AGNICO EAGLE

Main Application Document NWB Water Licence 2AM-WTP1826 Amendment

MAY 2019
VERSION 1

EXECUTIVE SUMMARY

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing an expansion to the approved Whale Tail Pit and Haul Road Project (referred to as the Expansion Project). The expansion and extension is proposed to include: a larger Whale Tail open pit, development of the IVR open pit, associated IVR Waste Rock Storage Facility and IVR Attenuation Pond, as well as underground operations while continuing to operate and process ore at the Meadowbank Mine. The project is located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km north of Meadowbank Mine in the Kivalliq Region of Nunavut. The Expansion Project is designed to operate as a satellite of the main Meadowbank facilities and will be accessed by the existing approved haul road. Transportation to the mine site (marine barging, airstrip, and transportation along the all-weather access road), housing and handling will remain the same as authorized under Project Certificate No. 004 and/or Project Certificate No. 008. The Expansion Project is subject to reconsideration of the Project Certificate (No. 008) by the Nunavut Impact Review Board, Agnico Eagle is seeking to amend the Type A Water Licence (2AM-WTP1826).

The Expansion Project will begin as soon as approval and permits for the amendment applications are received (anticipated for mid 2020). The operational phase of the Approved and Expansion Project will span from Year 1 (2019) to Year 7 (2025). Mining activities are expected to end in Year 7 (2025) and ore processing is expected to end during Year 8 (2026). Closure will occur from Year 8 (2026) to Year 24 (2042) after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pits and underground, as well as re-establishment of the natural Whale Tail Lake water level.

The Expansion Project is an extension of mining operations for the Approved Project that has existing and licensed waste and water management facilities. Consistent with the Approved Project, water management infrastructure includes: contact water collection ponds, freshwater collection ponds, diversion channels, retention dikes, dams, culverts, water treatment plants for effluent, potable water treatment plant, sewage treatment plant, and discharge diffusers. Additional Groundwater Storage Ponds, IVR dikes and diversions, as well as contact water collection systems will be put in place to effectively manage and mitigate impacts to water.

The approved Whale Tail Waste Rock Storage Facility will continue to be used for the expansion; however, the waste storage facilities will be expanded vertically and horizontally to the southeast. The newly proposed IVR Waste Rock Storage Facility will accommodate waste rock and overburden generated from the IVR Pit. The waste rock storage footprint, water management infrastructure, and camp have been designed consistent with the Approved Project and will accommodate growth of the project within the modified project footprint. The existing underground Waste Rock Storage Facility permitted under the Type B Water Licence 2BB-MEA1828 will have an increased footprint to accommodate additional waste storage and groundwater of the underground mine. Consistent with the approved Meadowbank and Whale Tail Pit operations, a classification system will be used to

identify and safely store NPAG, PAG, and ML rock. PAG mine rock will be stored in the designated storage areas designed for long-term geochemical and geotechnical stability.

Upon approval of the expansion, the Meadowbank Mine facility will continue to operate as an approved mining and milling operation (Project Certificate No. 004 and Type A Water Licence 2AM-MEA1526); as a result, Agnico Eagle is looking to extend the milling and tailings storage at Meadowbank Mine, through the Expansion Project. No new infrastructure is required at the existing Meadowbank Mine to support the Expansion Project. Agnico Eagle proposes to process the Whale Tail ore and placement of the tailings slurry at the existing Meadowbank Mine Tailing Storage Facility as approved by NIRB Project Certificate No. 008 and Type A Water Licence 2AM MEA1526. By extending the life of mine at Whale Tail Pit and Meadowbank, Agnico Eagle will progressively close portions of these sites while operating. The closure strategies for the Expansion Project are consistent with the approved Whale Tail Pit Project and securities for the expansion will be arranged with Crown-Indigenous Relations and Northern Affairs Canada and Kivalliq Inuit Association and posted in accordance with Type A 2AM-WTP1826.

Since 2016, Agnico Eagle has continued to collect baseline data, which has been incorporated into the updated environmental assessment to identify and assess potential environmental and social effects resulting from the Expansion Project and in support of the Final Environmental Impact Statement and Type A Water Licence Amendment Application filed in 2016. The results of the environmental assessment found that with mitigation, the Expansion Project would not cause long-term significant negative effects resulting from proposed construction, operations, and closure.

Agnico Eagle has developed monitoring and management programs required to mitigate, monitor, and report on its environmental performance against the regulatory requirements contained within its Whale Tail Pit, and Meadowbank operating authorizations, permits, licenses, and leases consistent with the legal requirements of applicable Acts and Regulations in Nunavut. Where appropriate, existing Meadowbank Mine plans or Whale Tail Pit stand-alone plans have been updated or addendums have been added to reflect the Expansion Project, and Whale Tail Project Certificate requirements. These existing and approved programs will focus on ensuring impacts to waste and water, are consistent with those predicted for the Approved Project. The accuracy of the environmental impact predictions and the effectiveness of the mitigation measures will be verified through monitoring and annual reporting. If unusual or unforeseen adverse environmental impacts are noticed, corrective action will be put in place. Through the adaptive management process, the existing mitigation measures will be adjusted or new mitigation measures implemented if necessary. External reporting will be completed, as required.

The economic effects of the Expansion Project are substantial and are expected to be of significant benefit to the territory. The Expansion Project is expected to generate 99 new employment opportunities for Nunavummiut incremental to those created by the Approved Project, and extend employment and incomes for the Approved Project workforce until 2026. The Expansion Project will

continue to have positive effects in communities for an extended period, in terms of household incomes and associated access to nutritious food, recreation, education, and resources with which to conduct traditional activities. Similarly, the Expansion Project will continue support for community programming and educational initiatives, as well as IIBAs royalties and commitments. Health and safety training over the operational life of the Expansion Project is also expected to continue to be of benefit to communities.

Since operations of Meadowbank Mine began, Agnico Eagle has continued public consultation by annually meeting with the community and local stakeholders within the Kivalliq Region, regulatory agencies and local employees. This has allowed a better general understanding of the rights, interests, values, aspirations, and concerns of the potentially affected stakeholders, with particular reference to Baker Lake. 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 consulted with local stakeholders and regulators regarding ongoing operations of the Whale Tail Pit and haul road development, as well as proposed Expansion Project.

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ᐊᒃᓗᓄ ᐃᐃᒍ ᐅᓴᖅᑕᕆᐊᓕᕆᔨᕐᓄᑦ - ᐊᐅᖅᑎᓂᔭᖅᑐᒥᑦ (ᐊᒃᓗᓄᕐᓄᑦ) ᐊᖏᕐᓕᒋᐊᖏᒪᓴᖅᑎᑦ ᓄᓇᒪᓕᕐᓂᐊᕐᓇᖅᑐᖅ ᐊᒪᑭᖅ ᓄᓇᒥᑦ ᐃᓗᓕᑐᖅᓯᒪᔪᖅ ᐊᒪᓚᓗ ᐅᓯᐅᑦᑕᖅᓴᖅᑭᑦ ᐊᐠᖅᑐᒪᒥᑦ ᐱᓕᕆᐊᖅ (ᐅᖅᐅᓯᐅᔪᖅ ᐊᖏᕐᓕᒋᐊᖅᑕᐅᓂᖏᓐᓄᑦ ᐱᓕᕆᐊᖅ). ᐊᖏᕐᓕᒋᐊᖅᓯᓂᖅᑎᑦ ᐊᒪᓚᓗ ᐅᐃᒍᒋᐊᖅᓯᓂᖅᑎᑦ ᐃᓕᐅᓇᓴᖅᑐᑦ: ᐊᖏᕐᓂᓂᖅᓱᑦ ᐊᒪᑭᖅ ᓄᓇᒥᑦ ᐅᐸᐃᓖᐊᕐᑎᑦ ᐃᓗᓕᑐᖅᓯᒪᓕᕐᓂᔪᓂ, IVR ᓄᓇᒥᑦ ᐅᐸᐃᓖᐊᕐᑎᑦ ᐃᓗᓕᑐᖅᓯᒪᔪᓕᕐᓂᔪᓂ, ᐃᓕᒋᐳᓗᑎᑉ IVR-ᒥᑦ ᐊᐅᑯᐊᖅᑕᐅᔪᓂᑉ ᐅᓴᖅᖢᓄ ᑐᖅᓯᒪᔪᖅᓯᒪᓇᖅᑐᑦ IVR-ᒥᑦ ᓴᖓᓕᒋᐊᖅᑎᑎᖅᑐᑦ ᑕᔪᕐᓇᖅᑐᑦ, ᐊᒪᓚᓗ ᓄᓇᐅᑉ ᐃᓗᐊᓂᑦ ᐊᐅᓪᓗᖅᑎᑎᓂᑦ ᐊᐅᓪᓗᖅᑎᑎᓂᖅ ᑲᔪᓂᓴᖅᑐᑦ ᐊᐅᖅᑎᖅᑐᒥᓂᖅ ᐊᐅᖅᑐᖅᓯᒪᔪᖅ ᐅᓴᖅᑕᕆᐊᖅᑎᑦ. ᐱᓕᕆᐊᖅ ᐃᓄᐃᑦ ᓄᓇᕗᑦ 150 ᑭᓪᓕᒋᑦᓴᐊᓂᖅ ᐅᖃᓗᐊᖅᑐᓂᖅ ᐅᐊᖏᓐᓇᖅᑐᖅ ᐅᐊᖓᓇᖓᓂᑦ ᖃᐅᔨᓂᑐᐊᑉ ᐊᒪᓚᓗ 50 ᑭᓪᓕᒋᑦᓴᐊᓂᖅ ᐅᖃᓗᐊᖅᑎᑎᑦᓴᓂ ᐅᐊᖓᓇᖓᓂᑦ ᐊᐅᖅᑎᖅᑐᒥᓂᖅ ᐅᓴᖅᑕᕆᐊᖅᑎᒋᑦ ᑭᖑᓪᓕᒋᑦ ᓄᓇᕕᒋᑦ. ᐊᖏᕐᓕᒋᐊᖅᓯᒪᓂᒪᓕ ᐱᓕᕆᐊᖅ ᐁᖅᑭᐅᒪᓕᕐᓂ ᐊᐅᓪᓗᖅᑎᓂᖅᑐᓂᒪᓕᕐᓂᔪᓄ ᐃᖏᑲᐃᖅᑐᓂᒃ ᐊᐅᖅᑎᖅᑐᒥᓂᖅ ᐱᓕᕆᐊᖅᑎᑦ ᐊᐠᖅᑐᒪᒥᑦ ᑕᐃᔨᖏᓐᓄᑦᑎᑐᖅᑐᓂᒪᓕᕐᓂᔪᓄ ᐃᖏᑲᐃᖅᑐᓂᒪᓕᕐᓂᔪᓄ ᐱᓕᕆᐊᖅᑎᑦ ᐊᐅᖅᑎᖅᑐᒥᓂᖅ ᐃᓗᓕᑐᖅᓯᒪᔪᖅ ᐊᐅᖅᑎᖅᑐᒥᓂᖅ

ᓇᓗᒋᑦᑐᐃᓐᓇᖅ ᐊᒪᑭᖅ ᐊᐅᑕᑯᖅᑕᐅᓐᓇᖅ ᐅᑦᖁᓇᓂᑦ ᑐᖁᑯᓇᓕᖅᑲᖅ ᐊᑐᖁᑕᐅᓂᐊᖁᖅᑐᖅ ᐊᖏᕐᓂᒋᐊᖁᓇᓕᒫᑦ; ᑭᓇᐊᓂ, ᐊᐅᑕᑯᓂᐠ ᑐᖁᑯᓇᓕᖅᑲᖅ ᐊᖏᕐᓂᒋᐊᖁᖅᑕᐅᓂᐊᖁᖅᑐᑦ ᖃᐅᒪᔪᓚᖅ ᐊᒪᓚᓐ ᓴᓂᒧᑦ ᓂᒋᖁᓕᓴᐃᓇᑦ ᖃᓇᓱᖅᓴᓇᓇᑦ. ᓄᑖᖅ IVR-ᒧᑦ ᐊᐅᑕᑯᖅᑕᐅᓐᓇᖅ ᐅᓴᖅᑲᓂᐠ ᑐᖁᑯᓇᓕᖅᑲᖅᑐᖅ ᐊᐅᑐᖁᖅᑐᖅ ᐊᐅᑕᑯᖅᑕᐅᓐᓇᖅ ᐅᓴᖅᑲᓂᐠ ᐊᒪᓚᓐ ᐅᖏᓕᐅᑕᖅᑐᓂᐅᓐᓇᓕᓂᐠ ᐱᓴᐅᓐᓇᓂᐠ IVR ᓄᓇᒥᑦ ᐃᓚᑦᑐᖁᓪᓕᒥᑦ. IVR-ᒧᑦ ᐊᐅᑕᑯᖅᑕᐅᓐᓇᖅ ᐅᓴᖅᑲᓂᐠ ᑐᖁᑯᓇᓕᖅᑲᖅᓯᒧᑦ ᐃᓂᐅᓐᓇᖅ, ᐃᒪᖏᐠ ᐊᐅᓪᓚᑎᑕᑎᓪᓗᒍ, ᐊᒪᓚᓐ ᓄᓇᓕᐊᓪᓚᖅ ᐋᖅᑭᐅᑕᐅᓪᓚᓕᒥᑦ ᐊᖅᑎᑦᓴᑐᒍ ᓇᓗᒋᑦᑐᐃᓐᓇᖅ ᐱᓕᕆᐊᖅ ᐊᒪᓚᓐ ᐃᓂᐅᓐᓇᖅᑐᖅ ᐊᖏᕐᓂᒋᐊᖁᖅᑕᐅᓐᓇᓕᓂᐠ ᐱᓕᕆᐊᖅ ᐋᖅᑭᐅᑕᐅᓐᓇᖅᓯᒧᑦ ᐃᓂᐅᓐᓇᖅᑐᑦ. ᑕᐃᒪᐅᑐᒍ Type B ᐃᒪᖅᒧᑦ ᓪᐃᓴᓀᓂᒍ 2BB-MEA1828 ᐊᖏᕐᓂᒋᐊᖁᑎᑕᑎᓂᐅᓐᓇᖅᑐᖅ ᐃᓂᐅᓐᓇᖅᑐᑦ ᐃᓂᖅᑎᓂᓂᐅᓐᓇᖅᓯᒪᓂᖅᑐᑦ ᐊᒪᑕᑯᓂᐠ ᑐᖁᑯᓇᓕᖅᑲᖅᓯᒪᓂᖅᑐᑦ ᐃᓂᐅᓐᓇᖅᑐᑦ ᓄᓇᒥᑦ ᐃᒪᖅᒧᑦ ᓄᓇᐅᓂᐠ ᐃᓪᓕᐅᓂᑕᓄᑦ ᐅᓴᖅᑕᓪᓚᐊᖏᑦ. ᐊᓱᐱᓪᒍ ᓇᓗᒋᑦᑐᐃᓐᓇᖅ ᐊᐅᓴᖁᑎᓂᖅᑕᑦ ᐊᒪᓚᓐ ᐊᐅᑕᖅ ᓄᓇᒥᑦ ᐃᓪᓕᐅᓂᑕᖅᑐᖅ ᐊᐅᓂᖅᑎᓂᐅᓐᓇᖅᑐᑦ, ᐃᓂᓕᐅᓚᓂᓕᒥᑦ ᐁᓴᑭᐅᒪᓂᐊᖁᖅᑕᐅᓐᓇᖅᑐᖅ ᖃᐅᔨᓂᐊᓕᒥᑦ ᐊᒪᓚᓐ ᐅᓪᓚᐊᓇᙳᖏᑦᑕᑯᓂ ᐊᖏᕐᓂᒋᐊᖁᖅᑕᐅᓐᓇᖅᑐᖅ NPAG, PAG ᐊᒪᓚᓐ ML ᐅᓴᕋᐃᑦ. PAG ᐅᓴᕋᑦᑕᖅᑕᐅᓐᓇᖅ ᐅᓴᖅᑲᐃᑦ ᑕᑯᓂᐊᖁᖅᑕᐅᓐᓇᖅᑐᑦ ᐃᓂᓕᐅᖅᓯᐅᓐᓇᖅᑐᑦ ᑕᐃᒪᓐᓇᖅᑐᑦ ᐃᓂᓕᐅᖅᓯᒪᓕᒥᑦ ᑕᐢᓂᐅᓐᓇᖅᑐᑦ ᓄᓇᒥᑦ ᐅᓪᓚᐊᓇᙳᖏᑦᑕᑯᓂᐠᑐᖅ ᐊᐅᓂᖅᑎᓂᓂᐅᓐᓇᓕᓂᐠ, ᐃᓂᓕᐅᖅᓯᒪᓕᒥᑦ ᐁᓴᑭᐅᓚᐊᓂᖅᑐᑦ ᖃᐅᔨᓴᓂᐊᓕᒥᑦ ᐊᒪᓚᓐ ᐅᓪᓚᐊᓇᙳᖏᑦᑕᑯᓂᐠ NPAG, PAG ᐊᒪᓚᓐ ML ᐅᓴᕋᐃᑦ. PAG ᐅᓴᕋᑦᑕᖅᑕᐅᓐᓇᖅ ᐅᓴᖅᑲᐃᑦ ᑕᑯᓂᐊᖁᖅᑕᐅᓐᓇᖅᑐᑦ ᐃᓂᓕᐅᖅᓯᐅᓐᓇᖅᑐᑦ ᑕᐃᒪᓐᓇᖅᑐᑦ ᐅᓪᓚᐊᓇᙳᖏᑦᑕᑯᓂᐠᑐᖅ ᐊᐅᓂᖅᑎᓂᓂᐅᓐᓇᓕᓂᐠ ᐊᒪᓚᓐ

ᖃᓄᐃᖓᓕᖅᑎᑕᐅᓂᖃᖅᑐᕐᓂᖅᓯᓄᑦ ᐱᔪᓂᒃ ᓴᓇᐅᔨᒪᓕᒫᓂᖓ, ᐊᐅᓪᓚᖅᑎᑕᐅᓂᕐᓂᑦ, ᐊᑐᓚᓗ ᐅᒃᑯᐊᖅᐸᒃᓕᒫᓂᕆᑦ.

