AGNICO EAGLE

MELIADINE GOLD PROJECT

INTERIM RECLAMATION AND CLOSURE PLAN

Water Licenses 2BE-MEP1318 and 2BB-MEL0914

August 2013

DOCUMENT CONTROL

Version	Date (YMD)	Section	Page	Revision
1	2010/08/04			The 2009 Plan was completely rewritten.
2	2010/11/02			The Plan was modified to include Mel East, Water Licence 2BE-MEP0813
3	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.
4	2013/07/19			Revision (DF)

Plan prepared by:

John Witteman
Environmental Consultant to Agnico Eagle Mines Limited

Plan approved by:

Stéphane Robert
Manager,
Regulatory Affairs Nunavut

Table of contents

1. Introduction and Background

Agnico Eagle Mines Ltd. (AEM) has conducting mineral exploration in the Meliadine Project and Mel East areas since their purchase in 2010. These lands are Inuit Owned Lands (IOL) pursuant to the Nunavut Land Claims Agreement and exploration activities have been authorized by the Kivalliq Inuit Association[1] (KIA) under land use permits. The Mel East land use permit is titled KVL308C07 while the Meliadine Project, KVL302C268 .

Rules and procedures for the management of IOL have been established by Nunavut Tunngavik Inc. These require that intensively used lands in the exploration area, such as the camp, fuel storage areas and underground exploration site be held under a commercial lease. Commercial Lease KVCL102J168 issued by the KIA is presently held by AEM for advanced exploration activities. This includes a 200 person exploration camp, fuel storage areas, an underground portal, waste rock and ore storage on surface, a landfill, and diamond drilling to define mineral resources and reserves for mining. Figure 1 and 2 show the layout of infrastructure on the commercial lease.

The Nunavut Water Board issued Water License 2BB-MEL0914 in 2009 and as a condition of this license, the Reclamation and Closure Plan is to be updated when there are changes in operations and/or technology. As well, Water Licence 2BE-MEP1813 was issued to the Mel East property, which also required a Reclamation and Closure Plan. This plan covers both water licences.

Although linked to the Meliadine Project, the Phase 1 All Weather Access Road has a separate Reclamation and Closure Plan under water license 2BW-MEL1215.

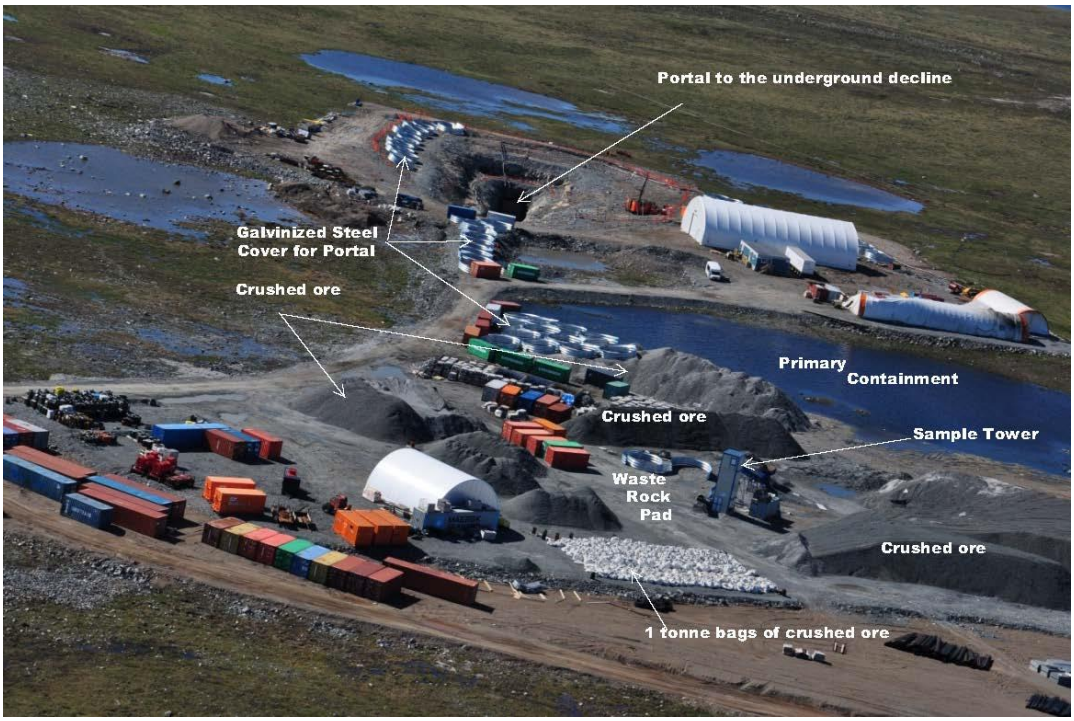
The estimated time to complete the reclamation and closure described in this plan is two summers.

[1] The Kivalliq Inuit Association is the designated Inuit association that holds title to Inuit owned lands in the Kivalliq Region of Nunavut.

