

Whale Tail Pit Project Meadowbank Division

Report Number: 1541520





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VOLUME 1 - PROJECT DESCRIPTION

EXECUTIVE SUMMARY

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing to develop Whale Tail Pit (Project), a satellite deposit located on the Amaruq Exploration property. Agnico Eagle is proposing to continue mine operations and milling at the Meadowbank Mine and gain approval to extend Meadowbank Mine to include development of resources from Whale Tail Pit. Concurrent with the reconsideration of the Project Certificate by the NIRB, Agnico Eagle is seeking an amendment to the Meadowbank Mine Type A Water Licence (No. 2AM-MEA1525) to include mining of Whale Tail Pit and the construction and operations of associated infrastructure from the Nunavut Water Board (NWB).

The Amaruq property is a 408 square kilometre (km²) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut. The deposit will be mined as an open pit (i.e., Whale Tail Pit), and ore will be hauled by truck to the approved infrastructure at Meadowbank Mine for milling.

The Project facilities will consist of a personnel camp (i.e., Main Camp), power plant, heli-pad, maintenance shop, tank farm, a waste rock storage facility (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, channels, dikes, dams, and culverts), and the Whale Tail Pit. As a result of development, Agnico Eagle is also proposing to expand the width of the existing exploration access road to a haul road to accommodate increased traffic rates and haul trucks. No new infrastructure is required at the existing Meadowbank Mine to support the development of the Project.

An initial amount of approximately 8.3 million tonnes (Mt) of ore will be mined from one open pit (i.e., Whale Tail Pit) and processed over a three to four year mine life. Ore from Whale Tail Pit will be segregated by grade then crushed on-site after which it will be transported to Meadowbank Mine for milling. The mill rate will be approximately 9,000 to 12,000 tonnes per day.

Agnico Eagle proposes to process the Whale Tail ore and dispose of the tailings slurry at the existing Meadowbank Mine tailing storage facility (TSF), which is authorized under the current Project Certificate and Type A Water Licence. The mine operation will generate approximately 8.3 Mt of tailings, 46.7 Mt of mine waste rock, and 5.8 Mt of overburden soil, with very limited organic material. Tailings produced from processing of Whale Tail ore will be accommodated within the existing footprint of the TSF. More specifically, tailings will be stored within the current footprint of the south cell TSF and by building an internal structure in the north cell TSF. Neither the footprint of the facility nor the chemical nature of the tailings and process water are expected to significantly change from current operations. Whale Tail tailings will require the same long-term environmental control mechanisms as are currently approved for Meadowbank.

Approximately 2.5 Mt of waste rock will be used for construction activities such as roads, pads, and water management facilities (i.e., dike, berm, rip rap, etc.). The remaining waste rock and overburden material will be hauled to the Whale Tail WRSF, which is located northwest of the Whale Tail Pit. A second, temporary overburden storage pad for staging purposes is located west of the Whale Tail Lake. Waste rock and overburden will be co-disposed together in one of the two piles constituting the storage facility.

The Project will be supported using the existing transportation requirements, relying on marine transportation for most supplies, aircraft for supplies and transportation of employees, and the gold dore produced at the Meadowbank Mill. The Meadowbank All Weather Access Road (AWAR) will continue to provide supplies







transported from the existing Baker Lake marshalling facilities to the Meadowbank Mine. The current operational components include marshalling facilities in Baker Lake and the 110 km AWAR between Baker Lake and Meadowbank Mine. Agnico Eagle is proposing to upgrade the previously permitted Amaruq exploration access road to a haul road to support the development of Whale Tail Pit and to enable hauling needed between the Whale Tail Pit and the Meadowbank Mill. No changes are proposed for the Meadowbank AWAR to Baker Lake.

