AGNICO EAGLE

MEADOWBANK COMPLEX

Interim Closure and Reclamation Plan for the Meadowbank Complex

DECEMBER 2025

VERSION 1

EXECUTIVE SUMMARY

Background and Document Purpose

The Meadowbank Complex is a gold mine located approximately 110 kilometres (km) north of Baker Lake in the Kivalliq District of Nunavut, Canada, entirely owned by Agnico Eagle Mines Limited (Agnico Eagle). It consists of the Meadowbank Mine – Agnico Eagle's original mine in the region – and the Whale Tail Mine, which is located approximately 50 km northwest of the Meadowbank Mine. The Meadowbank Complex is regulated by the Nunavut Water Board (NWB) Water Licence 2AM-MEA1530 for the Meadowbank Mine, and Water Licence 2AM-WTP1830 for the Whale Tail Mine. The Meadowbank Complex also is governed by Nunavut Impact Review Board (NIRB) Project Certificates for Meadowbank Mine (NIRB Project Certificate No. 004) and the Whale Tail Mine (NIRB Project Certificate No. 008).

Agnico Eagle wishes to unify reporting requirements for the Meadowbank Complex; to assist with this unification, WSP Canada Inc. (WSP) has combined the Meadowbank Mine and Whale Tail Mine Interim Closure and Reclamation Plans (ICRPs; (Agnico Eagle 2019; AtkinsRéalis 2020) into one document (e.g., this Meadowbank Complex Interim Closure and Reclamation Plan [herein, Meadowbank Complex ICRP]). The Meadowbank Complex ICRP has been updated to include new information related to detailed design, closure activities, and monitoring results that have become available since 2019. A Final Closure and Reclamation Plan (FCRP) will be developed as the Meadowbank Complex approaches closure, with the FCRP submitted at least 12 months prior to the end of planned mining.

By updating the Meadowbank Complex ICRP and combining the standalone Meadowbank Mine and Whale Tail Mine ICRPs into one unified document, this Meadowbank Complex ICRP aims to give Agnico Eagle flexibility in progressive reclamation, closure approaches, and closure scheduling. As the Meadowbank Complex is expected to enter closure in the coming years, this ICRP aims to achieve a 'near-final' state, so that the development of an FCRP is efficient, and results in a clear path forward for the implementation of closure designs and reclamation activities. The ICRP is also meant to update the reclamation liability, thus providing Agnico Eagle with an accurate estimate of their current financial liabilities associated with closure.

At this time, Agnico Eagle is not prepared to file a FCRP for permanent closure of all facilities at the Meadowbank Complex. However, Agnico Eagle has developed a preferred final closure plan for a major facility, the Meadowbank TSF (also known as the North Cell and South Cell TSF). To execute on this plan as part of progressive reclamation, Agnico Eagle requires certainty that the NWB has approved the closure strategy for the TSF to allow for execution of closure construction of the TSF in 2026. Following completion of closure construction of the TSF (scheduled to be completed by 2028), Agnico Eagle will request a reduction of the security. This will be aligned with the amendment of the Licence as per Part C of the Type A Water Licence to account for the corresponding reduction in reclamation liability (which will be established in advance of completion of the work). Agnico Eagle expects prompt return of the portion of the reclamation security that corresponds to the reduction of liability for the TSF once work is complete.

To limit confusion, the closure strategy for the TSF is reflected in this appendix. This appendix states that the closure strategy for this facility should be considered final as approved by the NWB and that the appendix will be transitioned over to the FCRP once Agnico Eagle is ready to submit the overall FCRP for the Meadowbank Complex.

Closure Vision

Agnico Eagle intends to leave behind a positive environmental and community legacy. In this regard, Agnico Eagle is committed to responsible mining practices for the protection of human, environmental, wildlife, and aquatic health. *The Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest* (AANDC and MVLWB 2013) provide the fundamentals for Agnico Eagle's closure vision, which is to return the Meadowbank Complex and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities.

Three closure objectives underpin Agnico Eagle's closure vision:

- **Physical stability:** The reclaimed Meadowbank Complex should be built or modified at closure so that landforms do not erode more than natural landforms, subside, or move under extreme design events, and therefore do not pose a threat to humans, wildlife, or environmental health and safety.
- **Chemical stability:** The reclaimed Meadowbank Complex should be chemically stable to prevent adverse soil, water and air quality effects that might pose a risk to humans, wildlife, or environmental health and safety.
- **Future use and aesthetics:** The reclaimed Meadowbank Complex should be compatible with the surrounding lands at the completion of the reclamation activities.

2024 and 2025 Activities

At Meadowbank Mine, no mining is currently occurring since the ore reserves were exhausted in 2019, and no new construction projects are underway. At Whale Tail Mine, mining is currently ongoing, with ore extracted conventionally using drilling and blasting, then hauled by long-haul trucks to Meadowbank Mine for processing. Resulting tailings are then deposited in the Tailings Storage Facility (TSF), Portage Pits A, E, and/or Goose at the Meadowbank Mine. In addition to routine activities throughout 2024 and 2025, several secondary construction/modification projects were undertaken at the Meadowbank Complex:

- Tailings were primarily deposited in Portage Pit E, with deposition in Portage Pit A and Goose Pit as required.
- Tailings were also deposited in the TSF North and South Cell to optimize the landform.
- Advancement of closure landform design of the TSF.
- Implementation of in-pit (Goose Pit) semi-passive treatment to enhance the degradation of nitrogen compounds in reclaim water.

- Environmental monitoring (wildlife, aquatic effects, groundwater, noise, dust suppression, waste management, air water quality) continued as required by NWB Water Licence and Project Certificate, Fisheries and Oceans Canada (DFO) authorizations, and Metal and Diamond Mining Effluent Regulations (MDMER).
- Progressive Reclamation activities, including but not limited to, ongoing closure of Portage WRSF with the placement of the NPAG/NML cover over the side slopes of the PAG/ML portion of the WRSF; continuation of site clean-up including decommissioning of unused equipment, and clean-up of Quarry 23 to allow for construction of TSF collection pond.

Closure and Reclamation

The Meadowbank Complex contains numerous components that support the mining and milling of ore. These include pits, quarries and borrow sites, waste rock and overburden storage facilities, stockpiles, water management infrastructure, and supporting infrastructure. An overview of the closure activities for each component is summarized below.

Open Pits

Currently, at the Meadowbank Mine, the Portage Pits receive reclaim (e.g., mill) water as part of site-wide water management. Goose Pit is currently being actively aerated to remove nitrogen species. The same aeration process operating in Goose Pit will begin in Portage Pit at the onset of closure. Treated water from Portage will be transferred to Vault Pit and discharged at depth to create a meromictic pit lake system. As Portage and Goose Pit are dewatered, they will be actively flooded with freshwater and reconnected with Third Portage Lake once criteria are achieved. Similarly, once all Portage and Goose Pit water is transferred to the Vault Pit, the Vault Pit will be actively flooded with freshwater and reconnected with Wally Lake once criteria are achieved.

At Whale Tail Mine, water management infrastructure is still configured to prevent the accumulation of water within the pits. Once mining is complete, pumps, pipes, and other water management elements will be reconfigured to prepare the pits for flooding in accordance with the pit flooding schedule. The dewatered Whale Tail Pit and IVR Pit area will be filled with a combination of natural runoff and contact water from the entire site. Sources include the Whale Tail and IVR Waste Rock Storage Facility (WRSF) Contact Water Collection Systems; the Whale Tail and IVR Attenuation ponds; and water pumped from Whale Tail Lake (South Basin).

To confirm water quality predictions and to determine if water treatment will be required in closure, water quality forecast modeling is completed yearly to identify parameters of concern for currently flooded pits. This process will continue at Meadowbank Mine and will begin at Whale Tail Mine once the Whale Tail and IVR Pits begin flooding. This ICRP currently incorporates a water treatment plant (WTP) as a contingency measure if water in the flooded pits is not suitable for release to the environment. Once the water in the re-flooded pit area meets the Meadowbank and Whale Tail Water Licence conditions, it will be deemed suitable for interaction with the receiving environment through the process of dike breaching.

Underground Workings

Only the Whale Tail Mine has underground workings, and the underground WRSF (located aboveground) is a temporary facility. This material will be returned underground or used to make Cemented Rock Fill (CRF) as backfill during mining operations and during closure. This waste rock will be entirely consumed during the backfilling process, with no underground waste rock remaining on the surface at the end of the mine life. At the end of operation, the underground workings will be actively flooded with a combination of natural runoff and underground contact water from the Groundwater Storage Ponds (GSPs), the IVR Attenuation Pond, and water pumped from Whale Tail Lake (South Basin).

It has been assumed that all machinery and equipment have no salvage value and will be left in the underground workings due to the site location and high transport costs. This equipment and any remaining infrastructure will be de-energized, cleaned, drained, inspected, and remediated, as appropriate, to eliminate the risk of dissipation of contaminants due to potential leakages. The portal, including the box cut leading to the portal, will be backfilled with non-potentially acid generating / non-metal leaching (NPAG/NML) waste rock material to eliminate access into the underground workings by people and animals.

Dikes and Saddle Dams

When water quality meets Water Licence conditions, South Camp Dike, Bay-Goose Dike, Vault Dike, Whale Tail Dike, and Mammoth Dike will be opened to reconnect the flooded pits with the adjacent lakes. Dike breaching (i.e., reconnection) will likely occur during winter, when thick ice conditions are expected to coincide with annual minimum lake levels. East Dike will remain intact, preserving the 1 m difference in elevation between Third Portage Lake and Second Portage Lake. Central Dike, Saddle Dams 1, 2, 4, and 5 will also remain intact to contain the stored tailings in the TSF. The remaining water retention and dewatering berms/dams (i.e., WRSF Dike and IVR Dikes) will be kept intact to provide a barrier between the facilities and surrounding lakes until the water quality (seepage and runoff collected from facilities, and from the flooding area) is suitable for release to the environment. Once this is achieved, the remaining structures will be decommissioned. Regular field inspections of the structures are planned to confirm that dikes are performing adequately in closure and post-closure.

Waste Rock and Overburden Storage Facilities

At the Meadowbank Mine, much of the closure and reclamation of the Portage WRSF has already been completed as part of progressive reclamation. The potentially acid generating / metal leaching (PAG/ML) material of the Portage WRSF is covered by a 4.0 m layer of NPAG/NML rock for geochemical stability, keeping the PAG/ML waste rock frozen, and controlling the migration of runoff to PAG/ML materials. The Portage WRSF is instrumented for thermal monitoring with thermistors to monitor the WRSFs temperature as freezing progresses. For the Vault WRSF, the waste rock is mainly NPAG/NML, and the

PAG/ML waste rock was encapsulated in the center of the pile during operations. At the Whale Tail Mine, WRSFs are managed similarly to those at the Meadowbank Mine. Based on the cover thermal modeling results, the Whale Tail WRSF and the IVR WRSF are being progressively covered with a 4.7 m thick closure cover consisting of NPAG/NML waste rock. The runoff water collected from the Portage, Vault, Whale Tail and IVR WRSFs will report to corresponding pits, and ultimately be released during dike reconnection when pit water quality is acceptable as per the Water Licence conditions.

Tailings Storage Facility

Agnico Eagle has developed a preferred closure plan for the facility, the Meadowbank TSF North and South Cell. To execute on this plan, Agnico Eagle requires certainty that the NWB has approved the closure strategy for the TSF and that it will promptly receive the return of the portion of the reclamation security that corresponds to the reduction of liability for the TSF once work is complete. To limit confusion, the closure strategy for the TSF is reflected in an appendix to the ICRP. This appendix states that the closure strategy for this facility should be considered final as approved by the NWB and that the appendix will be transitioned over to the FCRP once Agnico Eagle is ready to submit the overall FCRP for the Meadowbank Complex.

The appendix for the final Meadowbank TSF provides detail on the TSF cover geotechnical and geochemical stability; the studies concluded that a minimum 2.0 meter tailings cover would be sufficient to minimize oxygen ingress regardless of tailings temperature, and to meet physical and chemical stability criteria. It was also concluded that a thicker cover would not provide any significant additional geochemical stability, and instead would introduce more risk from a geotechnical standpoint, increasing the mass load on the tailings.

Water Management Facilities

Freshwater infrastructure will ultimately be removed once no freshwater is required for camp use in closure at Whale Tail and Meadowbank. The pits flooding system equipment (i.e., pumps, syphons, and piping) will be removed once pit flooding is complete. Water diversion ditches located in the northern periphery of the North Cell TSF and Portage WRSF will be integrated in the TSF cover system. The tailings pipelines will be decommissioned following completion of ore processing at the mill. Water collected by the various contact water collection systems will continue during the operations, and when required in closure, and post-closure phases. Channels will either remain in place to convey fresh water or be reclaimed to blend into the post-closure landscape.

At Whale Tail Mine, remaining pipes, pumps, and other infrastructure will be removed at the onset of post-closure. A sill will be constructed in the Kangislulik Lake, upstream of the Mammoth Dike, to support the increase in water level in Whale Tail Lake, which is a permanent feature, and will remain in post-closure (this sill is part of the Fish Habitat Offsetting Plan for Whale Tail Pit). The IVR diversion channels will be maintained as required and recontoured and/or surface-treated according to site-specific conditions to minimize erosion from surface runoff in closure until site water quality meets the

Water Licence conditions. No closure measures are necessary for the freshwater bypass channel (South Whale Tail Channel) from Whale Tail Lake (South Basin) to Kangislulik Lake because its invert elevation will be above the final water level in the lake.

Mine Infrastructure

All buildings and structures will be decontaminated, decommissioned, and dismantled at closure. Demolition waste that cannot be reused, recycled, or provided to local interests will be disposed of in the on-site landfill or reported to the Whale Tail underground. Disturbed site areas will be re-graded to suit the surrounding topography. In areas where the original ground surface was lowered for site grading or structural requirements, the slopes will be stabilized and contoured. General drainage direction will be directed towards the open pits. Cover materials may be required for erosion and dust control.

Waste Management Facilities

At closure, landfills will receive non-hazardous wastes. At Meadowbank Mine, Landfill #1 is located at the base, and on the south side of the Portage WRSF. Landfill #2 will be developed on top of the Portage WRSF at closure. Ultimately, the Portage WRSF will be covered in NPAG/NML material, which will also entomb the landfill waste.

At Whale Tail Mine, the Whale Tail Landfill is located within the Whale Tail WRSF and began receiving waste in 2023. This landfill will continue to receive waste in closure. As an ARD/ML control measure, the Whale Tail WRSF will be capped with a minimum 4.7 m thick layer of coarse acid-buffering ultramafic rock, which will also cover the landfill.

Hazardous materials will be managed in operations such that minimal quantities remain on-site at closure. Any remaining hazardous materials produced during decommissioning and demolition activities that cannot be used during closure will be transported to licensed disposal facilities in the south as per the Hazardous Material Management Plan.

Baker Lake Site Facilities

Once free of hazardous materials, the infrastructure of the Baker Lake Site Facilities will be offered to local interests. If communities are uninterested, buildings, infrastructure, including office trailers, and barge landing will be dismantled and decontaminated. Once closure efforts have decreased, and the Meadowbank Complex no longer has need for the Baker Lake Site Facilities, hazardous materials and chemicals that may be remaining in closure will be removed. Following removal of hazardous wastes and infrastructure removal, compacted areas including gravel pads and roadways will be decompacted via dozer or wing-tipped subsoiler, and culverts will be removed from the roadways to re-establish natural drainage patterns.

Transportation Routes

Agnico Eagle manages the All-Weather Access Road (AWAR) as a private road with limited public access during operations, while the Whale Tail Haul Road does not permit local traffic. Agnico Eagle will consider the option of leaving the AWAR and Whale Tail Haul Road intact if deemed in the public interest based on guidance and approval from local communities and regulatory agencies. If there is no local interest, the AWAR and Whale Tail Haul Road will be reclaimed. Natural drainage courses will be restored by removing culverts and bridges. Road base material will be ripped, excavated, and removed.

Quarries and Borrow Sites

Equipment (e.g., crushers) will be decommissioned and removed from the quarries. Quarries and borrow sources developed during AWAR and Whale Tail Haul Road construction will be reclaimed following use. Access into each quarry area will be blocked by placing a rock pile across the entryway to prevent easy access by wheeled vehicles. The base of the quarries will be graded to provide unrestricted drainage of runoff to the surrounding tundra, and to prevent the ponding or collection of water on the sites.

Monitoring and Security

The CPCMP (Appendix 6-A) provides detailed information on closure and post-closure monitoring activities for all components of the Meadowbank Complex. A permanent closure and reclamation financial security cost estimate has been prepared with the present layout and infrastructure at Meadowbank Complex (SECTION 8). The cost estimate covers the closure and reclamation of all facilities as described in this ICRP and was prepared using RECLAIM Version 7.0 for permanent closure of the Meadowbank Complex.

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DOCUMENT CONTROL

Version	Date	Section	Page	Revision
A	November 2024			Pre-Nunavut Water Board submission; for review by KivIA and CIRNAC
1	December 2025			Interim Closure and Reclamation Plan for Meadowbank Complex submitted to NWB for approval. Refinements/clarifications have been made based on the initial review with KivIA and CIRNAC As the closure of Meadowbank Mine and Whale Tail Mine are integral to one another, this Plan has amalgamated licenses 2AM-MEA1530 and 2AMWTP1830.

Prepared by:

Agnico Eagle Mines Limited – Meadowbank Division

ACRONYMS

Abbreviation	Definition
AANDC	Aboriginal Affairs and Northern Development Canada
ABA	Acid Base Accounting
AEMP	Aquatic Effects Monitoring Program
Agnico Eagle	Agnico Eagle Mines Limited
APECs	Areas of Potential Environmental Concern
ARD	Acid Rock Drainage
AWAR	All-Weather Access Road
BB Phaser Pit	Baby Phaser Pit
CCME	Canadian Council of Ministers of the Environment
CDA	Canadian Dam Association
CEQGs	Canadian Environmental Quality Guidelines
CESCC	Canadian Endangered Species Conservation Council
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
COIs	Communities of Interest
CPCMP	Closure and Post-Closure Monitoring Plan
CREMP	Core Receiving Environment Monitoring Plan
CRF	Cemented Rock Fill
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
EEM	Environmental Effects Monitoring
ELC	Ecological Land Classification
ESA	Environmental Site Assessment
FCRP	Final Closure and Reclamation Plan
FEIS	Final Environmental Impact Statement
GN	the Government of Nunavut
GSP	Groundwater Storage Pond
HHERA	Health and Environmental Risk Assessment
ICRP	Interim Closure and Reclamation Plan
IQ	Inuit Qaujimajatuqangit
ISV	Inuit Societal Values
KEAC	Kivalliq Inuit Elders Advisory Committee
KivIA	Kivalliq Inuit Association
KvSEMC	Kivalliq Socio-Economic Monitoring Committee
LOM	Life of Mine
LSA	Local Study Area
MDMER	Metal and Diamond Mining Effluent Regulations
Meadowbank Complex	Collectively, the Meadowbank Mine, Vault Pit, and Whale Tail Mine
Meadowbank Mine	Facilities and infrastructure at the Meadowbank mine site
ML	Metal Leaching
MVLWB	Mackenzie Valley Land and Water Board
NIRB	Nunavut Impact Review Board

Abbreviation	Definition
NPAG/NML	Non-Potentially Acid Generating/Non-Metal Leaching
NPR	Neutralization Potential Ratio
NRCan	Natural Resources Canada
NWB	Nunavut Water Board
OMS	Operation, Maintenance and Surveillance
PAG/ML	Potentially Acid Generating/Metal Leaching
PGA	Peak Ground Acceleration
PM	Particulate Matter
PMF	Probable Maximum Flood
POPC	Parameters of Potential Concern
QA/QC	Quality Assurance and Quality Control
RF	Rockfill Road
RIME	Research Institute on Mines and the Environment
SEMP	Socio-Economic Monitoring Program
SQROs	Soil Quality Reclamation Objectives
STP	Sewage Treatment Plan
TARP	Trigger Action Response Plan
TDS	Total Dissolved Solids
TEMP	Terrestrial Ecosystem Monitoring Plan
TOC	Total of Carbon
TSF	Tailings Storage Facility
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
Whale Tail Mine	Open pits and underground mines and infrastructure at the Whale Tail Mine
WRSF	Waste Rock Storage Facility
WSP	WSP Canada Inc.
WTP	Water Treatment Plant

LIST OF UNITS

Unit Abbreviation	Unit
km	kilometres
%	percentage
ha	hectares
°	degrees
’	minutes
”	seconds
km^2	square kilometres
t	tonnes
m	metres
Mtpa	million tonnes per annum
Mt	million tonnes
mRL	meters relative to level
masl	metres above sea level
m^3/yr	cubic metres per year
m^3	cubic metres
Mm^3	million cubic metres
t/m^3	tonnes per cubic metre
m^2	square metre
mm	millimetres
kg	kilograms
L	litres
MW	megawatt
KV	kilovolt
V	volt
KW	kilowatts
km/h	kilometres per hour
ºC	degrees Celsius
m/s	metres per second
mm	millimetres
g	grams
°C/m	degrees Celsius per metre
m/day	metres per day
mg/L	milligrams per litre
µS/cm	microsiemens per centimeter
m^3/day	cubic metres per day

SECTION 1 • INTRODUCTION

The Meadowbank Complex is a gold mine located approximately 110 kilometres (km) north of Baker Lake in the Kivalliq District of Nunavut, Canada, entirely owned by Agnico Eagle Mines Limited (Agnico Eagle). At present, Meadowbank Complex components include:

- a Marshalling Facility in Baker Lakea 110-km All-Weather Access Road (AWAR) connecting Baker Lake to the Meadowbank Mine
- the Meadowbank Mine
- the Whale Tail Mine: located 50 km northwest of Meadowbank Mine
- the Whale Tail Haul Road, connecting the Meadowbank Mine to Whale Tail Mine

The Meadowbank Complex is regulated by the Nunavut Water Board (NWB) Water Licence 2AM-MEA1530 for Meadowbank Mine, Water Licence 2AM-WTP1830 for Whale Tail Mine, as well as the Nunavut Impact Review Board (NIRB) Project Certificate No.004 for Meadowbank Mine and Project Certificate No.008 for Whale Tail Mine.

Due to the multiple components of the Meadowbank Complex and their associated licenses, Agnico Eagle wishes to unify these components under one closure plan, to streamline reporting requirements, given that these components all function as one larger entity, despite their spatial separation. To assist with this unification, WSP Canada Inc. (WSP) has combined the Meadowbank Mine and Whale Tail Mine Interim Closure and Reclamation Plans (ICRPs; AtkinsRéalis 2019; Agnico Eagle 2019) into one document. As a mine has several key phases of its life cycle, definitions are provided below to avoid confusion:

- **Operations:** The phase of a mine's life cycle where mining and milling are occurring. Progressive reclamation may occur, where components that are no longer vital to operations are permanently reclaimed to reduce efforts during Closure. During operations, mines conduct environmental monitoring as outlined in their operational permits. Operations may be interrupted due to commodity prices, or other factors. A temporary interruption often results in Care and Maintenance, which is a passive state for the mine.

- **Care and Maintenance:** A passive state, where the mine is no longer operating as defined in Operations. This state is typically temporary and can last from months to years. During Care and Maintenance, operators intend to resume activities, thus facilities within the mine are maintained for a quick restart. Monitoring during this phase aligns closely with monitoring during operations.

- **Closure:** The phase following **Operations.** Ore reserves are exhausted, and reclamation activities begin in earnest, as the mine is in its ultimate configuration, and operational activities have ceased. Tasks such as backfilling, recontouring, soil placement (if necessary), and pit flooding occur. There is no intention to re-open the mine or conduct additional disturbance.

- **Post-Closure:** The phase following **Closure**. Reclamation and closure activities are completed; pits are flooded to targeted elevations, engineered covers have been constructed over waste rock storage facilities (WRSFs), and the mine is in the final configuration.

1.1 Description of the Proponent

Proponent information is provided in Table 1.1-1.

Table 1.1-1: Agnico Eagle Proponent Information

Information Type	Associated Information
Proponent	Agnico Eagle Mines Limited
Proponent Address	10200, Route de Preissac Rouyn-Noranda, Québec J0Y 1C0 Canada
Component Locations:	**Meadowbank Mine:** latitude: 65° 1′ 7″ N, longitude: 96° 4′ 26″ W **Whale Tail Mine:** latitude: 65° 24′ 36″ N, longitude: 96° 41′ 41″ W Territory of Nunavut, Canada
Proponent Closure Consultant:	WSP Canada Inc. 16820 107 Avenue, Edmonton, Alberta, T5P 4C3 Canada
The contact person for the Meadowbank Complex is:	Jamie Quesnel Director, Permitting and Regulatory Affairs Direct: 819.759.3555 jamie.quesnel@agnicoeagle.com

1.2 Closure and Reclamation Planning Team

The Meadowbank Complex Interim Closure and Reclamation Plan (ICRP) has been prepared by a multi-disciplinary team of Agnico Eagle personnel, technical qualified professionals, and consultants. The team consists primarily of staff members from Agnico Eagle’s Permitting, Engineering, Closure, and Environment Departments. WSP provided external support for the development of the Meadowbank Complex ICRP, along with other consultants and contractors.

During the development of the ICRP, the Closure and Reclamation Planning Team's role had several components:

- Lead of the closure project.
- Liaise with engineering and environmental consultants and manage inter-company relationships.
- Take responsibility for the staffing and organization of the studies required for the interim and final closure.
- Adhere to scheduling and permitting requirements.
- Identify closure risks and opportunities.
- Manage documentation.
- Provide services in an ethical manner that is consistent with the Agnico Eagle corporate policies and its professional reputation.

1.3 Background

The 100% Agnico Eagle-owned Meadowbank Complex is located approximately 110 km north of Baker Lake in the Kivalliq District of Nunavut, Canada (Figure 1.3-1). It consists of the Meadowbank Mine – Agnico Eagle's original mine in the region – and the Whale Tail Mine component of the Meadowbank Complex is located approximately 50 km northwest of the Meadowbank Mine.

The Meadowbank Mine was first Licensed by the NWB in 2008 and achieved commercial production in March 2010. Shortly after, exploratory activities for the Whale Tail Mine began, with the intention that the new mine would provide additional ore to the Meadowbank Mine mill. Permitting efforts for the Whale Tail Mine commenced in 2016. In July 2018, Meadowbank Mine's original permit (i.e., Water Licence) was renewed and amended to allow for ore from Whale Tail Mine to be hauled and processed at the Meadowbank Mine. The permit also updated the volume of allowed tailings generated at the Meadowbank Mine, due to the extended life of mine (LOM). Due to the permitting process, the Meadowbank Complex underwent a brief pause in production, following which, processing of ore from Whale Tail Mine began in Q4 of 2019. Shortly after, exploration identified further reserves at Whale Tail Mine, that would require the creation of an additional pit (the IVR Pit) and underground operations. In early 2020, another amendment to the Water Licence was issued to permit another four years of hauling of ore from Whale Tail Mine to accommodate the newly identified reserves. In Q4 of 2020, the IVR Pit became productive, and in August 2022, underground operations reached commercial production.

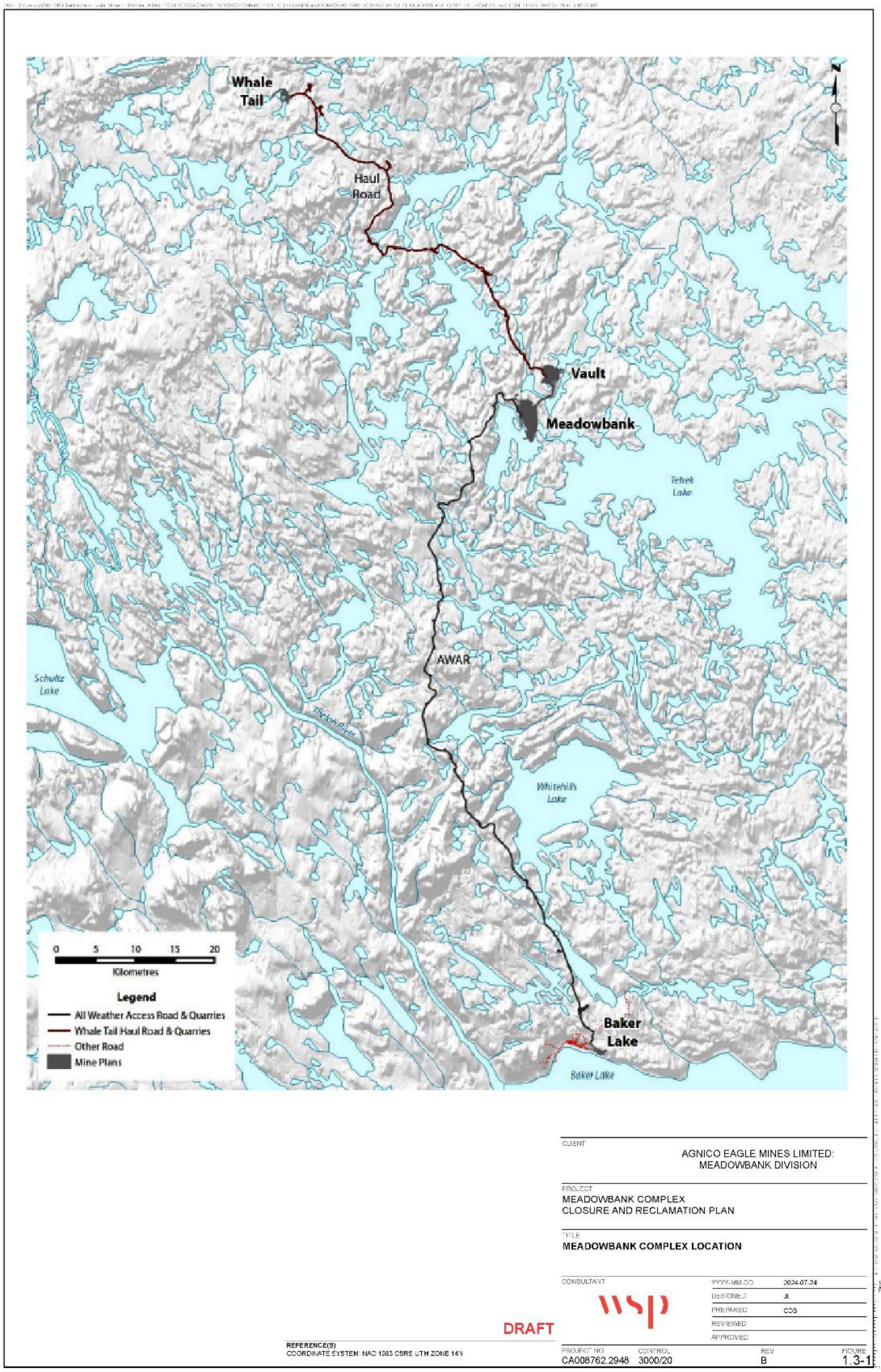


Figure 1.3-1: Meadowbank Complex Location

Presently, all ore at the Meadowbank Complex is sourced from the Whale Tail Mine. Mining at Whale Tail Mine is by open pit and underground operations. The ore is extracted conventionally using drilling and blasting, then hauled via the Whale Tail Haul Road by a long-haul off-road truck fleet to the mill at the Meadowbank facilities for processing. Given the additional tailings generated by the extended LOM, several rounds of permitting ensued prior to haulage of ore from Whale Tail Mine to Meadowbank Mine, to allow in-pit tailings disposal at Goose Pit (commenced July 5, 2019) and in Portage Pit E (commenced August 20, 2020).

Recent positive grade reconciliation led to adjustments in the ore zone model and mineral reserve estimation parameters, resulting in a new proven and probable mineral reserve estimate of 1.8 million ounces of gold (15.4 million tonnes grading 3.72 g/t gold). Exploration also continued to return significant mineralization at depth, with results up to 11.3 g/t gold over 6.4 m at 979 m depth. Based on these results, Agnico Eagle has approved an extension to the IVR open pit, which is expected to contribute approximately 70,000 ounces of gold to the 2026 production profile. Closure of the Meadowbank Complex will commence at the end of commercial operations and is expected to last 15 to 20 years. Table 1.3-1, and Figure 1.3-2 to Figure 1.3-5 present the location and components of the Meadowbank Complex.

Table 1.3-1: Major Meadowbank Complex Components

Meadowbank Mine		Whale Tail Mine	Baker Lake Marshalling Area[a]
Portage Pit (phase A to E)	Emulsion Plant	Whale Tail Pit	Barge Landing Area
Goose Pit	Vault Road	IVR Pit	Dry Freight Storage Facility
Portage WRSF	Worker Camp	Whale Tail WRSF	Bulk Fuel Storage Facility
NPAG/NML Stockpiles	Airstrip	IVR WRSF	Jet Fuel Storage Facility
Ore Stockpile	110-km All-Weather Access Road (AWAR)	Ore Stockpiles (No. 1 to 4)	Water Management Infrastructure
Milling Facilities (e.g., crusher, mill)	Vault Pit	Water Management Dikes	Diesel Generators
Tailings Storage Facility	Phaser Pit	Whale Tail Camp	Diesel Light Plants
Water Management Infrastructure	BB Phaser Pit	Whale Tail Haul Road	-
Containment Dikes	Vault WRSF	Water Management Infrastructure	-
Water Management Dams		-	-

- = no data; WRSF = Waste Rock Storage Facility; NPAG/NML = Non-Potentially Acid Generating/Non-Metal Leaching.

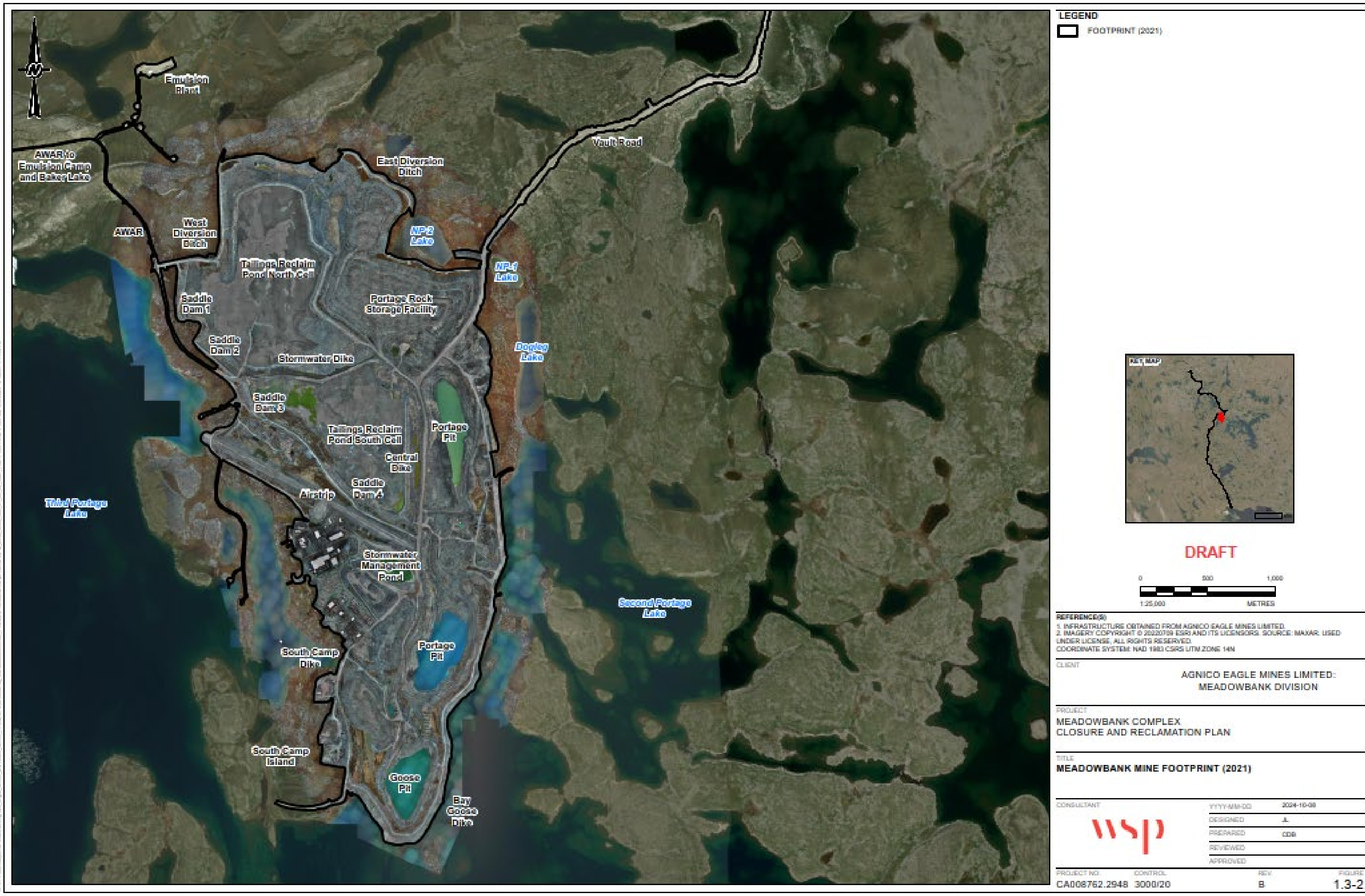


Figure 1.3-2: Meadowbank Mine Overview

Figure 1.3-3: Vault Pit Overview

Figure 1.3-4: Whale Tail Mine Overview

Figure 1.3-5: Baker Lake Marshalling Area

1.4 Regulatory Framework

The Meadowbank Complex ICRP has been prepared as a combination of, and updates to, the existing ICRPs for the Whale Tail Mine and the Meadowbank Mine. This ICRP follows applicable regulatory guidelines (Table 1.4-1).

The various components associated with the Meadowbank Complex require several different authorizations, leases, and permits from regulatory agencies including the NWB; the Kivalliq Inuit Association (KivIA); Environment and Climate Change Canada (ECCC); Metal and Diamond Mining Effluent Regulations (MDMER); Fisheries and Oceans Canada (DFO); Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC); and the NIRB (Table 1.4-2).

Table 1.4-1: Applicable, Guidelines, Standards or Policies

Applicable Guidance Document	
Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (AANDC and MVLWB 2013)	NTI Reclamation and Policy and Guidelines
Mine Site Reclamation Policy for Nunavut (AANDC 2002)	Environmental Code of Practice for Metal Mines (EC 2009)
Mine Site Reclamation Guidelines for the Northwest Territories (AANDC 2007)	The Guidelines for the Meadowbank Socio-Economic Monitoring Program (NIRB 2012)
The Government of Nunavut Environmental Guideline for Site Remediation (GN 2009)	-

- = not data.

Table 1.4-2: Key Applicable Federal, Territorial, and Regional Acts

Applicable Acts for the Meadowbank Complex (i.e., all components)	
Arctic Waters Pollution Prevention Act and Regulations	Nunavut Transportation of Dangerous Goods Act and Regulations
Canadian Environmental Assessment Act, 2012 and Regulations	Nunavut Waters and Nunavut Surface Rights Tribunal Act and Regulations
Canadian Environmental Protection Act and Regulations	Nunavut Commissioner's Lands Act and Regulations
Fisheries Act and Regulations	Nunavut Environmental Protection Act and Regulations
Mackenzie Valley Resource Management Act and Regulations	Nunavut Environmental Rights Act and Regulations
Navigable Waters Protection Act and Regulations	Nunavut Mine Health and Safety Act and Regulations
Northwest Territories Waters Act and Regulations	Science Act and Regulations
Species at Risk Act	Nunavut Agreement
Territorial Lands Act and Regulations	-
Component Specific Permits and Authorizations	
Meadowbank Mine	NWB Type A Water Licence 2AM-MEA1530
	NIRB Project Certificate No. 004
	DFO HADD Authorization NU-03-190 AWAR
	DFO HADD Authorization NU-03-191.3 and NU-03-191.4 Mine Site
	DFO Authorization NU-14-1046 Phaser Lake
	CIRNAC Land Leases 66A/8-71-3 (AWAR) and 66A/8-72-6 (AWAR Quarries)
	KivIA Production Lease KVPL08D280
	KivIA Quarry Lease KVCA06Q11
	KivIA Right of Way KVRW06F04
Whale Tail Mine	NWB Type A Water Licence 2AM-WTP1830
	NIRB Project Certificate N0. 008
	DFO HADD Authorization 16HCAA-00370
	DFO HADD Authorization 20HCAA-00275
	CIRNAC Land Leases 66H/8-02-1 (Whale Tail Haul Road) and 66H/8-01-4 (Whale Tail Haul Road Quarries)
	KivIA Production Lease KVPL17D01
	KivIA Quarry Lease KVCA15Q01, KVCA15Q02, KVCA18Q01
	KivIA Right of Way KVRW15F01

- = no data; CIRNAC = Crown-Indigenous Relations and Northern Affairs Canada; DFO = Fisheries and Oceans Canada; HADD = Harmful Alteration, Disruption or Destruction KivIA = Kivalliq Inuit Association; NIRB = Nunavut Impact Review Board; NWB = Nunavut Water Board.

1.5 Community Consultation and Engagement

1.5.1 Approaches and Objectives

Community consultation and engagement was a critical consideration in the regulatory review process for Meadowbank Complex's Complex Project Certificates and the Type A Water Licenses. Following successful permitting, Agnico Eagle has continued public consultation with local employees, local communities, and regulatory agencies. Approaches include hearings, community roundtables, and meetings to garner a better general understanding of the rights, interests, values, aspirations, and concerns of the potentially affected parties. Through this continued consultation, Agnico Eagle has developed an operational culture that recognizes and respects these relevant interests in the planning and executing processes. Agnico Eagle has, and will continue to, engage with the KivIA and other stakeholders. Currently, Agnico Eagle is committed to the following:

- Supporting the local community for procuring resources and personnel wherever possible.
- Maintaining open lines of communication between all parties involved. Extensive traditional knowledge has been gained and community input has been solicited through meetings, personal interviews, site visits, discussions with local heritage associations, and traditional knowledge-based land use maps.
- Understanding and integrating the Meadowbank Complex within a context of ecosystem integrity, social health, and economic stability. Agnico Eagle's objective is to minimize disturbance to the local environment during operations and leave the site in as natural a state as possible after closure. Post-closure monitoring will be a key component in confirming this objective is realized.

1.5.2 Incorporation of Inuit Qaujimajatuqangit

One of Agnico Eagle's key objectives is to incorporate Inuit Qaujimajatuqangit (IQ) into the operation and closure planning of the Meadowbank Complex. IQ is defined as follows:

> *IQ refers to the traditional knowledge and wisdom of Inuit society – it is a set of values and practices that transcend time immemorial. It serves as an ethical framework and a comprehensive guide towards leading a meaningful, fulfilling, and healthy life. Although described here in written format, IQ holds its greatest value and importance when passed down and shared orally by Inuit knowledge holders and elders. IQ embodies a holistic approach to living which fosters respectful relationships with all aspects of life, including fellow Inuit, the community, the land, and the animals with whom we all coexist*.

By embracing IQ, this report aims to support a path forward that helps to navigate the complexities of the future and promote a balanced and sustainable way of living (Karetak et al. 2017). It is important to recognize that IQ sits at the core of the Inuit value system and way of life. Because of this, Inuit practice and follow IQ in their daily lives. These values apply to all aspects of Inuit life, whether it is at home with family and friends, or with the environment. It is also followed in the way that Inuit conduct business or work.

IQ concerns related to the Meadowbank Complex have been provided by community members and representatives (i.e., Hunters and Trappers Organization and KivIA) since the Whale Tail Final Environmental Impact Statement (FEIS) Addendum submission was made in 2016. Concerns and mitigation measures are listed in the 2018 FEIS Addendum (Agnico Eagle 2018a).

1.5.3 Consultation and Engagement Efforts

Since operations began, Agnico Eagle has continued public consultation on a regular basis by meeting with communities, regulatory agencies, and local employees. Effective consultation has provided Agnico Eagle with a better understanding of the rights, interests, values, aspirations, and concerns of communities of interest (COIs). Through this continued consultation, Agnico Eagle has developed an operational culture that recognizes and respects these relevant interests in the planning and executing processes at the Meadowbank Complex. Tools to support ongoing engagement include the following:

- The Kivalliq Socio-Economic Monitoring Committee (KvSEMC) who meet annually to present data and consider socio-economic impacts.
- The Agnico Eagle Kivalliq Projects Socio-Economic Monitoring Program (SEMP), which is aimed to promote consideration of cumulative impacts and streamline development and review of monitoring reports, while respecting the unique regulatory requirements of individual projects.
- The Kivalliq Inuit Elders Advisory Committee (KEAC), which is a group who provide invaluable guidance to Nunavummiut and our Nunavut teams. The Elders’ Committee not only keeps local communities informed about Agnico Eagle’s mining activities and future plans, but it also provides IQ a body of Inuit traditional knowledge, and Inuit Societal Values (ISV), a set of guiding community principles, that can be integrated into many facets of the mine life cycle, planning, workforce, and wellness.

In January 2024, Agnico Eagle initiated in-person engagement activities related to the ICRP, and various public meetings, meetings, and site visits were hosted. A summary of comments and questions related to closure can be found in Appendix 1-A. This appendix summarizes comments and questions received during in-person engagement sessions up to April 2025.

Engagement past April 2025 has been ongoing and in addition, future engagement is slated for 2026. As required by NIRB Project Certificate No.008 Condition 51, Agnico Eagle was to develop a conceptual Socio-economic Closure Plan for the Whale Tail Mine. The Socio-economic Closure Plan has been updated as part of the 2024 Annual Report and will continue to be updated on a yearly basis and reported through the NIRB annual report process. Consultation in 2025, past April 2025, will be summarized in the 2025 annual report.

1.5.3.1 Closure and Reclamation Plan Engagement with KivIA and CIRNAC

In addition to the engagement activities as listed above, as holders of security for the Meadowbank Complex, Agnico Eagle has actively worked with the KivIA and CIRNAC through the revision of the Meadowbank Complex ICRP in 2025. The following activities occurred through this ICRP review process:

- November 15, 2024: Issue draft for comment ICRP to KivIA and CIRNAC
- January 24, 2025: In-person meeting with KivIA and CIRNAC to present the ICRP in more detail and discuss components of the ICRP
- Mid-February to end April 2025: Received comments from KivIA and CIRNAC, mostly related to the TSF cover and water management. Address comments and provide additional information during this time
- May 8-9, 2025: In-person meeting with KivIA and CIRNAC for technical discussion on the TSF cover and presentation of additional information
- August 20-22, 2025: Site field visit with three participants from KivIA and four from CIRNAC. Parties were toured around Meadowbank and Whale Tail, which included driving between Meadowbank and Whale Tail on the Whale Tail Haul Road. Locations observed included but not limited to the TSF, WRSFs, dikes, pits, lakes, and quarries.
- October 6, 2025: Conference call with KivIA to present updates on the TSF cover and the preferred option with supporting technical evidence.
- October 10, 2025: In-person meeting with CIRNAC (KivIA in attendance virtually) to present updates on the TSF cover and the preferred option with supporting technical evidence.

1.6 Purpose and Scope of the Interim Closure and Reclamation Plan

The general purpose of the Meadowbank Complex ICRP is to update the existing 2019 ICRPs and combine them into one unified document, allowing Agnico Eagle flexibility in progressive reclamation, closure approaches, and closure scheduling. As the Meadowbank Complex is expected to enter closure in the near future, this ICRP aims to achieve a '*near-final*' state, so that the development of a Final Closure and Reclamation Plan (FCRP) is efficient, and guides the implementation of closure designs and reclamation activities. The Meadowbank Complex ICRP is also meant to update the reclamation liability, thus providing Agnico Eagle with an accurate estimate of their current financial liabilities associated with closure. To accomplish this, Agnico Eagle has set several goals for the Meadowbank Complex ICRP, which are presented in Table 1.6-1.

At this time, Agnico Eagle is not prepared to file a FCRP for permanent closure of all facilities at the Meadowbank Complex. However, Agnico Eagle has developed a preferred final closure plan for a major facility, the Meadowbank TSF (also known as the North Cell and South Cell TSF). To execute on this plan as part of progressive reclamation, Agnico Eagle requires certainty that the NWB has approved the closure strategy for the TSF to allow for execution of closure construction of the TSF in 2026. Following completion of closure construction of the TSF (scheduled to be completed by 2028), Agnico Eagle will request a reduction of the security. This will be aligned with the amendment of the Licence as per Part C of the Type

A Water Licence to account for the corresponding reduction in reclamation liability (which will be established in advance of completion of the work). Agnico Eagle expects prompt return of the portion of the reclamation security that corresponds to the reduction of liability for the TSF once work is complete. To limit confusion, the closure strategy for the TSF is reflected in this appendix. This appendix states that the closure strategy for this facility should be considered final as approved by the NWB and that the appendix will be transitioned over to the FCRP once Agnico Eagle is ready to submit the overall FCRP for the Meadowbank Complex.

Table 1.6-1: Core Objectives of the Meadowbank Complex Interim Closure and Reclamation Plan

<table>
<tr><th>Core Closure Objectives</th><th>Core Social Objectives</th><th>Core Corporate /Financial Objectives</th><th>Core Regulatory Objectives</th></tr>
<tr><td>Provide closure objectives for Meadowbank Complex components</td><td>Help protect traditional values</td><td>Estimate the closure and reclamation costs</td><td rowspan="2">Address applicable requirements under the Water Licence 2AM-MEA1530, Water Licence 2AM-WTP1830, Project Certificates No. 004 and No. 008</td></tr>
<tr><td>Identify uncertainties related to the proposed closure objectives, options, or criteria</td><td>Protect public and employee health, safety, and welfare using known, safe, and responsible reclamation practices</td><td>Preserve shareholder value</td></tr>
<tr><td>Predict the likelihood of potential post-reclamation risks to the environment and human and wildlife health</td><td>Mitigate socio-economic impacts in the area where the mine is located following decommissioning and closure as practically possible</td><td>Include Agnico Eagle and shareholder goals in closure planning</td><td>Comply with applicable standards, guidelines, requirements, and objectives</td></tr>
<tr><td>Identify post-closure monitoring requirements and responsibilities for the selected closure activities</td><td rowspan="3">Establish conditions that allow the natural environment to recover from mining activities, which are compatible with future uses (including aesthetics and traditional values) as agreed with local government and communities, if applicable; and reduce costs and long-term liabilities to Agnico Eagle, the government, and the public</td><td rowspan="2">-</td><td rowspan="2">-</td></tr>
<tr><td>Describe closure options for temporary and permanent closure</td></tr>
<tr><td>Give preference to closure solutions that do not require subsequent maintenance or else solutions that reduce maintenance requirements (e.g., “passive water treatment”)</td><td>-</td><td>-</td></tr>
<tr><td>Promote progressive reclamation of facilities, whenever possible, spaced out over the operational life of the mine as areas are no longer required for operations</td><td>-</td><td>-</td><td>-</td></tr>
</table>

- = no data.

Agnico Eagle intends to leave behind a positive environmental and community legacy. In this regard, Agnico Eagle is committed to responsible mining practices for the protection of human, wildlife, and aquatic life, and environment. *The Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest* (AANDC and MVLWB 2013) provide the fundamentals for Agnico Eagle's closure vision, which is to return the Meadowbank Complex and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities. Three closure objectives underpin Agnico Eagle's closure vision:

- **Physical stability**: The reclaimed Meadowbank Complex should be built or modified at closure so that landforms do not erode more than natural landforms, subside, or move under extreme design events, and therefore do not pose a threat to humans, wildlife, or environmental health and safety.
- **Chemical stability:** The reclaimed Meadowbank Complex should be chemically stable to prevent adverse soil, water and air quality effects that might pose a risk to humans, wildlife, or environmental health and safety.
- **Future use and aesthetics:** The reclaimed Meadowbank Complex should be compatible with the surrounding lands at the completion of the reclamation activities.

By implementing the above closure principles, specific closure objectives can be achieved, thus advancing the Meadowbank Complex towards successful closure by meeting the various success criteria that underpin these objectives. Further information related to Agnico Eagle's closure vision, objectives, and success criteria can be found in SECTION 4.

1.7 Related Management Plans

A list of management plans for the Meadowbank Mine, Whale Tail Mine, and Meadowbank Complex is included in Table 1.7-1.

Table 1.7-1: Active Management Plans for the Meadowbank and Whale Tail Mines

Site	Management Plans	Submission Date	Version
Meadowbank Mine	Meadowbank No Net Loss Plan, Phaser Offsetting Plan addendum and In-Pit disposal addendum	February 2019	3
	Habitat Compensation Monitoring Plan	February 2017	4
	Groundwater Monitoring Plan	April 2020	11
	Water Quality Monitoring and Management Plan for Dike Construction and Dewatering + Addendum	July 2016	4
	Water Quality and Flow Monitoring Plan	March 2016	5
	Oil Pollution Emergency Plan and Oil Pollution Prevention Plan	March 2025	18
	Baker Lake Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan	March 2025	7
	Operational ARD/ML Sampling and Testing Plan	November 2013	2
	Incinerator Waste Management Plan	June 2022	10
	Landfarm Design and Management Plan	March 2025	6
	Landfill Design Management Plan	March 2025	7
	Dewatering Dike Operation, Maintenance and Surveillance (OMS)	March 2025	12
	Freshet Action Plan	March 2025	13
	Tailings Storage Facility OMS	March 2025	13
	Waste Rock and Tailings Management Plan	March 2025	15
	Pore Water Quality Management Plan	April 2020	2
	Water Management Plan	March 2025	14
	Sewage Treatment Plant Management Plan	March 2017	6
	Transportation Management Plan: All-Weather Access Road (AWAR)	October 2022	6
Whale Tail Mine	Mercury Monitoring Plan	March 2023	4
	Fish Habitat Offsetting Plan Whale Tail and Whale Tail expansion	June 2020	1
	Fish Habitat Offsetting Monitoring Plan	July 2021	2
	Groundwater Monitoring Plan	May 2019	3
	Arsenic Water Treatment Plan Operation & Maintenance Manual (OMM)	January 2019	2
	Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	May 2020	3
	Water Quality and Flow Monitoring Plan	April 2019	6
	Interim Closure and Reclamation Plan	July 2020	4
	Operational ARD-ML Sampling and Testing Plan – Whale Tail Pit Addendum	February 2023	7.1
	Landfarm Design and Management Plan	March 2025	4
	Landfill Design Management Plan	March 2025	6
	Water Management Infrastructure OMS	March 2025	5
	Freshet Action Plan	March 2025	7
	Waste Rock Management Plan	March 2025	14
	Water Management Plan	March 2025	14
	Sewage Treatment Plant OMM	February 2019	2
	Shipping Management Plan	March 2025	5
	Thermal Monitoring Plan	March 2025	5
	Migratory Bird Protection Plan	April 2020	3
	Whale Tail Pit Haul Road Management Plan	March 2023	4
	Adaptive Management Plan	July 2021	1.5
	Erosion Management Plan	December 2018	2
	Incinerator and Composter Waste Management Plan	July 2023	2
Meadowbank Complex	Air Quality and Dustfall Management Plan	April 2022	6
	Noise Monitoring and Abatement Plan	December 2018	4
	Aquatic Effects Management Program	April 2022	5
	Core Receiving Environment Monitoring Plan (CREMP) Update	April 2022	4
	Quality Assurance and Quality Control Plan	March 2025	10
	Greenhouse Gas Reduction Plan	April 2020	3
	Emergency Response Plan	March 2025	20a
	Hazardous Materials Management Plan	March 2025	8
	Spill Contingency Plan	March 2025	22
	Blast Monitoring Program	March 2025	10
	Meadowbank Mine and Whale Tail Bulk Fuel Storage Facility	June 2022	7
	Ammonia Management Plan	March 2024	5
	Occupational Health & Safety Plan	December 2018	3
	Wildlife and Human Health Risk Assessment (HHRA) Country Foods Screening Level Risk Assessment Plan	March 2024	9
	Agnico Kivalliq Projects Socio-Economic Monitoring Program	April 2022	4
	Terrestrial Ecosystem Monitoring Plan	March 2025	9

Note: Plan versions as of March 2025.

SECTION 2 • MEADOWBANK COMPLEX DESCRIPTION

2.1 Meadowbank Location and Access

The Meadowbank Mine is in the Kivalliq District of Nunavut, approximately 110 km by road north of Baker Lake, as shown in Figure 1.3-1. Mineral tenure covers 28,888 hectares (ha) and includes ten grandfathered Federal mining leases and three exploration concessions acquired from Nunavut Tunngavik Incorporated.

The Meadowbank Mine relies on marine transportation (from Baker Lake) for most of its supplies including fuel, construction and operation equipment, materials, and consumables, including dangerous goods, food, household goods, and other non-perishable supplies. The Baker Lake Marshalling Site is located approximately 2 km east of the Hamlet of Baker Lake and is the transfer point and temporary storage area for all dry shipments and fuel materials arriving by barge. Materials are then shipped overland to the mine via the AWAR, which was constructed to connect the Hamlet of Baker Lake to the Meadowbank Mine. Local workers can also access the Meadowbank Mine via the AWAR. The AWAR is not publicly accessible and is only used by Agnico Eagle and its employees and contractors. Alternatively, the Meadowbank Mine can also be accessed by plane via the private Meadowbank Aerodrome (Figure 1.3-2).

2.2 Whale Tail Location and Access

The Whale Tail Mine is located approximately 150 km north of the hamlet of Baker Lake, and approximately 50 km northwest of the Meadowbank Mine. The property is approximately 408 square kilometres (km^2) in size and was acquired by Agnico Eagle in April 2013, subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated. Material and workers reach the Whale Tail Mine via the Whale Tail Haul Road once arriving at the Meadowbank Mine via the private airstrip or the AWAR (Figure 1.3-4).

2.3 Site History

2.3.1 Meadowbank Site History

2.3.1.1 Ownership

The exploration phase of the Meadowbank Mine began in 1995, after Cumberland Resources Ltd. (Cumberland) purchased a 60% interest in the Meadowbank Mine from Asamera Minerals and formed a joint venture with Comaplex Minerals. Cumberland acquired the 40% interest held by Comaplex Minerals in 1997 and became the sole owner of the Meadowbank Mine. Cumberland later formed a subsidiary: Meadowbank Mining Corporation. Agnico Eagle acquired Cumberland Resources, and thus the ownership of the Meadowbank Mine in 2007.

2.3.1.2 Regulatory History

Following exploratory work in 1995, the Meadowbank Mine was advanced to the feasibility phase in 2003. Following this, the Meadowbank FEIS was submitted to NIRB in 2005, followed by a certificate for the development of the Meadowbank Mine from NIRB in 2006. Permits and Licenses were also obtained from the NWB, the KivIA, the Government of Nunavut (GN), Aboriginal Affairs and Northern Development Canada (AANDC), and DFO.

The Meadowbank Mine is also governed by the NIRB Project Certificate No. 004, first issued in December 2006. In November 2009, the Project Certificate was amended to reflect a Proponent Project name change, and was then amended again in August 2016 to allow expansion of Vault Pit operations into Phaser Lake, and to allow for the development of two additional pits: the Phaser Pit and the Baby Phaser Pit (BB Phaser Pit). A third amendment was approved in December 2018 to reflect modification of in-pit tailings deposition.

2.3.1.3 Operational History

Once approved, construction effort to support the Meadowbank Mine began in 2007 (e.g., the AWAR). Construction activities at the Meadowbank Mine and the Baker Lake Site Facilities to support mining operations, began in 2008. Mining began in 2009, and first gold poured in February 2010. From 2010 to 2018 mining activities occurred in Portage Pit. Mining of Goose Pit occurred from 2011 to 2015, and Vault Pit mining activities started in 2014 ran until 2018, with activity occurring from 2017 to 2018 in Phaser/BB Phaser Pits. In all cases, deposits were mined via truck-and-shovel open pit operations.

The development of the Meadowbank Mine has required periodic construction activities since the exploration phase, such as the development of camps, the airstrip, and water retention dikes, which allow for mining beneath shallow lakes. Several secondary construction/modification activities were undertaken in 2018, including the construction of the Central Dike Phase 7, North Cell Internal Structure, and Saddle Dam 3 Phase 4. Currently, no mining is occurring at Meadowbank since the ore reserves were exhausted in 2019, and no new construction projects are underway.

2.3.2 Whale Tail Site History

2.3.2.1 Regulatory History

In 2016, Agnico Eagle proposed development of the Whale Tail Mine to continue milling at the Meadowbank Mine. This application was accepted, and mining at the Whale Tail Mine began shortly after. In 2018, Agnico Eagle proposed to further increase in gold production by expanding mining activities at the Whale Tail Mine. The proposal requested further expansion of the Whale Tail Pit and the development of the IVR Pit and underground operations. This application was accepted, and related activities started in October 2018.

2.3.2.2 Operational History

To support the Whale Tail Mine, additional infrastructure was built (e.g., truck shop/warehouse, fuel storage, and a camp facility). Commercial production of the Whale Tail Mine deposit was achieved on September 30, 2019, with pre-stripping activities for the IVR Pit beginning in Q3 of 2020 and commercial production occurring on December 31, 2020. Exploration continued and deeper deposits of ore were discovered. Following the development of a portal, a decline, and underground infrastructure, commercial production from the underground of Whale Tail Mine was achieved on August 1, 2022. Mining is currently ongoing with ore extracted conventionally using drilling and blasting, then hauled by a long-haul off-road truck fleet to Meadowbank Mine for processing.

2.4 Project Summary

2.4.1 Meadowbank Mine – Summary and Current Mine Plan

Under the current LOM plan, no mining activity will occur at Meadowbank given ore resources were exhausted in 2019. As no mining is planned, no waste rock management is required. Tailings were primarily deposited in Portage Pit E, with deposition in Portage Pit A and Goose Pit as required. Tailings were also deposited in the Tailings Storage Facility (TSF) North and South Cell to optimize the landform. In addition to routine activities, several secondary construction/modification projects were undertaken.

Environmental monitoring (wildlife, aquatic effects, groundwater, noise, dust suppression, waste management, air water quality) continued throughout 2024 in support of operations, as required by the Meadowbank Mine NWB Water Licence and Project Certificate, DFO authorizations, and MDMER regulation.

2.4.1.1 Production

All ore at the Meadowbank Complex is sourced from the Whale Tail Mine. Ore is extracted conventionally using drilling and blasting, then hauled by a long-haul off-road truck fleet to the mill at the Meadowbank facilities for processing. A total of 4,165,659 tonnes (t) of ore from the Whale Tail Mine was processed in 2024 (Agnico Eagle 2025a). Final 2025 production tonnage will be provided in the 2025 version of the Annual Report to NWB and NIRB.

2.4.2 Whale Tail – Summary and Current Mine Plan

Ore from the Whale Tail Mine is hauled to Meadowbank Mine for milling and processing. To support operations, environmental monitoring (wildlife, aquatic effects, groundwater, noise, dust suppression, waste management, air water quality) continues , as required by the Whale Tail NWB Type A Water Licence and Project Certificate, DFO authorizations and MDMER regulation.

2.4.2.1 Production

In 2024, gold production increased compared to the prior year period, primarily due to higher gold grades and the volume of ore processed resulting from a strong operating performance. This stemmed from a full year of underground production and a higher than anticipated grade sequence in the Whale Tail Mine and IVR open pits (Agnico Eagle). Gold production continues in 2025; statistics are provided in the annual reports. Table 2.4-1 provides an overview of realized mining and milling tonnage for 2024 for the Meadowbank Complex. Associated overburden, waste rock, and tailings production tonnages are provided in Sections 2.5.3 and Section 2.5.5.

Table 2.4-1: 2024 Realized Mining and Milling Tonnage for the Meadowbank Complex

Month	Ore (t)	Ore Processed (t)
January	384,530	355,587
February	508,118	349,036
March	451,138	365,996
April	342,576	289,171
May	485,170	365,996
June	447,798	357,985
July	364,242	351,216
August	387,088	373,920
September	556,668	358,414
October	385,629	297,568
November	466,854	349,314
December	427,420	351,456
Total	5,207,232	4,165,659

Source: Agnico Eagle 2025a. t = tonne.

2.4.3 Future Meadowbank Complex Mine Plan

In 2024 and 2025, exploration drilling continued at Meadowbank Complex with the main objectives of:

- Infilling mapping of Whale Tail underground mineral resources.
- Confirming IVR and Vault open pit mineral resources for an eventual pit pushback.
- Extending underground mineral resources at depth in the Whale Tail, IVR, and Portage deposits.
- Continuing exploration in the area of Meadowbank Complex.

2.4.3.1 Life of Mine Production

Table 2.4-2 provides expected mining and milling tonnages for the LOM. Expected production rates and mill feed are provided in Table 2.4-2. Associated waste production is presented in Table 2.4-3 and more details are presented in Sections 2.5.3 and 2.5.5. As a result of operations, three mine waste streams are produced during the operation of the Meadowbank Complex: waste rock, overburden, and tailings. Approximately 205.8 million tonnes (Mt) of waste rock and 5.3 Mt of overburden will be generated by Meadowbank Complex as presented in Table 2.4-3.

Table 2.4-2: Projected Mining and Milling Tonnages (2017 to 2028) for the Meadowbank Complex

Year	Ore Mined (t)	Ore Processed in Mill (t)	Production Days
2017*	-0	0	0
2018*	46,149	0	0
2019*	1,140,323	2,750,306	214
2020*	3,032,794	2,602,827	366
2021*	4,064,016	3,570,491	365
2022*	4,294,576	3,825,969	365
2023*	3,532,445	3,842,648	365
2024	5,207,232	4,165,659	366
2025	4,970,061	4,214,229	365
2026	4,354,890	4,260,508	365
2027	1,795,866	4,260,508	365
2028	384,503	2,135,587	183
Total	32,822,854	35,605,838	-

Source: Agnico Eagle 2025b. * = Achieved values; t = tonne; - = no data

Table 2.4-3: Projected Mine Waste Tonnages (2017 to 2028) for the Meadowbank Complex

Year	Waste Rock Excavated (t)	Overburden Excavated (t)	Total Material Excavated (t)	Strip Ratio
2017*	272,090	199,454	471,543	0
2018*	1,903,018	735,664	2,684,831	41.2
2019*	12,101,399	1,510,888	13,612,287	10.6
2020*	31,846,323	1,699,327	33,545,650	10.5
2021*	33,805,525	622,159	34,427,684	8.3
2022*	32,728,239	255,710	32,983,949	7.95
2023*	32,517,312	2,187	32,519,499	11.49
2024	27,302,721	185,035	27,552,484	6.4
2025	23,449,953	0	23,449,953	5.8
2026	8,624,023	0	8,624,023	2.5
2027	1,184,236	0	1,184,236	1.4
2028	0	0	0	0.0
Total	205,734,838	5,275,152	211,009,990	-

Source: Agnico Eagle 2025b. - = no data; * = Achieved values; t = tonne.

Tailings have been and will be disposed of in the approved Meadowbank TSF and open pits, authorized under Project Certificate (No. 004), as part of the Meadowbank Complex deposition plan. Table 2.4-4 presents a summary of the deposition strategy from 2025 to mid-2028 based on the output of the deposition modelling. The strategy of the tailing’s deposition plan is to minimize freshwater consumption and ensure operational flexibility. The tailings deposition strategy is revised as required to meet operational needs and field conditions (Agnico Eagle 2025a). The operation, management, and monitoring of the TSF is regulated under Licence 2AM-MEA1530.

Table 2.4-4: Projected Mining and Milling Tonnages (2017 to 2028) for the Meadowbank Complex

Period	Location	Tailings deposited (dry mass)
January 2025 to May 2025	Pit A	1.7 Mt
June 2025 to September 2025	SC	1.4 Mt
October 2025 to May 2026	Pit A	2.8 Mt
June 2026 to August 2026	NC	1.1 Mt
September 2026 to June 2028	Pit E	7.4 Mt

Source: Agnico Eagle 2025a. Mt = Mega tonne.

2.5 Meadowbank Complex Components

The Meadowbank Complex contains numerous components that support the mining and milling of ore. These include pits, quarries and borrow sites, waste rock and overburden storage facilities, stockpiles, water management infrastructure, and supporting infrastructure (

Photo 2-1). The following sections provide information on the existing configuration of these components, including elevations, slopes, and other parameters. Importantly, the Meadowbank Complex uses its own

site-specific datum for elevations used in engineering and planning. Specifically, an elevation of 5,000 meters relative to level (mRL) equates to sea level; thus, 5092 mRL would equate to 92 metres above sea level (masl). Appendix 2-A (Tetra Tech 2020) provides comprehensive information on pit specifications (e.g., slopes, bench heights) and performance.

Photo 2-1: The Meadowbank Complex (2023)

2.5.1 Open Pit Mine Workings

No mining at Meadowbank Mine has occurred since ore reserves were exhausted in 2019. The processing of ore from the Whale Tail Mine is ongoing at Meadowbank mill. As approved by the Water Licence, in-pit tailings deposition began in Goose Pit on July 5, 2019 (Photo 2-2). Water was also deposited in Pit A and tailings in Pit E in August 2020 (Agnico Eagle 2024a). In 2023, additional work was completed on the closure water treatment system for the Goose and Portage Pits to improve poor water quality due to in-pit deposition. This work continued into 2024. The status and use of Meadowbank Open Pits are provided in Table 2.5-1.

Table 2.5-1: Current Status and Use of Meadowbank Open Pits

Pit	Current Status and Use
Portage Pit A	Complete, inactive pit; currently used for water management and tailings disposal
Portage Pit B	Inactive pit and inactive in-pit dump
Portage Pit C	Inactive pit and inactive in-pit dump
Portage Pit D	Inactive pit and inactive in-pit dump
Portage Pit E	Inactive pit, active in-pit dump, currently used for water management and tailings disposal
Goose Pit	Inactive pit, inactive in-pit dump; currently used for water management (aeration)
Vault Pit	Inactive pit and inactive in-pit dump; will be used for water management
Phaser Pit	Inactive pit
BB Phaser Pit	Inactive pit

Source: Knight Plésold 2024a.

2.5.1.1 Portage Pit Configuration

Photo 2-2 to Photo 2-4 show the plan view configurations of the Meadowbank Mine open pits. The Portage Pit is approximately 2 km long and 116.7 ha, and runs north to south, across Second and Third Portage lakes (Figure 1.3-2). Previously, the Portage Pit was comprised of several lobes (e.g., Portage Pit A through E). Progressive reclamation activities (e.g., in-pit deposition of waste rock) has resulted in the filling of Portage Pits B, C, and D, leaving Portage Pits A and E to be used for in-pit tailings disposal and water management.

Pit A's ultimate floor elevation was -3 masl (4997 mRL), and it's a crest has an elevation of 151 masl (5,151 mRL) and the elevation of water within Pit A is monitored and reported (monthly, annually) . The backfilled Portage Pits (e.g., Dumps B, C, and D) have elevations of 133 masl (5,133 mRL), 127 masl (5,127 mRL), and 126 masl (5,126 mRL), respectively (Agnico Eagle 2021a). Two platforms are present at B dump (respective elevations of 126 masl and 133 masl [5,126 mRL and 5,133 mRL]). Minor subsidence has occurred at B dump, while C and D Dumps are primarily stable, and have similar elevations. In addition, Pit A has a tailings spigot located near the crest of the pit on its west wall, which has allowed for tailings deposition.

