plan
	Annual seep survey by Environmental personnel	As per Quarry Management and Monitoring Plan	As per Quarry Management and Monitoring Plan

3.3. Documentation and Reporting

All documentation related to waste rock and ore classification, sampling, material hauled from underground, material hauled underground for backfill and waste rock, ore and mine backfill storage facility inspection records are maintained on-site.

Annual reporting required under the water licence will include:

- Volumes of waste rock and quarry and placed on the designated waste rock storage areas;
- Tonnages of waste rock stored on surface and material (waste rock and/or tailings) returned to underground;
- Available void space in the mine; and
- Results of annual geochemical monitoring of backfill and waste rock storage areas.

These details will be incorporated into the annual report submitted to the Board.

Agnico Eagle will combine all other results from the inspections and monitoring programs related to waste rock and quarry rock in an annual “Waste Rock and Mine Backfill Monitoring Report”. The monitoring report would be prepared and submitted no later than March 31 of the year following the monitoring activities, and would include all data collected prior to December 31 of the preceding year.

This brief factual report will address the requirements specified in the Water Licenses and any other permit obligations. The report will include, but not necessarily be limited to:

- A summary of the geochemical inspections;
- Results of the seep surveys;
- Results of geochemical sampling and analysis, if any;
- A summary of all mitigation activities undertaken as a result of monitoring; and
- A summary of the backfill volumes and available mine void space.

4. Contingencies

4.1. Drainage with ML/ARD Issues in Underground Sumps or Rock Stockpile Collection Ponds

In the unlikely event that the results of the underground seepage monitoring program indicate an elevated potential for ML/ARD, further investigations will be undertaken to define the contributing backfill sources from the geological and material handling records maintained during operations. If warranted, and after discussion with the appropriate regulatory agencies, water treatment measures may be implemented prior to discharge of underground water. The underground water monitoring program is described in the *Groundwater Management Plan*.

4.2. Inappropriate Construction Material Identified

In the unlikely event that the results of the seep monitoring program or the confirmatory sampling program (Section 3.2) indicate the presence of material with an elevated potential for ML/ARD has been used in construction, further investigations will be undertaken to define the extent and assess the potential impacts of the material. If warranted, and after discussion with the appropriate regulatory agencies, the material may be mitigated in place or excavated and hauled to the waste rock stockpile for eventual disposal underground.

4.3. Permanent Storage of Waste Rock Stockpiles on Surface Required

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While the majority of waste rock is expected to be placed underground by the time of closure, any remaining material on the surface will be managed on existing pads in accordance with the principles outlined in this Plan and the site-specific Closure and Reclamation Plans. Waste rock stockpiles remaining on the surface are anticipated to be not ML/ARD, based on ongoing geochemical characterization programs. These stockpiles will be graded and left in place. Geochemical sampling will continue throughout operations to confirm this classification. All above-ground storage options for closure are subject to approval by the NWB.

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