



## **MELIADINE GOLD PROJECT**

### **INTERIM RECLAMATION AND CLOSURE PLAN**

**for Water Licence**

**2BB-MEL**

**February 2024**

## DOCUMENT CONTROL

| Version | Date (YMD)    | Revision                                                                                                                                                                                                                 |
|---------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | 2010/08/04    | The 2009 Plan was completely rewritten.                                                                                                                                                                                  |
|         | 2010/11/02    | The Plan was modified to include Mel East, Water Licence 2BE-MEP0813                                                                                                                                                     |
|         | 2013/03/28    | The Plan was updated to reflect changes to the camp, addition of the Tiriganiaq borrow pit, a landfill and an additional bulk sample.                                                                                    |
|         | 2013/07/19    | Revision (DF)                                                                                                                                                                                                            |
|         | 2016/02/12    | Revision (DF)                                                                                                                                                                                                            |
|         | 2016/03/29    | Reclaim calculation revision (JW)                                                                                                                                                                                        |
|         | December 2023 | The Plan was modified per the 2BB Water Licence Amendment and includes the removal of 2BE-MEP as an independent Reclamation and Closure Plan was submitted to the NWB in November 2018                                   |
|         | February 2024 | Updated Section 4 and 5 to include details on landfarm, drill sump and disposal of drill cuttings. Removed securities associated with this plan, as they are to be moved to the Meliadine Mine 2AM-MEL1631 Water Licence |

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## **1. Introduction and Background**

Agnico Eagle Mines Limited (Agnico Eagle) has been conducting mineral exploration at the Meliadine Mine since their purchase in 2010. These lands are Inuit Owned Lands (IOL) pursuant to the Nunavut Agreement and exploration activities have been authorized by the Kivalliq Inuit Association (KIA) under land use permits.

Water Licence 2BB-MEL requires Reclamation and Closure Plan. The reclamation of the camp would see the removal of all buildings, sea cans, and equipment. The core storage would be the only component to remain after reclamation.

## **2. General Approach to Reclamation and Closure**

The Meliadine Mine reclamation objectives are to minimize negative environmental effects of advanced exploration wherever practicable, practice progressive reclamation, and upon closure, return negatively impacted areas to productive and lasting use by wildlife and humans. Reclaimed areas will be chemically and physically stable, and should ultimately support the same functions as the surrounding, undisturbed land. Because of the proximity of the mine site to Rankin Inlet, particular attention will be paid to ensuring that reclaimed areas are safe for future traditional use.

A practical, cost-effective approach will be central to reclamation and closure. The intent is to pursue reclamation and closure so there are no long-term care and maintenance requirements. The plan will be developed, updated, and revised on a regular basis, ultimately resulting in a final plan upon closure. Each iteration of the plan will provide more detail and greater certainty regarding the sequence of events in reclamation and closure.

Progressive reclamation will be used to reclaim areas no longer needed for advanced exploration by stabilizing disturbed land surfaces and promoting revegetation. This approach will employ best practices and will ultimately advance the return of areas to natural conditions while at the same time reducing the overall cost of reclamation. In a similar manner, obsolete equipment, surplus chemicals, and buildings will be removed as they are no longer needed.

Hazardous waste will be managed on an ongoing basis; consequently, there will be little to no accumulation of such wastes, subject to seasonal shipping considerations.

## **3. Demobilization**

All equipment and structures will be removed from the area. Buildings and materials with ongoing value to the company will be removed by Agnico Eagle. Local persons and businesses will be given the opportunity to salvage any remaining buildings and materials that would otherwise be dismantled or demolished as part of final site reclamation process. The only materials and structures remaining will be drill core stored in permanent racks on gravel pads. All demolished buildings and other solid, non-hazardous waste will be taken to the landfill or transport to a southern approved facility for disposal.