Figure 1. Camp Site - September 2012

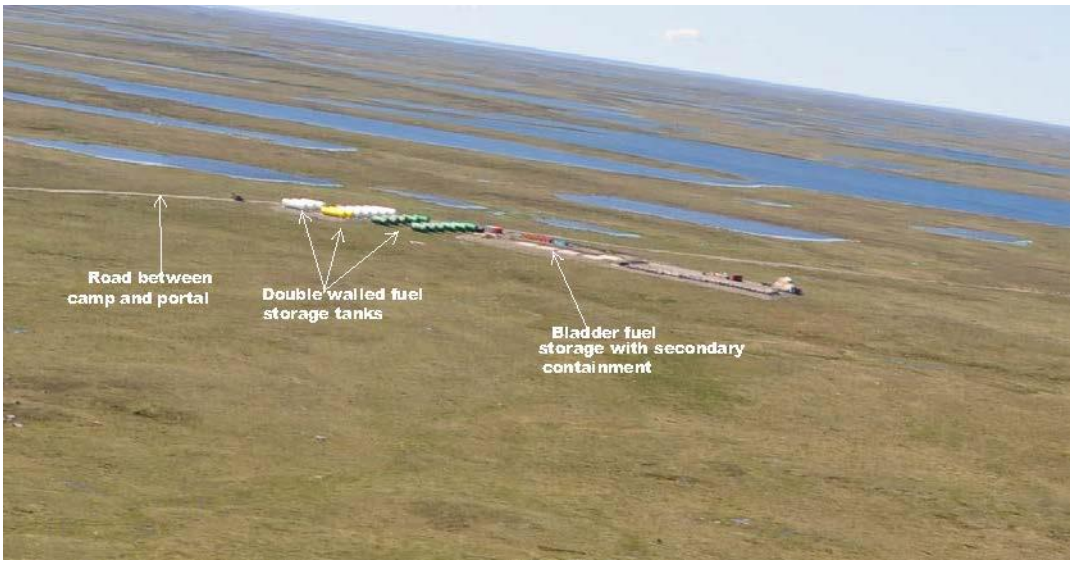
The reclamation of the camp would see the removal of all buildings, sea cans and equipment. The core storage would be the only component to remain after reclamation.

Figure 2. Portal Area



All the crushed ore would be moved into the portal and covered with a least two metres of waste rock or material from the Tiriganiaq borrow pit. All buildings and sea cans would be removed leaving only the waste rock pad. The road would be breeched to re-establish drainage that is now captured in the primary containment.

Figure 3. Fuel Tank Farm



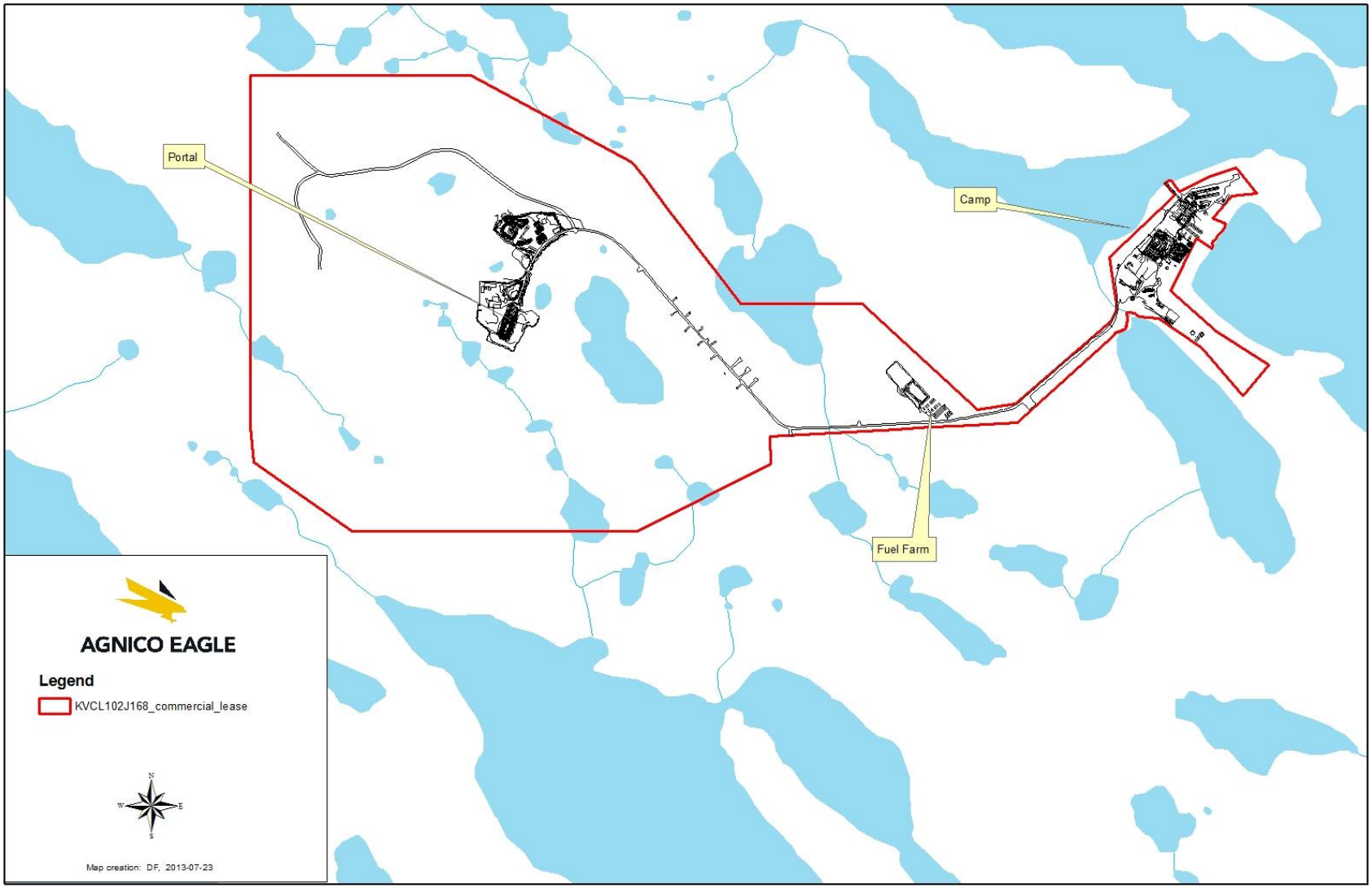
All the double walled fuel tanks will be removed as will the bladder fuel storage. The road will be scarified as the final step in reclamation.