ᐊᑲᓗᑯᑦ ᖃᐅᔨᓕᐊᖃᑕᒡᓂᕐᓂᕐᒧᑦ ᐊᑐᓚᓗ ᐊᐅᓚᓂᑎᓂᕐᒧᑦ ᑐᑭᖓᓚᓕᒫᓕᐅᕈᖅᑐᑦ ᐱᓴᓇᐊᖃᖅᑐᑐᑦ ᐊᓐᓚᓗᖅᑐᑎᓂᑎᓂᕐᒧᑦ, ᖃᐅᔨᓕᐊᖃᖅᑕᒡᓂᕐᓂᕐᒧᑦ, ᐊᑐᓚᓗ ᐅᓂᒃᑲᓕᐅᕈᓂᕐᒧᑦ ᐊᐸᑎᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᓂᐅᔪᓄᑦ ᒪᓕᑲᓕᓇᓂᐅᔪᓂᑦ ᐱᓴᓇᐊᖃᖅᑐᑐᓄᑦ ᒥᖅᓴᓄᑦ ᐊᒪᓕᖅᖃᖅ ᓄᓇᒥᑦ ᐃᓗᑦᑐᓕᕐᓂᑦ, ᐊᑐᓚᓗ ᐊᑐᖅᑎᓂᒃᓴᖅᑐᒥᑦ ᐊᐅᓪᓚᖅᑎᑕᐅᓂᕐᒧᑦ ᐱᓴᓇᖅᑎᑎᕐᔪᐃᓐᓂᑦ, >ᒥᑦ, ᓚᐃᓴᓐᓂᑦ, ᐊᑐᓚᓗ ᐊᑐᖅᑐᐊᕐᓂᕐᒧᑦ ᐊᐳᕐᓴᖅᓂᑦ ᒪᓕᑎᑲᓂᑦ ᐱᓴᓇᐊᖃᖅᑐᑐᒃᑯᑦ ᐊᑐᖅᑕᐅᔪᓂᑦ ᐱᕐᓯᓂᑦ ᐊᑐᓚᓗ ᒪᓕᑎᕋᓪᓂᑦ ᓄᓇᕗᒻᒥᑦ. ᓇᓱᒪᑲᖅᓱᑦ, ᑕᐃᒪᐅᔪᑦ ᐊᐳᖅᑎᓇᖅᑐᒥᑦ ᐅᓴᕐᑕᓚᐊᕐᓂᒧᑦ <ᕐᓇᐅᑦᓴᑦ ᐅᕐᓂᓇᓕᓂᑦ ᐊᒪᓕᖅᖃᖅ ᓄᓇᒥᑦ ᐃᓚᓕᑦᑐᑦ ᐃᓕᓴᕐᒪᔪᖅ ᐃᓕᓴᐅᑲᓕᐊᕐᓂᒧᑦ <ᕐᓇᐅᑦᓴᑦ ᐅᓪᓗᒥᑦᑐᑦ ᐅᕐᓂᓇᓕᓂᑦ ᐃᓚᓕᓕᒫᓂᖓᓂᑦ ᐊᐅᓪᓚᖅᑎᑕᐅᓂᕐᒧᑦ ᐊᑐᓚᓗ ᐊᒪᓕᖅᖃᖅ ᐱᓕᓚᖅᑐᑦ, ᐊᑐᓚᓗ ᐊᒪᓕᖅᖃᖅ ᐱᓕᓚᖅᑐᓕᕐᓂᑦ ᐃᓚᓕᓕᒫᓂᖓᓂᑦ ᐊᑐᓚᓗ ᐊᒪᓕᖅᖃᖅ ᐱᓕᓚᖅᑐᓕᕐᓂᑦ. ᑕᐃᒪᐅᔪᑦ ᐊᑐᓚᓗ ᓇᓱᒪᑲᖅᓱᑦ ᑐᑭᖓᓚᓕᐅᕈᓂᑦ ᐊᑐᑕᑯᖓᓚᐅᔪᑦ ᐊᑐᑕᑯᖅᑕᐅᔪᓂᑦ ᐊᑐᓚᓗ ᐃᒪᓕᑦ, ᐊᐳᔨᓕᑦ ᓇᓚᐅᑦᑕᖅᑕᐅᔪᓂᑦ ᓇᓱᒪᑲᖅᓱᑦ ᐱᓕᓚᖅᑐᑦ. ᓇᓚᐅᑦᑎᓂᕐᑦ ᐊᕐᓇᑎᒥᑦ ᐊᐳᑐᖅᑎᓇᖅᑐᑦ ᐊᑐᓚᓗ ᐃᑐᑎᖅᑎᓂᕐᒧᑦ ᐊᑐᓚᓗ ᐊᑐᖅᑎᓇᖅᑐᑦ. ᓇᓚᐅᑦᑎᓂᕐᑦ ᐊᕐᓇᑎᒥᑦ ᐊᐳᑐᖅᑎᓇᖅᑐᑦ ᐊᑐᓚᓗ ᐊᑐᑐᑎᓂᕐᒧᑦ ᐊᑐᖅᑎᓇᖅᑐᑦ ᐊᑐᓚᓗ ᐃᓚᓕᑦᑐᑦ ᐊᑐᖅᑎᓇᖅᑐᑦ ᐊᑐᓚᓗ

ᐱᒋᐊᖅᑎᑕᓂᕐᒥᐅ ᐱᓂᓪᓕᐊᓂᐅᔪᓂᒃ. ᐊᑭᓗᓄᑦ ᐅᖅᖃᑎᖅᑕᐅᖅᑐᑦ ᓄᓇᓕᖓᒥᑦ ᐃᓕᐅᔪᓂᒃ ᐊᑭᓚᓗ ᒪᓕᒐᓕᕆᓂᖅᓯᒪᑦ ᑲᒪᔨᓂᒃ ᐱᔨᔪᑎᒋᓕᒐᒍ ᐊᐅᓴᖅᑎᑕᑎᓂᖅ ᐊᒪᑭᖅ ᓄᓇᒥᑦ ᐃᓕᑦᑐᖅᓯᒪᔨᒥᑦ ᐊᑭᓚᓗ ᐅᓱᖏᑦᑕᕐᓂᖅᓯᒪᓂᖅ ᐊᐸᖅᓯᑎᒥᑦ ᐱᓕᓪᓕᐊᓂᐅᔪᓂᖅ, ᐊᑭᓚᓗ ᑐᑦᓱᕿᐅᑕᐅᔪᖅ ᐊᖏᕐᓕᓕᒋᐊᖅᑎᑕᑎᓂᖅᓯᒪᓂᖅ ᐱᓕᕆᐊᖃᒥᑦ ᒥᑦᐲᓗᓄᑦ.

AGNICO EAGLE

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SECTION 1 • PROJECT DESCRIPTION

1.1 Introduction

On November 6, 2017, the Nunavut Impact Review Board (NIRB) provided a positive decision on the Whale Tail Pit Project and on March 15, 2018 Agnico Eagle Mines Limited (Agnico Eagle) gained approval to further extend the life of mine (LOM) by constructing and operating the Whale Tail Pit and associated facilities as permitted by Project Certificate No. 008 (herein referred to as the Approved Project). On July 11, 2018, the Minister approved the Type A Water Licence 2AM-WTP1826 to begin construction and operation of the Whale Tail Pit, hauling of ore to the Meadowbank Mill, and continued milling at the Meadowbank Mill and operation of the tailings storage facility (TSF) under an amended Meadowbank Mine Type A Water Licence 2AM-MEA1526. As a satellite operation, the Whale Tail Pit is approved to operate and will continue to feed the Meadowbank Mill, TSF, and use associated Meadowbank Mine infrastructure under Project Certificate No. 004 and Type A Water Licence 2AM-MEA1526.

Agnico Eagle is proposing certain changes to the Approved Project. Specifically, Agnico Eagle is seeking approval to expand and extend the Approved Project to include the:

- IVR Pit;
- IVR Waste Rock Storage Facility (WRSF);
- IVR Attenuation Pond;
- Expanded Whale Tail Pit; and
- Underground mine.

Collectively, this is referred to as the Whale Tail Pit Expansion Project and often referred to in the Main Application Document as “the Expansion”.

The Amaruq property is a 408 square kilometre (km^2) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km north of Meadowbank Mine (Figure 1.2-1). The Project, and its drainage basin, is located entirely within the Kivalliq region of Nunavut.

As an expansion to the existing operations at Whale Tail Pit, the proposal is subject to an Environmental Assessment (EA) reconsideration established by the *Nunavut Planning and Project Assessment Act* and the Water Licence authorities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. Agnico Eagle requests the Nunavut Water Board (NWB) amend Water Licence 2AM-WTP1826 where appropriate to include mining of the expansion components and associated infrastructure to account for the Expansion Project.

In support of the NWB water licence amendment, Agnico Eagle has provided this stand-alone document to guide the review process. The Main Application Document has been developed to conform with the Supplemental Information Guideline issued by the NWB.

1.1.1 Project Definition

Table 1.1-1 provides a summary of the Expansion Project as a comparison to the Approved Project. Agnico Eagle believes the scope of the Approved Project (Agnico Eagle 2016c) has not changed significantly with the proposed expansion.

Table 1.1-1 Definition of Scope

	Whale Tail Pit and Haul Road – Approved Project	**Expansion of the Whale Tail Pit Operations (May 2019)**
Location/ Land Tenure	The Amaruq property located approximately 150 km north of the Hamlet of Baker Lake and approximately 50 km north of the Meadowbank Mine.	No change. Project Development Area boundaries expanded.
Resource	The total gold resource for the Whale Tail Pit will extend the LOM of Meadowbank for three to four years.	The total gold resource for the Expansion Project will expand and extend the LOM of Meadowbank to 2026.
Life of Mine	This Whale Tail Pit resource will be extracted over approximately a three to four-year period from 2019 through 2022. Construction and pre-stripping is scheduled to begin in 2018 and mining in October 2018 with mill feed expected to begin in third quarter of 2019. Dewatering is currently scheduled to occur between the first and third quarters of 2019. Infrastructure/activities at Meadowbank Mine that support the Project will be extended for another three years and will remain the same as authorized under Project Certificate No. 004.	This expanded resource will be extracted over approximately a four-year period from 2020 thru 2025. In total, the resource extraction for the Whale Tail Project will be expanded and extended over approximately a seven-year period from 2019 to 2025. Mining activities at Whale Tail Pit are expected to end in Year 7 (2025) and ore hauling and processing is expected to end during Year 8 (2026). Construction and pre-stripping for the IVR Pit is scheduled to begin in September 2020; mining of the expanded pits and underground will begin in 2021. Infrastructure/activities at Meadowbank Mine that support the Expansion Project will be extended for another four years and will remain the same as approved under Project Certificate No. 004.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
Site Access	Existing airstrip used during exploration phase will be reclaimed. The Approved Project is designed to operate as a satellite of the main Meadowbank facilities, and will be accessed by the existing exploration access road, which will be upgraded to accommodate haul trucks and increased traffic. Transportation to site (marine barging, airstrip, and transportation along the all-weather access road), housing and handling will remain the same as authorized under Project Certificate No. 004.	Existing airstrip used during exploration phase will be used as a construction access road for Whale Tail Dike. A section of the expanded haul road near the Whale Tail Pit site will be used as an airstrip during the operation of the expansion. The Expansion Project is designed to operate as a satellite of the main Meadowbank facilities, and will be accessed by the approved haul road, which Agnico Eagle proposes to expand from 9.5 m to 15 m in width to ensure safe passage of haul trucks. Additional borrow/quarry material will be needed to undertake Expansion of the haul road. Refer to Section 1.2.7 of the Main Application Document. Transportation to site (marine barging, airstrip, and transportation along the all-weather access road), housing and handling will remain the same as authorized under Project Certificate No. 004 and/or Project Certificate No. 008, where applicable.
Laydown Facilities and Baker Lake Marshalling Area	Existing Meadowbank facilities will be used. A small laydown area will be constructed on the Whale Tail Pit site.	No change. Refer to Section 1.2.11 of the Main Application Document.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
On-site Facilities	Construction of on-site facilities at Whale Tail Pit: power plant, maintenance facilities, tank farm, water treatment plant, water management infrastructure, sewage treatment plant, heli-pad, and accommodation for 210 people at the main camp. Continued use of the existing Amaruq exploration camp on the property for exploration activity. All milling will be done at Meadowbank Mine at a mill rate consistent or lower than the current mill rate (9,000 to 12,000 tonnes per day). Power generation for the Mill and camp at Meadowbank will remain the same as authorized under the current Project Certificate (No. 004).	On-site, existing facilities and infrastructure will continue to be utilized including: a personnel camp (i.e., Main Camp), landfill, power plant, heli-pad, maintenance shop, tank farm, a WRSF, an ore stockpiling facility, an attenuation pond, a water and sewage collection and treatment system, haul roads, access roads, water management infrastructure (e.g., collection ponds, diversion systems, dikes, dams, and culverts), and the Whale Tail Pit. No change related to use of existing Amaruq exploration camp on the property for exploration activity (Type B Water Licence 2BB-MEA1828). No changes related to milling to be done at Meadowbank Mine. Expansion to include: • Expansion of on-site facilities at Whale Tail Pit to accommodate a maximum of 544 persons. • Installation of a larger maintenance shop, core shack and additional wings to the Main Camp, to support additional personnel.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
		• Installation of an incinerator, composter, and landfarm to support waste management activities. Refer to Section 1.2.12 of the Main Application Document. • Additional diesel generators to power underground infrastructures and expanded camp facilities. • For expansion of mining and water management infrastructure see below. All other on-site facilities for the Whale Tail Project will remain the same as authorized under the current Project Certificate No. 008.
Mine Infrastructure	Open pit mining for the Approved Project is planned to occur in one area, Whale Tail Pit. Flow of surface water into the pit will be limited through construction of two dikes. Whale Tail Dike will be constructed to divide the pit area from the southern portion of Whale Tail Lake, and Mammoth Dike is required for dewatering the pit area and to limit the water flow from Mammoth Lake into the pit during important flood events. To limit the impact of dike construction, turbidity barriers will be installed.	Expansion of Whale Tail Pit; mining an additional open pit, IVR Pit; underground mining below Whale Tail and IVR pits. Flow of surface water into the Whale Tail Pit will continue to be controlled by Whale Tail Dike and Mammoth Dike. Flow of surface water into IVR Pit will be controlled by IVR Diversion and IVR-D1, IVR-D2, and IVR-D3 dikes. Construction mitigation measures and methods of IVR-D1, IVR-D2, and IVR-D3 dikes are consistent with measures and methods for dike construction of Approved infrastructure.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	Only NPAG and low metal leaching (LML) material will be used for the construction of infrastructure. Low permeability rockfill dikes with a geomembrane will be constructed. As needed, sodium bentonite will be mixed in place with aggregate or in a slurry to reduce the permeability of the construction material.	No significant changes to dike design are anticipated; although the Northeast Dike (within the IVR Pit footprint) will be removed once the IVR Pit is initiated. Dewatering of IVR Pit is currently scheduled to begin in 2020. Dewatering of Lake A53 is currently scheduled to begin in 2021. Underground mining will be mainly, long hole mining (95%) with some mechanized cut and fill in flat areas. The configuration will be a mix of transverse and longitudinal stoping. Waste rock will be temporarily stored on surface in the Underground WRSF until it is used for underground backfill. Stopes will be filled with cemented rock fill and rock fill. Ore will be extracted by truck and scoop and hauled to surface through main access ramp.
Ore Processing	Ore processing, handling, treatment, and disposal will continue at the Meadowbank Mill and tailings will be stored in the footprint of the existing approved tailings storage facility consistent with the current Project Certificate No. 004. Operations for the approved tailings facility are addressed under Type A Water Licence 2AM-MEA1526.	No change.
Tailings	No tailings to be treated or disposed of on the Whale Tail Pit site.	No change.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	The existing tailings facility at Meadowbank Mine will continue to be used for tailings disposal. All tailings treatment and placement will remain consistent with the current Project Certificate No. 004.	
Process Water	Mine process water reclamation will remain the same as authorized under the current Project Certificate No. 004 and Type A Water Licence 2AM-MEA1526.	No change.
Ore Stockpile	Three ore-stock pile areas are approved under Project Certificate No. 008 and Type A Water Licence 2AM-WTP1826.	Consistent with the Approved Project, ore will be stockpiled in a series of stockpiles located adjacent to the pits as shown on Figure 1.2-1.
Waste Rock	Waste rock and overburden generated at Whale Tail will be placed in the Whale Tail Waste Rock Storage Facility. Consistent with Meadowbank a classification system will be used to identify and safely store PAG and ML (leachable) rock in a designated storage area designed for long-term stability; and to stockpile NPAG and NML rock for use in construction and as cover material for the WRSF facility. Run-off will be appropriately handled.	The approved Whale Tail WRSF will continue to be used for the Whale Tail Pit expansion and the Whale Tail WRSF will be expanded vertically and horizontally to the southeast. Expansion includes: • A new IVR WRSF to accommodate waste rock and overburden generated from the IVR Pit. The waste rock storage footprint, water management infrastructure and camp have been designed and considers up to eight