Portage Pit E has a final floor elevation of -23 masl (4,976 mRL), and a crest elevation of 130 masl (5,130 mRL). In addition, Pit E has a tailings spigot located near the crest of the pit on its west wall, which has allowed for tailings deposition.

2.5.1.2 Meadowbank Goose Pit Configuration

The Goose Pit is located approximately 1 km south of the Portage Pit, under Third Portage Lake (Figure 1.3-2). Mining ceased in 2019 and resulted in a final pit floor elevation of -3 masl (4997 mRL). The Goose Pit has been partially backfilled with tailings and waste rock, and continues to receive contact water as part of operations of the Meadowbank Complex (Tetra Tech 2020). The elevation of the tailings surface occurring at approximately 86 masl (5086 mRL). The Goose Pit has not received tailings since 2019. Like the former Portage Pit lobes (i.e., B, C, and D lobes), the Goose Pit also has received waste rock deposition; however, this has not occurred since 2017 (Agnico Eagle 2021a). An aeration system was installed in Goose Pit in 2024 to induce biological treatment in the flooded pit for nitrogen species. Aided by nutrient amendments, the aeration system proved to be a success by removing thiocyanate from solution. Nitrification process was not able to begin in time before the system was shut off for the winter. Aeration continued in 2025. The final elevation of the Goose Pit dump is approximately 125 masl (5125 mRL). Photo 2-2 provides an overview of Goose Pit's major components.

2.5.1.3 Meadowbank Vault, Phaser, and BB Phaser Pit Configurations

The Vault Pit is approximately 8 km to the north of the Portage Pit, on the shores of Vault Lake (Figure 1.3-3). Phaser and BB Phaser Pits are adjacent to Vault Pit on the Southeast side (Figure 1.3-3). Mining of the Vault Pit ceased in 2019, resulting in a pit floor with an elevation of -45 masl (4955 mRL). The final elevation of the Phaser Pit floor is currently unknown; however, it is assumed to be similar to that of the BB Phaser Pit, which has a pit floor elevation of 88 masl (5,088 mRL). The Vault Pit, Phaser Pit, and the BB Phaser Pit have elevations of 39 masl (5,039 mRL), 107 masl (5,107 mRL), and 131 masl (5131 mRL), respectively. The Vault Pit has two in-pit waste rock dumps constructed in the north portion of the pit, with elevations of approximately 82 and 133 masl (5082 and 5133 mRL). The pit and in-pit dumps are inactive, and access to these areas is restricted by barrier berms.

Photo 2-2: The Portage Pit Area (2023)

Photo 2-3: The Goose Pit Area (2023)

Photo 2-4: The Vault Area (2023)

2.5.1.4 Current Whale Tail Pit Configuration

The Whale Tail Pit existing footprint is shown in Figure 1.3-4 and Figure 2.5-1. The current mine design approach for the Whale Tail Pit rock zones consists of selective mining using 10 m to 14.4 m benches. Ultimate bench heights are typically 21 m, with bench face angles that vary from 65° to 75° depending on the pit wall. Inter-ramp angles vary from 41° to 53°. Mining of Phase 1 was completed in the first half of 2023. A berm prevents access into this phase. A multi-bench failure occurred on the north wall in 2022, thus no entry is permitted into this area, however, mining is still occurring in other areas of the Whale Tail Pit (e.g., along the northwest wall). At the end of operations, the Whale Tail Pit is planned to extend the pit approximately 282 m below current water level of Whale Tail Lake (i.e., to 129 m below sea level; 4,871 mRL). The expansion of Whale Tail Pit at its ultimate configuration will extend across the northern edge of Whale Tail Lake and it will have a total footprint area of 62 ha.

2.5.1.5 Current IVR Pit Configuration

The IVR Pit's current extent is shown in Figure 1.3-4 and Figure 2.5-2. The IVR deposit is partly located within the footprints of Whale Tail Lake and two other unnamed lakes. Dewatering of IVR Pit area began in 2020 and involved isolation of the pit area from surface runoff. The water level is maintained by diverting most the clean water to other sub-watersheds via the IVR Diversion and by pumping (operational dewatering) the contact water to the Water Treatment Plant (WTP) for treatment before discharge through diffusers into the Kangislulik Lake.

The IVR Pit has several sections: IVR V1, IVR V2, IVR West 1, IVR West 2, and the IVR West Mini Pit. The IVR V2 Pit is nearing completion, and the final wall has been established. The IVR West pits (1 and 2) were recently completed and are actively being filled with waste rock and water, respectively. Mining of the IVR West 2 Extension has not commenced.

The IVR Pit is planned to extend approximately 107 m below the current water level of Whale Tail Lake (153.5 m) to a final elevation of -260 masl (4740 mRL) and will have an ultimate footprint area of approximately 43 ha. Of the completed pits, the IVR West 1 has been partially backfilled with waste rock and is no longer accessible. The completed IVR West 2 was being used for water management, but is no longer required for this purpose, and will be closed in the future. The IVR Mini Pit is dry, but access is restricted via berms. Excess groundwater is temporarily stored in the east lobe of IVR Pit.

Figure 2.5-1: Whale Tail Pit – Plan View

Figure 2.5-2: IVR Pit – Plan View

2.5.2 Underground Workings

2.5.2.1 Current Underground Workings Configuration

Only the Whale Tail Mine has underground workings (Figure 2.5-3); the Meadowbank Mine and Vault Pits are open pits. Underground operations occur beneath both the Whale Tail Pit and the IVR Pit. Underground mining consists mainly of long hole mining, with some mechanized cut and fill in flat areas. A mix of transverse and longitudinal stoping is used. Excess water from the underground mine is managed through the Underground Mine Stope and Groundwater Storage Pond 1 (GSP-1) for high salinity water.

The underground mine uses the existing exploration ramp, and portal, as the main connection to the surface for haulage of ore, and uses the existing vent raises (WHL #1, WHL #2, IVR #1 and IVR #2) to supply air to the underground workings. Trucks and scoops are used for ore extraction, with resulting waste rock from the underground mine temporarily stored on surface or in the existing exploration underground WRSF. Stopes are then filled with Cemented Rock Fill (CRF) or rock fill, such that no waste rock will remain on the surface after operations. The underground workings require the treatment and management of 12,000 m^3/yr to 127,000 m^3/yr of contact water (Golder 2019a). Runoff from underground waste rock contains salinity due to drilling brines (used for drilling in permafrost) and brackish groundwater below the permafrost. Salt leaching occurs but is temporary as salt-water is captured and treated separately from the runoff from surface during operations. On-going kinetic testing has not yet shown any effect of salt on sulfide mineral reaction rate.

Ultimately, the underground operation below Whale Tail Pit will extend to 658 m below the lake water surface (i.e., to 505 m below sea level; 4,495 mRL) and to 234 m below the lake water surface (i.e., to 83 m below sea level; 4,495 mRL) for the underground operation below IVR Pit (Agnico Eagle 2018a).

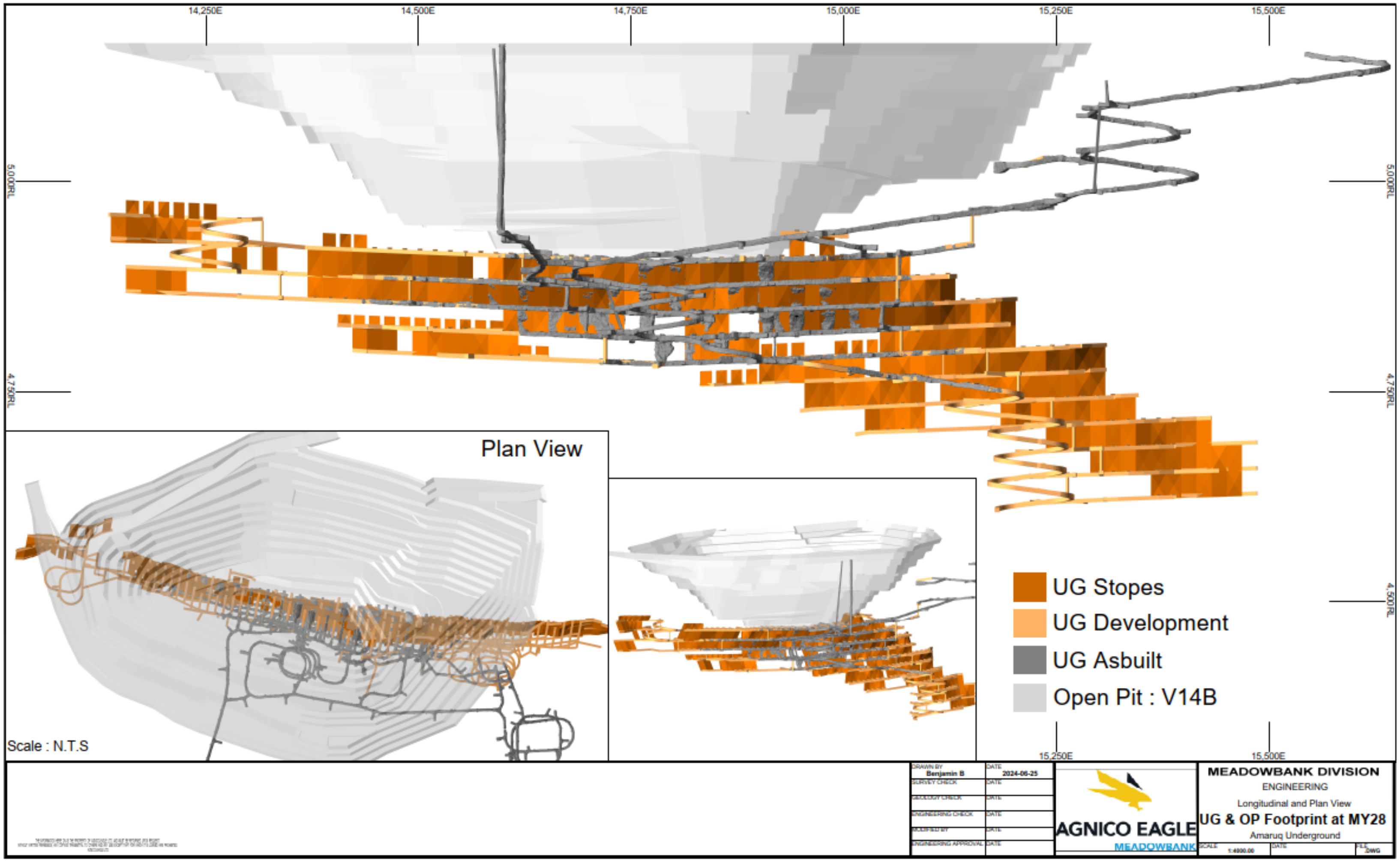


Figure 2.5-3: Underground Workings

2.5.3 Waste Rock and Overburden Storage Facilities

There are three main WRSFs at the Meadowbank Mine: the Portage WRSF, the Goose WRSF, and the Vault WRSF. No waste rock has been generated at the Meadowbank Mine since 2019, when Whale Tail Mine was approved. Waste rock generated at the Whale Tail Mine reports to the Whale Tail WRSF; thus, the Vault, Goose, and Portage WRSFs are in near-final configurations. Table 2.5-2 provides estimated volumes of each of the WRSFs present at the Meadowbank Mine. At the onset of closure, portions of the Portage non-potentially acid generating/non-metal leaching (NPAG/NML) WRSF along with the NPAG/NML contained in the Goose NPAG/NML WRSF will be used for closure construction and to cap sources of potentially acid generating/metal leaching (PAG/ML) materials located in the Portage WRSF and the Meadowbank TSF.

Table 2.5-2: Meadowbank Rock Storage Facility Volume

Rock Storage Facility	Design Volume (m^3)	Type of Waste Rock
Portage WRSF – PAG/ML Area	29,100,000	PAG/ML
Portage WRSF – NPAG/NML Area	10,200,000	NPAG/NML
Portage WRSF Total	39,300,000	PAG/ML; NPAG/NML
Vault WRSF	29,100,000	NPAG/NML; PAG/ML
Vault WRSF Total	29,100,000	NPAG/NML; PAG/ML
Portage Stockpile (adjacent to Pit E)	3,700,000	NPAG/NML
Pit A Stockpile	2,600,000	NPAG/NML
Goose NPAG/NML	5,900,000	NPAG/NML
Central – NPAG/NML SP	425	NPAG/NML
Other WRSF Total	12,200,425	NPAG/NML

Source: Agnico Eagle 2024d.

WRSF = Waste Rock Storage Facility; NPAG/NML = Non-Potentially Acid Generating/Non-Metal Leaching; PAG/ML = Potentially Acid Generating/Metal Leaching.

2.5.3.1 Meadowbank Mine – Portage Waste Rock Storage Facility

Both PAG/ML and NPAG/NML waste rock is present at the WRSFs at the Meadowbank Mine (Figure 1.3-2; Photo 2-5; Table 2.5-2). The Portage WRSF is the largest WRSF at the Meadowbank Mine and consists of three cells: the North Portage NPAG/NML WRSF (immediately west of NP2 Lake), the Portage PAG/ML WRSF (immediately south of NP2 Lake), and the South Portage NPAG/NML WRSF (immediately west of Portage E Pit). Placement of waste rock within the Portage WRSF commenced in 2009 closest to the Portage Pit and progressed westward over the entire footprint, then upward to further benches during the development of the mine. Design details are provided in Table 2.5-3. Contact water from the Portage WRSF reports to Portage Pit A (see **Figure 2.5-26**).

Photo 2-5: The Portage WRSF (2023)

Table 2.5-3: Details of the Portage Waste Rock Storage Facility

Design Characteristics	Value
Storage Volume	39.3 Mm^3
Final Crest elevation	254 m (5254 mRL)
Final Height	100 m
Maximum elevation of Adjacent Topography	192 masl (5192 mRL)
Footprint Area	80.8 ha
Thermal Cover Thickness	4.0 m

Source: Agnico Eagle 2025b. Mm^3 = million cubic metres; m = metres; mRL = meters relative level (5,000 mRL = sea level); ha = hectares.

Progressive reclamation of the Portage WRSF began in 2011 with the implementation of a closure cover system (Figure 2.5-4; Agnico Eagle 2024a). The Portage WRSF capping progress update map was populated with the locations of tires and pickets to guide PAG/NPAG limits, construction priorities and instructions, the surveys conducted as construction progressed, and Wenco fleet management system data. This map was updated and distributed weekly as part of the mine planning process. Once the Portage WRSF capping has progressed to its final extent all information available will be gathered to document the completed capping.

The Portage WRSF closure cover consists of a 4.0 m NPAG/NML waste rock cover system encapsuling PAG/ML waste rock. The purpose of the cover system is to protect the geochemical stability of the Portage WRSF, by insulating the PAG/ML waste rock from direct interaction with the atmosphere and limiting oxidation, by maintaining frozen conditions within the PAG/ML waste rock. The cover system also prevents runoff from contacting PAG/ML waste rock material. No additional earthworks at the crest or base of the embankments or revegetation of the slopes are required for long-term stability or to meet end land use objectives. To date, approximately 90% of the closure cover system has been constructed on the Portage WRSF. No additional work on the landform is planned prior to closure as the demolition landfill is to be located on the WRSF and it will not be possible to reclaim the upper most bench and plateau of the Portage WRSF until the work is complete.

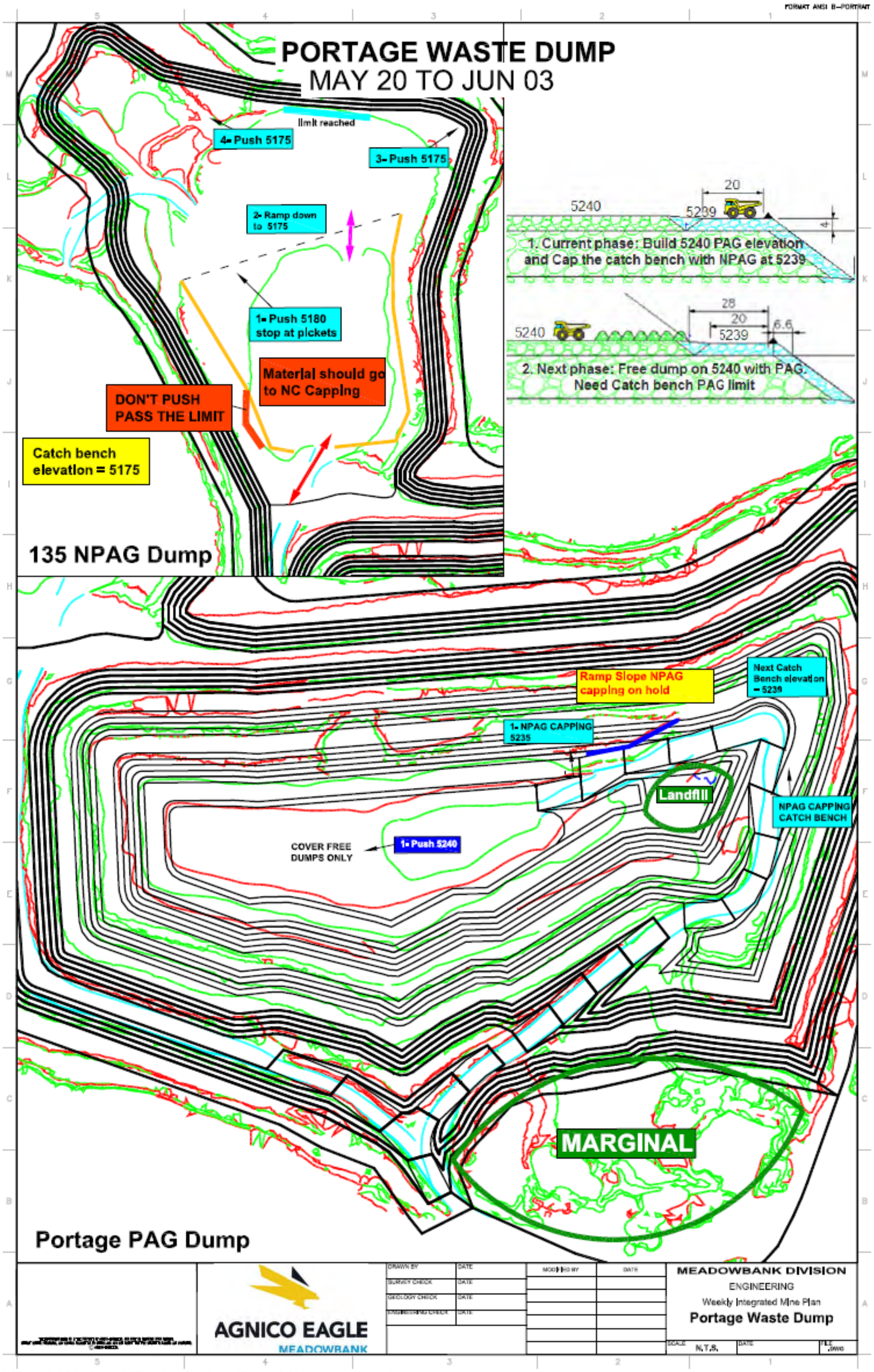


Figure 2.5-4: Portage WRSF Progress Update

2.5.3.2 Meadowbank Mine – Goose NPAG/NML Waste Rock Storage Facility

The Goose NPAG/NML WRSF is located immediately northwest of the Goose Pit, and abuts the South Camp Dike (Figure 1.3-2; Photo 2-3). Design details of the Goose WRSF are not available, but it contains approximately 6.0 Mt of NPAG/NML waste rock, which is expected to be used completely during closure. The WRSF is inactive, and access is prevented via a rockfill berm.

2.5.3.3 Meadowbank Mine – Vault Waste Rock Storage Facility

The Vault WRSF is located 8 km Northeast of the Meadowbank Mine, and comprises of a small amount of PAG/ML entombed by NPAG/NML (Figure 1.3-3; Photo 2-4). Table 2.5-4 provides the design details for the Vault WRSF.

Table 2.5-4: Details of the Vault Waste Rock Storage Facility

Design Characteristics	Value
Storage Volume	29.1 Mm^3
Final Crest elevation	246 m (5,246 mRL)
Final Height	80 m
Maximum elevation of Adjacent Topography	190 masl (5,190 mRL)
Footprint Area	61.0 ha

Source: Agnico Eagle 2024d. Mm^3 = million cubic metres; m = metres; mRL = meters relative level (5,000 mRL = sea level); ha = hectares.

2.5.3.4 Whale Tail Waste Rock and Overburden Storage Facilities

The Whale Tail Mine has two permanent WRSFs (Whale Tail WRSF and IVR WRSF) and one temporary Underground WRSF (Figure 1.3-4). A small overburden stockpile is also present. These WRSFs collectively occupy an area of 240 ha. Waste rock and overburden generated from the Whale Tail Pit reports to the Whale Tail WRSF and the IVR WRSF. Waste rock and overburden generated from the IVR Pit reports to the IVR WRSF. The WRSFs are designed to minimize the impact on the environment and consider both the physical and geochemical stability of the stored waste rock and overburden. Any lake sediment encountered is stored permanently in the WRSFs due to its geochemical properties, while waste rock from the underground workings is used to backfill stopes such that no underground waste rock remains on surface after operations, eliminating risk of acid rock drainage (ARD)/metal leaching (ML) issues. A summary of the geochemical properties of the overburden and waste rock is provided in the Waste Rock Management Plan (Agnico Eagle 2024c) and detailed geochemical properties are presented in Golder (2018). Table 2.5-5 provides current volumes of the materials stored in WRSF and stockpiles (except those containing ore) at the Whale Tail Mine. The Whale Tail WRSF (Figure 2.5-5) and IVR WRSF (Figure 2.5-6) capping progress update maps are populated with the locations of tires and pickets to guide PAG/NPAG limits, construction priorities and instructions, the surveys conducted as construction progresses, Wenco fleet management system data, drone survey, and GPS equipment tracking. These maps are updated and distributed weekly as part of the mine planning process. Once the Whale Tail WRSF and IVR WRSF capping has progressed to it's final extent all information available will be gathered to document the completed capping.

The Whale Tail Mine is expected to have generated approximately 205.9 Mt of waste rock and 5.4 Mt of overburden by the onset of closure. Approximately 8.8 Mt of NPAG/NML waste rock will be used for construction activities such as roads, pads, and water management facilities (e.g., dikes, berms, riprap). In addition, a total of about 12.8 Mt will be used for the PAG/ML WRSF thermal cover at closure. The remaining waste rock and overburden material will be stored in the WRSF or the temporary overburden stockpile.

Table 2.5-5: Whale Tail 2024 Waste Rock Volumes

Waste Rocks from Whale Tail and IVR Pits	Volume (tonnes)
Whale Tail, IVR, and temporary underground WRSFs	25,718,021
Stockpiles	1,303,615
Dikes	0
Roads (Road construction and maintenance; excludes Whale Tail Haul Road)	146,437
Construction (Earthworks excluding road and Dike construction)	134,647
Total	27,302,721

Source: Agnico Eagle 2025a.

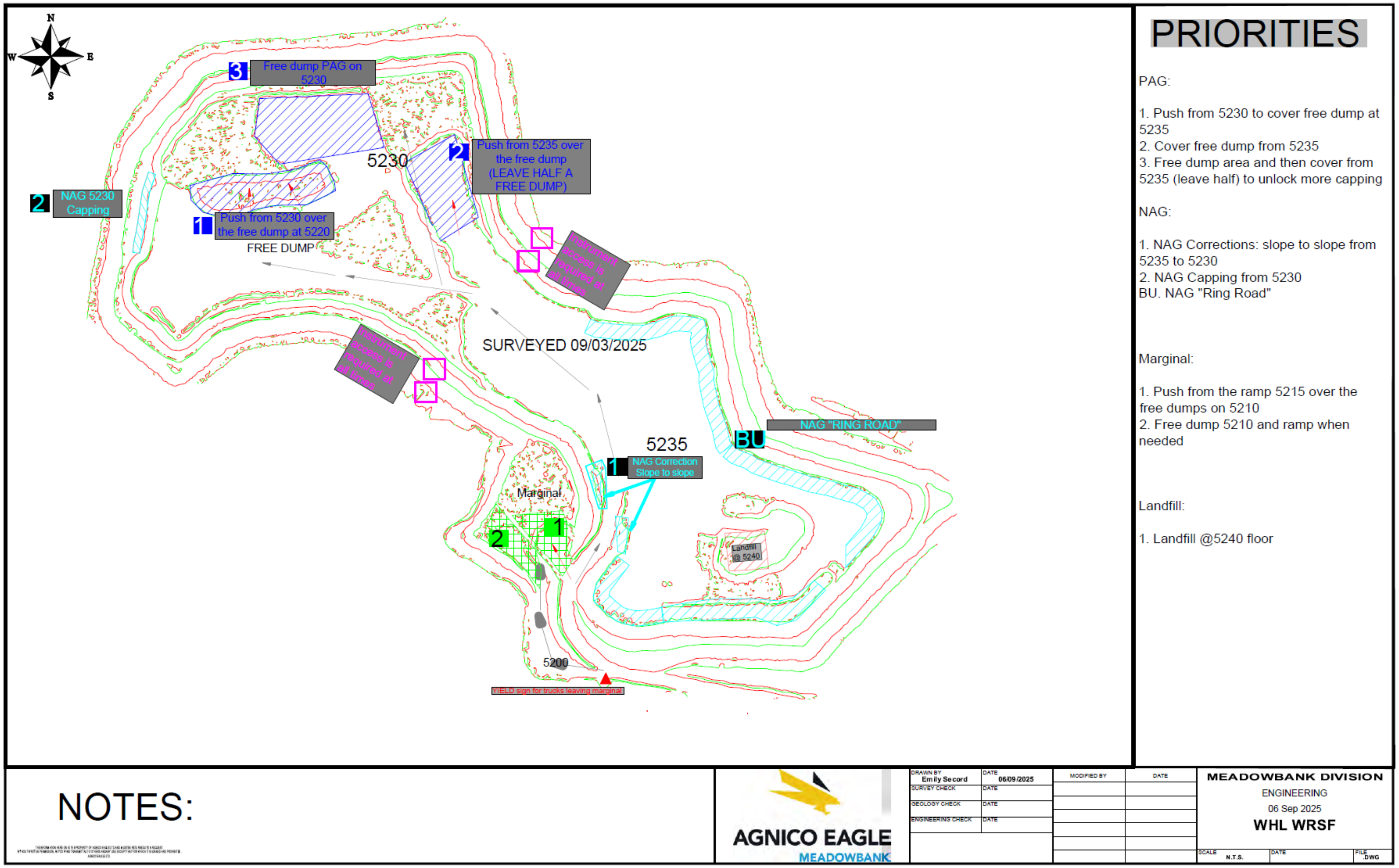


Figure 2.5-5: Whale Tail WRSF Capping Progress Update

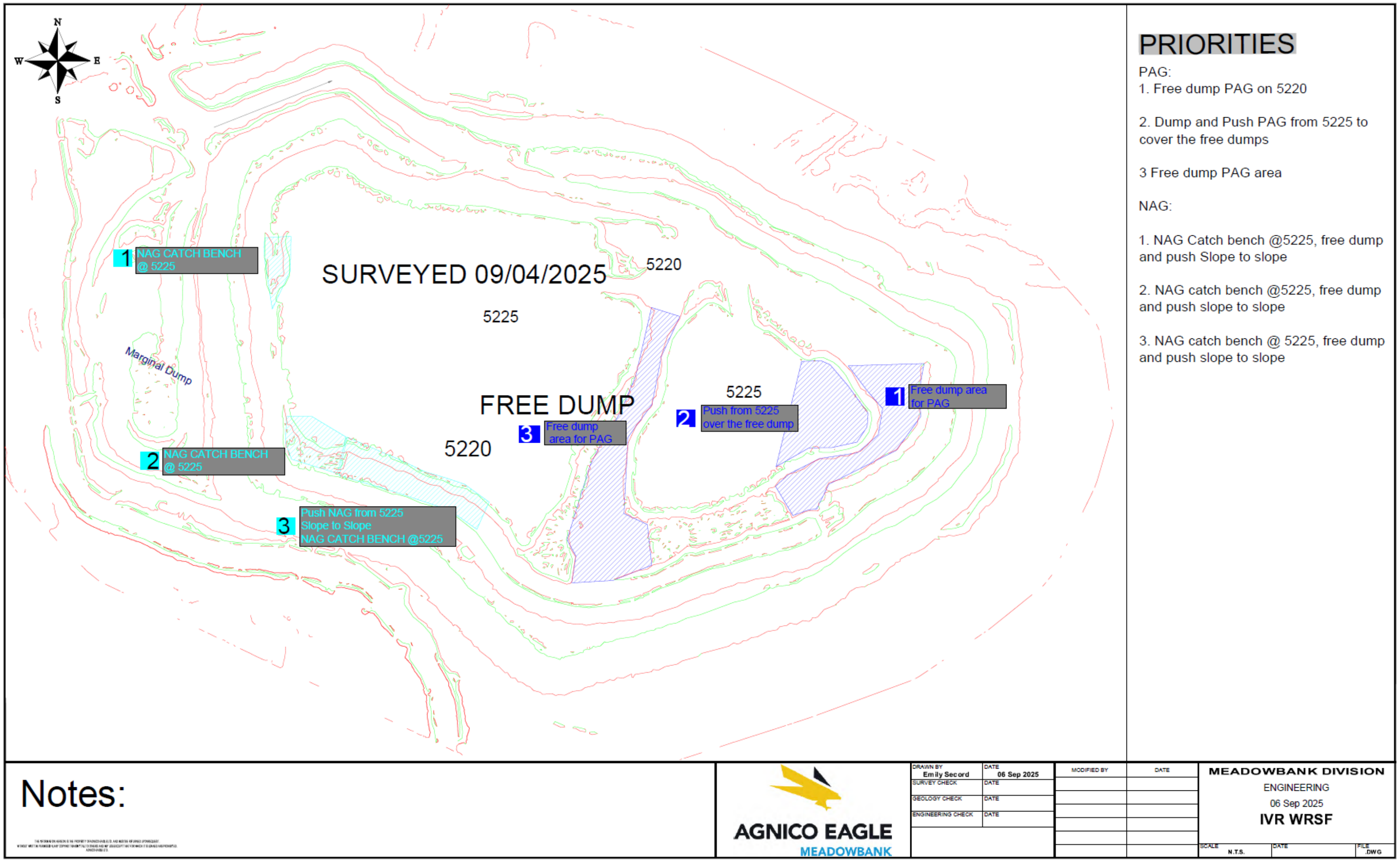


Figure 2.5-6: IVR WRSF Capping Progress Update

2.5.3.5 Whale Tail – Whale Tail WRSF

The Whale Tail WRSF is located to the northwest of the Whale Tail Pit and is located on advantageous topography (Figure 1.3-4). A dike (The WRSF Dike) was constructed in 2019 to form the WRSF Pond. Contact water and runoff from the Whale Tail WRSF are captured by the Whale Tail WRSF Pond and pumped to the Whale Tail Attenuation Pond where the contact water is treated in the Whale Tail Water Treatment Plant (WTP) prior to discharge to the receiving environment (Agnico Eagle 2018b).

The study "*Landform Water Balance Modelling of Whale Tail and IVR WRSF under RCP8.5*" (Okane 2018a), is a landform water balance including estimates of runoff, interflow, and basal contact water rates for different slopes and aspects of the WRSF under the Representative Concentration Pathway 8.5 climate change condition (Okane 2018a). The results of the study estimated effective precipitation for the 150-year climate database and provided a surface water balance. The study concluded that basal contact water will be negligible, determined the interflow distribution by month, and forecasted trends in pore space temperature (Okane 2018a). Results of the surface water balance support the conceptual model that the hydraulic regimes are expected to be different based on the north and south aspect, as generally, higher net radiation on the south aspect results in greater evaporation and soil heating (Okane 2018a). With more evaporation, less water is available to runoff and/or infiltrate. Higher net radiation will also result in more sublimation, as more energy is available to convert snow into water vapour (Agnico Eagle 2024a). The study "*Amaruq Waste Rock Storage Facility Thermal Cover System Design Basis*" (Okane 2018b) goes over the cover system design, the surface water management design, design drawings, construction specifications, and the Operation, Maintenance and Surveillance (OMS) Manual for the WRSF cover systems (Okane 2018b). Agnico Eagle has documented permafrost conditions on-site with thermistors placed at strategic locations recommended by the different designers and consultants involved in the project. A summary of the thermal monitoring program at Whale Tail Mine from the period of 2016 to 2023 along with interpretation of the thermistor results is presented in the Whale Tail Thermal Monitoring Report (Agnico Eagle 2024d). Table 2.5-6 provides the design details for the Whale Tail WRSF.

Table 2.5-6: Whale Tail Waste Rock Storage Facility Design Basis

Parameters	Value
Slope	23°
Bench Height	20.0 m
Bench Setback	20.0 m
Lift Placement	5.0 m
Crest	250 masl (5,250 mRL)
Height	95 m
Maximum elevation of Adjacent Topography	170 masl

Source: (Agnico Eagle 2024c). ° = degrees; m = metres; t= tonnes; masl = metres above sea level; mRL = meters relative to level; % = percentage; t/m^3 = tonnes per cubic metre.

2.5.3.6 Whale Tail – IVR WRSF

The IVR WRSF is located east of the IVR Pit. The crest elevation of the IVR WRSF is approximately at 221 masl (5,221 mRL) with a maximum height of approximately 60 m in an environment where the adjacent topography elevation varies between 154 and 170 masl (5,154 mRL to 5,170 mRL; Agnico Eagle 2023a).

Recent stability analyses indicate that higher benches (up to 40 m) could be built and still provide satisfactory geotechnical stability. If needed, the WRSFs could be expanded for additional capacity, upon regulatory approval. At completion, the crest elevation of the IVR WRSF will be approximately at 250 masl (5,250 mRL), with maximum height of approximately 95 m (Agnico Eagle 2023a). Table 2.5-7 provides the design details for the IVR WRSF.

Table 2.5-7: IVR Waste Rock Storage Facility Design Basis

Design Characteristics	Value
Slope	36.4°
Bench Height	20.0 m
Bench Setback	20.0 m
Lift Placement	5.0 m
Crest	221 masl (5,221 mRL)
Height	60 m
Maximum elevation of Adjacent Topography	170 masl

Source: (Agnico Eagle 2024c); ° = degrees; m = metres; masl = metres above sea level; mRL = meters relative to level.

2.5.3.7 Whale Tail – NPAG/NML Stockpile

The NPAG/NML stockpile was designed to receive NPAG/NML waste rock for future use. It is currently receiving NPAG/NML that is not destined for the Whale Tail WRSF. No overburden has been placed in this stockpile. The NPAG/NML stockpile will ultimately have an overall height of 20 m. It will be composed of a 15 m bench constructed in three layers of 5 m thickness, and a 5 m bench at the top. The 5m bench at the top will start at a setback distance of 20 m from the crest of the 15 m bench. The bench height and setback were selected based on slope stability and constructability constraints. The NPAG/NML stockpile geometry design was chosen to allow for stability of the structure during its construction until it is eventually removed and utilized for closure. The geometry of the NPAG/NML stockpile is positioned strategically to direct contact water from this structure to the Attenuation Pond to eliminate risk of propagating total suspended solids (TSS) in surrounding lakes.

2.5.3.8 Whale Tail – Underground WRSF

The Underground WRSF, is located east of the Whale Tail Pit. All mine waste rock from underground operations is temporarily stored at the WRSF before being returned underground as backfill material.

2.5.3.9 Whale Tail – Overburden Stockpile

The overburden at the Whale Tail Mine is glacial till, composed of a thin layer of organic material overlying a layer of non-cohesive soil with variable amounts of silt, sand, and gravel (i.e., lakebed sediments, till, and till-like material). This stockpile contains a portion of the stripped overburden stockpiled during the establishment of the Whale Tail Mine. This overburden will be used for reclamation purposes at closure.

2.5.4 Whale Tail – Ore Stockpile

The six areas selected for stockpiling of ore are identified as the Whale Tail Ore Stockpiles. The approximate footprint of these ore stockpiles is listed in Table 2.5-8:. No material will remain on stockpile pads at the end of operations.

Table 2.5-8: Ore Stockpile Footprints

Ore Stockpile	Area (m^2)
WHL Ore Stockpile (No.1)	70,662
WHL Ore Stockpile (No.2)	82,191
WHL Ore Stockpile (No.3)	188,244
IVR Ore Stockpile (No.4)	146,329
Underground Ore Stockpile (No.1)	16,029
Underground Ore Stockpile (No.2)	1476

Source: (Agnico Eagle 2025c).

2.5.5 Tailings Storage Facilities

2.5.5.1 Meadowbank Mine – Meadowbank Complex Tailings Storage Facility

Historically, tailings from Meadowbank Complex report to the Meadowbank TSF, which is operated as described in Agnico Eagle (2022a). The TSF is located within the dewatered portion of the northwestern arm of Second Portage Lake. Figure 1.3-2 and Figure 2.5-26 provide the location of Meadowbank Mine Dikes and Dams associated with the TSF. The TSF consists of the North Cell and the South Cell, which are divided by the Stormwater Dike. The North Cell is comprised of peripheral structures Saddle Dam 1, Saddle Dam 2, and two rock-filled access roads (RF1 and RF2). Several high-density polyethylene pipes, ranging from 6” to 16” in diameter, manage water and tailings within the TSF. The South Cell is comprised of Central Dike, Saddle Dam 3, Saddle Dam 4, and Saddle Dam 5, all built to an elevation of 154 m (5145 mRL).

The North Cell of the TSF has a maximum capacity of 14.4 Mm^3 while the South Cell of the TSF has a maximum capacity of 16.3 Mm^3 (Agnico Eagle 2022a). As of December 2024, an estimated 18.5 Mt and 15.2 Mt of tailings slurry has been deposited in the North Cell and South Cell, respectively (Agnico Eagle 2024a). From 2010 to 2022, a total of 44.3 Mt of dry tailings has been deposited in the TSF as indicated in Agnico Eagle (2024a). Comprehensive information on the TSF, its specifications, and operations are provided in Agnico Eagle’s OMS (Agnico Eagle 2024e). The North Cell was internally raised with the construction of the North Cell Internal Structure to a variable elevation ranging from 152 to 154 m (5,152 to 5,154 mRL). Recent activity has included the construction of additional berms in the North Cell to optimize cell volumes for future deposition.

Table 2.5-9: Meadowbank Deposition Location (realized and projected)[(a)]

Date	Deposition Location	Tailings Deposited (Mt)
February 2010 to November 2014	North Cell	16.0
November 2014 to July 2015	South Cell	2.7
July 2015 to October 2015	North Cell	1.0
October 2015 to August 2018	South Cell	10.8
August 2018 to October 2018	North Cell	0.5
October 2018 to April 2019	South Cell	1.4
April 2019 to July 2019	North Cell	0.6
July 2019 to December 2019	Goose Pit	1.4
January 2020 to August 2020	Goose Pit	1.4
August 2020 to July 2021	Pit E	3.1
July 2021 to August 2021	North Cell	0.4
August 2021 to December 2022	Pit E	3.8
January to August 2023	Pit E	2.5
August 2023 to September 2023	South Cell	0.3
September 2023 to December 2023	Pit E	0.8
Projected*		
January to July 2024	Pit E	3.9
August 2024	North Cell	0.4
September 2024 to July 2025	Pit A	3.8
August 2025	South Cell	0.4
September 2025 to June 2026	Pit E	2.1

(a) as of December 2024; ongoing updates provided in the annual reports

Source: Agnico Eagle 2024c. Mt = million tonnes. * = to be verified in the 2024 Annual Report.

A retention basin and a series of diversion ditches surround the catchment basin of the North Cell. These structures are designed to convey surface water runoff away from the TSF. Within the North Cell, three temporary retention basins and one ditch have been constructed along the downstream toe of the internal structure to collect contact water and runoff. In 2023, North Cell and South Cell reclaim water berms were improved for future tailings deposition.

The TSF’s current configuration allows tailings management in smaller areas with shorter beach lengths, reducing the amount of water that is trapped and permanently stored as ice, which would result in decreased TSF capacity. Further, operation in cells also allows progressive reclamation, cover trials, and cover construction. Due to the arid climate and permafrost environment, tailings in the TSF are disposed in a manner promoting freeze back. Given the duration that water at site is ice covered, subaqueous disposal is preferred. It is anticipated that the tailings will eventually become encapsulated by permafrost; thus, limiting oxygen diffusion and water infiltration into the tailings, contact water from the tailings, and ARD/ML generation.

The water management strategy for the TSF is to drain the surface water collected on the North Cell and South Cell of the TSF to Collection Pond 23. A primary north and south channel will drain the North Cell and South Cell to Third Portage Lake via Collection Pond 23, respectively. The channel will have an outlet through the stormwater dike and will convey all water from the north cell to Collection Pond 23. Secondary channels / swales will drain water from the various portions of the North Cell and South Cell and convey it to the primary northern and southern channel.

Currently, the TSF is inactive, with tailings reporting to Pit E, however, additional capacity remains in the TSF should the need arise. Section 2.5.6 provides an overview of the current configuration of dikes and saddle dams associated with the Meadowbank Mine TSF. Tailing solids chemistry is monitored monthly, and information is provided in Table 2.5-10.

In 2023, progressive reclamation occurred at the Meadowbank TSF, comprising the construction of NPAG/NML layers and rockfill structures in both the North and South Cells to support possible additional tailings deposition, continuing the construction of the NPAG/NML covers that was initiated in 2015. A total of 91,438 m^3 of NPAG/NML rockfill material and 14,075 m^3 of granular NPAG/NML material was placed in the TSF in 2023. The 2025 rockfill placement volumes will be provided in the next version of the Annual Report.

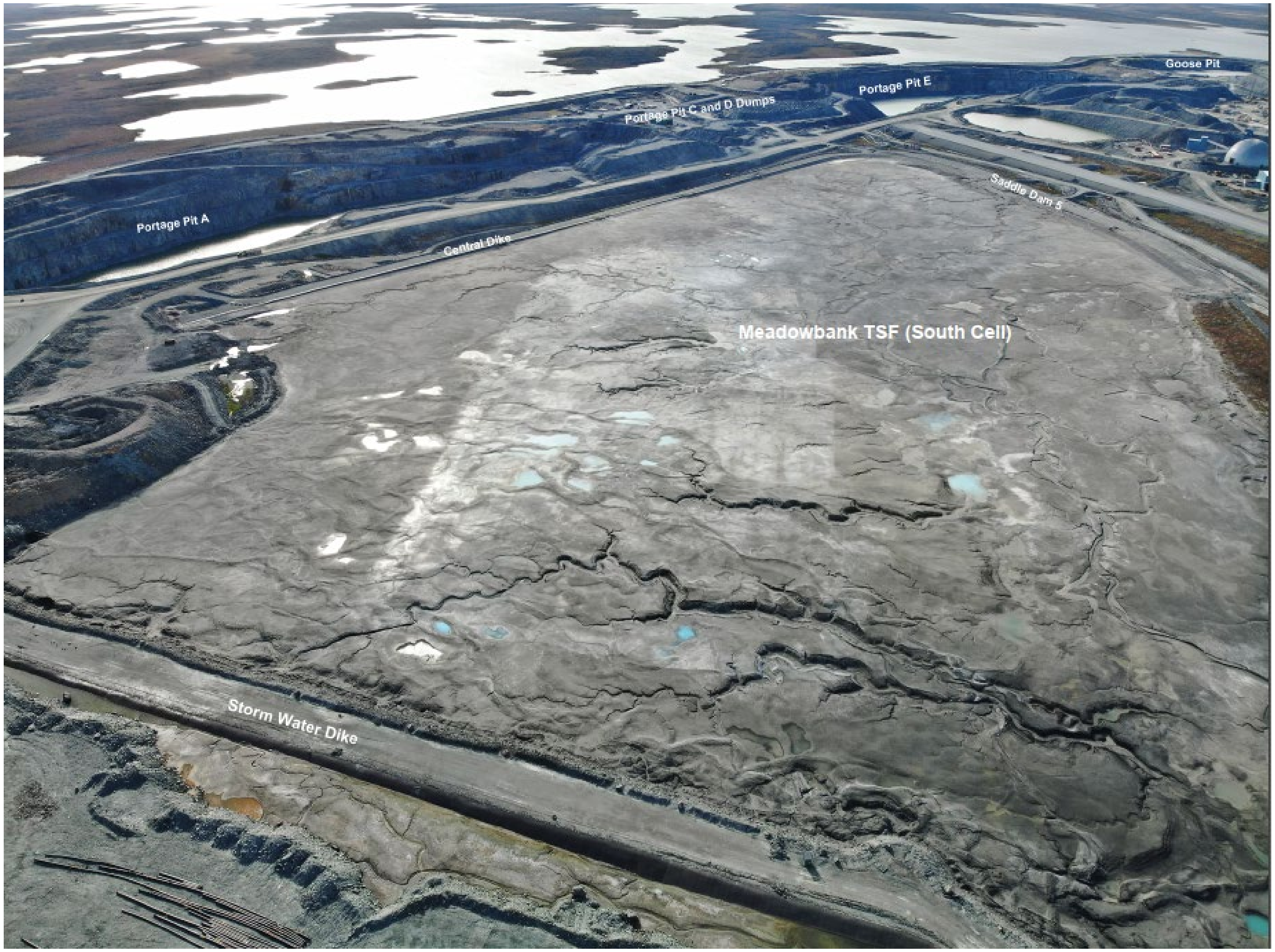


Photo 2-6: Meadowbank Mine TSF (2023)

Table 2.5-10: 2023 Tailings Solid Chemistry Monitoring Data

Analysis	Date	2023											
	Units	Jan	Feb	March	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
NP	t $CaCO_3$/1000t	73.6	93.1	82.8	24.6	81.2	77.2	83.6	97.5	68.6	76.5	79.4	82.2
AP	t $CaCO_3$/1000t	55.3	67.5	64.1	71.6	55	1.25	69.1	47.5	54.7	46.2	59.7	51.9
Net NP	t $CaCO_3$/1000t	18.3	25.6	18.7	-46.96	26.2	76	14.5	50	13.9	30.2	19.7	30.3
NP/AP	Ratio	1.33	1.38	1.29	0.34	1.48	61.8	1.21	2.05	1.25	1.65	1.33	1.58
Sulphur	%	2.02	2.1	2.18	2.22	2.12	< 0.005	2.52	1.76	2.08	1.99	2	1.87
Leachable SO_4-S	%	0.25	<0.04	0.13	<0.04	0.36	< 0.04	0.31	0.24	0.33	0.51	0.09	0.21
Sulphide	%	1.77	2.16	2.05	2.29	1.76	< 0.04	2.21	1.52	1.75	1.48	1.91	1.66
C	%	0.958	1.11	0.982	0.934	0.939	0.368	1.12	1.19	1.09	1.07	1.09	1.15
CO_3	%	4.01	4.82	4.04	0.76	3.76	0.96	4.5	4.96	3.88	4.6	4.53	4.69
Final pH	pH	1.91	1.5	1.85	1.56	1.67	1.86	1.73	1.78	1.8	1.86	1.86	1.63
As	ug/g	1600	1800	1400	2000	1200	1300	2500	1300	2000	1200	1400	1500
Cu	ug/g	89	130	140	79	120	120	110	120	120	87	102	130
Ni	ug/g	440	570	520	630	470	420	570	640	310	520	350	590
Zn	ug/g	94	93	99	86	96	88	90	94	86	94	104	100

Source: Agnico Eagle 2024a. NP = Neutralization Potential, AP = Acidity Potential.

2.5.5.2 Meadowbank Complex Tailings Storage Facility Dikes

Several perimeter dikes create the North Peripheral Structure and South Peripheral Structure of the Meadowbank Complex TSF, and thus the impoundment area of the TSF, which is bisected by the Stormwater Dike (Photo 2-6). In 2023, the eastern portion of the Stormwater Dike liner was capped with engineered fill. A full list of the Meadowbank Complex Tailings Management Infrastructure is provided in Table 2.5-11. Design criteria are presented in Table 2.5-12.

Table 2.5-11: Meadowbank Complex TSF Components

Infrastructure	Function
TSF North Cell Peripheral Structures	
Saddle Dam 1, Saddle Dam 2, RF1, RF2	Peripheral tailings retention structures for tailings containment within the North Cell
TSF North Cell Internal Structure	Upstream raise built on the tailings to increase the capacity of the North Cell
TSF South Cell Peripheral Structures	
Saddle Dam 3, Saddle Dam 4, Saddle Dam 5, Central Dike	Peripheral tailings retention structures for tailings containment within the South Cell
TSF Stormwater Dike	Internal structure that divides the TSF into the North and the South Cell
TSF Diversion Ditches	Non-contact water diversion structures. Prevent runoff from the watershed from reaching the TSF

RF= rock-filled road; TSF = Tailings Storage Facility.

Table 2.5-12: Design Criteria for the Meadowbank Complex Peripheral Structure

Use	Classification (CDA 2013)	Design Earthquake	Inflow Design	Water Level (m)		Max Tailings Elevation (m)	Crest Elevation (m; max elevation)
				Max Operation	Design Flood		
Design Criteria for North Cell Peripheral Structure (Saddle Dam 1, Saddle Dam 2) and Stormwater Dike							
Tailings Retention	High	1:2500	1/3 between 1000-year and PMF	148	149	149.5	150
Design Criteria for South Cell Peripheral Structure (Saddle Dam 3, Saddle Dam 4, Saddle Dam 5, Central Dike)							
Tailings Retention	High	1:2500	1/3 between 1000-year and PMF	143	144	144.5	145

Source: Agnico Eagle 2024e.

CDA = Canadian Dam Association; m= metres; PMF = Probable Maximum Flood.

Saddle Dam 1 – North Cell:
Saddle Dam 1 crosses a depression between the northwestern arm of Second Portage Lake and Third Portage Lake (Figure 2.5-26). Saddle Dam 1 is a rockfill embankment with a 3H:1V upstream slope and a 1.3H:1V downstream slope. The dam was constructed in two stages: Stage 1 of Saddle Dam 1 is 250 m in length and has a crest elevation of 141 masl (5141 mRL) and is 10 m in height, while Stage 2 is 400 m in length, and was constructed to an elevation of 150 masl (5150 mRL) and is 20 m in height. Figure 2.5-7 provides a typical cross-section of Saddle Dam 1.

Saddle Dam 2 – North Cell:
Saddle Dam 2 is located along the western side of the TSF and connects to the western corner of the Stormwater Dike (Figure 2.5-26). Saddle Dam 2 crosses a depression between the northwestern arm of Second Portage Lake and Third Portage Lake and has an elevation of 150 masl (5150 mRL).

The upstream foundation of the dike and abutments are primarily founded on bedrock; however, some portions of the structure, underneath the inverted filter, are founded on ice-poor soil. During construction, a thin layer of low permeability till was placed and compacted along the toe liner to tie-in the connection with bedrock. A thin layer of crushed aggregate (0 to 22 millimetre [mm]) mixed with dry bentonite powder was also placed under the thin layer of low permeability till in areas where open fractures were observed within the bedrock. The toe liner tie-in was then covered with till. Figure 2.5-8 provides a typical cross-section of Saddle Dam 2.

Rockfill Road 1 (RF1) and Rock Fill Road 2 (RF2) – North Cell:
There are two rockfill access roads located on the eastern side of the North Cell at the toe of the Portage WRSF (Figure 2.5-26). They were constructed with run of mine rockfill. These access roads were not designed as a containment structure, but during the operation of the North Cell, water and tailings ponded against them. In June 2013 water going through these structures infiltrated the Portage WRSF and then reached Lake NP2. Following this contact water event, a filter system was constructed in August 2014 on the upstream side of RF1 and RF2 to promote the build up of a tailings beach and prevent water exfiltration from the TSF at that location. The constructed filter berm consisted of till and/or coarse filter, geotextile, and fine filter. These structures are now covered by a tailings beach. In 2023, the tailings surface of RF1 and RF2 structures was capped. Figure 2.5-9 provides a typical cross-section of RF1/RF2.

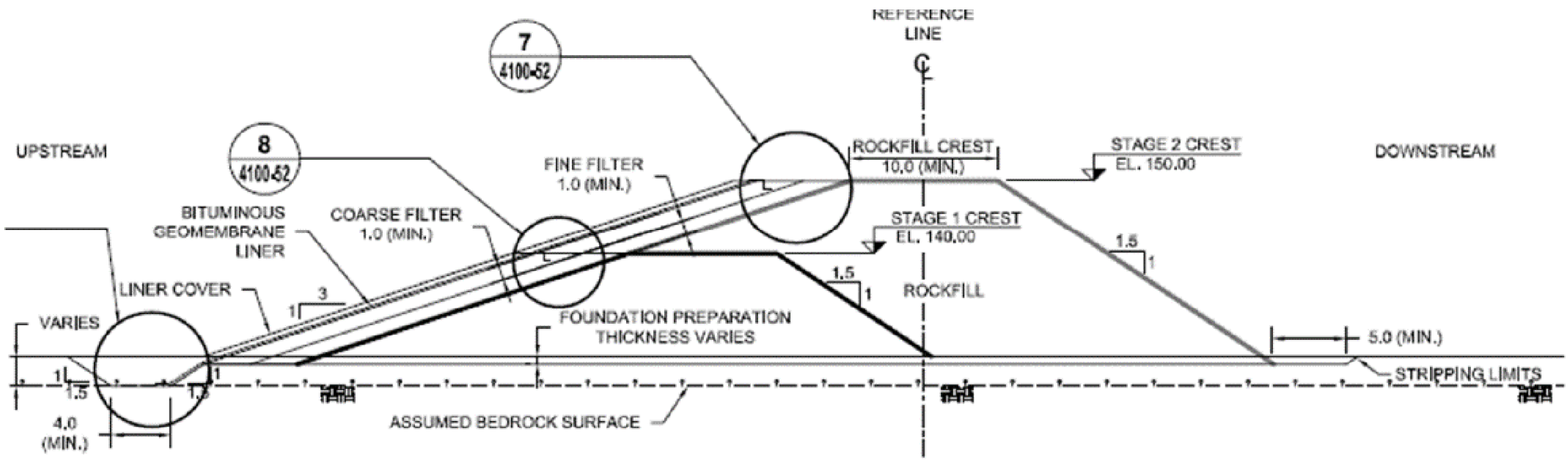


Figure 2.5-7: Typical Cross-Section of Saddle Dam 1

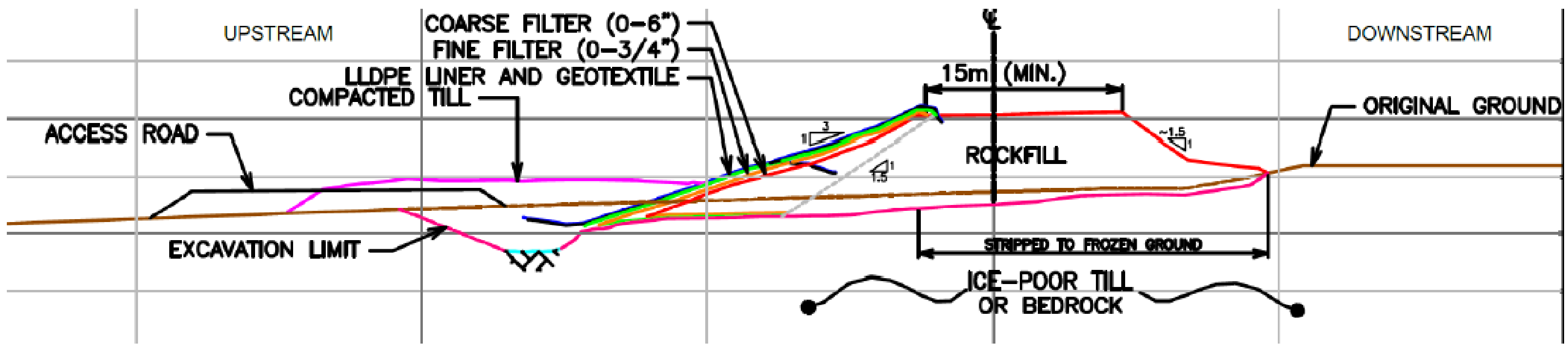


Figure 2.5-8: Typical Cross-Section of Saddle Dam 2

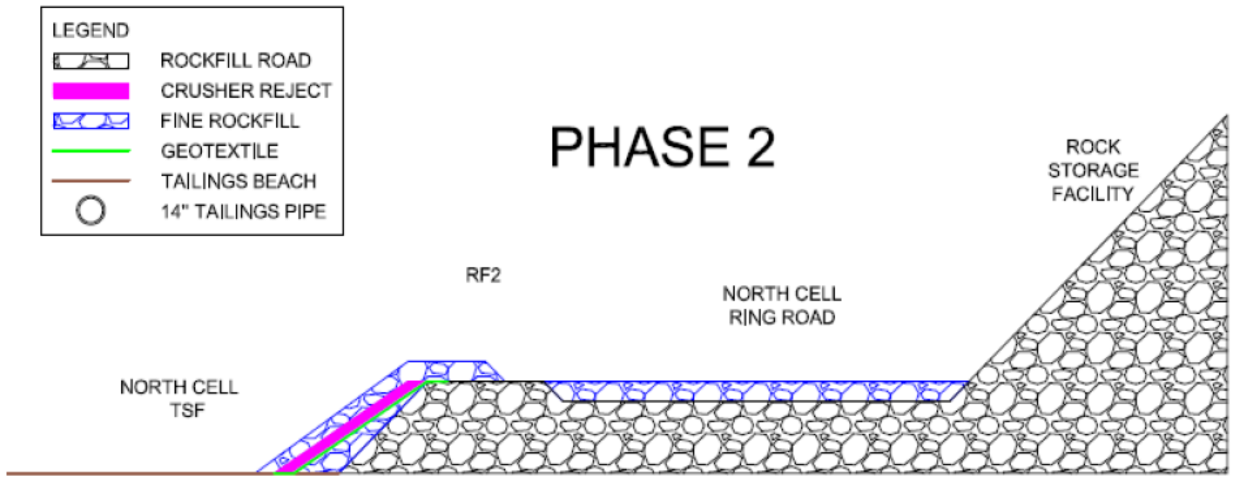


Figure 2.5-9: Typical Cross-Section of RF1/RF2

North Cell Internal Structure:

The North Cell Internal Structure is located within the North Cell of the TSF (Figure 2.5-26). It is built as an upstream raise over the existing tailings of the North Cell and the rockfill cover placed over the past years for closure operations. It was constructed in 2018 and is 2160 m in length with a variable elevation between 152 masl (5152 mRL) and 154 masl (5154 mRL).

The North Cell Internal Structure is designed and constructed as a permeable zoned rockfill dam with filter zones, built on the top of surface dried tailings of the North Cell and on the existing rockfill cover. The bulk part of the North Cell Internal Structure consists of coarse rockfill material. The upstream face is designed at a 3H:1V slope and the downstream faces are designed at a 1.5H:1V slope. The upstream face of the North Cell Internal Structure comprises two granular filter zones. The filter zones are designed to prevent tailings migration and internal erosion, while allowing water to flow through the embankment.

Channelling of water has been observed since 2019 at the upstream toe of the eastern part of the dike. The water flow is eroding fine filter material at the toe. Sloughing, deformation, and tension cracks in the upstream filter layer have been observed since 2020 in the eastern area and are caused by water eroding and undercutting the toe of the filters. In 2023, a rockfill berm was added to the toe of the North Cell Internal Structure to alleviate local erosion from contact water and local run-off flows (Agnico Eagle 2024i). The western portion of the North Cell Internal Structure was extended towards Saddle Dam 1 (Agnico Eagle 2024a).

Internal ditches and sumps were constructed over the existing tailings surface. A ditch connecting to a sump was built on the western side of the North Cell Internal Structure and two sumps were built on the eastern side. The objective of these structures is to collect water that would seep through the internal structure during operation. Water collected in these structures is pumped back into the TSF. These structures are operational only during deposition from the internal structure of the North Cell. Figure 2.5-10 provides a typical cross-section of the North Cell Internal Structure.

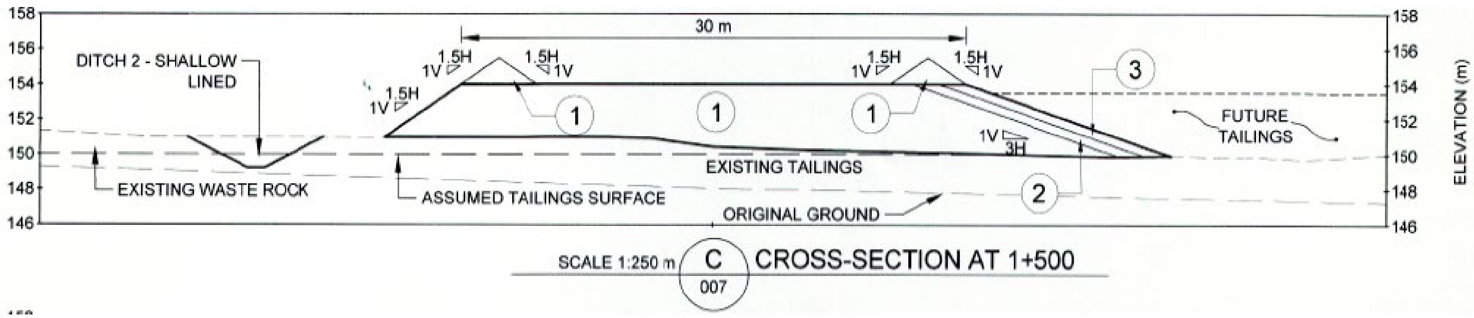


Figure 2.5-10: Typical Cross-Section of North Cell Internal Structure

The Stormwater Dike:

The Stormwater Dike is a rockfill embankment structure founded on lakebed soils and located within the Meadowbank TSF (Figure 2.5-26). Most of the dike is seated on dense till from the former lakebed within the talik while the abutments are generally founded on bedrock. The Stormwater Dike subdivides the TSF into the North Cell and the South Cell, within the dewatered northwestern arm of Second Portage Lake. The North Cell side is referred to as upstream and the South Cell side as downstream. The Stormwater Dike was initially designed and constructed as a temporary structure that would be encapsulated in tailings to equal elevation on both sides. With the change in tailings deposition strategy there is a 5 m difference in tailings elevation between the upstream and downstream area, thus the dike has become a permanent structure. The upstream slope is approximately 3H:1V and the downstream slope is about 1.3H:1V.

The Stormwater Dike was constructed in three stages. Stage 1 has a height of 10 m (crest elevation of 140 masl; 5,140 mRL) and a length of 860 m. Stage 2 has an overall height of 18 m (crest elevation of 148 m; 5148 mRL) and a length of about 1,060 m. Stage 3 consisted of raising the existing crest now-conjoined dikes to 150 masl (5150 mRL). A horizontal bench is present along the upstream face of the structure due to the connection of Stage 1 and Stage 2. Following this, a bituminous geomembrane liner was installed above the graded filters on the upstream face of the dike. Low permeability till was placed and compacted along the upstream toe of the dike, above the liner. In 2023, fine and coarse filter protection were added over the geomembrane in advance of the rockfill closure cover (Agnico Eagle 2024i). Figure 2.5-11 provides a typical cross-section of the Stormwater Dike.

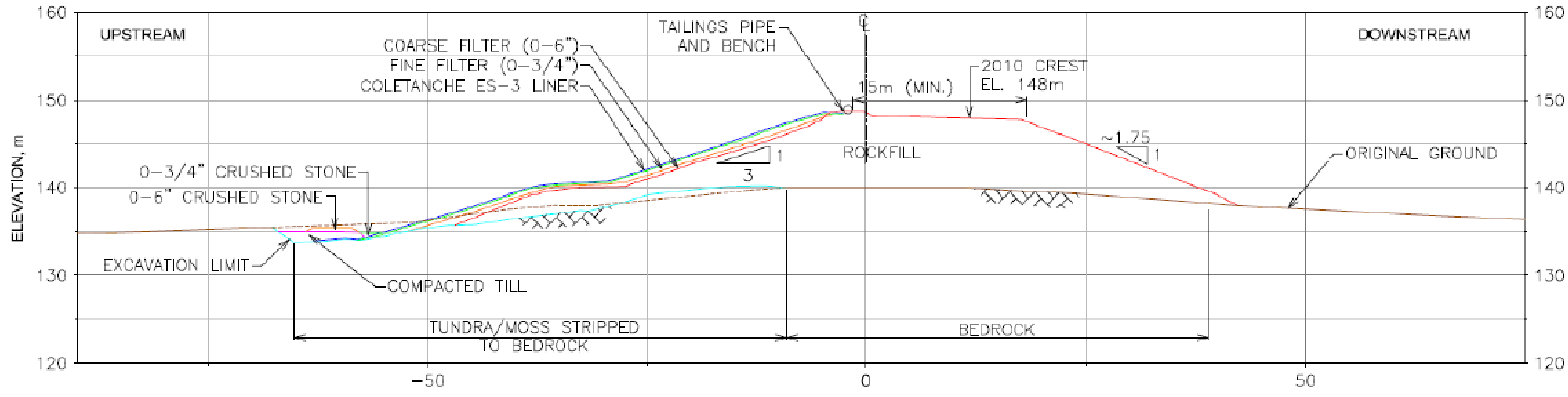


Figure 2.5-11: Typical Cross-Section of the Stormwater Dike

Saddle Dams 3, 4, and 5 – South Cell:

Saddle Dam 3 is in the northwestern corner of the South Cell and merges into Saddle Dam 2 (Figure 2.5-26). Saddle Dam 4 is in the southwestern corner of the South Cell and merges into Saddle Dam 5, which merges with the southern end of Central Dike. These three dams have an elevation of 145 masl (5145 mRL), and a cumulative length of 865 m. Saddle Dams 3, 4, and 5 are designed and constructed as zoned rockfill dams with filter zones, low permeability upstream liners, and upstream toe liner tie-in key trenches. Cross-sections of Saddle Dams 3, 4 and 5 consist of a rockfill embankment, constructed from run-of-mine waste rock, placed in lifts and compacted. The upstream faces are designed at a 3H:1V slope and the downstream faces are designed at a 1.5H:1V slope. Saddle Dams 3, 4, and 5 have sumps located downstream to collect runoff water and pump it back into the South Cell. Figure 2.5-12 provides a typical cross-section of Saddle Dams 3, 4, and 5.

Central Dike – South Cell:

The Central Dike is located along the eastern side of the TSF and crosses a depression within Second Portage Lake (Figure 2.5-26). It forms one of the perimeter structures of the South Cell. The dike was constructed to a final elevation of 145 masl (5145 mRL). The completed crest length is approximately 900 m.

The Central Dike design includes a compacted rockfill embankment with an upstream contact water barrier, granular filters, and a key trench along the centerline of the dike transitioning on the upstream toe near both abutments. The foundation soils include lakebed sediments and till overlying bedrock. Soft and ice-rich soils were removed from the Central Dike footprint during construction. The Central Dike is designed to be able to be raised to an elevation of 150 masl (5150 mRL) and the final crest elevation is subject to review by Agnico Eagle.

A contact water pumping system was installed in a low spot along the dike, to control the water level at the downstream toe. The pump is operated year-round. Contact water is collected within the downstream area of the dike. The average contact water rate at Central Dike has significantly decreased since 2015 as tailings were deposited in the South Cell and has been following contact water modeling predictions. The water from the contact water system is sent to Collection Pond 23 via the primary south channel draining the entire South Cell. Figure 2.5-13 provides a typical cross-section of Central Dike.

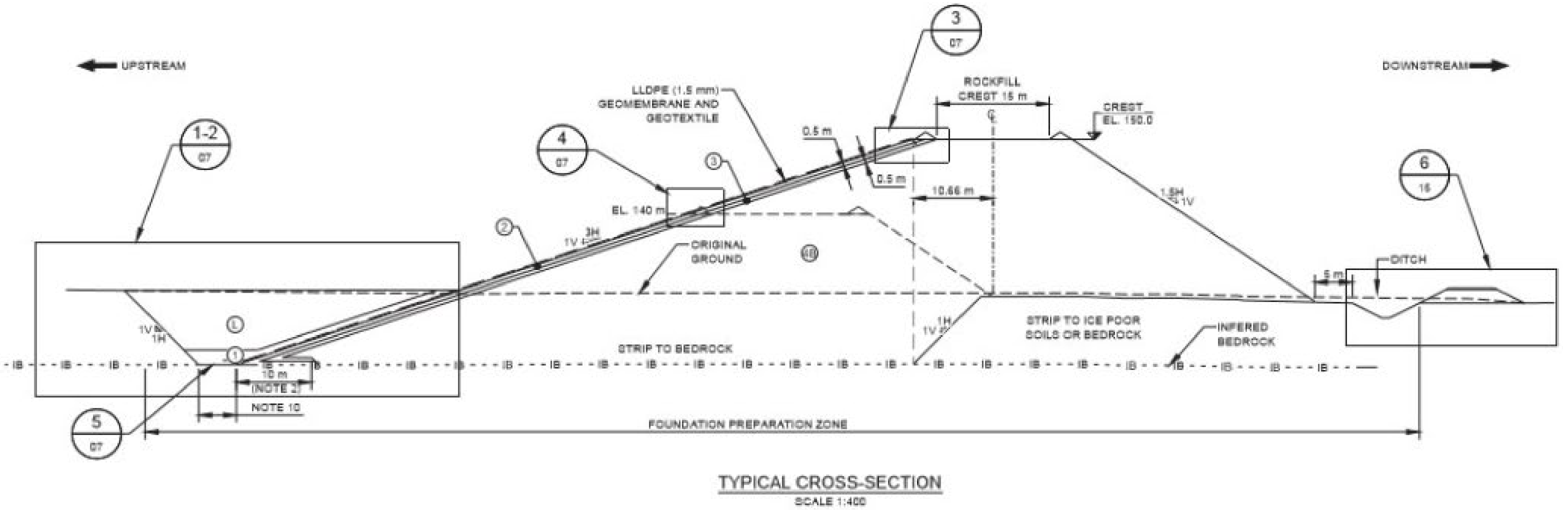


Figure 2.5-12: Typical Cross-Section of Saddle Dams 3/4/5

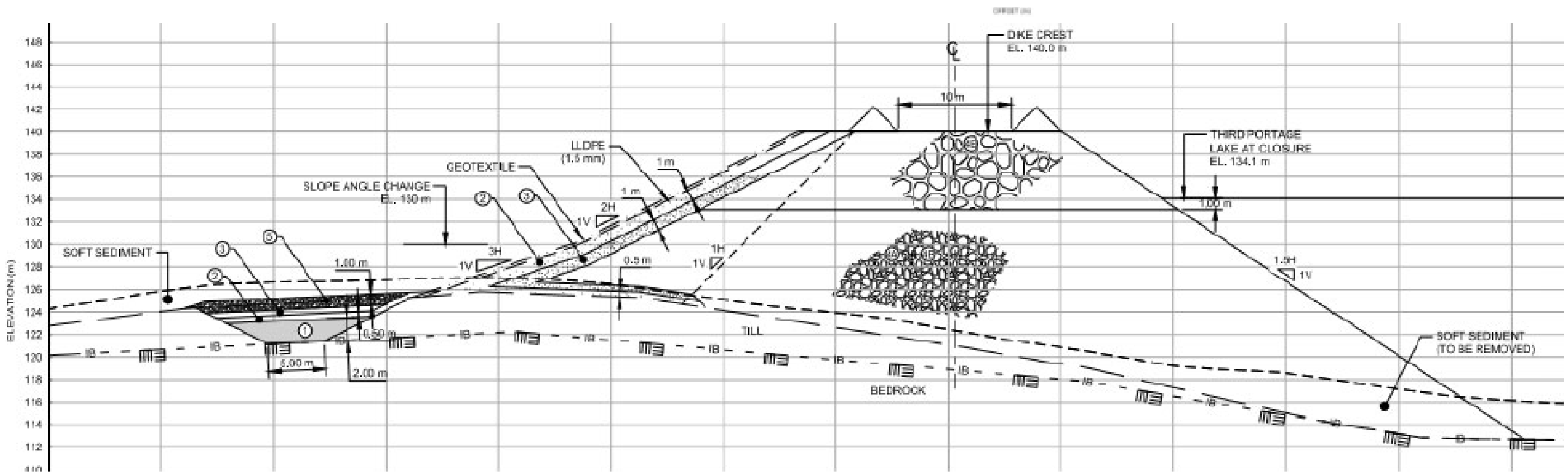


Figure 2.5-13: Typical Cross-Section of the Central Dike

2.5.5.3 In Pit Tailings

Design criteria for the In-Pit Tailings deposition areas (e.g., Portage Pit A, Portage Pit E, and Goose Pit) are provided in Table 2.5-13:. While the Meadowbank TSF still has capacity to receive tailings, most tailings now report to Portage Pit E (Table 2.5-14). As such, the Meadowbank TSF North Cell and South Cell only receive tailings intermittently. Agnico Eagle (2024c) provides a comprehensive overview of the in-pit tailings deposition plan. Notably, Pit A will be used primarily for water management; however, if needed, it can receive tailings. Figure 2.5-14 provides the most recent forecast on pit water elevations to 2027. Figure 2.5-15 provides an overview of the tailings deposition plan.