### **3.1 Structures**

There are rigid “Atco” type trailers, which serve as the Accommodation Complex and auxiliary units (such as office, kitchen, STP/WTP, dry) for contingency use, as well as the core shack and garage. There are also multiple seacans which are used to storage materials and related equipment for drilling purposes. It is expected that all the trailer unit buildings will be salvaged by Agnico Eagle for either return to the south or placed for sale in Rankin Inlet.

### **3.2 Drilling Supplies and Chemicals**

All useful material such as salt and other drilling compounds such as grease will be relocated to Rankin Inlet. These will either be sold to local interests or shipped to Southern Canada.

All chemicals, explosives, and hazardous materials still in unopened packages at closure will be shipped south. Open packages and waste materials will be shipped to a certified waste management company for treatment, recycling and/or disposal in another provincial or territorial jurisdiction.

The ongoing annual removal of surplus chemicals and hazardous waste, and the immediate clean-up of spilled fluids will minimize the quantity of material requiring handling, packaging and removal upon closure.

## **4. Reclamation of Meliadine Exploration Camp Area**

The camp area will be allowed to re-vegetate naturally once cleared of all buildings and other infrastructure. Revegetation will be slower in higher, drier areas than in low lying, moist areas. Where they exist, irregular surfaces will be left in place as these capture snow over the winter which in turn provides moisture to plants in the spring. The application of fertilizer is generally most effective in moist sites and while it helps on drier sites, the response by the tundra plant community on the higher ground will be slower. Only indigenous plant species approved by the GN DoE will be used in revegetation in accordance with GN Guidelines established for revegetation work in Nunavut. In most instances promotion of natural vegetation from adjoining plant colonies will be the preferred practice.

Five different surface conditions will require reclamation on termination of activities:

- Areas of heavy traffic - In these areas, the total amount of vegetation on surface is diminished thereby reducing the insulative layer over the permafrost. The effect is an eroded surface settlement and rocks protruding through to the surface. These sites are stable and reclamation will involve applications of fertilizer to accelerate natural re-vegetation. Plants on the margins of disturbed areas will benefit from the applications of fertilizer and possibly enhance seed production.
- Gravel pads - Gravel has been placed on the lease area to establish a level supporting surface under buildings. The natural surface remains stable and is bordered by natural vegetation. The gravel surface will be treated with peat and fertilizer and dispersed.
- Building bases - The prolonged presence of a building has prevented plant growth by blocking light to the plants underneath. Similar conditions existed at the former camp site which was vacated in late winter 1996. The natural revegetation of those building sites is progressing slowly. The ground

surface at building sites remains stable and time alone will allow plants to become established. This will be enhanced by limited scarification to improve the germination of seeds from adjacent plants. Application of fertilizer throughout the lease area should generally assist in re-vegetation.

- Burned and contaminated sites - Sites that have been used to burn wood and other non-hazardous combustibles on demobilization will be few in number, limited in size and always on an existing rock pad or road surface. The sites will be raked, any metal removed to the landfill, the ash scattered, the road surface scarified, and the sites fertilized. All sites with contaminated soils will be identified with GPS locations for monitoring.
- Landfarm - After removal of all remediated soil and prior to closure and reclamation of the Landfarm, the berm and base will be sampled on a 10 m grid to determine if these soils are free from PHC contamination. No excavation will be necessary if the Government of Nunavut (GN) GN Remediation Guidelines for Agricultural/Wildland land use are met. If the GN Remediation Guidelines for industrial land use or Abandoned Military Site Reclamation Protocol (AMSRP) guidelines were used during operations, the Landfarm will be covered with a 2 m thick layer of waste rock, or other suitable material used for reclamation. The surrounding berm will be breached to avoid water accumulation on the landfarm.
- Roads – Roads will be scarified and allowed to revegetate naturally. There is a single water crossing and this will be removed. If necessary, the area surrounding the water crossing will be stabilized with waste rock.