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
		years storage capacity to allow for expected resource growth. • The Underground WRSF that is permitted under the Type B will be expanded. Agnico Eagle will increase the footprint of the underground exploration area to the north to accommodate additional waste rock storage. Consistent with Meadowbank and Whale Tail Pit operations, a classification system will be used to identify and safely store PAG and ML rock. PAG mine rock will be stored in the designated storage areas designed for long-term stability. NPAG and NML rock will be either stockpiled or used in construction, including for WRSF cover material. Run-off will be appropriately handled. Thermal encapsulation of the PAG and ML rocks was selected as a reclamation strategy to verify long-term stability of the waste rock storage facilities. The Expansion Project will generate approximately 15.2 Mt of tailings to be stored at Meadowbank TSF, 121.7 Mt of mine waste rock, and 5.7 Mt of overburden soil to be stored at Whale Tail, with very limited organic material.
Freshwater	The freshwater and potable water supply for the Whale Tail Camp will be pumped from Nemo Lake during construction (175,000m^3/year) and operations (191,750m^3/year) and treated	Freshwater and potable water use approved under Water Licence 2AM-WTP1826 will extend to 2025. No increase in the

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	at the on-site water treatment plant. As part of these amount, 45,750 m^3/yr will be pumped from Nemo Lake for dust suppression on the road.17,600 m^3/yr of freshwater and potable water will be required from Whale Tail Lake during the closure phase. 2,500 m^3/yr of freshwater from the unnamed lake will be required for the purposes of explosives mixing and associated uses . 10,655,000 m^3/yr of freshwater from Whale Tail Lake will be required to complete pit flooding activity during the Closure phase.	freshwater use per year is required for the Expansion Project during the construction, operation and construction phases. Freshwater requirement during the Expansion project are detailed in Table 1.2-2 below.Expansion facilities includes construction of intake in Mammoth Lake (to replace approved unnamed lake water source) to support emulsion plant operations. A source was added to allow operational geological drilling. Water to be taken in small lakes/pond proximal to drilling sources. No change in water supply authorized under Type A Water Licence 2AM-MEA1526 for continued operation of Meadowbank Mill.
Water Management	Water management infrastructure at Meadowbank Mine tailings facility will remain the same as authorized under the current Project Certificate (No. 004) and Type A Water Licence 2AM-MEA1526. Construction of the Whale Tail Pit Attenuation Pond and related infrastructure.	No change to water management infrastructure at Meadowbank Mine. Water management infrastructure includes contact water collection ponds, freshwater collection ponds, water collection and diversion systems, retention dikes, culverts, water treatment plants for effluent, potable water treatment plant, sewage treatment plant, and discharge diffusers.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	Construction of a series of dewatering and diversion dikes for water management of Whale Tail Pit. Construction of a contact water collection system around the Whale Tail WRSF to capture contact water and convey it to the Attenuation Pond. Other contact water will be directed to the Whale Tail Attenuation Pond. Sewage at Whale Tail Pit will be treated using a treatment system similar to the system used at Meadowbank Mine. Treated sewage effluent will be discharged to the Whale Tail Attenuation Pond and discharged as effluent with other site contact water. Effluent from the Whale Tail Attenuation Pond will be treated and discharged to Mammoth Lake via an effluent diffuser. Non-contact water will be diverted from site through channels and dikes. Dewatered flows from Whale Tail Lake (North Basin) will either be pumped to Whale Tail Lake (South Basin) or discharged to Mammoth Lake through a diffuser. Any water requiring treatment will be pumped to the water treatment plant prior to discharge through the diffuser in Mammoth Lake.	Three groundwater management ponds will support underground mine operations at surface (GSP-1, GSP-2, and GSP-3). Total Dissolved Solids (TDS) and associated treatment, if required, will be provided at the associated ponds. Note, GSP-1 is approved under 2BB – MEA1828 as Stormwater Pond. **Contact Water:** • All surface contact water on-site will be directed to an Attenuation Pond. • Two attenuation ponds are planned to capture contact surface water and include the approved Whale Tail Pit Attenuation Pond and the IVR Attenuation Pond at Lake A53 to support the Expansion Project operational activities. • Operation of the Whale Tail Pit Attenuation Pond will continue during construction and a new IVR Attenuation Pond is proposed to be constructed and operated between the camp and the IVR WRSF as part of the Expansion Project. • Flow of surface water into the Whale Tail Pit will continue to be controlled by Whale Tail Dike and Mammoth Dike with new infrastructure to manage surface water into IVR Pit controlled by IVR-D1, IVR-D2,

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	Raising of the water level of Whale Tail Lake (South Basin) to discharge into Mammoth Lake through a southwest diversion channel. Refilling of Whale Tail Lake (North Basin). Breaching of dikes to reconnect flow between the South Basin and North Basin of Whale Tail Lake and Mammoth Lake.	and IVR-D3 dikes and IVR Diversion. Note the Northeast Dike will be removed once the IVR Pit is initiated. No significant changes to dike design are anticipated. • Additional water management infrastructures around IVR Pit and IVR WRSF Contact Water Collection Systems. • Underground groundwater and contact water will be managed separately from surface infrastructure contact water. o The Groundwater Storage Ponds will be used to: ▪ Collect saline water from shallow underground development where mining through the permafrost requires brine drilling water and receive brine concentrate. ▪ Collect the lower salinity naturally brackish groundwater from underground inflows below the base of the permafrost.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
		○ Treated water from TDS treatment plant will be discharged via diffuser to Mammoth Lake or Whale Tail Lake South Basin. ○ At the end of underground mining, any remaining water in the Groundwater Storage Ponds will be pumped underground for flooding of the underground workings. **Non-contact Water:** • Non-contact water will be diverted from site through a combination of diversion systems, dikes, and pumps. • A series of diversion dikes and diversion systems will continue to be used for water management of Whale Tail Pit expansion. • A new diversion system, IVR Diversion, is proposed to divert clean runoff from the upper watershed of the IVR Pit to the Nemo Lake watershed. • An additional non-contact water discharge point in Whale Tail Lake South Basin upstream of the Whale Tail Dike will be required to discharge dike seepage

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
		captured in Whale Tail Dike Collection Pond and pumped to Whale Tail Lake (South Basin). Sewage wastewater will continue to be treated using a New Terra System. Treated sewage effluent will be discharged to the Attenuation Pond and discharged with other site contact water. Any water requiring treatment will be pumped to the water treatment plant prior to discharge through the diffuser in Mammoth Lake, and Whale Tail Lake (South Basin). For the amendment to the Type A Water Licence, Agnico Eagle will require additional discharge point into Whale Tail Lake (South Basin); one for Whale Tail Dike Seepage and for discharge of Treated water. Agnico Eagle is also looking at alternative discharge locations such as D1 and D5 lakes which Agnico Eagle requests for inclusion in the licence in order to provide the option of these alternative discharge locations in future (further details are provided in Section 1.5). Additional alternatives under consideration by Agnico Eagle are outlined in Section 1.9.6 of the main application document.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
		Agnico Eagle is committed to maintaining discharge criteria according to the Type A Water Licence 2AM-WTP1826. The water level of Whale Tail Lake (South Basin) will be raised from July 2020 to May 2026 (i.e., an additional four years beyond May 2022 from the Approved Project to support the Expansion Project activities) and will discharge into Mammoth Lake through a southwest diversion system during this period. Refilling of Whale Tail Lake (North Basin) by diversion of site runoff, consistent with the Approved Project.
Fuel and Hazardous Wastes	A Bulk Fuel Storage Facility will be constructed on the Whale Tail Pit site. All hazardous waste will be hauled to Meadowbank and disposal will remain the same as authorized under the current Project Certificate No. 004. Use, transportation, handling and storage of fuel, hazardous materials, concrete, and aggregates will remain the same as authorized under the current Project Certificate.	The approved Whale Tail Bulk Fuel Storage Facility will be expanded and storage tanks will be installed around site to support infrastructures. Expansion facilities will include construction of a landfarm on-site for the treatment of hydrocarbon contaminated material. Use, transportation, handling and storage of fuel, hazardous materials, concrete, and aggregates will remain the same as authorized under the current Project Certificate.
Closure	Closure and reclamation activities at Meadowbank Mine will remain the same as authorized under the current Project Certificate. However, closure of the Meadowbank Mill,	Closure and reclamation activities at Meadowbank Mine will remain the same as authorized under Project Certificate No. 004 and Type A Water Licence 2AM-MEA1526. With mill feed ending

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	maintenance shop, powerhouse, and camp will be delayed by three years. The Whale Tail site will be closed and reclaimed in a manner consistent with the FEIS and as recommended under the current Project Certificate. Water management at closure for Whale Tail Lake will require flooding of Whale Tail Pit, refilling of Whale Tail Lake (North Basin), breaching of Northeast, Mammoth, and Whale Tail dikes, and decommissioning of North, East, and South Whale Tail diversion channels. The open pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin). Post-closure the Whale Tail WRSF dike will be breached.	in 2026, closure of the Meadowbank Mill, maintenance shop, powerhouse, and camp will be delayed until 2033. The Whale Tail Pit operations will be closed and reclaimed in a manner consistent with the Approved Project and as required under Project Certificate No. 008 and Type A Water Licence 2AM-WTP1826. Expansion facilities, the IVR Attenuation Pond, and Groundwater Storage Pond(s) are planned to be filled with NPAG rock at closure. The underground mine, Whale Tail Pit, and IVR Pit, will be filled with a combination of natural runoff and contact water from the site, and water pumped from Whale Tail Lake (South Basin). Refilling of Whale Tail Lake (North Basin) is estimated to take between 16 and 17 years, from 2026 to 2042. Lake reconnection will be completed when the water quality monitoring results meet water quality discharge criteria as per NWB Type A Licence conditions.
Employment	The total work force employed by Agnico Eagle will increase during construction and operations of the Project. The current workforce located at Meadowbank Mine for the operational	The camp will be expanded to support a maximum of 544 employees.

	Whale Tail Pit and Haul Road – Approved Project	Expansion of the Whale Tail Pit Operations (May 2019)
	phase will remain similar for the Whale Tail Pit development and with employees stationed at Meadowbank camp for milling and at Whale Tail Pit for mining of the satellite pit.	

LOM = life of mine; NPAG = non-potentially acid generating; PAG = potentially acid generating; ML = metal leaching

1.1.2 The Proponent

The Amaruq property is owned and managed by Agnico Eagle Mines Limited (NYSE:AEM, TSX:AEM), a Canadian publicly traded mining company listed on the Toronto and New York Stock Exchange, trading symbol AEM, with head offices in Toronto, Ontario.

Agnico Eagle is a long established, Canadian headquartered, gold producer with operations located in Canada, Finland, and Mexico, and exploration and development activities in Canada, Finland, Mexico, and the United States. Agnico Eagle currently has the Meadowbank operating gold mine and Meliadine will reach commercial production Q2 2019 in Nunavut.

Key contacts within Agnico Eagle for the Project are provided in Table 1.1-2. A summary of Agnico Eagle is available on-line at: 2017 Annual Financial Information.

Table 1.1-2 Agnico Eagle Key Contacts

Agnico Eagle – Meadowbank Division	Agnico Eagles Mines Limited CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph. 819 -874-5980
General Manager	Luc Chouinard 93, Arseneault, Suite 202 Val d'Or, QC, Canada, J9P 0E9 T: 819-759-3555 Ext. 4606896 M: 819.355.9348
Project Superintendent – Whale Tail	Julie Belanger P.Eng, M.Sc.A Meadowbank Division Baker Lake, Nunavut, Canada, X0C 0A0 M: 819.856.1667 julie.belanger@agnicoeagle.com
Superintendent - Permitting and Regulatory Affairs - Nunavut	Jamie Quesnel Meadowbank Division Baker Lake, Nunavut, Canada, X0C 0A0 M: 819.856.0821 jamie.quesnel@agnicoeagle.com
Nunavut Permitting Lead	Michel Groleau Meadowbank Division Baker Lake, Nunavut, Canada, X0C 0A0 T: 819.759.3555 Ext. 4608169 M : 418.670.6590 michel.groleau@agnicoeagle.com
Nunavut Permitting Lead	Manon Turmel Agnico Eagle - Nunavut Office 11600 rue Louis-Bisson Mirabel, Quebec, Canada J7N 1G9 T: 819.759.3555 Ext. 4608172 manon.turmel@agnicoeagle.com

1.1.3 Sustainable Development and the Precautionary Principle

Agnico Eagle is committed to creating value for their shareholders by operating in a safe, socially, and environmentally responsible manner while contributing to the prosperity of their employees, their families, and the communities in which they operate. This is imbedded into the four fundamental values that make up the keystones of Agnico Eagle's Sustainable Development Policy: Operate Safely, Protect the Environment, and treat Employees and Communities with Respect. This commitment is reflected in Agnico Eagle's published Sustainable Development Policy (English, French, and Inuktitut), which includes environment and health and safety. In addition, Agnico Eagle monitors accountability to sustainable development by completing an Annual Sustainable Development Report, which is also available on the website (Agnico Eagle 2019). The commitments made in this Sustainable Development Policy are extended to all of Agnico Eagle operations world-wide, and apply to the Meadowbank Mine and the Project.