Table 2.5-13: In-Pit Tailings Design Criteria

Design Criteria
Designer: AtkinsRéalis Construction Period (Infra): 2019 - 2021 Operation Period: 2019 - 2028 Planned Closure Period: 2026 to 2044 Maximum Tailings Elevation: 103.6 masl (5103.6 mRL); 30 m below Third Portage Lake level (133.6 masl; 5133.6 mRL).

Source: AtkinsRéalis 2018.

The general in-pit tailings strategy uses three key principles to promote the likelihood of achieving the designed post-closure configuration:

- a minimum of 8 m tailings freeboard to prevent re-pulping of tailings solids and transport to the lakes once flooded
- Portage Pit A and Pit E water elevation will maintain a freeboard with the lowest point of the West Road if deemed required by geotechnical assessment results
- Goose Pit tailings freeboard will respect a highest elevation of 120 masl (5120 mRL), to create a 13.6 m freeboard near Bay-Goose Dike

Table 2.5-14: 2025 to 2028 In-Pit Tailings Deposition Plan

Period	Pit	Tailings Deposited (t)	Tailings Elevation (masl)	Water Elevation (masl)
2025	Pit A	2,776,571	78.504	110.96
	Pit E	0	104.191	110.96
	Goose	0	85.000	122.14
2026	Pit A	1,762,803	93.318	116.19
	Pit E	1,046,457	110.287	116.19
	Goose	0	85.000	89.87
2027	Pit A	0	93.318	117.42
	Pit E	4,260,508	121.264	117.42
	Goose	0	85.000	120.31
2028	Pit A	0	93.318	120.55
	Pit E	2,135,587	125.6	120.55
	Goose	0	85.000	119.92

Source: Agnico Eagle 2024 Annual Report - Meadowbank Waste Rock and Tailings Management Plan V15

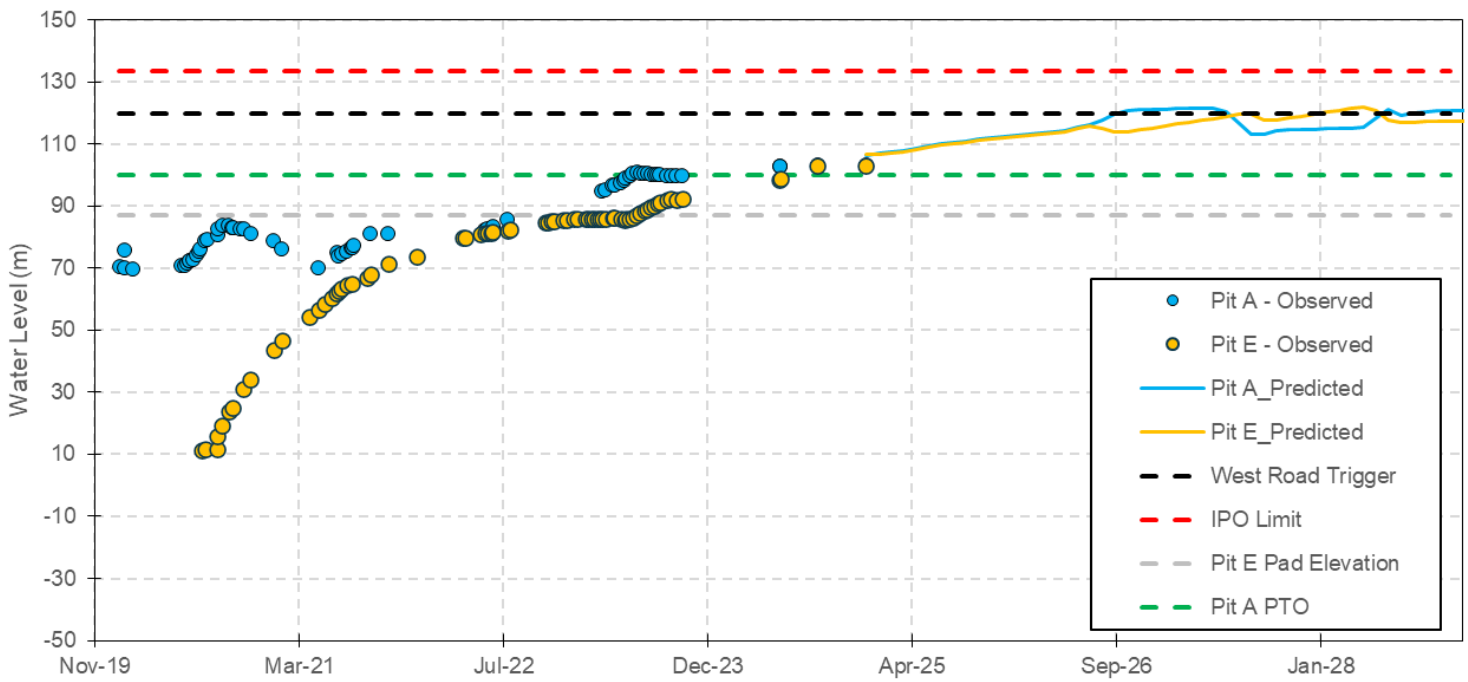


Figure 2.5-14: Pit A and Pit E Water Level Forecast to 2028

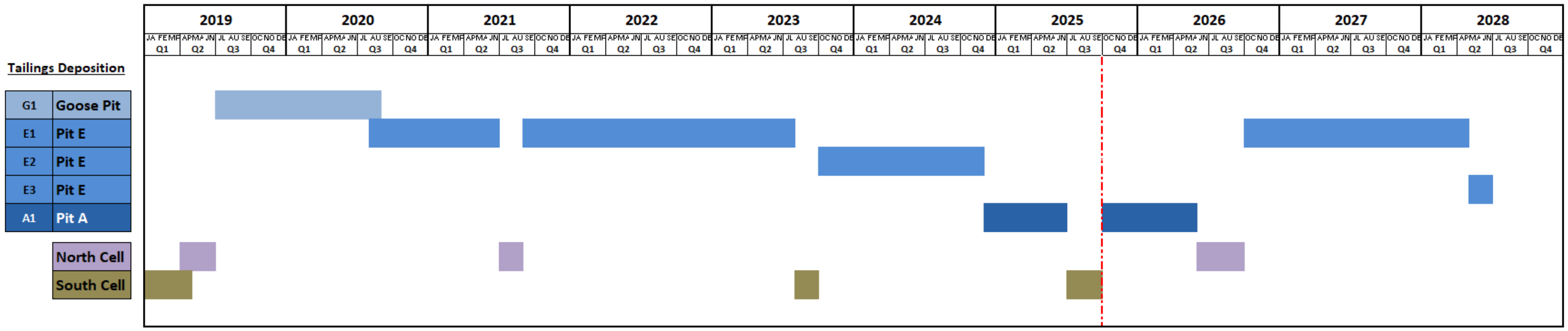


Figure 2.5-15: In-Pit Deposition Schedule for the Meadowbank Mine

2.5.5.4 Meadowbank Mine – Portage Pit A Tailings

Portage Pit A is located within the dewatered portion of the Second Portage Lake. It was mined out between 2010 and 2018 by creating five benches of 21 m each. The crest is at an elevation of 130.0 masl (5130 mRL) and the bottom is at -3.0 masl (4997 mRL), which provides a total volume of retention ranging between 11,416,587 m^3 and 14,719,893 m^3 depending on the water/tailings deposition configuration. It is currently anticipated that this structure will be used primarily for water management, although infrastructure is present for in-pit tailings deposition should it be necessary.

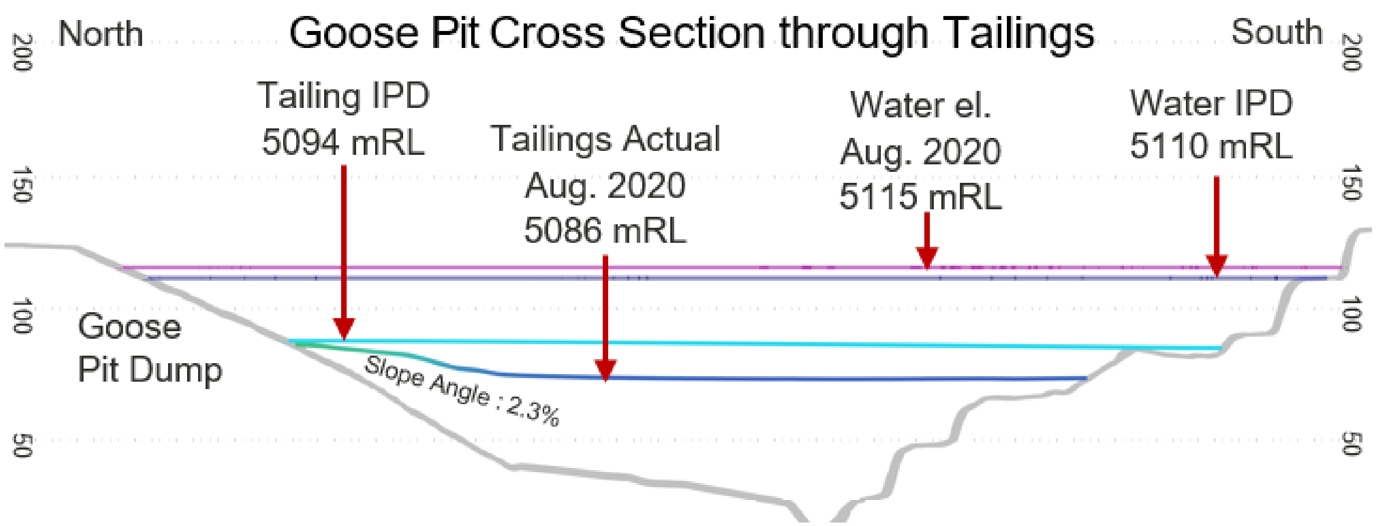
2.5.5.5 Meadowbank Mine – Portage Pit E Tailings

Portage Pit E is located between Portage Pit A and Goose Pit, within the dewatered portion of the Third Portage Lake. It was mined out between 2010 and 2019, and it has a total retention volume ranging between 19,141,935 m^3 and 23,695,162 m^3 depending on the tailings/water deposition plan.

The 2023 Mine Plan (Agnico Eagle 2023a) indicates that the majority of tailings generated for the duration of the LOM will primarily report to Portage Pit E. If necessary, tailings may be deposited in Portage Pit A or Goose Pit. Disposal of tailings into Portage Pit E began on August 20, 2020, and is ongoing, with tailings currently being discharged from the crest of the south end of the west wall, near the south ramp entry to the pit (Agnico Eagle 2024a). Portage Pit E was the primary disposal location for tailings in 2024, as Portage Pit A and Goose Pit are near their final configurations (Agnico Eagle 2024a).

2.5.5.6 Meadowbank Mine – Goose Pit Tailings

Goose Pit is located at the south end of the Meadowbank Mine, in the dewatered section of the Third Portage Lake. Goose Pit provides a total volume of retention for tailings of 5,471,353 m^3 and 6,321,146 m^3 for tailings and water. The Goose Pit also contains an in-pit waste rock dump. In 2019 tailings deposition commenced into the former open pit and continued to 2020. The tailings abut the Goose Pit Dump slope and cover the lower portion and toe of the dump Figure 2.5-16. The deposited tailings have an elevation of 89.87 masl (5089.87 mRL) and are currently covered by approximately 22 m of water. The pit is no longer actively used for tailings deposition.



Source: Tetra Tech 2020.

Figure 2.5-16: Goose Pit Cross-Section

2.5.6 Dewatering Dikes

This section describes dikes and saddle dams for the Meadowbank Complex, while information of water management infrastructure is provided in Section 2.5.7. The Meadowbank and Whale Tail OMS manuals (Agnico Eagle 2024g; Agnico Eagle 2024h) contain plan view figures, aerial photographs, and cross-sectional schematics for dikes and dams associated with the Meadowbank Complex TSF. Dam stability information is provided in (Agnico Eagle 2024g). The surveillance program for the dewatering dikes and the TSF structures includes site observation, inspection, and instrument monitoring. Details of these surveillance programs and their frequencies at Meadowbank Mine are presented in the surveillance section of the TSF OMS Manual (Agnico Eagle 2024e) and in the Dewatering Dike OMS Manual (Agnico Eagle 2024g). Details of these surveillance programs and their frequencies at Whale Tail Mine are presented in the surveillance section of the Whale Tail Water Management Infrastructures OMS Manual (Agnico Eagle 2024h).

2.5.6.1 Meadowbank Mine – Dewatering Dikes

Dewatering dikes and dams were required to isolate mining activities from surrounding lakes (e.g., East Dike, South Camp Dike, and Bay-Goose Dikes). All dikes and dams were designed for long term stability.

East Dike

East Dike isolates the northwest arm of Second Portage Lake from the Portage Pit and the Meadowbank Complex TSF (Figure 2.5-26). There are no spillways or water diversion works associated with the East Dike. It is approximately 800 m in length and was constructed within Second Portage Lake prior to dewatering. It consists of a wide rockfill shell, with downstream filters and a soil-bentonite cutoff wall that extends to bedrock. The cutoff wall extends up to 8 m below lake level. During construction an 18 m^3 sinkhole formed near station (Sta.) 60+472. Additional grouting was performed to mitigate this occurrence, and the dike has performed well since then. Table 2.5-15 provides the design details for the East Dike. Figure 2.5-17 provides a typical cross-section of the East Dike.

Table 2.5-15: Design Criteria for the East Dike

<table>
<tr><th rowspan="2">Use</th><th rowspan="2">Water Type</th><th rowspan="2">Classification (CDA 2013)</th><th rowspan="2">Inflow Design Flood</th><th colspan="2">Water Level (m)</th><th rowspan="2">Crest Elevation (m) (max height)</th></tr>
<tr><th>Normal</th><th>Design Flood</th></tr>
<tr><td>Water Retention /Dewatering</td><td>Non-contact</td><td>High</td><td>1/3rd between 1000-Year and PMF</td><td>133.1</td><td>135.1</td><td>13.7.1 (10 m)</td></tr>
<tr><td colspan="7">Operational Highlights:
• Sinkhole cavity due to SB erosion observed in 2009 and repaired with grouting. Stable since then.
• Contact water managed by 2 pumping stations (stable rate).</td></tr>
</table>

Source: Agnico Eagle 2024k.

CDA = Canadian Dam Association; m= metres; PMF = Probable Maximum Flood; m= metres; SB = Soil-Bentonite.

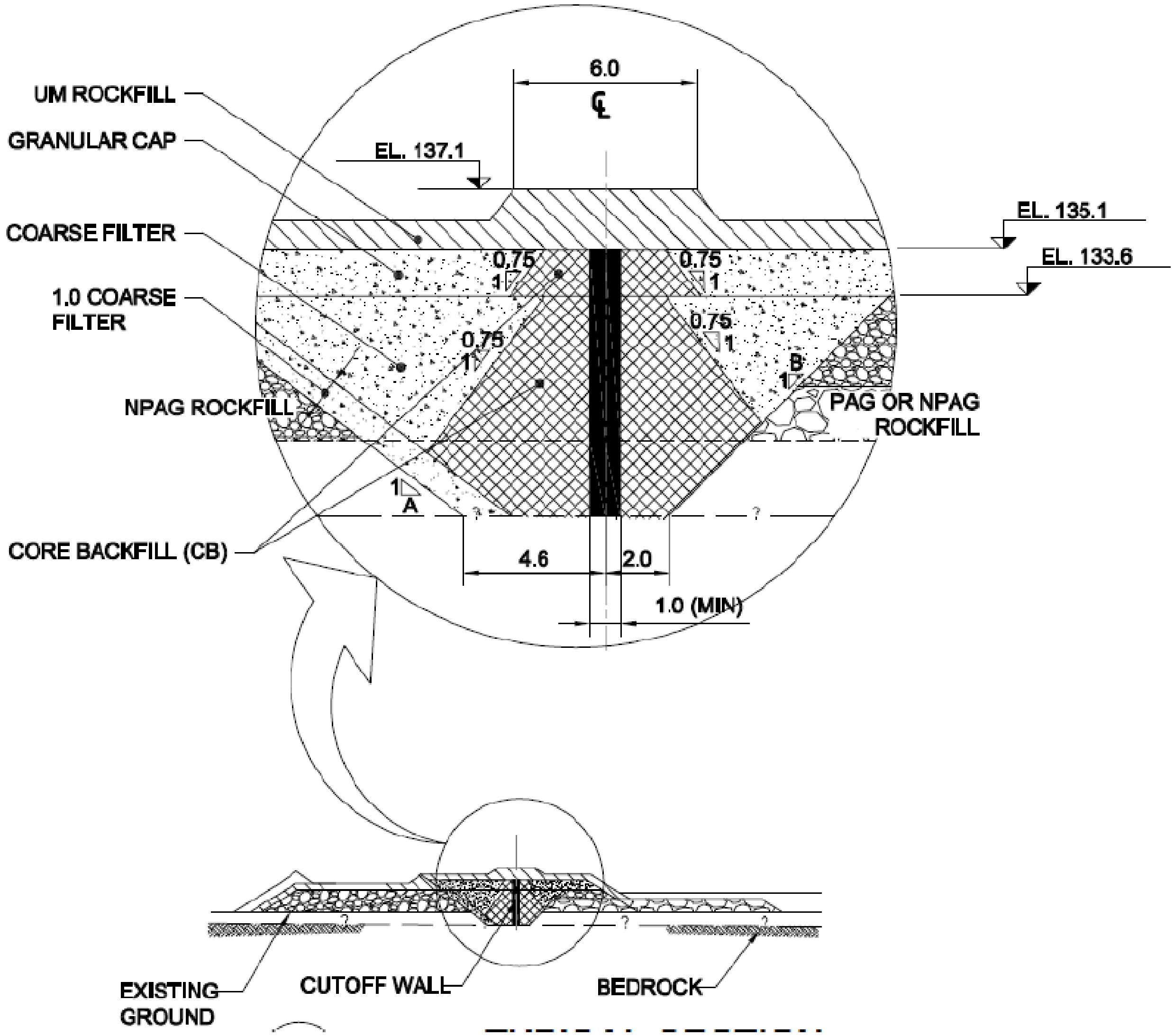


Figure 2.5-17: Typical Cross-Section of East Dike

The Bay-Goose Dike

The Bay-Goose Dike works in conjunction with the South Camp Dike to isolate the Bay-Goose Basin from Third Portage Lake, and permits operation of the Goose Pit and the southern portion of Portage Pit (Figure 1.3-2; Figure 2.5-26). No spillways or water diversion works are associated with the Bay-Goose Dike. The Bay-Goose Dike is approximately 2200 m in length and was constructed "in the wet", prior to dewatering. The earthworks component of the Bay-Goose Dike construction occurred over two summer construction seasons. The crest of Bay-Goose Dike is a restricted area and access is prohibited. The crest of this structure can only be accessed by authorization from the Geotechnical Coordinator. Table 2.5-16 provides the design details for the Bay-Goose Dike. Figure 2.5-18: provides a typical cross-section of the Bay-Goose Dike.

Table 2.5-16: Design Criteria for the Bay-Goose Dike

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention /Dewatering	Non-contact	High	1/3rd between 1000-Year and PMF	134.1	135.1	13.7.1 (15 m)
Operation Highlights: • Settlement and tension cracks observed in the thermal capping of the structure. • Small contact water observed at the toe of the structure. Naturally report to Goose Pit.						

Source: Agnico Eagle 2024g. CDA = Canadian Dam Association; m= metres; PMF = Probable Maximum Flood; m= metres.

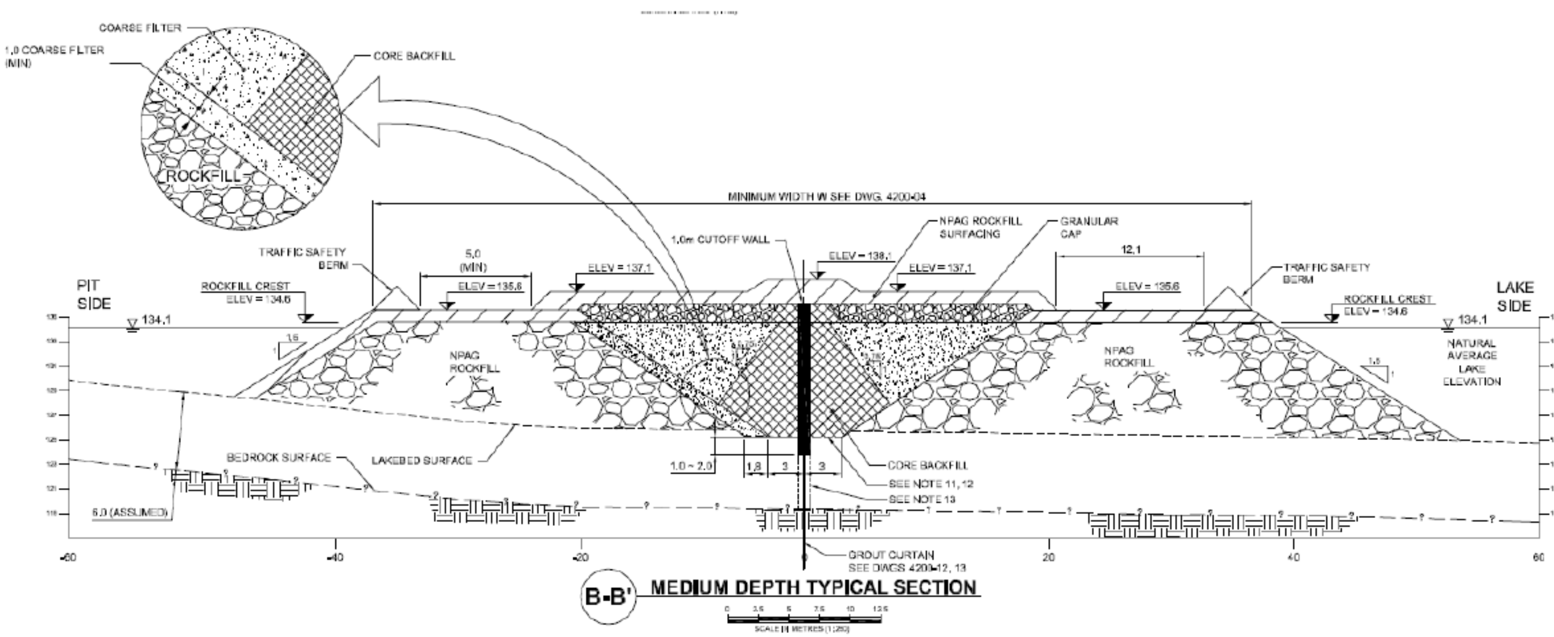


Figure 2.5-18: Typical Cross-Section of Bay-Goose Dike

The South Camp Dike

The South Camp Dike covers a narrow channel within Third Portage Lake and in conjunction with the Bay-Goose Dike isolates the Bay-Goose Basin from Third Portage Lake (Figure 1.3-2; Figure 2.5-26). No spillways or water diversion works are associated with the South Camp Dike. It is located south of the plant site area and is used to connect the mainland to South Camp Island. It covers a narrow channel, approximately 60 m in width, where water depths were between 0.5 and 1 m.

The South Camp Dike has a broad rockfill shell with a bituminous geomembrane liner installed on the upstream side of the shell. The liner was founded on native frozen (permafrost) till material, in a trench approximately 3 to 5 m below the lakebed surface. Compacted granular material mixed with bentonite was placed above the toe of the liner. Table 2.5-17 provides the design details for the South Camp Dike. Figure 2.5-19 provides a typical cross-section of the South Camp Dike.

Table 2.5-17: Design Criteria for the South Camp Dike

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention /Dewatering	Non-contact	Significant	n/a	134.1	136.3	137.6 (3 m)
Operation Highlights: n/a						

Source: Agnico Eagle 2024g.

CDA = Canadian Dam Association; m= metres; n/a = not applicable.

Vault Dike

Vault Dike is located across a shallow creek that connects Wally Lake and Vault Lake, at the Vault Pit area approximately 8 km north of the main Meadowbank Mine (Figure 1.3-3). Vault Dike is essential to allow the dewatering of Vault Lake and to isolate Vault Pit during mining activities from Wally Lake. Vault Dike is designed and constructed as a zoned rockfill dam with filter zones, an impervious upstream liner consisting of a bituminous geomembrane liner, and an upstream key trench made of aggregate mixed with bentonite. The filter zones minimize contact water and internal erosion and facilitate contact water collection. Vault Dike includes a key trench at the base of the upstream side filled with a 0 to 25 mm fill amended with bentonite surrounding the liner. Coarse and fine filter material was placed on the upstream slope as geomembrane bedding. The bulk part of the dike consists of coarse rockfill material. The embankment crest is at 142.4 masl (5142.4 mRL) and the upstream toe is at approximately 139.4 masl (5193.4 mRL). The downstream toe is at approximately 139.6 masl (5139.6 mRL) and the bottom of the key trench ranges from 135.6 masl to 142.3 masl (5135.6 mRL to 142.3 mRL), with an average elevation of 137.0 masl (5137 mRL). Table 2.5-18 provides the design criteria for the Vault Dike. The upstream and downstream fill slopes of the dam are 1.5H:1V. Figure 2.5-20 provides a typical cross-section of the Vault Dike.

Table 2.5-18: Design Criteria for the Vault Dike

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention /Dewatering	Non-contact	Low	1-100-year snow melt + 1-100-year rainfall	139.52	141	142.5 (3 m)
Operation Highlights: n/a						

Source: Agnico Eagle 2024g. CDA = Canadian Dam Association; m = metres

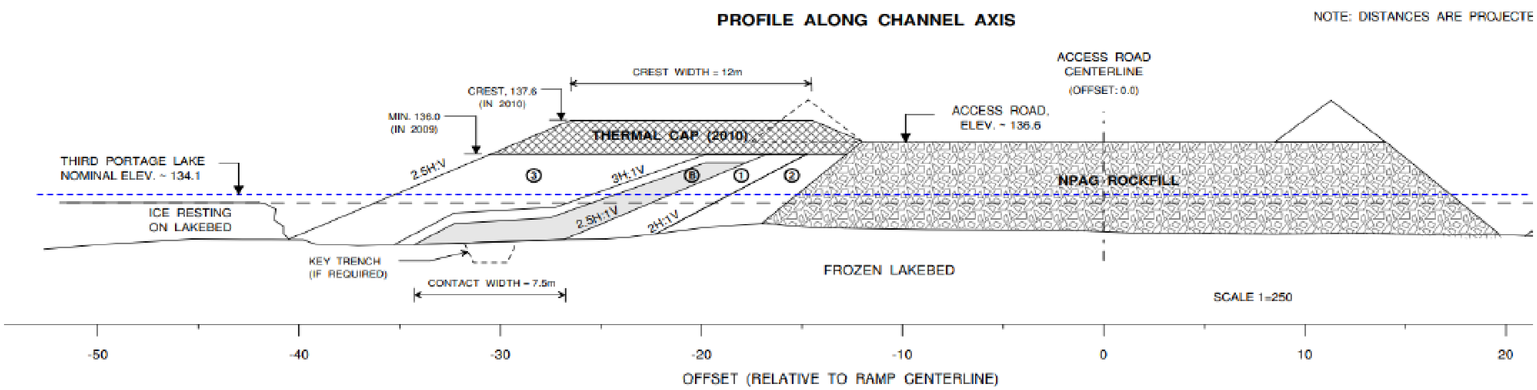


Figure 2.5-19: Typical Cross-Section of South Camp Dike

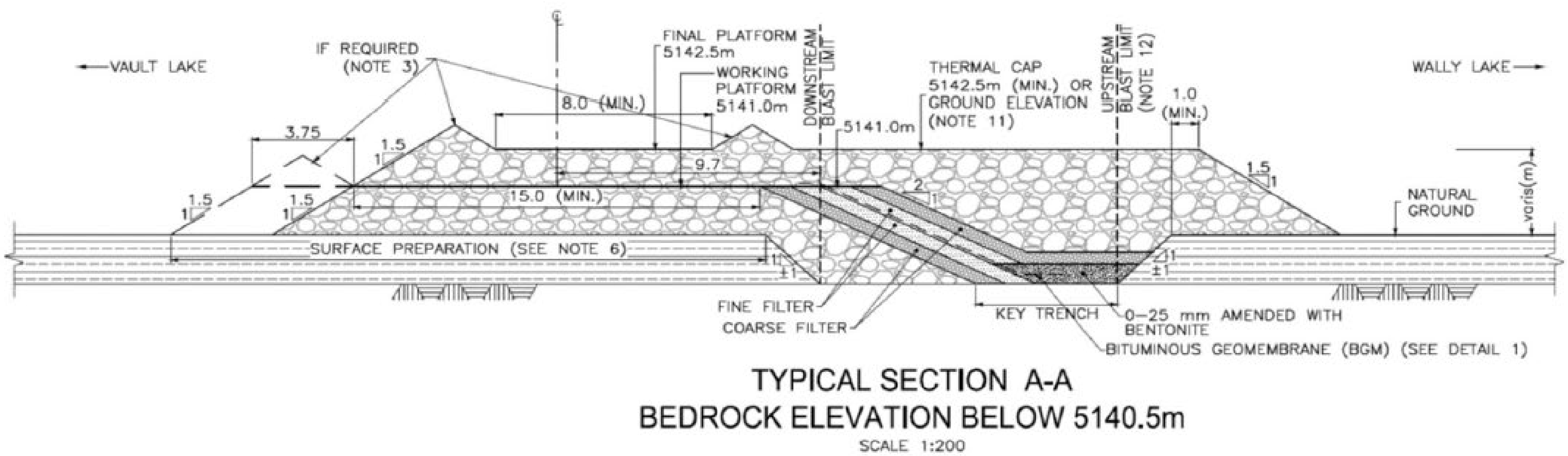


Figure 2.5-20: Typical Cross-Section of Vault Dike

2.5.6.2 Whale Tail – Dewatering Dikes

The Whale Tail Mine has four dikes associated with its footprint (Table 2.5-19; Figure 2.5-21). These dikes primarily serve to keep lake water from entering areas used for pits or other mine components. Notably, a fifth dike (Northeast Dike) was dismantled in 2020, thus is not reflected in Table 2.5-19.

Table 2.5-19: Whale Tail Mine Dewatering Dikes

Infrastructure	Function
Whale Tail Dike	Non-contact water retention and dewatering structure. Isolates the Whale Tail Pit mining activities from Whale Tail Lake
Mammoth Dike	Non-contact water retention structure. Isolates the Whale Tail Pit mining activities from Kangislulik Lake
WRSF Dike	Contact water retention structure. Prevents contact water from snow melt and runoff from direct precipitation on the waste rock stockpile from reporting into Kangislulik Lake by storing it in the WRSF pond
IVR Dike D-1	Contact water retention structure. Prevents contact water from the IVR Attenuation Pond from reporting into the main camp area

Source: Agnico Eagle 2024h.

Whale Tail Dike

The Whale Tail Dike is located at the south of the Whale Tail Pit and isolates the Whale Tail Pit from Whale Tail Lake South (Figure 2.5-21). The South Whale Tail Diversion Channel is a diversion structure associated with this dike and is used to re-route water from Whale Tail South to Kangislulik Lake. Whale Tail Dike is approximately 835 m in length and was constructed within Whale Tail Lake on a shallow plateau of the lake floor. It consists of a wide rockfill shell, with downstream filters and a cement-bentonite cutoff wall built with secant piles that extend into the bedrock. The cutoff wall extends up to 12 m below lake level and is socketed 1.37 m in the bedrock on average. The dike has a 5 m grout blanket on the upstream side and a 10 m grout curtain on the downstream side. Thermal cover rockfill of 2.0 m thick was placed between the secant pile top elevation and the final crest elevation of the dike at 159 masl (5159 mRL).

In August 2022 it was observed that the natural soil on the eastern abutment had settled allowing water to ingress further into the east abutment, which led to rapid thawing of the eastern abutment foundation and the development of cracks on the crest and sloughing of the dike slope in that area. Work to remediate this issue was carried out in two phases under the Whale Tail Dike Thermal Capping project. Phase 1 was completed at the eastern abutment from September 19 to 29, 2022 (Agnico Eagle 2023a). The design, implementation, and monitoring of erosion control measures for Phase 1 have been previously reported in the 2022 Meadowbank Complex Annual Report (Agnico Eagle 2023a). Phase 2 was completed from April 10 to 22, 2023, and included thermal berms that have been added to the west and east abutments on the lake side to encourage regeneration of frozen ground as this contributes to upstream slope stability and maintaining the contact water control measures of the Dike (Agnico Eagle 2024h). As-built drawings of Whale Tail Dike Eastern and Western abutments are presented in Agnico

Eagle (2024h). Phase 2 earthworks site preparation consisted of snow removal at both abutments, as well as ice excavation on the western abutment to prevent possible settlement during freshet. Snow and ice were disposed of downstream of the dike in a pre-approved area so resulting meltwater would flow into the Whale Tail Attenuation Pond. For the 2023 east abutment work, capping material was added to the above-water portion of the thermal berm that had been previously constructed to the east of Whale Tail Dike. No free water was expected or encountered during construction; thus, sediment control and water quality measures were not required. Following poor drainage performance at the toe of the Dike during freshet 2023, the toe access road was raised and reprofiled, the contact water collection trench was remediated, and a SeaCan shelter was added to the main weir for contact water monitoring (Agnico Eagle 2024h). No dewatering activities occurred in 2023. Table 2.5-20 outlines the design criteria for the Whale Tail Dike. Figure 2.5-22 provides a typical cross-section of the Whale Tail Dike.

Table 2.5-20: Whale Tail Dike Design Criteria

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention /Dewatering	Non-contact	High	1/3 between 1000-Year and PMF	156.0	157.0	159.0
Operation Highlights: • Contact water at D/S toe. Mitigated by remedial grouting of a downstream blanket (2019/2020). • Contact water reports to the Whale Tail Attenuation Pond (stable rate). • Thermal degradation of the Eastern upstream abutment required the construction of a thermal berm in 2022.						

Source: Agnico Eagle 2024h. CDA = Canadian Dam Association; m = metres; PMF = Probable Maximum Flood.

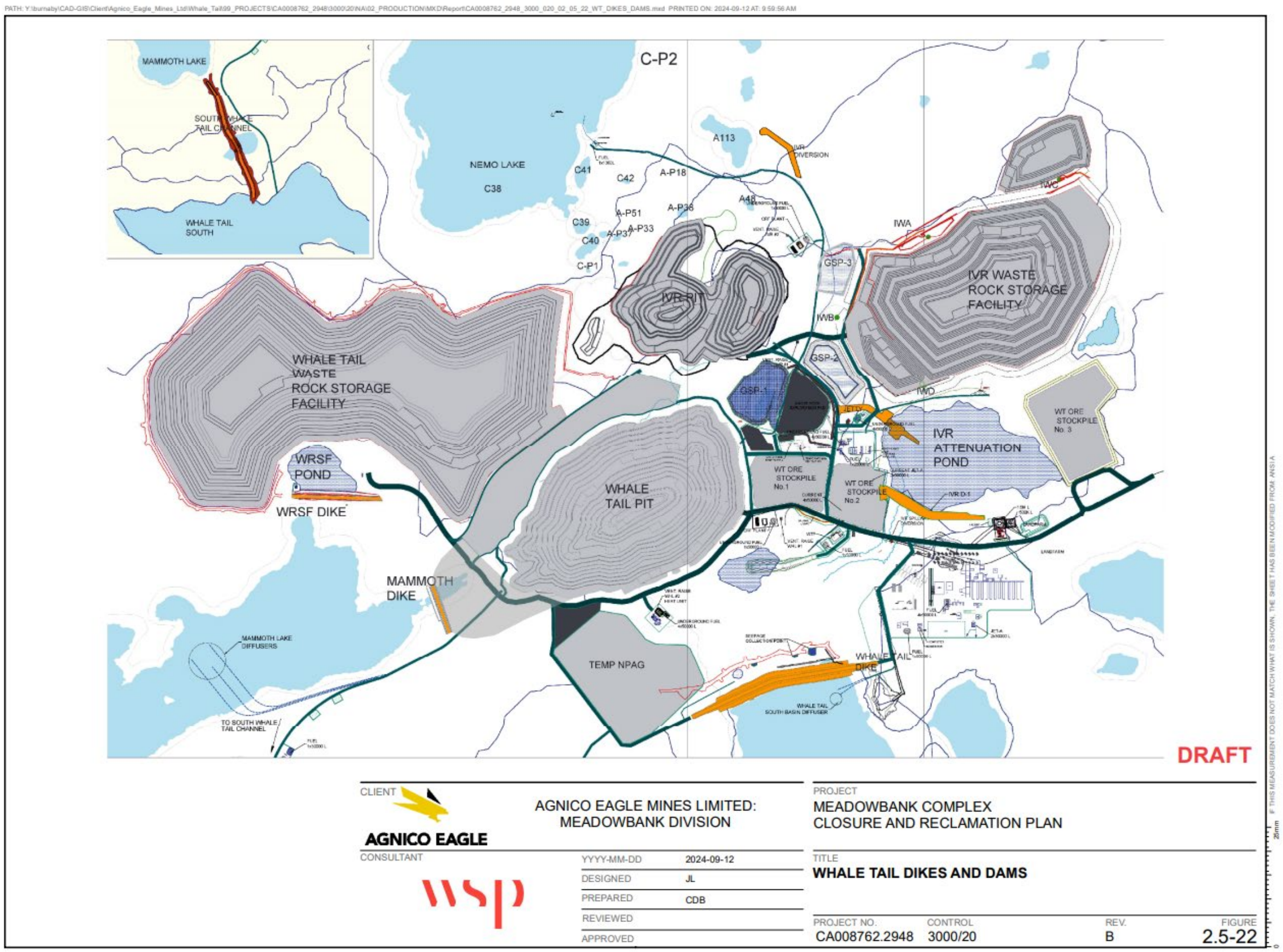


Figure 2.5-21: Whale Tail Dikes and Dams

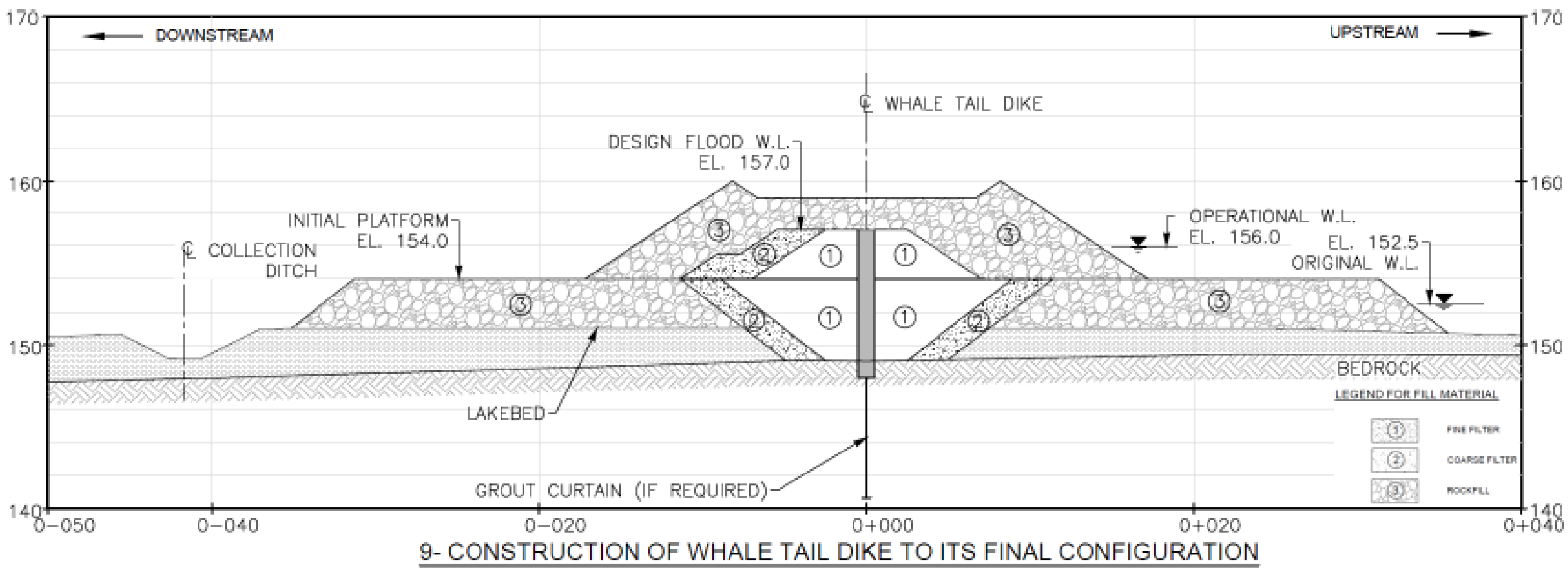


Figure 2.5-22: A Typical Cross-Section of the Whale Tail Dike

Mammoth Dike

Mammoth Dike is a water retaining infrastructure built to isolate the Whale Tail Pit from Kangislulik Lake (Figure 2.5-21). It is located at the west side of the Whale Tail Pit. Kangislulik Lake receives water from Whale Tail Lake through the South Whale Tail Diversion Channel and treated water from site discharge through the Kangislulik Lake diffuser. Water flows out of Kangislulik Lake through its natural outlet. This structure is a zoned rockfill dike with a filter system. The low permeability element of the dike consists of a bituminous geomembrane liner installed on the upstream face anchored in a key trench with fine filter amended with bentonite. The key trench is approximately 3 m deep and is founded on bedrock. Table 2.5-21 provides the design details for the Mammoth Dike. Figure 2.5-23 provides a typical cross-section of the Mammoth Dike.

Table 2.5-21: Mammoth Dike Design Criteria

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water level		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention	Non-contact	High	1/3 between 1000-Year and PMF	Low or no water	153.5	155.0
Operation Highlights: • In December 2019 and May 2020, the Kangislulik Lake level exceeded the normal operational level (frozen outlet). • Pumping from Whale Tail South was stopped until the level was back to normal.						

Source: Agnico Eagle 2024h. CDA = Canadian Dam Association; m = metres; PMF = Probable Maximum Flood.

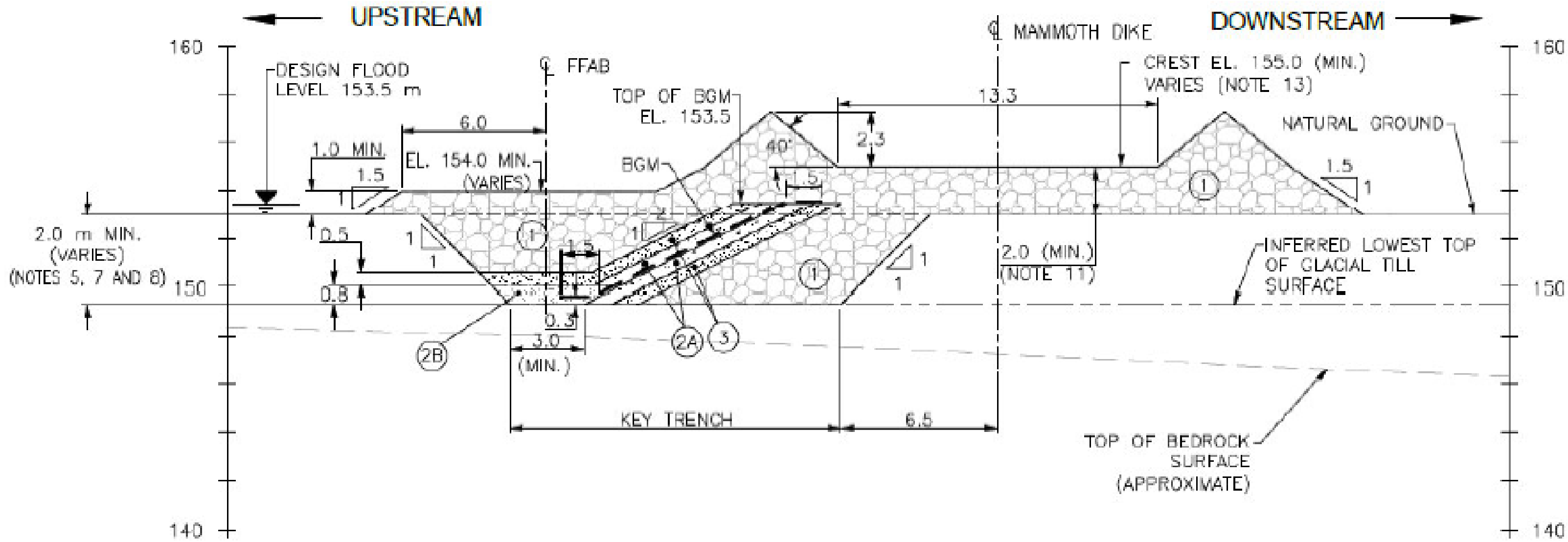


Figure 2.5-23: A Typical Cross-Section of the Mammoth Dike

WRSF Dike

WRSF Dike is a water retention infrastructure designed to prevent contact water from the Whale Tail WRSF accumulating in the WRSF pond from reporting to Kangislulik Lake. It is located south of the Whale Tail WRSF (Figure 2.5-21). The water collected in the WRSF pond located upstream of the dike is pumped to the Attenuation Pond and treated prior to being discharged. An area of approximately 109 ha drains towards the WRSF pond. The construction of the WRSF Dike mainly occurred from January to February 2019 to maintain the frozen condition of the foundation. This structure is a zoned rockfill dike with a filter system. The low permeability element of the dike consists of a bituminous geomembrane installed on the upstream face anchored in a key trench with fine filter amended with bentonite. The key trench is approximately 3 m deep and founded on frozen glacial till or bedrock.

In August 2019, the Trigger Action Response Plan (TARP) level of the WRSF Dike was increased to yellow due to contact water observed toward Kangislulik Lake. The situation was remediated by building a thermal berm in the winter of 2020 and by lowering the operating level of the pond. These strategies were successful in preventing contact water in 2020 and the TARP level of the structure is now Green. No contact water has been observed since then and the thermistor response has demonstrated the success of the mitigation measures that were implemented. Table 2.5-22 provides the design details for the WRSF Dike. Figure 2.5-24 provides a typical cross-section of the Whale Tail WRSF Dike.

Table 2.5-22: Whale Tail WRSF Dike Design Criteria

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Runoff storage	Contact	Low	100	155.0	157.8	158.4

Operation Highlights:

- In August 2019, contact water was noted at the D/S toe. WRSF Pond was emptied to manage the contact water.
- Construction of a thermal berm on U/S side to promote freeze-back of the foundation and lowering of WRSF pond operational levels. No contact water since then.

Source: Agnico Eagle 2024h.

CDA = Canadian Dam Association; m = metres; WRSF = Waste Rock Storage Facility.

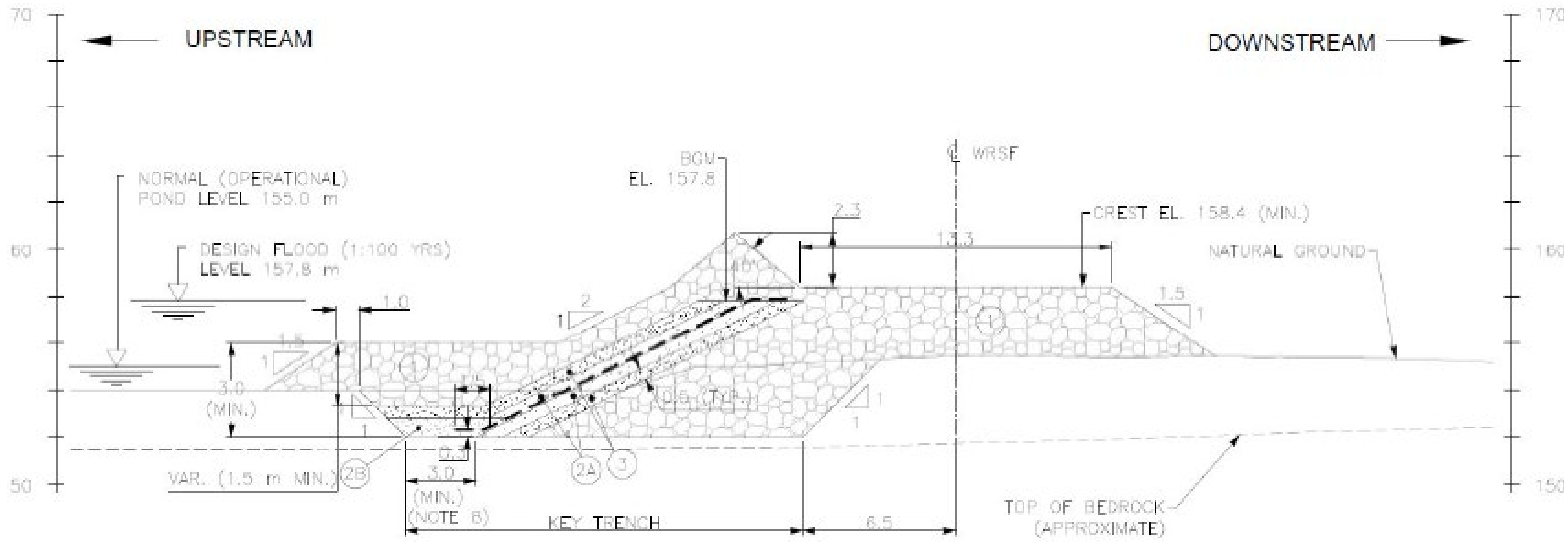


Figure 2.5-24: A Typical Cross-Section of the Whale Tail WRSF Dike

IVR Dike D-1

IVR Dike D-1 is a contact water retaining infrastructure built to contain the IVR Attenuation Pond (Figure 2.5-21). It is located East of the Whale Tail Pit. The structure includes an emergency spillway to release the water to the Whale Tail Attenuation Pond. The structure was constructed as a zoned rockfill dike with a filter system. The low permeability element of the dike consists of a bituminous geomembrane liner installed on the upstream face anchored in a 3 m deep key trench located below the centerline of the structure surrounded by fine filter amended with bentonite. The key trench is excavated in frozen glacial till or bedrock. To improve the thermal condition of the key trench a rockfill and esker thermal berm was placed on the upstream side. Table 2.5-23 provides the design details for the IVR Dike D-1. Figure 2.5-25 provides a typical cross section of the IVR Dike D-1.

During the 2022 freshet, localised deformation of the crest was observed on the area located above the upstream hinge of the liner. The settlement had a magnitude of 0.2 to 0.3 m over an area about 150 m long, 6-8 m wide and extending from STA 0+100 to 0+300. It had an offset of about 14m upstream of the centerline. The TARP level was raised to yellow in September 2022 to increase inspection and monitoring. The IVR Dike foundation remained in frozen conditions. It is believed that the observed settlement is related to a surficial mechanism linked to the thawing of the esker material placed above the liner in winter conditions and does not affect the integrity of the liner or the key trench.

Table 2.5-23: IVR Dike D-1 Design Criteria

Use	Water Type	Classification (CDA 2013)	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Normal	Design Flood	
Water Retention	Contact	High	1/3 between 1000-Year and PMF	163.2	164.7	165.5
Operation Highlights: • Operational since freshet 2021. • Deformation of the crest and vertical settlement was observed on the area located above the upstream hinge of the liner in the summer of 2022. • Deformation stable in 2023, no progression.						

Source: Agnico Eagle 2024h.

CDA = Canadian Dam Association; m = metres; PMF = Probable Maximum Flood.

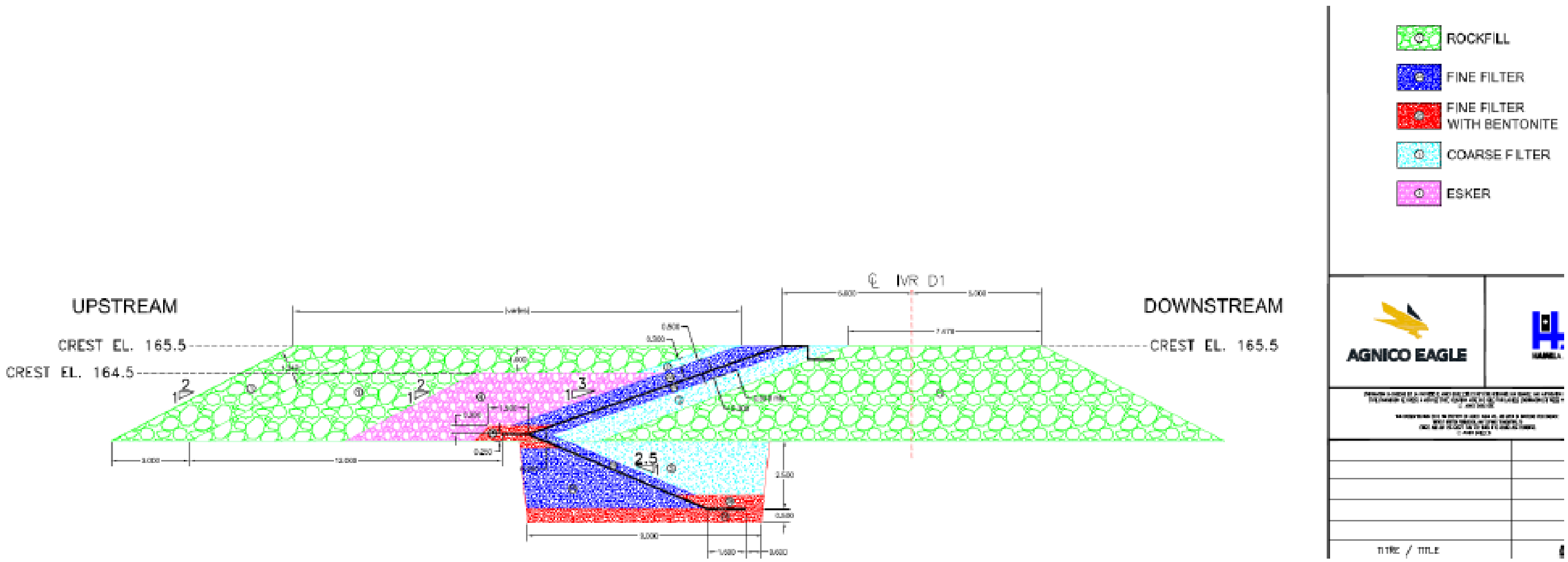


Figure 2.5-25: A Typical Cross-Section of the IVR Dike D-1

2.5.7 Water Management Facilities

2.5.7.1 Meadowbank Water Management Facilities

At Meadowbank Mine, five major sources of inflow water are considered in the site water management system: freshwater pumped from Third Portage Lake, natural run off, natural pit groundwater inflow, contact water inflow from the East Dike, and freshet water. This water is either utilized or removed from the inflow through the following ways:

- As WTP effluent (if treatment is necessary – meets discharge criteria and is then discharged).
- As water trapped in the capillary voids of the tailings fraction (including ice entrapment for winter months) at the TSF.
- As East Dike contact water discharging into Second Portage Lake (28,512 m3 for the year of 2023).
- As water trapped within the in-pit voids at WRSFs area.
- As natural pit flooding.

A detailed water balance is reviewed yearly and is provided in the annual Water Management Report and Plan (Agnico Eagle 2024k). The water management facilities include the components listed below (Figure 2.5-26):

- **Dewatering systems:** Consisting of pumps in parallel connected to a surface pipeline that conveyed water to a treatment facility for the removal of suspended solids prior to discharge.
- **Flooding systems:** Following completion of mining and in-pit deposition, the pit areas will be flooded. Flooding will be carried out through a combination of the following inputs into the pits:
    - Precipitation
    - Surface runoff
    - Contact water from the East Dike (150,131 m^3 for the year of 2023 [Portage and Goose pits only])
    - Pumping from Third Portage and Wally Lake
- **Rock storage runoff collection systems:** The topography on the Southwest side of the Portage WRSF naturally conveys surface water runoff to the TSF North Cell. Two sumps, WEP1 and WP2, located on the North side of the Portage WRSF NPAG/NML area, collect contact water from the WRSF during freshet to be transferred to the North Cell TSF.
- **Water Diversion Ditch Systems:** Two water diversion systems (East and West; Figure 2.5-27), located around the perimeter of the North Cell TSF and the Portage WRSF, were constructed in 2012 to divert surface water from undisturbed watersheds away from the Portage WRSF and North Cell TSF. The East and West ditches divert non-contact water to NP2 Lake and to Third Portage Lake, respectively. On the west end of the diversion ditches is the Western Interception Sump. The objective of the

Western Interception Sump is to collect runoff water from the west section of the diversion ditches and to retain it until the Total Suspended Solids (TSS) in the water has reached the criteria allowing discharge to the environment. When the TSS level in the interception sump is considered too high, water from that sump is pumped back into the North Cell of the TSF. Table 2.5-24 and Figure 2.5-26 provide the design details for the North Cell Diversion Ditches.

Table 2.5-24: Design Criteria for North Cell Diversion Ditches

Use	Water Type	Inflow Design Flood	Base width (m)
Water Conveyance	Non-contact	1:100	0.5 m to 3 m
Operation Highlights: n/a			

Source: Agnico Eagle 2024h. m = metres; n/a = not applicable.

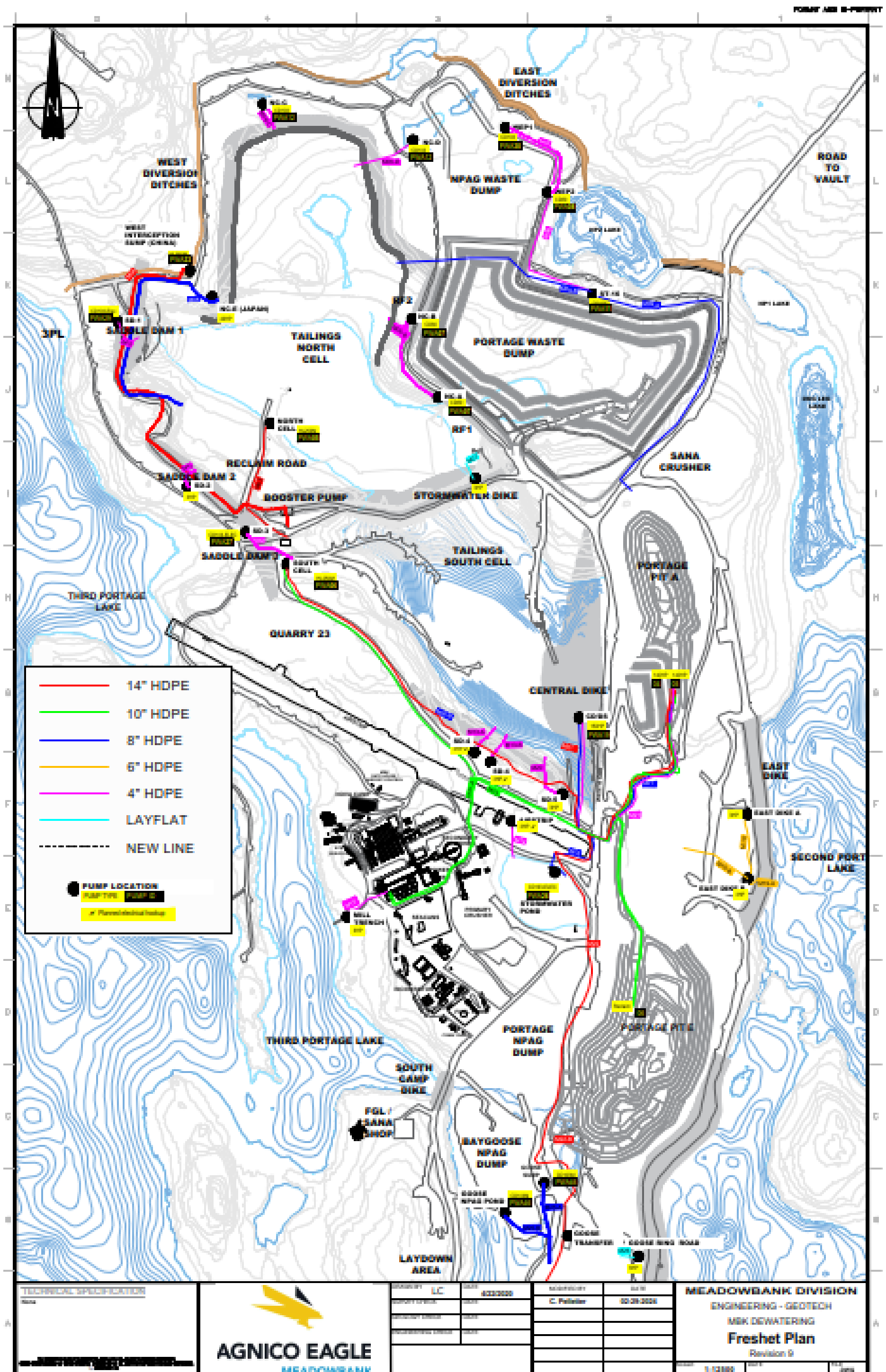
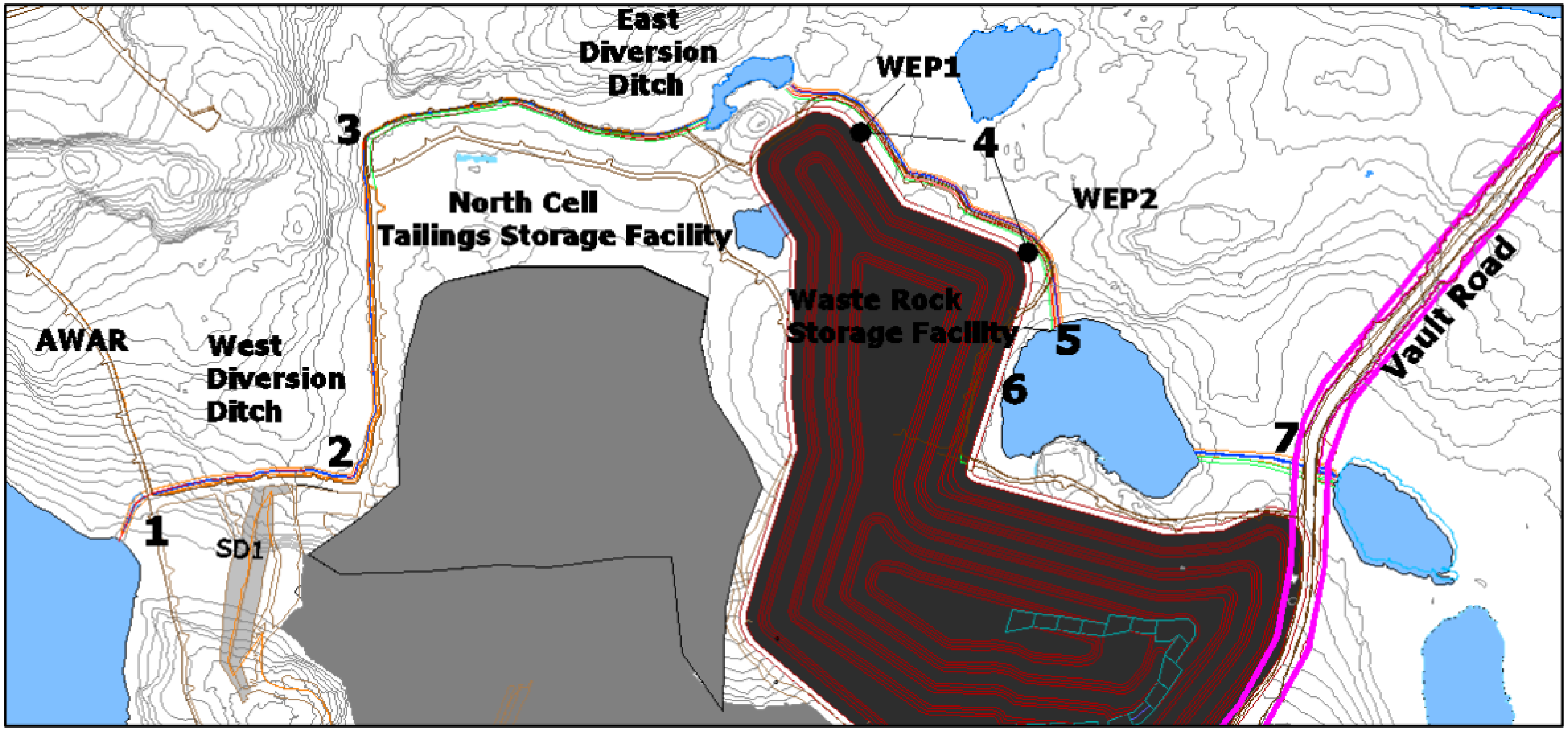


Figure 2.5-26: Meadowbank Mine Dikes and Water Management Infrastructure

- **Pit sumps and pumping systems**: Sumps are in place for collecting and draining water. Water collected reports to pits at the Meadowbank Mine.
- **Contact water and runoff collection systems**: Water collected by any contact water and runoff collection system is monitored during operations as per the Meadowbank Water Licence requirements. The main contact water collection systems on-site are the Central Dike contact water collection system, the East Dike contact water collection system, the Mill contact water collection system, and the WRSF contact water (ST-16) collection system.
- **Tailings pipelines**: Tailings are transported as a slurry through a pipeline to the TSF and to the pits. The location of the pipelines along the perimeter is determined by the deposition plan and operational consideration for the development of tailings beaches.
- **Stormwater Management Pond (Tear Drop Lake)**: The Stormwater Management Pond receives drainage from the Mill and service area including treated wastewater, and runoff from: part of the airstrip, the accommodation facilities, the power plant, stockpiles, and contractor areas. Sewage Treatment Plan (STP) treated effluent also reports to the Stormwater Management Pond. Water from the pond is transferred to the Portage Pit as necessary during summer. A total of 188,661 m^3 was transferred from the Stormwater Management Pond to the Portage Pit in 2023, with no water being released into the environment.
- **Freshwater intake and treatment system**: This system pumps water from Third Portage Lake for human consumption and provides fresh make-up water to the Mill for ore processing. Water used for human consumption is treated with chlorination and UV light at the accommodation facilities.
- **Wastewater treatment system**: This system treats domestic sewage from the site. The treated water is then directed to the Stormwater Management Pond. This WTP is a tertiary treatment plant designed to remove organic material and nutrients. It is comprised of a primary clarifier, three rotary biological contactors, and a final clarifier. The dewatered sludge is disposed of in the TSF.

In 2023, water transfers continued throughout the site to meet the water management objectives. Table 2.5-25 outlines the water transfer volumes in 2023 (Agnico Eagle 2024a).



Source: Agnico Eagle 2024g. 1 – AWAR; 2 – West Diversion Ditch; 3 – North Cell TSF; 4 – WEP 1; 5 – WEP 2; 6 – WRSF; 7 – Vault Road.

Figure 2.5-27: Diversion Ditches and Related Infrastructure

Table 2.5-25: 2023 Meadowbank Mine Water Transfer

Water Transfer	2024 Transfer Volume (m^3)
North Cell to South Cell	190,069
Stormwater Management Pond to South Cell	0
Stormwater Management Pond to Pit A	410,718
South Cell to Pit A	282,380
South Cell to Goose	0
Pit A to Goose	0
Goose to Pit E	0
Pit A to Pit E	156,600
Saddle Dam 3, 4 & 5 to South Cell	67,346
Saddle Dam 1 & 2, North Cell Internal Structure to North Cell	103,634
Interception sump to South Cell	216,629
ST-16 & Waste Extension Pool to Pit A	83,283
Central Dike Downstream Pond to Pit A	554,951
Central Dike Downstream Pond to South Cell	0
Central Dike Downstream Pond to Pit E	0
Goose Pit Inflow	16,467 m^3 from NPAG Pond, 15,617 m^3 from Goose Ring Road

Source: Agnico Eagle 2024c.

2.5.7.2 Whale Tail Water Management Facilities

The Whale Tail Mine was divided into several water management areas including contact water areas and non-contact water areas. Contact water is collected in several ponds or sumps and pumped to Attenuation Ponds before being treated and discharged to Whale Tail Lake (South Basin) or alternative discharge location (adaptive management) until the end of operations. Non-contact water is rerouted or discharged directly into the environment without treatment. The Whale Tail Mine water management system includes four dikes (Section 2.5.6.2), two channels (South Whale Tail Channel and IVR Diversion Channel), one Saline Ditch, and Surface Contact Water Pumping Infrastructure.

South Whale Tail Channel

The South Whale Tail Channel is a blasted channel in the south-western part of the Whale Tail Lake watershed. It allows non-contact water to be discharged by gravity from Whale Tail Lake to Kangislulik Lake. The inlet of the South Whale Tail Channel is at 155.3 masl (5155.3 mRL). The channel has a trapezoidal shape with lateral slopes of 3H:1V, a base width of 5.0 m, and a bed-slope of 0.3%. The South Whale Tail Channel was constructed using a protective riprap layer consisting of rockfill on the bottom and the sides of the channel to avoid erosion and limit TSS in the water. The riprap has a thickness of 0.5 m and consists of blasted rock with a diameter of 100 to 300 mm. Two transition materials consisting of fine and coarse filter with a 0.3 m thickness each were installed between the overburden and the riprap for particle retention between the foundation soil and the riprap. A layer of geotextile was placed between the coarse filter and the riprap to avoid the migration of fine particles from the filters that could increase turbidity. Table 2.5-26 provides the design details for the South Whale Tail Channel.

Table 2.5-26: Design Criteria for South Whale Tail Diversion Channel

Use	Water Type	Base Width	Inflow Design Flood	Water Level (m)		Crest Elevation (m) (max height)
				Maximum	Design Flood	
Water Conveyance	Non-contact	5 m	1/3 between 1000-Year and PMF	156.0	157.0	155.3
Operation Highlights: n/a						

Source: Agnico Eagle 2024h. PMF = Probable Maximum Flood; m = metres; n/a = not applicable.