Construction of the Whale Tail Pit site will begin as soon as approval and permits are received (anticipated for early 2018) and ultimately have full production in 2019. The operational phase will span three to four years, from Year 1 (2019) to Year 4 (2022). Mining activities are currently expected to end in Year 3 (2021) and ore processing is expected to end during Year 4 (2022). Closure will occur from Year 4 (2022) to Year 11 (2029) after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pit, as well as reestablishment of the natural Whale Tail Lake water level. By extending the life of mine at Meadowbank, Agnico Eagle will progressively close portions of Meadowbank Mine while operating.

The main objectives pertaining to water management are to limit and/or stop the flow of surface water runoff in the pit and to limit the impact on the local 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 fresh water 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.

Water management infrastructure includes contact water collection ponds, freshwater collection ponds, diversion channels, retention dikes, dams, culverts, water treatment plant for effluent, potable water treatment plant, sewage treatment plant, and a discharge diffuser. All contact water on-site will be directed to an attenuation pond. Contact water will be treated and then released to Mammoth Lake through a discharge diffuser.

To allow the mining of the Whale Tail Pit, Whale Tail Lake will be partly dewatered once the Whale Tail Dike is constructed. Following the completion of mining, the open pit will be filled with natural runoff and water pumped from Whale Tail Lake (South Basin) into Whale Tail Pit. The north and south basins of Whale Tail Lake are expected to reach the same elevation within eight years (2029). The Whale Tail Dike and the Mammoth Dike will be breached when the water quality monitoring results meet discharge criteria as per NWB Type A Licence conditions to allow water to return to the natural flow patterns downstream.

The Project was designed to minimize the areas of surface disturbance, stabilize disturbed land surfaces against erosion, and return the land to a post-mining land use to re-establish traditional pursuits and wildlife habitat. This will mainly be achieved by rapidly dewatering during the open water season, mining the pit as efficiently as possible, and then refilling as early as possible during closure. Post-closure environmental monitoring will continue until it has been verified that reclamation has successfully met closure and reclamation objectives.

Baseline programs have been completed for the Project and have included data collection for the physical environment (e.g., terrain and soils, permafrost, geochemistry, noise, and surface water quantity and quality), biological environment (e.g., vegetation, terrestrial wildlife and birds, and fish and other aquatic organisms), and



the cultural environment (e.g., IQ, archaeology, and socio-economics) in support of the environmental assessment and Type A Water Licence Amendment Application. Agnico Eagle has completed an environmental assessment to identify and assess potential environmental and social effects resulting from the Project. It is anticipated that the Final Environmental Impact Statement (FEIS) Amendment and Type A Water Licence Amendment will be submitted to the NWB and NIRB in June 2016, at the time of the NPC conformity determination decision. The results of the environmental assessment found that with mitigation, the Whale tail Pit, Whale Tail haul road, and the extension of the Meadowbank Mine, will not cause long-term significant negative effects as a result of 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 Meadowbank operating authorizations, permits, licenses, and leases consistent with the legal requirements of applicable Acts and Regulations in Nunavut. Existing Meadowbank Mine management and monitoring plans have been updated or addendums have been added to reflect the Project and will be submitted as part of the FEIS and Water Licence Amendments in June 2016. The performance of the management plans will be monitored periodically and the results communicated. Independent subject matter experts 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 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.

A key goal of Agnico Eagle's public consultation and engagement program has been to ensure the Company obtains a "social licence to operate", by securing the support of a majority of residents from potentially impacted local 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 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 community of interest, 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 the current Amarug exploration activities and the proposed Whale Tail Pit, as an extension to the Meadowbank Mine.

Consultation and regulatory engagement discussions were also considered as part of the alternatives assessment. The alternatives that shaped the overall Project includes the Project Go/No-Go decision, deposit, mining method, and production rate, processed ore containment and tailing storage, overburden and waste rock disposal, water management, transportation access and quarry development, and infrastructure support.

Agnico Eagle is a senior mining company with a proven reputation for sustainability and economic success in Nunavut. Its' success is based on grass roots exploration and recognizing the potential in the areas it explores. 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. These commitments based on Agnico Eagle's Sustainable Development Policy, are published in the Annual Sustainable Development Report, and are reported annually to the Kivalliq Inuit Association, NWB, and NIRB.



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