1.1.4 Regional Context

The Project falls within the boundaries of the Keewatin Regional Land Use Plan (Nunavut Planning Commission 2000) administered by the Nunavut Planning Commission. The issues considered in the Approved Project FEIS (Agnico Eagle 2016c) within a regional context remain unchanged as a result of the Expansion Project. The Expansion Project received conformity from NPC on October 16, 2018.

1.1.5 Regulatory Regime

All current, applicable, and active permits are the sole ownership and responsibility of Agnico Eagle - Meadowbank Division.

The regulatory organizations have not changed since the FEIS (Agnico Eagle 2016c). Refer to Volume 1, Appendix 1-A of the Approved Project FEIS Addendum.

1.1.6 Consultation

Public consultation and engagement are a legal requirement in Nunavut, an industry best practice, and an important corporate commitment. For additional information related to Agnico Eagle's goals and objectives for Consultation refer to the Approved Project FEIS Volume 1, Section 1.1.11 and Volume 2, Section 2.3 (Agnico Eagle 2016c).

During the regulatory review process and upon receipt of the Project Certificate No. 008 and Type A Water Licence 2AM-WTP1826 for Whale Tail Pit, Agnico Eagle has continued public consultation by meeting with local employees that live throughout the Kivalliq, meeting in the community and local stakeholders, and regulatory agencies routinely which has allowed a better general understanding of the rights, interests, values, aspirations, and concerns of the potentially affected stakeholders, with particular reference to the local population. Through this continued consultation Agnico Eagle has developed an operational culture that recognizes and respects these relevant interests in the planning and executing processes. For the Expansion Project consultations, hearings, community round-table, and meetings that were completed as

part of the Approved Project have been integrated into the Addendum. Although feedback from interveners, stakeholders, and community members since 2014 is integrated into this application, only an updated record of consultation including government engagement undertaken since June 2016 is provided in Addendum Volume 2. Agnico Eagle has, and will continue to, engage with the Kivalliq Inuit Association (KivIA) and other stakeholders. Appendix F of the Main Application Document includes a summary of Project concerns raised by community members and approved project references to mitigation measures.

1.2 Project Description and Alternatives

1.2.1 Project Justification

1.2.1.1 Project Purpose and Rationale

Since 2009, Agnico Eagle has operated the Meadowbank Mine. Components of the Meadowbank Mine include a marshalling facility in Baker Lake and the 110 km All-Weather Access Road (AWAR) between Baker Lake and Meadowbank (Figure 1.2-1).

As the economics of the Meadowbank Mine have improved and Meadowbank Mine operations are optimized, mine engineers began considering the feasibility of expanding Meadowbank operations. As a result, mining of open pits at the Meadowbank Mine (more specifically Portage Pit) will continue until Q3 of 2019.

With approval of Whale Tail Pit Project in 2018, the initial extension of the Meadowbank LOM helped to bridge the production gap between the end of production at Meadowbank and the approved start of production of the Whale Tail Pit.

During the two-year permitting process, the resource at Whale Tail Pit continued to expand, which resulted in an economic expansion and extension further extending the LOM for the Meadowbank Mine. The deposits will be mined as open pits (expanded Whale Tail Pit and IVR Pit) and underground, and ore will be stockpiled then hauled to the approved infrastructure at Meadowbank Mine for milling (Figure 1.2-1). As a result of development, Agnico Eagle is also proposing to further expand the width of the haul road to accommodate traffic and haul truck safety.

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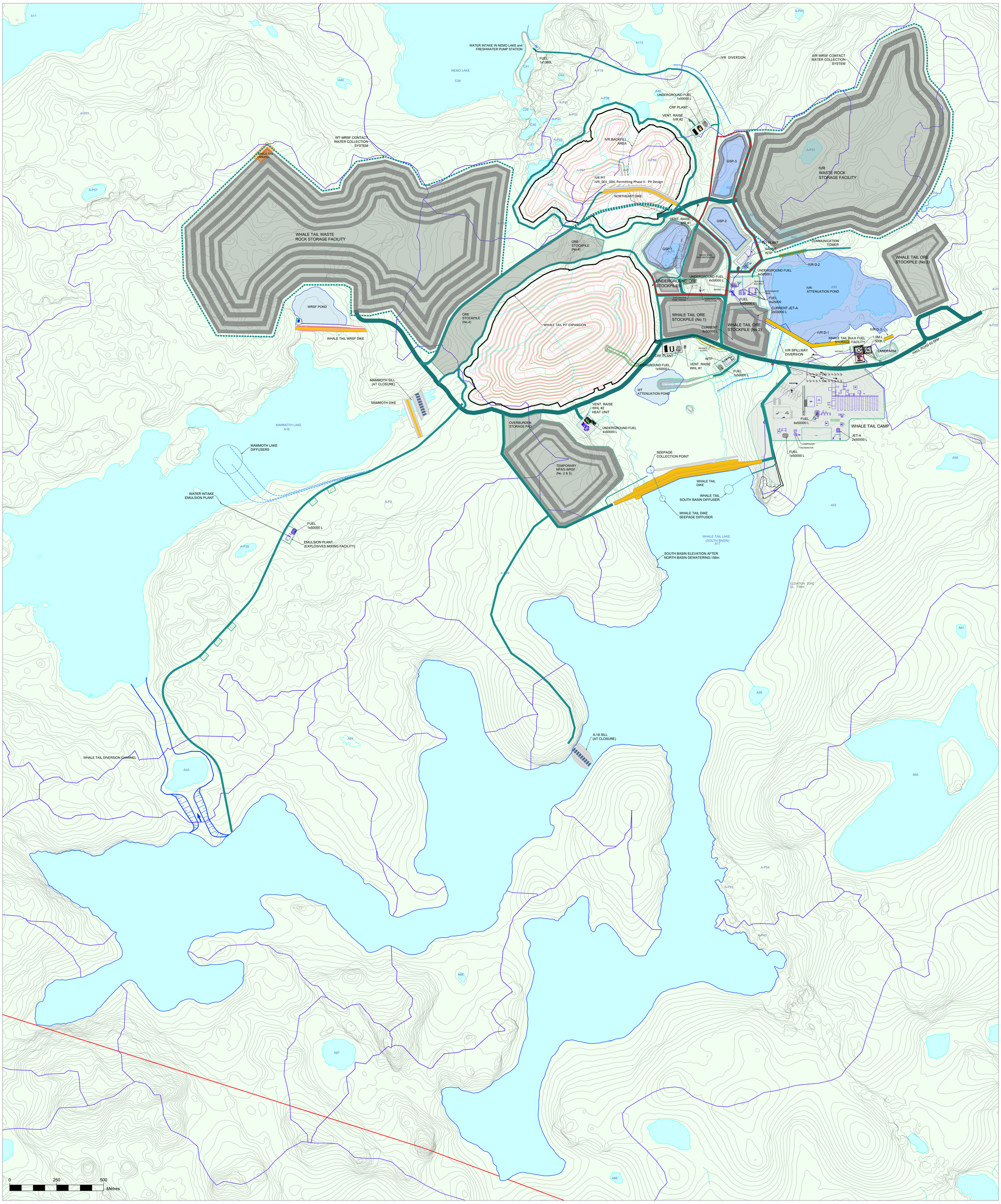
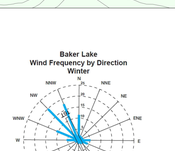


Baker Lake
Wind Frequency by Direction
Winter



LEGEND

- WATERSHED
- ATTENUATION POND
- LAKE WATER
- OPEN PIT
- HAUL ROAD, LARGE WIDE
- HAUL ROAD, SINGLE LANE
- SERVICE ROAD
- ROAD, SALT PROTECTION
- ROCK PILE
- WATER POND
- PAD
- BUILDING
- SILL

NOTES GÉNÉRALES / GENERAL NOTES

ISSUED FOR PERMITTING
AGNICO EAGLE DATE : 2019-05-03

TITRE / TITLE	# DWG
DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS	

REV	DESCRIPTION	DATE	PAR BY
REVISIONS			

AMARUQ PROJECT

AGNICO EAGLE

DESSINÉ PAR DRAWN BY	JOCELYN CRETE	DATE 2019-04-28
VERIFIÉ PAR CHECKED BY	MICHEL GROLEAU	2019-04-30
APPROUVÉ PAR APPROVED BY		
PROJET NO. PROJECT NO.	6117	
DATE		

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT
005 – SITE PREPARATION
210 GENERAL ARRANGEMENT
AMARUQ MINE SITE ARRANGEMENT – PERMITTING

ÉCHELLE SCALE	FICHIER FILE
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1.2.1.2 Project Need

With approval of the Whale Tail Pit and Haul Road Project (Approved Project), as a satellite deposit to the Meadowbank Mine, mineable reserves have been extended until 2022. As described in the previous section, the Expansion Project further extends the minable reserves until 2025.

The Kivalliq region of Nunavut offers limited, and usually seasonal, employment opportunities. The population is predominately young with a high level of unemployment. Elders have stated that the young must find jobs in the wage economy as they will not be able to live off the land as Inuit did in the past. Agnico Eagle will continue exploration activities with the objective to extend the LOM beyond 2025. Inuit employment opportunities will be maximized throughout the LOM.

The Government of Nunavut (GN; 2009) describes the vision for Nunavut to the year 2030 and lists an improved standard of living; active, healthy, and happy individuals and families; self-reliant communities with strong Inuit societal values, and recognition for Nunavut's unique culture. Nunavut's economic and social development plans focus on the economic sectors that can provide the most growth and employment potential, without harming the environment. These sectors are mining, tourism (and arts and crafts), and commercial fishing (GN 2009).

As stated in the Approved Project (Agnico Eagle 2016c), the current Meadowbank Mine is an important contributor (through employment income and training opportunities) to the economy of Baker Lake and to the economy of the Kivalliq region, especially to the communities of Arviat and Rankin Inlet. The Expansion Project would mean opportunities for continued employment, as well as forthcoming benefits and revenue stream to Nunavut Tunngavik Incorporated (NTI) and KivIA, from direct taxes paid to governments, personal income tax, and sales tax from employment.

Continued operations of Meadowbank Mill through operations of the Expansion Project will reduce dependence on government, without compromising the health of the people or the land, through the creation of stable private sector employment that will both contribute to a better standard of living for the residents of Kivalliq, as well as reducing dependence on social assistance programs. The continued operation will also contribute to the economic vision of a more self-reliant Nunavut as a key contributor to the future economic well-being of Canada as projected by the Government of Canada (GN 2009).

The continued expansion and extension of the Approved Project will support the vision and contribute to the goals of Inuit Beneficiaries of Nunavut as expressed by NTI and KivIA. Benefits will accrue to Inuit from the Inuit Impact and Benefit Agreement (IIBA), and also from royalties paid to NTI over the extended operating LOM. The IIBA is available publicly on-line at the following website http://aemnunavut.ca/wp-content/uploads/2017/06/Whale-Tail-IIBA2017-06-15-.pdf

The goals and contributions of the Expansion Project are consistent with the Approved Project. For additional information refer to the Approved Project (FEIS Volume 1, Section 1.2.1).

The proposed development of the Expansion Project will be financed by Agnico Eagle from its own operating revenue stream.

1.2.2 Project Components and Activities

The Approved Project facilities already assessed under Project Certificate No. 008 and permitted under Type A Water Licence 2AM-WTP1826 include: a personnel camp (i.e., Main Camp), power plant, heli-pad, maintenance shop, tank farm, a WRSF, an ore stockpiling facility, an attenuation pond, a water and sewage collection and treatment system, haul roads (including haul road from Whale Tail Pit to the Meadowbank Mine), access roads, water management infrastructure (e.g., collection ponds, diversion system, dikes, dams, and culverts), and the Whale Tail Pit.

The general mine site layout of the Expansion Project is provided in Figure 1.2-1. The Expansion Project comparative to the Approved Project FEIS (Agnico Eagle 2016c) is defined in Table 1.1-1. A list of updated drawings is provided in Appendix I.

1.2.2.1 Deposit, Mining Methods, and Production of Whale Tail Pit Approved and Expansion

As approved under the Project Certificate No. 008 and Type A Water Licence 2AM-MEA1526, approximately 8.3 million tonnes (Mt) of ore will be mined from the Whale Tail Pit and processed from 2019 to 2022. The Approved Project mine operations will generate approximately 8.3 Mt of ore, 46.1 Mt of mine waste rock, and 5.6 Mt of overburden soil, with very limited organic material, as shown in Table 1.2-1A.

Table 1.2-1A: Approved Project – Summary of the Approved Project Materials Balance

Year	Ore Mined (t)	Ore Processed (t)	Waste Rock Excavated (t)	Overburden Excavated (t)
2017			461,625	199,454
2018	179,003		1,087,633	1,236,488
2019	2,196,993	1,642,500	17,238,276	4,111,005
2020	3,070,121	3,040,090	27,316,859	71,412
2021	2,833,027	3,596,554		
2022				
2023				
2024				
2025				
2026				
Total	**8,279,144**	**8,279,144**	**46,104,393**	**5,618,359**

The Expansion Project mine operations will generate approximately an additional 15.2 Mt of ore for a total of 23.5Mt, 122 Mt of mine waste rock for a total of 167.8Mt, and 5.7 Mt of overburden soil for a total of 11.3Mt, with very limited organic material (refer to Table 1.2-1B). Approximately an

additional 45.8 Mt of non-potentially acid generating (NPAG) waste rock may be used for construction activities for a total of 58.4Mt.

Table 1.2-1B: Expansion Project – Summary of the Expansion Project Materials Balance

Year	Ore Mined (t)	Ore Processed (t)	Waste Rock Excavated (t)	Overburden Excavated (t)
2017				
2018				
2019				
2020			2,384,454	2,875,737
2021	1,082,536	233,331	31,461,155	1,342,271
2022	4,674,860	3,070,030	31,707,096	281,150
2023	3,970,053	3,224,997	31,075,034	1,226,057
2024	4,793,044	3,238,079	24,002,432	
2025	720,634	2,063,214	1,090,886	
2026[a]		3,411,477		
Total	**15,241,127**	**15,241,128**	**121,721,057**	**5,725,215**

a) Assumed balance of ore in stockpile is processed at Meadowbank in 2026.

Table 1.2-1C: Approved and Expansion Project – Updated Summary of Mine Life Materials Balance

Year	Ore Mined (t)	Ore Processed (t)	Waste Rock Excavated (t)	Overburden Excavated (t)
2017	0	0	461,625	199,454
2018	179,003	0	1,087,633	1,236,488
2019	2,196,993	1,642,500	17,238,276	4,111,005
2020	3,070,121	3,040,090	29,701,313	2,947,149
2021	3,915,563	3,829,885	31,461,155	1,342,271
2022	4,674,860	3,070,030	31,707,096	281,150
2023	3,970,053	3,224,997	31,075,034	1,226,057
2024	4,793,044	3,238,079	24,002,432	0
2025	720,634	2,063,214	1,090,886	0
2026[a]		3,411,477	0	0
Total	**23,520,271**	**23,520,272**	**167,825,450**	**11,343,574**

The Whale Tail Pit is an open pit that extends across the northern edge of Whale Tail Lake and IVR is an open pit located northeast of Whale Tail Pit (Figure 1.2-1).

Table 1.2-1D: Whale Tail Open Pit Expansion

Waste Type	Whale Tail Pit Project		Whale Tail Pit Expansion Project		Difference
	Total (t)	Total (%)	Total (t)	Total (%)	Total (t)
Total PAG and/or Moderate to High Arsenic Leachability Waste	33,449,865	56%	109,398,003	54%	75,948,138
Total NPAG and/or Low Arsenic Leachability Waste	12,654,528	21%	58,427,447	29%	45,772,919
Waste Rock Excavated	46,104,393	77%	167,825,450	83%	121,721,057
Total Ore	8,279,144	14%	23,520,271	12%	15,241,127
Total (t)	54,383,537	100%	202,689,296	100%	148,305,759
Total Overburden	5,618,359	9%	11,343,574	6%	5,725,215

The expanded construction upgrades to support the Expansion Project will begin as soon as approval and permits for the Type A Water Licence 2AM-WTP1826 amendment are received (anticipated for mid-2020). The full operational phase for the approved Whale Tail Pit Haul Road and Expansion Project will span from Year 1 (2019) to Year 8 (until 2026). Mining activities at Whale Tail Pit are expected to end in Year 7 (2025) and ore hauling and processing is expected to end during Year 8 (2026). Closure will begin in approximately Year 8 (2026) to Year 24 (2042) after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pits and underground, as well as re-establishment of the natural Whale Tail Lake water level.