IVR Diversion Channel

The IVR Diversion Channel is an excavated channel located in the north-east part of Whale Tail Mine. It allows non-contact water to flow from the north-east watershed to Nemo Lake. Its objective is to reduce the amount of contact water reporting to IVR Pit. The channel has a trapezoidal shape with lateral slopes of 2H:1V to 3H:1V, a base width of 3.0 m, and a bed-slope of 0.3%, in combination with a pervious rockfill perimeter berm that delineates the west boundary of the channel and acts as an access road. The IVR Diversion Channel was constructed with a layer of fine filter material placed on top of the excavated foundation, followed by geotextile and overlain by riprap. Table 2.5-27 provides the design details for the IVR Diversion Channel.

Table 2.5-27: Design Criteria for IVR Diversion Channel

Use	Water Type	Inflow Design Flood	Freeboard (m)	Base width (m)
Water Conveyance	Non-contact	1:100	0.3	3
Operation Highlights: n/a				

Source: Agnico Eagle 2024h. m = metres; n/a = not applicable.

Saline Ditches

The Saline Ditches are collection ditches built in the periphery of the Underground WRSF and Underground Ore Stockpile. Their purpose is to collect saline water runoff from these facilities and redirect it by gravity to GSP1 for containment.

The Underground WRSF Saline Ditch consists of a ditch surrounding Pad D (Underground WRSF) with a bituminous geomembrane liner as a low permeability element. The ditch was built in two segments each having a 1% longitudinal slope. The first segment is from Sta. 0+000 to 0+430 and is located along a segment of Road 3. The second segment is from Sta 0+440 to 0+680 and goes around the underground ramp portal and ends at a culvert inlet. The membrane is installed on a 300 mm subgrade bedding and is anchored on both crests. The geomembrane is then protected by a layer of 300 mm fine filter material and by a layer of 300 mm of coarse filter material.

The Underground Ore Stockpile Saline Ditch consists of a ditch surrounding the Underground Ore Stockpile with a bituminous geomembrane liner as a low permeability element. The ditch was excavated as one segment having a minimum 0.3% longitudinal slope from Sta 0+000 to Sta 0+350. The depth of excavation varied from 1.7 to 2 m. The membrane is installed on a 200 mm subgrade bedding and is anchored at both crests. The geomembrane was then protected by a layer of 300 mm of fine filter and by a layer of coarse filter.

Surface Contact Water Pumping Infrastructure

The main areas of the Whale Tail Mine requiring surface contact water pumping infrastructure are:

- **Whale Tail Attenuation Pond**: The dewatered area of the North Whale Tail Mine basin between the Whale Tail Dike and the Whale Tail Pit is referred to as the Whale Tail Attenuation Pond. Until the commissioning of the IVR Attenuation Pond it was the main contact water management area on-site where all surface contact water from the Whale Tail Mine site was directed prior to being sent to the WTP and discharged to the environment. With the commissioning of IVR Attenuation Pond this location is now a secondary Attenuation Pond. Water from the Whale Tail Attenuation Pond can either be transferred to the IVR Attenuation Pond or sent to the WTP.
- **IVR Attenuation Pond**: The dewatered area of former lake A53 is referred to as the IVR Attenuation Pond. It was commissioned in the summer of 2020. The construction of the dike IVR-D1 in the winter of 2020 has increased the capacity of this Attenuation Pond so that it became the main area to manage contact water on-site. Contact water from the Whale Tail Mine site is directed to the IVR Attenuation Pond where it is stored prior to being sent to the WTP and discharged through an approved diffuser.
- **WTP and Diffusers**: The WTP is designed to treat TSS and arsenic. The water can be discharged from the Whale Tail Mine and IVR Attenuation Ponds to the environment through two approved diffuser locations after the water quality satisfies discharge criteria. The first discharge location is Kangislulik Lake with three diffusers spaced 50 m apart. The second discharge location is Whale Tail South Lake with two diffusers in Whale Tail South spaced 108 to 130 m apart.
- **Whale Tail WRSF / IVR WRSF Sumps**: The runoff water from the WRSFs needs to be managed so that it is sent to one of the two Attenuation Ponds on-site. The Whale Tail WRSF is contained within a watershed that either drains to the Whale Tail WRSF Pond or toward the IVR Pit, and water reporting to the Whale Tail WRSF is pumped to either the Whale Tail or IVR Attenuation Pond. Four sumps are established around the Whale Tail WRSF in low spots so that water can’t accumulate at the toe of the Whale Tail WRSF and escape the watershed. Water from these sumps water is pumped toward the WRSF Pond. The IVR WRSF is contained within the watershed that drains either toward the IVR

Attenuation Pond or IVR Pit. Four sumps were installed around the IVR WRSF and water from these sumps is pumped toward the IVR Attenuation Pond.

- **Whale Tail Pit / IVR Pit Area**: Water from the pits is sent to one of the site Attenuation Ponds. The IVR Pit is contained within permafrost and water management is only required at freshet. The Whale Tail Pit is located within a closed talik and there is constant inflow reporting to the pit from the south wall (i.e., near the Whale Tail Attenuation Pond).

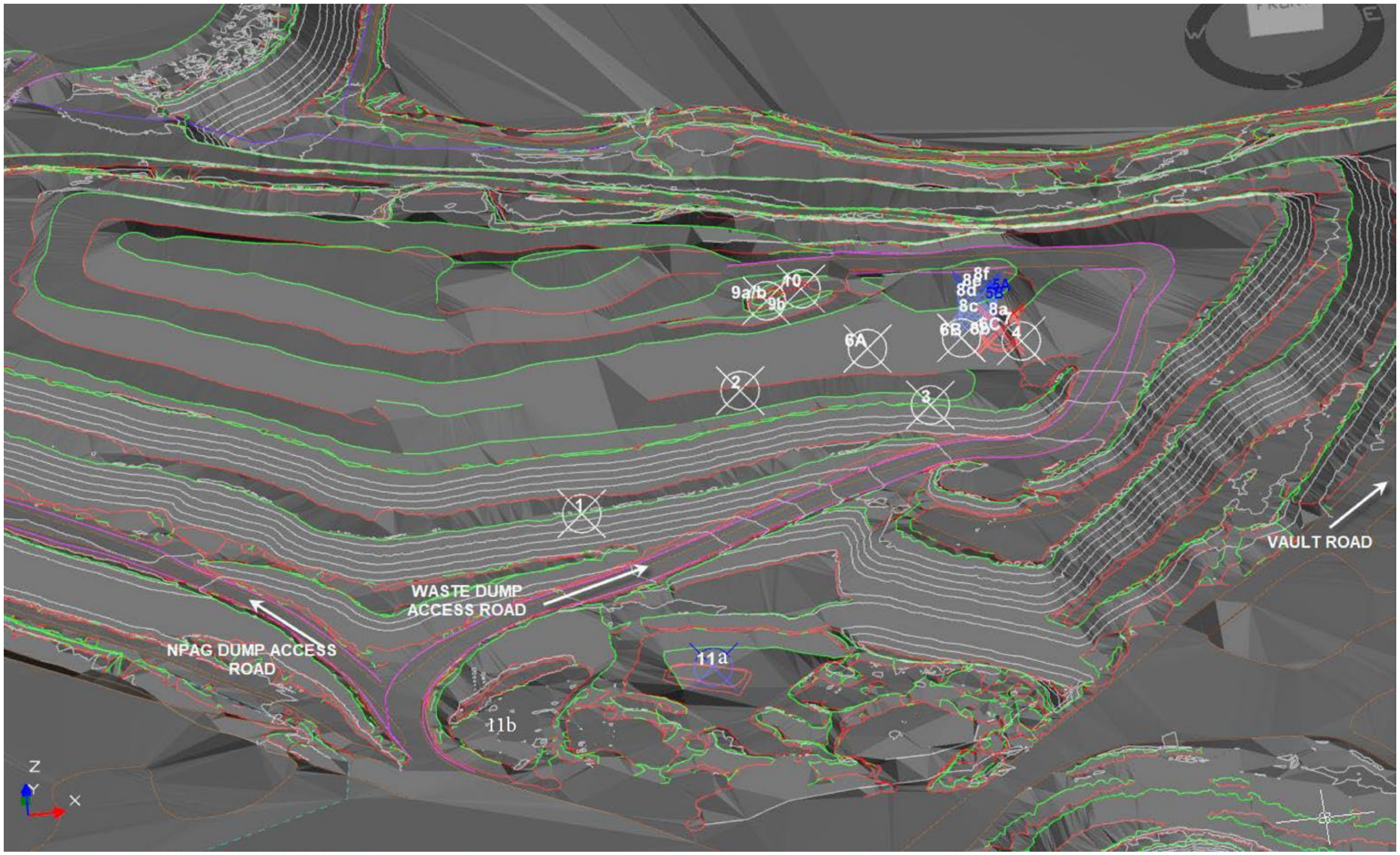
2.5.8 Waste Management Facilities

In 2024, Agnico Eagle generated approximately 16,291 tonnes of waste for Meadowbank and Whale Tail sites. This represents 75.7% of general waste disposed in the landfills, 3.2% of domestic waste disposed in the composter or off-site, 5.3% of industrial/hazardous waste sent to an approval facility off-site, 4.6% of waste (waste oil, batteries, and tires) recycled on site and off-site and 11.2% of steel recycled off site.

2.5.8.1 Meadowbank Mine – Landfill

At Meadowbank, Landfill #1 is located in the Portage WRSF (Figure 1.3-2, Photo 2-7), and it is being used for the disposal of non-hazardous, non-putrescible, non salvageable solid waste material from Meadowbank that could not be incinerated. This landfill is operated as multiple 'sub-landfills' that have been, or will be, built and buried within the footprint of Portage WRSF. The elevation and location of these sub-landfills change as the WRSF evolves throughout the operations phase of the Meadowbank Complex. The sub-landfill area is bounded by a rock fill berm, to act as a wind shield. These sub-landfills are progressively closed and encapsulated in the Portage WRSF. Landfill #2 (closure landfill) was developed in a 4 m deep depression at the top of the Portage WRSF and served as the non-hazardous waste disposal site for the closure phase of the Meadowbank Mine. The demolition waste from infrastructure removal/reclamation is disposed of in Landfill #2. The area of Landfill #2 to receive waste will be bounded on the northwest side by a 2 m high rockfill berm. An estimate of waste volume is required to estimate the approximate size of the landfills; however, an exact waste volume is not a critical parameter in the design because of the flexibility of design to accommodate extensions (larger to accept more waste) or contractions (smaller to accept less waste) of the landfill. The volume of waste landfilled from the start of the project is approximately 130,369 m^3 (Agnico Eagle 2025a). Figure 2.5-28 indicates the location of each sub-landfill used to date.

Photo 2-7: Portage WRSF Landfill (2023)

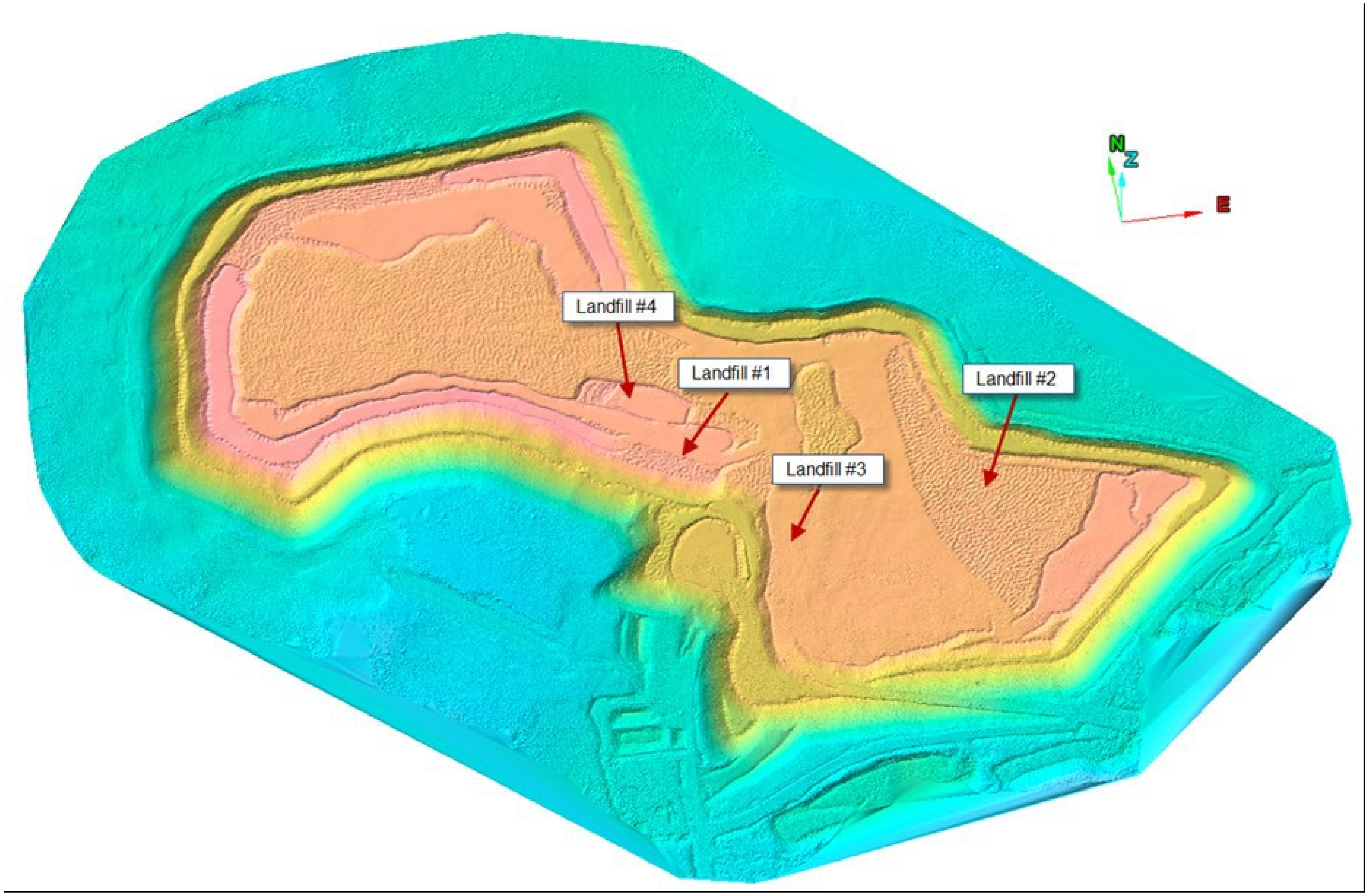


Source: Agnico Eagle 2024b.

Figure 2.5-28: Meadowbank Sub-landfill Locations

2.5.8.2 Whale Tail – Landfill

At Whale Tail Mine, there is a landfill located in the Whale Tail WRSF, and bounded by berms on the south and east sides to protect debris from the wind. The surface runoff from the landfill is managed as part of the contact water system for the Whale Tail WRSF. Non-salvageable, non-degradable, non-hazardous, non-putrescible solid waste material generated during construction, operations, and closure are disposed of in a solid waste landfill (Agnico Eagle 2024c). The landfill does not receive any waste that attracts birds or wildlife, and it is maintained in such a manner that windblown litter is minimal. The volume of waste landfilled in the Whale Tail Landfill since 2019 is 43,344 m^3, and Agnico Eagle landfilled approximately 12,793 m^3 in 2023 (Agnico Eagle 2025a). Figure 2.5-29 indicates the location used to date. Landfill #4 is currently in use.



Source: Agnico Eagle 2024b.

Figure 2.5-29: Whale Tail Landfill Locations

2.5.8.3 Hazardous Waste Disposal

Hazardous wastes generated at the Meadowbank Complex are summarized in Table 2.5-28:.

Table 2.5-28: Hazardous Wastes generated at Meadowbank Complex

Waste Fuel	Lubricants and Other Contaminants
Diesel fuel	Greases
Oils (if not incinerated)	Other lubricants used for equipment operation and maintenance
Solvents (if not incinerated)	Antifreeze

Source: AtkinsRéalis 2019.

Meadowbank Mine – Hazardous Waste Disposal

At Meadowbank Mine, an area adjacent to the primary incinerator has been set up for the storage of hazardous wastes and other liquid waste and solid materials, including used waste oil, batteries, and tires. Materials are segregated and stored in drums inside closed and secured sea cans. Hazardous waste from the Whale Tail Mine is managed on-site before shipping to the storage location at Meadowbank Mine (Agnico Eagle 2019). Annually, materials are transported to the Baker Lake Site Facilities and barged to a southern location for disposal or recycling at a Licensed Facility. In 2024, approximately 553 sea cans comprising hazardous waste, used tires, scrap metal, domestic waste, and construction debris were transported from Baker Lake marshalling facilities to registered companies or disposal facilities located in the Province of Quebec (Agnico Eagle 2025a).

Whale Tail – Hazardous Waste Disposal

At the Whale Tail Mine, hazardous wastes are packaged for shipment off-site to registered hazardous waste management facilities in the south. The accumulation of wastes is avoided through an active waste management program.

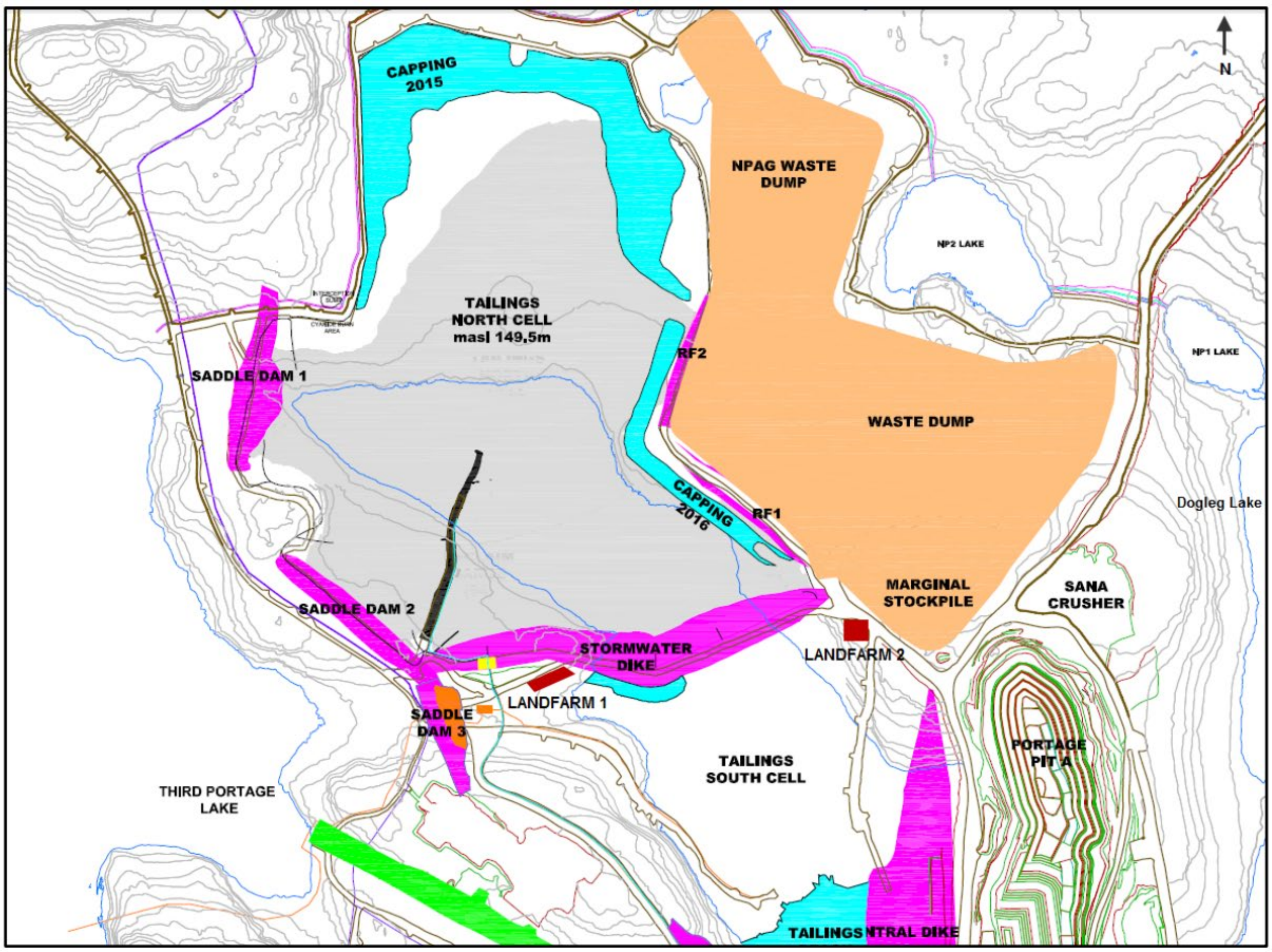
In 2023, the waste to be disposed off-site from Whale Tail Mine was transported to Meadowbank so there is no possibility to make a distinction between the volume from the two sites. A description of the types of waste, packaging and volume, and a summary of waste generated per type along with their disposal/recycling location is provided in Agnico Eagle (2025a).

2.5.8.4 Contaminated Waste Disposal

Meadowbank Mine – Contaminated Waste Disposal

Soil contaminated with light hydrocarbons, such as diesel, is treated in an on-site landfarm facility to treat and manage potential hydrocarbon contaminated soils. Materials contaminated with heavy hydrocarbons (not treatable in the landfarm) (e.g., hydraulic fluid or grease) are segregated, packaged, and shipped south for treatment and/or disposal.

Meadowbank's first landfarm (Landfarm 1) was located on the north-west side of the South Tailings Cell. The tailings eventually flooded Landfarm 1, and it is now interred within the TSF. For this reason, the Landfarm 2, was constructed and is currently located on the northeast side of the TSF South Cell, north of the Central Dike (Agnico Eagle 2024m;nFigure 2.5-30). Similar to Landfarm 1, Landfarm 2 is designed with one soil remediation/storage cell. Based on surveys conducted by Meadowbank's Engineering Department, the volume of Landfarm 2 in December 2023 was 5934 m^3. In 2023, it is estimated that 400 m^3 of soil was added to Landfarm 2 from spill events around the Meadowbank site. The remaining capacity of Landfarm 2 is estimated at 5,511 m^3. The available landfarm volume should not be exceeded within the expected LOM (Agnico Eagle 2024m).

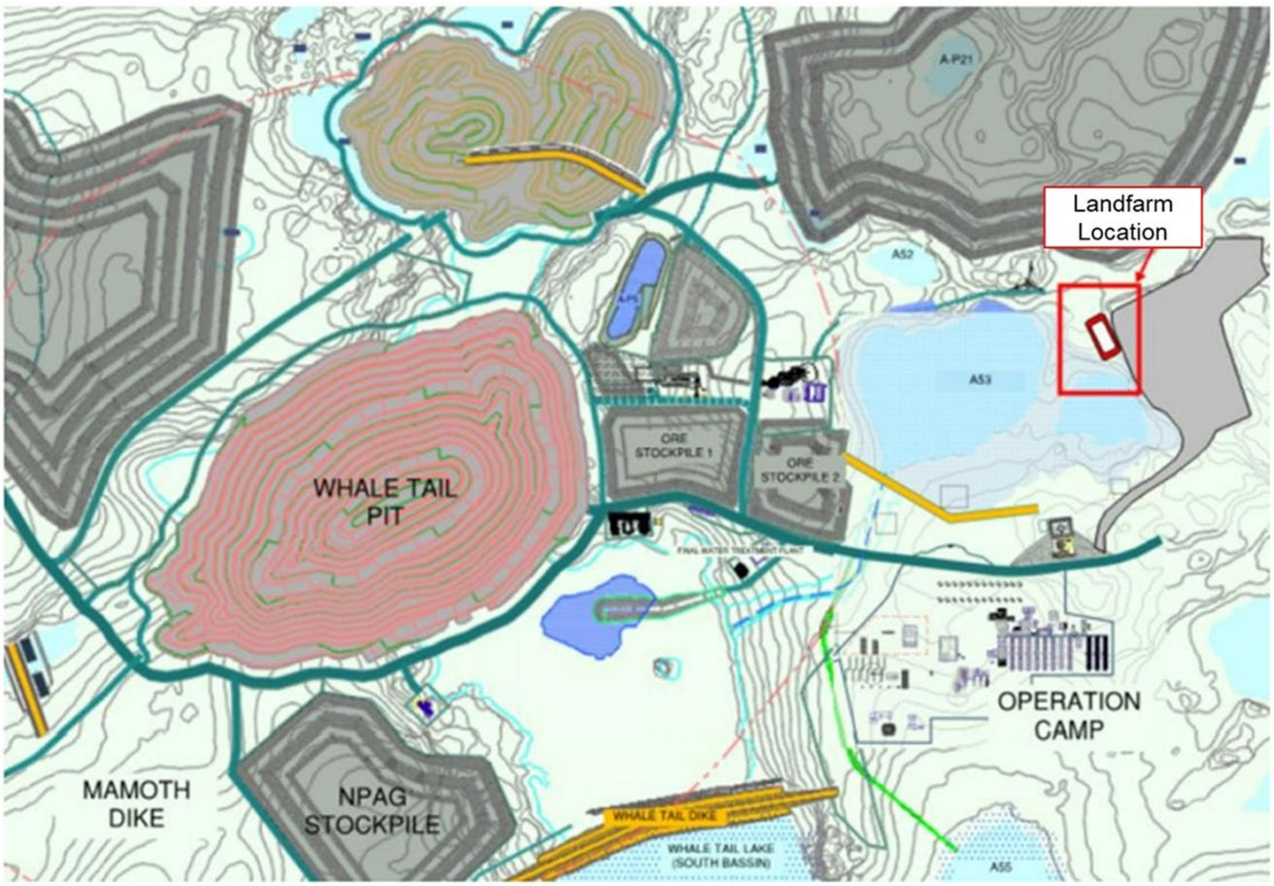


Source: Agnico Eagle 2024o.

Figure 2.5-30: Meadowbank Landfarm 1 and Landfarm 2 Locations

Whale Tail – Contaminated Waste Disposal

The landfarm at the Whale Tail Mine was built in fall of 2022 and is located east of the IVR Attenuation Pond as presented in (Figure 2.5-31). It is located away from any receiving environment waterbody. The landfarm was designed assuming that 1,000 m^3 per year of petroleum hydrocarbon contaminated soils will need to be managed during the construction, and operation phases and 350 m^3 of material per year during closure (Agnico Eagle 2024n). The landfarm was not operational for the majority of 2022 Only 15 m^3 of soil was brought to the landfarm in 2022 (Agnico Eagle 2022b). In 2024, the accumulated petroleum hydrocarbon contaminated materials in landfarm for remediation was 3,000 m^3 (Agnico Eagle 2025a).



Source: Agnico Eagle 2024p.

Figure 2.5-31: Whale Tail Mine Landfarm Location

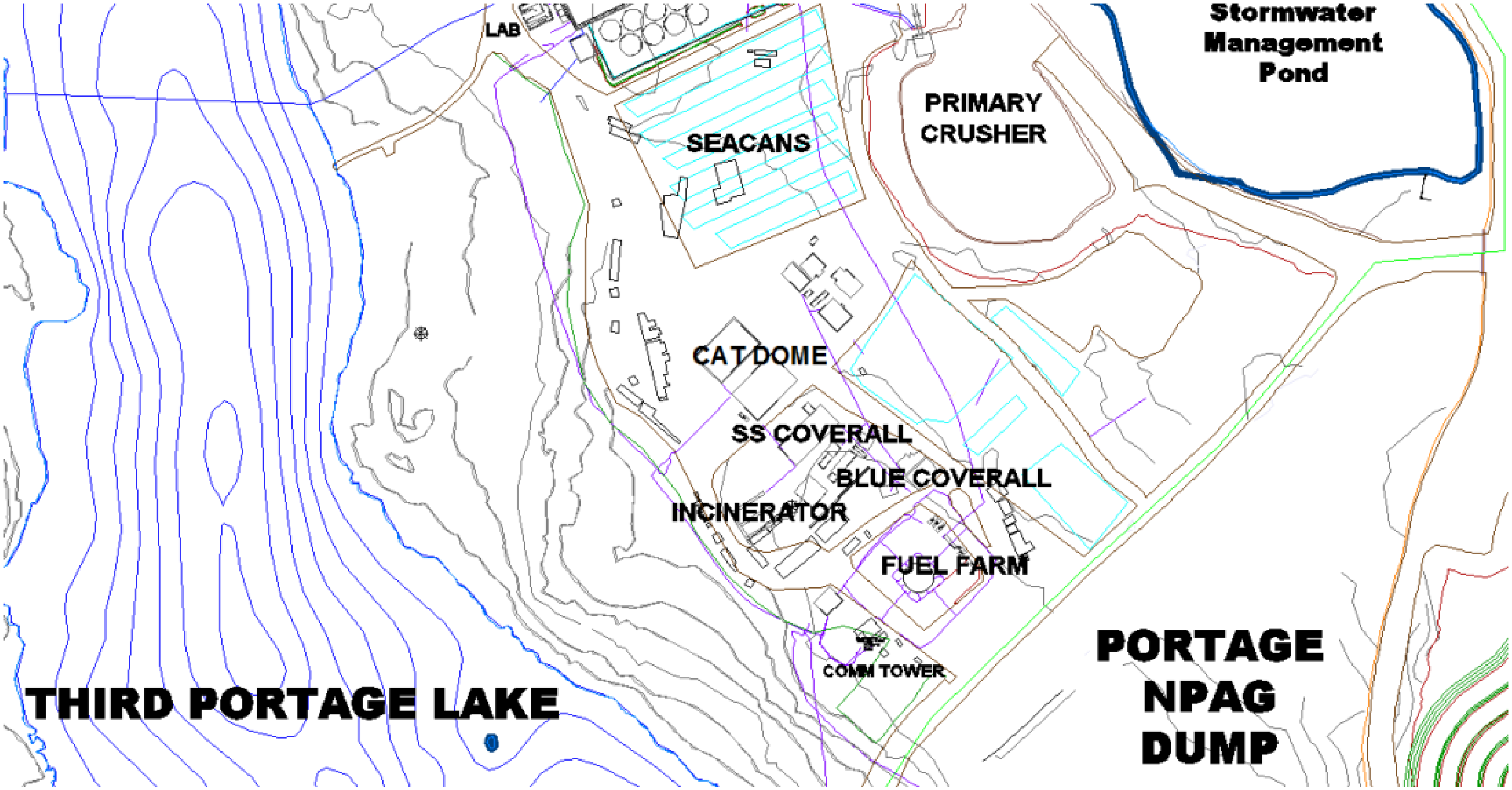
2.5.8.5 Other Waste Disposal Areas

Meadowbank Mine – Other Waste Disposal Areas

At Meadowbank Mine, the incinerator is located away from the accommodations complex, adjacent to the fuel storage facility. The composter is in the same building as the incinerator (Figure 2.5-32). The primary objective of the incinerator is to dispose of solid waste from the accommodation camp, kitchen, shops, and offices (e.g., paper, cardboard, food waste, and other organic materials) that cannot be composted or landfilled, thus diverting materials from the landfill that could create odours, attracting wildlife to the mine. The domestic sewage from the Meadowbank Complex is treated at the wastewater treatment system and the dewatered sludge is deposited in the TSF. Operation of the incinerator ceased on November 27, 2022(Agnico Eagle 2024a). A total volume of 456.26 m^3 of sewage sludge was collected and disposed of in the TSF (Agnico Eagle 2022c).

Whale Tail Mine – Other Waste Disposal Areas

At the Whale Tail Mine, organic wastes and combustibles are disposed of at the incinerator or composter; both of which are west of the Main Camp. Organic material is diverted from the incinerator to the composter, and combustible materials are burned on-site in the incinerator. Incinerated waste volumes are similar to those at Meadowbank Mine. Further details are provided in the Incinerator and Composter Waste Management Plan (Agnico Eagle 2024o). Sewage is collected from the camp and change-room facilities and pumped to the on-site STP at the Whale Tail Mine. The treated sewage is then pumped to the Whale Tail Attenuation Pond and discharged with other site contact water.



Source: Agnico Eagle 2022d.

Figure 2.5-32: Incinerator, Waste Oil Furnaces, and Composter Location

2.5.9 Baker Lake Site Facilities

This section describes Baker Lake Site Facilities for Meadowbank Mine (Figure 1.3-5). Baker Lake Site Facilities are located approximately 2 km east of the Hamlet of Baker Lake. The Baker Lake Site acts as the transfer point and temporary storage for all dry shipment and fuel materials arriving by barge prior to overland shipment to the Meadowbank Complex via the AWAR. The facilities at Baker Lake Site are required throughout the operation period and the closure period for water management. The infrastructure present at the Baker Lake Site includes (AtkinsRéalis 2020):

- **Barge Landing**: All construction and operating supplies for the Meadowbank Complex are transported on ocean freight systems to Baker Lake. A barge unloading facility, and a container handler receive all shipments prior to redirecting them to the Meadowbank Complex.

- **Dry Freight Storage Facility**: The general laydown area of the dry freight storage area includes a terraced gravel-based pad for stacking sea containers and other equipment. The area covers approximately 65,000 m^2. The roads and unloading platform of main traffic zones are covered with 1 m of compacted granular fill. The storage platforms are covered with 0.6 m of compacted granular fill to provide stable support.

- **Bulk Fuel Storage Facilities**: The above ground Bulk Fuel Storage Facility includes:

- **Six 10 million L (10,000 m^3) diesel fuel storage tanks**: The tanks are located within a lined and bermed containment area capable of storing at least 110% of the volume of one 10,000 m^3 storage tank. A secondary containment area lined with a low permeable geomembrane provides additional fuel confinement at the fuel tank farm. Fuel is shipped by barge to the facility, pumped from the barges to the storage tanks, and distributed to highway vehicles or tanker trucks at a dispensing station located on the north side of the facility. This provides the Meadowbank Complex with fuel to operate for a year.

    - **Eighteen 100,000 litres (L) fuel tanks**: The tanks are located within a lined and bermed containment pad at the fuel storage area to provide jet fuel storage capacity. The dispensing station for the Jet A Facility is setup within an arctic container installed on a lined and compacted gravel pad. This lined area can contain 110% of the volume of one 100,000 L storage tank. A collection sump is also located within the lined pad to collect accidental spills or leakage.

    - **Access Road**: An all-season road links the Baker Lake Site Facilities to the AWAR leading to the Meadowbank Complex. Roads have a gradient of 8% or less and are typically covered with compacted granular fill.

    - **Water Management**: The general strategy for water management is to minimize sediment and pollutant mobilization by implementing best management practices during operation of the facilities. Water that has accumulated within the berms surrounding the Bulk Fuel Storage Facility is released to the environment once it is confirmed to meet all regulatory water quality criteria and approval has been granted from the government inspector.

- **Power for the Facilities**: The facilities include the office trailer supplied by portable generators and yard lighting is provided by portable, diesel-powered light towers.

2.5.10 Transportation Routes

The AWAR was planned to minimize disturbance and the number of bridge crossings that would be required. The AWAR was constructed above grade, using quarried material from NPAG/NML rock, and has a total of nine bridge crossings. The AWAR serves as the main access to the Meadowbank Complex and is the main transportation route from Baker Lake Site for shipping supplies. Year-round road access reduces the amount of infrastructure required at the Meadowbank Complex by significantly reducing the volumes of fuel and other consumable supplies that must be stored at the Meadowbank Complex to support ongoing operations. As the AWAR is the primary access for materials to the Meadowbank Complex, it is required until the end of production and closure. In 2024, repairs to Bridge 1, Bridge 2 and Bridge 3 along the AWAR were completed (Agnico Eagle 2025a).

In November 2015, Agnico Eagle received approval to construct a 64-km long access road, to connect the Vault Pit (to the Whale Tail Mine footprint) in support of exploration activities (Figure 2.5-33). Initially 6.5 m in width, and originally intended for light duty traffic, this road was upgraded to a maximum width of 9.5 m, to support hauling activities from the Whale Tail Mine. The upgraded haul road was also designed to allow for caribou crossing. Agnico Eagle has also allowed for temporary haul road closures due to caribou migration. The haul road has three bridges, eight large open bottomed arch culverts, and 28 corrugated metal-pipe round culverts to pass watercourse crossings. The bridges, open bottom arch culverts, and round culverts allow for normal river and stream flow, and for fish migration at road water crossings. There are also many other localized drainage culverts to prevent erosion, reduce thaw susceptibility, and prevent washout of the road during freshet. The bridges and culverts were designed at the exploration stage to accommodate the potential for use of the exploration road as a haul road.

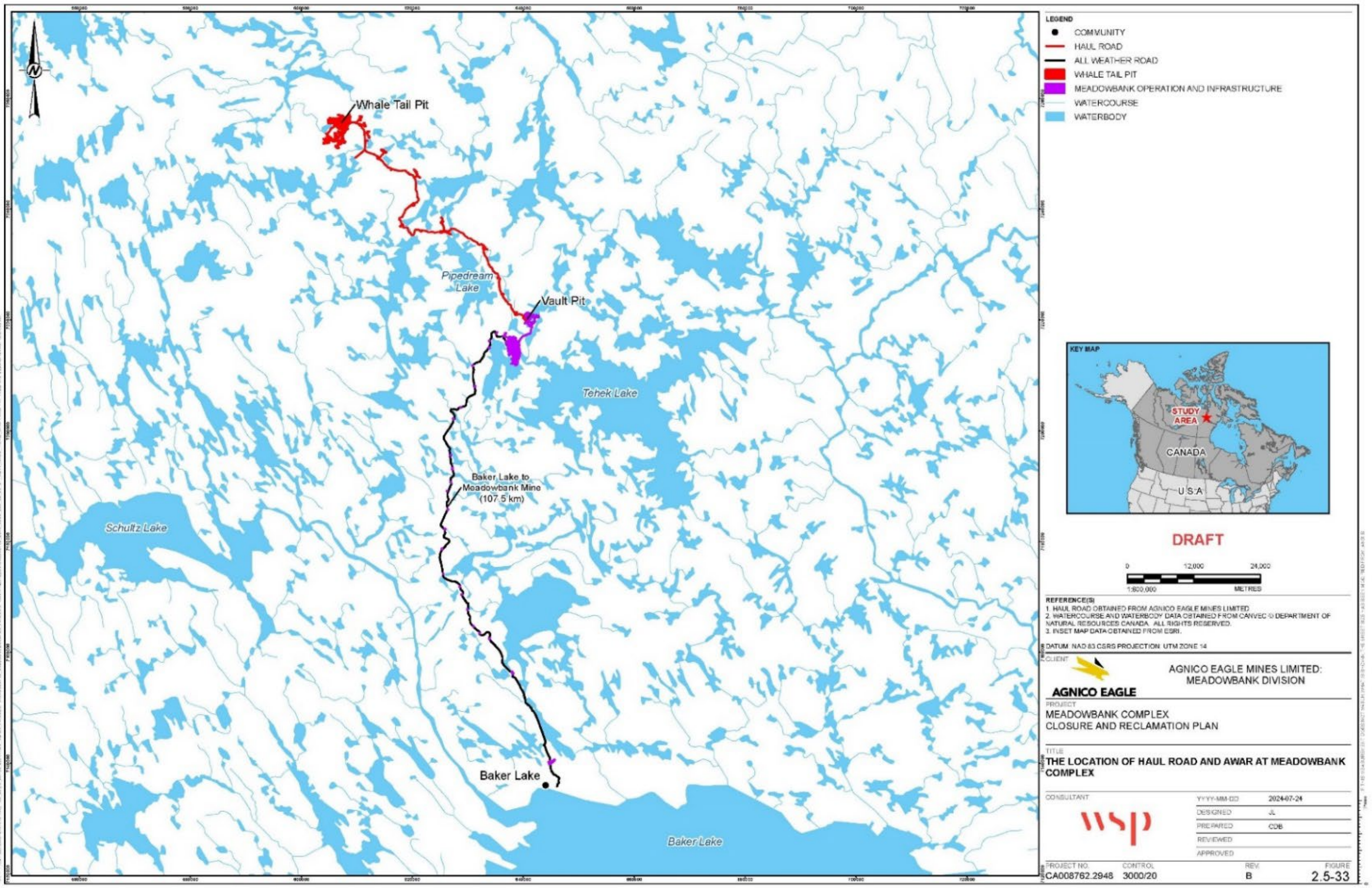


Figure 2.5-33: The Location of Haul Road and AWAR at Meadowbank Complex

2.5.11 Quarries and Borrow Sites

During the construction of the AWAR and the Whale Tail Haul Road, road surfacing was constructed using waste rock, crushed rock aggregates from quarry sites, or natural aggregate from borrow pits that are sourced from esker material. These quarries/borrow pits were expanded to obtain materials for haul road expansion to support additional material hauling from the IVR Pit. A total of 22 quarries were used to create the AWAR, and a total of 11 quarries and nine esker locations were mined to create the Whale Tail Haul Road. Information regarding the AWAR and the Whale Tail Haul Road is provided in Section 2.5.10. Agnico Eagle intends to use suitable open pits waste rock where practical to minimize or eliminate the need for additional rock quarries; however, in 2023, material was taken from Quarry 2 (Parcel A) along the AWAR on Crown Land for road maintenance. In 2024, no new material was taken from the All-Weather Access Road quarries on Crown Land. No issues with runoff water inside the quarries were noted in 2024 (Agnico Eagle 2025a). Figure 2.5-34 and Figure 2.5-35 provide an overview of the AWAR’s extent and associated quarries.

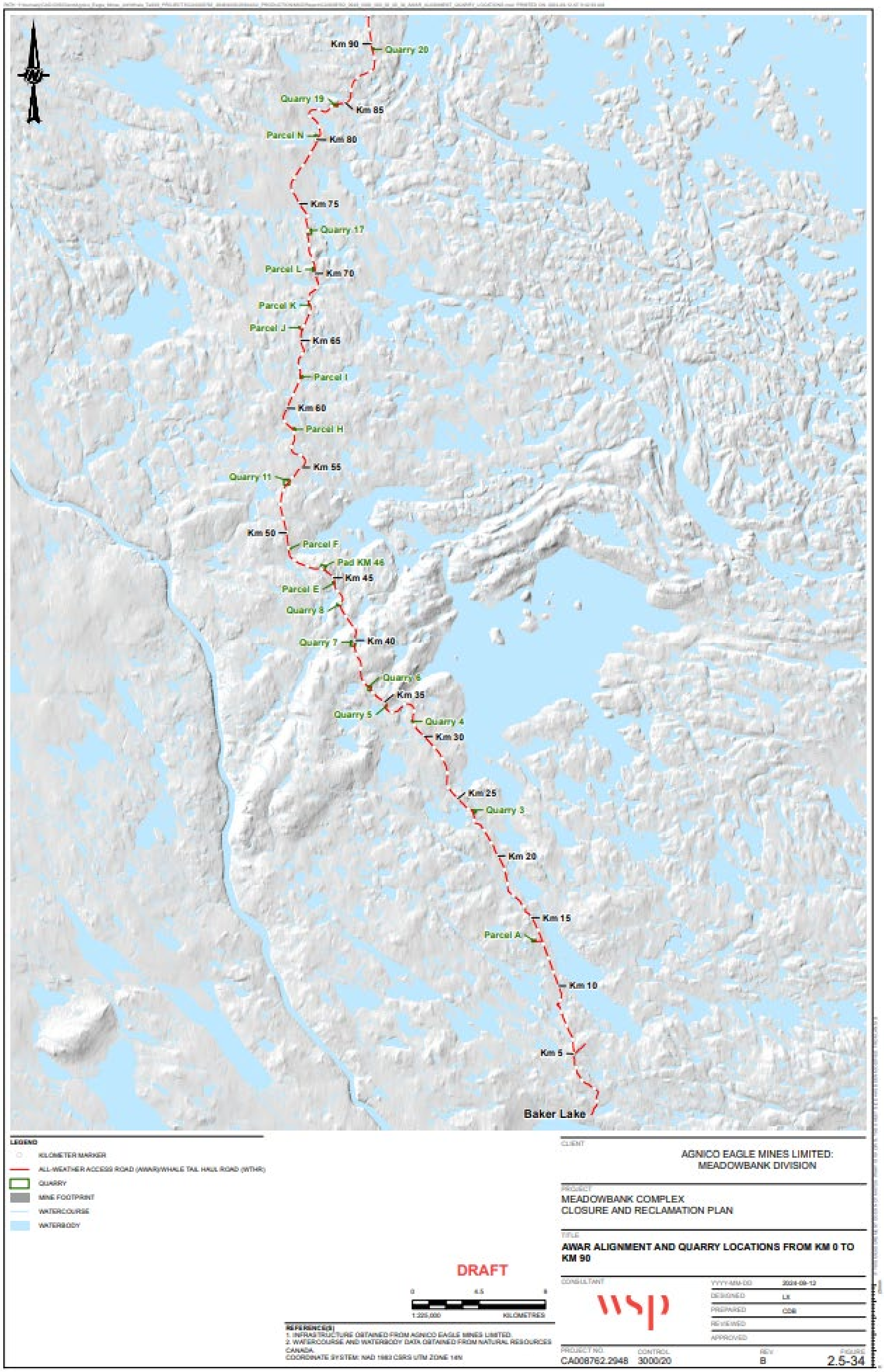


Figure 2.5-34: AWAR Alignment and quarry locations from Km 0 to Km 90

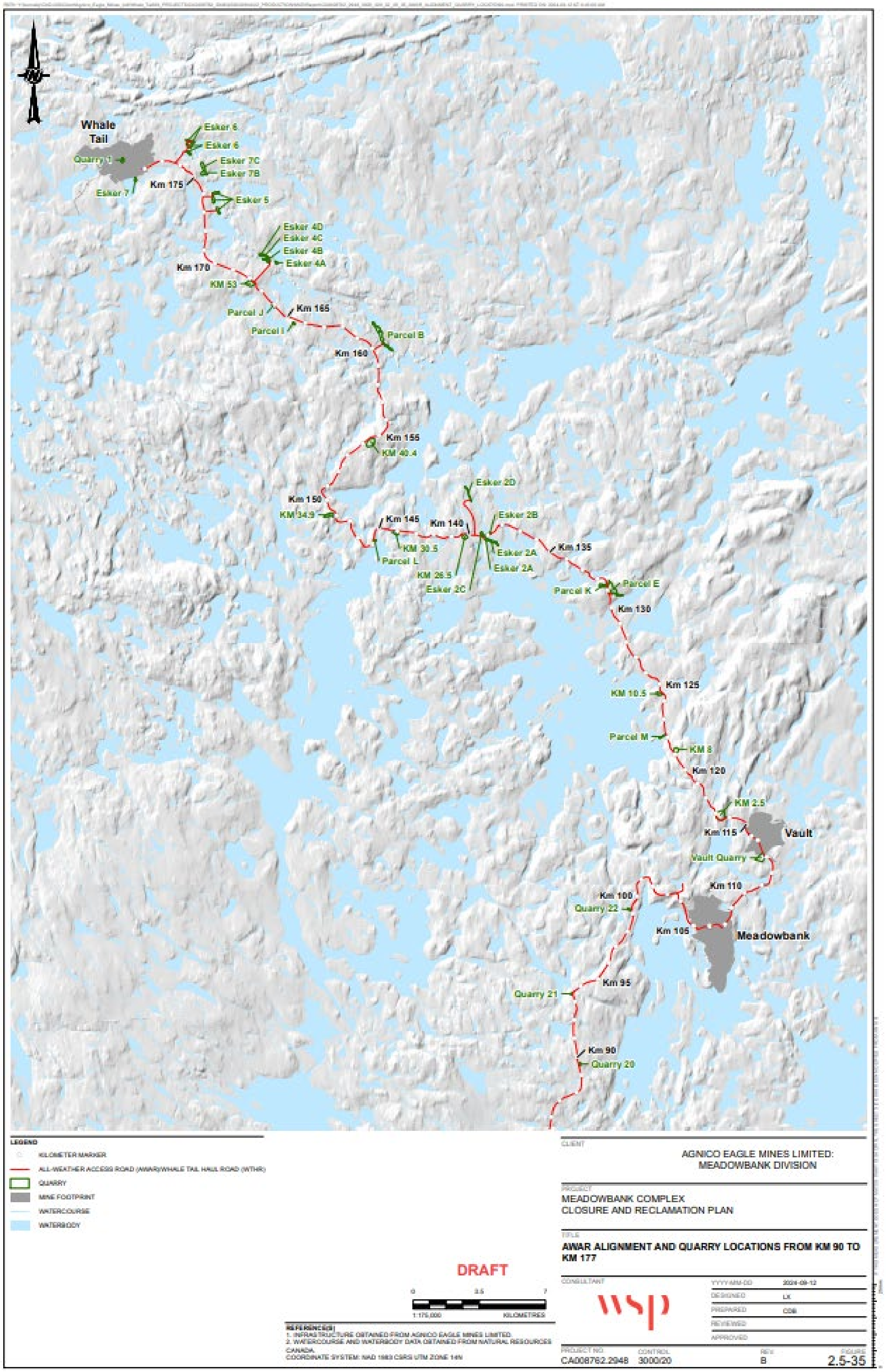


Figure 2.5-35: AWAR Alignment and quarry locations from Km 90 to Km 177

2.5.12 Mine Infrastructure

2.5.12.1 Meadowbank Mine Infrastructure

The Meadowbank Mine contains buildings and other infrastructures used to provide living quarters to the working population and to support mining processes. These infrastructures are located near the Portage and Goose Pits and the TSF (Figure 1.3-2).

Components of this infrastructure are listed below (AtkinsRéalis 2020):

- **Accommodations:** The accommodation facilities include 12 dormitory wings (termed the Main Camp), the construction office, the environment office, the dry change room, the dispatch office, the drinking water treatment facility, housekeeping and building maintenance facilities, and kitchen (with cafeteria), all connected to each other by arctic corridors that are also linked to the Mill and Service Building. The facilities are constructed of ATCO-style rigid wall modules. The dormitory wings consist of single-occupancy rooms with shared or single washrooms and showers. A twelfth dormitory wing is present, but not linked to the complex by an arctic corridor. A gymnasium coverall was also built as part of the accommodation facilities. Additional structures include Nova Camp (additional year-round living quarters) and the geology tents.
- **Ore Processing/Mill:** The mining processes involved in the extraction of gold from the raw ore material include crushing, grinding, gravity concentration, thickening, leaching, carbon-in-pulp, carbon stripping, and gold recovery. Cyanide destruction, tailings deposition and carbon regeneration processes are also undertaken to support the extraction processes. The crushing process consists of reduction of the raw ore material into coarse ore by using a gyratory crusher (also called the primary crusher), a cone crusher (secondary crusher), and a tertiary cone crusher (pebble crusher). The crushed material is stored in the Ore Dome until conveyed to the Mill Complex to pass through the extraction processes. A total of four conveyor belts are used to carry the ore from the primary crusher to the Mill. The Mill building is a pre-engineered steel structure supported by concrete foundations and is located beside the accommodation facilities. The ten leach tanks are within bermed secondary containment located outside on the south side of the Mill. The assay lab and SO2 Plant, located beside the Mill building, provide support to the mining processes.

- **Power, electric grid and fuel**: Meadowbank Mine Power Plant is diesel-fired with six generators, with the capacity to supply 15.5 megawatt (MW) of energy. The plant is a pre-engineered structure, and both the building and generator assembly are mounted on concrete foundations. A local electrical network is in place to supply buildings and other infrastructure near the Power Plant. In addition, a network of 5 kilovolt (KV) cable is installed to reach more remote infrastructure (i.e., the freshwater intake pumping station, and the Emulsion Plant). The fuel storage and dispensing area is located beside the contractor area, south of the accommodation facilities and Mill. The primary storage consists of a 5.6 million L steel tank located within a lined bermed containment structure. A fuel unloading and distribution pump and pipeline module feeds a network system throughout the Mill area, supplying fuel to the exterior day tanks at the Power Plant. A fuel dispensing station for supplying light and heavy vehicles is located adjacent to the fuel storage area.
- **Services:** Service infrastructure consists of buildings and structures for activities supporting mining activities, the Mill, and the accommodation facilities. The Service Building is the largest service infrastructure and is a pre-engineered steel structure supported on concrete foundations. This building provides offices, a warehouse, medical and emergency service area, and serves as the repair facility for the maintenance of large mobile equipment. A coverall, near the Ore Dome and Mill, is used as a warehouse. The contractor area, located between the fuel storage area and Mill, hosts infrastructure supporting activities by contractors hired for the Meadowbank Complex. Infrastructure components in these areas include trailers, coveralls, and temporary structures providing garages, tool shops, and storage space.
- **Roads:** The road network at the Meadowbank Mine consists of a series of service and haul roads. The total length of these roads is approximately 22 km. Service and haul roads to and around the Vault deposit are approximately 12 km in length. The Vault haul road is approximately 8 km long and was constructed between the Meadowbank Mine and the Vault Pit. Culverts were installed at stream crossings. The roads are constructed above grade using NPAG/NML rock from the pits or the Airstrip Quarry. Road width varies from 10 to 20 m for service roads, and up to 40 m for haul roads.
- **Communication tower:** Three communication towers are located along the AWAR at Meadowbank Mine, and the typical communication tower includes antenna, receiver/transmitter unit, foundation mounts, and portable generator.
- **Airstrip:** The Meadowbank Mine is accessible via overland travel on the AWAR and via chartered aircraft to the airstrip. The airstrip is used for transporting personnel and freight, such as food and cargo, to the Meadowbank Mine. The airstrip is located immediately north of the supporting infrastructure on the peninsula that separates the Second and Third Portage lakes. The airstrip is 1752 m x 45 m and can accommodate a Boeing 737.

- **Airstrip Quarry:** This quarry is located north of the airstrip and provided material for the rockfill foundation of the building infrastructure at the Meadowbank Mine and for the construction of the dikes. It is now used for the storage of drill cores and associated equipment.
- **Emulsion Plant area:** This area is approximately 5 km north of the accommodation facilities and includes the Emulsion Plant and two warehouses installed on a rockfill pad for the storage of ammonium-nitrate. Four explosive magazine storages on rockfill pads are also located along the access road between the AWAR and Emulsion Plant. A freshwater intake at the nearby lake is in place to supply water to the Emulsion Plant.
- **Vault area infrastructures:** a WTP (Acti-flow system) and a detonator magazine are all that remain of the Vault area infrastructure.

Photo 2-8 displays major mine infrastructure components. Table 2.5-29 lists the dimensions of buildings and infrastructure at Meadowbank Mine.

Photo 2-8: Meadowbank Mine Infrastructure (2023)

Table 2.5-29: Building and Dimensions at Meadowbank Mine

Building/ Infrastructure	Footprint (m²)	Stories (3 m Height)	Total Demolition Volume Scaled for Height (m³)	Concrete Foundation Area (m²)	Building/ Infrastructure	Footprint (m²)	Stories (3 m Height)	Total Demolition Volume Scaled for Height (m³)	Concrete Foundation Area (m²)
Meadowbank Mine									
Mill	7,560	5	37,800	4,560	Talbon Shop	235	1	235	-
Leach Tank (10)	2,500	5	12,500	2,500	Blue Coverall	354	2	710	-
Primary and Secondary Crusher	246	3	740	246	Gate House	100	1	100	-
Pebble Crusher	325	2	650	325	Fuel Dispensing Station	165	1	165	-
Conveyors	975	2	1,950	-	Emulsion Plant	1,000	2	2,000	-
Assay Lab	440	1	440	-	5.6 ML Bulk Fuel Tank	955	2	1,910	-
Accommodation Complex (Inc. Nova Camp)	11,744	1	11,744	-	Airstrip	41,000	-	-	-
Kitchen and Cafeteria	2,630	2	5,259	-	Access roads (~10 m x 12 km)	120,000	-	-	-
Service Building	3,270	4	13,080	3,270	Haul roads (~25 m x 14.5 km)	363,000	-	-	-
Site Service Building	500	1	500	3,270	Portage/Goose Disturbed Area	406,000	-	-	-
Dome Warehouse	1,427	2	2,854	-	Vault Disturbed Area	65,000	-	-	-
Ore Dome	3,000	7	21,000	-	Sea cans (each)	1,200	-	-	-
Power Plant	2,485	3	7,455	-	Baker Lake				
Cat Warehouse	1,345	2	2,690	-	10 ML Bulk Fuel Tanks (6 tanks)	5,295	4	21,180	6,095
Toromont Facilities	925	1	925	-	100,000 L Jet Fuel Tanks (18 tanks)	720	1	720	-
Fountain Tire	330	1	330	-	Scarify laydown areas	500,000	-	-	-
White Coverall	1,395	2	2,790	-	AWAR		-	-	-
Batch Plant	1,050	2	2,100	-	Road surface (8 m x 105 km)	840,000	-	-	-
Environmental Office	140	1	140	-	Remove culverts (each)	34	-	-	-
Dike Dewatering Shop	755	1	755	-	Remove bridge (each)	11	-	-	-
Incinerator	280	1	280	-	Reclaim quarries (m³)	2,300	-	-	-

Source: AtkinsRéalis 2019.

- = no data

2.5.12.2 Whale Tail Mine Infrastructure

Ore from the Whale Tail Mine operation is segregated by grade. The high-grade ore is transported to Meadowbank Mine for milling as part of the run of mine operation, while the low-grade ore is temporarily stockpiled in the ore pads until the end of the mining operations, after which, it will be milled, as part of closure. To support the operation of the Whale Tail Pit, several other pieces of infrastructure are used including:

- **A Communication tower**: The communication tower occupies an area of approximately 6,400 m^2 with a height of 45.5 m. It is the main communications node for the Whale Tail Mine.
- **A Power Plant**: Is a diesel-fueled facility using reciprocating engines housed in the modular building with a floor area of 215 m^2. Two 1.8 MW/600-volt (V) gensets have been relocated from the Vault Pit to the Whale Tail Mine. Seven 500 kW Volvo Penta diesel generators were also installed in the Power Plant to provide additional power. Three 1875 kilowatts (KW) CAT 3516 diesel generators were installed for the Underground Mine.
- **The Worker Camp**: A 544-person worker camp is also present at the Whale Tail Mine. The camp includes rooms, as well as a reception and security area, a kitchen and dining room, a laundry, recreational facilities, an administration building, and a first-aid clinic. The camp complex is an insulated structural wood frame building resting on a structural steel frame floor on piles. The camp is located at the industrial site pad and has a total floor area of approximately 177,000 m^2.
- **The Mine Services Area**: As part of operations, a mine services area is required. The Whale Tail Mine maintenance shop has a wash bay, a machine shop, and a welding shop. An emulsion plant is also present near Kangislulik Lake.
- **The Kangislulik Lake Intakes**: Two Kangislulik Lake intakes are available to support the Whale Tail Mine emulsion plant operations and for explosives.
- **The Bulk Fuel Storage Facility**: 96.8 million L (95 million L of ultra-low sulphur diesel and 1.8 million of Jet A) are stored at the Bulk Fuel Storage Facility. The Bulk Fuel Storage Facility is located east of the Whale Tail Camp adjacent to the mine operations haul road. The fuel unloading facility is located within a lined and bermed area and is sized to hold 110% of the volume of the largest tank.
- **The Millwright Building Pad**: The Millwright Building Pad near the underground truck shop was built to provide a foundation base to support the new Millwright Maintenance Building, which will provide additional space for equipment maintenance (Agnico Eagle 2024a).
- **The Composter Building Pad**: The construction of the Composter Building Pad included the installation of a prefab concrete pad that will be used to install a Honco building with a composter system inside in 2024 (Agnico Eagle 2024a).

Table 2.5-30 lists the footprints of building and infrastructure at the Whale Tail Mine.

Table 2.5-30: Footprint of Building and Infrastructure at the Whale Tail Mine

Building/ Infrastructure	Footprint (m²)	Building/ Infrastructure	Footprint (m²)	Building/ Infrastructure	Footprint (m²)	Building/ Infrastructure	Footprint (m²)
		Accommodation Complex - Main Camp	18,000	Offices, kitchen, ERT	1,311	Storage Facilities (Main Warehouse)	3,699
Remove Buildings							
Power Plant	216	Communication Tower	100	Water treatment plant	1,500	U/G Heating Plant	1,800
Cement Rock Fill Plants	320	AN Storage Facility	50	Shop area and others	4,508	On-site bulk fuel tanks	213
Fire protection- Pumping station	30	Fresh water intake	200	New incinerator, composter	100	Break foundation slabs	11,000
WTP & Fresh water pumping station	832	WRSF Pond, Attenuation Pond pumphouses	24	IVR Attenuation Pond pumphouse	24	Water and Wastewater Treatment Facilities	178
Emulsion Plant - Kangislulik Lake	1,800	Additional tanks	170	Workers Dry	668	-	-
Grade and Contour Pads							
Accommodation Complex - Main Camp	179,400	Offices, kitchen, ERT	1,204	Storage Facilities (Main Warehouse)	3,699	Water and Wastewater Treatment Facilities	178
Communication Tower	100	Water treatment plant	1,500	Emulsion Plant	1,800	Cement Rock Fill Plants	320
Shop area and others	4,508	On-site bulk fuel tanks	713	Additional tanks	670	Fire protection- Pumping station	29.7
New incinerator, composter, and landfarm	10,900	Workers Dry	668	WTP & Fresh water pumping station	832	WRSF Pond, Attenuation Pond pumphouses	24
Power Plant	216	AN Storage Facility	50	Fresh water intake	200	-	-

Source: Agnico Eagle 2019.
- = no data.

SECTION 3 • EXISTING ENVIRONMENTAL CONDITIONS

3.1 Atmosphere Environment

As the Meadowbank Complex consists of two mine sites within one ecozone, the atmospheric environment is similar for both sites. Thus, atmospheric environment topics are presented jointly in the subsections below. Physical, chemical, and biological environment conditions are discussed separately for the Meadowbank Mine and Whale Tail Mine (Section 3.2, Section 3.3, and Section 3.4).

3.1.1 Climate Conditions

The Meadowbank Complex is located at the southern limit of the Northern Arctic terrestrial ecozone and has a Low Arctic ecoclimate. This ecoregion is classified as a polar desert and is characterized by long, cold winters and short, cool summers. Winds are predominately from the northwest and exceed 20 kilometres per hour (km/h) more than 25% of the time.

Table 3.1-1 includes average, minimum, and maximum air temperatures, average and maximum wind speed, as well as daily average, total, and maximum volume of precipitation (rainfall / snowfall) for both the Meadowbank and Whale Tail Mines. It should be noted that Agnico Eagle does not have a snow gauge but rather a rain gauge. For this reason, snow precipitations are reported as mm of rain.

3.1.2 Climate Change

The closure and reclamation planning must consider the potential impact of climate change on-site conditions. Many of Agnico Eagle's closure efforts centre around maintaining permafrost as a method to prevent geochemistry issues, and to control the movement of water. Permafrost is sensitive to climate change and an increase in air temperature will likely cause natural permafrost degradation. The sensitivity of permafrost to climate change in Canada has been assessed by (Smith and Burgess 1998; 2004) by categorizing the response of ground thermal conditions to climate and the effects of permafrost thaw on terrain stability.

The Meadowbank Complex is within the continuous permafrost zone. Permafrost is regionally predicted to be moderately sensitive to climate change, with a low to moderate physical response resulting from thaw (Smith and Burgess 2004). At the Meadowbank Complex, ground ice content is reported to be between 0 and 10% (Heginbottom et al. 1995). Projections indicate that the active layer thickness is expected to increase, while the total thickness of permafrost may slowly reduce in time. However, these changes are not anticipated to compromise the planned permafrost encapsulation strategies for the WRSFs and TSF. ECCC (CanRCM4 climate model) predicts that the mean annual temperature will increase about 4ºC to 5ºC by 2085 due to climate change (NRC 2010). The Whale Tail 2018 FEIS Addendum (Agnico Eagle 2018a) has further climate change related information.

Table 3.1-1: Meadowbank Complex 2023 Monthly Climate Data

Month	Temperature Average	Temperature Max	Temperature Min	Wind Speed Average	Wind Speed Max	Total Precipitation	Daily Average Precipitation	Max Precipitation
	ºC	ºC	ºC	m/s	m/s	mm	mm	mm
January	-27.48 (-27.98)	-8.54 (-8.97)	-39.90 (-39.80)	5.67 (5.05)	18.15 (17.25)	10.25 (25.70)	0.33 (0.83)	2.80 (10.90)
February	-37.24 (-36.77)	-27.35 (-21.37)	-45.05 (-44.20)	3.38 (3.46)	13.60 (15.54)	1.70 (5.60)	0.06 (0.20)	1.10 (1.70)
March	-27.51 (-27.51)	-17.72 (-15.17)	-39.07 (-38.74)	4.14 (3.50)	15.11 (13.78)	2.50 (5.80)	0.08 (0.19)	1.10 (2.20)
April	-14.90 (-14.78)	-3.42 (-1.61)	-31.71 (-30.61)	2.78 (3.29)	15.21 (15.21)	0.10 (1.10)	0.00 (0.04)	0.10 (0.60)
May	-0.43 (-0.26)	12.35 (13.67)	-12.28 (-12.95)	5.45 (4.11)	19.68 (19.72)	10.55 (5.10)	0.34 (0.16)	3.90 (2.30)
June	7.75 (8.32)	19.89 (20.97)	-2.16 (-3.16)	4.90 (3.68)	18.37 (16.82)	54.00 (40.40)	1.86 (1.35)	19.45 (13.50)
July	13.90 (13.95)	25.22 (26.54)	5.43 (5.29)	4.94 (2.42)	14.84 (12.23)	10.25 (19.40)	0.33 (0.63)	5.00 (8.80)
August	13.59 (12.22)	25.39 (27.14)	1.14 (0.43)	5.12 (3.21)	17.40 (15.01)	65.05 (53.50)	2.10 (1.73)	17.20 (12.60)
September	5.86 (5.26)	17.39 (17.12)	-0.73 (-1.25)	5.72 (4.29)	19.29 (18.93)	39.95 (43.30)	1.33 (1.44)	19.20 (12.60)
October	-1.38 (-2.02)	9.16 (8.40)	-12.14 (-14.07)	6.35 (4.40)	21.38 (19.99)	4.05 (7.50)	0.13 (0.24)	1.70 (1.40)
November	-15.00 (-16.82)	-2.11 (-4.23)	-29.77 (-31.38)	6.24 (2.96)	32.48 (17.21)	8.70 (37.20)	0.29 (1.24)	2.60 (12.00)
December	-19.84 (-20.14)	-8.65 (-10.05)	-30.78 (-31.95)	5.03 (4.16)	21.03 (20.31)	15.05 (21.30)	0.49 (0.69)	5.40 (4.60)
Total	N/A (N/A)	N/A (N/A)	N/A (N/A)	N/A (N/A)	N/A (N/A)	222.15 (265.9)	N/A (N/A)	N/A (N/A)
Average	-8.64 (-8.88)	3.47 (4.37)	-19.75 (-20.20)	4.98 (3.71)	18.88 (16.83)	N/A (N/A)	0.61 (0.73)	6.63 (6.93)

Source: Agnico Eagle 2024a.

ºC = degrees Celsius; m/s = metres per second; mm = millimetres; Brackets indicate Whale Tail Mine climate data; N/A = not applicable.

3.1.3 Air Quality

The objective of the air quality and dustfall monitoring program is to measure dustfall, NO2, and suspended particulates (TSP, PM10, PM2.5) at various monitoring locations around the Meadowbank and Whale Tail Mines, AWAR, and Whale Tail Haul Road.

Results are primarily compared to Government of Nunavut (GN) Environmental Guidelines for Ambient Air Quality and/or Canadian Ambient Air Quality Standards (CAAQS) for TSP, PM2.5 and NO2; BC Ambient Air Quality Objectives for PM10; and Alberta Environment and Parks Ambient Air Quality Guidelines for passive dustfall. Results are also compared to model predictions from the Project's Final Environmental Impact Statement (FEIS), where suitable. In some cases, management thresholds are also established based on these values.

Air quality and dustfall monitoring occurs annually according to the Air Quality and Dustfall Monitoring Plan.

3.1.4 Noise and Vibration

The objective of the noise program is to measure noise levels at five previously determined monitoring locations around the Meadowbank Mine (R1 – R5) and six previously determined monitoring stations around the Whale Tail Mine and Whale Tail Haul Road (R6 – R11), over at least two 24 h periods.

.No human receptors (e.g., cabins) are in the vicinity of noise monitoring stations, and no noise related complaints have been received to date. Impacts of sensory disturbance on wildlife are determined separately through the Terrestrial Ecosystem Monitoring Plan (TEMP) and reported annually in the Wildlife Monitoring Summary Report. Noise monitoring occurs annually according to the Noise Monitoring and Abatement Plan (Agnico Eagle 2024s).

3.2 Physical Environment

Unlike the atmospheric environment, the terrestrial environment is more variable over shorter distances and is inherently more variable due to geological processes and glacial history. As a result, Meadowbank and Whale Tail Mines are discussed separately in the following subsections.

3.2.1 Topography and Lake Bathymetry

3.2.1.1 Meadowbank Mine Topography

The landscape in the region and immediate vicinity of the Meadowbank Mine consists of rolling hills and relief with low growing vegetative cover and poor soil development. Numerous lakes are interspersed among boulder fields, eskers, and bedrock outcrops, forming complex drainages. The Meadowbank Mine is located close to the surface water divide between the Back River basin, which flows north to northeast towards the Arctic Ocean, and the Quoich River basin, which flows east to southeast into Chesterfield Inlet. The terrain along the AWAR has low relief, and is generally gently to moderately sloping with short, steep slopes occurring locally on some bedrock surfaces. Elevation ranges from approximately 130 m above mean sea level at lakeshores up to 200 m on ridge crests (AtkinsRéalis 2020).

3.2.1.2 Whale Tail Mine Topography

The topography surrounding the Whale Tail Mine is generally flat with local surface relief of up to 20 m. The low terrain of the area has resulted in a diffuse drainage pattern. High flows are observed during spring runoff, while low flows and dry stream channels are typical in late summer. Whale Tail Lake drains to the south via a network of low-lying lakes.

3.2.2 Geology

3.2.2.1 Meadowbank Mine Geology

Figure 3.2-1 highlights the regional geology of the Meadowbank Mine. The Meadowbank Mine geology consists of intermediate volcanic, iron formation, ultramafic, and quartzite lithological units. The Meadowbank Mine area is underlain by a sequence of Archaean greenstone (ultramafic and mafic flow sequences) and metasedimentary rocks that have undergone polyphase deformation resulting in the superposition of at least two major structural events. Enclosed within the greenstone are volcaniclastic sediments, felsic-to-intermediate flows and tuffs, sediments (greywackes), and oxide iron formations. The sequence also contains sericite schists, which are believed to be altered felsic flows or dykes. The ultramafic rocks are variably altered, containing serpentinite, chlorite, actinolite, and talc.

Gold deposits are found along two main structural features at the Meadowbank Mine – the Meadowbank Trend and the Pipedream Lake (Northeast) Trend. The Meadowbank Trend hosts the Goose, Portage, and Vault deposits, which are the sites of mining. In all deposits, gold mineralization is commonly associated with intense quartz flooding, and the presence of sulphide minerals (pyrite and/or pyrrhotite). The Goose and Portage deposits are hosted by a magnetite-rich iron formation, while intermediate volcanic rocks host most of the mineralization at the Vault deposit farther north. Both the rock units and the gold deposits are tightly folded and structurally complex, sandwiched between granite plutons.