## **5. Reclamation of Drill Sites**

All drill sites are reclaimed on a progressive basis. Following completion of a drill hole, the casing is pulled if possible, or cut off at or below ground level. Water and drill cuttings flow down the hole or casing and freeze in place thereby plugging the drill hole. As per the water management plan, drill cuttings are not allowed to flow into any body of water. If needed, Agnico Eagle uses “Aquadams” and/or silt curtains and/or sludge line to manage TSS. Once the sludge has settled and TSS are removed, the water is allowed to flow into a natural water course. Agnico Eagle does not intend on digging sumps, drill cuttings will be disposed of within a natural depression, more than 31 meters above the ordinary High Water Mark of any water body. Procedures will be followed as agreed upon with the site inspector.

Quite commonly, the process of drilling creates a depression around the borehole and the sludge is concentrated in and adjacent to that depression. Experience has shown that if the drilling sludge is spread as a thin layer around the hole, the area will re-vegetate completely within a couple of years. If a thick layer of drill sludge is deposited into depressions, re-vegetation is hindered. The present approach to drill site re-habilitation has worked well for the last 15 years.

## **6. Storage of Drill Core**

At closing, the drill core in storage at the Meliadine site will be evaluated for long term storage stability. Core stored in unstable conditions will be restacked on more durable and stable gravel pads for long term storage and access.

## **7. Roads**

Decommissioning of the roads on site will be accomplished by loosening compacted surfaces (ripping surface with a dozer mounted ripping unit), flattening side slopes, removing all culverts and other potential obstructions to drainages paths. The objective will be to make the road surface impassable to vehicular traffic and by loosening the top, allow plants to establish.

## **8. Cost of Implementation**

### **8.1 History**

The first Site Liability Security Deposit Review document was provided to the NWB in September 2007. This report provides details on Agnico Eagle's \$950,000 security deposit (Letter of Credit) with the KIA that covers the entire project including both the camp and underground exploration site. The NWB set security at \$639,000 in water license 2BB-MEL1424. Together, the total security held by KIA and the federal government is \$1,589,000.

On or about July 8, 2011, Agnico Eagle and AANDC (currently referred to as Crown Indigenous Relations and Northern Affairs Canada; CIRNAC) agreed that a security of \$824,483 was appropriate for the level of activity, which included the extension of the ramp and a ventilation shaft. The NWB indicated in its approval of the underground extension on January 6, 2011 that *"the NWB will, in accordance with Part B Item 4, revisit the amount of security prior to the commencement of the underground extension program."* In preparation for the commencement of the underground extension program, Agnico Eagle recalculated the security using the Reclamation Cost Estimating Model -Version 6.1 (RECLAIM Model). In March 2013, the reclamation and closure costs for the Meliadine Project and Mel East were calculated at \$1,489,082 and \$34,126, respectively.

An updated Reclamation and Closure Plan was submitted to the NWB on November 26, 2018, specifically for the 2BE-MEP1828 licence. On July 3, 2019, the plan was provided to interested parties for information. No comments were received; therefore, the NWB acknowledged the plan addresses requirements of Part I, Item 1 of the 2BE-MEP1828 licence.

At the time of issuance of the 2014 2BB-MEL Licence renewal/amendment, Agnico Eagle was in the process of permitting the Meliadine Mine with the Nunavut Impact Review Board (i.e., environmental assessment) and then subsequently the water licensing regulatory process with the NWB. The Type A 2AM-MEL1631 Water Licence was approved by the Minister on May 19, 2016; and security was established.

## **9. Post Closure Monitoring**

Water and soil sampling after the site has been re-habilitated is the primary method of ensuring that the area has been brought back to productive habitat suitable for use by wildlife and humans.

Environmental monitoring will continue during and after the post-closure phase of the reclamation until it can be established that licensed criteria have been met. The amount and frequency of post-closure monitoring that is required will diminish with time as natural reclamation takes hold and all parties are satisfied that the reclamation has satisfactorily met its objectives.