Agnico Eagle is committed to active rehabilitation activities including progressive reclamation, such as removal of surface infrastructure, and commencement of pit flooding, and restoration of Whale Tail Lake water levels as approved. Active closure will be consistent with the Approved Project FEIS (Agnico Eagle 2016c) and current Type A Water Licence 2AM-WTP1826. However, open pit reflooding of Whale Tail Pit will be postponed to Year 8. The IVR Pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin) and the underground will be flooded. During the closure period the pits and underground have flooded, Whale Tail Lake and IVR Pit water levels are restored, and flooded pit and runoff from the WRSFs are shown to be suitable for uncontrolled release.

Consistent with the Approved Project, the pit design and geotechnical stability for the Expansion Project operations will be monitored using the same best practices currently applied at the approved Whale Tail Pit operations and Meadowbank Mine. The geological setting of the ore body is important for open pit slope design and underground mine development. The Whale Tail Pit expansion considered comments received from interested parties during the technical review phase for the Approved Project. Agnico Eagle will use the same equipment currently in use at Whale Tail Pit operations. Project design considerations are discussed in Section 1.3 of the Main Application Document.

Common and well-known underground mining methods will be used by Agnico Eagle, mainly, long hole mining (95%) with some mechanise cut and fill in flat areas. The configuration will be a mix of transverse and longitudinal stoping. The underground mine will use a ramp as the main connection to surface for haulage of ore. Truck and scoop equipment will be used for ore extraction. Stopes will be filled with cemented rock fill and rock fill.

The main lithologies encountered at the Project are summarized in Section 5 of the Expansion Project FEIS Addendum (Agnico Eagle, 2018), Appendix 5-E. As outlined in the FEIS (Agnico Eagle 2016c), there are some rock types, specifically intermediate intrusive and southern greywacke waste rock (during early mine development) from the Whale Tail Pit that are suitable for construction. There is no acid rock drainage (ARD) or metal leaching (ML) concern from the esker material tested; indicating that this material can be used for road construction. The report titled Evaluation of the Geochemical Properties of Waste Rock, Ore, Tailing, Overburden and Sediment from the Whale Tail Pit and Road Aggregate Materials (Volume 5, Appendix 5-E) provides detailed assessment of geochemical properties for the Expansion Project. Segregation of waste rock will be important to the operation and closure of the Project and is outlined in the addendum to the approved Operational ARD/ML Sampling and Testing Plan enclosed with this application.

Explosives management and blasting practices will be consistent with practices in place for the Approved Project. Refer to the Ammonia Management Plan enclosed with this application for additional details. For additional information on explosives production and storage, refer to Section 1.2.10 of the Main Application Document.

1.2.2.2 Processed Ore Containment (and Tailings Storage Facility)

Ore from the Whale Tail Pit, IVR Pit, and underground will be segregated by grade and temporarily stored in one of four primary stockpiles at the Whale Tail Pit site (Figure 1.2-1), before being transported to the Meadowbank Mine for milling. Ore will primarily be stockpiled adjacent to the Whale Tail Pit (No.1 & 4), the additional stockpiles (No. 2 and 3) are proposed to facilitate blending of ore types. Agnico Eagle would like to reiterate that our intent is to store ore efficiently and with minimal impact to the environment.

Excavated ore material will be hauled to the ore stockpile facilities, or if needed to the crushing facility using mine trucks. Material that needs to be crushed will either be dumped into a chute, which feeds the jaw crusher, or dumped on the ground and then dumped into the chute using a wheel loader. The throughput for the crusher will be approximately 9,000 to 12,000 t/day. Refer to the Approved Project FEIS Volume 1, Appendix 1-C (Agnico Eagle 2016c) for the conceptual layout of the crushing facility.

Consistent with the Approved Project, Agnico Eagle proposes to process the ore resulting from the expansion at the existing Meadowbank Mine and dispose of the tailings in the approved TSF, authorized under Project Certificate No. 004 and Type A Water Licence 2AM-MEA1526. The mill rate is not expected to change and remain on average 9,000 t/day and up to a peak mill throughput of

12,000 t/day (which is the current rate capacity at Meadowbank Mill). Agnico Eagle is planning the deposition of the Whale Tail tailings inside the Portage and Goose pits once approval is received. Agnico Eagle will review the plan as required by changes in operation and/or technology and modify the Plans accordingly in the form of an addendum to be included in the Annual Report.

1.2.3 Overburden and Waste Rock Disposal

The Expansion Project will include Whale Tail Pit, IVR Pit, and underground operations that will extract a total of 121.7 Mt of waste rock plus approximately 5.7 Mt of overburden (see Table 1.2-1B). Approximately 45.8 Mt of waste rock available for construction activities such as roads, pads, WRSF thermal cover and water management facilities (i.e., dike, berm, rip rap, etc.). The remaining waste rock and overburden material will be hauled to the WRSFs, as shown on Figure 1.2-1. The approved Whale Tail WRSF will continue to be used for the Expansion Project. The Whale Tail WRSF is proposed to be expanded vertically and horizontally to the southeast to accommodate an additional capacity required by the Expansion Project. In addition, waste rock and overburden generated from IVR Pit is proposed to be stored in the new IVR WRSF, and the currently approved underground WRSF (Licence No. 2BB-MEA1828) will be expanded to the north to accommodate additional waste rock approximately 2.2 Mt from the underground operations. Underground waste rock pile will be completely reclaimed at the end of operation and used at backfill material for the Underground mine operation. A second, temporary overburden storage facility for staging purposes is located west of Whale Tail Lake (Figure 1.2-1).

Waste rock stored in the Underground WRSF will be returned underground as backfill, with no waste rock remaining on surface at the end of mine life.

A summary of the geochemical properties of the overburden and waste rock including a summary of waste rock management including use of construction material is provided in the Whale Tail Pit Waste Rock Management Plan enclosed with this application and detailed geochemical properties are presented in Volume 5 of the Expansion Project FEIS Addendum (Agnico Eagle, 2018), Appendix 5-E. Thermal encapsulation of the potentially acid generating (PAG) and ML rocks was selected as the reclamation strategy to verify long-term stability of the waste rock storage facilities.

Overburden will mainly be produced during the construction phase (i.e., stripping of the Whale Tail Pit and IVR Pit) of the Project. Waste rock will be produced during both construction and operations. Waste rock and overburden will be co-disposed together in one of the piles constituting the storage facility.

The approved Whale Tail WRSF design has been approved by the NWB as a 60 day notice on December 20, 2018. Similar design parameters are proposed for the IVR WRSF.

Freshwater to support the Meadowbank Mill, TSF, and Meadowbank Camp is authorized under the existing Type A Water Licence 2AM-MEA1526.

An updated summary of freshwater source requirements is provided in Table 1.2-2.

The current NWB Water Licence (i.e. 2AM-WTP1826) provides for a maximum quantity of water use not to be exceeded at 240,000 m^3 annually during construction and operation. As well as 10,655,000 m^3 annually during closure.

Table 1.2-2: Summary of Freshwater Source Requirements

Water Use	Construction (2018)			Operations (2019 - 2025)			Closure (2026 – 2042)			Total for All Phases
	Daily	Annual	Total Construction	Daily	Annual	Total Operations	Daily	Annual	Total Closure	
	(m^3/d)	(m^3/yr)	(m^3)	(m^3/d)	(m^3/yr)	(m^3)	(m^3/d)	(m^3/yr)	(m^3)	(m^3)
Whale Tail Lake (North Basin)										
Dewatering (dewatering North Basin to South Basin)	38,400	3,172,810	3,172,810	-	-	-	-	-	-	**3,172,810**
Whale Tail Lake (South Basin)										
Camp Use	78	18,905	18,905	-	-	-	12	4,380	73,095	92,000
Truck Shop	103	25,053	25,053	-	-	-	-	-	-	25,053
Drilling Water - Pits	24 - 48	7,668	7,668	-	-	-	-	-	-	7,668
Transfer/Reflooding Whale Tail Pit - (Whale Tail South Basin to Open Pit and Whale Tail North)	-	-	-	-	-	-	-	8,280,000[(a)]	55,505,966	55,505,966
Total Whale Tail Lake (South Basin)	*205 - 229*	51,626	51,626	-	-	-	12	8,284,380	55,579,061	55,630,687
Nemo Lake										
Camp Use	78	21,239	21,239	78	28,397	187,187	-	-	-	208,426
Truck Shop	103	28,146	28,146	103	37,657	248,059	-	-	-	276,205
Drilling Water - Pits	24 - 48	9,120	9,120	36-96	17,197 - 35,064	211,597	-	-	-	220,717
Makeup Water Underground	4 – 10	826	826	-	-	-	-	-	-	826
Cement Mixing	-	-	-	24 - 65	8,766 - 23,741	80,769	-	-	-	80,769
Industrial/Miscellaneous – dust suppression	-	45,750	45,750	-	45,750	274,500	-	45,750	732,000	1,052,250

Water Use	Construction (2018)			Operations (2019 - 2025)			Closure (2026 – 2042)			Total for All Phases
	Daily	Annual	Total Construction	Daily	Annual	Total Operations	Daily	Annual	Total Closure	
	(m^3/d)	(m^3/yr)	(m^3)	(m^3/d)	(m^3/yr)	(m^3)	(m^3/d)	(m^3/yr)	(m^3)	(m^3)
Total Nemo Lake	*209 - 239*	*105,081*	*105,081*	*2341 - 342*	*137,767 - 170,609*	*1,002,112*	-	*45,750*	*732,000*	***1,839,193***
Mammoth Lake										
Explosives Mixing	-	2,500*	2,500	-	2,500*	15,000	-	2,500*	40,000	**57,500**
Lake A53										
Dewatering (dewatering Lake A53 to Whale Tail Lake [South Basin])	-	-	-	-	153,735	153,735	-	-	-	**153,735**
Other - Small Lakes/Ponds proximal to drilling sites										
Operational Geological Drilling	-	-	-	299	109,135	-	-	-	-	-
Total for Project										
Total for Project	-	-	3,332,017	-	-	1,170,847	-	-	56,351,061	**60,853,925**

* Licence maximum value approved prevails over value provided in NWB decision (NWB 2018)

a) max volume for first year of closure at 10, 655,000 m^3 and 4,500,000 m^3annually thereafter (NWB Decision 2018)

1.2.4 Freshwater Requirements

Currently, the Whale Tail Camp operations has a water treatment plant for potable (domestic) water. The design flow rate for the potable water for the main camp and accommodations (i.e., kitchen, laundry) is 84 cubic metres per day (m^3/day), based on a 400 people camp capacity and a nominal consumption of 240 litres (L)/day/person from Nemo Lake. Agnico Eagle suggests with a projected increase in on-site staff in 2020 to 544 people for the Expansion Project, the existing authorized volumes from Nemo Lake are adequate. Detailed plant operation specifications were provided in the Approved Project (FEIS Volume 1, Section 1. 2.4.1).

Freshwater and potable water use will extend for operations until 2025 and additional freshwater will be required from Whale Tail Lake at closure.

1.2.4.1 Freshwater Source and Capacity

The freshwater intake locations approved under 2AM-WTP1826 are shown in Figure 1.2-1.

Nemo Lake

The Nemo Lake catchment has a total area of 17.6 km^2 (including 14.4 km^2 of land surface area and 3.24 km^2 lake catchment surface area). The average outflow rates for baseline at the outlet of Nemo Lake are 0.05 cubic metres per second (m^3/s) for June, 0.02 m^3/s for August, and 0.01 m^3/s for September (Volume 6, Appendix 6-C).

Whale Tail Lake (South Basin)

The Whale Tail Lake catchment has a total area of 28.1 km^2, of which 3.9 km^2 (i.e., north of the Whale Tail Dike) will be diverted as part of operations. The average outflow rates for baseline at the outlet of Whale Tail Lake are 4.23 m^3/s for June, 0.19 m^3/s for August, and 0.01 m^3/s for September (Volume 6 of Expansion Project FEIS Addendum (Agnico Eagle 2018), Appendix 6-C).

1.2.4.2 Freshwater Infrastructure

Intakes, Pump Houses, Pipeline, Storage Tanks and Potable Water Treatment

Agnico Eagle proposes installation of an additional intake in Mammoth Lake to support emulsion plant operations. The use of water for explosives mixing is already authorized under the current water licence with source to be amended to Mammoth Lake. Location as shown on Figure 1.2-1. Intake will be constructed consistent with the intake installed at Nemo Lake. Final design and construction drawings will be provided to the NWB for review 60 days prior to construction.

1.2.5 Water Management

In support of the Expansion Project, Agnico Eagle has prepared a fully revised addendum to the Whale Tail Pit Water Management Plan and is attached to this application.

The main objectives pertaining to water management are to minimize the flow of surface water runoff in the pit and to limit the impact on the receiving environment. In developing the water management plan, the following principles were followed:

- keep the different water types separated as much as possible;
- control and minimize contact water through diversion and containment;
- minimize freshwater consumption by recycling and reusing the contact and process water wherever feasible; and
- meet discharge criteria before any site contact water is released to the downstream environment.

Consistent with the Approved Project, the preferred site water management options were selected based on four aspects: society, environment, economy, and engineering and viability. Refer to Section 1.9.6 of the Main Application Document. The selected option consists of isolating the pit area located in Whale Tail Lake with two dikes (Whale Tail Dike and Mammoth Dike) and diverting Whale Tail Lake (South Basin) to Mammoth Lake.

1.2.5.1 Water Management Infrastructure

The Expansion Project will include construction and operations of water management infrastructure, either consistent with, or in addition to Type A approved infrastructure and water management as described in Table 1.1-1.

Design criteria with required design drawings for the expansion project related to water management control structures are provided in the Water Management Plan enclosed with this application (Appendix G.5). Prior to construction detailed design drawings will be submitted to the NWB in accordance with the current Type A Water Licence 2AM-WTP1826. Any refinements to the Water Management Plan will be submitted to the NWB annually as required by the current water licence. The discharge diffusers at Whale Tail Lake (South Basin) will be similar to the diffuser designed and authorized for Mammoth Lake discharge and authorized under the current Type A Water Licence.

The water management infrastructure required for the haul road (i.e., bridges and culverts) have already been assessed and constructed under existing authorization. If necessary, to support access road development, additional authorizations may be required for the proposed expansion.

1.2.5.2 Effluent Treatment

Any water requiring treatment will be pumped to the water treatment plant(s) prior to discharge through the diffuser in Mammoth Lake or through diffusers in Whale Tail Lake (South Basin) or other alternatives.

Agnico Eagle is committed to maintaining discharge criteria according to the Type A Water Licence 2AM-WTP1826. Conceptual design and modelling results for the Expansion Project for alternative discharge locations are included in the Water Management Plan (Appendix G.5). Preliminary baseline data collection was completed in 2018 on two alternative locations for effluent discharge identified by Agnico Eagle. Both lakes have been assessed qualitatively and included in the FEIS Addendum. Additional alternatives under consideration by Agnico Eagle are outlined in Section 1.9.6 of the FEIS Addendum.

1.2.5.3 Dewatering

As per Type A Water Licence 2AM-WTP1826, Agnico Eagle has completed the construction of the dike and the fish out in March 2019 and November 2018 respectively. The proposed expansion of the Whale Tail Pit Project has not changed the dewatering of the Whale Tail Lake (North Basin); however, small waterbodies and ponds within the footprint of the IVR Pit and Lake A53 (IVR Attenuation Pond) could require approvals under the *Fisheries Act* for fishouts and dewatering during the open water season of 2020 to 2022. Dewatering for the Expansion Project where applicable is planned for release entirely through Whale Tail Lake (South Basin).