At Meadowbank Mine, laterally large deposits of glacial till cover the mine's extent. Block fields of weathered parent material interspersed with thin veneers of till or organics are common. Till thicknesses average 3 m, with a maximum of 12.5 m. In general, the till can be described as unsorted, medium brown, silty sand/gravel till, with between 20% and 40% fines (silt and clay) of locally derived volcanic, sedimentary, and lesser granitic clasts (AtkinsRéalis 2020). Glaciofluvial deposits are volumetrically insignificant, and the area was above the last glacial marine transgression; thus, no glaciomarine deposits are present. Material recovered from beneath the lakes within the Meadowbank Mine footprint can be generally described as cobbles and gravel with traces of sand, silt, and clay. Further details on the rock types comprising the Portage, Goose, and Vault deposits and their relative proportions within the footprint of the deposits can be found in the Baseline Physical Ecosystem Report (Cumberland 2005b).

The Meadowbank Mine is in an area of relatively low seismic risk. The peak ground acceleration (PGA) for the area was estimated using the seismic hazard calculator from the 2010 National Building Code of

Natural Resources Canada (NRCan) website (NRC 2010). The estimated PGA is 0.019 g for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1000-year return) and 0.036 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2475 year return) for the area (Agnico Eagle 2019; AtkinsRéalis 2020).

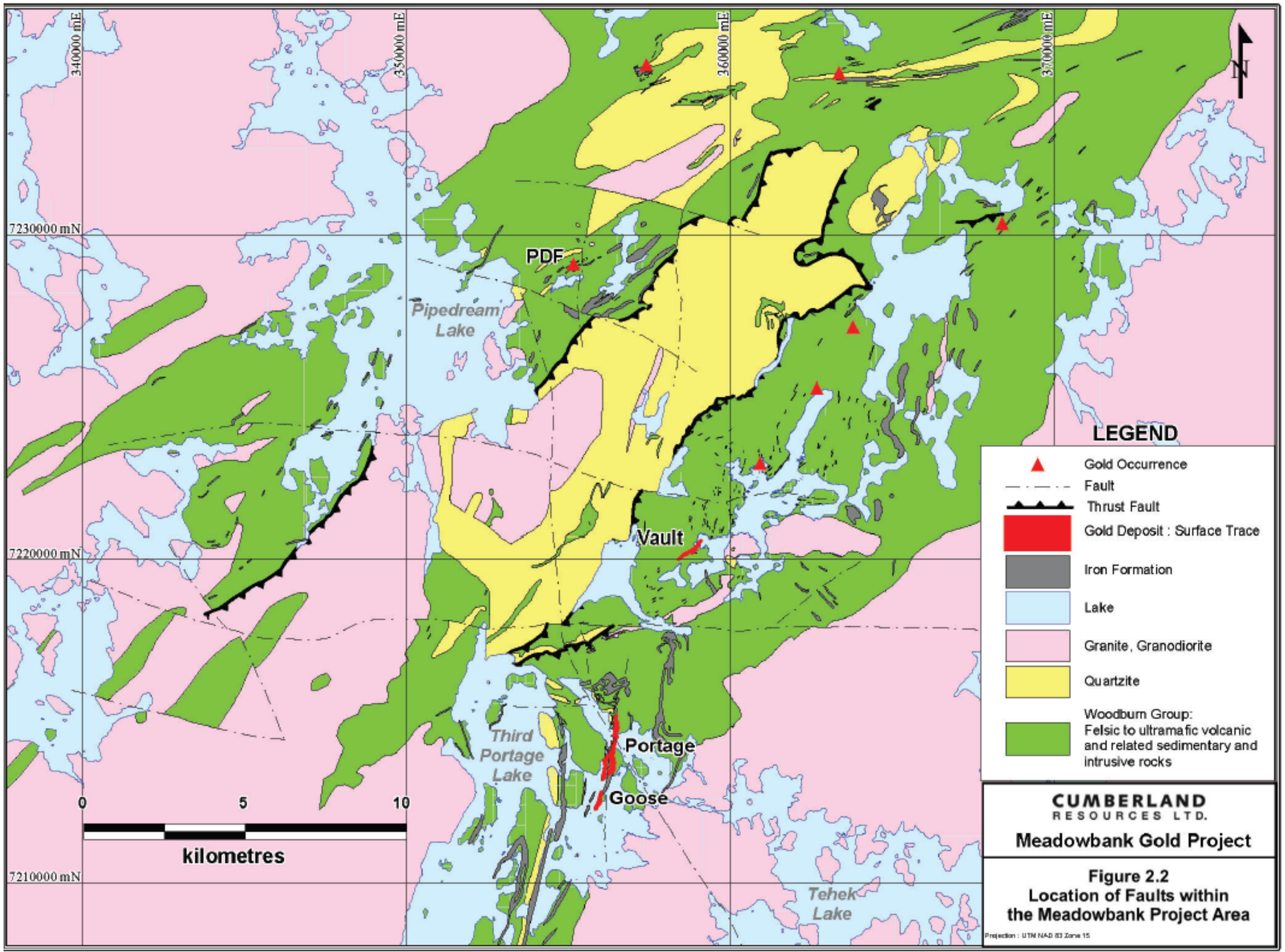


Figure 3.2-1: Regional Geology of the Meadowbank Area

3.2.2.2 Whale Tail Mine Geology

The Whale Tail Mine deposit includes: ultramafic komatiites, clastic sedimentary rocks, mafic volcanic rocks, and felsic to intermediate intrusive rocks (Golder 2016a). The Whale Tail Mine is underlain by Archean supracrustal rocks of the metamorphosed Woodburn Lake Group; the same sequence as at the Meadowbank Mine (Figure 3.2-2). There are four Paleo-Proterozoic aged events of deformation recognized, two of which have significant effects on the geometry of the deposit. Three different mineralization styles are present at the Whale Tail Mine deposit, with gold associated with pyrrhotite or arsenopyrite. Mineralization is hosted in the iron formation (as layers, lenses, or disseminations), in chert (as silica flooding), and throughout the entire rock sequence (as veins). Details on these lithological units are provided in (Golder 2016b).

The Whale Tail Mine is located in an area of relatively low seismic risk. The PGA for the area was estimated using the seismic hazard calculator from the 2010 National Building Code of NRCan website (NRC 2010). The estimated PGA is 0.019 grams (g) for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1000-year return) and 0.036 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2475 year return) for the area (Agnico Eagle 2019; AtkinsRéalis 2020).

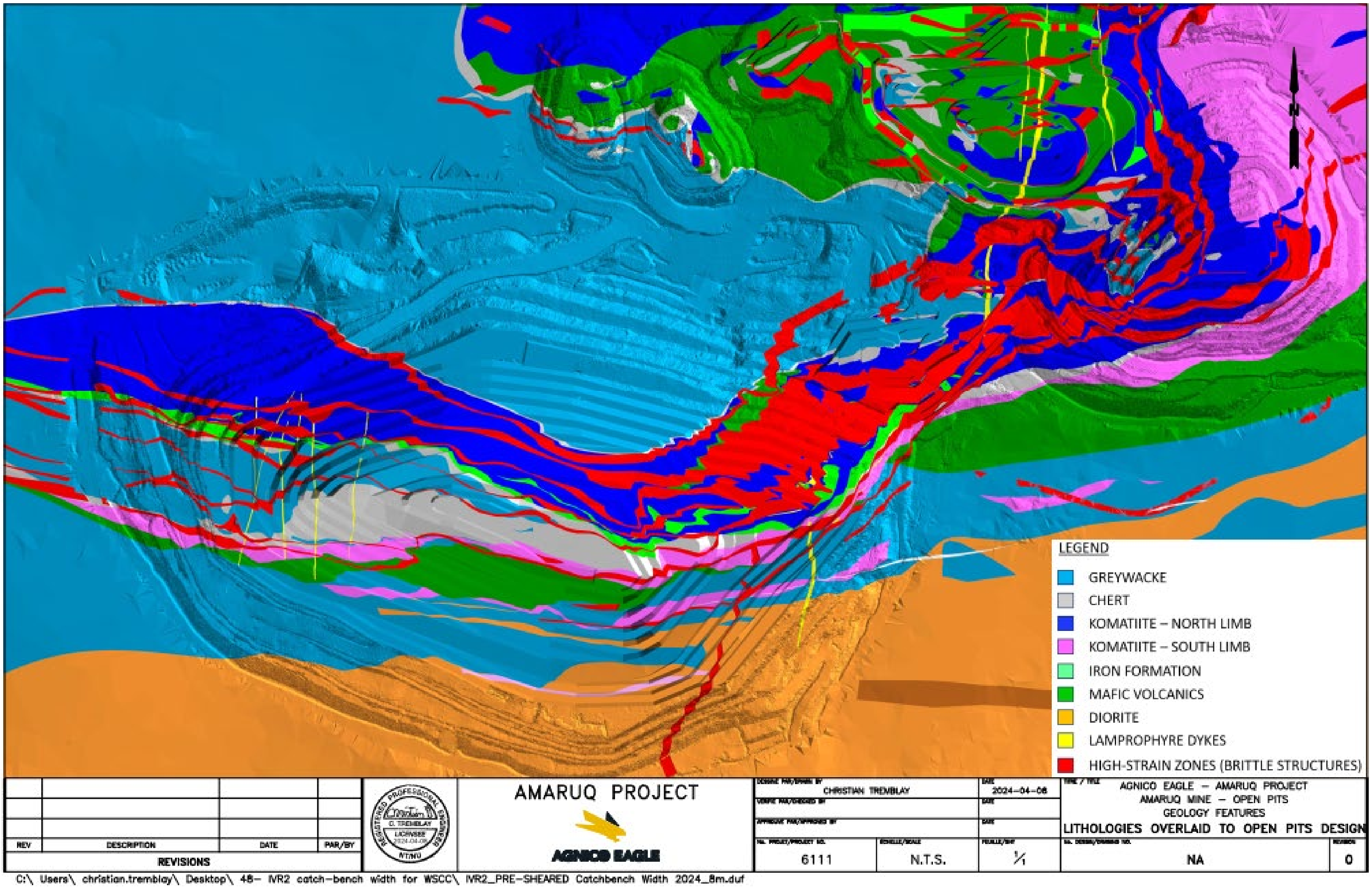


Figure 3.2-2: Geology of the Whale Tail and IVR Open Pits

3.2.3 Geological Hazards, Seismicity, and Geotechnical Conditions

3.2.3.1 Meadowbank Mine

Knight Piésold (2024a) provides detailed information on pit stability. Only one bench is visible above the Goose Pit lake elevation of 112 masl (5,112 mRL). This bench extends around the circumference of the pit and is stable. The North Waste Rock Dump, which abuts the north boundary of the Goose Pit has been subsiding since 2015, due to deposition of water in the pit, and through a combination of thawing snow/ice lenses within the dump.

Portage Pit A has seen local bench scale failures (2012, 2016) within ultramafic portions of the west wall. The Portage Pit B Dump, has settled, and tension cracks and sink holes are present. The Portage Pit C Dump is currently stable, while Portage Pit D Dump shows some signs of settling (tension cracks), which began in 2017. Some deformation and settlement have also been observed; however, extensometer readings are below the 50 mm/day threshold, which would trigger an adaptive management response. Portage Pit E is generally performing well. A few relatively small rock fall hazards are present on the northwest wall and ramp, but two rockfall berms are in the vicinity and expected to contain these hazards in the event of a fall.

In general, the east portion of Vault Pit is stable, and its benches are performing well. The Whale Tail Haul Road) crosses the saddle between the Vault and Phaser Pits on a rockfill embankment. There is no evidence of instability, but this embankment could be negatively impacted if the water level in the Phaser Pit increases. The west wall of the Vault Pit was constructed in 7 m benches, and these commonly failed. The flooding of Vault and Phaser/BB Phaser Pits with natural inflow began at the end of mining operations in the area in 2019 and continued during 2023. Monitoring is ongoing for this area. The North Waste Rock Dump, located at the north boundary of the Vault Pit, had tension cracks form in 2019, but these appear to be stable.

3.2.3.2 Whale Tail Mine

Knight Piésold (2024b) provides detailed information on pit stability. Much of the Whale Tail Pit is unstable, particularly along the north wall of Phase 1, where a multi-bench scale failure occurred in 2022. The northwest wall of Phase 1 has also been subject to bench-scale failures, which are expected to continue. Agnico continues to scale this area to minimize failure risk. Similarly, the northeast wall has had multiple failures ranging in size from 50 t to 200 t. Several rock fall hazards have also been identified on the south and southwest walls. Agnico continues to mine out areas associated with most failures in the Whale Tail Pit and adjust bench angles to maximize stability.

IVR Pit has some catch-benches that are at capacity, due to failure during pit development. Spill over has occurred and will continue during operations; high hazard rockfalls have occurred at the IVR West 2 Pit.

3.2.4 Permafrost

Permafrost refers to subsurface soil or rock where temperatures remain at or below 0°C for at least two consecutive years. This is synonymous with perennially cryotic ground, which may be frozen, partially frozen, or non-frozen depending on the ice/water content of the ground, and the salinity of the groundwater. The base of the permafrost is expected to be an undulating surface and the actual depth to permafrost is variable. Permafrost does not necessarily contain ice; rather, its definition is based solely on the temperature of the mineral or organic parent material.

3.2.4.1 Meadowbank Mine Permafrost

At Meadowbank Mine, permafrost is considered stable and has temperatures colder than -5°C (Cumberland 2005c). In this region, the layer of permanently frozen subsoil and rock is generally deep and overlain by an active layer that thaws during summer. The depth of the active layer is estimated to range between 1 and 3 m. Permafrost depths are estimated to be between 450 and 550 m, depending on proximity to lakes, slope, aspect, and other site-specific conditions. The measured active layer depth in Meadowbank Mine area currently ranges from about 1.3 m in areas of shallow overburden and away from the influence of lakes, up to 4.0 m adjacent to lakes, and up to 6.5 m beneath the streams connecting Third Portage and Second Portage lakes.

The ground ice content of permafrost soil and rock in the Meadowbank area is expected to be between 0% and 10% (dry permafrost) based on regional scale compilation data. Locally on land, ice lenses and ice wedges are present, as indicated by ground conductivity, and by permafrost features such as frost mounds. These areas of local ground ice are generally associated with low-lying areas of poor drainage. Rock and soil-related terrain instability is a minor concern in the Meadowbank Mine area. Although permafrost will degrade in certain areas, for the most part, the permafrost is “dry” and has low ground ice content. The exception is the wetlands occupying lowlands adjacent to lakes and ponds where excess ground ice is present, and thaw instability is foreseeable. These impacts can be mitigated using currently accepted permafrost engineering practices as part of dike construction, drawdown and re-watering of lakes, pit development, and WRSF and TSF construction and closure.

3.2.4.2 Whale Tail Mine Permafrost

At Whale Tail Mine, a thermistor data review and numerical modelling of the lake talik formations for the Whale Tail Lake area was carried out by Golder in 2019 (Golder 2019b). Based on the latest thermistor data available, the permafrost characteristics in the Whale Tail area are summarized below:

- The estimated depth of zero amplitude from the temperature profiles ranges from 18 m to 35 m.
- The temperatures at the depths of zero amplitude are in the range of -3.1°C to -8.6°C for on land thermistors.
- Temperatures in depth at the locations of the thermistors’ tip vary between -0.35°C and -3°C.

- The geothermal gradient estimated based on the lowest 70 to 100 m of the thermistor strings is in the range of 0.004°C/m to 0.052°C/m.
- Permafrost depth ranges between 480 m and 550 m for ground away from the Whale Tail Lake, and between 350 m and 450 m below surface in portions beneath the Whale Tail Lake.
- Under the northern portion of the lake along the proposed ramp area, there is likely a closed talik formation.
- Open talik formations are probable in the southern portion of the lake where the Whale Tail Lake becomes wider.

3.2.5 Hydrogeology

3.2.5.1 Meadowbank Mine Hydrogeology

There are two groundwater flow regimes at Meadowbank Mine for areas of continuous permafrost: a deep regime beneath the permafrost, and a shallow regime in the active layer near the ground (Golder 2014). The deep groundwater regime is connected to taliks located beneath large lakes. Groundwater flow within the deep groundwater flow regime is limited to the sub-permafrost zone. Regionally, this deep groundwater flow regime is connected to the ground surface only by open taliks underlying larger lakes. The elevations of these lakes are expected to be the primary control of the regional groundwater flow directions in the deep groundwater flow regime. Smaller lakes, which have taliks that do not extend down to the deep groundwater regime, do not influence the groundwater flow in the deep regime.

The shallow groundwater regime is active only seasonally during the summer months, and the magnitude of the flow in this layer is typically several times less than runoff from snowmelt (Woo 2011). Water in the surface active layer is stored in ground ice during the cold season and is then released when the ice thaws in late spring or early summer, thus providing flow to surface waterbodies (Woo 2011). Locally, groundwater in the active layer (shallow regime) flows to local depressions and ponds that drain to Second Portage and Third Portage lakes or flow directly into these two water bodies (AtkinsRéalis 2020).

There does not appear to be a detectable difference in the hydraulic conductivity of the various rock types. Ultramafic rocks, at a given depth, have similar hydraulic conductivity to those of the Intermediate Volcanics at the same depth. The hydraulic conductivity of the shallow exfoliated and weathered bedrock and faults, regardless of rock type, is generally higher than the deeper, less fractured rock (AtkinsRéalis 2020).

3.2.5.2 Whale Tail Mine Hydrogeology

At the Whale Tail Mine, two regimes, similar to those observed at Meadowbank Mine, exist, and are dominantly isolated by permafrost from one another. Groundwater in the active layer flows to local depressions and ponds that drain to larger lakes at velocities estimated to range from about 0.004 to 0.08 m/day (Agnico Eagle 2019). Baseline data indicates that Whale Tail Lake is likely both a groundwater recharge and discharge zone. Hydraulic gradients are expected to range from slightly downward to slightly upward, with a downward gradient present in the north basin (flow of water from Whale Tail Lake to Lake DS1) and an upward gradient present in the south basin (flow of water from Lake A70 to Whale Tail Lake). IVR Pit is entirely located within permafrost and the potential effect of this pit on the groundwater flow regime will not be significant until post-closure, when the permafrost below the pit is predicted to degrade, eventually forming an open talik that will connect the IVR Pit Lake to the deeper groundwater flow system.

3.2.6 Surface Water Hydrology

3.2.6.1 Meadowbank Mine Hydrology

Hydrology in the Meadowbank Mine is highly influenced by geographic location, the headwater nature of the watersheds, and by the seasons. Streams near the Meadowbank Mine are relatively short, small- to medium-width ephemeral channels with boulders. They connect all neighbouring lakes in a cascading network (AtkinsRéalis 2020). Snowmelt runoff in the region begins in the period from late May to mid-June, and the snowmelt peak is often the peak flow for the year. Secondary peaks due to rainfall events can occur during the summer and can sometimes exceed snowmelt peaks. Flows typically decline through the late summer and fall, with freeze-up occurring in late September for the smallest streams and in late November for the medium channels. All channels are anticipated to freeze to the bottom with zero flows over the winter period (AtkinsRéalis 2020).

3.2.6.2 Whale Tail Mine Hydrology

The Whale Tail Mine and its associated Haul Road are located within the Meadowbank River, Quoich River, and Thelon River watersheds. There are four distinct watersheds in the immediate vicinity of the Whale Tail Mine:

- The A watershed (i.e., where the Whale Tail Mine and Kangislulik Lake are located) with a total drainage area of 110 km^2.
- The B watershed (i.e., located just north of the A watershed, and west of Nemo Lake) with a total drainage area of 7.1 km^2.
- The C watershed (i.e., where Nemo Lake is located) with a total drainage area of 17.6 km^2.
- The D watershed (i.e., the watershed located immediately south of the A watershed) with a total drainage area of 110.6 km^2. The D watershed is a sub-watershed of the Thelon River watershed. The D watershed was added to account for potential effects from the proposed alternate discharge locations (adaptive management).

These watersheds comprise an extensive network of lakes, ponds, and interconnecting streams.

3.3 Chemical Environment

3.3.1 Sediment Quality

3.3.1.1 Meadowbank Mine Sediment Quality

Lakebed substrate in the Meadowbank Mine vicinity is a key habitat attribute that dictates the species composition and abundance of benthic invertebrates and its importance as feeding habitat by fish. Water depth is the strongest determinant of physical features of the lake substrate, especially grain size. At depths of less than 2 m, the lakebed substrate is ice scoured and subject to erosion by wave-driven currents. Between 2 m and about 4 m depth, substrate consists of a heterogeneous mixture of boulder, rock, and cobble. Below 4 m depth, sediment grain size diminishes with sand, silt, and clay becoming more abundant. At depths of 6 to 8 m and greater, bottom sediment consists of a uniform silt/clay mixture (AtkinsRéalis 2020). Sediment samples at depths of 8 m or greater collected from numerous locations throughout the Meadowbank Complex area and reference lakes revealed a great similarity in grain size, organic carbon (2.5% to 5%), and metals concentration.

At Meadowbank Mine, all sediment metals concentrations observed can be regarded as background because of the near absence of anthropogenic activities. Metals concentrations are generally similar across the area, including reference lakes, and reflect the natural, mineralized nature of the sediments and low rate of deposition (AtkinsRéalis 2020). In 2023, mean sediment concentrations exceeded the trigger for chromium at Third Portage Lake. There have been temporal changes in sediment chromium concentrations at Third Portage Lake, which were attributable to activities at the mine, but levels appear to have peaked in 2017 and have since declined (Agnico Eagle 2024a). Adverse impacts to the benthic community were not observed and fish tissue metals concentrations are low and similar to concentrations in fish found in other pristine lakes.

3.3.1.2 Whale Tail Mine Sediment Quality

The particle size distribution in the top 3 to 5 cm of sediment from south Whale Tail Lake, Kangislulik Lake, Pipedream Lake, and Inuggugayualik Lake was predominantly silt/clay, and characteristic of depositional areas in lakes from this region. A coarser particle size distribution was evident in samples collected from Nemo Lake and north Whale Tail Lake with sediment collected at similar depth (i.e., 8±1.5 m) being predominantly silt/sand.

Sediment chemistry in the Whale Tail study area is naturally elevated in several metals. Concentrations of these metals can be highly variable as the sediment chemistry of the lakes is spatially heterogenous. In 2023, mean sediment core concentrations of arsenic and chromium exceeded triggers and were significantly higher than the baseline period at Whale Tail Lake (South Basin), Kangislulik Lake, and A20. Though mean arsenic concentrations exceeded triggers, concentrations generally remained within baseline ranges at all the study lakes. Potential increasing trends were noted for chromium at Whale Tail Lake (South Basin) and Kangislulik Lake. Despite this, trigger exceedances for chromium were marginal at Kangislulik Lake and concentrations at Whale Tail Lake (South Basin) ranged well above the trigger value during baseline sampling. Mean copper concentrations exceeded the trigger at A20; however, this is likely attributed to spatial heterogeneity rather than mining activities (Agnico Eagle 2024a). Total of carbon (TOC) proportions, while naturally differing across the study lakes, have remained stable within each lake. These findings show that mining activity has not caused an increase in TOC.

Total mercury concentrations were below the Canadian Council of Ministers of the Environment (CCME) sediment quality guidelines at all areas for depositional and inundation zone samples. In 2023, total mercury concentrations in the depositional and inundation zones of the basin were similar to baseline/reference conditions. Total mercury concentrations in the deposition zones in downstream exposure areas were similar to baseline/reference conditions (Agnico Eagle 2024a).

3.3.2 Surface Water Quality

3.3.2.1 Meadowbank Mine Surface Water

The lakes in the vicinity of the Meadowbank Mine are ultra-oligotrophic, soft water, and isothermal, with neutral pH and high oxygen concentrations year-round. Limnological conditions tend to be very stable, with uniform, vertical temperature, oxygen, and nutrient distributions with only minor, temporary stratification. Water clarity is high, with Secchi depths of 10 m or more. Turbidity and suspended and total dissolved solids (TDS) in surface waters are typically low, and below laboratory detection (<1.1 NTU, <1.1 milligrams per liter [mg/L] and <10 mg/L, respectively). Hardness (4.4 to 9.5 mg/L), and dissolved anions (chloride, fluoride, sulphate) are also very low and near detection limits (<0.05 to 0.06 mg/L), with circumneutral pH (6.6 to 7.7) and low conductivity (5 to 77 microsiemens per centimeter [µS/cm]). Nitrate, nitrite and ammonia values seldom exceed 0.001 mg/L, while dissolved phosphate ranges from <0.001 to 0.003 mg/L. Dissolved organic carbon concentrations typically range from 1.4 to 2.3 mg/L (AtkinsRéalis 2020). Total and dissolved metals concentrations are remarkably similar within and between lakes between 1997 and 2002. Total antimony, arsenic, chromium, copper, mercury, and nickel concentrations from lakes in the Meadowbank Complex are all below laboratory detection limits and well below water quality guidelines for the protection of aquatic life (CCME 2009). The only metals to exceed detection limits are aluminum (0.006 to 0.014 mg/L), cadmium (up to 0.0015 mg/L), lead (up to 0.0012 mg/L), and zinc (0.001 to 0.019 mg/L).

To monitor the influence of the Meadowbank Mine on the receiving environment, Agnico Eagle has implemented the Core Receiving Environment Monitoring Plan (CREMP) which is part of the larger *Aquatics Effects Monitoring Program* (AEMP). Water quality monitoring is conducted annually, to determine if parameters exceed guidelines. 2023 Monitoring indicated that areas close to the mine have higher concentrations of dissolved solids and constituent major ions such as calcium and magnesium compared to baseline/reference conditions (Agnico Eagle 2024t). This observation is consistent with previous findings. While these changes to water quality are mine-related, the observed concentrations are still relatively low and there is no evidence to suggest concentrations are increasing year-over-year or that the observed concentrations would result in adverse ecological effects. Consistent with previous reporting cycles, there were no trigger exceedances in 2024 for any water quality parameters with CCME water quality guidelines (WQG), including metals (Agnico Eagle 2024t). In the context of the assessment framework outlined in the FEIS the magnitude of potential effect on water quality in each of the near-field lakes in 2024 was considered low (i.e., less than the CCME WQGs) and consistent with the original predictions (Agnico Eagle 2024t).

The latest 2024 water quality forecast identified that treatment may be required at closure for aluminium, arsenic, cadmium, copper, mercury, nickel, TDS, total ammonia, pH, TSS, and potentially low concentration of total cyanide as the pit water quality may exceed water quality objectives, based on the completely mixed assumption. For the Vault area, ammonia and nitrate are the parameters of concern, but no actual or forecasted concentration exceeds the Type A Water Licence discharge requirements for this area (Agnico Eagle 2024k).

A comparison between the predicted (originally predicted in support of the NWB Licence) and measured water quantity and quality within Portage, Goose, and Vault Pits from 2012 to 2024 is presented in Agnico Eagle (2025). In Portage Pit, the measured water quantity was higher than the predicted water quantity by more than 20% (between 30 to 68%) from 2019 to 2024. In Goose Pit, measured water quantity exceeded predictions by 13-24% over 2020-2023, and lower by 63% in 2024. As of 2019, Vault Pit is undergoing natural reflooding and it also receives infiltration water from the Vault Attenuation Pond. Between 2019 and 2024, measured quantity exceeded predictions by more than 20% (Agnico Eagle 2025a). For water quality in Third Portage Pit Sump (Pit E) and Goose Pit, the measured values of many parameters were higher by +/- 30% than the predicted values in 2023 and 2024. In North Portage Pit Sump (Pit A), the measured values were higher by more than 20% of the predicted values in 2023 and 2024 (Agnico Eagle 2025a).

3.3.2.2 Whale Tail Mine Surface Water

Baseline surface water quality monitoring of Whale Tail project area lakes was conducted by Azimuth from 2015 to 2016 (Appendix 6-G of Golder 2016c), and are similar in nature to those described in Section 3.3.2.1. Baseline water chemistry was consistent among the lakes and similar to reference area lakes. 2023 CREMP time series plots identified that the some parameters have increased relative to baseline/reference conditions (Agnico Eagle 2024t). Findings of the 2023 CREMP are provided below:

- **Ionic Compounds** – total dissolved solids and constituent ions such as calcium, magnesium, potassium, and sodium were elevated in the near-field (e.g., close to the mine) lakes and downstream of Kangislulik Lake to Lake A76.
- **Nutrients** – total Kjeldahl nitrogen, total phosphorus, total organic carbon, and dissolved organic carbon were elevated in the near-field area Whale Tail South Basin and at mid-field area A20. These same parameters were elevated at Kangislulik Lake, though mean annual total phosphorus level declined in 2023 and did not exceed the trigger value. The elevated parameters are likely the result of inputs from flooded terrestrial habitats following impoundment, dewatering inputs from Whale Tail North Basin, and the joining of Whale Tail South Basin to A20 metals/metalloids – total and dissolved lithium was elevated at Wail Tail Lake South Basin and Kangislulik Lake and dissolved silicon

was elevated at lake DS1. These parameters do not have an effects-based guideline for protection of freshwater aquatic life.

- **Total phosphorus** at Whale Tail South Basin and total alkalinity, TDS, total lithium, and several ionic compounds at Whale Tail South Basin and Kangislulik Lake exceeded FEIS predictions in one or more sampling events. Importantly, the absolute concentrations of these parameters remain low. Total phosphorus and arsenic at Whale Tail South Basin and Kangislulik Lake are within the normal operating ranges and Level 0 water management strategy is in effect in 2024 as per the Adaptive Management Plan. Routine water quality monitoring will continue in 2024 to track emerging spatial and temporal trends.

The 2024 Whale Tail water quality forecast shows that all forecasted concentrations for parameters of potential concern (POPCs) are below the Water Licence criteria and CCME guidelines, with the exception of total arsenic in the Whale Tail and IVR Attenuation Ponds (Agnico Eagle 2025a). The water from these ponds is treated at the WTP prior to discharge to Whale Tail Lake (South Basin) or Kangislulik Lake. As a result, all forecasted POPCs are below their respective water license limits, and meet all receiving environment criteria. In 2024, the treated water met the Water Licence discharge criteria for arsenic. During the Active Closure phase, all concentrations of POPCs in Kangislulik Lake are forecasted to decrease over time since there is no longer any discharge of treated water to the lake. At post-closure, many POPCs are forecasted to temporarily increase in Kangislulik Lake since Whale Tail Lake (North Basin) will be reconnected to Kangislulik Lake once the pits have been flooded to their final elevations, and the Whale Tail and Mammoth Dikes have been breached. All POPCs are expected to remain below the CCME guidelines in Kangislulik Lake, Whale Tail South Basin and Whale Tail North Basin (Agnico Eagle 2025a).

3.3.3 Groundwater Quality

3.3.3.1 Meadowbank Mine Groundwater

In 2024, WSP personnel collected groundwater samples from all five of the existing monitoring wells present on-site: MW-16-01, MW-IPD-01(s), MW-IPD-01(d), MW-IPD-07, and MW-IPD-09. Agnico Eagle personnel provided supplemental water quality data. No groundwater samples were collected at Pit-A or Pit-E Contact water during the 2024 groundwater sampling campaign due to unstable ground surface conditions of the wall and the flooded conditions in the pit at the contact water inflow point. For comparative purposes only, groundwater quality results were compared to the Portage effluent quality discharge limits in the Meadowbank Water Licence. No groundwater quality criteria are applicable to the site. Sample analytical results from each of the collected samples was below the Portage effluent discharge limits (WSP 2024a).

3.3.3.2 Whale Tail Mine Groundwater

Groundwater quality in the shallow, closed talik at the Whale Tail Pit is assumed to be similar to that of the Meadowbank Mine (Knight 2015). It has high to very high hardness, neutral to slightly basic pH, and good buffering capacity. TDS concentrations range from 193 to 1900 mg/L (Agnico Eagle 2018a). Groundwater inflow is controlled by the shallow bedrock hydraulic conductivity. Concentrations of fluoride, copper, iron, and selenium are elevated in comparison to guidelines for the protection of aquatic life and drinking water. The higher percentile values for nitrogen-containing compounds, aluminum, arsenic, boron, hexavalent chromium, molybdenum, and zinc exceed the Canadian Environmental Quality Guidelines (CEQGs). Additionally, several of these parameters as well as chloride, manganese, and sodium exceed aesthetic drinking water guidelines.

Groundwater sampling and hydraulic head measurements of the Westbay Well AMQ16-626 were undertaken in 2024 (WSP 2024b). Pressure monitoring indicates that hydraulic heads have decreased since pre-mining conditions (WSP 2024b). An upward gradient is present at shallow depths and a slight downward to near neutral gradient is present at depth. The downward hydraulic gradient observed is lower than pre-mining conditions and likely reflects the influence of dewatering the Whale Tail Pit and north basin of Whale Tail Lake (WSP 2024b). The average 2024 inflow to the Whale Tail Pit is estimated to be 2122 m^3/day, based on the winter sump inflow measurements in January, February, March, October, November, and December (WSP 2024b). TDS estimated from AMQ16-626 are slightly less saline than the Whale Tail TDS profile adopted for the FEIS, but the results do not deviate significantly from FEIS assumptions (WSP 2024b).

3.3.4 ARD/ML Potential

3.3.4.1 Meadowbank Mine ARD/ML Potential

Table 3.3-1 presents a summary of ARD/ML Guidelines used to classify Meadowbank Complex waste rock.

Table 3.3-1: Summary of ARD/ML Guidelines Used to Classify Waste

Initial Screening Criteria	ARD Potential
NPR <1	PAG/ML
1< NPR <2	Uncertain or low PAG/ML
2< NPR, As <75 ppm	NPAG/NML
2< NPR, As >75 ppm	PAG/ML

Source: AtkinsRéalis 2019.

NPAG/NML = Non-Potentially Acid Generating/Non-Metal Leaching; PAG/ML = Potentially Acid Generating/Metal Leaching; NPR = Neutralization Potential Ratio.

A material geochemical program was developed to characterize the Meadowbank geologic materials and define the nature and magnitude of impacts that may result from the interaction between these materials and the environment during all phases of mine development, including post-closure. This program involved characterizing (AtkinsRéalis 2020):

- Geochemistry of bedrock in the area of the proposed open pits and planned mine infrastructure away from the ore deposits through static testing;
- Tailings material and overburden through static testing;

- Long-term weathering behaviour of selected pit rock and tailings samples with respect to ARD/ML potential and constituent leaching rates through kinetic testing.

Because activities related to mining have ceased at the Meadowbank Mine, the results presented in (AtkinsRéalis 2020) are the most current. AtkinsRéalis (2019) indicates that metal concentrations in leachate generated by static and kinetic tests were compared relevant guidelines. Pit rock samples were also obtained from exploration drill core specifically for ARD/ML testing to determine the spatial and compositional variability of each rock unit to be disturbed, including targeted testing of starter pit rock that was used for the construction of the Meadowbank Mine roads and dikes. Analysis of weathered drill cores (11 to 12 years in age) was conducted to document the effects of weathering on the chemical characteristics of pit rock. Tailing solids and decant water samples were obtained from the metallurgical program, which focused on the processing characteristics of representative ore samples from each deposit (AtkinsRéalis 2020).

The results of kinetic testing (i.e., 2019 testing) relating the measured potential of rock to generate ARD/ML are summarized in Table 3.3-2. The sulphide content of pit rock from each lithology is generally low, with median total sulphur contents of less than 1%. The bulk of the Iron Formation and quartzite rock is PAG/ML. The ARD/ML potential was realized under accelerated laboratory weathering tests but not under field conditions, after over two years of exposure. Ultramafic rock is NPAG/NML and has the highest median buffering capacity of all rock types. The bulk of the Intermediate Volcanics rock type is NPAG/NML (AtkinsRéalis 2020).

Table 3.3-2: Summary of Kinetic Test for Pit Rock

Area Lithology	Portage			Vault
	Ultramafic	Iron Formation	Intermediate Volcanics	Intermediate Volcanics
Proportion of Pit Rock Waste	36%	37%(a)	28%	13.50
ARD/ML Potential(b)	2% PAG/ML 2% Uncertain 96% NPAG/NML	67% PAG/ML 13% Uncertain 20% NPAG/NML	20% PAG/ML 14% Uncertain 66% NPAG/NML	14% PAG/ML 11% Uncertain 75% NPAG/NML
Laboratory Test Leachate MMER Exceedances	As	Ph, Zn	n.e.(c)	n.e.(c)
Field Barrel Test Leachate MMER Exceedances	n.e.	n.e.	n.e.	n.e.

Source: Cumberland 2005d.

(a): Iron formation rock proportions include 2% of quartzite rock.

(b): Based on static testing database.

(c): Result from the 100-kg composite sample.

n.e. = no exceedances.

The relative potentials of the rock types to generate ARD/ML under neutral drainage conditions and the implications for potential use as construction rock are presented in Table 3.3-3. This is based on a classification system (Table 3.3-3) used to identify the appropriate use and storage for mine rock. Table 3.3-4 provides a breakdown of tailings geochemistry at the Meadowbank Mine.

Table 3.3-3: Rock Type and Potential for ARD/ML

Open Pit	Material Type	Potential for ARD/ML	Potential for ML	Restrictions for Storage or use in Construction
All Pits	Overburden	None	Low	None
	Tailings	High	High	Requires measures to control ARD
	Lake Sediment	Variable (none to high)	High	May require collection and treatment of drainage
Portage and Goose	Ultramafic and Mafic Volcanic	None	Low	May require collection and treatment of drainage
	Intermediate Volcanics	Variable (none to moderate)	Moderate	Requires measures to control ARD/ML
	Iron formation	High	High under ARD conditions / Low under neutral conditions	Requires measures to control ARD/ML
	Quartzite	High	Low	Co-disposal with ultramafic/mafic volcanic or cap/water cover
Vault	Intermediate Volcanics	Low	Variable (low to moderate)	May require collection and treatment of drainage

Source: Cumberland 2005a.

Table 3.3-4: Summary of Tailings Chemistry at Meadowbank

Deposit	Portage	Goose	Vault
Proportion of Total Tailings	53%	8%	39%
ARD/ML Potential of Tailings	PAG/ML	PAG/ML	PAG/ML
Flotation Circuit Tailings MMER Exceedances	pH, Cu, Ni, Zn	pH, Cu, Ni, Zn	n.e.
Whole Ore Circuit Tailing Composite Sample(a) MMER Exceedances	n.e.	n.e.	n.e.

Source: Cumberland 2005e.

(a): Sample considering of 54% Portage, 8% Goose, and 39% Vault whole ore tailings.

n.e. = no exceedances.

3.3.4.2 Whale Tail Mine ARD/ML Potential

In 2023, approximately 305 samples from the Whale Tail and IVR Pits were sent to an accredited commercial lab (external lab) for Acid Base Accounting (ABA) analysis for determination of neutralization potential and acid potential, metal leaching potential, bulk metals analysis, and whole rock analysis (Agnico Eagle 2024a). Waste rock, overburden, and lake sediment were sampled and tested as part of a geochemical program (Table 3.3-5). Among the six lithologies tested, two have low ARD/ML potential, while the remaining lithologies are either PAG/ML. The overburden is NPAG/NML while the lake sediment is PAG/ML.

Table 3.3-5: Summary of ARD/ML Potentials of Waste Types at the Whale Tail Mine

Waste Type	ARD Potential			Effluent Quality Criteria Exceedances in test leachate	ML potential(a)
	% PAG/ML	% Uncertain	% NPAG/NML		
Komatiite North	5	-	95	Arsenic	High
Komatiite South	29	-	71	Arsenic	Moderate
Greywacke Central	58	29	13	Arsenic	Variable
Greywacke South	-	-	100	-	Low
Greywacke North	16.6	16.6	66.6	Nickel	Variable
Chert	87	4	9	Arsenic	Variable
Iron Formation	27	4	69	Arsenic	High
Basalt	-	3	97	Arsenic	Moderate
Basalt North/ Gabbro	4.3	8.7	87	Arsenic	Moderate
Diorite	15	15	70	-	Low
Overburden	-	-	100	Aluminum, Copper, Iron	Low(b)
Lake Sediment	-	-	100	Aluminum, Arsenic, Iron, Nickel	High(b)

Source: Agnico Eagle 2023b.
(a) = based on column kinetic test results.
(b) = based on Shake Flask Extraction results.
- = no data.

Most of the waste rock lithologies disturbed by mining of the Whale Tail Pit, Underground, and IVR Pit are NPAG/NML (79%) and include komatiite, iron formation, basalt, south greywacke, and diorite, and do not require means to control ARD/ML. PAG/ML waste rock includes some komatiite and iron formation samples, as well as the chert and central greywacke units, while the north greywacke unit has a variable ARD/ML potential. This unit occurs in all three mining zones.

All ARD/ML waste rock developed from the Whale Tail Pit is permanently stored in Whale Tail WRSF, along with lithologies that show metal-leaching behaviour (commonly, leachable arsenic). Overburden and lake sediment associated with the Whale Tail Pit are classified as NPAG/NML based on the low sulphide sulphur content. However, leachable arsenic is elevated in the lake sediments, thus all lake sediments are also permanently stored in the Whale Tail WRSF, while overburden is co-disposed with the waste rock, and stored in a temporary overburden stockpile located within the Whale Tail WRSF, as it is geochemically stable.

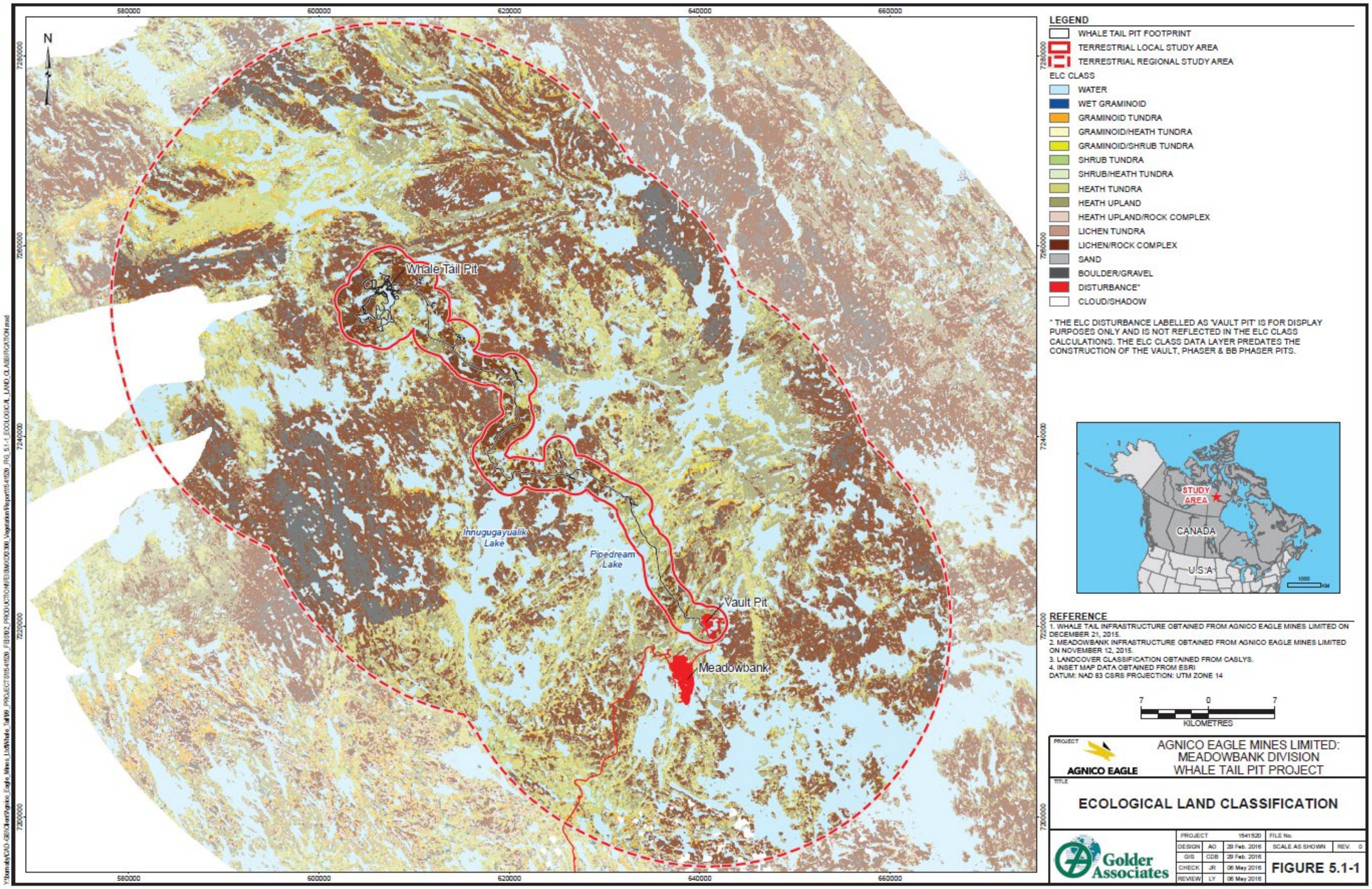
Arsenic is the principal POPC. It is released in leachate from basalt, komatiite, and iron formation waste rock at elevated concentrations relative to other waste rock and to site water quality criteria, in short and long-term leach tests. These elevated concentrations do not mean that water contacting this rock at the site will necessarily exceed the Effluent Limits, however, because conditions at Whale Tail Mine differ substantially from the aggressive leaching conditions of laboratory tests. The arsenic is anticipated to be sourced from sulphide minerals including arsenical pyrite, arsenopyrite, and trace amounts of arsenic sulfosalts (gersdorffite) observed in komatiite and iron formation but with varying degrees of exposure (i.e., some sulphides are locked in). As such, preventing oxidation is expected to minimize arsenic leaching. The effects of arsenic leaching from waste rock on the quality of mine effluent are evaluated in the water quality model.

3.4 Biological Environment

3.4.1 Vegetation and Ecosystems

3.4.1.1 Meadowbank Mine Vegetation and Ecosystems

The Meadowbank Mine is characterized by a continuous vegetation cover interspersed with bedrock outcroppings and continuously aggrading surfaces. The vegetative cover consists of lichens, mosses, ericaceous shrubs, heaths, herbs, grasses, and sedges (AtkinsRéalis 2020). Baseline vegetation studies were conducted in 1999 and 2002 for the LSA and in 2005 for the AWAR (Cumberland 2005c). An inventory of the flora plant communities was performed and showed that vegetation at the Meadowbank Mine is typical of upland tundra. No sensitive, rare, regionally unique, or endangered species or communities were identified within Meadowbank Mine or AWAR LSA (Cumberland 2005a). The Ecological Land Classification (ELC) units are shown in Figure 3.4-1. Water is the most common ELC unit within the Meadowbank Mine LSA, covering about 31% of the land surface. The most common vegetated unit within the Meadowbank Mine LSA is Sedge, covering approximately 20%. Other common ELC units are Rock & Boulder and Lichen-Rock. Heath Tundra is the most common ELC unit within the AWAR LSA, covering approximately 29%. Other common ELC units are Lichen, and Birch & Riparian Shrub (AtkinsRéalis 2020).



Source: Golder 2016c.

Figure 3.4-1: Ecological Land Classification for the Meadowbank Complex Local Study Area

3.4.1.2 Whale Tail Mine Vegetation and Ecosystems

A total of 13 ELC units were mapped within Whale Tail LSA (Figure 3.4-1). Lakes are the most common ELC Unit, representing more than one fifth (21%) of the LSA. High-quality caribou habitat includes the lichen/rock complex and Heath Upland ELC units, covering 46% of the LSA. The Wet Graminoid and Sand ELC units are less common (1%) vegetated ELC units in the LSA. The Sand ELC unit includes a non-vegetated sandy substrate and a cover of ericaceous shrubs and lichens (Agnico Eagle 2016a). Patches of the Sand ELC unit are mostly localized in the southern portion of the LSA.

The 2014, 2015, and 2016 vegetation surveys identified 181 vascular plants in Whale Tail area, with 150 identified to the species level and 31 to the genus level. A total of 99 non-vascular plants (33 bryophytes and 66 lichens) were identified from field surveys, with 10 specimens identified to the genus level. The most common and widespread vascular species found were the northern Labrador-tea (*Rhododendron tomentosum*) and mountain cranberry (*Vaccinium vitis-idea*), both observed in 99 of the 126 plots surveyed and present in all ELC types. The overall findings indicate that most of the areas surveyed consist of low-diversity vascular plant communities dominated by fewer than 10 species. The most common and widespread non-vascular species found were arctic butterfingers lichen (*Dactylina arctica* ssp. *arctica*) and green witch’s hair lichen (*Alectoria ochlroleuca*), observed respectively in 69 and 60 of the 126 plots surveyed and present in all ELC types.

Only two federally listed plant species, namely the moss species Porsild’s bryum (*Haplodontium macrocarpum*) and felt-leaf willow (*Salix silicicola*), have been identified within Nunavut. These species and suitable habitat were not observed within the LSA during field programs (Dougan 2017). Of the 107 confirmed vascular species recorded during field programs, six are territorially listed as Sensitive (CESCC 2011). A complete list of the vascular and non-vascular species recorded during field surveys and their Canadian Endangered Species Conservation Council (CESCC) status is presented in (Agnico Eagle 2016b).

3.4.2 Wildlife

Caribou are an important component of the Arctic ecosystem and a key part of the culture and traditional economy of Nunavut. In the Kivalliq region, there are five migratory barren-ground caribou herds, including the Beverly, Ahiak, Wager Bay, Lorillard, and Qamanirjuaq. As a result, Inuit traditionally chose not to live at or near the calving grounds but instead established camps along the migration routes. Elders have indicated that no caribou calving grounds have been identified near the Whale Tail Mine area (Agnico Eagle 2016b). According to Nagy et al. (2011), the nearest calving ground to the Whale Tail Mine is over 100 km away. No caribou mortalities have been documented on the AWAR since 2013 Terrestrial Environment as recorded between 2007 and 2017 (Agnico Eagle 2018a).

In 2023, Meadowbank experienced its longest-lasting caribou migration since operations began. Agnico Eagle continues to adjust for the caribou migration in its production plan as this migration can affect the ability to move materials on the road between Whale Tail and Meadowbank and between Meadowbank and Baker Lake. Wildlife management is an important priority, and Agnico Eagle is working with Nunavut stakeholders to optimize solutions to safeguard wildlife and minimize production disruptions (Agnico

Eagle 2024a). In total, there were 200 days in 2024 (i.e., 54.6% of the year) with road closures and restrictions applied on the AWAR in response to caribou or muskox (Agnico Eagle 2025a).

Other land animals of significance to the communities include ungulates such as muskox, and fur-bearing species like Arctic wolves, Grizzly bears, and wolverines. Small mammals are a significant food resource for a variety of predatory mammals and birds. Several species, including Arctic hare, Arctic ground squirrel, and Northern collared lemming, were observed during 2014 baseline studies.

The bird species observed in greater numbers than any other species during the surveys were snow goose (*Chen caerulescens*), Canada goose (Branta canadensis), Lapland longspur (*Calcarius lapponicus*), and horned lark (*Eremophila alpestris*). Other commonly observed breeding bird species were savannah sparrow (*Passerculus sandwichensis*), semipalmated sandpiper (*Calidris pusilla*), sandhill crane (Grus canadensis), and rock ptarmigan (*Lagopus mutus*). Sandhill crane, Canada goose, and snow goose were most common during the migratory period. Raptors, as well as all three species of jaegers (*Stercorariidae*), were recorded occasionally during baseline surveys (AtkinsRéalis 2020).

3.4.3 Aquatic Life

3.4.3.1 Meadowbank Mine Aquatic Life

Studies targeting the ecological characteristics of the aquatic environment in the Meadowbank area have been conducted since 1991 and were compiled in the baseline aquatic ecosystem report (Cumberland 2005f). Results indicate that the Meadowbank lakes are ultra-oligotrophic/oligotrophic (i.e., nutrient poor and unproductive) lakes. Although biological productivity of the lakes is limited by nutrient availability, cold water, and a short growing season, they support healthy communities of plankton, benthos, and fish that are typical of oligotrophic Arctic lakes (Cumberland 2005f).

Lake trout (*Salvelinus namaycush*) and round whitefish (*Prosopium cylindraceum*) dominate lakes within the area of the Meadowbank Mine and are typically the two most common species in Arctic headwater lakes in Nunavut and the Northwest Territories (Scott and Crossman 1979). Lake whitefish (*Coregonus clupeaformis*) are also known to be present in other watersheds in this region, but are absent from the Quoich River system (Lawrence et al. 1977; MacDonald and Stewart 1980). This species is near the edge of its northerly distribution, which may also explain its absence in the lakes around the Meadowbank Mine (AtkinsRéalis 2020). Landlocked (i.e., non-anadromous) Arctic char (*Salvelinus alpinus*) is present in all of the lakes in the Meadowbank Mine's vicinity, although relative abundance differs among lakes. Arctic char generally tends to be more abundant in downstream lakes than in upstream lakes. South of Tehek Lake, anadromous char are known to migrate up the Prince River to Whitehills Lake, which is used by Arctic char to overwinter (MacDonald and Stewart 1980).

3.4.3.2 Whale Tail Mine Aquatic Life

Fish and fish habitat baseline studies were completed between 2014 and 2016, encompassing areas near the Whale Tail Haul Road and Whale Tail Pit. Lower trophic community (phytoplankton, zooplankton, benthic invertebrates, and periphyton) baseline studies were also completed near the Whale Tail Pit. The evaluation of fish habitat extended to 28 watercourses crossing the Whale Tail Haul Road. Among them, three watercourses (located at crossing km 49.0, km 41.1, and km 32.7 along the Whale Tail Haul Road from the Vault area) were classified as rivers with large, flowing open channels, opening potential habitat for species of interest, such as Arctic char and Arctic grayling (*Thymallus arcticus*). These large rivers serve as vital locations for spawning, rearing, and foraging for small-bodied fish, and as migratory corridors for large-bodied fish.

Along the Whale Tail Haul Road, five streams (at km 61.6, km 54.3, km 45.0, km 38.9, and km 21.5 from the Vault area) likely provide corridors for large-bodied fish. However, most of the crossing locations (n = 20) only had the potential for seasonal use by small-bodied fish such as Ninespine stickleback (*Pungitius pungitius*) or Slimy sculpin (*Cottus cognatus*). Potential spawning habitat for Arctic grayling (i.e., areas with gravel substrate) was identified at two watercourse crossings: km 49.0 and km 20.2 from the Vault area. A total of 52 fish from five species were captured using 186 mins of fishing effort at 11 watercourse crossing locations along the Whale Tail Haul Road alignment. Slimy sculpin was the most abundant, followed by Arctic char, Arctic grayling, Burbot (*Lota lota*), and Ninespine stickleback. Arctic char were captured at three watercourses upstream of Pipedream Lake (Tasirjuaraajuk Lake), a lake known to support Arctic char based on IQ (Agnico Eagle 2016b).

Lake trout spawning habitat was investigated in Whale Tail Lake in late August 2016. A total of 15 high-potential spawning shoals were identified throughout the lake, based on depth, substrate, and slope. To verify spawning shoal locations, 11 underwater video cameras were deployed from August 27 to August 31, 2016. Although no spawning behaviour was observed, Lake trout were the most frequently observed fish species at these shoal locations, and one instance of a male Lake trout following a female was recorded, which is a behaviour often associated with spawning. Data collection was limited to daylight hours due to technological constraints, which may have contributed to the lack of observed spawning behaviour, as spawning primarily occurs after dark. Lake trout spawning was not assessed at other lakes within the Whale Tail Mine area.

SECTION 4 • CLOSURE VISION

Agnico Eagle is committed to responsible mining practices for the protection of human, wildlife, and aquatic life health, and minimizing impacts on the environment. Agnico Eagle intends to leave behind a positive community and environmental legacy. *The Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites* (AANDC and MVLWB 2013) provide the fundamentals for Agnico Eagle's closure goal, which is to:

> *return the mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities* (AANDC and MVLWB 2013)

This closure goal is part of a regional closure vision for mines in Nunavut. Three closure principles (pillars for successful closure) underpin Agnico Eagle's closure goal; they are:

- **Physical stability:** The reclaimed Meadowbank Complex should be built or modified at closure so that landforms do not erode more than natural landforms, subside or move under extreme design events, and therefore do not pose a threat to humans, wildlife, or environmental health and safety.
- **Chemical stability:** The reclaimed Meadowbank Complex should be chemically stable so as to prevent adverse soil, water, and air quality effects that might pose a risk to humans, wildlife, or environmental health and safety.
- **Future use and aesthetics:** The reclaimed Meadowbank Complex should be compatible with the surrounding lands at the completion of the reclamation activities.

By implementing the above closure principles, specific closure objectives can be achieved, thus advancing the Meadowbank Complex towards successful closure by meeting the various success criteria that underpin these objectives. Figure 4.0-1 (for illustrative purposes only) provides an example of how success criteria and objectives work to support the overall closure vision of the Meadowbank Complex.

4.1 Components Related to Physical and Chemical Stability

Table 4.1-1 lists the components at Meadowbank Complex that have been introduced above related to physical and chemical stability.

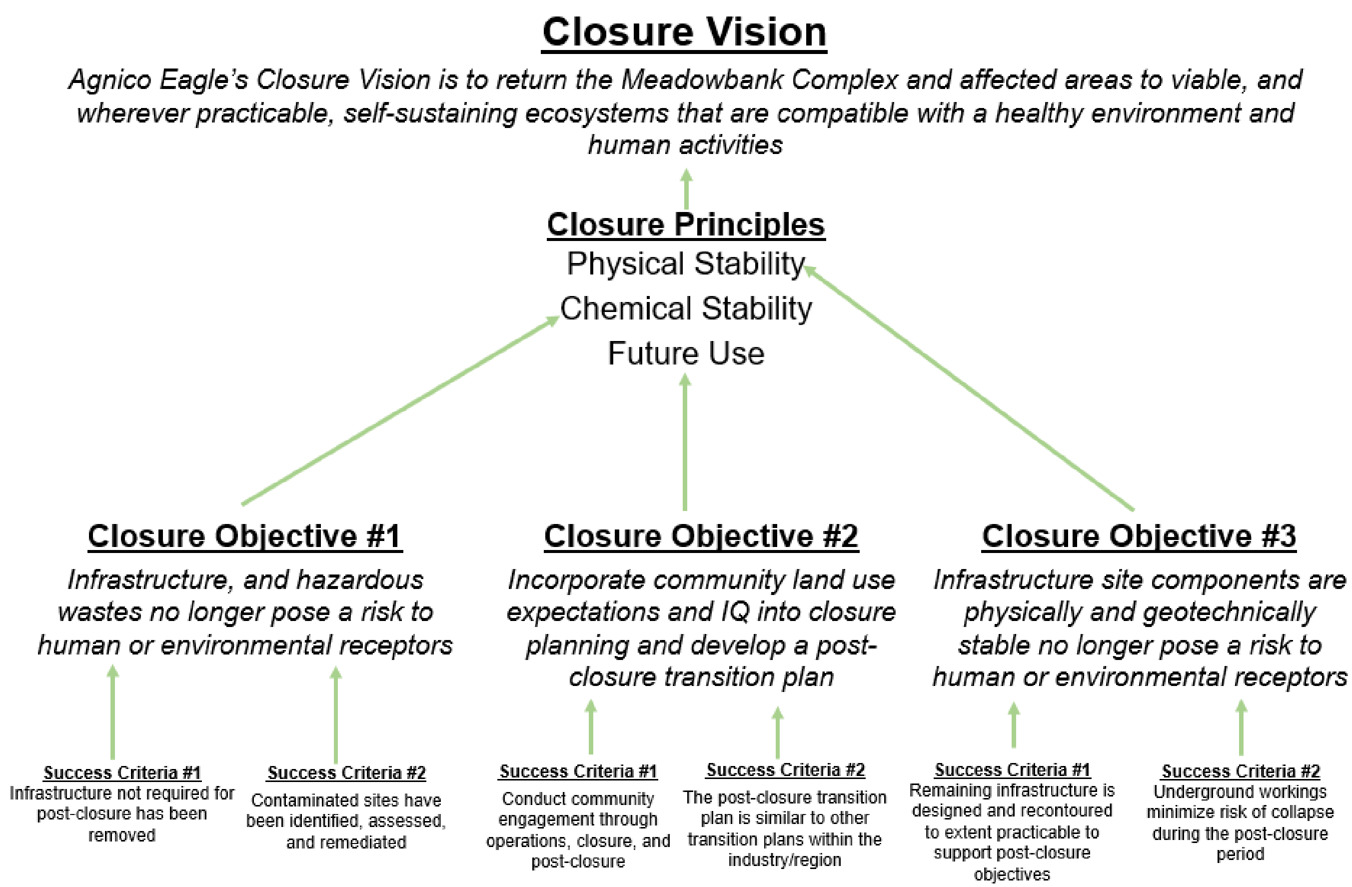


Figure 4.0-1: A Hypothetical Example of the Closure Vision Hierarchy for the Meadowbank Complex (for illustrative purposes only)

Table 4.1-1: Meadowbank Complex Components related to Physical and Chemical Stability

Components	Waste Rock	Tailing Storage Facilities	Water Management	Dewatering Dikes	Waste Management
Chemical Stability	• Portage WRSF PAG/ML Area • Vault WRSF	• North Cell • South Cell • Goose Pit • Pit E • Pit A	• Rock Storage Runoff Collection System • Freshwater Intake and Treatment System • Wastewater Treatment System • Tailings Pipelines	• Saddle Dam 1, Saddle Dam 2, RF1, RF2 • TSF North Cell Internal Structure • TSF North Cell Peripheral Structures • Saddle Dam 3, 4, and 5, Central Dike • WRSF Dike • IVR Dike D-1	• Meadowbank Mine Landfill • Whale Tail Mine Landfill • Meadowbank hazardous waste disposal • Meadowbank and Whale Tail contaminated disposal
Physical Stability	• Portage WRSF – PAG/ML Area • Portage WRSF – NPAG/NML Area • Vault WRSF • Portage Stockpile • Central – NPAG/NML SP • Pit A Stockpile • Goose NPAG/NML	• North Cell • South Cell • Goose Pit • Pit E • Pit A	• Dewatering System • Flooding System • Water Diversion Ditch System • Pit Sumps and Pumping System • Contact Water and Runoff Collection Systems • Stormwater Management Systems • Whale Tail Water Management Facilities	• TSF Stormwater Dike • TSF Diversion Ditches • East Dike • Bay Goose Dike • South Camp Dike • Vault Dike • Whale Tail Dewatering Dike • Mammoth Dike	• -

WRSF – Waste Rock Storage Facility, PAG/ML- Potentially Acid Generating/Metal Leaching, NPAG/NML – Non-Potentially Acid Generating/Non-Metal Leaching, SP – Storage Pit, TSF – Tailing Storage Facility, - - not applicable

4.2 End Land Use

Given the remote location of the Meadowbank Complex, and low heterogeneity of ecosystems across the adjacent landscape, end land uses are generally limited to those that support wildlife (e.g., caribou) and traditional land uses (e.g., hunting, foraging). Because multiple end land uses can be supported on any landform at the same time, and wildlife habitat and traditional land uses heavily overlap, Agnico Eagle's closure objectives primarily relate to integration of post-closure ecosystems and associated land uses with the adjacent landscape.

4.3 Closure Objectives

Closure objectives are discussed conceptually in SECTION 4, and their role in the closure planning hierarchy is displayed in Figure 4.0-1. Agnico Eagles's site wide closure objectives and criteria that apply to all components of the Meadowbank Complex are provided in Section 4.3. Component specific closure objectives and criteria can be found in SECTION 6, as presenting them there offers more clarity with regards to the component specific closure prescriptions and strategies that follow them.

4.3.1 Site Wide Closure Objectives for the Meadowbank Complex

Site wide closure objectives are those that are not specific to a component and are general objectives for a mine site that help achieve an operator's closure vision. Table 4.3-1 provides the site wide closure objectives for the Meadowbank Complex. Specific objectives for each site components presented in SECTION 6 and are aligned with the site wide closure objective.

Table 4.3-1: Site Wide Closure Objectives and Criteria for the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions Required	Criteria /Objective Met
Future Use		**Social**			
	SW1	Incorporate community land use expectations and IQ into closure planning	Conduct community engagement through operations, closure	SW1/2-Action 1: implement public engagement SW1/2-Action 2: establish a transition plan for the onset of post-closure SW1/2-Action 3: create a system for incorporating public feedback into planning and implementation, where appropriate	SW1/2 – Action 1☐ SW1/2 – Action 2☐ SW1/2 – Action 3☐
	SW2	Develop a post-closure transition plan	Efficacy of the post-closure transition plan is similar to other transition plans within the industry and/or region		
	SW3	Traditional uses can resume on the post-closure landscape	The post-closure landscape supports traditional uses	SW3-Action 1: design the post-closure landscape to support ecosystems that provide habitat for traditional use where possible	SW3 – Action 1☐
		Wildlife			
	SW4	Post-closure landform is compatible with wildlife accessibility	Recontour the landscape to extent practicable, to allow travel by wildlife	SW4-Action 1: design and construct post-closure landscape features that consider access and egress	SW4 – Action 1☐
		Ecosystem and Landscape			
	SW5	Post-closure landscape features are compatible with the surrounding landscape	Recontour the landscape to extent practicable, to integrate with landforms in the surrounding landscape	SW5-Action 1: design and construct post-closure landform features so that they are compatible with the surrounding landscape SW5-Action 2: design and construct water management infrastructure with consideration of post-closure water management and drainage needs both on and off-site	SW5 – Action 1☐ SW5 – Action 2☐
		Air and Water			
	SW6	Water management infrastructure meets its post-closure water balance targets	Install water management infrastructure needed for post-closure, if necessary	SW6-Action 1: review the post-closure water balance model periodically SW6-Action 2: if necessary, design, construct, and complete (i.e., install or remove) water management infrastructure	SW6 – Action 1☐ SW6 – Action 2☐
Chemical Stability	SW7	Water quality is safe for humans, wildlife, and aquatic life	Water quality meets modelled predictions and relevant criteria, and is protective of human and ecological health	SW7-Action 1: review post-closure water quality model periodically SW7-Action 2: if necessary, design, construct and complete (i.e., install or remove) water management infrastructure	SW7 – Action 1☐ SW7 – Action 2☐
	SW8	Dust deposition levels are safe for humans, wildlife, and aquatic life	Dust characteristics meet modelled predictions and relevant criteria, and is protective of human and ecological health	SW8-Action 1: install and maintain dust monitoring instrumentation consistent with the CPCMP SW8-Action 2: monitor dust characteristics in accordance with the CPCMP	SW8 – Action 1☐ SW8 – Action 2☐

Table 4.3-1: Site Wide Closure Objectives and Criteria for the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions Required	Criteria /Objective Met
		Infrastructure and Contaminants			
	SW9	Infrastructure do not pose a risk to human or environmental receptors	Infrastructure not required for post-closure has been removed	SW9-Action 1: remove infrastructure not required for post-closure	SW9 – Action 1☐
	SW10	Hazardous wastes have been treated or removed	Fuels, oils, and other hazardous material have been safely removed	SW11-Action 1: conduct a hazardous materials assessment prior to decommissioning or transportation of hazardous materials off-site to an approved facility SW11-Action 2: remove and manage hazardous material from site as per operational practices	SW10 – Action 1☐ SW10 – Action 2☐
	SW11	Areas that may have been contaminated during operations do not pose a risk to human or environmental receptors	Contaminated sites have been identified, assessed, and remediated	SW10-Action 1: conduct ESAs in accordance with Canadian Standards Association (CSA) Criteria SW10-Action 2: evaluate decontamination criteria with linkages to Human Health and Ecological Risk, associated with each closure option	SW11 – Action 1☐ SW11 – Action 2☐
Physical Stability		**Geotechnical**			
	SW12	Closed landforms are physically and geotechnically stable and do not pose a risk to human or environmental receptors	Remaining landforms are designed and recontoured, to the extent practicable, to protect long-term geotechnical stability	SW12-Action 1: design and construct landform features to have minimal risk of erosion, thaw settlement, slope failure, collapse, comparable to natural landforms in the region	SW12 – Action 1☐

IQ = Inuit Qaujimajatuqangit; ESA = Environmental Site Assessment; CPCMP = Closure and Post-Closure Monitoring Plan.

SECTION 5 • PROGRESSIVE RECLAMATION

Where possible, progressive reclamation and closure activities will take place during mining. Portions of the Meadowbank Complex that have been disturbed by mining will be reclaimed once operations in that area are complete and when required resources are available.

5.1 Definition of Progressive Reclamation

The intent is to reclaim components and/or decommission facilities that no longer serve a purpose for operations or monitoring. It differs from temporary reclamation (e.g., revegetating a slope that will later be disturbed) in that it is permanent in nature. For instance, if a WRSF is at capacity, an operator may elect to contour the WRSF to the slopes required to support final closure and place a closure cover system (if required). Progressive reclamation serves several purposes:

1) It permits the trial of innovative reclamation prescriptions and reclamation research.
2) It allows Agnico Eagle to identify potential areas for improvement in reclamation and closure approaches.
3) It permits adaptive management of closure approaches and risks identified through the progressive reclamation process.
4) It promotes confidence in reclamation and closure activities that will be completed in closure.
5) It can reduce the total closure capital tied up in the reclamation bond, thus freeing up money for operational projects.
6) It accelerates the overall closure timeline, thus reducing the duration of liability to mining operators.

5.2 Progressive Reclamation by Mine Component

An overview of the progressive reclamation schedule for the Meadowbank Complex can be found in SECTION 10.

5.2.1 Meadowbank Mine – Progressive Reclamation Mine Component

Historical and current progressive reclamation activities completed at Meadowbank Mine are provided in the following sections. Several pits at the Meadowbank Mine are currently flooding. As this is ongoing, and supports the Meadowbank Mine's final closure configuration, it is discussed briefly below. Opportunities for future potential progressive reclamation activities are also presented.

5.2.1.1 Open Pits

As part of the Meadowbank Mine's final closure strategy, mined pits will be flooded to create flooded pits that serve to prevent ARD/ML issues associated with geochemical weathering (i.e., due to exposure to oxygen and water). Mining activities in Goose Pit ceased in 2015. In-pit tailings deposition started in Goose Pit in July 2019. Following in-pit tailings deposition in Goose Pit, the reclaim water was transferred to Portage Pit and flooding has resumed with natural runoff. Current inputs into Goose Pit include natural flooding (runoff water, contact water, groundwater) and transfer from the downstream contact water of Central Dike and Pit A (Agnico Eagle 2025a). As of 2023, the elevation of Goose Pit Lake was 118 masl (5118 mRL).

Portage Pits A and B are partially flooded and form a conjoined flooded pit. Together, they receive contact water and are expected to continue to do so until closure. Part of Pit B, and all of Pit C and Pit D form an in-pit WRSF. Since mining is complete at the Meadowbank Mine, alterations to the current configuration are not expected until closure (final closure configuration is discussed in SECTION 6). Portage Pit E actively receives tailings and contact water. Depending on mill output, Pit A may receive tailings before the end of the mine life.

Phaser Pit mining activities were completed in October 2018, while Vault Pit and BB Phaser were completed in mid-2019. The flooding of Vault and Phaser/BB Phaser pits with natural inflow began in 2019 and continued during 2024 and will continue through to post-closure.