1.2.5.4 Re-Filling

Following completion of mining, the underground mine, Whale Tail Pit, and IVR Pit, will be filled with a combination of natural runoff and contact water from the site (e.g., Groundwater ponds), and water pumped from Whale Tail Lake (South Basin). During the spring of the 2026, the water accumulated in Whale Tail Lake (South Basin) during operations will be pumped into the underground mine until it is filled and into the IVR Pit thereafter. Refilling of Whale Tail Lake (North Basin) will occur from 2026 to 2042. As part of the Whale Tail Project Fisheries Offsetting, for the Approved Project, a sill will be constructed to increase the final flooded water level from the baseline elevation of 152.5 by 1 m to 153.5 masl. The Whale Tail Dike and Mammoth Dike will then be decommissioned when the water quality monitoring results meet discharge criteria to allow water to passively flow to the natural environment.

1.2.6 Marine Area

The Approved Project relies on marine transportation 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. Consistent with approved operations, materials

will be transported to Baker Lake via barge and will either be directly transported to Meadowbank Mine and/or the Whale Tail Pit site or temporarily held in the Baker Lake marshalling area.

Fuel is supplied to Baker Lake by marine fuel tankers at an annual volume of 96.8 million L (95 million L of ULSD and 1.8 million L of Jet A). The fuel is transported by ocean-going tankers to a fuel transfer (lightering) site located near Helicopter Island, Nunavut. Once the fuel tankers are securely anchored, fuel is transferred to either tug-assisted fuel barges or smaller shuttle tankers. The fuel barges / shuttle tankers then transport the fuel shipment through Chesterfield Narrows to Baker Lake. Fuel shipping is provided by Petro-Nav a subsidiary of Groupe Desgagnes.

Agnico Eagle does not forecast changes to the existing transportation requirements related to the marine environment; in other words, no additional ship trips are expected to be added by the Expansion Project as compared to the level of shipping currently required to re-supply the Meadowbank Mine and Whale Tail Pit Approved Project on an annual basis. The proposed marine activity will simply be extended to 2025 for mining operations.

1.2.7 Haul Roads, All-Weather Road, Borrow Pits and Quarry Sites

No changes are proposed for the Meadowbank AWAR to Baker Lake.

To support the Expansion Project, Agnico Eagle proposes to update the haul road from 9.5 m width to 15 m width to ensure safe passage of haul trucks. Efficiency of traffic movement on the haul road is dictated by safety. In 2018, Agnico Eagle conducted an assessment which included field trials with the long haul trucks to determine optimal safety, efficiency, and production of hauling from Whale Tail Pit site. It has been determined that a 15 m road width would allow long haul trucks to pass each other safely, which a 9.5 m road width does not allow. Furthermore, during wintertime, snow tends to pile up on one side of the road and, as such, the proposed expansion will improve driving conditions.

No additional changes from FEIS (Agnico Eagle 2016c) are proposed related to site access. The expanded road will be constructed using waste rock or aggregates from quarry and esker sites, and top-dressed with esker or quarry material. Materials will be obtained from already permitted and leased quarry and esker sites, as well as four new quarry/esker sites. Refer to Quarry Site Location Plan Main Application Document, Figure 1-B-1. Table 1.2-3 provides a summary of quarries/eskers to be used for the expansion of the haul road. Typical cross-sections of the upgraded road based on underlying ground conditions are provided in Appendix J.

Table 1.2-3: Quarries/Eskers for the Expansion of the Haul Road

Quarry / Esker	Status	Quarry / Esker	Status
Vault	Approved	Km 34.9	Expansion proposed
Km 2.5	New location	Esker 3	Approved
Km 8	New location	Km 40.4	New location
Km 10.5	Approved	Km 50.6	Approved
Esker 1 / Quarry 17	Approved	Km 52	Approved
Esker 2 (ABC)	Approved	Km 53	New location
Km 26.5	Expansion proposed	Eskers 4 to 7	Approved
Km 30.5	Approved		

The haul road traffic volumes for the Expansion Project are consistent with those applied to the Approved Project FEIS Volume 4, Appendix 4-B, Table 4-B-15 (Agnico Eagle 2016c). Agnico Eagle assumed that long haul trucks "daily vehicle passages" on the haul road would be 154 trips per day on average and up to 173 trips per day. The upper limit number has not changed for the Expansion Project, as it is based on a maximum throughput at the mill.

Refer to the Whale Tail Pit Haul Road Management Plan enclosed with this Application (Appendix G.9).

1.2.8 Maintenance, Warehouse, and Laydown

Primary maintenance will occur using existing infrastructure at Meadowbank Mine. For light maintenance the industrial site adjacent to the Whale Tail Pit will include one maintenance shop for mine equipment and one for haul trucks. Agnico Eagle may also include a wash bay, a machine shop, and a welding shop. The concrete foundation will be designed according to the type of bay (e.g., for a wash bay, drains in the foundation will be designed for used water with a sump for an oil separator).

1.2.9 Airport Facilities

In the Approved Project FEIS, Agnico Eagle initially proposed to progressively reclaim the small airstrip at the exploration site with surface material to be reused as construction material for the proposed infrastructure at the Whale Tail site. Upon further project optimization, Agnico Eagle decided to use the existing airstrip as a construction access road for Whale Tail Dike. A section of the expanded haul road near the Whale Tail Pit site will be used as an airstrip during the operation of the expansion.

1.2.10 Explosives Production and Storage Sites

Consistent with the Approved Project, the existing emulsion plant located near the Meadowbank Mine will be maintained with deliveries on an as needed basis during operations. The haul road will be used to truck explosives between the Meadowbank Mine and the Whale Tail site, with a minimum amount of explosives to be stored at the Whale Tail site. An emulsion storage facility and plant will continue to be used at the Whale Tail Pit project. The location of general infrastructure for the management of explosives at the Whale Tail site are shown on Figure 1.2-1. Agnico Eagle will confirm compliance with legislative requirements for siting explosive storage facilities should a decision be made to relocate the facility. Any potential storage site will be located within the local study areas assessed in the FEIS Addendum.

Consistent with the Approved Project, the explosives storage facilities will be safely located away from vulnerable facilities, as stipulated by the federal and territorial *Explosives Use Act* and *Regulations*. The minimum setback distances between the proposed explosives storage facilities and the other mine site facilities will be governed by the *Quantity-Distance Principles User's Manual,* as published by the Explosives Branch of Natural Resources Canada. Use of these setback distances will ensure that the location of these proposed facilities meet all federal and territorial regulations regarding safe siting of such facilities.

For additional information on the supply, storage, and handling of explosives refer to the Ammonia Management Plan (Appendix G.10).

1.2.11 Fuel Storage Sites

Consistent with the existing Type A Water Licence 2AM-WTP1826 and the Approved Project FEIS, the Expansion Project will require the use of fuel (P-50 Fuel Diesel ULSD-43). Fuel usage between the Meadowbank Mill and operations at the Whale Tail site is projected to be approximately 96.8 million L/year. The Whale Tail Bulk Fuel Storage Facility will be located east of the Whale Tail Camp adjacent to the mine operations haul road (Figure 1.2-1).

Agnico Eagle has approval to store 500,000 L of diesel fuel under Type A Water Licence 2AM-WTP1826 to support open pit activities under the Approved Project and 1,900,000 L of diesel fuel under Water Licence 2BB-MEA1828 to support underground development and exploration activities. Under Type A Licence 2AM-WTP1826, Agnico Eagle adjusted the size of the fuel tank to one 1,500,000 L tank under the existing water licence to support open pit activities for the Approved Project. To support underground mining activities, as part of the Expansion Project, Agnico Eagle is proposing to add:

- one above ground storage tank with approximately 500,000 L capacity within the vicinity of the current Whale Tail Pit Fuel Farm; and
- 700,000 L storage capacity between five key storage locations illustrated in Figure 1.2-1.

In total, the proposed fuel storage capacity required for the Approved Project and the Expansion Project is a total of 3.325 ML. The bulk fuel tank will be re-filled by a fuel truck on a regular basis throughout the year.

The approved fuel storage facilities at Whale Tail Pit, Meadowbank Mine, and following upgrades currently under consideration of Type A Water Licence (2AM-MEA1826, to support current operational needs associated with the Approved Project), the Baker Lake marshalling area will not change as a result of the Expansion Project.

For additional information refer to the Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan enclosed with this application (Appendix G.11).

1.2.12 Waste (Domestic and Hazardous) Management

Agnico Eagle proposes to add an incinerator, a composter and a landfarm on site, to reduce traffic on the Whale Tail Pit Haul Road and to improve waste and contaminated soil management. Reduced traffic will result in less interactions with caribou and safer road conditions.

Hazardous Waste

Agnico Eagle does not propose changes to the approved handling and disposal of hazardous waste. Hazardous material management will be implemented in accordance with the Hazardous Material Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities enclosed with this application (Appendix G.13).

Domestic Landfill Waste

Construction debris and domestic waste generated on-site will be disposed of in an on-site landfill to be located in the Whale Tail WRSF. The total capacity of this landfill is to be 59,000 m^3 approved under Type A Water Licence 2AM-WTP1826. Agnico Eagle will implement landfill management in accordance with the Landfill and Waste Management Plan enclosed with this application (Appendix G.4).

Incineration

Agnico Eagle is proposing an incinerator on-site for the Expansion Project.

Further details are provided in the Incinerator and Composter Management Plan enclosed with this application (Appendix G.8).

Composting

Agnico Eagle is proposing a composter on-site for the Expansion Project. The composter will be at the same location as the incinerator. The objective of the composter is to reduce the amount of waste incinerated (i.e., reduce fuel consumption – reduce greenhouse gases [GHG] emissions).

Weekly organic matter quantities will consist of the following:

Further details are provided in the Incinerator and Composter Management Plan enclosed with this application (Appendix G.8).

Sewage

Agnico Eagle is proposing to increase sewage treatment facilities capacity from 350 to 544 people to accommodate the Expansion Project activities. Further details are provided in the Whale Tail Operation & Maintenance Manual - Sewage Treatment Plant enclosed with this application (Appendix G.21). As stipulated in Part B, Item 17, Agnico Eagle will review the Plans as required by changes in operation and/or technology and modify the Plans accordingly in the form of an addendum to be included in the Annual Report.

Hydrocarbon Contaminated Waste

As the Project advances, Agnico Eagle foresees the need to optimize project operations with construction and operation of an on-site landfarm facility to treat and manage potential hydrocarbon contaminated soils. The proposed location of the facility is provided in Figure 1.2-1.

A Landfarm Design and Management plan in support of Project operations has been included in this application (Appendix G.7).

1.2.13 Power

Power requirements to support the project were assessed as part of the Approved Project. Additional power is required as part of the Expansion Project to meet underground needs. For additional information refer to the Expansion Project FEIS Addendum Volume 4, Appendix 4-B Air Emissions Inventory.

1.3 Project Design

Agnico Eagle continues to conduct feasibility and design studies with both the cold northern climate and remote location as the principal engineering considerations for successful design, construction, and operations. Consistent with Approved Project FEIS, the Expansion Project was designed to minimize the areas of surface disturbance, stabilize disturbed land surfaces against erosion, and return the land to a post-mining use for traditional pursuits and wildlife habitat. This will mainly be achieved by rapidly dewatering during the open water season, mining the pits as efficiently as possible, and then refilling as early as possible during closure.

1.4 Pace, Scale, and Timing of Project

As stated in Section 1.2.1 of the Main Application Document, Meadowbank Mine was scheduled to exhaust its mineable reserves by Q1 of 2019. With the recent NIRB approval and Type A Water Licence approval for development of the Whale Tail Project, mineable reserves to supplement Meadowbank Mine have been extended to 2022, with the expansion project further extending mineable reserves

until 2025. Agnico Eagle will continue exploration activities with the objective to extend Mine life beyond 2025.

As described in the Main Application Document, by extending the LOM at Meadowbank, Agnico Eagle will progressively close portions of the Meadowbank Mine while operating. Refer to Approved Project FEIS Volume 1, Section 1.4 for additional information.

The development sequence for the mine infrastructure and water management infrastructure is summarized in Table 1.4-1.

Table 1.4-1: Mine Development Sequence and Key Activities

		Construction[1]	Operations[2]							Closure[3]									Post-closure[4]
		-1	1	2	3	4	5	6	7	8	9	10	11-19	20	21	22	23	24	24
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029-2037	2038	2039	2040	2041	Q1-Q3 2042	Q4 2042
Water Management Infrastructure	**Status[5]**																		
Groundwater Storage Pond 1 (GSP-1)	Approved																		
Groundwater Storage Pond 2 (GSP-2)	New																		
Groundwater Storage Pond 3 (GSP-3)	New (Optional)																		
Water Intake in Nemo Lake and Freshwater Pump Station	Approved																		
Whale Tail Attenuation Pond Pump Station	Approved			8															
IVR Attenuation Pond Pump Station	New																		
Whale Tail WRSF Dike	Approved*																		
WRSF Pond	Approved																		
Whale Tail Dike	Approved																		
Mammoth Dike	Approved																		
Northeast Dike	Approved			7															
Whale Tail Dike Seepage Pump Station	New																		
South Whale Tail Diversion System	Approved																		
Whale Tail WRSF Contact Water Collection System	Approved																		
IVR WRSF Contact Water Collection System	New																		
East Channel	Approved																		
IVR Diversion	New																		
IVR Attenuation Pond	New																		
Underground Water Management System	New																		
Water/Effluent Treatment																			
Freshwater Treatment Plant (Potable)	Approved																		
Sewage Treatment Plant	Approved																		
Construction Water Treatment Plant	Approved																		
Operation Water Treatment Plant	Approved																		
Mammoth Lake Diffuser	Approved																		
Whale Tail South Basin Diffuser	New																		
Whale Tail South Basin Dike Seepage Diffuser	New (Alternative)																		
Unnamed Alternate Diffuser (Lake D1 or D5)	New																		
TDS Treatment	New																		
Mining																			
Underground Mining[6]	New																		
Whale Tail Pit	Approved																		
Whale Tail Pit Expansion	New																		
IVR Pit	New																		
Waste Rock																			
Whale Tail Waste Rock Storage Facility	Approved*																		
Overburden Storage Pad	Approved																		
NPAG WRSF	Approved																		
Whale Tail Ore Stockpiles	Approved																		
Underground Ore Stockpiles	New																		
Underground WRSF	Approved																		
Ore Stockpile (No.4)	New																		

		Construction[1]	Operations[2]							Closure[3]								Post-closure[4]
		-1	1	2	3	4	5	6	7	8	9	10	11-19	20	21	22	23	24	24
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029-2037	2038	2039	2040	2041	Q1-Q3 2042	Q4 2042
IVR Waste Rock Storage Facility	New																		
Dewatering																			
Fish Out - Whale Tail North Basin	Approved																		
Dewatering of Whale Tail Lake North Basin	Approved																		
Dewatering of A47 and A49 Lakes	New																		
Fish Out – A53 Lake	New																		
Dewatering of A53 Lake	New																		
Re-Filling/Flooding																			
Re-Filling/Flooding Whale Tail Pit	Approved																		
Flooding of Whale Tail (South Basin)	Approved																		
Re-Filling/Flooding Underground	New																		
Re-Filling/Flooding IVR	New																		
Re-Filling/Flooding Whale Tail (North Basin)	Approved																		
Reconnection North Basin and South Basin of Whale Tail Lake	Approved																		
Associated Infrastructure																			
Industrial Pad Development and associated buildings (camp, maintenance shop, communication towers, etc.)	Approved									9									
Widening Haul Road (9.5 m)	Approved																		
Widening Haul Road (15 m)	New																		
Additional Haul Road Quarries and Eskers	New									9									
Site access roads	Approved									9									
Explosives Magazines	Approved									9									
Landfill	Approved									9									
Landfarm	New									9									
Incinerator	New									9									
Composter	New									9									

1. Construction: Approved Project - 2018 to 2019
2. Operations: Approved Project - 2019 to 2022; Expansion 2020 to 2025
3. Closure: Approved Project - 2023 to 2029; Expansion - 2026 to 2042; pits fully flooded in 2042
4. Post-closure: Approved Project - 2030 to 2033; Expansion – Q4 2042
5. Status reflects "Approved" infrastructure already assessed and permitted under Project Certificate (No. 008) and Type A Water licence 2AM-WTP1826 or other permit or authorization, and "New" infrastructure associated with proposed Expansion Project
6. Underground Mining - initial ramp development authorized under 2BB-MEA1828
7. Northeast Dike required for development of Whale Tail Dike. However dismantling of facility to support expansion will occur sooner than originally projected.
8. The approved project considered treated discharge to Mammoth Lake during open water season only; The expansion proposed addition of winter discharge to Mammoth Lake

* Infrastructure approved, however, needs to remain in place longer than originally proposed due to the expansion and delaying of the closure of the facility

9. Final active closure timelines to be determined in Final Closure and Reclamation Planning process.

Green line = start of Expansion Project; Red dashed line = end of Approved Project operations phase

1.5 Adaptive Management and Precautionary Principle

As with all Meadowbank operations (i.e., Meadowbank Mine, Whale Tail Pit, ongoing exploration, and the proposed expansion), making good use of adaptive management requires the recognition that it is a structured, iterative approach to environmental management decision making (CPR 2011). Many VCs applicable to the Project are part of dynamic natural and socio-economic systems where uncertainty can be a significant factor. The goal is to reduce uncertainty over time by incorporating learnings from design, monitoring, mitigation, and changes in operations into environmental management at the proposed mine site. Where applicable, an adaptive management strategy or approach will be used for those VCs that will be monitored by Agnico Eagle.

Agnico Eagle has taken steps to integrate its sustainable development program into all aspects of its business through the development and implementation of an internal Health, Safety, Environment and Community Relations Management System, that is structured within the RMMS. Trends are compiled, followed, and analyzed in the RMMS and compared to the pre-established goals/thresholds. Any action plan and corrective actions to be taken are documented through the RMMS. For additional information related to Agnico Eagles adaptive management system and precautionary approach, refer to Approved Project FEIS Volume 1, Section 1.6 (Agnico Eagle 2016c).

As part of the Expansion Project, the followings are adaptive management strategies that have been evaluated:

- Most appropriate location to store additional surface water. A Multiple Accounts Analysis was completed and Lake A53 was selected to become the IVR Attenuation Pond;
- Addition of alternative discharge locations such as D1 and D5 lakes (which Agnico Eagle requests for inclusion in the licence in order to provide the option of these alternative discharge locations in future). Alternative discharge locations being considered are presented in Figure 1.5-1;
- Groundwater Storage Pond 3 (GSP-3) was added as a contingency should GSP-1 and GSP-2 be not sufficient;
- Water treatment. Reverse Osmosis and Saltmaker technologies were looked at. Evaluation will be continued to find the best available technology.

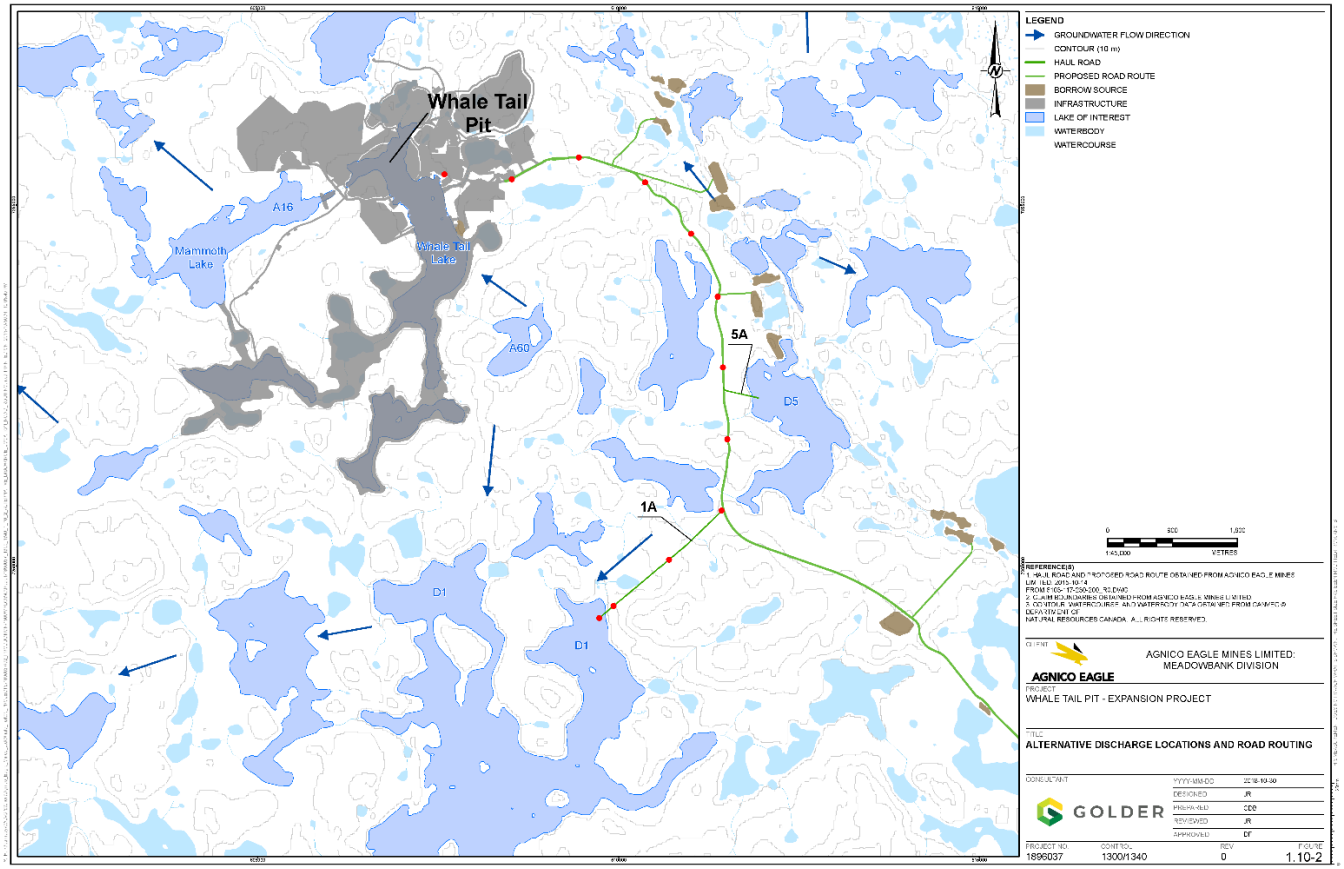

Figure 1.5-1: Alternative Discharge Locations and Route Routing

1.6 Performance Measurement and Monitoring

The Expansion Project is an extension of mining operations for the Approved Project (i.e., mining of the Whale Tail Pit orebody) that has existing waste and water management facilities and associated management plans that are approved by the NWB under Type A Water Licence 2AM-WTP1826. The existing management, monitoring, and mitigation will focus on ensuring impacts to waste and water, are consistent with those predicted for the Approved Project. The accuracy of the environmental impact predictions and the effectiveness of the mitigation measures will be verified through monitoring and annual reporting.

As indicated in the Approved Project FEIS Volume 1, Section 1.7 (Agnico Eagle 2016c), as part of the Mining Association of Canada, Agnico Eagle reports its global performance through its annual Corporate Social Responsibility report.

Regulatory requirements and targets are identified in each of the management plans required under the Project Certificate, Water Licence or any other permit, licence or authorization, as appropriate. Corrective actions will be triggered when those thresholds are reached. The RMMS will link the thresholds to appropriate corrective actions and establish accountability.

The performance of the management plans will be monitored periodically and the results communicated. Independent researchers or consultants may be engaged to review performance where necessary. The accuracy of the environmental impact predictions and the effectiveness of the mitigation measures will be verified through that process. If unusual or unforeseen adverse environmental impacts are noticed, corrective action will be put in place. Through the adaptive management process, the existing mitigation measures will be adjusted, or new mitigation measures implemented if necessary. External reporting will be completed, as required in accordance with Annual reporting requirements under the Project Certificate and/or Type A Water Licence.

For the purposes of the Expansion Project NIRB reconsideration and review process, Agnico Eagle has provided new or updated plans.

As previously stated, the Expansion Project is an extension of mining operations for the Approved Project; therefore, many of the monitoring and mitigation plans are “operational” plans in place for the Whale Tail Pit Project. By title, Agnico Eagle has indicated that these plans are intended for the NWB assessment.

These plans are living documents which will evolve as the approved and expanded project proceeds and will be updated to reflect changes in operation, technology, and direction or requests made by the NWB and subsequent approvals for the project.

The _NWB plans have been submitted for the purposes of the NWB Water Licence amendment. Final plans that are in accordance with amended or approved authorizations and licenses will be provided to the regulators as directed and will incorporate operational changes, review comments, intervener recommendations, and commitments made by Agnico Eagle for the Expansion Project.

1.7 Potential Future Developments

Agnico Eagle will continue exploration activities with the objective to extend Whale Tail Project mine life beyond 2025.

The development of Whale Tail Pit as currently approved and the Expansion Project represents a portion of the mineralization identified for the Whale Tail zone. The 408 km^2 Amaruq property has potential for future development (Figure 1.7-1 and Figure 1.7-2) as:

- Underground mining of the Whale Tail ore body;
- Mammoth intersect potential underground and/or open pit;
- Buffalo Pit;
- IVR Push Back (towards IVR WRSF) and underground.

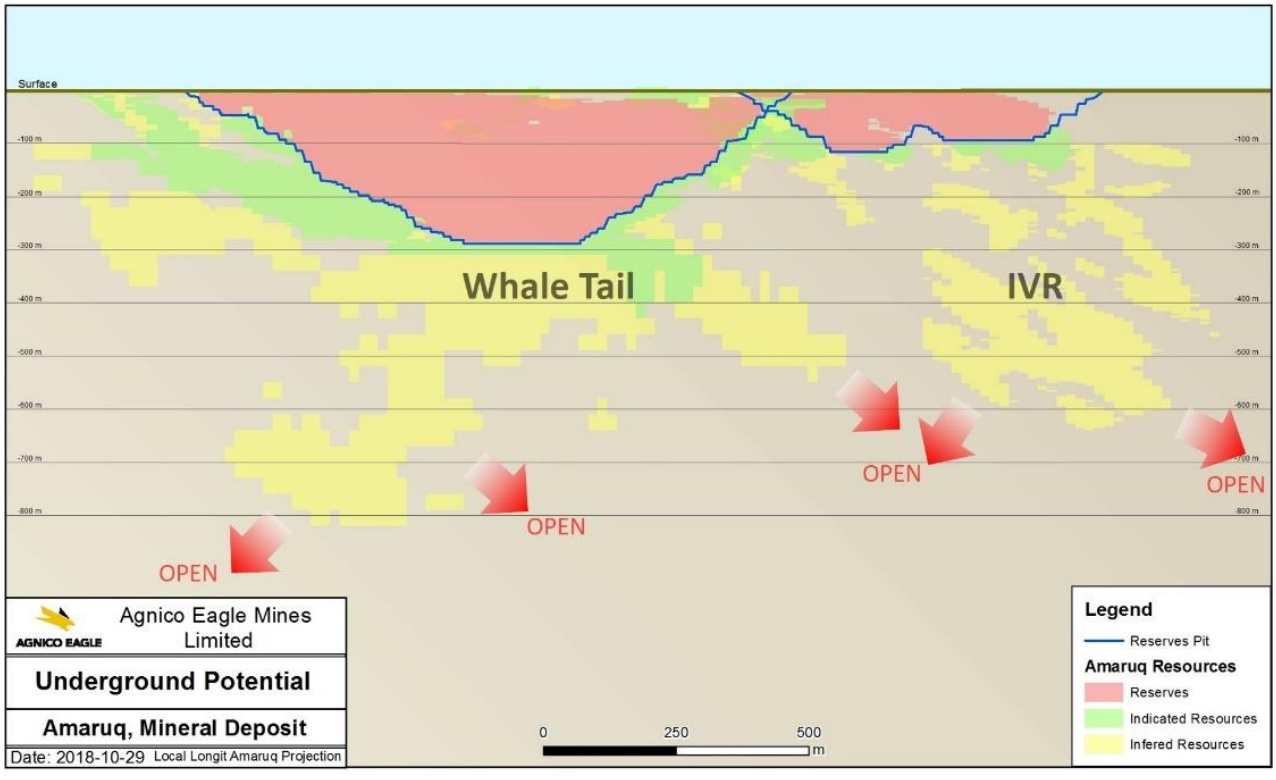

Figure 1.7-1: Underground Potential of the IVR Ore Body

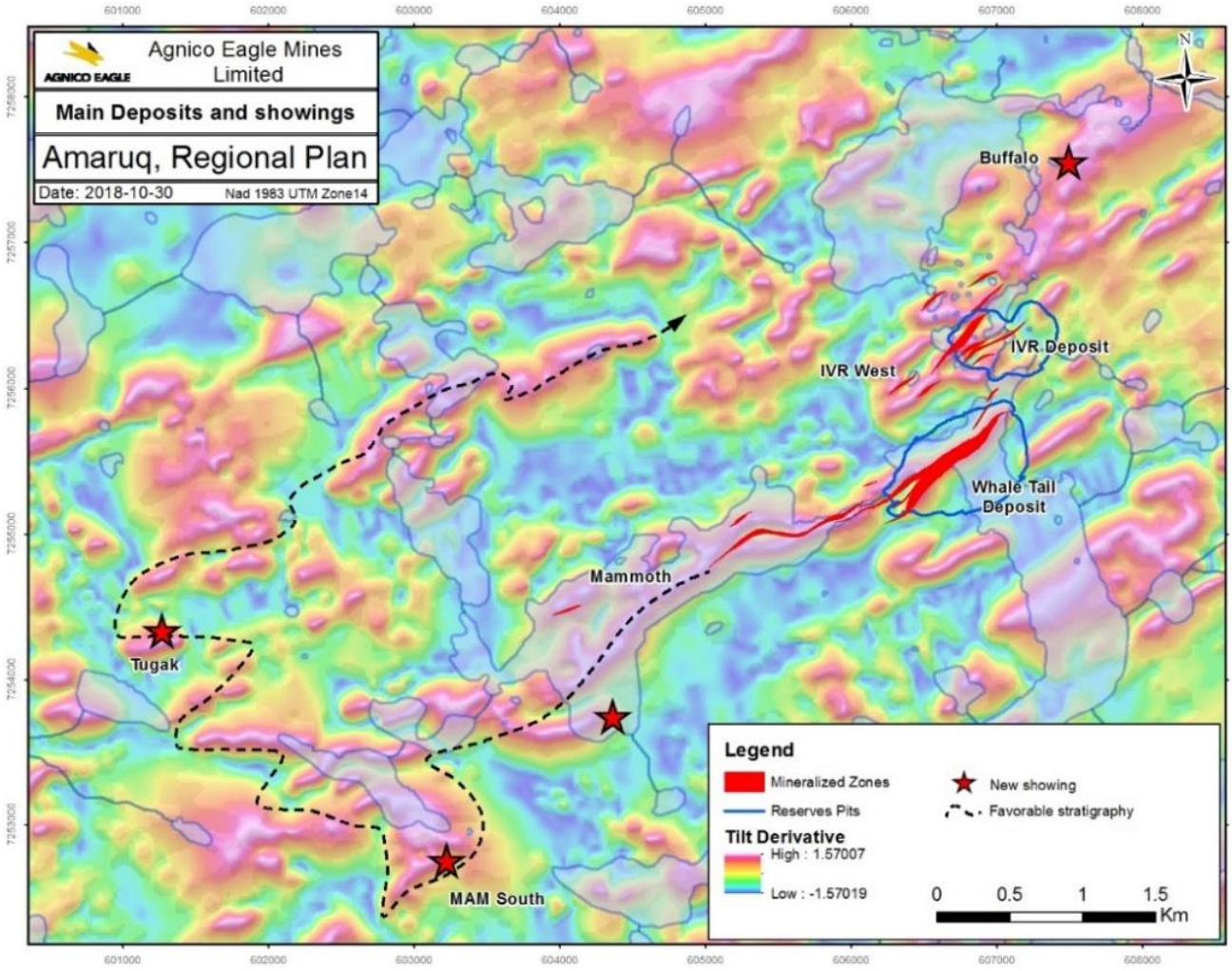

Figure 1.7-2: Geophysics Survey of the Amaruq Exploration Site and Future Development Opportunities

Agnico Eagle proposes to continue delineation drilling of the Mammoth and Buffalo intersect zones in the future.