5.2.1.2 Waste Rock Storage Facilities

The closure and reclamation of the Portage WRSF is ongoing during operations with the placement of the NPAG/NML cover over the side slopes of the PAG/ML portion of the WRSF. To date, approximately 90% of the PAG/ML WRSF has been covered. However, progressive reclamation of the uppermost bench or the top surface will not be possible until after decommissioning of all mine buildings and associated infrastructure, as the area could be used as landfill located within the unreclaimed top footprint of the WRSF. Additional geotechnical instrumentation may be installed if required in the Portage WRSF during the remaining period of operation.

5.2.1.3 Tailings Storage Facility

In 2014 and 2015 capping trials and test pads were constructed on the Meadowbank TSF North Cell in collaboration with the Research Institute on Mines and the Environment (RIME) to gather data and determine the most appropriate capping design for TSF’s site-specific conditions. Progressive reclamation (e.g., capping) of the tailings with NPAG/NML rockfill in the North Cell was undertaken in winter of 2015 following the completion of the tailings deposition in some sectors. The construction of the NPAG/NML cover continued from 2016 to 2019. In 2024, progressive reclamation activity occurred at the tailings storage facility of the Meadowbank Site. Progressive reclamation with the construction of the NPAG cover landform over the tailings in the North Cell was first undertaken in winter of 2015 following the completion of the tailings deposition. The construction continued in 2016 to 2019, and 2023. In 2024, the construction of the NPAG cover over the tailings and of some rockfill structures required to support possible additional tailings deposition were completed in the North Cell. A total of 113,145 m^3 of NPAG rockfill material and 11,058 m^3 of granular NPAG material was placed in the TSF in 2024 (Agnico Eagle 2025a).

Based on operational conditions and available resources, there may be some opportunities to complete some progressive reclamation on the NPAG/NML cover of the South Cell and North Cell TSF, as well as for the associated water management system. In 2024, Agnico Eagle continued the work to update the closure landform design of the TSF. Based on the design assessment and the site conditions, additional tailings deposition could be completed in the North and South Cell, along with construction of internal rockfill structures required for water management and tailings deposition. Construction of the tailings closure NPAG cover landform will also be constructed in progressive closure based on site conditions and resources available (Agnico Eagle 2025a).

5.2.1.4 Water Management Facilities

Minimal reclamation of water management facilities has been completed at the Meadowbank Mine, given that the mine is still producing contact water. In this regard, only some water management infrastructure has been removed from some of the flooding pits. For instance, following conversion of the Portage Attenuation Pond into the Reclaim Pond (South Tailings Cell) in 2014, some dewatering equipment from the North Cell reclaim system (i.e., dewatering pipelines, reclaim barge, effluent diffuser pipelines, and pumps) were dismantled and removed. During this process, some water management systems were moved to Whale Tail Mine based on availability and needs on both sites. Decommissioning of unused water management system not required for closure may be completed in progressive reclamation.

Based on water management strategy for the closure, additional water management system or WTP may be constructed and commissioned during the remaining part of operation at the Meadowbank Mine, to prepare for closure.

Since 2021, work has progressed on the development and implementation of the closure water treatment system for the Portage and Goose Pits water due to poor water quality resulting from in-pit deposition of tailings. The following main activities occurred, and continued in 2025:

- bench scale laboratory testing to define the water treatment technologies and design required for closure; and
- Implementation of in-pit semi-passive treatment to enhance the degradation of nitrogen compounds in reclaim water.

5.2.1.5 Mine Infrastructure, Buildings, Equipment and Waste Management Facilities

Progressive reclamation activities for the buildings and equipment at Vault has occurred during operation after the mining activities. To date, the emergency camp and office at Vault have been removed. The incinerator at Meadowbank has also been partially dismantled, as the composter is presently in use. The Meadowbank emulsion plant has also partially been decommissioned as no more emulsion is being prepared at Meadowbank. In 2024, site cleanup continued with decommissioning of unused equipment. The area located between the airstrip and the South Cell TSF, in the former quarry used for the construction of the airstrip (referred to as Quarry 23) was cleaned up for the construction start of the TSF collection pond. Tires, equipment and core boxes were sorted out, disposed of or placed in suitable areas (Agnico Eagle 2025a).

The landfill located in the Portage WRSF will be in active use throughout the operation period and also during the closure period to receive debris from decommissioning and demolition. Operation landfills are progressively closed in the Portage WRSF during operation, but final closure of the landfill will occur at the end of the active closure stage (Agnico Eagle 2025a).

5.2.1.6 Quarries

Quarries no longer required for operations could be progressively reclaimed during operation, as equipment and resources become available. The AWAR will be preserved as the main access to the site in a sufficient condition to allow post-closure access for monitoring, inspection and maintenance activities. Material availability from quarries and proper maintenance are required to ensure the good state of the road. The quarry reclamation is in Appendix 5-A. Based on planned maintenance schedule, a specific timeline for quarries progressive reclamation during operation will be defined.

5.2.2 Whale Tail Mine – Progressive Reclamation by Mine Component

Historical and current progressive reclamation activities completed at Whale Tail Mine are provided in the following sections. Opportunities for future potential progressive reclamation activities are also presented.

5.2.2.1 Waste Rock Storage Facilities

Both the Whale Tail WRSF and IVR WRSF are actively receiving waste rock. However, since the beginning of their operation, cover material was progressively placed on the side slopes of the WRSFs. In 2024, progressive placement of the NPAG/NML cover on these facilities continued. As the WRSFs are designed for long-term stability, no additional re-grading or construction will be required. The uppermost bench and top surface of the Whale Tail WRSF will not be reclaimed until closure as these will be required until the end of operations for landfill area. Additional geotechnical instrumentation will be installed if required in the WRSFs during the remaining period of operation. Photos of the progressive cover replacement on WRSF are available in Appendix 5-B.

5.2.2.2 Water Management Facilities

At Whale Tail Mine, the East Channel and Northeast Dike were reclaimed prior to initiation of IVR Attenuation Pond and construction of IVR Pit. Decommissioning of unused water management system not required for closure may be completed in progressive reclamation. Based on water management strategy for the closure, additional water management system may also be constructed and commissioned during the remaining part of operation at Whale Tail Mine.

5.2.2.3 Mine Infrastructure, Buildings, Equipment and Waste Management Facilities

Potential progressive reclamation activities including decommissioning and demolition of buildings and infrastructure not required for the end of operations may occur in progressive reclamation. Equipment and machinery could also be decommissioned based on the resources required for the remaining part of operations. Efforts will be made to reduce inventories of consumables leading up to the end of operation.

Unused roads and pads could also be reclaimed in progressive reclamation, following ESA for soil contamination if required.

Decommissioned infrastructure or equipment may be sent off-site for reuse or resale or landfilled on-site. Underground equipment deemed non salvageable may be left underground in sectors where mining activities are completed. Contaminated soil and waste tires could also be placed underground in sectors within permafrost ready for backfill. Approved waste generated from the demolition and the decommissioning of infrastructure or equipment may be landfilled in the approved landfills located within the Whale Tail WRSF, as per the approved *Landfill Management Plan* (Agnico Eagle 2024n).

5.2.2.4 Quarries and Eskers

The quarries and eskers no longer required for operations could be progressively reclaimed during operation, as equipment and resources become available. The Whale Tail Haul Road will be preserved as the main access to the site in a sufficient condition to allow post-closure access for monitoring, inspection and maintenance activities. Material availability from quarries and proper maintenance are required to ensure the good state of the road. Based on planned maintenance schedule, a specific timeline for quarries and eskers progressive reclamation during operation will be defined (Appendix 5-A).

SECTION 6 PERMANENT RECLAMATION AND CLOSURE

This section provides the Meadowbank Complex's reclamation and closure program, which is designed to achieve Agnico Eagle's closure vision for both the Meadowbank Mine and Whale Tail Mine. Agnico Eagle's closure vision for the Meadowbank Complex is as follows (and as outlined in SECTION 4):

> *To return the mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities* (AANDC and MVLWB 2013)

A mine's closure vision is the *"mission statement"* of a mine for closure. All stages, activities, and efforts associated with closure are geared towards the realization of a mine's closure vision. To achieve a mine's closure vision, the associated closure criteria and closure objectives must first be met (Figure 4.0-1). Closure criteria and objectives, in turn, are met through closure and reclamation activities. Often closure and reclamation is completed progressively, when possible, with closure activities being completed during operations as areas are no longer required for mining or monitoring. Given that this is not possible for all mine components, closure activities primarily occur after operations (see SECTION 1 for definitions of common stages in a mine's life cycle). Given that the Meadowbank Mine and Whale Tail Mine have similar infrastructure (e.g., WRSFs, pits, dikes), and therefore similar closure and reclamation requirements, these elements are presented in the following sub-sections together, where possible.

It is important to note that the terrain of the Meadowbank Complex footprint was covered by discontinuous vegetation interspersed with few bedrock outcroppings prior to disturbance. While reclamation efforts will be designed to encourage a natural succession of indigenous plant species, active revegetation has not been planned given the climactic and edaphic conditions of the Meadowbank Complex for several reasons:

1) Seeds are difficult to collect and scarify for planting. In more southern locations, seed collection and use in mine reclamation is practicable, but the location of the Meadowbank Complex precludes this option from a feasibility standpoint.
2) Revegetation efforts have low rates of success in the Arctic given the harsh conditions and short growing seasons.
3) Erosion and invasive species risks are low in the Arctic
4) Innuit groups have historically preferred natural recovery of disturbance rather than rehabilitation.

Because of these reasons, active revegetation efforts will be omitted from Agnico Eagle's reclamation prescriptions for the Meadowbank Complex. However, grading and contouring of the Meadowbank Complex's surface features will occur (where appropriate) to control soil erosion and to promote natural drainage and natural revegetation.

> **<u>Important Reader Note:</u>** For the Meadowbank Complex to achieve its post-closure configuration, some dewatering dikes will be breached, allowing for the connection of the reflooded pits with the adjacent lakes from the receiving environment. Similarly, runoff, discharge, or other forms of site water will ultimately mix with water in the receiving environment. To achieve post-closure configuration, existing WTPs will be removed. **However, these actions (e.g., dike reconnection, mixing of contact water with the environment, removal of treatment plants) will only occur if water quality data and modeling indicate the water can be released directly to the environment without further treatment and meets Water Licencing requirements.** Monitoring requirements are provided in the Closure and Post-Closure Monitoring Plan (CPCMP; Appendix 6-A). Additionally, previous versions of the Meadowbank ICRP had explicit statements for all occurrences where post-closure mine water interacted with the receiving environment, but these have been removed to avoid repetition.

Agnico Eagle is committed to implementing progressive reclamation and closure of the Meadowbank Complex whenever practicable. A summary of the reclamation research is available in Appendix 6-B. The potential activities in progressive closure are described in SECTION 5 and a detailed progressive reclamation and closure schedule is available in SECTION 10. As aspects of the Meadowbank Complex are progressively reclaimed, they will enter the CPCMP framework, where relevant parameters will be monitored and assessed against their respective closure success criteria (e.g., SECTION 4, and relevant tables for each component within this section). As monitoring data is amassed, it will be reviewed for trends and evaluated against the Adaptive Reduction Framework contained within the CPCMP, until success criteria are met; the timing of which may vary between components of the Meadowbank Complex.

6.1 Environmental Site Assessment

Remediation is a primary step in successful mine closure. Without remediation, Agnico Eagle's closure vision cannot be achieved, nor can the relinquishment of the Meadowbank Complex be realized. To address this, an ESA is currently underway for ancillary areas around the Meadowbank Complex that are in their final configuration. The intent of this ESA is to rule out these areas so less effort is required at the onset of closure to identify and remediate contaminated portions of the Meadowbank Complex. Further, areas of higher activity within the Meadowbank Complex (e.g., TSF, pits, WRSFs) are not yet in their final configuration, and cannot be effectively assessed as their conditions may change as they progress towards the end of operations.

Once the Meadowbank Complex is in its final configuration, a post-closure ESA will commence. A detailed breakdown of the Post-Closure Environmental Assessment activities is presented in Appendix 6-C, which is referred to as the '*Closure Investigation Work Plan*'.

6.1.1 Human Health Environmental Risk Assessment (HHERA)

To further help prepare the Meadowbank Complex for closure, and to determine if risks are expected to human health or the environment, Preliminary ESA data were used to assist with the closure Human Health and Environmental Risk Assessment (HHERA). Site Specific Remediation Objectives were developed and used to inform the HHERA. Findings from the closure HHERA (see Appendix 6-D) indicate that there are no expected long-term risks to humans, wildlife, or the environment in the post-closure phase of the Meadowbank Complex, thus giving Agnico Eagle confidence to proceed with the activities provided in this ICRP.

6.2 Open Pits

6.2.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions for the Meadowbank Complex are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). Existing site configuration and existing environmental conditions are summarized in SECTION 2 and SECTION 3 of this ICRP, respectively.

At the Meadowbank Mine, open pits have been fully developed and their status is provided in Table 2.5-1. The pits consist of Portage Pit A to E, Goose Pit, Vault Pit, Phaser Pit, and BB Phaser Pit. Some of the Portage Pits (B, C, and D) and Goose Pit have received waste rock as backfill. These backfilled areas are near their final configuration but may require some recontouring for closure. Tailings have been deposited in Goose Pit and in Portage Pit E. Tailings deposition in Portage Pit A is expected before the end of operations.

Water management for the pits is still ongoing (see Agnico Eagle 2023a). Water management will continue into closure (see Appendix 6-E), until water quality modeling and monitoring indicates that water quality is suitable for reconnection of the Meadowbank Mine with the surrounding aquatic environment.

At Whale Tail Mine, open pits are in development, and they are described in Section 2.5.1. The Whale Tail Mine contains the Whale Tail Pit and the IVR Pit (which consists of the IVR V1, IVR V2, IVR West 1 and IVR West 2 extension). The Whale Tail Pit at its ultimate configuration will extend across the northern edge of Whale Tail Lake and will have a total footprint area of 62 ha. By the end of operations, the Whale Tail Pit is planned to extend approximately 282 m below the current water level of Whale Tail Lake (i.e., to -129 masl; 4871 mRL). Within approximately 11 years, open talik is expected to form below the deepest portion of the Whale Tail Pit. With time (approximately 50 years), the permafrost under the Whale Tail Lake will continue to thaw and the open talik that exists in the south part of Whale Tail Lake will have expanded to include the northern margins of the Whale Tail Pit Lake.

By the end of operations, the IVR Pit is planned to extend approximately 107 m below the current water level of Whale Tail Lake (153.5 masl; 5153.5 mRL) and it will have an ultimate footprint area of approximately 43 ha. Following flooding and the formation of the IVR Pit Lake, the permafrost is expected to melt and connect the IVR Pit Lake to the sub-permafrost groundwater flow system and act as a recharge boundary to the regional groundwater system once the permafrost layer beneath the lake melts (Golder 2019c). However, this permafrost is expected to fully degrade over the next 1,000 years.

6.2.2 Closure Objectives and Criteria

Closure objectives associated with open pits are provided in Table 6.2-1.

Table 6.2-1: Closure Objectives and Criteria for Open Pits of the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions/Measurements	Criteria/Objective Met
Physical Stability	**Geotechnical**				
	OP1	Avoid uncontrolled release of water during pit flooding	Pit fill rates align with the projected water balance targets	**OP1/2-Action 1**: review post-closure water balance model periodically **OP1/2-Action 2**: if necessary, design, construct, and complete (i.e., install or remove where applicable) water management infrastructure **OP1/2-Action 3**: install and maintain geotechnical monitoring instrumentation consistent with the CPCMP (Appendix 6-A)	**OP1/2 – Action 1** ☐ **OP1/2 – Action 2** ☐ **OP1/2 – Action 3** ☐
	OP2	Pit reconnection is safe for humans and wildlife, and aligns with post-closure water balance targets			
Chemical Stability	**Water**				
	OP3	Water quality is safe for humans, wildlife, and aquatic life	Water quality meets modelled predictions and relevant criteria, and is protective of human and ecological health	**OP3-Action 1**: review post-closure water quality model periodically **OP3-Action 2**: monitor water quality in accordance with the CPCMP **OP3-Action 3**: conduct dike reconnection when water quality meets criteria	**OP3 – Action 1** ☐ **OP3 – Action 2** ☐ **OP3 – Action 3** ☐

Note: Open pits will not be designed for fish habitat.
OP= Open Pit; CPCMP = Closure and Post-Closure Monitoring Plan.

6.2.3 Closure Activities

Please refer to Section 10SECTION 10 for timing of major closure activities associated with open pits at the Meadowbank Complex. Importantly, the 2019 Meadowbank Mine ICRP (AtkinsRéalis 2020) indicated that the in-pit tailings within the Portage and Goose Pits would be capped with a rock cover. However, this closure option was assessed (Appendix 6-F) and is no longer viable, as an aggregate cover over the tailings is not required to mitigate risks to fish. In addition, Agnico Eagle has identified several geotechnical considerations, as well as health and safety risks related to such cover over the in-pit tailings. Thus, the in-pit tailings rock cover is therefore not considered in this version of the ICRP.

6.2.3.1 Infrastructure and Equipment Removal

At the onset of closure, only water management infrastructure associated with pit flooding will be present for pits at both the Meadowbank Mine and the Whale Tail Mine. All other infrastructure and equipment, such as those used to deposit tailings or used in the mining process will have been removed. Refer to SECTION 10 for further detail on infrastructure removal timing.

6.2.3.2 Pit Access

Meadowbank

Access has already been restricted to Meadowbank Mine pits due to most of these pits containing water, mining wastes, or a combination thereof. Following removal of equipment, ramps will be barricaded to prevent inadvertent access to such areas using rock barricades or safety berms until the pits have been flooded, and the flooded pits reach their target elevations. Perimeter fences around pits will not be used because wolves can use fences to trap caribou and other prey, thus resulting in an unintended post-mining impact on wildlife population dynamics. After flooding, the pits are not expected to pose a physical risk to humans or wildlife, as most of the former pit extent will be flooded.

Whale Tail

At Whale Tail Mine, a plan will be developed to allow for reasonable exit should inadvertent access occur, and emergency egress routes will be provided. Once an egress plan has been developed, decommissioning and disposal efforts can commence. Following removal of equipment, pit access will be blocked using rock barricades or safety berms until the pits have been flooded, and the flooded pits reach their target elevations. Perimeter fences around pits due to their potential post-mining impacts on wildlife population dynamics. After flooding, the pits are not expected to pose a physical risk to humans or wildlife, as most of the former pit extent will be flooded.

6.2.3.3 Water Management Activities Prior to Flooding

Meadowbank

Currently, at the Meadowbank Mine, the Portage Pits receive reclaim water (e.g., mill water) as part of site-wide water management. Portage Pits A and E and Goose Pit received tailings deposition during the LOM. In-pit tailings deposition will also occur until 2028 at Portage Pit A and E.

Goose Pit is currently undergoing active aeration to remove nitrogen species. The degradation is a biochemical process, aided by aeration mixing of the flooded pit waters and the addition of phosphorus as a source of nutrients (Appendix 6-E; Lorax 2024a). Once in-pit tailings deposition in the Portage Pit is completed, the same aeration process operating in Goose Pit will begin in Portage Pit as well. In this period, treated water from Goose will be transferred to Vault Pit and discharged at depth to create a meromictic flooded pit system as described in Appendix 6-E (Lorax 2024a). **Figure 6.2-1** provides detail on overall water movement and treatment that will be conducted within the Meadowbank Mine Pits as part of progressive reclamation and preparation for closure.

Whale Tail

At Whale Tail Mine, water management infrastructure is still configured to prevent accumulation of water within the pits. Once mining is complete, pumps, pipes, and other water management elements will be reconfigured to prepare the pits for flooding in accordance with the pit flooding schedule.

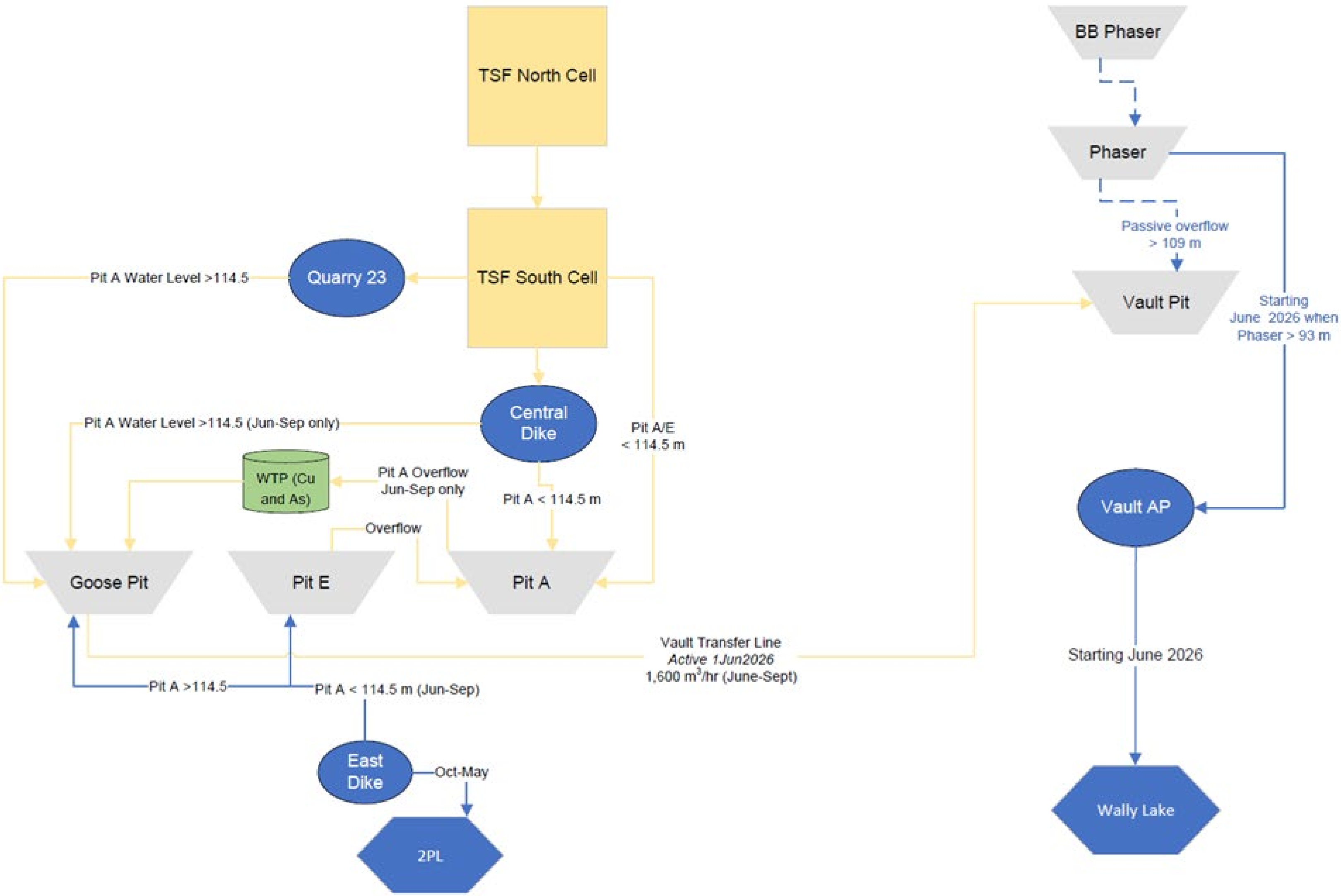


Figure 6.2-1: Water Treatment and Management Plan for the Meadowbank Mine Pits during Late Operations and Closure

6.2.3.4 Flooding of the Pits

Meadowbank

After Portage and Goose Pits are dewatered, they will be actively flooded with freshwater from Third Portage Lake and reconnected with Third Portage Lake by approximately 2036 (see Figure 10.2-1; Appendix 6-E). All runoff reporting to BB Phaser Pit, Phaser Pit and Vault Attenuation Pond will be discharged to Wally Lake beginning in 2026 through to approximately 2036 (Figure 10.2-1; Appendix 6-E). Discharging to Wally Lake permits the interception of runoff flow into Vault Pit and maximizes the storage capacity of Vault Pit. Once all Portage and Goose Pit water is transferred to Vault Pit, Vault Pit will be actively flooded with freshwater and reconnected with Wally Lake (Figure 6.2-1). Different flooding concepts are currently being considered as ongoing investigation into aeration reaction rates is in progress.

To minimize impacts to aquatic habitat in the surrounding lakes, it is anticipated that freshwater transfers from Third Portage and Wally lakes will be done during periods of higher water in the spring and summer months. Maximum yearly pumping rates will respect the limits specified in the Meadowbank Water Licence to avoid draw down levels in each source lake. Throughout the pit flooding phase, the dikes will remain in place, acting as barriers for water migration between the flooded pit and the surrounding lakes and environment. For full details on pit flooding, refer to Appendix 6-E.

Whale Tail

At the Whale Tail Mine, following completion of ore processing at the end of operations, the underground mine workings will be flooded with site contact water and saline water including any temporarily stored in IVR and Whale Tail Pit, along with water from underground stored at surface. The remaining voids will be filled with Whale Tail Lake (South Basin) water, as contact water from the underground mine is expected to have higher salinity.

The dewatered Whale Tail Pit and IVR Pit area will be filled with a combination of natural runoff and contact water from the entire site. Sources include the Whale Tail and IVR WRSF Contact Water Collection Systems; the Whale Tail and IVR Attenuation ponds; and water pumped from Whale Tail Lake (South Basin). To account for fish habitat loss due to mine development, and as part of the *Fish Habitat Offsetting Plan* (Agnico Eagle 2020), a sill will be constructed in the Kangislulik Lake, upstream of the Mammoth Dike, to increase the water level in Whale Tail Lake (North Basin) by 1 m to 153.5 masl (5153.5 mRL), thus providing additional fish habitat.

To achieve this, it is anticipated that approximately 75,000,000 m^3 of water over 16 years from Whale Tail Lake is required (Agnico Eagle 2024u). Whale Tail Pit will require approximately 57,000,000 m^3 of water, while the IVR Pit is expected to require approximately 11,000,000 m^3 of water (Agnico Eagle 2024u). Whale Tail Lake (North Basin) is expected to require approximately 6,000,000 m^3 to achieve the final pit-lake configuration. Similarly, the underground mine will be reflooded (i.e., approximately 1,000,000 m^3) with a combination of underground water, site water and water from the Whale Tail South Basin (Agnico Eagle 2024u).

Overall, the flooding sequence will be adapted to meet water quality closure objectives to allow for the reconnection of the lakes. The water balance and water quality forecast will be updated to optimize the flooding sequence. Pump sizing for flooding and a more accurate estimate for the duration of flooding will be established during the detailed design phase to optimize pumping costs and to reduce potential impacts to Kangislulik Lake and Whale Tail Lake (South Basin).

6.2.3.5 Water Quality

Meadowbank

At closure, POPCs associated with process water from in-pit deposition in Goose Pit, Pit E and Pit A will be present (Lorax 2024b). To manage this, the water in the pits will be aerated to remove nitrogen species along with active treatment for metals. Remaining water will then be stored at depth in Vault Pit under meromictic conditions, under a freshwater cap. Water quality monitoring (e.g., via the CPCMP) will be ongoing during closure while the pits are reflooding to verify the predictions of the water quality model, and to determine when pit water quality is suitable for release via dike reconnection.

Whale Tail

The POPCs identified by the water quality model (Lorax 2024a) at Whale Tail are associated with exposed pit wall runoff as there is no process water stored at the site. POPCs from pit wall runoff will be treated through active treatment as necessary until objectives are met. Flooding of the pits will reduce exposure to atmosphere and oxidative conditions, and remove POPCs from the pit wall. Water quality monitoring (e.g., via the CPCMP) will be ongoing during closure while the pits are reflooding to verify the predictions of the water quality model, and to determine when pit water quality is suitable for release via dike reconnection.

6.2.3.6 Dike Reconnection Following Reflooding

Meadowbank

At the Meadowbank Mine, dikes will be breached when the water quality monitoring results meet discharge criteria as per the Water Licence to allow water to naturally flow to the outside environment (see figures Figure 6.2-2 to Figure 6.2-4 for final configurations). Following this, remaining pumping and pipelines systems will be removed, and the Bay Goose Dike, South Camp Dike, and Vault Dike will be breached to reconnect the flooded pits with the adjacent lakes. Dike breaches will occur at selected locations at a depth of approximately 3 m below average water level to account for ice formation. Excavated materials (rockfill) will be locally placed to extend shallower areas on the residual sides of the dike and breaches. Dike breaches are discussed further in Section 6.3. Design and specifications of the dike breaches will be developed in time during flooding and site conditions and consider the geotechnical monitoring requirements of the dikes. The Portage Pit and Goose Pit area will be connected as one waterbody when the pit water level reaches approximately 131.0 masl (5131mRL). Similarly, the Vault Dike will be breached to allow reconnection of the area with Wally Lake when the water quality in the re-flooded area meets Water Licence conditions.

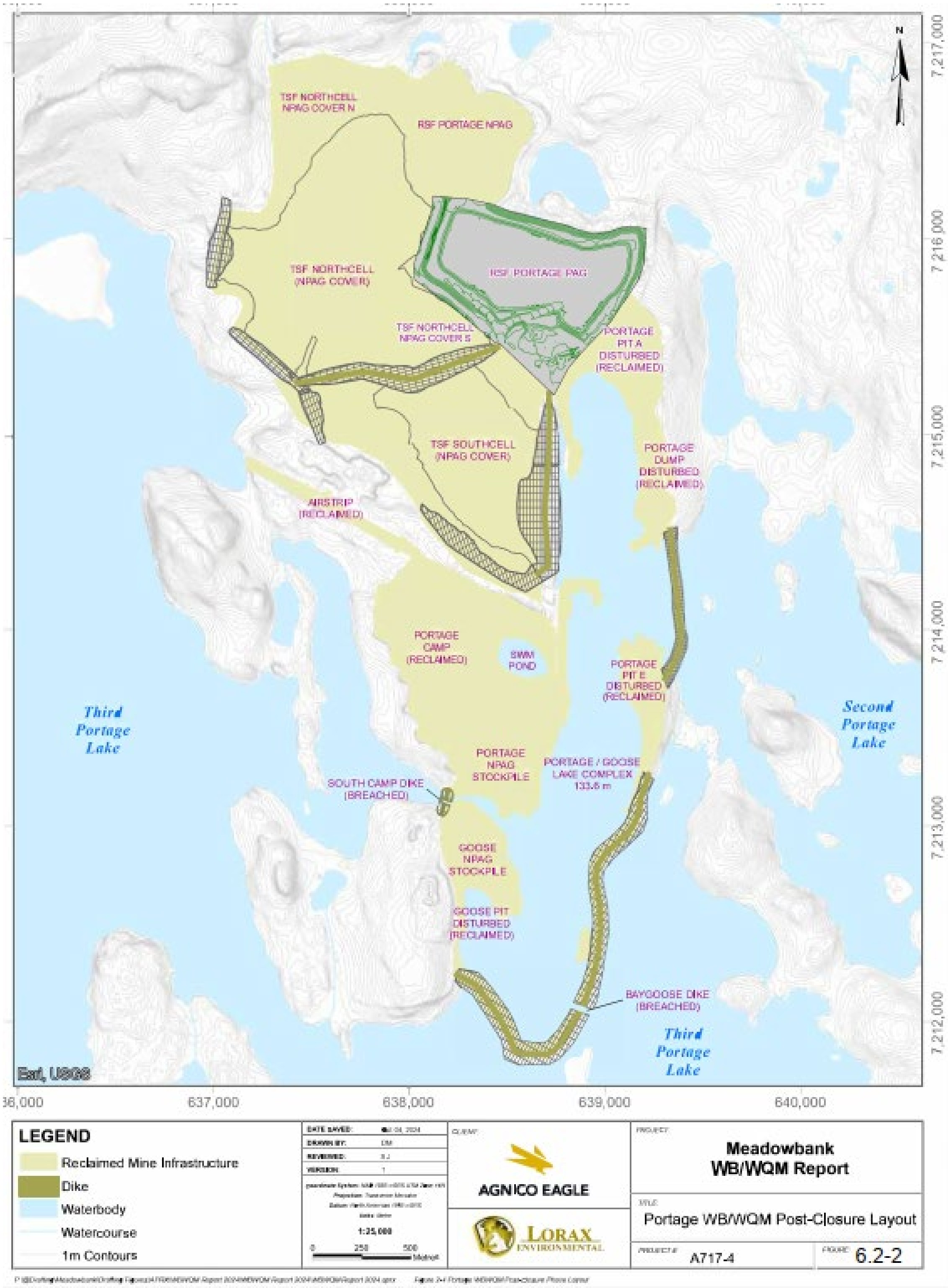


Figure 6.2-2: Expected Configuration of the Meadowbank Mine after reflooding, prior to dike breaching

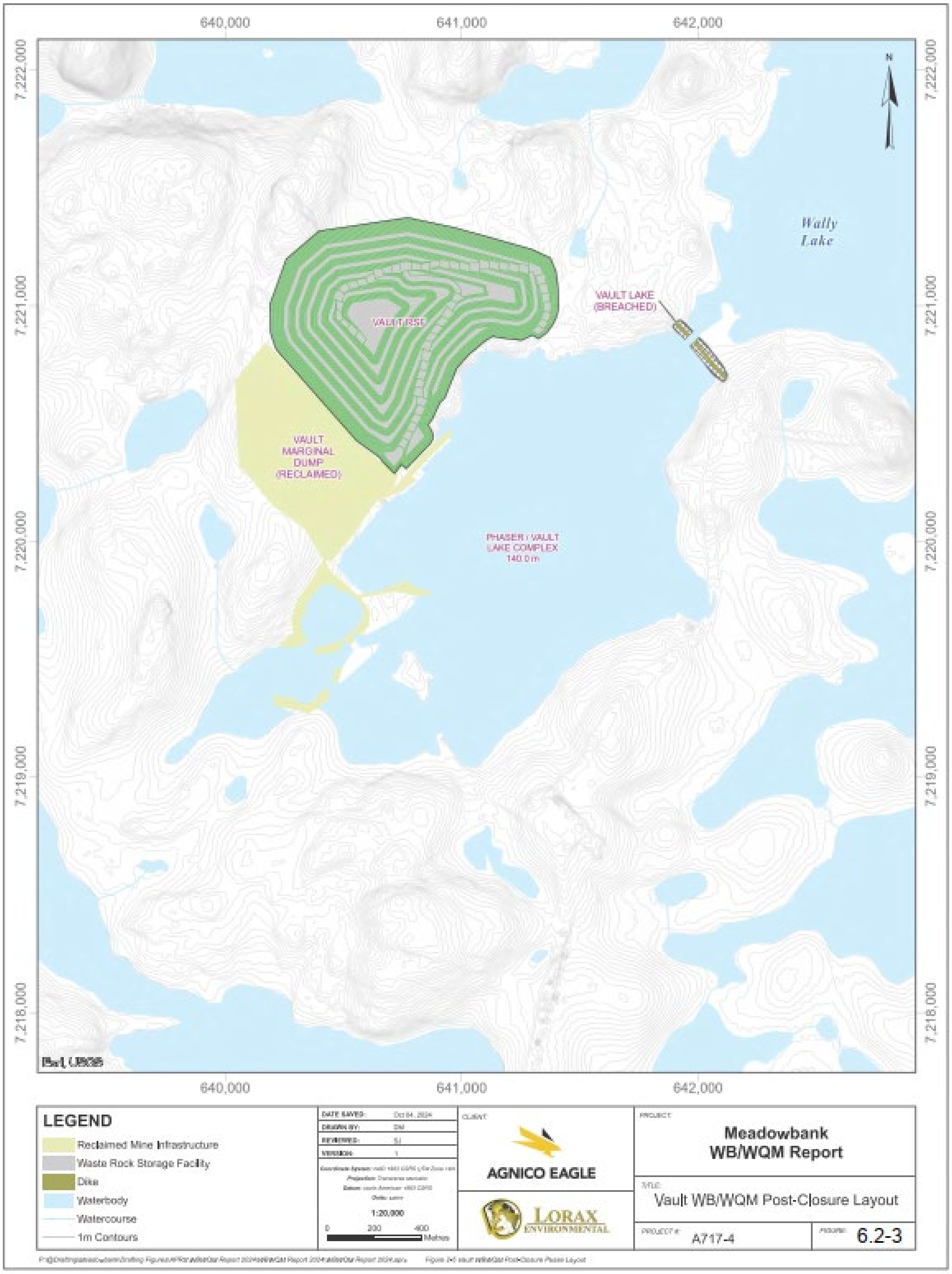


Figure 6.2-3: Expected Post-Closure Configuration of the Vault Pit

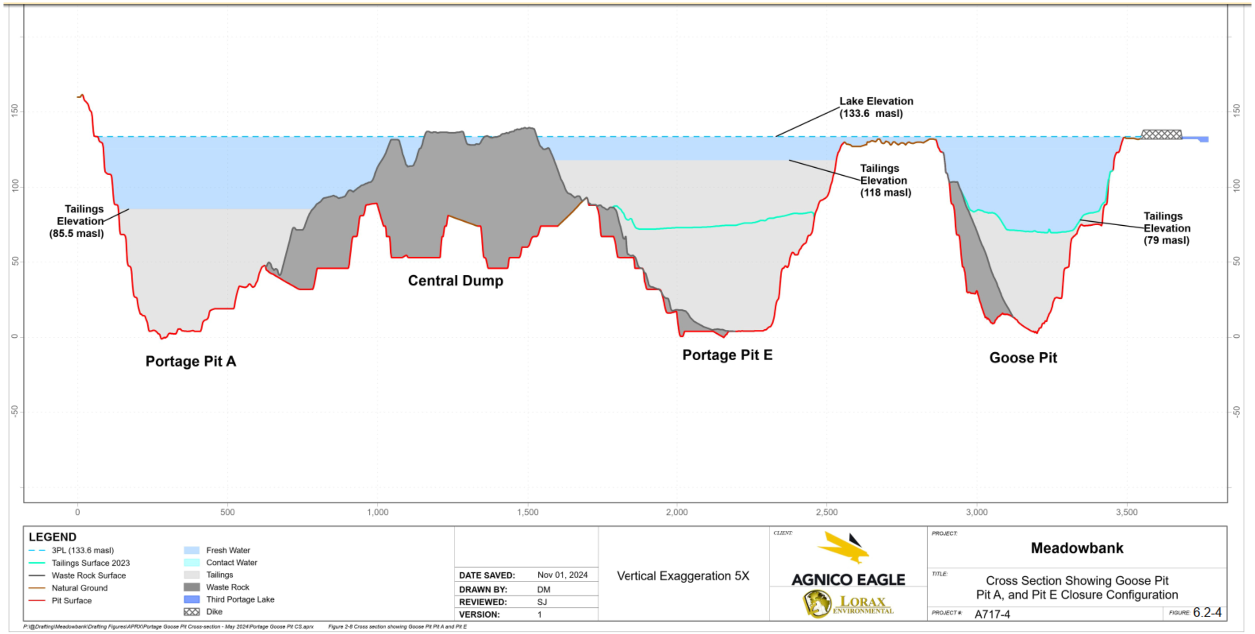
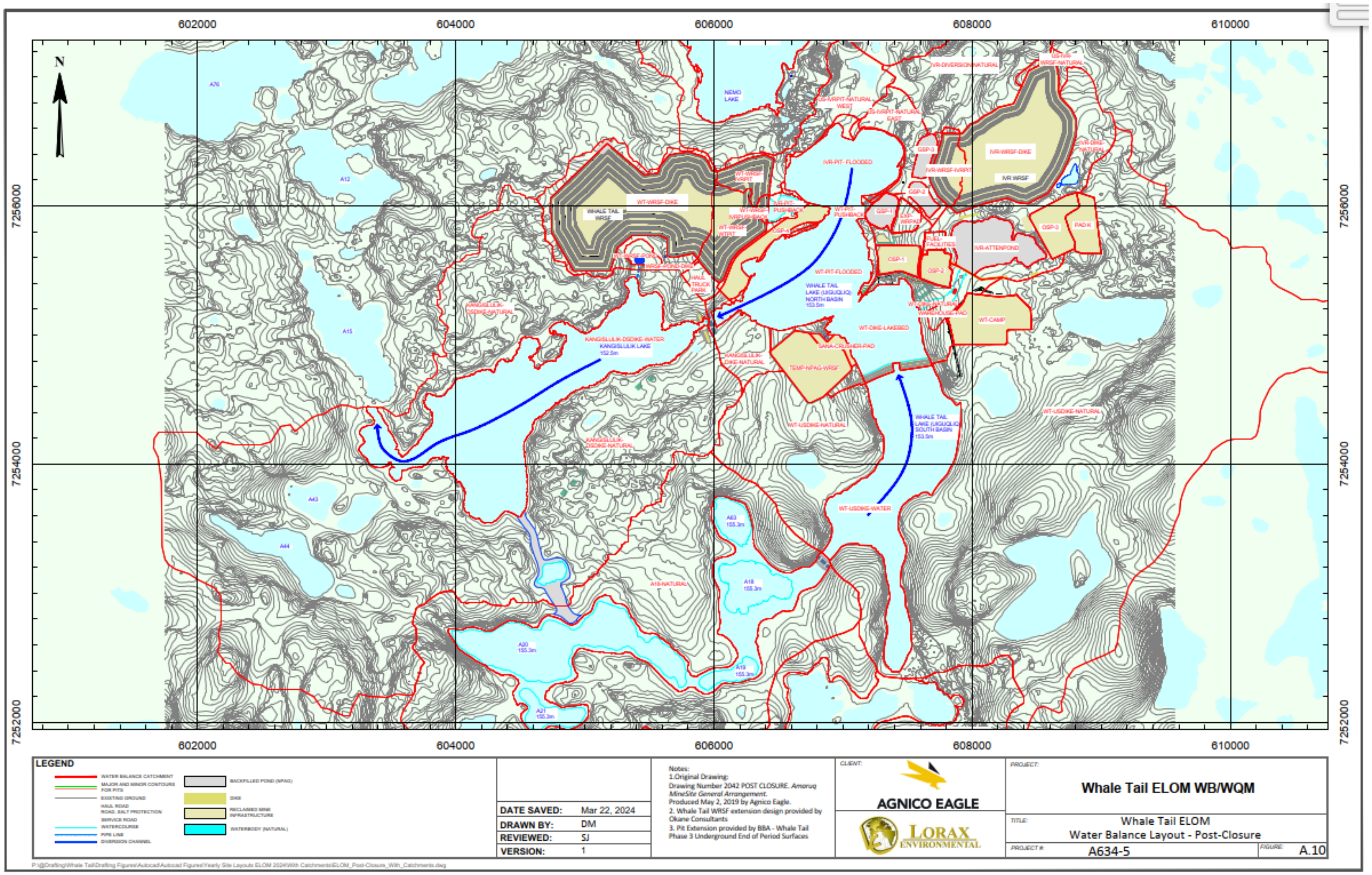


Figure 6.2-4: Cross Section of Goose Pit, Pit A, and Pit E Closure Configuration

Whale Tail

At the Whale Tail Mine, the Whale Tail Dike and Mammoth Dike will be breached when the water quality monitoring results meet discharge criteria as per the Water Licence to allow water to naturally flow to the outside environment. Dike breaches are discussed further in Section 6.3. Design and specifications of the dike breaches will be developed in time during flooding and site conditions and consider the geotechnical monitoring requirements of the dikes.

Figure 6.2-5 provides illustration of the Whale Tail Mine following dike reconnection.



Source: Lorax 2024b.

Figure 6.2-5: Expected Post-Closure Configuration of the Whale Tail Mine

6.2.4 Predicted Residual Effects

Meadowbank

At the Meadowbank Mine, the only discharge to Wally Lake will be of collected runoff, or clean surface water from BB Phaser Pit, Phaser Pit and Vault Attenuation Pond. Otherwise, no discharges will occur to the receiving environment during operations and pit flooding since all contact waters will be diverted to the TSF South Cell or the open pits. The Goose Dike, South Camp Dike, and Vault Dike will only be opened when the level of the flooded pits reaches the same elevation as the adjacent lakes, and pit water quality meets the Water Licence conditions. No residual effect on Third Portage or Wally Lakes water quality and water level are expected during closure and post-closure.

As filling pits with water and tailings change the thermal dynamics of the pits of the Meadowbank Complex, Agnico Eagle conducted thermal modelling in 2018 to project post-closure conditions of permafrost in pit-adjacent areas (AtkinsRéalis 2018). Thermal modelling indicates that the existing open talik conditions at Goose Pit and Portage Pit E will extend and the permafrost pocket at Goose Pit will disappear. An open talik may develop beneath Portage Pit A, and thawing may continue towards its southeastern tip. A three-dimensional (3D) hydrogeological model was created to assess the long-term migration of selected contaminants in groundwater from in-pit tailings deposition to surrounding Second and Third Portage Lakes following mine closure. The modelling results indicate that chloride and arsenic from Goose Pit and Portage Pit A will report to Second Portage Lake. However, groundwater flow is minimal due to small hydraulic head differences between open talik lakes and relatively low bedrock permeability. Thus, even though chloride and arsenic fluxes will increase over time due to plume arrival at Second Portage Lake, their concentrations in the lake will remain below CCME guidelines for protection of aquatic life. Meanwhile, the development of an open talik at Portage Pit A will lead locally to an upward hydraulic gradient, approximately one hundred years after closure, and a portion of pore water from the tailings could be released in the overlying Third Portage Lake. Based on the water balance approach and the simulated mass fluxes from the hydrogeological model, forecasted chloride and arsenic concentrations in the Second and Third Portage Lakes do not show significant impacts on fresh water and are expected to remain below CCME guidelines for protection of aquatic life.

Whale Tail

At the Whale Tail Mine, no discharges will occur to the downstream receiving environment during pit flooding, since all contact water will be diverted to the Whale Tail Lake (North Basin) and IVR Pit. Once the dikes are breached and decommissioned and the water flow is reconnected between the South and North basin, predicted concentrations of major ions – nutrients (except phosphorus), and metals – in Kangislulik Lake and downstream environments for post-closure, are predicted to be lower than aquatic life guidelines.

Permanent alteration of permafrost around the pits at Whale Tail Mine is expected, with the following net effects:

- Temporary permafrost aggradation due to excavation of the open pits.
- Degradation of permafrost and enlargement of the talik below the pits due to flooding of pits.
- Potential groundwater inflows to the Whale Tail Pit during operations when its depth extends below the base of permafrost.

Modelling of the thermal conditions of the Whale Tail Pit during flooding and into post-closure suggests the warm flooded pit temperature will impact the permafrost under the pit, and talik zones will start to occur around the pit walls and floor during operations (Agnico Eagle 2024d). Upon closure and subsequent flooding of the Whale Tail Pit, permafrost areas underneath the flooded pit are expected to gradually thaw. Thermal assessments have indicated this process would take hundreds of years (Golder 2019b). The flooded pit would eventually reduce the permafrost depth in the ground surrounding the pit, but this process could take a significantly longer time (in the order of 10,000 years) to complete.

6.2.5 Uncertainties

The following uncertainties have been identified with respect to closure planning of the open pits:

- Water quality of the final flooded pits prior to opening of the dewatering dikes and free mixing with adjacent water bodies.
- Flooding rate for filling the open pits at closure, including natural inflows and lake water transfers, and length of time to achieve target water levels.

Water quality monitoring will continue to expand the available water quality database and water quality forecasts for flooded pits water and will continue to be performed annually during operation to better predict the water quality at closure. Treatment options will be examined and will be assessed in greater detail if required in the future. The water balance and water management will also be reviewed on an annual basis during operation and in closure to estimate the lake water transfer volume required for flooding, and that adequate water levels are maintain until dike reconnections occur.

6.2.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Monitoring activities are outlined in the CPCMP (Appendix 6-A). During the closure phase (e.g., when the Meadowbank Complex is being reclaimed and converted to its post-closure configuration), monitoring efforts are expected to closely align with those observed during operations, until a Closure Water Licence has been received. Importantly, the CPCMP contains an adaptive reduction framework, which details the conditions for the removal of parameters, stations, and reductions in monitoring frequencies. Given the length of the Meadowbank Complex's closure period, post-closure monitoring is geared towards confirming that the flooded pits and dike reconnection are functioning as expected.

6.2.7 Contingencies

This ICRP currently incorporates a WTP at Whale Tail and Meadowbank (Vault). The need for water treatment will be determined based on water quality forecasts (Lorax 2024a; b) and water quality monitoring efforts (e.g., CPCMP) before dikes are to be breached. If the water in the flooded pits is not suitable for release to the environment this flooded pit water will be treated as a contingency.

6.3 Dikes and Saddle Dams

Dikes and saddle dams are described in Section 2.5.5. Please refer to SECTION 10 for timing of major closure activities associated with dikes and saddle dams of the Meadowbank Complex.

6.3.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions can be found in the Meadowbank 2005 FEIS (Cumberland 2005a), and are also summarized in SECTION 3 of this plan. Existing conditions can be found in Section 2.5.7 of this ICRP. During post-closure, several dewatering dikes will be breached, to support the Meadowbank Complex final closure configuration, once mine water meets discharge quality criteria.

6.3.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex dikes and saddle dams are covered in Table 4.3-1 (i.e., Site Wide Closure Criteria).

6.3.3 Closure Activities

All dikes and dams of the Meadowbank Complex were designed for long-term stability. During closure, Portage, Goose, Vault, Phaser pits, IVR and Whale Tail Pits will be completely flooded. Once it is confirmed that flooded pit water meets water quality criteria, South Camp Dike, Bay-Goose Dike, Vault Dike, Whale Tail Dike, and Mammoth Dike will be opened to reconnect the flooded pits with the adjacent lakes.

East Dike will remain intact, preserving the 1 m difference in elevation between Third Portage Lake and Second Portage Lake. Central Dike, Saddle Dams 1, 2, 4, and 5 will also remain intact to contain the stored tailings in the Meadowbank TSF. Table 6.3-1 presents the general reconnection description for each component to be decommissioned based on conceptual design. The final dike reconnection design for the structures will be presented in the FCRP. It should be noted that dikes will not be opened, until the water quality meets criteria of the Water Licence.

The remaining water retention and dewatering berms/dams (i.e., WRSF Dike and IVR Dikes) will be kept intact to provide a barrier between the facilities and surrounding lakes until the water quality (contact water and runoff collected from facilities, and from the flooding area) is suitable for release to the environment. Once this is achieved, the remaining structures will be decommissioned.

Dike breaching (i.e., reconnection) will likely occur during winter, when thick ice conditions are expected to coincide with annual minimum lake levels. Consideration will be given to breach staging, with above-water portions of the dike/dam in the decommissioned area removed during winter periods, when there will be little surface water flow, thereby minimizing the potential release of sediments to the neighboring lakes. Exposed surfaces within the breach opening above normal lake water levels will be covered with erosion protection consisting of NPAG/NML materials when needed. These materials will also be used below the water surface. Complete design, specifications, and written notification to NIRB and the NWB of Agnico Eagle's intent to breach the will be completed 60 days prior to flooding.

Table 6.3-1: General Description of Decommissioning Components – Dike Reconnection

Component	General Description of the Reconnection Process[1]
Bay-Goose Dike Reconnection	• Create a reconnection with a width of 10 m that has 3H:1V side slopes, at two locations, with potential for a third location to access Portage Pit Lake. • Open dike to 3 m below design minimum water level to allow year-round fish passage, facilitate water exchange and movement within the former impoundment. • Install erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
South Camp Dike Reconnection	• Create a reconnection with a width of 10 m that has 3H:1V side slopes. • Open dike 1 m below design minimum water level to allow for seasonal fish passage. • Install erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
Vault Dike Reconnection	• Create a reconnection with a width of 10 m through dike, a width of 5 m though the channel, and 3H:1V side slopes throughout. • Install erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
Whale Tail Dike[2]	• Create a reconnection with a width of 10 m that has 3H:1V side slopes. • Open dike to 3 m below design minimum water level to allow year-round fish passage, facilitate water exchange, and facilitate water movement within the former impoundment. • Install erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
Mammoth Dike	• Create a reconnection between Kangislulik Lake and Whale Tail Pit Lake
Mammoth Sill	• Install a 1 m high sill, during progressive reclamation efforts

1 = Conceptual design. Complete design, specifications, and written notice of dike reconnection (breaches) will be provided to NWB 60 days prior to implementation. 2= Whale Tail Dike breach design is based on conceptual design completed for Bay-Goose Dike reconnection.

6.3.4 Predicted Residual Effects

Meadowbank Mine water will enter and mix in Third Portage Lake and Wally Lake. It is predicted that concentrations in post-closure will meet discharge criteria. Similarly, at Whale Tail, North Basin water will enter and mix with water in Whale Tail South Basin; resulting in water quality that is expected to meet Water Licence limits.

6.3.5 Uncertainties

There are no major uncertainties related to dike closure.

6.3.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Monitoring activities are outlined in the CPCMP (Appendix 6-A). In general, post-closure monitoring and maintenance will consist of:

- Periodic visual inspections by a geotechnical engineer to visually assess stability and performance of dikes and dams.
- Assessment of instrumentation data.
- Interpretation of instrumentation data to show that dikes and dams are performing as intended.

6.3.7 Contingencies

Stability issues are not anticipated for the dewatering dikes in Meadowbank and Whale Tail, as in post-closure, the water differential across dikes surrounding the open pits will be minimal. Regular field inspections of the structures are planned as per the CPCMP to show that they are performing adequately in closure and post-closure.

The decommissioning schedule of the of Bay Goose Dike, South Camp Dike, Vault Dike, Whale Tail Dike, and the Mammoth Dike is based on predictions that water quality in the flooded areas at in Portage and Goose Pits and at Whale Tail Mine will meet discharge criteria. The need for contingency measures in the event of unfavourable water quality will be based on water quality monitoring during operations and closure. In this scenario, the reconnection (dike breach) schedule will be adjusted until water quality meets Water Licence criteria.

6.4 Underground Workings

Only the Whale Tail Mine has underground workings. The underground workings are described in Section 2.5.2. Please refer to SECTION 10 for timing of major closure activities associated with closure of the underground workings.

6.4.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions are covered in Section 3.2.2. By the end of operations, the underground workings will have been backfilled to the extent practicable. Ultimately, the underground workings will be flooded, as part of the final flooded pit.

6.4.2 Closure Objectives and Success Criteria

Closure Objectives for the underground workings are provided in Table 6.4-1.

Table 6.4-1: Closure Objectives and Criteria for Underground Workings of the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions	Criteria/Objective Met
Future Use	**Geotechnical**				
	UG1	Restrict access for humans and wildlife to the underground workings	Surface openings are capped to restrict access to the underground workings as required under applicable legislation	**UG1-Action 1**: design and construct barriers to the underground to effectively restrict access **UG1-Action 2**: obtain GN Mines Inspector confirmation of compliance where applicable	**UG1 – Action 1** ☐ **UG1 – Action 2** ☐
Physical stability	UG2	Underground workings are physically and geotechnically stable	Underground workings minimize risk of collapse during the post-closure period	**UG2-Action 1**: proper management and progressive disposal of backfilled waste materials to the underground, in accordance with the Waste Management Plan or the ICRP **UG2-Action 2**: monitor geotechnical stability in accordance with the CPCMP	**UG2 – Action 1** ☐ **UG2 – Action 2** ☐
Chemical Stability	**Water**				
	UG3	The underground workings do not pose a risk to site water quality	Water quality meets modelled predictions and relevant criteria, and is protective of human and ecological health	**UG3-Action 1**: during closure, the underground water balance/water quality model align with predictions **UG3-Action 2**: flood underground to limit potential for ARD/ML	**UG3 – Action 1** ☐ **UG3 – Action 2** ☐

UG = Underground; GN = Government of Nunavut; ICRP = Interim Closure and Reclamation Plan; CPCMP = Closure and Post-Closure Monitoring Plan; ARD/ML = Acid Rock Drainage/Metal Leaching.

6.4.3 Closure Activities

6.4.3.1 Crown Pillar Assessment

During operation and at the end of mining activities, a geotechnical assessment of crown pillar stability will be completed to confirm that there is no risk of subsidence or remaining hazard to humans or wildlife.

6.4.3.2 Infrastructure and Equipment Decommissioning

An inspection and inventory of all equipment, machinery, and materials in all areas of the underground workings will be carried out to evaluate their subsequent handling. The salvage value of equipment and machinery is expected to be limited due to the site location and high transport costs. Therefore, it has been assumed that all machinery and equipment have no salvage value and will be left in the underground workings. The equipment and infrastructure will be de-energized, cleaned, drained, inspected, and remediated, as appropriate, to eliminate the risk of dissipation of contaminants due to potential leakages. The ventilation system at the exploration ramp and portal will be removed and placed in the underground workings.

6.4.3.3 Backfilling of the Underground

At Whale Tail, the underground WRSF (located aboveground) is a temporary facility. This material will be returned underground or used to make CRF as backfill during mining operations and during closure. This waste rock will be entirely consumed during the backfilling process, with no underground waste rock remaining on surface at the end of the mine life. The backfill is not expected to completely fill the underground. Contaminated soils, waste tires and other inert waste material such as pipes, culverts and sea cans could also be placed underground in sectors within permafrost ready for backfill. A list of material that may report to the underground is found in Appendix 6-G. When backfilling and waste disposal are complete, the underground will be allowed to flood, and water will occupy the void space in the underground workings.

6.4.3.4 Flooding of Underground Workings

At the end of operations, the underground workings will be actively flooded with a combination of natural runoff and underground contact water from the GSP, the IVR Attenuation Pond, and water pumped from Whale Tail Lake (South Basin). Studies have indicated that flooding to elevation 152.5 masl (5152.5 mRL) will take approximately 5 months. Groundwater inflows will also passively contribute to the flooding. The pipeline and pump system used during the mine dewatering stage will be decommissioned to allow flooding.

6.4.3.5 Securing Openings

The portal, including the box cut leading to the portal, will be backfilled to eliminate access into the underground workings by people and animals. The opening will be filled with NPAG/NML waste rock material for at least 20 m into the adit. Backfilling the portal and the upper portion of the decline ramp and capping of the vent raises are considered to be the only viable option for eliminating access to the underground mine workings.

Options for securing the openings will be further developed to the proper level of engineering required to ensure compliance to industry best practices and applicable codes and protocols. The plans and designs will include inspection and monitoring considerations where required.

Vent raises will be capped with reinforced concrete plugs or equivalent engineered caps to eliminate inadvertent access into the underground workings by people and animals. The areas around the capped vent raises and the backfilled decline ramp will be re-graded to suit the surrounding topography to the extent possible.

6.4.4 Predicted Residual Effects

Based on the thermistor and modelling results, the underground operation at the Whale Tail Mine will extend through the permafrost into non-frozen ground, while the underground operation at IVR will likely be contained within the permafrost zone. It is expected that mining will result in permanent alteration of permafrost within the mined-out areas.

At closure, the underground infrastructure will be actively and naturally flooded, and the flooding will accelerate thawing of permafrost zones immediately adjacent to the mine workings. Any degradation of permafrost in the ground surrounding the underground operations is unlikely to revert to the pre-excavation state as the underground shafts will be flooded naturally, and the presence of water is likely to increase permafrost degradation. However, due to the limited footprint, flooding of the underground infrastructure is not expected to have a significant impact on the overall permafrost thawing process under the flooded pit.

6.4.5 Uncertainties

There are no currently identified uncertainties associated with the closing of the surface openings to the underground or those associated with the process of flooding the underground workings. However, resulting water quality of the flooded mine remains uncertain, as the water and rock interactions in the underground are difficult to define.

6.4.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Monitoring activities are outlined in the CPCMP (Appendix 6-A). During the closure phase, but after the underground has been flooded, and access restricted, monitoring to confirm the success of closure will be conducted. Reclaimed areas (especially at and around the sealed openings to surface) will be visually assessed. The surface of the post-closure landscape will be assessed for subsidence (e.g., underground failure). A 50 m radius will be established on the surface above any underground workings, and this area will be marked to monitor subsidence until underground flooding efforts are complete. Thermistors will be installed to monitor freeze-back in permafrost areas and to confirm that the ground thermal regime returns to conditions predicted in the design. If necessary, areas of subsidence, will be backfilled.

Groundwater levels in the underground workings will be monitored at the start of the closure period to confirm underground flooding is proceeding as expected, with frequency reduced as stability becomes more certain (e.g., adaptive reduction). Instrumentation will be placed in one or more vent raises as mining operation is completed to facilitate groundwater monitoring.

6.4.7 Contingencies

There are no activities proposed as contingencies for the closure of the underground mine workings.

6.5 Waste Rock Storage Facilities

The waste rock and overburden storage facilities are described in Section 2.5.3. Please refer to SECTION 10 for timing of major closure activities associated with dikes and saddle dams of the Meadowbank Complex.

6.5.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions at Meadowbank are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). The pre-disturbance site conditions are also summarized in SECTION 3 of this plan. Section 2.5.3 provides detailed description of the WRSFs on-site that are currently in operation.

Meadowbank

At the Meadowbank Mine, the PAG/ML material in the Portage WRSF has been entirely encapsulated in NPAG/NML material through progressive reclamation as part of a thermal cover design, except on the top bench. NPAG/NML rockfill is stored in a stockpile adjacent to the Portage WRSF area and in other stockpiles around site. This stored NPAG/NML material will be used for closure construction requirements, including the final closure of the remaining bench of PAG/ML material at the Portage WRSF. The Vault WRSF contains a majority NPAG/NML material and is not expected to require a cover, thus will be left in its current configuration.

The Portage NAG/NML stockpile is expected to be the primary source of material for the TSF cover construction. Other NAG stockpile may also be used for the construction.

Whale Tail

Two WRSFs are currently in operation: the Whale Tail WRSF, located northwest of the Whale Tail Pit, and the IVR WRSF, located east of the IVR Pit. Waste rock will be trucked to both facilities until the end of operations and distributed according to the operations schedule. Progressive reclamation will take place during operation with the placement of NPAG/NML material cover over the PAG/ML material.

6.5.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex WRSFs are provided in Table 6.5-1.

Table 6.5-1: Closure Objectives and Criteria for Waste Rock Storage Facilities of the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions	Criteria/Objective Met
Chemical Stability	**Air and Water**				
	WRSF1	Water quality is safe for humans, wildlife, and aquatic life	Water quality meets modelled predictions and relevant criteria, and is protective of human and ecological health	**WRSF1-Action 1**: design and construct cover to limit potential for ARD/ML **WRSF1-Action 2**: install and maintain geotechnical monitoring instrumentation consistent with the CPCMP **WRSF1-Action 3**: monitor contact water and runoff water quality in accordance with the CPCMP	**WRSF1 – Action 1** ☐ **WRSF1 – Action 2** ☐ **WRSF1 – Action 3** ☐
Physical Stability	WRSF2	WRSFs are physically and geotechnically stable and do not pose a risk to human or environmental receptors	WRSFs are designed and recontoured (if required) to the extent practicable to protect long-term geotechnical stability	**WRSF2-Action 1**: design and construct landform features so that they are compatible with the surrounding landscape **WRSF2-Action 2**: design WRSFs to account for seismic, climate change, and permafrost considerations **WRSF3-Action 3**: monitor geotechnical stability in accordance with the CPCPM	**WRSF2 – Action 1** ☐ **WRSF2 – Action 2** ☐ **WRSF2 – Action 3** ☐

WRSFs = Waste Rock Storage Facilities; CPCMP = Closure and Post-Closure Monitoring Plan; ARD/ML = Acid Rock Drainage/Metal Leaching.

6.5.3 Closure Activities

6.5.3.1 Geotechnical Stability

The WRSFs at the Meadowbank and Whale Tail Mine have been designed and constructed for long-term stability. As long-term stability is the primary concern for closure, WRSFs will not be recontoured (unless explicitly necessary), given that the ultimate slopes and crest elevations are comparable to the hills of surrounding areas, and overall, align with the intended end land use. Although the rock placed in the Portage and Vault WRSFs is expected to freeze, the design, in terms of permanent physical stability, is not dependent on freezing. No additional earthworks at the crest or base of the embankments or revegetation of the slopes are required for long-term stability or to meet land use objectives.

6.5.3.2 Thermal Cover

Meadowbank

At the Meadowbank Mine, much of the closure and reclamation of the Portage WRSF has already been completed as part of progressive reclamation (Figure 2.5-4). The PAG/ML material of the Portage WRSF is covered by a 4.0 m layer of NPAG/NML rock for geochemical stability and to keep the PAG/ML waste rock frozen (see **Figure 6.5-1**). The cover also controls the migration of runoff to PAG/ML materials. The depth of cover was selected based on thermal modelling and instrumentation to assess the probable thickness of the active layer at closure and considers climate change. The NPAG/NML cover has not been compacted during construction, but this is considered in the thermal model and in the thickness of the cover (Agnico Eagle 2024b). To date, approximately 90% of the NPAG/NML cover has been placed over the PAG/ML Portage WRSF area; the remainder will be covered during closure.

In 2022, Agnico Eagle completed a study to confirm the design of the Portage WRSF landform and the cover performance. The scope of this study included: reviewing the closure concept, updating the concept design based on information gathered through operation, updating the landform water balance and updating the monitoring plan. This report can be found in Appendix 21 of the 2022 Annual Report and in Appendix 6-H of this ICRP. The conclusions from this study reinforce the confidence in the current design of the Portage WRSF landform. The report covers available monitoring data and models and discusses the predicted behaviour of the landform while explaining the mechanisms that will ensure that the closure objectives are met. An updated adaptive monitoring plan and additional tools to measure the performance of the current cover and inform the final design of the landform that will be submitted as part of the FCRP are also described in this report.

The Portage WRSF is instrumented for thermal monitoring with thermistors installed in the PAG/ML area and the NPAG/NML cover. Thermal monitoring will continue in the WRSFs using the current thermistors as well as additional thermistors installed in future years if required. Thermal monitoring results are, and will continue to be used, to monitor the WRSFs temperature as freezing progresses (Agnico Eagle 2024d). These thermistors were used in Okane's review on the performance and thermal modelling of Portage WRSF Closure Landform Design. The Okane report (Okane 2023) indicates that the 4.0 m thermal cover of NPAG/NML material will reduce the risk to water quality in the receiving environment, associated with ARD/ML generated from the PAG/ML waste rock, by promoting frozen conditions within the WRSF. Numerical modelling was initiated to estimate the depth of the active layer (i.e., layer of materials undergoing freeze-thaw cycles from atmospheric forcing) within the Portage WRSF. The modelling indicates the PAG/ML waste rock will remain frozen, and oxidation rates greatly decreased, for the next 150 years under agreed upon climate change scenarios (Agnico Eagle 2024d).

While thaw below the cover system is expected as per the updated thermal modelling, the likelihood of a 4.0 m cover system thickness being insufficient, leading to unacceptable water quality in the receiving environment is expected to remain low. This is due to several factors:

- Low volumetric water content in the thawed waste rock, resulting in low likelihood of mobilization of seepage from waste rock;
- Lower pyrite oxidation rates within the thawed waste rock compared to the cover system material (as a result of consistent near-freezing temperatures within the waste rock) resulting in low to moderate likelihood of production of ARD/ML products;
- Limited volume of PAG/ML waste rock in the estimated thawed waste rock zone, resulting in low likelihood of production of ARD/ML products; and
- Limited interaction between infiltrating water and PAG/ML waste rock due to the development of ice lenses in the upper profile of the RSF and frozen conditions at the base of the RSF.

Finally, for Vault WRSF, geochemical predictions indicate that a capping layer will not be required at the Vault WRSF as most waste rock produced is NPAG/NML. To date, through the ARD testing program, it has been determined that approximately 85.5% of the waste rock generated is NPAG/NML. As a precaution, PAG/ML waste rock was placed in the middle of the Vault WRSF and this material will be covered with at least 4m of NPAG/NML to minimize any generation of ARD/ML and to promote freeze back (Agnico Eagle 2024b).

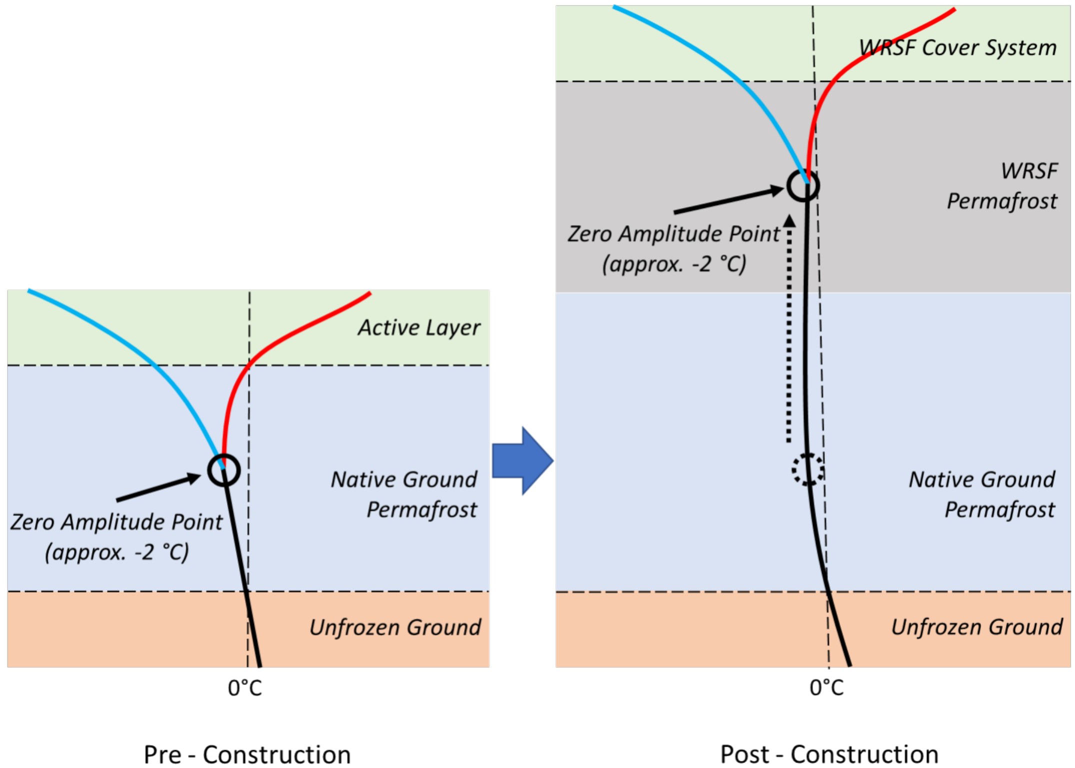


Figure 6.5-1: Visual Example of the Thermal Cover Closure Concept (OKane 2023)

Whale Tail

At the Whale Tail Mine, WRSFs are managed similarly to those at the Meadowbank Mine. WRSFs are constructed in lifts, water is controlled until quality criteria are met, and progressive reclamation is conducted to prepare the WRSFs for closure. As with the Portage WRSF, re-grading of the side slopes will not be required at closure apart from contouring the top surface to create positive drainage and to prevent ponding. To observe the freezeback of the Whale Tail WRSF and IVR WRSF and monitor the temperature within the facilities, a series of thermistors will be installed at strategic locations. At closure, additional vertical thermistors may be installed on top of the pile (Agnico Eagle 2024c). As with the PAG/ML cell of the Portage WRSF, a thermal cover will be progressively placed on the surface. Based on the cover thermal model results, the Whale Tail WRSF and the IVR WRSF will be covered with a 4.7 m thick closure cover that will be constructed with NPAG/NML waste rock (Okane 2018b). The intent of the cover is to contain the yearly active layer inside the thickness of the cover, and to maintain a temperature below 0°C for the underlying rock (e.g., **Figure 6.5-1**). Additionally, the cover aims to limit acid generating reactions and migration of contaminants. Similarly to Portage WRSF, the likelihood of a 4.7 m cover system being insufficient is very low due to the factors listed previously for Meadowbank's WRSFs (e.g., low volumetric water content, low pyrite content, etc.).

Thermistors will be installed to verify the predicted performance of the cover. The contact water management system for the WRSFs will be maintained during the closure period. Finally, as the Whale Tail and IVR WRSFs are not as developed as that of the Portage WRSF, Agnico Eagle has an *Adaptive Management Plan* (Agnico Eagle 2021b; Appendix M). The *Adaptive Management Plan* contains a TARP, which provides guidance on varying levels of management responses based on thermal monitoring criteria. Refer to Appendix 6-I for more information.

6.5.3.3 Water Management

The runoff water collected from the Portage, Vault, Whale Tail, and IVR WRSFs will be monitored until monitoring demonstrates that water quality meets the Water Licence conditions. Following this, the WRSF contact water management systems will be decommissioned.

6.5.3.4 Ore Stockpile

Ore Stockpiles will be emptied in at the onset of closure. In closure, if metal contamination of ore pads is measured, the contaminated pad section will be covered with NPAG/NML waste rock (Agnico Eagle 2024c).

6.5.3.5 NPAG/NML Stockpile

At Meadowbank, NPAG/NML rockfill is stored in a stockpile adjacent to the Portage WRSF area and in other stockpiles around site. At Whale Tail, the NPAG/NML rockfill is also placed in a separate stockpile. It is expected that stored NPAG/NML material will be used for closure construction requirements, and that sufficient NPAG/NML material will be available for all closure construction. Remaining NPAG/NML stockpiles will stay primarily in their current configuration unless they need to be recontoured for physical and chemical stability.

6.5.4 Predicted Residual Effects

The WRSFs will be permanent features on the post-closure landscape. Pre-disturbance vegetation communities within the WRSF footprints will be permanently lost, but it is expected that some of the native community will naturally revegetate the WRSFs cover surface over time. No significant adverse impact on traditional and non-traditional use, or impact on wildlife use is anticipated with the closure of the WRSFs. Runoff from the WRSFs is ultimately expected to meet discharge criteria, but will be managed or treated until these objectives can be met.

6.5.5 Uncertainties

The main uncertainty related to WRSF closure is the cover thickness required for adequate aggradation of permafrost, insulation from thaw, effective long-term encapsulation of waste rock and the risk to water quality in the receiving environment. Given Agnico Eagle's experience at Meadowbank Mine, thermal covers for Whale Tail Mine WRSFs are expected to perform in a similar manner. However, the thermal profile at closure will depend on the actual waste placement plan and schedule, initial waste temperatures when placed, and thermal conditions of the original ground before the waste materials are placed. For this reason, thermistors and geotechnical instrumentation has been and will be installed in the WRSFs to monitor the rate of freezeback, the progress of permafrost development in the facilities and other parameters during the operations stage to support modelling. Mitigations (e.g., water treatment) will be required should water quality issues be observed.

6.5.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Monitoring activities are outlined in the CPCMP (Appendix 6-A). The post-closure performance of Meadowbank Complex WRSFs will be assessed through the following methods:

- Inspections by a geotechnical engineer to assess stability and performance of the WRSFs.
- Monitoring of ground conditions in the WRSF, to confirm permafrost establishment and progression.
- Monitoring of thermistor and other geotechnical instrumentation to determine thermal conditions within the WRSFs.

6.5.7 Contingencies

As geochemistry/water quality issues are the main concern for WRSFs within the Meadowbank Complex, the primary contingency is to continue to monitor and treat contact water, until it is suitable for discharge. If thermal covers are not performing as desired, additional NPAG/NML material may be placed to increase the cover thickness, further isolating PAG/ML material from water and oxygen.

6.6 Tailings Storage Facility

At this time, Agnico Eagle has developed a preferred final closure plan for a major facility, the Meadowbank TSF (also known as the North Cell and South Cell TSF).

To execute on this plan as part of progressive reclamation, Agnico Eagle requires certainty that the NWB has approved the closure strategy for the TSF to allow for execution of closure construction of the TSF in 2026. Following completion of closure construction of the TSF (scheduled to be completed by 2028), Agnico Eagle will request a reduction of the security. This will be aligned with the amendment of the Licence as per Part C of the Type A Water Licence to account for the corresponding reduction in reclamation liability (which will be established in advance of completion of the work). Agnico Eagle expects prompt return of the portion of the reclamation security that corresponds to the reduction of liability for the TSF once work is complete.

To limit confusion, the closure strategy for the TSF is reflected in this Appendix 6-J of the ICRP. This appendix states that the closure strategy for this facility should be considered final as approved by the NWB and that the appendix will be transitioned over to the FCRP once Agnico Eagle is ready to submit the overall FCRP for the Meadowbank Complex.

6.6.1 Tailings Cover North and South Cell

Refer to Appendix 6-J for the final closure design for the North and South Cell TSF.

6.6.2 In-pit Tailings Deposition

Refer to Section 6.2 for details on in-pit tailings deposition and related closure.

6.7 Water Management Facilities

Water Management Facilities are described in Section 2.5.7. Please refer to SECTION 10 for timing of major closure activities associated with water management facilities of the Meadowbank Complex.

6.7.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a; b). The pre-disturbance site conditions are summarized in SECTION 3. Section 2.5.7 describes current conditions of water management facilities. Unless otherwise stated, all water management facilities will be decommissioned when not deemed required during operation or closure.

All open pits will be flooded at the end of mining operations or during closure. Detailed information on filling rates and volumes of pits and waterbodies associated with the Meadowbank Complex can be found in Lorax (2024a; b) for the Meadowbank Mine and Whale Tail Mine (Appendix 6-E).

6.7.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex's water management facilities are covered in Table 4.3-1 (i.e., Site Wide Closure Criteria).

6.7.3 Closure and Post-Closure Activities

6.7.3.1 Dewatering Systems

At the end of closure, remaining pipes, pumps, and other infrastructure will be removed and disposed in the on-site landfill or in the Whale Tail underground if they are not required to support post-closure.

6.7.3.2 Freshwater Intake, Potable Water Treatment Systems, Wastewater Treatment Systems, and Flooding Systems

Once site-wide water quality meets objectives and monitoring outlined in the CPCMP, fewer personnel and monitoring efforts will be required as the freshwater intakes, the freshwater pipelines, potable WTPs, STPs, and the wastewater systems will be decommissioned. Freshwater infrastructure will ultimately be removed once no freshwater is required for camp use in closure at Whale Tail and Meadowbank. Structural components (i.e., pumps, tanks, and piping) will be decontaminated and will be shipped off-site (if salvageable), or disposed in the on-site landfill or in the Whale Tail underground.

The effluent pipelines and diffusers will be pulled out of the lakes, cut up into pieces and disposed of in the on-site landfill or in the Whale Tail underground, along with most water management infrastructure. Any slabs on grade underneath infrastructure will be left in place and perforated. The areas will be re-graded to promote natural drainage and natural revegetation. Sludge from within the STP will be buried in the TSF at Meadowbank or in WRSFs at Whale Tail as during operations.

Like the dewatering systems, the pits flooding system equipment (i.e., pumps, syphons, and piping) will be removed once pit flooding is complete. All equipment will be dismantled, and either be shipped from the mine site or disposed of in the on-site landfill, if still operational. If necessary, the areas will be recontoured to promote natural drainage and natural revegetation. The diffusers located in receiving lakes will be removed at the end of closure (if not required in post-closure).

6.7.3.3 Stormwater Management Pond (Tear Drop Lake)

The Stormwater Management Pond receives treated water from the STP and other wastewater. The water is transferred to the Portage Pit as part of flooding. During closure, the pipelines and related components will be decontaminated and disposed of in the on-site landfill, or Whale Tail underground, when the pond is no longer required for wastewater management.

Water from the Storm Water Management Pond ultimately reports to Portage Pit A; this process will continue in closure. This contact water is expected to have minimal impact on overall water quality within Pit A, and will ultimately be treated as part of the wider water treatment strategy. Water quality of the

Storm Water Management Pond is expected to improve over time as relatively clean run-off (during closure) and clean run-off (during post-closure) fill the pond.

6.7.3.4 Culverts

Culverts will be maintained as required in closure until released to the environment without further management and without erosion. Culverts related to the AWAR, Vault Road, and Whale Tail Haul Road will be dismantled and disposed of in the on-site landfill, or the Whale Tail underground when no longer required (e.g., decommissioning of the roads). Reclaimed areas will be re-graded to promote natural drainage and natural revegetation.

6.7.3.5 Water Diversion Ditches

Meadowbank

The diversion ditch diverts non-contact water away from the TSF during operations. The water diversion ditch system located in the northern periphery of the North Cell TSF and Portage WRSF will be integrated in the TSF cover system design.

Whale Tail

At the Whale Tail Mine, similar ditches are in place. The IVR diversion channels will be maintained as required in closure until site water quality monitoring results indicate that the water can be released directly to the environment without further management. The channels will be recontoured according to site-specific conditions to minimize erosion from surface runoff.

No closure measures are necessary for the freshwater bypass channel (South Whale Tail Channel) from Whale Tail Lake (South Basin) to Kangislulik Lake because its invert elevation will be above the final water level in the lake.

6.7.3.6 Tailings Pipelines

The tailings slurry pipelines are located on the peripheral structures of the Meadowbank TSF, around the pits (during in-pit deposition), and the mill located southwest from the TSF. The tailings pipelines will be decommissioned following completion of ore processing at the mill in accordance with International Cyanide Management Code requirements (ICMI 2021). The tailings pumps (located in the mill), booster pump (located on the Stormwater Dike), and associated tailings pipelines will be dismantled, decontaminated, and disposed of in the on-site landfill, or report to the Whale Tail underground at closure.

6.7.3.7 Contact Water Collection Systems

Contact water collection systems will continue during operations, and when required in closure, and post-closure phases. Channels will either remain in place to convey fresh water or be reclaimed to blend into the post-closure landscape. When they are no longer required, water management infrastructure (e.g., ditches) will be recontoured according to site-specific conditions to minimize erosion from surface runoff.

Meadowbank

The main contact water collection systems at Meadowbank are the Central Dike contact water collection system, the East Dike contact water collection system, the Mill contact water collection system, and the WRSF contact water (ST-16) collection system. When contact water has resorbed or when water quality is acceptable for release to the environment, these systems will be removed. Pipelines and pumps will be decommissioned and disposed of in the on-site landfill. The sumps will be backfilled where required and the landscape will be recontoured to allow for natural drainage where possible.

Whale Tail

At Whale Tail, the IVR and WT WRSF ponds, GSP-1, and IVR attenuation pond (formerly Lake A53), will be emptied and pond bottom sediment will be characterized. If required, mitigations will be implemented to manage sediment, should it exceed criteria. Following this, these water management features will be reflooded. The contact water collection system located downstream of Whale Tail Dike will be decommissioned in closure when contact water management is no longer required.

6.7.3.8 Sill

A sill will be constructed in the Kangislulik Lake, upstream of the Mammoth Dike, to support the increase the water level in Whale Tail Lake by 1 m to 153.5 masl (5153.5 mRL), as part of the *Fish Habitat Offsetting Plan* (Agnico Eagle 2020). This sill is a permanent feature and will remain in post-closure.

6.7.4 Predicted Residual Effects

No significant residual effects have been identified for closure of the water management facilities, aside from changes to terrain caused by the construction and subsequent reclamation (excavation, re-grading) of the facilities.

6.7.5 Uncertainties

Surface water quality predictions provide an estimate of water quality under post-closure conditions. As such, water quality modelling will continue to be updated as the Meadowbank Complex progresses towards closure and will inform post-closure water management strategies.

6.7.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

The overall post-closure monitoring and maintenance program and reporting for the Meadowbank Mine are as per the CPCMP (Appendix 6-A).

Water management infrastructure will be decommissioned at various times in the closure and post-closure phases depending on their function and location. During closure, the frequency of monitoring will be as specified by the Meadowbank and Whale Tail Water Licenses and will focus on the physical state and performance of structures and components. Once the water management facilities are no longer needed, they will be decommissioned, natural drainage patterns will be re-established as much as possible, and monitoring is expected to decrease. Post-closure monitoring will involve annual inspections of permanent diversions as well as general site grading and establishment of proper/natural drainage patterns.

Receiving waterbodies will be monitored as outlined in the Meadowbank Mine and Whale Tail Mine Water Licenses and the CREMP (Azimuth 2022). A detailed plan will be developed prior to closure, and will provide locations, frequencies, and parameters that are to be monitored.

6.7.7 Contingencies

The closure plan currently incorporates a WTP as a contingency measure should water in the flooded pits at Meadowbank Complex be unsuitable for release to the environment. Until water quality meets discharge criteria as per the Water Licence conditions, the water management for the site will remain a closed system (i.e., no discharge to the receiving environment).

6.8 Mine Infrastructure

6.8.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions of Meadowbank Mine infrastructure is based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). Pre-disturbance conditions of Whale Tail Mine are based on baseline data collection programs carried out since 2013. The pre-disturbance conditions are also summarized in SECTION 3 for both components of the Meadowbank Complex. Similarly, mine infrastructure components present at the Meadowbank Mine are described in Section 2.5.12, with dimensions listed in Table 2.5-29; and in Section 2.5.12 with the dimensions listed in Table 2.5-30 for Whale Tail Mine. Please refer to SECTION 10 for timing of major closure activities associated with mine infrastructure at the Meadowbank Complex.

By the end of operations, the expected area of disturbance associated with the on-site and off-site facilities including the mine infrastructure is approximately 635 ha. The facilities will be dismantled and reclaimed following best practices put in place during operations and to minimize long-term disturbance. Alternatively, the facilities could also be transferred to the local community, should they express interest.

6.8.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex's mine infrastructure are covered in Table 4.3-1 (i.e., Site Wide Closure Criteria).

6.8.3 Closure Activities

6.8.3.1 Infrastructure and Building Decommissioning

Due to the logistical complexity the deconstruction and restoration of Whale Tail and Meadowbank will occur over multiple years, as outlined in the following steps:

- **Step 1:** Mobilization of specialized equipment, cleaning laydowns, and setting up working and sorting surfaces.

- **Step 2:** Mill operations will conclude and will be followed by deconstruction of the Whale Tail Mine and some minor infrastructure decommissioning at Meadowbank Mine.
- **Step 3:** Continuation of the deconstruction activities of Meadowbank Mine infrastructure and any contouring the landform (if necessary) of certain areas of the Whale Tail Mine and Meadowbank Mine.
- **Step 4:** Completion of all ongoing decommissioning activities and the demobilization of equipment and contractors at the end of the barge season.

The Meadowbank Mine crushing circuit will be demolished. Starting from the primary crusher, transfer tower, secondary crusher, pebble crusher and the HPGR. This also included all conveyor galleries and the geodesic dome. Site services will continue to maintain the halted mill and underground production equipment until decommissioned and removed from site. Decommissioning of the mill will require emptying of tanks, purging the process piping and chemical lines, emptying the glycol network, and emptying the various fuel, oil, and grease tanks. All structural elements and fixed equipment will be cleaned with water to remove and recover as much as possible all the fine asbestos dust spread out across the mill. All pieces of equipment at the Meadowbank Complex containing electronics (e-waste) will be dismantled and shipped south for disposal or resale, as existing landfill permits do not allow for their disposal on-site. As outlined in Appendix 6-G, any above grade concrete structures will be demolished and the rubble will be disposed of in the landfill, any slabs on grade will be punctured and then left in place and covered with non potentially acid generating/non-metal leaching waste rock if required, and any subgrade foundations will be left in place. The Meadowbank airstrip will be decommissioned last. After this, all equipment and crew will have to transit from Baker Lake community to Meadowbank Mine.

Baker Lake decommissioning is anticipated in 2030. Eight 10-million-liter fuel tanks and twenty 50,000-liter JET-A tanks are currently installed near the community of Baker Lake. In addition to these tanks, there are interconnection piping and pumping stations for loading and unloading. All the JET-A tanks are scheduled to be dismantled during the final demolition, as well as seven out of eight fuel tanks. A tank, a loading station and associated piping must remain in place. This tank will provide diesel for the operation of the WTP and surrounding auxiliary infrastructure. The last tank and all infrastructure surrounding, including the containment, will be dismantled at the final closure when all the environmental requirements have been concluded.

In general, demolition waste that cannot be reused, recycled, or provided to local interests will be disposed of in the on-site landfill or report to the Whale Tail underground. Sea-cans, for instance, will be sold to the local community as there is interest, but due to the number of sea-cans available, and shipping economics, the majority will be scrapped and disposed of in the on-site landfill or report to the Whale Tail underground.

The procedures for decontamination and management of demolition waste will continue to be developed on site during the remaining part of operations. Hazardous material generated during demolition will be managed in closure following the same practices as during operations.

Finally, Health, Safety, and Environment coordinators, and Environmental coordinators, and Equipment and Infrastructure personnel are expected to be present throughout the demolition and decommissioning stage.

6.8.3.2 Equipment Removal

Equipment used for closure activities and long-term maintenance (e.g., trucks, backhoes) will be removed from the Meadowbank Complex once they are no longer required. Most of the mobile equipment will be either sent for salvage and resale, disposed in the on-site landfill. Equipment from underground operations considered non-salvageable will be left underground after removal of all hazardous materials and fluids. A small subset of equipment will be retained on-site for a portion of the post-closure stage.

Fuel not used during closure and reclamation activities will be sold, returned to suppliers, or burned on-site. If there is no community interest in the empty fuel tanks, they will be cleaned (as per Appendix 6-G), cut into strips and the steel sold as scrap (if viable), deposited into the landfill, or report to the Whale Tail underground.

The procedures for decontamination of equipment before disposal will continue to be developed on site during the remaining part of operations. Hazardous material generated during demolition will be managed in closure following the same practices as during operations.

6.8.3.3 Surface Stabilization and Recontouring

Disturbed site areas will be re-graded to suit the surrounding topography. In areas where the original ground surface was lowered for site grading or structural requirements, the slopes will be stabilized and contoured. General drainage direction will be directed towards the open pits. Cover materials may be required for erosion and dust control. It is anticipated that a succession of indigenous plant species will naturally revegetate the surface over time.

6.8.4 Predicted Residual Effects

No significant residual effects have been identified, apart from the initial removal of plant communities, and the potential changes to terrain caused by the construction and subsequent reclamation.

6.8.5 Uncertainties

No major uncertainties are related to the closure of Meadowbank Complex infrastructure.

6.8.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

The overall post-closure monitoring and maintenance program are discussed in Appendix 6-A along with the reporting requirements. All buildings and equipment left on-site during closure will be maintained until no longer required, at which time they will be removed from the site or demolished and disposed in the on-site landfill. The post-closure and monitoring program will entail periodic visual inspections to assess reclaimed areas.

6.8.7 Contingencies

There are no activities proposed as contingencies for the closure of the mine infrastructures.

6.9 Waste Management Facilities

6.9.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). The pre-disturbance site conditions are summarized in SECTION 3. Waste Management facilities are described in Section 2.5.8 in their current and predicted final configurations. Please refer to SECTION 10 for timing of major closure activities associated with waste management facilities at the Meadowbank Complex.

Meadowbank Complex landfills and landfarms are currently in use, and will be until post-closure. Hazardous waste management areas will also operate until the end of closure, where, along with waste management facilities, they will be reclaimed following best practices put in place during operation to minimize long-term disturbance. Currently, there are three landfills anticipated to be active during closure. **Table 6.9-1** provides their names, locations, and volumes used to date. Capacity of the landfill for the closure will be reviewed based on volumes used in operations and on final WRSF design. Section 6.9.3 provides the closure designs for these landfills.

Table 6.9-1: Closure Landfill Details for the Meadowbank Complex

Landfill	Location	Volume Used (m^3)	Volume Available for Closure (m^3) *
Landfill 11	Base of Portage WRSF	7,440 m^3	251,461
Portage WRSF Landfill	Top of Portage WRSF	0 m^3 – to be filled during closure	45,250
Whale Tail WRSF landfill	Top of Whale Tail WRSF	8,228 m^3 used on bench development; 0 m^3 used for closure	188,620
TOTAL:			**485,331**

*= an additional 306,476 m^3 is available as a contingency at the top of the IVR WRSF and the Vault WRSF

6.9.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex waste management facilities are covered in Table 4.3-1 (i.e., Site Wide Closure Criteria).

6.9.3 Closure Activities

6.9.3.1 Meadowbank Landfill

Landfill #11 is located at the base of the south side of the Portage WRSF (Figure 2.5-28; **Figure 6.9-1**). Landfill 11 is used for waste placement during operation but has been designed to provide space for landfilling at closure. An estimated 251,461 m^2 of approved volume of Landfill #11 is available for closure

(Agnico Eagle 2023c). Landfill #11 will serve as the solid waste disposal facility for the next two years of mine life. Landfill #11 has evolved in sub-landfills that are built and buried according to the evolution of the Portage WRSF. The sub landfills have a rectangular shape with the length perpendicular to the prevailing wind direction so that much of the waste is protected from wind by their respective rockfill berms.

Landfill #2 will be developed on top of the Portage WRSF at closure if additional space for waste disposal is required. Landfill #2 is currently estimated to be a 4 m deep depression in the top of the waste rock pile at the Portage WRSF. The area to receive waste will be bounded on the northwest side by a 2 m high rockfill berm. The rockfill berm will act as a wind shield to reduce the amounts of wind-blown debris, while providing material for intermediate cover of the landfill. Waste will be placed to a maximum thickness of 4 m, after which it will be covered with a minimum of 0.3 m thickness of rock fill. A final cover of 4 m of NPAG/NML waste rock will then be placed over the waste. The as-built area of the landfill #2 is estimated at 11,312 m^2 and the estimated 45,250 m^3 of approved volume is available for closure (Agnico Eagle 2023c). Drainage from the landfill is largely expected to freeze within the Portage WRSF, with little to no contact water reporting to the water collection infrastructure. Only approved waste will be placed in the Meadowbank landfill during progressive closure and at closure as presented in Appendix 6-G.

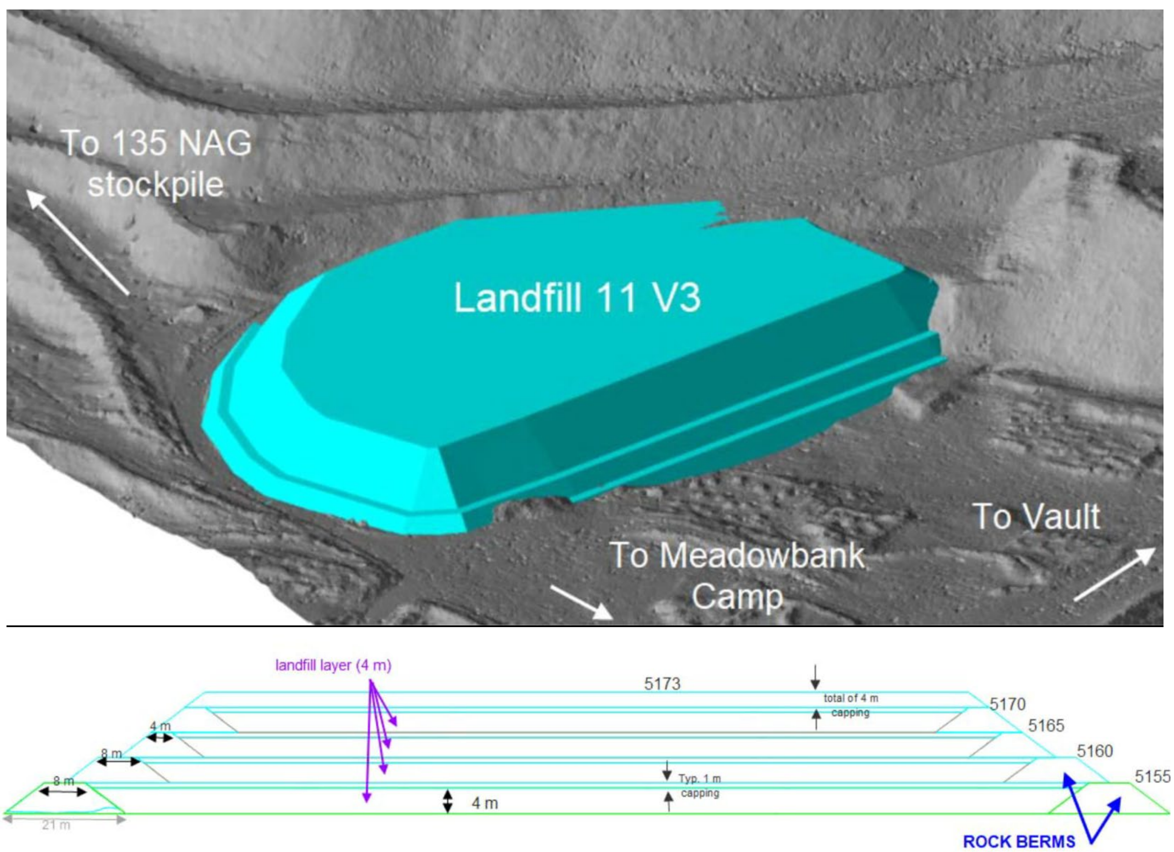


Figure 6.9-1: Landfill #11 at closure (Agnico Eagle 2023c)

6.9.3.2 Whale Tail Landfill

The Whale Tail Landfill is located at the top of the Whale Tail WRSF and began receiving waste in 2023. The slopes of the sub landfills are covered with an advancing waste rock layer during operations such that the sub landfills are covered by a minimum 0.3 to 1 m thickness of waste rock by the end of operations for each sub-landfill, prior to the final NPAG/NML cover. As the Whale Tail Mine progresses to closure, the location of the landfill will change for every 20 m increase in elevation to the WRSF, thus always allowing access to the landfill **Figure 6.9-2:**. At closure, the landfill will become encapsulated within the Whale Tail WRSF by surrounding and covering the facility with one layer of NPAG/NML waste rock (same thickness than surrounding cover for Whale Tail WRSF) and should thereafter be stable and protected by the NPAG/NML thermal cover. Because of the WRSF thermal cover, leachate from the landfill is anticipated to be dilute due to controls on materials allowed in the landfill. Moreover, internal drainage from the landfill as infiltrating water becomes frozen within the Whale Tail WRSF, with little to no contact water reporting to the water collection infrastructure. Only approved waste will be placed in the Whale Tail landfill during progressive closure and at closure as presented in Appendix 6-G.

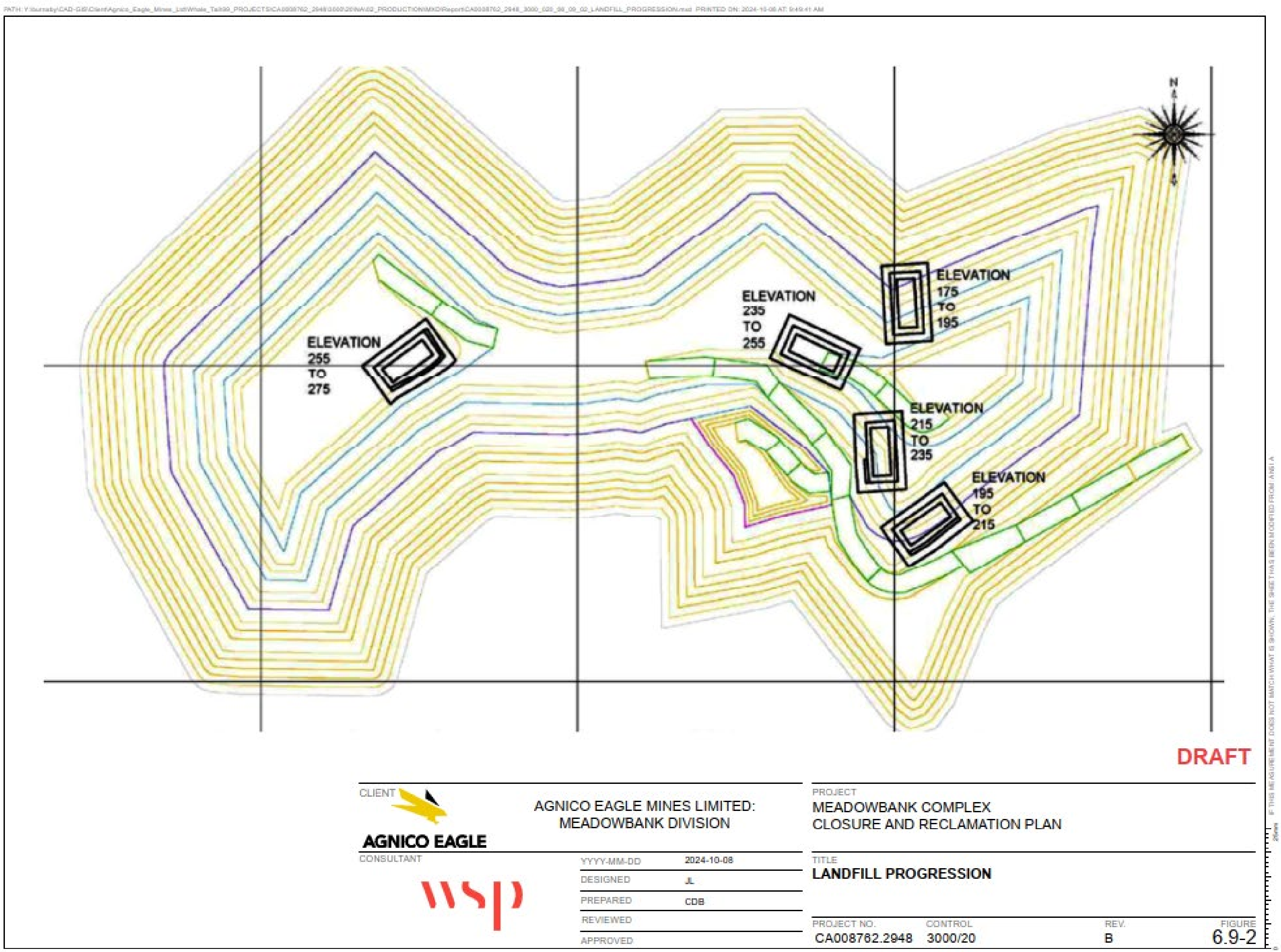


Figure 6.9-2: Whale Tail Landfill at Closure

6.9.3.3 Incinerator

The incinerator at Meadowbank Mine was dismantled in 2023 and is not expected to be operational for the remaining LOM, and thus no ash monitoring will be required. The ash will be disposed at the landfill as per the Meadowbank Incinerator Waste Management Plan (Agnico Eagle 2022c). A composter has replaced the incinerator. Composted materials will report to the Meadowbank landfill in closure as per during operations, and the composter will be dismantled, and treated as other non-hazardous waste.

6.9.3.4 Hazardous Materials

Hazardous materials will be managed in operations such that minimal quantities remain on-site at closure. Any remaining hazardous materials produced during decommissioning and demolition activities that cannot be used during closure will be transported to licensed disposal facilities in the south. Used oil will be incinerated on-site during operations and closure (if necessary). Any remaining cyanide reagents will be packaged and transported to licenced facilities in the south or other Agnico Eagle divisions in accordance with the International Cyanide Management Code (ICMI 2021). Batteries and electronics (e-waste) will be shipped south for recycling in appropriate facilities. Little to no accumulation of hazardous wastes during mine operations or closure is expected at the Meadowbank Complex.

6.9.3.5 Landfarms and Contaminated Soil

The Meadowbank and Whale Tail landfarm facilities will be decommissioned at mine closure. Prior to abandonment/closure of the landfarm, the berm and base will be sampled on a 10 m grid, including at a depth of 1 m in representative locations, to determine if these soils are free from petroleum hydrocarbons contamination. Results of this analysis will be compared to Government of Nunavut criteria or the site-specific soil quality objectives. The remediated material and liner material (at Whale Tail) from the landfarm will be excavated and placed in the TSF, underground or in the Whale Tail WRSF landfill area below the final cover. The berms and base of the landfarms will be sampled to determine if the underlying material is free from contamination. If the soils meet the required criteria, the areas will then be re-graded to provide proper surface drainage.

The contaminated soil will be placed in the Whale Tail underground during progressive closure and at closure, or an alternative location currently being investigated.

6.9.4 Predicted Residual Effects

No significant residual effects have been identified for closure of the waste management facilities, outside of the immediate loss of plant communities associated with the development of these facilities. As with the rest of the Meadowbank Complex, vegetation recovery of reclaimed waste management facilities is expected to be slow, given the climatic and edaphic conditions of the Meadowbank Complex footprint.

6.9.5 Uncertainties

No uncertainties have been identified for this component.

6.9.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

The overall post-closure monitoring and maintenance program and reporting for the Meadowbank Complex is discussed in Appendix 6-A.

6.9.7 Contingencies

If the NAG/NML covers of the Meadowbank Complex landfills deform to an unacceptable degree, they will be regraded. Failure of landfill covers is not expected, as their covers will align with their associated WRSF covers, and, like the WRSFs, are expected to freeze. The contaminated material placed within the TSF is expected to freeze under the NPAG/NML cover, limiting the mobility of contaminants. Similarly, contaminated material placed underground in permafrost zones will also freeze. If contamination is identified during the closure site assessment for the waste management facilities, then the contamination will be excavated, treated on site or shipped off-site for disposal or treatment. Contact water from the reclaimed landfill or from the landfarm will be monitored, managed and treated if required.

6.10 Baker Lake Site Facilities

6.10.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions are based on baseline data collection programs presented in the Meadowbank FEIS (Cumberland 2005a). The pre-disturbance site conditions are also summarized in SECTION 3. Baker Lake Facilities in their current condition are described in Section 2.5.9. Please refer to SECTION 10 for timing of major closure activities associated with Baker Lake Site Facilities.

The Baker Lake facilities are currently in use and will be until the onset of post-closure, as material will be shipped to and from the Meadowbank Complex via the Baker Lake Site.

6.10.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex’s Baker Lake site facilities are provided in Table 6.10-1.

Table 6.10-1: Closure Objectives and Criteria for Baker Lake Marshalling Area of the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions	Criteria/Objective Met
Future Use	**Social**				
	BL1	Traditional uses can resume on the post-closure landscape	The post-closure landscape supports traditional uses	**BL1/2-Action 1**: design the post-closure landscape to support ecosystems that provide habitat for traditional use where possible **BL1/2-Action 2**: design and construct post-closure features so they are stable and compatible with the surrounding landscape and proper drainage	**BL1/2 – Action 1** ☐ **BL1/2 – Action 2** ☐
	BL2	Post-closure landscape features compatible with the surrounding landscape	Baker Lake Facility associated features have been designed and constructed considering regional post-closure topography		
Chemical Stability	**Infrastructure and Contaminants**				
	BL3	Infrastructure do not pose a risk to human or environmental receptors Hazardous wastes have been treated or removed and do not pose a risk to human or environmental receptors	Infrastructure not required for post-closure has been removed	**BL3-Action 1**: remove infrastructure not required for post-closure	**BL3 – Action 1** ☐
	BL4		Contaminated sites have been identified, assessed, and remediated	**BL4-Action 1**: conduct ESA in accordance with Canadian Standards Association (CSA) Criteria **BL4-Action 2**: evaluate decontamination criteria with Human Health and Ecological Risk associated with closure options	**BL4 – Action 1** ☐ **BL4 – Action 2** ☐
	BL5		Fuels, oils, and other hazardous material have been safely removed	**BL5-Action 1**: conduct a hazardous materials assessment prior to decommissioning or transportation off-site to an approved facility. **BL-5 Action 2**: remove and manage hazardous material from site as per operational practices	**BL5 – Action 1** ☐ **BL5 – Action 2** ☐
	Water				
	BL6	Water quality is safe for humans, wildlife, and aquatic life	Water quality meets modelled predictions and relevant criteria and is protective of human and ecological health	**BL6-Action 1**: monitor water quality in accordance with CPCMP	**BL6 – Action 1** ☐

BL=Baker Lake; ESA = Environmental Site Assessment; CPCMP = Closure and Post-Closure Monitoring Plan.

6.10.3 Closure Activities

6.10.3.1 Infrastructure and Equipment Removal

Once free of hazardous materials, the infrastructure of the Baker Lake Site Facilities will be offered to local interests. If communities are uninterested, buildings, infrastructure, including office trailers, and the barge landing, then these items will be dismantled and decontaminated and demolition waste will be either transported to the Meadowbank Mine landfill for disposal, or barged out of Baker Lake for disposal, recycling, or sold as scrap metal.

6.10.3.2 Hazardous Materials

Once closure efforts have decreased, and the Meadowbank Complex no longer has need for the Baker Lake Site Facilities, hazardous materials and chemicals that may be remaining in closure will be removed. The contaminated soil will be placed in the Whale Tail underground, or an alternative location currently being investigated. The contaminated soil will be sampled if required, and the results of the analysis will be compared to the results from ESA that has been done by WSP (WSP 2024c; WSP 2024d; WSP 2024e; WSP 2025).

6.10.3.3 Natural Drainage

Following removal of hazardous wastes and infrastructure, compacted areas including gravel pads and roadways will be decompacted via dozer or wing-tipped subsoiler. To promote surface drainage, areas will be profiled, and culverts will be removed from the roadways to re-establish natural drainage patterns.

6.10.4 Predicted Residual Effects

No significant residual effects have been identified, apart from the initial removal of plant communities, and the changes to terrain caused by the construction and subsequent reclamation of the facilities.

6.10.5 Uncertainties

The main uncertainty is related to the local interest for the Baker Lake facilities and associated equipment. This uncertainty will be addressed through future engagement with COIs.

6.10.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Appendix 6-A provides detailed information on closure and post-closure monitoring activities for all components of the Meadowbank Complex. Monitoring and maintenance associated with the Baker Lake Site Facilities includes:

- Periodic inspections to visually assess the reclaimed areas.
- Maintenance of buildings and equipment left on-site during closure.

6.10.7 Contingencies

There are no activities proposed as contingencies for the closure of the buildings and equipment at the Baker Lake Site.

6.11 Transportation Routes

6.11.1 Pre-disturbance, Existing, and Final Site Conditions

Pre-disturbance conditions are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). The pre-disturbance site conditions are also summarized in SECTION 3. The AWAR and the Whale Tail Haul Road in their current condition are described in Section 2.5.10. Please refer to SECTION 10 for timing of major closure activities associated transportation routes of the Meadowbank Complex.

There are multiple culverts and bridges necessary to cross the streams along the AWAR and the Whale Tail Haul Road. When no longer required for closure or post-closure monitoring, the AWAR and Whale Tail Haul Road will be reclaimed, and the natural drainage and terrain will be restored as much as possible. Upon local interest and regulatory approval, the AWAR and Whale Tail Haul Road could be transferred to the local community.

The haul roads within the open pits and between the open pits and underground portal and the ore pads will become redundant when mining ceases. The haul roads to the WRSFs at Whale Tail Mine will be maintained until the closure of the WRSFs is completed. The internal access roads, as needed, will be active until water quality meets discharge criteria during post-closure.

6.11.2 Closure Objectives and Criteria

The closure objectives and closure criteria for the transportation routes and quarries are listed in Table 6.11-1.

Table 6.11-1: Closure Objectives and Criteria for Transportation Route and Quarries Associated with the Meadowbank Complex

Closure Principle(s)	ID	Closure Objective	Closure Criteria	Actions	Criteria/Objective Met
Future Use Physical Stability	**Social**				
	TQ1	Traditional uses can resume on the post-closure landscape	The post-closure landscape supports traditional uses	**TQ1/2-Action 1**: design the post-closure landscape to support ecosystems that provide habitat for traditional use where possible **TQ1/2-Action 2**: design and construct post-closure features so they are stable and compatible with the surrounding landscape and ensure proper drainage	**TQ1/2 – Action 1** ☐ **TQ1/2 – Action 2** ☐
	TQ2	Post-closure landscape features compatible with the surrounding landscape, are physically and geotechnically stable and do not pose a risk to human or environmental receptors	Recontour and/or scarify to extent practicable to protect long-term geotechnical stability		
Chemical Stability	**Water**				
	TQ3	Water quality is safe for humans, wildlife, and aquatic life	Water quality meets modelled predictions and relevant criteria and is protective of human and ecological health	**TQ3-Action-1**: monitor water quality in accordance with CPCMP, if necessary	**TQ3 – Action 1** ☐

TQ = Transportation route and Quarries; CPCMP = Closure and Post-Closure Monitoring Plan.

6.11.3 Closure Activities

Agnico Eagle manages the AWAR as a private road with limited public access during operations, while the Whale Tail Haul Road does not permit local traffic. Agnico Eagle will consider the option of leaving the AWAR and Whale Tail Haul Road intact if deemed in the public interest based on guidance and approval from local communities and regulatory agencies. If there is no local interest, the AWAR and Whale Tail Haul Road will be reclaimed. Natural drainage courses will be restored by removing culverts and bridges. Warning markers and/or signage will be established at the locations of the culverts and bridges once they are removed to minimize risk to snowmobilers. If necessary, the road footprint will be scarified, and topography within the road footprint will be contoured to align with the surrounding natural topography.

Cross-drain structures (cross-ditches) will be installed where necessary between culvert sites. Where armouring rock is required, this rock will be NPAG/NML for the protection of aquatic life. In-stream works will be excavated to the level of the original channel bed. Where affected watercourses are fish-bearing, fish passage will be maintained. Work at fish-bearing sites will consider appropriate timing for in-stream works and will be completed in accordance with DFO operational statements. Communication towers will be decommissioned, removed, and transported to either the Baker Lake Site for shipping or to Meadowbank Landfill for disposal. Following AWAR closure, post-closure monitoring and site maintenance will be completed via helicopter access.

6.11.4 Predicted Residual Effects

No significant residual effects have been identified, apart from the impacted plant community due to development of the Meadowbank Complex transportation routes. Former roads may provide a snowmobile or ATV access corridor, which could result in added hunting pressure along the corridor.

6.11.5 Uncertainties

Uncertainty exists regarding the transfer of ownership of the AWAR and Whale Tail Haul Road to the local community. If it is deemed in the public interest based on guidance and approval from local communities and regulatory agencies, the AWAR and Whale Tail Haul Road will be left intact. Road operation and maintenance responsibility would then be transferred to another party.

6.11.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

Guidance on generic monitoring and maintenance programs for closure and post-closure is provided in *The Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites* (AANDC and MVLWB 2013). The overall post-closure monitoring and maintenance program is discussed in Appendix 6-A. Post-closure monitoring and maintenance strategies for the transportation routes include periodic visual inspections to assess the reclaimed areas and maintenance of roads until they are no longer required.

6.11.7 Contingencies

If exposed rock on the AWAR or the Whale Tail Haul Road corridor result in acidification of surface water, then such impacts will be assessed, and an appropriate mitigation strategy will be put in place.

6.12 Quarries and Borrow Sites

6.12.1 Pre-disturbance, existing, and final site conditions

Pre-disturbance conditions are based on baseline data collection programs presented in the Meadowbank 2005 FEIS (Cumberland 2005a). The pre-disturbance site conditions are also summarized in SECTION 3 of this plan. The existing quarries and borrow sites are described in Section 2.5.11. Please refer to SECTION 10 for timing of major closure activities associated with quarries and borrow pits of the Meadowbank Complex.

6.12.2 Closure Objectives and Criteria

Closure criteria for the Meadowbank Complex quarries are provided in Table 6.11-1.

6.12.3 Closure Activities

Closure activities for the quarries and borrow sites are expected to be the same at Meadowbank Mine and Whale Tail Mine. Agnico Eagle believes that wall scaling to remove unstable blocks and loose rocks at toe of walls and berming off the crests to restricted access will successfully meet the closure criteria associated with these components of the Meadowbank Complex. Where minimal or seasonal ponding is observed the floor will be regraded to promote adequate drainage. In some cases, quarries may have a flooded floor (entirely or some significant sections). Water within these quarries will be left as-is in closure and post-closure. Thus, Agnico Eagle proposes to leave the water pond as-is. Considering that draining large quantities of water in low laying areas would require extensive work to create draining channels, this option is proposed as it is considered less disturbing to the environment while continuing to ensure proper water quality. Detailed information on the execution of quarry reclamation can be found in Appendix 5-A. The following subsections provide overview of items not covered within Appendix 5-A.

6.12.3.1 Infrastructure and Equipment Removal

Equipment (e.g., crushers) will be decommissioned and removed from the quarries. All quarries and borrow sources developed during AWAR and Whale Tail Haul Road construction will be reclaimed following use. Garbage and other debris will be removed from the quarries and transported for appropriate disposal. If required, quarry access roads will be decommissioned by removing any culverts, backgrading the watercourse banks, and scarifying the road surface. Access into each quarry area will be blocked by placing a rock pile across the entryway to prevent easy access by wheeled vehicles.

6.12.3.2 Runoff Control

Where seasonal ponding occurred, the base of the quarries will be graded to provide unrestricted drainage of runoff to the surrounding tundra, and to prevent the ponding or collection of water on the sites. Water quality will be monitored as per the CPCMP.

6.12.4 Predicted Residual Effects

No significant residual effects have been identified for after closure of the quarries and borrow sites at Meadowbank Mine and Whale Tail Mine, but construction and subsequent reclamation of the facilities could result in some alteration of the terrain and or loss of plant communities.

6.12.5 Uncertainties

No major uncertainties are related to the closure of the quarries and borrow sites.

6.12.6 Closure and Post-Closure Monitoring, Maintenance and Reporting

The overall post-closure monitoring and maintenance program and reporting for the Meadowbank Complex is discussed in Appendix 6-A along with the general reporting requirements.

6.12.7 Contingencies

There are no activities proposed as contingencies for the closure of the quarries and borrow sites.

SECTION 7 TEMPORARY CLOSURE

While the Meadowbank Complex is expected to operate continuously throughout its LOM, it is not immune from the hazards that can result in temporary closure. Temporary closure occurs when an advanced mineral exploration or mining operation unexpectedly halts but intends to resume activities in the future. Several factors can cause an active mine to enter temporary closure: increased operating costs, decreased commodity prices, or lower-than-expected ore grades. Temporary closure can also be due to operational issues such as a pollution abatement order, dam breach, fire, breakdown of critical milling equipment. with duration (e.g., short-term, or long-term) highly dependent on the reason for shutdown.

Agnico Eagle is required to give NWB a minimum 60-days written notice in the event of temporary closure of the Meadowbank Complex. This notice also serves to inform staff, the population, and the regulator of the cessation of operations (though, if event driven, operations may have ceased before notification can be given). Following notification, the numbers of personnel on-site would be reduced to reduce operation costs. The staff present at site during temporary closure would be sufficient in number and expertise to successfully carry out care and maintenance, and monitoring duties, and to address and remediate any potential problems that may arise. Sufficient equipment and supplies/reagents would be left on-site for maintenance or reclamation activities that may need to take place.

Additionally, Agnico Eagle is also required to submit Temporary Closure Plan (i.e., a Care and Maintenance Plan) within 30 days of notification for maintaining compliance with the Conditions of the Licenses (e.g., 2AM-MEA1530; 2AM-WTP1830). In a temporary closure scenario, the Meadowbank Complex would not be producing but would still be required to meet Conditions outlined in the Licence, such as monitoring and reporting. In this regard, during short-term and long-term temporary closure, monitoring would continue at the regular level as set out in the mine operations and monitoring program, and in accordance with all applicable Licenses, permits and authorizations. Adjustment of monitoring frequencies for long-term temporary closure might be made only following approval from the licensing and permitting authorities concerned.

7.1 Temporary Closure Goals and Objectives

The goal of temporary closure is to promote ongoing protection of the environment, and regulatory compliance during the shutdown period. The objectives of temporary closure activities are to:

- Make available appropriate financial resources to promote the safety of humans, wildlife, and the environment.
- Maintain operating facilities and programs necessary to protect humans, wildlife, and the environment, including necessary environmental monitoring and reporting.
- Provide a sufficient staff with the appropriate expertise to care for the site and any potential problems that may arise.

- Provide sufficient equipment and supplies on-site for any maintenance activities that may need to take place.
- Comply with all applicable federal and territorial laws and regulations, in addition to the operator's Land Use Permits, Land Leases, and Water Licenses.

7.2 Temporary Closure Activities

The Meadowbank Complex's short-term and long-term temporary closure activities are presented in the following subsections. The extent to which the activities listed will be implemented depends on the status of the Meadowbank Complex at the onset of temporary closure, and its anticipated duration. In most circumstances, temporary closure activities will proceed as outlined within this section. Confirmed details and schedule of the activities would be provided in the Temporary Closure Plan (i.e., Care and Maintenance Plan).

In the event of major upset (e.g., fire, dam breach) that prevents implementation of the temporary closure plan, the affected features will be subject to alternative temporary closure measures, with the planned temporary closure activities resuming as soon as practical.

7.2.1 Short-term Temporary Closure

The short-term temporary closure period is defined as a period of less than one year and is initiated by economic, environmental, and social factors. Table 7.2-1 provides the short-term temporary closure plan.

7.2.2 Long-term Temporary Closure

Long-term temporary closure (indefinite shutdown) is a cessation of mining and processing operation for an indefinite period greater than one year. The intention is that the mine will resume operations as soon as possible after the cause for the indefinite shutdown has been addressed. To maintain its long-term temporary closure, the mine must maintain safety and environmental stability during this time. Possible causes for an indefinite shutdown could include prolonged adverse economic conditions or extended labor disputes. If a long-term temporary closure of the Meadowbank Complex is expected, a decision on the estimated length would be made after the initial one-year period (e.g., the short-term temporary closure). Decisions on possible extensions to the indefinite shutdown would be made every six months thereafter and would be based on the conditions at that time. At present, the maximum length of time or number of extensions for interim shutdown before moving to final closure has not been defined. Table 7.2-2 summarizes the measures that will be taken as required in addition to the short-term temporary closure activities during a long-term temporary closure.

Table 7.2-1: Short-term Temporary Closure Plan

Sites	Closure Activities
Open Pits	Warning signs and berms will be erected as needed around the pit perimeter.
	Dewatering/flooding of the pit will continue as per operations.
Monitoring	Monitoring of water quality of the collection ponds will continue as per operations.
	Environmental monitoring and sampling will continue at the intervals used during operations, and in accordance with all applicable Licences, permits, and authorizations.
	Environmental and geotechnical monitoring and sampling will continue at the regular level as set out in the mine operations and monitoring program, and in accordance with all applicable Licences, permits and authorizations.
Water Management	No change in surface water management facilities operation. Management of contact water runoff will occur as per operations.
	Unused water distribution lines will be drained but left in place as resumption of use is expected following the end of short-term temporary closure.
	All contact water will be treated and discharged as per operations
TSF	No change in maintenance of water management infrastructures supporting the TSF from operational levels. No change in maintenance of required freeboard.
Infrastructures and Baker Lake Site Facilities	All mobile equipment except for small service equipment required for pit inspections will be removed and placed in secure on-site storage.
	Fuel, lubricants, and hydraulic fluids will be removed from the pit area and stored in designated areas.
	Fluid levels in all fuel tanks will be recorded and monitored regularly for leaks or will be removed.
	An inventory of chemicals and reagents, petroleum products, and other hazardous materials will be conducted. These materials will be secured appropriately or removed.
	All explosives will be relocated to the main powder magazine and secured, disposed of, or removed.
	Minimum staffing levels will be maintained to carry out care and maintenance activities.
	The accommodations will be operated at reduced staffing level.
	Critical facilities will have nominal heat to prevent freezing of the facilities and possible damage.
	The sewage treatment plant and potable water treatment plant will continue to operate as needed.

Sites	Closure Activities
	Hazardous wastes on-site will be collected and stored in an appropriate area for annual disposal at a registered disposal facility.
AWAR	Short-term temporary closure will not affect the AWAR as it is used as the overland transportation route from Baker Lake to the mine site for supplies.
Whale Tail Haul Road	In most circumstances, the haul road will continue to be open. The status of the road during such periods would be assessed by Agnico Eagle on a case-by-case basis.
Whale Tail – Ore Stockpile	The water and dust management strategies for the ore stockpiles will be kept the same as those used during active mine operations.

Source: (Agnico Eagle 2019; AtkinsRéalis 2020).

Table 7.2-2: Long-term Temporary Closure Plan

Sites	Closure Activities
Open Pits	Pumps in the pit will be relocated and the pit will be allowed to flood passively (from rainfall and groundwater inflow).
Monitoring	Reduced geotechnical stability monitoring and maintenance frequency. Pit area will be inspected routinely to check for rock falls, changes to groundwater inflows and overall integrity
WRSF	If necessary, the working face of the WRSFs slopes will be graded to ensure stability and to promote drainage of water to the contact water management system adjacent to the rock storage facilities. As the WRSFs will be designed and operated for long-term stability, it is anticipated that any grading required will be localized and minimal. The WRSFs will be monitored to ensure the site stays in compliance with any permits and/or Licenses.
TSF	The tailings surface area will be re-graded, if needed, to promote slope stability. Erosion control measures will be implemented, if required, to reduce the potential mobilization of tailings by wind. The TSF will be subject to routine geotechnical stability monitoring and maintenance. Maintenance will be completed as required.
Dikes/Dams	The dikes/dams will be monitored and maintained. Dikes/dams will not be opened and reconnected to adjacent lakes.
Water Management	Surface water control structures will be maintained as required. In areas where water quality is suitable for discharge, natural drainage courses may be re-established.
	Unused water distribution lines will be drained.
AWAR	Long-term temporary closure will not affect the AWAR as it is used as the overland transportation route from Baker Lake to the mine site for supplies.
Whale Tail Haul Road	The haul road may be allowed to become inaccessible during the winter for cars and trucks. If Agnico Eagle requires continued presence on-site, then it is likely Agnico Eagle would maintain the road in some manner over the winter.
Whale Tail – Ore Stockpile	Surface water control structures will be maintained as required.

Source: (Agnico Eagle 2019; AtkinsRéalis 2020).

7.3 Temporary Closure Schedule

Mining activities during short-term closure are typically stopped. However, activities such as care and maintenance, monitoring, intermittent testing, periodic operation of equipment and appropriate facilities will continue in the event of a temporary shutdown. Activities related to protecting public and wildlife safety would be a priority and would focus upon maintenance and monitoring of facilities and equipment to maintain physical and chemical stability. To promote public and wildlife safety, temporary closure staff would be present, and access to temporarily inactive facilities restricted to authorized personnel.

The temporary closure schedule would depend on when temporary closure occurs (i.e., what year of the operations stage) and its duration, both of which are commonly uncertain. Therefore, the schedule for the activities presented in Section 7.2 would be developed as temporary closure advances. Establishing a temporary closure schedule inherently contains uncertainty as this is not a planned activity, and the duration of a temporary closure would vary based on the cause for closure. As a result, the schedule would be progressive.

The sequence of activities for short-term and long-term temporary closure would, in summary, be as follows:

- Restrict access to the site, buildings, and infrastructures to authorized personnel as required.
- Carry out an inventory of chemicals and reagents, petroleum products, and other hazardous materials and secure the inventory appropriately or remove some of it from site.
- Post warning signs and berms as needed around the open pits perimeter.
- Remove mobile equipment except for small service equipment required for open pits and site inspections and place them in secure on-site storage.
- Temporary closure of unnecessary facilities and systems.
- Continue with environmental and geotechnical monitoring and sampling required for care and maintenance, and monitoring at the regular level as set out in the mine operations and monitoring program, and in accordance with all applicable Licences, permits, and authorizations.

SECTION 8 FINANCIAL SECURITY

8.1 Introduction

8.1.1 Overview

This section details the current RECLAIM version 7.0 reclamation security amounts for both the Meadowbank Mine Site and the Whale Tail Mine site. It details the security calculations related to site specific conditions, the development of unit rates, as well as highlighting previously accepted quantities and unit rate assumptions. This section also seeks to make recommendations for return of security amounts based on progressive reclamation, following existing precedent for the region.

The RECLAIM version 7.0 cost models for both the Meadowbank Mine Site and the Whale Tail Mine have been updated based on changes to the existing conditions, design parameters, and closure criteria. A gap analysis has been performed to verify all closure scope has been included in the RECLAIM version 7.0 model. The unit rates carried in the models have been assessed and validated for the current submittal.

Agnico Eagle would like to reach an agreement on a security schedule as part of the Type A Water Licence amendment for both sites based on this ICRP. The security schedule will allow for progressive release of security upon completion of the closure criteria and confirmation by CIRNAC in a manner like that of other comparable projects in the region. The security schedule will require consultation and engagement with CIRNAC and KivIA by Agnico Eagle supported by WSP.

8.1.2 Purpose of Estimate

The RECLAIM version 7.0 estimate has been prepared to provide Agnico Eagle with an estimate of the potential reclamation liability closure costs for a peak estimated liability during the next five-year period. It is understood that the RECLAIM estimate will be used by Agnico Eagle for financial security requirements as part of the Type A Water Licence amendment for both the Meadowbank Mine Site and the Whale Tail Mine. It will also be used as a baseline to revaluate the security held as progressive reclamation advances and the required remaining security is reduced.

8.1.3 Battery Limits

The battery limits for the RECLAIM version 7.0 encompass disturbances and infrastructure located within permitted mine area. The permitted mine area is depicted in Figure 1.3-2 to Figure 1.3-5.

For the purposes of the RECLAIM version 7.0 security individual Meadowbank Mine Site pits and rock piles for, Portage, Goose, Vault, and Phaser have been evaluated separately, as have the Whale Tail Mine pits and rock piles, Whale Tail Pit, and the IVR Pit.

8.2 Reclamation Liability Cost Estimate Design Basis

8.2.1 Design and Closure Information

The primary reclamation and closure information available to inform the preparation of the RECLAIM included the following information provided by Agnico Eagle, as well as written and verbal communications:

- Meadowbank Complex 2023 and 2024 Annual Report 60-000-100-REP-006 (Agnico Eagle 2024a, 2025a), which provides the current condition of all aspects of the Meadowbank Complex.
- Meadowbank ICRP 2019 – Financial Security Cost Estimate Assumptions Update (AtkinsRéalis 2020), which provides the previous security commitments made concerning the Meadowbank Mine.
- 2AM-WTP1826 Whale Tail Pit-Expansion Project – Reclaim 7.0 (Golder 2019d), which provides the previous security commitments made concerning the Whale Tail Mine.

8.3 Cost Estimate

8.3.1 Cost Estimate Overview

As per financial security requirements and preferred means of the Government of Northwest Territories and the Mackenzie Valley Land and Water Board (MVLWB) the reclamation cost estimate has been prepared using the RECLAIM cost model version 7.0. The cost estimate has been updated based on revised closure requirements as outlined in this document.

Closure activities were prepared following the RECLAIM version 7.0 model developed in Microsoft Excel as Appendix 8-A. The model is used to calculate the estimated reclamation costs for mine sites in northern Canada. It provides line items for each reclamation activity which may be applicable at the given site and allows for additional items to be added as required. For each line item the model presents the quantity of work multiplied by the appropriate unit cost provided in the model or as provided by the user. A notes section is included to rationalize any modified unit rates used on each line.

8.3.2 Cost Model

RECLAIM version 7.0 consists of 11 reclamation costing worksheets used to calculate the overall reclamation cost estimate. These include direct cost worksheets associated with the following mine components:

- Open pit
- Underground mine
- Tailings impoundment
- Rock pile
- Buildings and equipment

- Chemicals, hazardous materials and contaminated soils
- Water management
- Water treatment
- Interim care and maintenance
- Post-closure monitoring and maintenance
- Mobilization and demobilization

No additional worksheets have been added for other closure areas or pricing rationalization.

Additional cost factors such as contingency, engineering, project management, health and safety, Quality Assurance and Quality Control (QA/QC), community engagement costs, and bonding are automatically calculated in the cost summary worksheet, with percentages applied to the total direct cost.

8.3.3 Summary of Costs

A summary of the estimated closure and reclamation costs including Total Cost, Land Liability Cost, and Water Liability Costs as developed by RECLAIM version 7.0 is provided in the following tables (Table 8.3-1; Table 8.3-2) for both the Meadowbank and Whale Tail Sites. Figure 8.3-1 to Figure 8.3-4 provide an overview of security remaining and security reduction over time for the Meadowbank Complex.

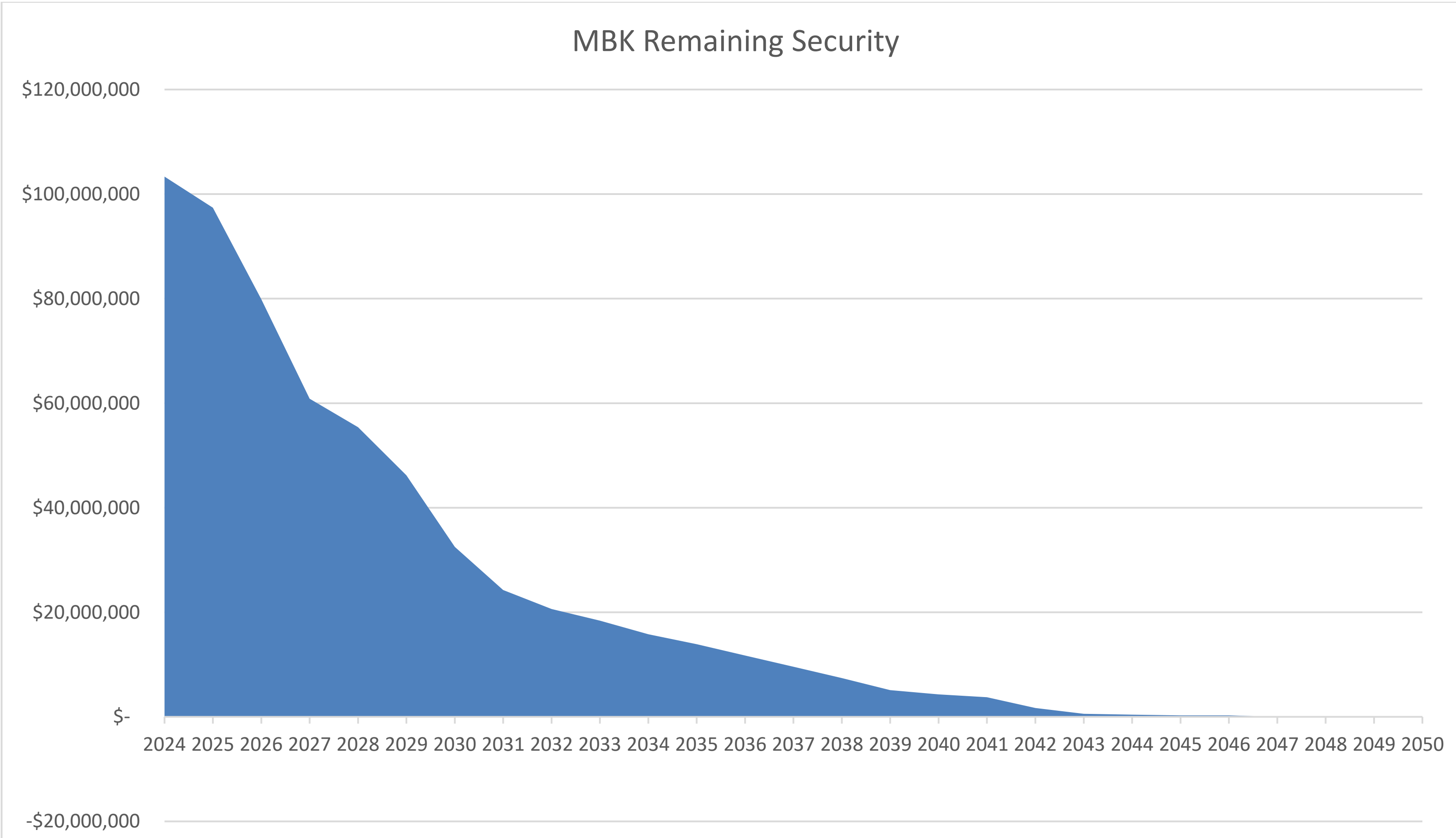


Figure 8.3-1 Meadowbank Mine Remaining Security

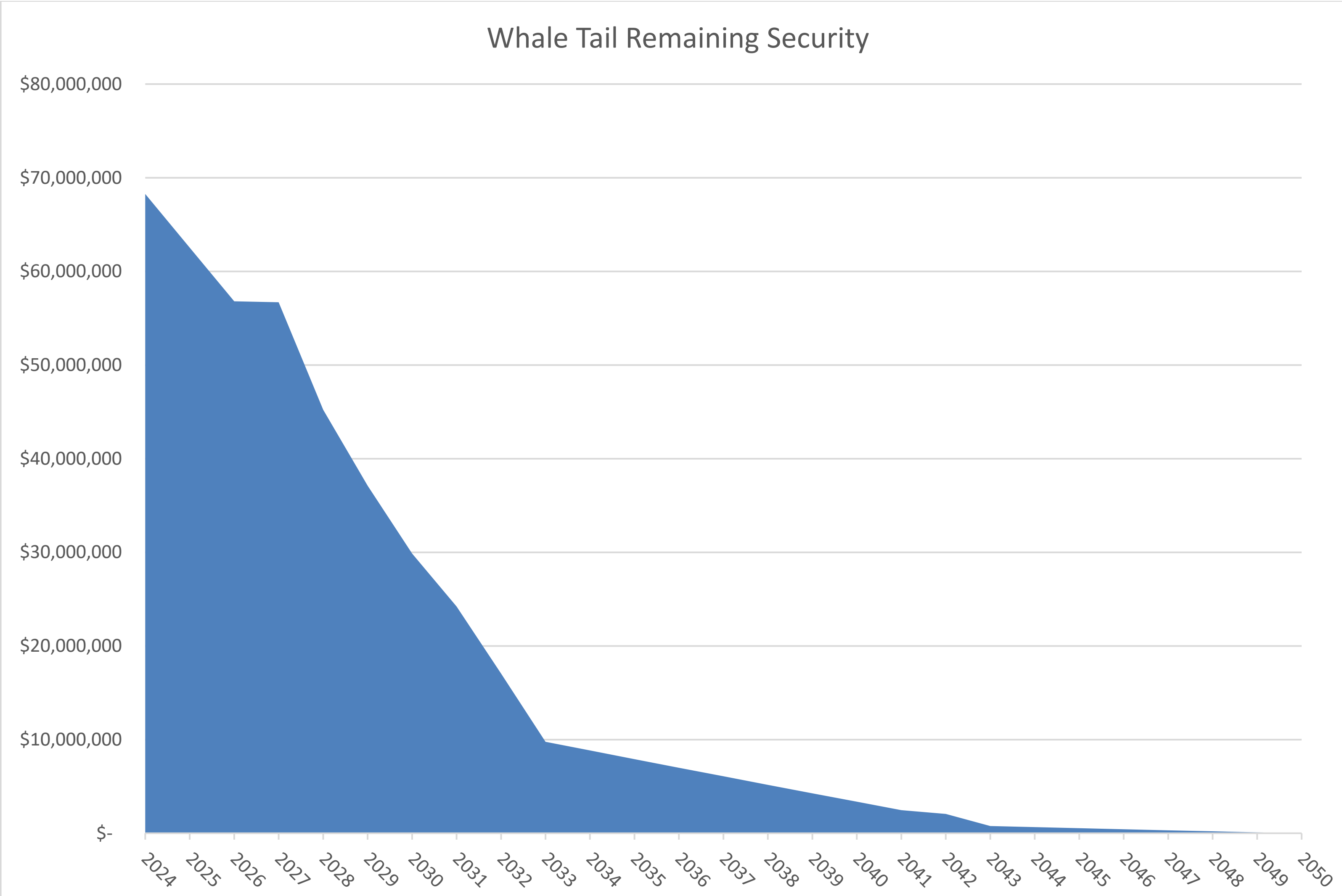


Figure 8.3-2 Whale Tail Mine Security Remaining

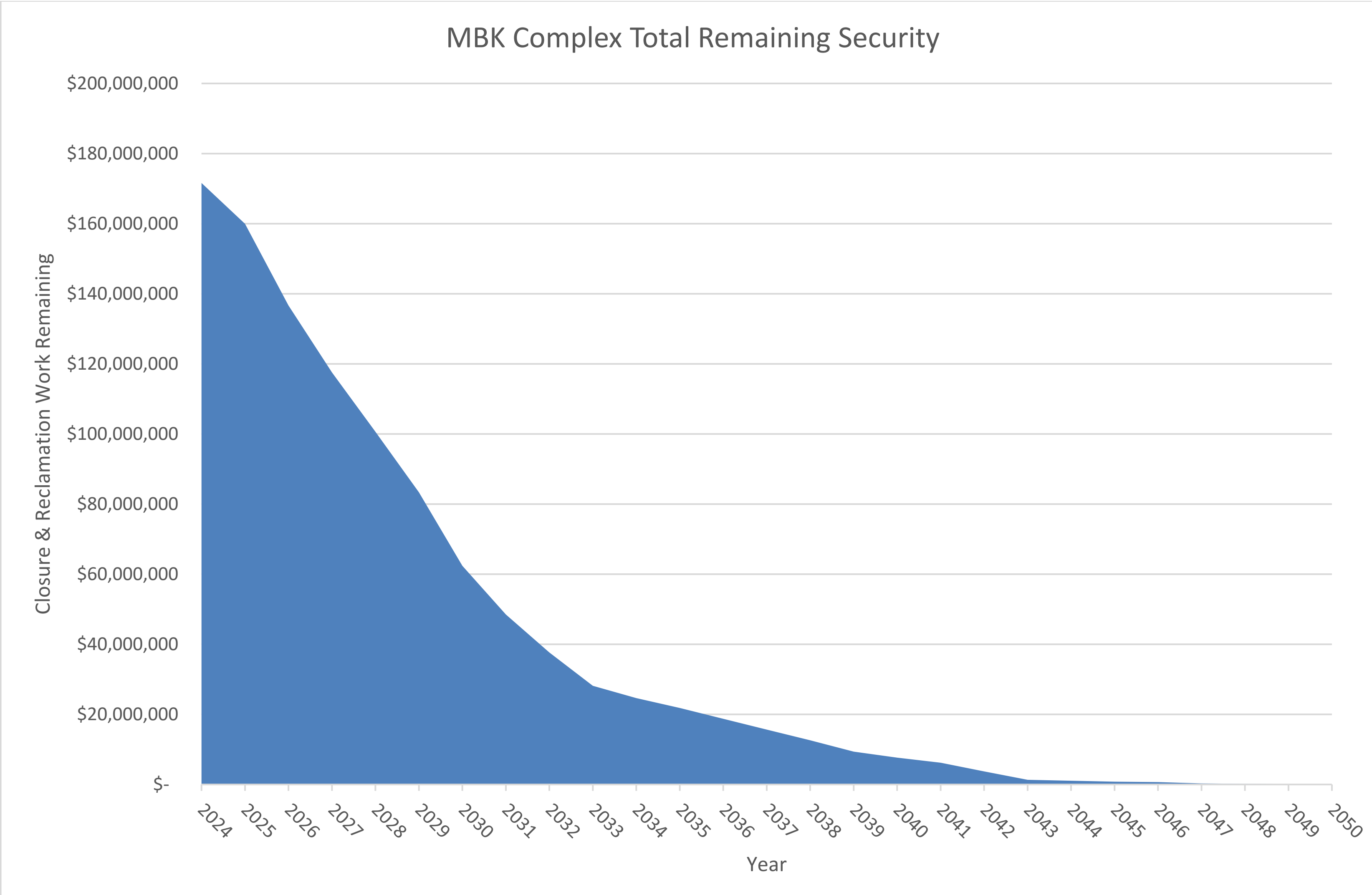


Figure 8.3-3 Meadowbank Complex Total Remaining Security

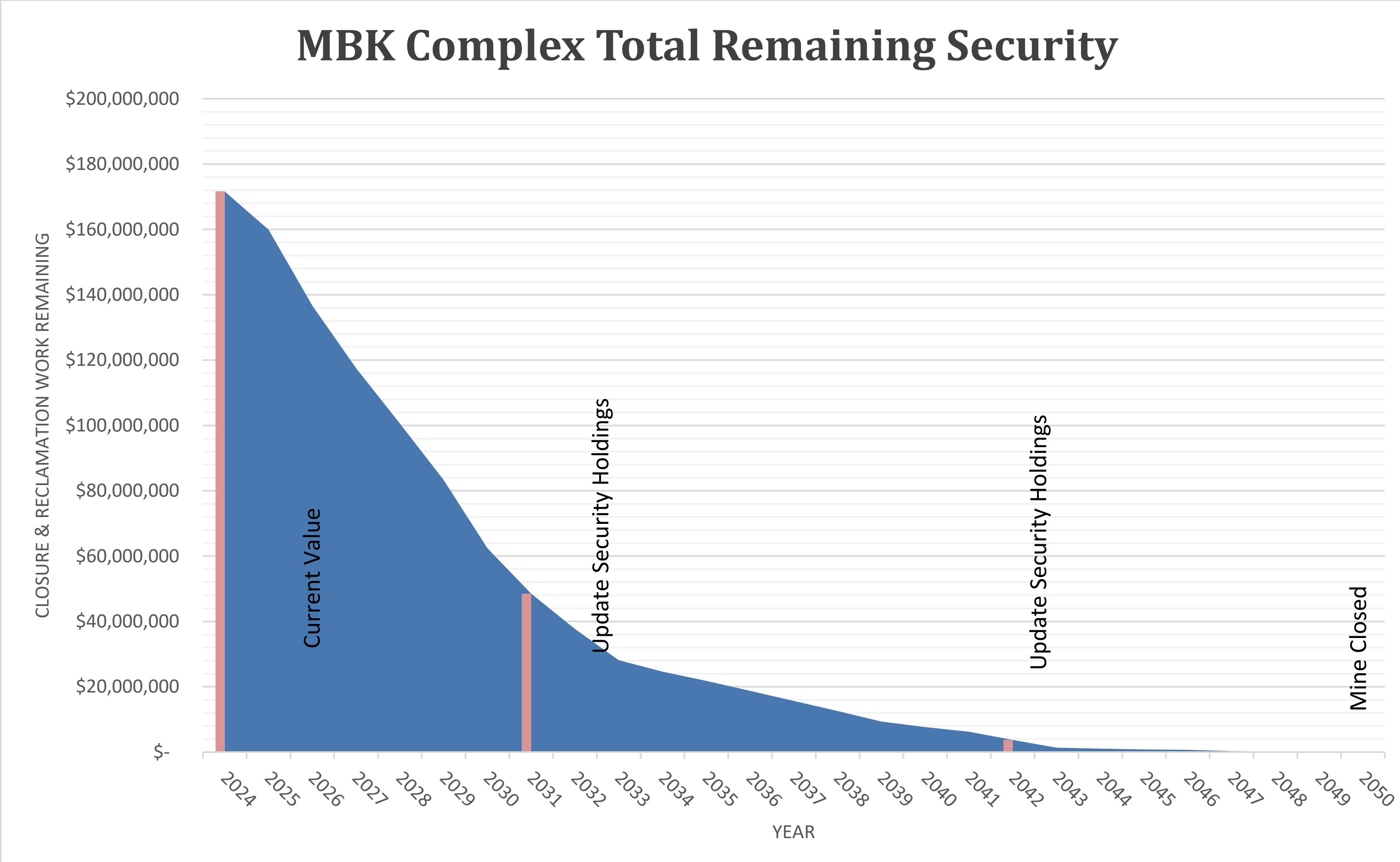


Figure 8.3-4: Meadowbank Complex Total Remaining Security with Security Holding Update Timeline

Table 8.3-1: Meadowbank Mine Site RECLAIM Summary

Item	Component Name	Cost	KivIA Liability	CIRNAC Liability
Capital Costs	-	-	-	-
Open Pit	Portage	$75,240	$37,620	$37,620
	Goose	$73,080	$36,540	$36,540
	Vault	$1,080	$540	$540
	Phaser	$1,080	$540	$540
Underground Mine	-	$0	$0	$0
Tailings Facility	-	$32,121,068	$16,060,534	$16,060,534
Rock Pile	Portage	$2,707,534	$1,353,767	$1,353,767
	Vault	$30,000	$15,000	$15,000
Buildings and Equipment	Meadowbank	$8,121,236	$4,060,618	$4,060,618
	Baker Lake	$1,685,266	$842,633	$842,633
	AWAR	$749,930	$374,965	$374,965
Chemicals and Contaminated Soil Management	-	$1,316,981	$658,491	$658,491
Surface and Groundwater Management	-	$25,409,069	$12,704,535	$12,704,535
Interim Care and Maintenance	-	$847,800	$423,900	$423,900
SUBTOTAL: Capital Costs		**$73,139,364**	**$36,569,682**	**$36,569,682**
Percent of Subtotal			50%	50%
INDIRECT COSTS		**COST**	**KivIA Liability**	**CIRNAC Liability**
Mobilization/Demobilization	-	$5,589,160	$2,794,580	$2,794,580
Post-Closure Monitoring and Maintenance	-	$4,133,524	$2,066,762	$2,066,762
Engineering	5%	$3,656,968	$1,828,484	$1,828,484
Project Management	5%	$3,656,968	$1,828,484	$1,828,484
Health and Safety Plans/Monitoring & QA/QC	2%	$1,462,787	$731,394	$731,394
Bonding/Insurance	1%	$731,394	$365,697	$365,697
Contingency	15%	$10,970,905	$5,485,452	$5,485,452
Market price factor adjustment	0%	$0	$0	$0
SUBTOTAL: Indirect Costs		**$30,201,706**	**$15,100,853**	**$15,100,853**
TOTAL COSTS		**$103,341,070**	**$51,670,535**	**$51,670,535**

Table 8.3-2: Whale Tail RECLAIM Summary

Item	Component Name	Cost	KivIA Liability	CIRNAC Liability
Capital Costs				
Open Pit WT	-	$35,345	$17,673	$17,673
Open Pit IVR	-	$7,550,316	$445,847	$7,104,469
Underground Mine	-	$775,689	$677,195	$98,494
Tailings Facility	-	$0	$0	$0
Rock Pile WT	-	$6,129,757	$3,064,879	$3,064,879
Rock Pile IVR	-	$2,921,227	$1,460,614	$1,460,614
Buildings and Equipment	-	$3,774,657	$1,887,329	$1,887,329
Chemicals and Contaminated Soil Management	-	$899,779	$449,889	$449,889
Surface and Groundwater Management	-	$22,750,756	$11,375,378	$11,375,378
Interim Care and Maintenance	-	$947,781	$473,891	$473,891
SUBTOTAL: Capital Costs		**$23,809,438**	**$22,892,654**	**$22,892,654**
Percent of Subtotal			50%	50%
INDIRECT COSTS		**COST**	**KivIA Liability**	**CIRNAC Liability**
Mobilization/Demobilization	-	$7,401,348	$3,700,674	$3,700,674
Post-Closure Monitoring and Maintenance	-	$2,718,710	$1,359,355	$1,359,355
Engineering	5%	$2,289,265	$1,144,633	$1,144,633
Project Management	5%	$2,289,265	$1,144,633	$1,144,633
Health and Safety Plans/Monitoring & QA/QC	1%	$457,853	$228,927	$228,927
Bonding/Insurance	1%	$457,853	$228,927	$228,927
Contingency	15%	$6,867,796	$3,433,898	$3,433,898
Market price factor adjustment	0%	$0	$0	$0
SUBTOTAL: Indirect Costs		**$22,482,091**	**$11,241,045**	**$11,241,045**
TOTAL COSTS		**$68,267,399**	**$34,133,700**	**$34,133,700**

- = not applicable

8.3.4 Unit Rate Escalation

Where no material change exists to the design or execution of activities no specific changes from previously approved assumptions have been made.