The areas of potential future development are within the study area for the current Project. If proven economically viable the exploitation of the additional deposits would extend the LOM for Meadowbank Mine operations. Agnico Eagle would seek the appropriate modifications and/or amendments, if applicable.

1.8 Technology

The most current concepts have been selected for Project design (i.e., mining, processing, and effluent treatment). Although the technologies are considered state-of-the-art, the Meadowbank project

team have adapted to difficult climatic conditions and have designed infrastructure accordingly and used up-to-date technology to solve problems.

The mining and processing techniques proposed for Expansion Project are an extension of current mining practices as described in the Approved Project (FEIS Volume 1, Section 1.10), thus Agnico Eagle intends to use familiar, proven approaches seen at many mining operations in production today; however, Agnico Eagle is continually addressing problems using proven newest technologies to improve mining efficiency, production efficiency, reduce fuel consumption, and ultimately reduce emissions.

For example, Agnico Eagle is currently researching alternative energy sources (i.e., wind turbine) in conjunction with the Meliadine Gold Project and depending on viability may in the future extend to Meadowbank operations at Meadowbank and Whale Tail Pit.

1.9 Alternatives to the Expansion Project

Alternatives were considered during all stages of Project design. Consultation and regulatory engagement discussions have been considered as part of the alternatives assessment. In general, consistent with the Approved Project, Project alternatives were evaluated for the Expansion Project according to the following criteria:

- Environmental – potential impacts to the environment, project footprint, reclamation;
- Engineering and Viability – best engineering practices, technology, permitting, risk, and flexibility;
- Economy – cost implications, construction capital, operating costs, maintenance cost for reclamation; and
- Society – community acceptance or preference, traditional knowledge (TK), health and safety, quality of life, employment, and socio-economic effects.

The alternatives that shaped the overall Project include the following:

- Project Go/No-Go decision;
- Infrastructure, Transportation, Access, and Quarry Development
- Deposit, Mining Method, and Production;
- Processed Ore Containment and Tailing Storage;
- Overburden and Waste Rock Disposal; and
- Water Management.

For additional information refer to the Approved Project (FEIS Volume 1, Section 1.10 and subsections).

1.9.1 Project Go/No-Go Decision

The proposed expansion of Whale Tail Pit is an opportunity made real by existing mining and milling facilities at Meadowbank Mine and the recent approval by NIRB and NWB for the Whale Tail Pit Project. Without the Expansion Project, the Meadowbank Mine will close in 2023.

From the economic and societal view, the no-go alternative would result in a substantial lost opportunity. Tax and royalty revenues to government and employment and business contracting opportunities to individuals and companies would be lost.

From an environmental perspective, the no-go alternative would mean no additional impacts from mining. Existing site facilities would be decommissioned and the area disturbed would be restored within the terms of the existing licenses.

Delays in the Expansion Project associated with permitting may affect the long-term economic viability of the Meadowbank Mine. Agnico Eagle has an obligation and commitment to reclaim infrastructure through progressive reclamation as facilities are no longer needed. To reduce economic and environmental liability for the Expansion Project and existing Meadowbank Mine, Agnico Eagle's key objective is to minimize the "gap" in time between exhaustion of the Approved Project minable reserves and mining of the expansion. Mining is market driven, as such Agnico Eagle is continually aware that market conditions may yield no go scenarios.

1.9.2 Infrastructure, Transportation, Access, and Quarry Development

As stated in the Approved Project FEIS, to improve economics for the Expansion Project, Agnico Eagle has minimized Expansion Project footprint, reduced potential impacts to the environment, and reduced infrastructure requiring reclamation by using as much as possible, the established Amaruq and/or Meadowbank Mine infrastructure. All Expansion Project infrastructure is located within the local study area for the Approved Project originally assessed in the FEIS (Agnico Eagle 2016c).

The Expansion Project proposes expansion of the approved 9.5 m wide haul road to a proposed 15 m wide haul road for safety. The road allows Agnico Eagle to use Meadowbank infrastructure to the fullest extent possible and optimize operations. Operational optimization limits the need for additional on-site support infrastructure. The existence of the road allows Agnico Eagle to minimize Expansion Project footprint.

Consultation was undertaken in development of the road and road selection alternatives were discussed with community representatives (Approved Project FEIS Volume 7, Appendix 7-A; Agnico Eagle 2016c). Agnico Eagle modified the road route to take into account community preference and TK, are working with the Department of Culture and Heritage to respectfully mitigate existing cultural heritage sites, and have avoided all burial sites.

Quarry selection and use options were evaluated in the application filed for the exploration access road in 2015 and 2016. Agnico Eagle, where possible, has prioritized use based on feedback from the community and KivIA. Refer to Table 1.2-3.

Further details are provided in the Whale Tail Haul Road Management Plan enclosed with this application (Appendix G.9).

1.9.3 Deposit, Mining Method, and Production

Agnico Eagle outlined the potential for future development of the Amaruq property (Main Application Document Section 1.8) these options were considered as Expansion Project alternatives.

Additional deposits within the Amaruq property require further exploration or advanced exploration (i.e., bulk sampling) to assess economic viability.

1.9.4 Processed Ore Containment and Tailings Storage

The processing of ore and disposal of tailings will remain consistent with the Approved Project and undertaken in accordance with Project Certificate No.004 and Type A Water Licence 2AM-MEA1526.

1.9.5 Overburden and Waste Rock Disposal

As stated in the Approved Project, Agnico Eagle is continuing to explore within the Amaruq property and it was important that proposed infrastructure site locations were not sited over potential mineralization, which might prove economical in the future. Understanding the location of existing and potential future mineralization on the Amaruq property was key in the proposed siting of the overburden and waste rock disposal areas; site water management also played a key role in siting the Whale Tail WRSF. Based on the review of interveners alternative WRSFs proposed in the Approved Project FEIS are now being considered for implementation in this expansion. Whale Tail WRSF and overburden pile placements were determined by taking into account the potential for environmental impacts in consort with facilities engineered to minimize the amount of contact water generated, requiring treatment, or requiring containment during operations and especially post-closure.

Consistent with the Approved Project, Agnico Eagle considered various locations for the WRSF, while simultaneously looking at water management. Ultimately, the location was determined based on the reasons listed above, but the primary decision criteria used to select the WRSF options were:

- to evaluate options considered in the Approved Project FEIS;
- to reduce the risks to the downstream waterbodies;
- to reduce the direct impacts on waterbodies; and
- to reduce interaction of surface water with the WRSFs.

Based on operation feedback from Meadowbank Mine operations, Agnico Eagle is also considering alternatives for waste rock and/or tailings to include potentially in-pit disposal to mined out open pits.

1.9.6 Water Management

To support the Approved Project, a detailed water management multiple account analysis (MAA) was completed on various options for Project water management. Refer to the Approved Project FEIS Volume 1, Appendix 1-E (Agnico Eagle 2016c) for additional information.

Current approved water management for mine water effluent includes contact water effluent diffuser in Mammoth Lake and channelling and rerouting of non-contact water towards Mammoth Lake. The later consists of blocking the water flow with the construction of the Whale Tail Dike, raising the water level of the Whale Tail Lake (South Basin) and rerouting the water flow towards the Northwest to Mammoth watershed through a diversion system.

To support of the Expansion Project, Agnico Eagle has completed an additional MAA as one part of a larger alternatives assessment for the Whale Tail Pit Project Amendment for which a brief summary is provided below.

The Expansion Project requires an attenuation pond to annually store water between October and May, so that water can be treated and discharged mostly during ice-free conditions between June and September. The stored water would include mine contact water containing suspended solids and arsenic. It is challenging to find feasible sites that are non-fish bearing, and that would meet Agnico Eagle's objective to locate the attenuation pond within sub-watersheds that contain approved, and proposed, mine infrastructure for the Whale Tail Pit Project.

The *Fisheries Act* prohibits the deposit of deleterious substances in waters frequented by fish, unless it is authorized by regulations. Under the Metal and Diamond Mining Effluent Regulations (MDMER), an amendment to Schedule II of the Regulation is required to list the natural waterbody and authorize the disposition. A Schedule II amendment is considered by ECCC after a project has conducted an assessment of alternatives to use a natural water body to store mine waste, completed EA, prepared a fish habitat compensation plan that will offset the loss of fish habitat for consideration as part of the EA, and participated in public and Inuit Qaujimajatuqangit consultations on the EA, including on possible amendments to the MDMER.

Agnico Eagle has prepared an alternatives assessment to demonstrate that the use of a waterbody as an attenuation pond is the most appropriate option from an environmental, technical, and socio-economic perspectives. This assessment has followed the transparent and standardized process described in ECCC's *Guidelines for the Assessment of Alternatives for Mine Waste Disposal* (ECCC 2016).

The initial step in the assessment process identified eight potential alternatives that met four threshold criteria: must align with existing water management strategy; must be confined within the area already proposed to be affected by the Expansion Project; must provide sufficient storage capacity; and must not contradict the mine development plan. Following a critical flaw assessment,

that included screening against criteria such as engineering and safety risks, and avoiding areas of high environmental, cultural and/or archeological value, five alternatives (Figure 1.9-1) were left that were carried through to the characterization stage and a MAA. The five alternatives were:

I. New attenuation pond at Lake A53 (fish-bearing);
II. New attenuation pond at Lake A53 and expand existing Whale Tail Attenuation Pond;
III. New attenuation pond at Lake 54 (non-fish-bearing);
IV. New attenuation pond at Mammoth Lake (fish-bearing); and
V. Expansion of existing Whale Tail Attenuation Pond (land-based).

Inuit Qaujimajatuqangit (IQ) was incorporated throughout the alternatives assessment, including in the baseline setting description, critical flaw assessment, characterization of alternatives, in the development of meaningful indicators for the MAA, and in the determination of value-based weightings. Consultation with elders and community members in Baker Lake and Chesterfield Inlet also highlighted traditional values, areas of use, and concerns related to the water attenuation alternative, that were incorporated in the assessment of alternatives.

The results of the MAA indicate that Alternative I: A53 has the highest merit rating, followed by Alternative V: Expansion of the existing Whale Tail Attenuation Pond. Alternative IV: Mammoth Lake is the lowest rated alternative. Based on the outcomes of the MAA, the preferred alternative is Lake A53.

This alternative proposes to store contact water for the Expansion Project in a new IVR Attenuation Pond, with adequate storage capacity, supplemented by the existing Whale Tail Attenuation Pond with a storage capacity. The public and Indigenous consultations throughout the EA process will continue to be used to seek feedback on the assessment of alternatives and water management at the site, in addition to the community consultations previously held in Baker Lake and Chesterfield Inlet in July 2018. Recently, updated modelling highlights better water quality than initial predictions in Lake A53 and in addition with preliminary discussions with DFO, they have indicated that an Authorization under S.35 would adequately offset serious harm to fish in Lake A53, based on two main factors: the temporary use of Lake A53 as an attenuation pond during operations; and plans to restore Lake A53 habitat to support fish after use.

We are continuing to review this information and we can provide more information during the technical review.

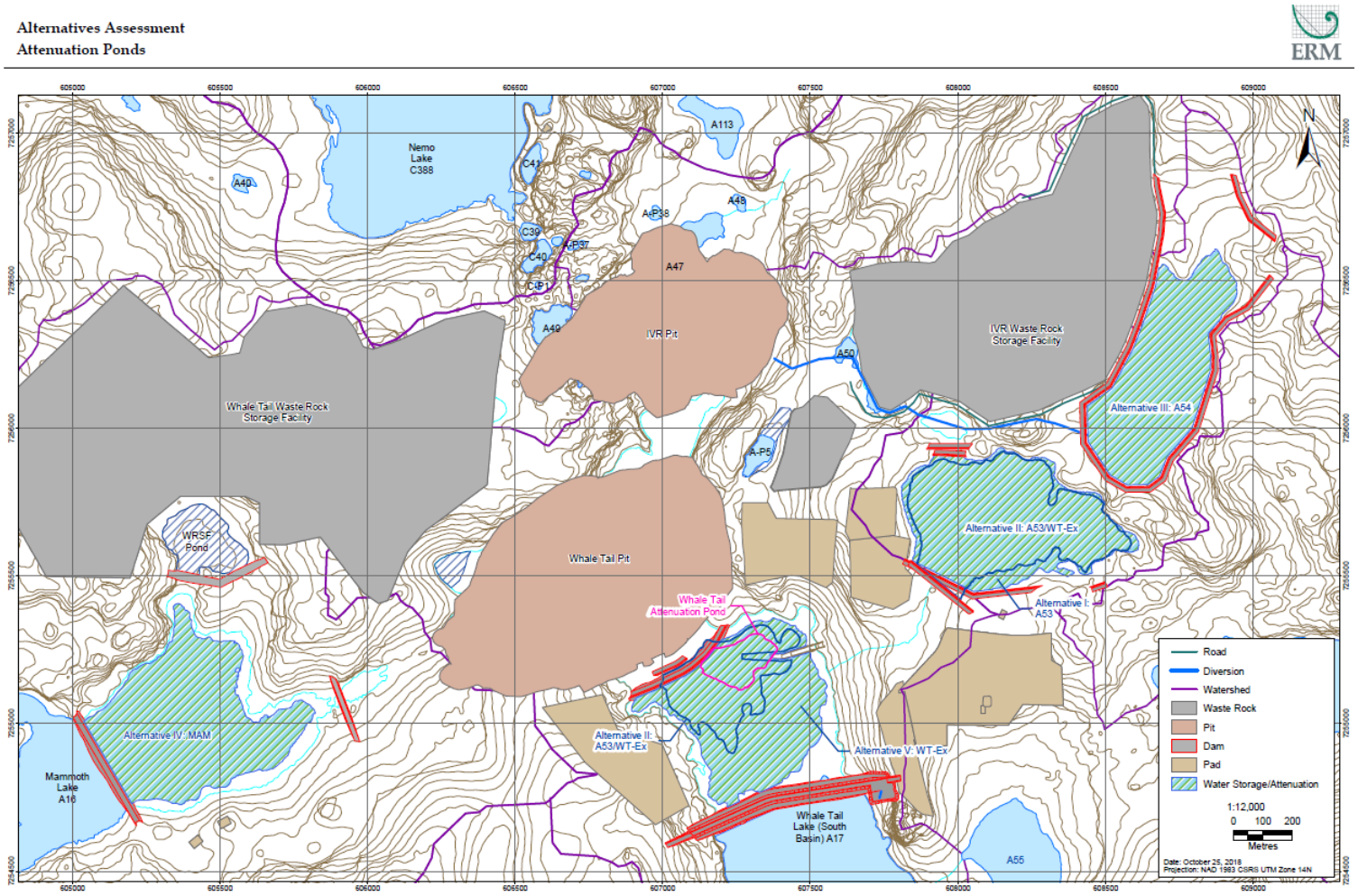

Figure 1.9-1: Alternative Assessment of Attenuation Ponds

In addition to the MAA, Agnico Eagle continues to evaluate water management alternatives including:

- Mine water effluent to the mined out open pits for flooding.
- Mine water effluent to the IVR Attenuation Pond and subsequently discharged into Whale Tail basin.
- Alternative underground groundwater and contact water management which may include increasing the storage capacity of the Groundwater Storage Pond 1.
- Potentially increasing the storage capacity of the Whale Tail Attenuation Pond.
- Possibility of placing waste rock that is either ML/PAG or non ML/NPAG into IVR Pit.
- Potentially modifying the performance of the Water Treatment Plant to modify discharge quality, discharge rate and/or schedule of discharge.
- Potentially storing additional groundwater in the GSP-3.
- Potentially increasing the storage capacity of the IVR Attenuation Pond by raising elevation of IVR-D1, IVR-D2 and IVR-D3.
- Postponing the start of the TDS Treatment and potentially modifying the performance of these treatment plants to increase or decrease the discharge rate and/or discharge schedule.