8.3.5 Direct Cost Assumptions

The direct costs include the costs related to the physical work activities to be completed for the various project components, in addition to the care and maintenance requirements for the Site.

In most cases, costs have been developed using unit rates provided in the RECLAIM 7.0 template with rates applied to the calculated quantities. Where an appropriate RECLAIM supplied rate was not available, an independent unit rate was used from Meadowbank operational data or from precedent data for similarly sized projects with similar location conditions. Unit rates used in the estimate assume third party contractor pricing and have been validated against benchmark data as well as BC Road Builders Blue Book rates (BCRBHCA 2023).

Specific assumptions for the quantities and unit rates used in the financial security cost estimate are provided for each closure component and are detailed in Section 8.3.5.1 and Section 8.3.5.2.

8.3.5.1 Meadowbank Mine Site

The following sections detail the security requirements for the Meadowbank Mine Site.

Open Pits

For this component, it is assumed that the entrance and select perimeter areas of each pit will be blocked with NPAG/NML berms to control access of wildlife and motorized vehicles to the open pits during flooding. The length of berms was estimated from Figure 1.3-2. Berms are assumed to be 1.5 m high, with 2H:1V side slopes, and made of NPAG/NML rockfill.

NPAG/NML waste rock stockpiles at Goose and Portage Pits will be regraded and left in place.

<u>Previously approved assumptions and custom unit rates</u>

The following previously approved berm volumes have been carried in the estimate.

Berms at ramp entrances and at exposed Portage Pit crest

- 300 m long x 1.5 m tall with 2H:1V side slopes = 1350 m^3.

Berms at Goose, Vault and Phaser ramp entrances

- 100 m long x 1.5 m tall with 2H:1V side slopes = 450 m^3.

Underground Mine

There are no underground workings at the Meadowbank Mine Site.

Tailings Impoundment

The tailings cover will consist of NPAG/NML waste rock.

The following volumes have been assessed for the preferred option (2 m) for the tailings cover based on current takeoffs of work done to date and the current design volume.

- Remaining volume NPAG/NML rockfill required for North Cell NPAG/NML cover: 2,108,123 m³.
- Remaining volume NPAG/NML rockfill required for South Cell: NPAG/NML cover: 1,516,695 m³.

Takeoff quantities for ditches and sedimentation ponds in the North Cell and South Cell have been updated based on current designs, updated since 2019.

Runoff Water Ditches:

North Cell:

- No further excavation.

South Cell:

- Volume of rock excavation from South Cell to Collection Pond 23: 152,000 m³.
- Volume of rock excavation: from Collection Pond 23 to Third Portage Lake 57,600 m³.
- Volume of NPAG/NML waste rockfill: 0 m³.

Collection Ponds:

North Cell:

- No further excavation.

South Cell (Collection Pond 23):

- Volume of till excavation: 0 m³.
- Volume of rock excavation: 481,326 m³.
- Volume of NPAG/NML waste rockfill: 0 m³.

Security related to the breach of Saddle Dam 3 has been removed as this reclamation activity will no longer be required because of the change in water management design related to the IVR Pit.

The diversion ditches located in the northern peripheral area of the TSF North Cell will be backfilled and tied into the TSF cover system as these are not required to manage non-contact water during closure.

The distribution line related to the Vault water management and water treatment design change is addressed in the water management and water treatment sections of this RECLAIM.

Previously approved assumptions and custom unit rates

The cover for the TSF South and North Cells will include landforms to promote water shedding. The nominal cover thickness over most of the landforms will be well over the minimum, as a thickness variation is required to obtain the designed landforms and promote adequate water management.

Quantities of rockfill required for the cover of the North Cell was adjusted to consider the construction of the internal structure required for the tailings deposition of Whale Tail Pit. These structures and the additional tailings deposited will reduce the quantity of NPAG/NML material required for the construction of the cover and the landforms. For the South Cell, quantities were calculated to cover an area with tailings at approximately El. 149.5 m (5,149.5 mRL).

For the TSF North Cell cover, the cover portion constructed between 2015 and 2023 in progressive reclamation was considered and subtracted from the total material required.

The construction of the drainage features within the cover and the collection pond used for management of the runoff water over the TSF were also included in the calculation.

7.0 km (7,000 m) of tailings discharge piping will also be dismantled, decontaminated and buried in the on-site landfill. A total of 4,500 m of North Cell and South Cell tailings discharge piping will be reused for the tailings in-pit deposition to reduce the overall quantity of piping (Agnico Eagle 2018a). The booster pump located between the North and South Cell will also be dismantled.

Geotechnical instrument installation and/or maintenance of the existing instruments for the North and South Cell was also considered in the estimate.

A total of 16.0 km (16,035 m) of piping for tailings in-pit deposition was used during operation. These lines will be dismantled, decontaminated, and buried in the on-site landfill.

Removal of Piping added for In-pit Deposition:

Provided for removal of 16.0 km of HDPE, with on-site disposal. The piping includes the following:

- Transfer pipes from Goose Pit to junction to pits A and E.
- Transfer pipes from Goose Pit to junction to pit E.
- Transfer pipes from Goose Pit to junction to pit A.
- Reclaim water from pit A to junction to mill.
- Reclaim water from junction to tie in.
- Tailing pipes (Portage Pit E).
- Tailing pipes (Portage Pit A).
- Pig launcher discharge lines (Goose Pit, Pit A, Pit E).

Removal of Tailings Discharge Line:

- Provided for removal of 7.0 km of HDPE, with on-site disposal.
- Lump sum of $15,630 for decommissioning of associated booster pump system/building.

Specialized Items:

- Lump sum of $50,000 for the installation/or maintenance of instrumentation.

Rock Pile

The configuration of the Portage WRSF has not changed since 2014. The Portage WRSF cover was placed progressively during operations between 2011 and 2017. Presently, it is considered that 84% of the WRSF PAG/ML area has been covered with 4.0 m of NPAG/NML material (Agnico Eagle 2018d). No cover is required for Vault WRSF as the waste rock is mainly NPAG/NML, and the portion of PAG/ML material is encapsulated in the center of the WRSF as needed.

- Volume of NPAG/NML cover remaining based on current takeoff: 514,285 m³

The cost estimate also includes the cover of collection sumps around the Portage WRSF.

<u>Previously approved assumptions and custom unit rates</u>

The following previously approved volumes and lump sum items have been carried in the estimate.

Cover Portage Rock Storage Facility:

- Volume of NPAG/NML cover required (total): 3,214,286 m³.
- Volume of NPAG/NML cover constructed between 2011 and 2017 (progressive reclamation): 2,700,000 m³.

Cover Portage Rock Storage Sumps:

- Additional 6,800 m³ of cover provided for backfilling/covering sumps WEP1, WEP2 and WRSF (ST-16) sumps.

Specialized Items:

- Lump sum of $50,000 for installation/or maintenance of instrumentation at Portage WRSF.
- Lump sum of $30,000 for installation/or maintenance of instrumentation at Vault WRSF.

Buildings and Equipment

The footprint areas of buildings and infrastructures for Meadowbank Mine Site and Baker Lake and the AWAR provided by AtkinsRéalis (2019) were reviewed and adjusted if changes were required.

Hours to decontaminate and dispose of equipment on-site have been adjusted based on the current quantity of equipment.

For demolition work it is assumed that:

- All demolition of site infrastructure will be undertaken by a single third-party contractor under a single contract.
- Existing site facilities where available will be used for the duration of closure.
- Decommissioning will include electrical disconnects, pressure vessel discharge, fire suppression isolation, product line blowouts, sump cleanouts (industrial buildings only).
- Concrete from structures can be processed and used as fill on-site (if applicable), all crushed concrete will be inert at time of demolition.
- Only above-grade concrete was considered in the demolition volumes, machine estimates, and material handling costs. Slabs and below grade concrete is assumed to be left in place and covered as noted in the reclamation and closure plan. Above-grade concrete will be land-filled or used as backfill upon approval.

The diversion ditch at Baker Lake will be filled and recontoured by replacing the 5,720 m^3 material excavated to construct the ditch which has been stockpiled 800 m away.

Quarries used to construct the AWAR were previously assumed to have all slopes recontoured to 1:1 but based on the current reclamation design, Section 6.12.3 Closure Activities, quarry reclamation will consist of floor work and minimal wall scaling where required only to achieve drainage objectives and minimize adverse affects to the existing vegetation. An allowance for supply and placement of fill has been included.

<u>Previously approved assumptions and custom unit rates</u>

Removal of Buildings and Scarification of Foundations:

- Building footprints, with demolition areas scaled for heights assuming 3 m stories. Buildings with concrete foundations requiring puncturing assumed.
- A total of 18 Jet-A Fuel tanks at Baker Lake were considered instead of 20 tanks, as 2 were demobilized in 2016.

Reclaim Roads and Laydown Areas:

- Road/Laydown areas for the mine site and Baker Lake are listed in Table 8.3-2 and will be scarified. The AWAR will be ripped to promote natural revegetation and recontoured to promote natural drainage.
- The airstrip length increased from 1495 to 1752 m, for an additional area of 6,000 m^2 and a total area of 4.1 ha.

- The site road area was increased by 20,000 m² due to additional access roads built estimated at 2.0 km, for a total area of 12 ha.
- Removal of 21 culverts on-site including Vault area were considered with a lump sum allowance of $4,000 per culvert removal. A lump sum allowance of $40,000 for the installation of water breaks and erosion control is also provided.

Containers:

- During 2024 there were 9,937 containers on site. During the summer of 2024 approximately 3600 containers were demobilized from site. As demobilization progresses a minimum 400 containers per year to transport material and waste off site will be required. At the end of the closure period, it is estimated that 1,400 containers will have to be disposed in the on-site landfill. Assuming 2.5 metric tons per container, this represents a total of 3,500 metric tons to cut and landfill.

AWAR Water Crossing Removal:

- Lump sum allowances of $4,000 per culvert removal and $25,000 per bridge removal. A total of 38 culverts and 9 bridges are considered for the AWAR.

Chemicals, Hazardous Materials and Contaminated Soils

Chemicals and soil management were reviewed in accordance with the information available in the Landfarm Design and Management Plan (Agnico Eagle 2024o), the Hazardous Materials Management Plan (Agnico Eagle 2022d) and the Meadowbank Annual Report 2017 (Agnico Eagle 2018b).

<u>Previously approved assumptions and custom unit rates</u>

Building Decontamination:

- Building decontamination was considered for the maintenance shop (10 days), the power plant (10 days), the fuel storage (10 days), and the emulsion plant (3 days). A total cost of $33,000 was estimated for decontamination including 33 person-days.

Hazardous Material:

- No waste oil is considered in the cost estimate as the oil will be burned progressively for energy during operations.
- Fuel dregs assumed to be 0.5% of bulk fuel storage capacity (60 million liters of diesel and 1.8 million liters of Jet Fuel) and burned on-site with waste oil, for a total of 309,000 liters.
- One-year accumulation of oily and glycol contaminated waste water is considered, for a total of 58,456 liters (as per the Meadowbank Annual Report 2017, (Agnico Eagle 2018b).
- A lump sum of $3,000 is considered for battery disposal.
- Mill and water treatment reagents at closure assumed to be 5% of annual consumption.

- A total of 10,000 kg of assay lab and environmental reagents are assumed (Golder 2014).
- A lump sum of $20,000 is considered for the disposal of various waste such as machine shop paints, solvents and filters.
- A total of 16,170 liters of glycol is considered based on the quantity on-site reported (Hazardous Materials Management Plan, (Agnico Eagle 2021b).

Contaminated soil:

- A contingency of 2,745 m^3 of hydrocarbon contaminated soil requiring on-site remediation at closure is considered, based on the reported total for 2017 (Meadowbank Annual Report 2017, (Agnico Eagle 2018b).
- An allowance of 5% of the total contaminated soil (137 m^3) is considered for heavily contaminated soil not treatable on-site, to be managed as hazmat material.

Audit

- An allowance of $7,500 and $50,000 has been provided for Audit Phase 1 and 2 investigations, respectively. Hazmat removal audit is considered covered under these audits.

Water Management

The cost estimate includes the open pits flooding, the construction of dike reconnections (opening), and closure of the water management facilities.

The volumes of water required for Portage, Goose, and Vault Pits flooding and the period of flooding come from the water balance presented in the 2023 Water Management Plan by Agnico Eagle (Agnico Eagle 2024m). The operation and the maintenance of the pumping system were considered for an active flooding period of 6 years.

Repurposing and installing dewatering pumps and pipe at Portage and pumps at Vault is accounted for with a $100,000 allowance each. An additional 8 km of twin pipe to service the Vault water management system will be placed.

The preliminary design of the dike reconnections for Bay, Goose, South Camp and Vault dikes was developed in 2016. The construction quantities required for the reconnections were estimated from the preliminary design. Based on the current design the Vault Pit to North Phaser Pit Channel will be eliminated based on the planned pumping configuration.

The freshwater barge and pipeline for the freshwater intake will be decommissioned. Water management pipelines will also be removed and landfilled, as well as the Third Portage Lake and Wally Lake diffusers.

The construction of WTPs to treat the reclaim water is considered in the estimate, as well as its decommissioning. Due to the water quality forecast results, and the additional parameters that may require treatment, the cost estimate for the WTPs was adjusted compared to the ICRP 2014 (Golder 2014) and 2019 (AtkinsRéalis 2020).

The annual cost for operation of the WTPs is also calculated based on the current water treatment plan. The WTPs are planned to operate during the first year of closure before flooding is initiated.

Previously approved assumptions and custom unit rates

Portage, Goose and Vault Pits Flooding:

- Data updated as per the 2023 Water Management Plan (Agnico Eagle 2024m) and Lorax (2024a).
- Total volume of water pumped to Portage Pit over 6 years: 16.0 Mm^3 of water pumped from Third Portage Lake and from the Reclaim Pond.
- Total volume of water pumped to Goose Pit: 5.26 Mm^3 of water pumped from Third Portage Lake.
- Total volume of water pumped to Vault Pit: 30,000 m^3 of water pumped from Wally Lake.
- Remaining volume of flooding for the open pits will be covered by natural flooding (groundwater inflows, seepage, runoff), with no associated cost.
- Phaser Pit will be flooded by natural flooding, with no associated cost.
- Considered pumping unit cost of \$0.02/m^3 (Golder 2014).
- For pump maintenance and operation—2 labourers working 12-hour days, 7 days per week, during active pumping period (4 months/year over 5 years), with associated accommodation costs.
- Annual pump servicing provided by 2 manufacturer consultants for 1 week site visit per year over 5 years, with associated travel allowance costs.

Dike Opening:

Bay-Goose Dike Reconnection (South, East and North):

- Opening of the dike with the lake to 3 m below design minimum water level to allow year-round fish passage, facilitate water exchange, and facilitate water movement within the former impoundment.
- Reconnection at two locations, with an alternate third location to access Portage Pit Lake.
- Reconnection width of 10 m with 3:1 side slope.
- Erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
- Volume of reconnection excavation = 94,000 m^3.
- Volume of rock placement for capping and transition material, shoreline protection and fish substrate = 27,900 m^3.

South Camp Dike Reconnection:

- Opening of the dike with the lake to 1 m below design minimum water level to allow for seasonal fish passage.
- Reconnection width of 10 m with 3:1 side slope.
- Erosion protection on exposed shoreline and appropriately sized substrate in reconnection base to satisfy fish habitat requirements for this structure.
- Volume of reconnection excavation = 24,000 m^3.
- Volume of rock placement for capping and transition material, shoreline protection and fish substrate = 9,500 m^3.

Vault Dike Reconnection:

- Channel invert 3 m below design minimum water level to allow for year-round fish passage.
- Reconnection width of 10 m through dike, channel width of 5 m, with 3:1 side slope.
- Erosion protection on exposed shoreline and appropriately sized substrate in opening base to satisfy fish habitat requirements for this structure.
- Volume of channel excavation = 27,000 m^3.
- Volume of rock placement for capping and transition material, shoreline protection and fish substrate = 10,800 m^3.

Removal or Correction of Water Management Structures:

- Volume for correction work on the diversion ditches—backfill/recontour (consider work on 1000 m of diversion ditch, on an area of 4 m^2 per linear meter, 1 m deep excavation) = 4,000 m^3
- Lump sum for removal of the freshwater barge of $3,000.
- Lump sum for removal of each diffuser of $3,000.
- Length of pipeline to remove: 1,000 m for the fresh water supply system and 2,000 m for general water pipelines.

Temporary Water Treatment Plants Construction:

- Installation assumes repurposing an existing structure.
- The cost estimated for the tanks and mechanical components in the ICRP 2014 (Golder 2014) was increased to account for the type of technology required for treatment, for a total of $1,240,000 each.
- Piping, electrical, instrumentation and controls, and equipment installation costs have been estimated as percentages of the total tanks and equipment cost, for respectively 30%, 15%, 15% and 35%, for a total of $1,178,000 each.

- The decommissioning is accounted for demolishing a structure of 1,500 m^2 and scarification of the footprint.
- The decommissioning of the system includes 540 man-hours (3 labours,12 hours/day for 15 days), with associated accommodation costs.

Water Treatment:

- Annual cost of water treatment, 8 years of operation included within in Section 8.3.5.1, are calculated based on the Water Treatment in Section 8.3.5.1. Duration of treatment has been adjusted based on the 2023 Water Management Plan (Agnico Eagle 2024m).

Water Treatment

Two water treatment systems will be used to facilitate the water management strategy during active closure. One in-line metals treatment system will be used at the Meadowbank site from 2027 to 2029 to reduce metals concentrations to allow biological aeration processes to proceed uninhibited. Another metals and total suspended solids treatment system will be used at the Vault site to ensure all discharge to Wally Lake meet Water Licence criteria. Although the water is predicted to meet end-of-pipe criteria, the treatment plant will be operational in case it is required. The treatment plant is projected to be available from 2026 to 2033.

<u>Previously approved assumptions and custom unit rates</u>

Temporary Water Treatment Plants Operation:

- The volume of water to be treated is based on Agnico Eagle’s 2023 Water Management Plan update (Agnico Eagle 2024m). The volume corresponds to the approximate quantity of water collected at the Vault site, and water requiring aeration in the Portage pits.
- Considered pumping unit cost of \$0.07/m^3 with diesel pump.
- A lump sum allowance of \$500,000 for reagents is provided, based on the costs presented in the ICRP 2014 (Golder 2014) increased to account for the type of technology required for treatment and due to the potential higher volume of water to be treated.
- For operation, 1 skilled labour considered for 12 hours/day during 6 months per year over 1 year.
- Annual plant servicing provided by 2 manufacturer consultants for a 7-day site visit per year (168h) over 1 year, with associated travel allowance costs.

Interim Care and Maintenance

Interim care and maintenance are considered in this cost estimate as this is a requirement from CIRNAC. The estimate is based on a 3-year period and includes the annual surveillance, surveillance and monitoring costs (closure), presented in CPCMP (Appendix 6-A).

Previously approved assumptions and custom unit rates

- Treatment costs are assessed in the water management tab as necessary.
- The annual cost related to maintenance, surveillance, monitoring and inspection during the closure period is estimated at $282,600 (as presented in the CPCMP).
- The total cost for 3 years of care and maintenance is evaluated at $847,800.

Post-Closure Monitoring and Maintenance

The post-closure costs are separated in two main periods: the closure period (5 years), and the post-closure period (11 years). The costs related to site monitoring and maintenance are presented below.

The annual operation cost of the interim water treatment plan is not included in the post-closure costs as it is already accounted for in “Interim care and maintenance” for the required period of 3 years.

Discounting for long-term monitoring and maintenance (i.e., CPCMP) are included in the presented costs. A discount rate for Years 0 to 100 post-closure of 3.0% was used for the long-term monitoring and maintenance calculations.

Previously approved assumptions and custom unit rates

Monitoring and Inspection, Closure

- An annual lump sum of $100,000 for general monitoring programs (i.e., aquatic, wildlife, air quality, noise monitoring program) is considered.
- One annual geotechnical inspection if planned per year for $20,800 – one week visit by one engineer, 7 days, 12h per day at $150/hour, plus $5,000 of reporting and associated travel and accommodation fees.
- A lump sum of $10,000 for groundwater monitoring.
- A lump sum of $15,500 of regulatory fees including annual reporting, management plans and progress reports.
- An estimated annual cost of $73,100 for the water quality monitoring on-site, based on operational laboratory costs and the Meadowbank Water Licence 2AM-MEA1530 requirements.

Monitoring and Inspection, Post-Closure:

- A lump sum of $100,000 every 2 years for general monitoring programs (i.e., aquatic, wildlife, air quality, noise monitoring program) is considered.
- One annual geotechnical inspection if planned per year for $20,800 based on a one week visit with one engineer, 7 days, 12h per day at $150/hour, plus $5,000 of reporting and associated travel and accommodation fees).

- A lump sum of $10,000 for groundwater monitoring.
- A lump sum of $15,500 of regulatory fees including annual reporting, management plans and progress reports.
- An estimated annual cost of $49,432 for the water quality monitoring on-site, based on operational laboratory costs and the Meadowbank Water Licence 2AM-MEA1530 requirements (Schedule 1, Table 8.3-1), as presented in Table 8.3-3.

Maintenance and Surveillance

- Two site caretakers provided with biweekly overnight visits, 12 hours per day, 5 months of the year, along with annual allowances for a site vehicle and equipment ($20,000) and site maintenance ($10,000).

Post-Closure Net Present Value

The discount rate for calculation of net present value of post-closure cost is considered at 3%.

Mobilization and Demobilization

During the closure stage, mobilization costs have been accounted for by allowing costs for mobilization and demobilization of equipment from Baker Lake, the mobilization of workers to perform the closure work, in addition to one barge trip into and out of Baker Lake exclusively for Meadowbank closure.

<u>Previously approved assumptions and custom unit rates</u>

- Mobilization and demobilization of heavy mobile equipment for demolition is based on a distance of 110 km along the AWAR from Baker Lake to Meadowbank.
- A seasonal work force of 50 workers over 3 years for a 6 months per year demolition/rehabilitation seasons is considered, with associated accommodation and transportation costs (4 trips per year at $2,500 return, with 6 hours paid per trip).
- Mobilization, camp, and accommodation for 95 days to complete the aggregate placement work for the tailings in-pit deposition (based that 4,000 m^3 can be placed in a day).
- Lump sum for one barge trip into and out of Baker Lake of $1,000,000 is considered.

Indirect Costs

- No departures have been made from previously approved percentages.
- Project management and engineering fees are assumed at 5% each of the direct closure costs.
- Health and safety monitoring, QA/QC and engagement costs (communication with stakeholders from the community) are assumed as 2% of the direct closure costs.
- Bonding/insurance fees are assumed as 1% of the direct closure costs.

- Based on the current level of engineering and uncertainties, a contingency of 15% of the direct closure costs has been provided for.

8.3.5.2 Whale Tail

Open Pits

Whale Tail and IVR Pits are assessed separately including stability and setback studies. Takeoff quantities for placement of materials are based on current conditions.

The previously proposed overburden cover to mitigate water quality concerns in the IVR Pit has been removed and replaced, in accordance with (section 6.2 Open Pits), with a water treatment approach. Water management and water treatment additions to the closure security are detailed in Water Management and Water Treatment within Section 8.3.5.2.

Previously approved assumptions and custom unit rates

Berms at ramp entrances and at exposed Whale Tail Pit crest

- 3 entrances, 30 m long x 1 m tall with 2H:1V side slopes = 270 m^3

Berms at ramp entrances and at exposed IVR Pit crest

- 4 entrances, 30 m long x 1 m tall with 2H:1V side slopes = 360 m^3

Removal of stationary equipment Whale Tail Pit

- Lump sum $10,000

Removal of stationary equipment IVR Pit:

- Lump sum $10,000

IVR Pit pump station and piping

- $800,000 allowance for pump and pipe setup
- $75,000 allowance for relocation of pipe system from underground flooding
- Pump operation at previously approved rate

Underground Mine

Security is primarily composed of activities relating to backfilling the portal and the decline ramp to eliminate access to the underground mine workings. Capping the vent raises and plugging CRF fill passes.

Previously approved RECLAIM submittals included provisions for removal of contaminated soils to the landfarm for treatment and subsequent use in reclamation activities. As the underground has no soils, and no ESA the related line items have been removed from the reclamation cost.

Fuels, oils, chemicals, etc. will be removed for disposal by a licensed handler prior to flooding.

Previously approved assumptions and custom unit rates

The portal and decline ramp will be backfilled to eliminate access to the underground mine workings. The vent raises will be capped. CRF passes will be plugged. Fuels, oils, chemicals, etc. will be removed for disposal by a licensed handler prior to flooding. Decontaminated underground equipment will be left in place.

- Portal backfilling and raise caps as per Amaruq Exploration Water Licence 2BB-MEA1828.
- Ventilation shafts #1 and #2 will be capped with prefab concrete slabs, previously approved at $23,767 each.
- Removal of the main ventilation system at the exploration ramp/portal approved at $10,000 lump sum.
- Disposal of heavy hydrocarbons is assessed with an escalated unit rate based on previously approved volumes and level of effort.
- Fees and other allowances inclusive of transportation are included with the removal of hazardous materials.
- The relocation of dewatering pumping systems is addressed with a previously approved lump sum.

Tailings Impoundment

There is no tailings impoundment at the Whale Tail site and this tab of the RECLAIM sheet has been removed.

Rock Pile

The design of the Whale Tail and IVR rock piles has been adjusted since the 2020 ICRP to account for mine plan revision. 20% of the total volume is expected to be placed at closure with the preceding 80% being placed during operations. Design details for closure are expanded upon in Section 6.5 Waste Rock and Overburden Storage Facilities.

- Volume of Whale Tail NPAG/NML cover included in RECLAIM: 1,283,897 m^3
- Volume of IVR NPAG/NML cover to included in RECLAIM: 649,123 m^3

Previously approved assumptions and custom unit rates

- Whale Tail flattening of slopes with dozer, contouring of waste rock operations pad using a previously approved unit rate.

- Whale Tail and IVR thermal cover placement volume is based on the current state of reclamation activities. The placement unit cost is not a custom unit rate but has been reviewed and previously approved. An escalated lump sum previously approved is used for waste rock survey.

Buildings and Equipment

For demolition work it is assumed that:

- All demolition works of site infrastructure will be undertaken by a single third-party contractor under a single contract.
- Existing site facilities where available will be used for the duration of closure.
- Decommissioning will include electrical disconnects, pressure vessel discharge, fire suppression isolation, product line blowouts, sump cleanouts (industrial buildings only).
- Concrete from structures can be processed and used as fill on-site (if applicable), all crushed concrete will be inert at time of demolition.
- Only above-grade concrete was considered in the demolition volumes, machine estimates, and material handling costs. Slabs and below grade concrete is assumed to be left in place and covered as noted in the ICRP. Above-grade concrete will be land-filled or used as backfill upon approval.

<u>Previously approved assumptions and custom unit rates</u>

- Decontamination and on-site disposal of equipment not suitable for future use off-site.
- Grade and contouring of pads unit rate is based on previously approved RECLAIM.
- Removal of culverts and bridges previously approved.
- Closure and reclamation of borrow pits for haul road construction as per previously approved RECLAIM.

Chemicals, Hazardous Materials and Contaminated Soils

Chemicals and soil management were reviewed in accordance with the information available in the Landfarm Design and Management Plan (Agnico Eagle 2024p), the Hazardous Materials Management Plan (Agnico Eagle 2022d) and the Meadowbank Annual Report 2023 (Agnico Eagle 2024a).

Hazardous materials will be managed on an ongoing basis to minimize accumulation of materials on-site and reduce decontamination costs during decommissioning.

Allowances for waste oil, fuel, and batteries have been made including fees for transportation.

Previously approved assumptions and custom unit rates

Building decontamination and consolidation of hazardous materials will be managed on an ongoing basis to minimize accumulation of materials requiring remediation at closure. Final decontamination of structures is based on the total footprint and uses a previously approved unit rate per square meter.

An allowance for the quantity of waste oils, fuel, and batteries has been carried forward from previously approved estimates. Similar lump sum and custom unit rates for machine parts, glycol, other hazardous materials including transport and disposal fees are as per previously approved RECLAIM.

A phase 2 contaminated soil investigation has been retained from the previously approved RECLAIM in accordance with the ESA program.

Water Management

The cost estimate includes the open pits flooding, the construction of dike reconnections (opening) and closure of the water management facilities including sediment ponds.

Previously planned backfilling of GSP-2 and GSP-3 is no longer being constructed as per the current water treatment strategy. Only GSP-1 will remain to be backfilled. Backfilling former lakes within the IVR attenuation pond area will also no longer be required as per the current water treatment strategy. Takeoff quantities for these items have been reduced to zero but line items are included in RECLAIM sheets for posterity. Pumped volumes to empty these ponds for sediment characterization have been added.

Cost to construct a temporary water treatment plant is based on previously approved unit rates developed for water treatment at the Meadowbank Mine Site.

Previously approved assumptions and custom unit rates

- Lump sum as per previously approved RECLAIM to relocate sediments to landfill from WRSF ponds.
- Removal of pumps, and pipeline from Nemo Lake and Whale Tail (South Basin) as per previously approved RECLAIM.
- Removal of pump at Mammoth Lake and removal of pipeline to explosive mixing.
- Removal of discharge diffusers at Whale Tail South Basin and Mammoth Lake.

Water Treatment

A metals water treatment plant will be operated to reduce arsenic concentration, amongst other metals, in IVR Pit until water quality objectives are met. Water treatment is expected to run for six years during active closure. Cost for reagents is based on current site consumption data and has been adjusted for the expected annual treatment volume.

Interim Care and Maintenance

Annual interim care and maintenance costs have been calculated based on one full calendar year. This version of RECLAIM assumes the total cost to be multiplied over three years to satisfy the bonding requirements.

<u>Previously approved assumptions and custom unit rates</u>

- Pickup truck day rate duplicated from previously approved RECLAIM.
- Allowance for communications.
- Water sampling & reporting, geotechnical assessment lump sums as per previously approved RECLAIM.

Post-Closure

The post-closure costs are separated in two main periods: the closure period (5 years) and the post-closure period (11 years). The costs related to site monitoring/inspection and maintenance/surveillance are presented below.

Discounting for long-term monitoring and maintenance (i.e., CPCMP) was included in the presented costs. A discount rate for Years 0 to 100 post-closure of 3.0% was used for the long-term monitoring and maintenance calculations.

<u>Previously approved assumptions and custom unit rates</u>

- Unit rates for Surface and ground water sampling, and survey inspections as per Amaruq Exploration NWB water licence.
- Site and AWAR monitoring are as per previously approved RECLAIM.

Mobilization and Demobilization

Mobilization of equipment and workers to perform closure work is assumed from Baker Lake.

<u>Previously approved assumptions and custom unit rates</u>

- As per previously approved RECLAIM transport time for equipment and workers from Baker Lake to site is accounted for with a custom unit rate. Hours are based on AWAR travel time with an addition for travel once on-site.
- As per previously approved RECLAIM it is assumed there is sufficient fuel on-site to complete the work.
- Unit rates for reclamation activities are the same between Meadowbank Complex areas.
- Indirect Costs

- Other indirect costs are calculated based on the direct costs total. Only the contingency has been modified from the previously approved percentage.
- Project management and engineering fees are assumed at 5% each of the direct closure costs.
- Health and safety plans/monitoring, QA/QC and engagement costs (communication with stakeholders from the community) are assumed as 1% of the direct closure costs.
- Bonding/insurance fees are assumed as 1% of the direct closure costs.
- Based on the current level of engineering and uncertainties and to bring parity between the security for Meadowbank and Whale Tail, a contingency of 15% of the direct closure costs has been provided for.

8.3.6 Comparison with 2019 Estimate

The following tables (Table 8.3-3; Table 8.3-4) summarise the changes from previous RECLAIM submittals for both the Meadowbank Mine and the Whale Tail Mine.

Table 8.3-3: Meadowbank RECLAIM Version 7.0 Comparison

Item	Component	Current Cost	2019 Cost	Difference
Open Pit	Portage	$75,240	$3,240	$72,000
	Goose	$73,080	$1,080	$72,000
	Vault	$1,080	$1,080	$0
	Phaser	$1,080	$1,080	$0
Underground Mine	-	$0	-	$0
Tailings Facility	-	$32,121,068	$38,680,308	-$6,559,240
Rock Pile	Portage	$2,707,534	$1,378,767	$1,328,767
	Vault	$30,000	$30,000	$0
Buildings and Equipment	Meadowbank	$8,121,236	$8,029,508	$91,728
	Baker Lake	$1,685,266	$1,660,670	$24,596
	AWAR	$749,930	$993,078	-$243,148
Chemicals and Contaminated Soil Management	-	$1,316,981	$1,316,981	$0
Surface and Groundwater Management	-	$25,409,069	$7,997,222	$17,411,847
Interim Care and	-	$847,800	$847,800	$0
SUBTOTAL: Capital Costs		**$73,139,364**	**$60,940,814**	**$12,198,550**
Indirect Costs				
Mobilization/Demobilization	-	$5,589,160	$5,589,160	$0
Post-Closure Monitoring and Maintenance	-	$4,133,524	$4,133,524	-$0
Engineering	5%	$3,656,968	$3,047,041	$609,927
Project Management	5%	$3,656,968	$3,047,041	$609,927
Health and Safety Plans/Monitoring & QA/QC	2%	$1,462,787	$1,218,816	$243,971
Bonding/Insurance	1%	$731,394	$609,408	$121,986
Contingency	15%	$10,970,905	$9,141,122	$1,829,783
Market price factor adjustment	0%	$0	$0	$0
SUBTOTAL: Indirect Costs		**$30,201,706**	**$26,786,112**	**$3,415,594**
TOTAL COSTS		**$103,341,070**	**$87,726,926**	**$15,614,144**

- = not applicable

Table 8.3-4: Whale Tail RECLAIM Version 7.0 Comparison

Item	Component Name	Current Cost	2019 Cost	Difference
Capital Costs				
Open Pit WT	-	$35,345	$35,345	$0
Open Pit IVR	-	$7,550,316	$8,401,400	-$851,084
Underground Mine	-	$775,689	$786,699	-$11,010
Tailings Facility	-	$0	$0	$0
Rock Pile WT	-	$6,129,757	$5,932,400	$197,357
Rock Pile IVR	-	$2,921,227	$3,441,000	-$519,773
Buildings and Equipment	-	$3,774,657	$3,774,657	$0
Chemicals and Contaminated Soil Management	-	$899,779	$899,779	$0
Surface and Groundwater Management	-	$22,750,756	$6,495,673	$16,255,083
Interim Care and Maintenance	-	$947,781	$947,781	$0
SUBTOTAL: Capital Costs		**$45,785,308**	**$30,714,735**	**$15,070,573**
INDIRECT COSTS				
Mobilization/Demobilization	-	$7,401,348	$7,401,348	$0
Post-Closure Monitoring and Maintenance	-	$2,718,710	$2,718,710	$0
Engineering	5%	$2,289,265	$1,535,737	$753,529
Project Management	5%	$2,289,265	$1,535,737	$753,529
Health and Safety Plans/Monitoring & QA/QC	1%	$457,853	$307,147	$150,706
Bonding/Insurance	1%	$457,853	$307,147	$150,706
Contingency	15%	$6,867,796	$6,142,947*	$724,849
Market price factor adjustment	0%	$0	$0	$0
SUBTOTAL: Indirect Costs		**$22,482,091**	**$19,948,773**	**$2,533,318**
TOTAL COSTS		**$68,267,399**	**$50,663,508**	**$17,603,891**

*2019 cost included 20% Contingency:

- = not applicable

8.3.7 Exclusions

The following items are excluded from the estimate:

- Provincial and federal taxes.
- Employee benefits and/or redundances are not included as part of RECLAIM guidelines.
- Social, cultural, and heritage costs beyond items specified in RECLAIM.
- Value from equipment or infrastructure sale or salvage.

8.4 Closure Criteria Satisfying Security Requirements

This section outlines the conditions for which the closure objectives and criteria have been met and the held security amount is no longer needed and can be returned to Agnico Eagle.

Specific evidence parameters are detailed for each RECLAIM line item in SECTION 10 Closure Schedule. The evidence parameters are listed in Table 8.4-1.

Table 8.4-1: Evidence Parameters

1	Indirect Costs, submit new cost estimate with each adjustment - percentage based items will adjust accordingly.
2	Major Works, Mines Inspector sign-off, Attached Mines Inspectors Letter to Monthly Report, CIRNAC Inspector on-site will/can also assess
3	Earthworks, Photos or Aerial photo where applicable, Engineer Verification as part of the Monthly Report, CIRNAC Inspector via email or will/can also access
4	General, Survey and documentation, Engineer Verification, CIRNAC Inspector on-site will/can also assess
5	General, Photographs or Aerial photo where applicable, survey with field engineer sign-off
6	General, Design and Engineer sign-off, CIRNAC Inspector via email or will/can also access
7	General, Manifests/Photographs, CIRNAC Inspector via email or will/can also access
8	Monitoring, Analysis/Report filed, CIRNAC Inspector via email
9	NA, Proportionally related to other items for security return.

8.4.1 Indirect Costs

Security estimate items based on a percentage calculation contained within the Summary Indirect Costs section will be addressed by way of recalculation of the overall cost estimate.

8.4.2 Meadowbank

The following sections address the detailed requirements and evidence required to confirm completion of milestones for return of closure security amounts.

8.4.2.1 Open Pit

The closure objectives accounted for in this filing will be considered complete upon inspection and approval from CIRNAC inspector.

Closure of the Meadowbank Portage, Goose, Vault, and Phaser Pits will be complete upon the placement of barricades at the ramp crest and will no longer require security to be posed. Following this approval and the balance of security contained within this section of the RECLAIM can be returned to Agnico Eagle.

8.4.2.2 Tailings

Closure of the tailings facilities includes placement of an NPAG/NML waste rock cover of varying thicknesses. In addition, a water management system to control runoff and ensure proper drainage for the North and South Cells. Removal of pumping and piping infrastructure and installation of instrumentation will conclude the tailings closure works. These milestones can be completed separately with regard to the return of closure security amounts.

8.4.2.3 Rock Pile

The rock pile cover represents the most significant milestone related to closure security. Completion of the NPAG/NML cover of the rock pile as well as coving of the sumps and installation of permanent instrumentation must all be completed before closure of the rock pile section of the closure security is considered complete.

8.4.2.4 Buildings & Equipment

Removal of buildings and equipment will proceed throughout closure activities and will be individually evaluated as meeting the closure criteria for return of the closure security. Breaking of basement slabs and reclamation of roads, laydown areas, and airstrip can only be evaluated after all buildings have been removed.

8.4.2.5 Chemicals

The chemicals component of the reclamation security will be evaluated in concurrence with buildings and equipment reclamation activities. As buildings must be decontaminated prior to reclamation the buildings decontamination and consolidation and shipment off site of hazardous materials will be considered complete after inspection of the related buildings remediation.

Hazardous materials removal and contaminated soils removal must be evaluated for completion concurrently with buildings and equipment site remediation activities.

8.4.2.6 Water Management

Pumping activities are not required to occur concurrently, the flooding of Portage Pit, Goose Pit, and Vault Pit may be completed separately and can be evaluated independently for achieving the closure criteria and subsequent return of security amounts. Dyke reconnection and rock placement can also take place independently and should be evaluated individually for meeting closure criteria.

The construction of temporary water treatment facilities will not be considered complete for the purposes of reclamation security return until water treatment has commenced. Security held for the decommissioning of the temporary WTP should be held until such time as the treatment plant is taken over by another entity or decommissioning activities are completed.

8.4.2.7 Water Treatment

Operating expenses related to the WTP are assembled on an annual basis and should continue to be held until such time as no water treatment activities are taking place.

8.4.2.8 ICM

Interim Care and Maintenance costs are based on annual post-closure expenses and are to be held until related post-closure activities are considered complete.

8.4.2.9 Post-Closure

Post-closure activities are based on the expected annual expense for two periods: closure and post-closure. The closure potion of this security should be held until the project moves into the post-closure phase, at this point the closure portion becomes redundant and can be returned. The post-closure phase security will be considered complete when all other reclamation security areas have satisfied the closure criteria.

Mobilization

Mobilization and demobilization reclamation security should be revaluated based on the remaining reclamation work remaining upon subsequent submittals of the overall site security. While the overall scope of the mobilization security should be reduced as the reclamation scope meets closure criteria the remainder of the mobilization security should be held until such time as all reclamation activities have been completed.

8.4.3 Whale Tail

8.4.3.1 Open Pit

Excluding pumping operations, the closure objectives accounted for in this filing will be considered complete upon inspection and approval from the regulator. Closure of the Whale Tail and IVR Pits will be complete upon the placement of barricades at the ramp crest, conclusion of a stability and setback study, and removal of stationary equipment. Pumping activities include supply and install of a pump station and pipe system to operate for an expected 17 years before closure criteria are met.

8.4.3.2 Underground Mine

The closure criteria satisfying the requirements for security return related to the underground mine at the Whale Tail Mine Site shall be satisfied upon completion of raise capping and backfilling of the portal. Prior to capping and backfilling activities being completed all hazardous materials must be removed from the underground including submittal of documentation confirming such activities are complete. Mobile equipment containing no hazardous material will be left underground. Pumping activities to flood the underground mine can occur concurrently with raise capping.

8.4.3.3 Tailings

No security is held for the Whale Tail Mine Site related to tailings reclamation.

8.4.3.4 Rock Pile

Placement of the complete thermal cover at the Whale Tail and IVR Pits in conjunction with a waste rock survey and installation of thermistors must be completed to satisfy the closure objectives. Progressive completion of thermal cover placement can be considered annually for security return.

8.4.3.5 Buildings and Equipment

Removal of buildings and equipment will proceed throughout closure activities and will be individually evaluated as meeting the closure criteria for return of the closure security. Breaking of basement slabs and reclamation of roads, laydown areas, and airstrip can only be evaluated after all buildings have been removed.

8.4.3.6 Chemicals

The chemicals component of the reclamation security will be evaluated in concurrence with buildings and equipment reclamation activities. As buildings must be decontaminated prior to reclamation the buildings decontamination and consolidation of hazardous materials will be considered complete after inspection of the related buildings remediation.

Hazardous materials removal and contaminated soils removal must be evaluated for completion concurrently with buildings and equipment site remediation activities.

8.4.3.7 Water Management

Removal of dykes and backfilling of GSP-1. This can be evaluated for security return on a progressive basis. Removal of pumps and backfilling of ditches will satisfy the closure criteria for security return upon inspection and approval.

8.4.3.8 ICM

Interim Care and Maintenance costs are based on annual post-closure expenses and are to be held until related post-closure activities are considered complete.

8.4.3.9 Post-Closure

Post-closure activities, water sampling, geotechnical inspection, and survey, are expected to continue for 20 years. Following each successive post-closure year the security amount should be recalculated based on the remaining monitoring time.

8.4.3.10 Mobilization

Mobilization and demobilization reclamation security should be revaluated based on the remaining reclamation work remaining upon subsequent submittals of the overall site security. While the overall scope of the mobilization security should be reduced as the reclamation scope meets closure criteria the remainder of the mobilization security should be held until such time as all reclamation activities have been completed.

8.5 Security Reduction Procedure in Water Licence

Agnico Eagle understands that an amendment to security will require an amendment process under Part C of the Type A Water Licence. In addition, under Part C, as part of the amendment, the process of a release of reclamation security will also be applicable. For clarity, this means that once the cover is completed in 2028, the LOC should be reduced to the revised amount as per Table 8.5-1.

In addition, section 10 of the *Nunavut Waters Regulation* confirms that the reclamation security required under the Type A Water Licence cannot exceed the estimated reclamation liability for the site. Additionally, as a policy matter the NWB supports and encourages progressive reclamation, particularly for a specialized facility, such as a TSF.

Accordingly, this plan is submitted as an appendix to the ICRP (Appendix 6-J) in support of the NWB's approval of the execution of this plan as well as a corresponding reduction in security required under Part C once the work is completed.

Agnico Eagle is able to comply with all of the terms and conditions of the Type A Water Licence in carrying out the closure of the TSF. No amendments to the Type A Water Licence will be required to carry out the closure strategy described in this plan.[1] Therefore, the NWB should not require an amendment process to approve the ICRP.

[1] For example, Agnico Eagle can continue to comply with

- Part D, Item 9 – "All Effluent from the Sewage Treatment Plant shall be directed to the Stormwater Management Pond. Any discharge of the Stormwater Management Pond shall be directed to the Tailings Storage Facility."
- Part E, Item 5 - "The Licensee shall maximize to the greatest practical extent, the use of reclaim water from the Tailings Storage Facility for use in the mill.."
- Part F, Item 2 - "The Licensee shall dispose of Sewage Effluent and direct all sludge removed from the Sewage Treatment Plant to the Tailings Storage Facility or to the Landfarm as a nutrient amendment in accordance with the Operation and Maintenance Manual: Sewage Treatment Plant (March 2017) as approved by the Board."
- Part F, Item 20 – "The Licensee shall dispose of tailings and operate the Tailings Storage Facility in accordance with the Tailings Storage Facility - Operation, Maintenance and Surveillance Manual (March 2019) and the Updated Mine Waste Rock and Tailings Management Plan (July 2019) as approved by the Board and Guide to the Management of Tailings Facilities (Mining Association of Canada September 1998). The tailings solids fraction shall be permanently contained within the Tailings Storage Facility."

For further clarity, Table 8.5-1 highlights the reduction of the security directly related to the activity of the North and Cell cover and highlighted the revised security number for Reclaim version 7.0 once the cover material is placed. The placement of the cover will start in winter 2025/2026 and continue until the start of freshet 2028.

Table 8.5-1: Summary of Security Costs and Revised Security Costs for Water Licence Reduction

Item	Costs	Comments
A. Existing Licence overall security required by Part C	$89,427,746	
B. New reclamation security estimate number	$103,341,070	(Section 8.0 of ICRP [Agnico Eagle 2025])
C. Difference of security estimate	$13,913,324	
D. North and South Cell Cover security estimate liability reduction	$42,814,967	(Table 4 in Appendix 6-J) 1. Freshet 2026 – approximately $14,271,655.67 will be spent on the cover placement which exceeds the difference in reclaim 2. Freshet 2027 – approximately an additional $14,271,655.67 will be spent 3. Freshet 2028 – approximately the final $14,271,655.67 will be spent
E. Balance of Cover Costs	$28,901,643	= D - C
F. Revised Security Estimate for License once the activities contemplated by this Plan are completed	$60,526,103	Revised security in the Water Licence after the amendment

SECTION 9 ENVIRONMENTAL RISK MONITORING

This section provides a brief overview of key environmental risk monitoring programs associated with the Meadowbank Complex. Detailed information is available in the CPCMP (Appendix 6-A) and the Closure Investigation Work Plan (Appendix 6-C).

9.1 The Core Receiving Environment Monitoring Plan (CREMP)

The CREMP monitors water quality in the receiving environment and determines if activities at Meadowbank Mine, Whale Tail Mine, and Baker Lake are causing changes in water quality, sediment chemistry, plankton, and benthic invertebrates. Fish are monitored as part of the MDMER Environmental Effects Monitoring (EEM) requirements on a three-year cycle; findings from the EEM are included as a component of AEMP; the later of which is the overarching ‘umbrella’ program that integrates results of individual, but related, monitoring programs for the purpose of implementing management actions before unacceptable adverse impacts occur to aquatic life.

The purpose of the CREMP is to act as a system of early warning triggers and action thresholds to support management decisions within the AEMP. This monitoring plan is active during monitoring and into closure. It is not expected to occur into post-closure, as the CPCMP Adaptive Reduction Framework is meant to confirm chemical stability in the receiving environment, and taper off monitoring efforts, leading up to the onset of post-closure. Details on the CREMP (Agnico Eagle 2024t) and the CPCMP are found in Appendix 6-A.

9.2 Phase I and Phase II Environmental Site Assessment

A Desktop Study, Phase I, and Phase II ESAs were conducted in 2023, 2024, and 2025 as part of the progressive reclamation of the Meadowbank Complex (WSP 2024c; WSP 2024d; WSP 2024e; WSP 2025). These investigations focused on areas outside the operational mining areas (i.e., outside of the open pits, tailing ponds, waste rock storage facilities, dikes, dams and roads within and interconnecting the mine sites).

Upon closure, all potentially impacted areas (both inside and outside the former operational mining areas) will need to be evaluated. The Closure Investigation Work Plan (Appendix 6-C) outlines the process used to evaluate the site at closure for soil contamination related to historical mine operations and related activities. The Plan is conceptual, in that the exact sampling locations are not predetermined but reasonable assumptions that outline extent and effort to be expected in the investigation are included. The Closure Investigation Work Plan documents how Agnico Eagle will identify Areas of Potential Environmental Concern (APECs) and POPCs to be assessed with the purpose of determining the potential extent of remediation and/or risk management. It will outline the following key steps:

1) Conduct a Phase I ESA to identify APECs and POPCs at the mine features, such as open pits, underground workings, mine waste disposal facilities (tailings ponds and waste rock repositories) and any area affected by the transfer of contaminants from the historical mine operations of these features.
2) Complete a Phase II ESA to determine the presence and extent of POPCs at the identified APECs in the Phase I ESAs.
3) Achieve practical delineation and estimate the volumes of contaminated soil to the extent that is feasible to develop a remedial action plan; and
4) Identify feasible remedial technologies to treat contaminated soil and water at the Complex.

Soil quality remediation objectives were developed for select parameters and will be used to support closure activities to identify areas of the mine and soil volumes requiring remediation. The list of POPCs for which Soil Quality Reclamation Objectives (SQROs) were developed included the metals assessed in the Wildlife and Country Foods Screening Level Risk Assessment Plan (Agnico Eagle 2024v) and the spill contaminants identified in the Phase II ESAs conducted to date (WSP 2024e; WSP 2024d); e.g., trichloroethylene, petroleum hydrocarbon fraction F2, methanol, and cyanide. The soil quality remediation objectives (detailed methods and final values) are provided in Appendix 9-A. At closure, they will be applied as part of the Closure Investigation Work Plan (Appendix 6-C) to identify areas of the mine and soil volumes requiring remediation.

9.3 Human Health Risk Assessment (HHERA)

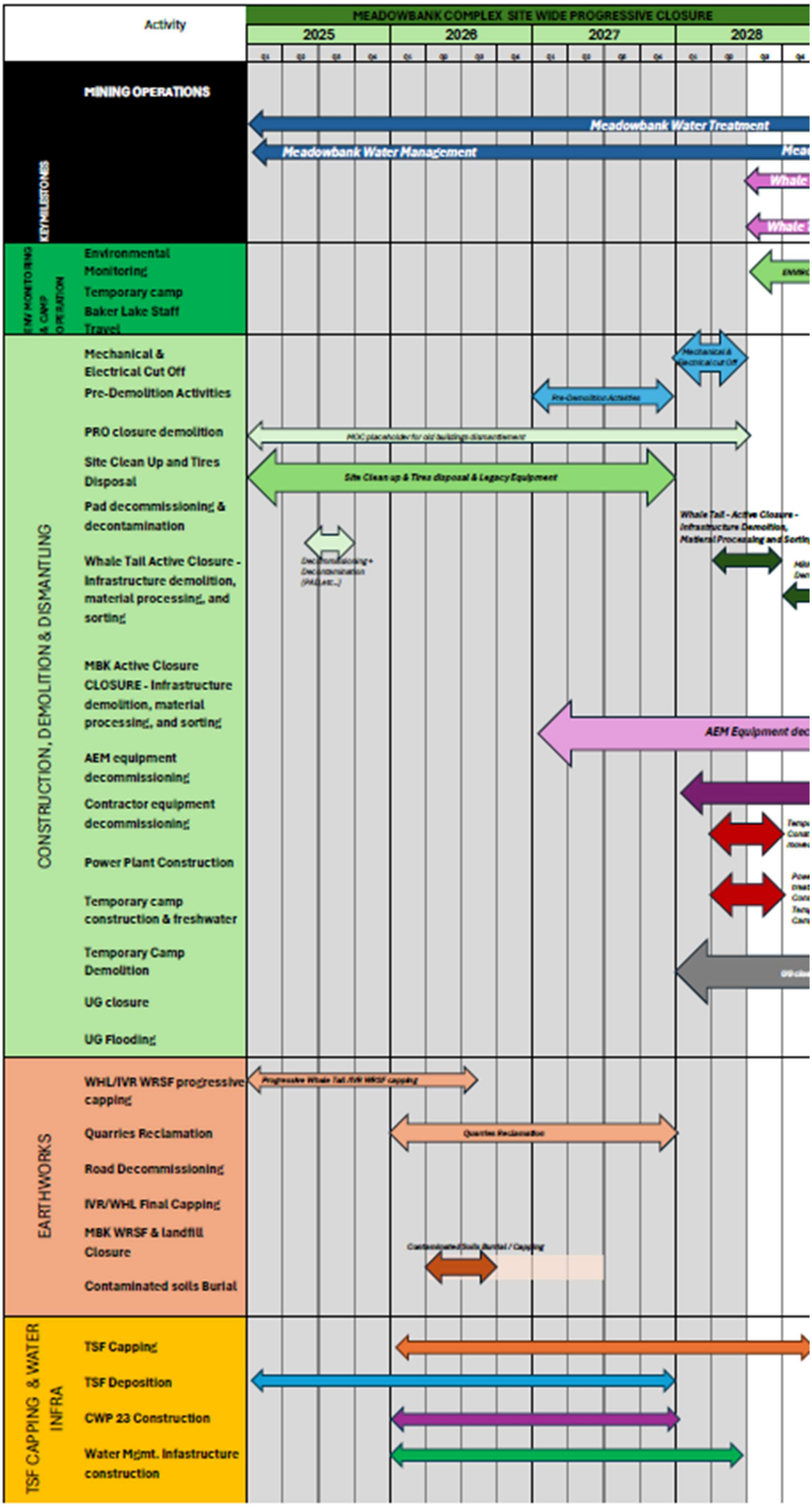
A HHERA was prepared to support the ICRP. The objective of the HHERA was to evaluate the potential risks to human health and the environment from predicted soil and water contamination associated with the historical operation of the Site as a gold mine. Based on the results of the HHERA (Appendix 6-D), negligible risks to human, terrestrial and aquatic receptors are expected in post-closure conditions at the Meadowbank Complex.

SECTION 10 CLOSURE SCHEDULE

10.1 Progressive Reclamation of the Meadowbank Complex

Agnico Eagle is committed to conducting progressive reclamation of the Meadowbank Complex, where possible (Figure 10.1-1). Several progressive reclamation activities are underway (e.g., thermal cover over the Meadowbank Complex WRSF, North Cell and South Cell TSF) or nearing completion (e.g., thermal cover over the Portage WRSF). Progressive reclamation activities are reported in the *Meadowbank Complex Annual Report* (e.g., Agnico Eagle 2024a).

Figure 10.1-1: Progressive Reclamation Timeline for the Meadowbank Complex



10.2 Closure and Post-Closure of the Meadowbank Complex

Most closure activities will be conducted following operations. These include items such as final water treatment, deconstruction of the mill, and disposal of hazardous wastes. Closure monitoring will begin in closure and continue until the success criteria of the Meadowbank Complex have been met, and as described in the CPCMP (Appendix 6-A). Figure 10.2-1 illustrates the closure and post-closure activities for the Meadowbank Complex, and their expected durations. Figure 10.2-2 shows the activities of the full life cycle for the Meadowbank Complex.

Figure 10.2-1 Closure and Post-Closure Timeline for the Meadowbank Complex

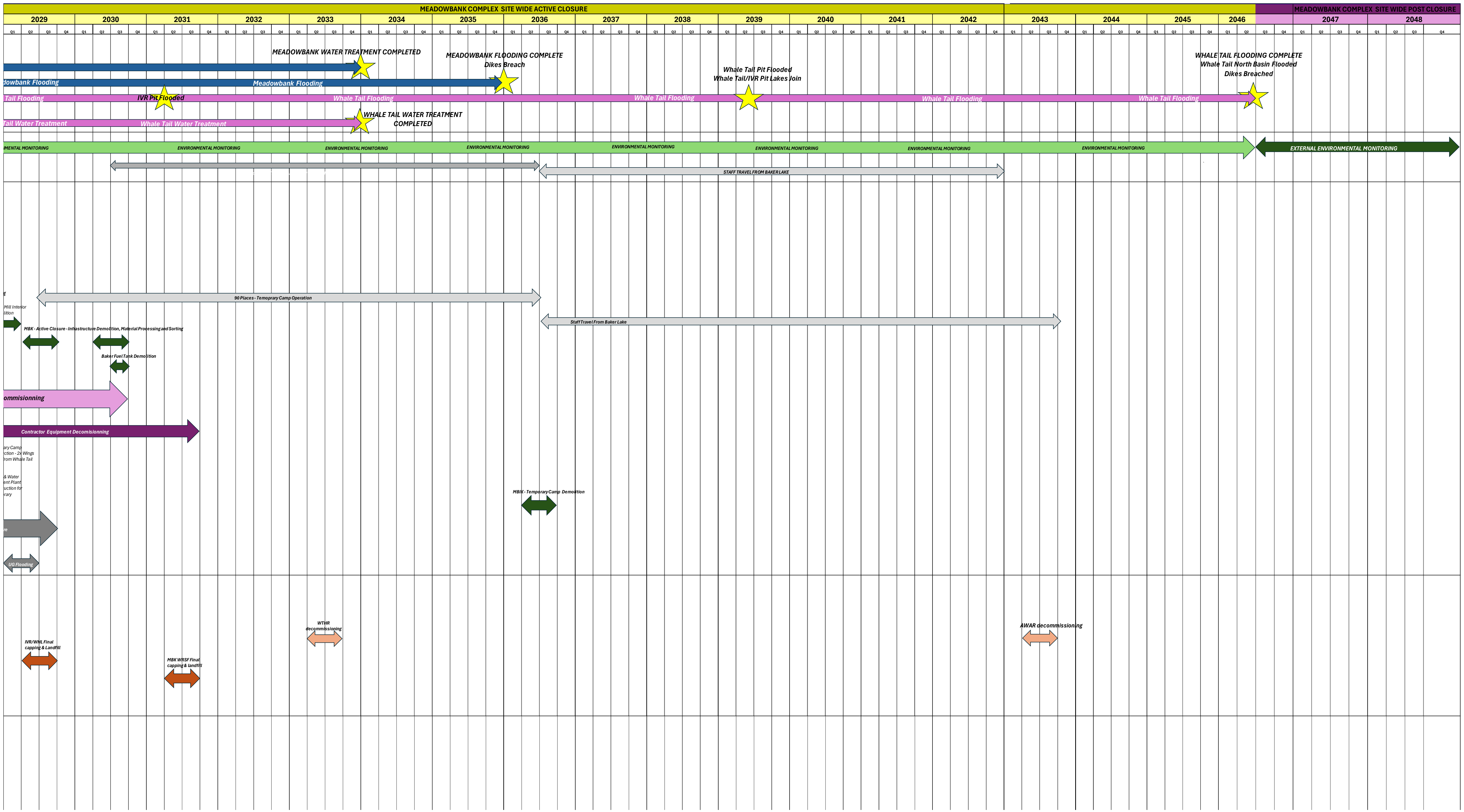


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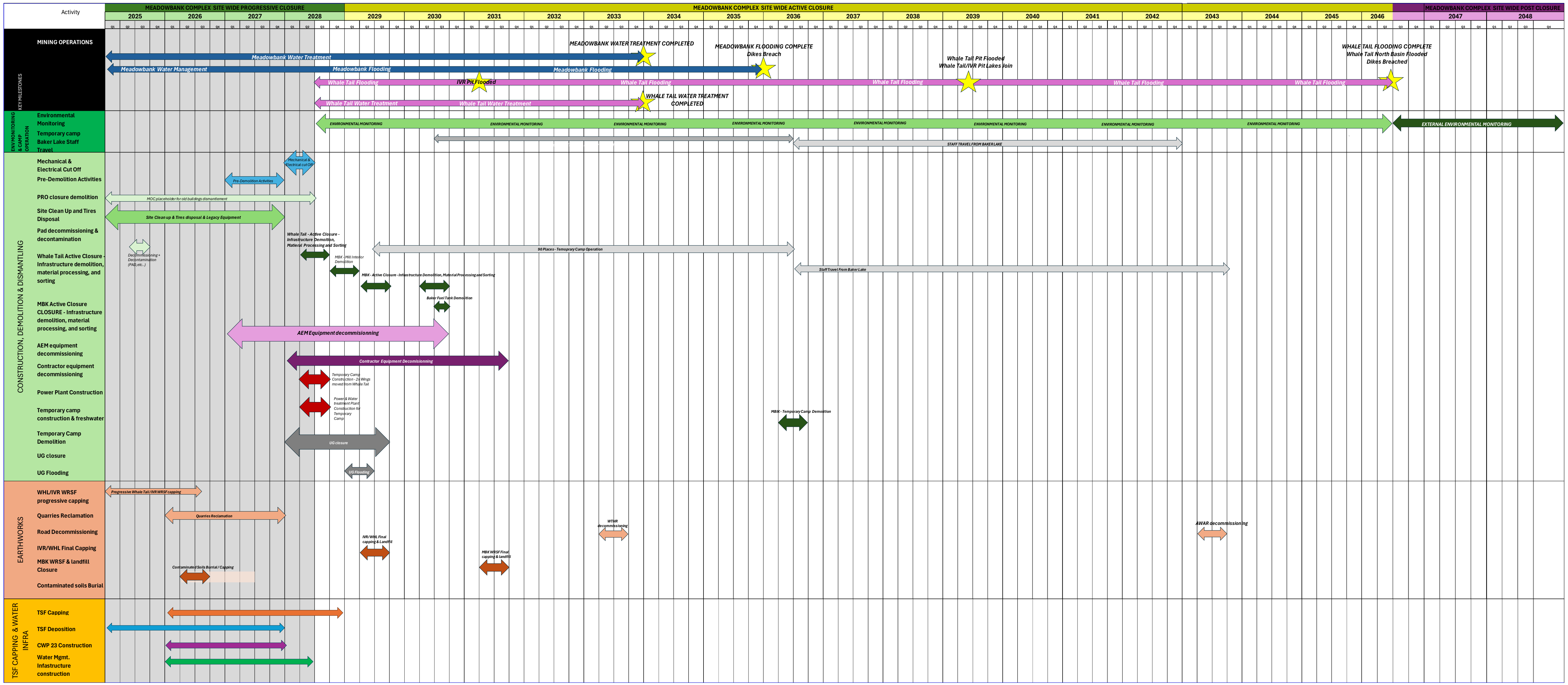
Figure 10.2-2: Overview of the Meadowbank Complex's Closure Life Cycle



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APPENDICES

For ease of review and file size, appendices are provided as standalone pdf files