2. General Approach to Reclamation and Closure

The Meliadine Gold Project's reclamation objective is 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.

Figure 4. Site Plan



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. Location of Infrastructure

The location of the following infrastructure is provided below in UTM coordinates (NAD83, Zone 15) and latitude and longitude:

Area	UTM_E	UTM_N	Lat_DD	Long_DD	Lat_DMS	Long_DMS
Camp (Centre of Area)	541935	6988949	63.0277	-92.1713	63,1,40	-92,10,17
Main Fuel Tanks	541214	6988484	63.0236	-92.1857	63,1,25	-92,11,8
Aviation Jet A Storage	542031	6988695	63.0254	-92.1695	63,1,32	-92,10,10
Camp P-50 Storage	542050	6989129	63.0293	-92.169	63,1,46	-92,10,8
Portal Fuel Tanks (22,700 L)	539845	6988850	63.0271	-92.2126	63,1,37	-92,12,45
Fuel Drum Storage	540054	6989039	63.0287	-92.2084	63,1,43	-92,12,30
Portal Boxcut (Centre)	539912	6988732	63.026	-92.2113	63,1,34	-92,12,41

Note: DD – decimal degrees, DMS – degrees, minutes, seconds

The Discovery Camp for Mel East is located at latitude: 62° 57’36”N, longitude: 91° 55’12”W. It covered an area of less than 1.5 hectares and could previously accommodate approximately 15-20 people but these accommodations, the kitchen and stored fuel were removed in 2010 and 2011. In 2012, the remaining hazardous materials were transferred to the Meliadine camp for processing and/or treatment[2]. Metal waste was also transferred to the Meliadine camp for eventual recycling. What remained on site are the core shack, core racks, storage shed, and emergency shelter and an outhouse. These will be used when diamond drilling occurs on site. These will be removed as part of final reclamation.

4. Demobilization

The following scenario assumes that AEM no longer renews any permits, leases, licenses and other authorizations for advanced exploration and instead enters into reclamation and closure phase for the existing development, including the underground. The last infrastructure to be reclaimed will be the site roads as they will be used extensively in the reclamation and closure, as will the Phase 1 All Weather Access Road[3].

[2] Hazardous materials that cannot be treated on site are packaged for transport south for recycling/treatment/disposal.
[3] The reclamation and closure of the Phase 1 All Weather Access Road is described under water licence 2BW-MEL1215. It would be last road closed should advanced exploration cease and the development of a mine be abandoned.

All equipment, structures and fuel tanks will be removed from the area of the commercial lease prior to lease termination. Buildings and materials with ongoing value to the company will be removed by AEM. 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, and the contoured earthworks associated with reclaiming the underground exploration area. All demolished buildings and other solid, non-hazardous waste will be removed to the drop cut for the portal, be taken to the landfill or transported to south.

4.1 Structures

As shown on figure 1, few soft sided Weatherhaven shelters remain from when the camp was first established. These have largely been replaced by rigid “Atco” type trailers. Trailers house up to 200 persons and serve as offices. The second most common buildings are stick built, including generator shelters and several fuel pump shelters. A rigid insulated and heated corridor network connects the main accommodation, kitchen/mess and shower structures. Three large Weatherhaven tents house equipment and supplies. Two BIOdisk sewage treatment plants and an incinerator- waste management building treat liquid and solid waste, respectively. The portal site has 2 large and 1 small Weatherhaven structures. There are also a sampling tower and numerous sea-cans.

It is expected that all the trailer units and Weatherhaven buildings will be salvaged by AEM for either return to the south or placed for sale in Rankin Inlet. Stick built structures and Weatherhaven tent bases could be salvaged by local interests.

4.2 Heavy Equipment

The heavy equipment on site for the underground exploration program is valuable and reusable. After being utilized for site reclamation, the equipment will be moved to Rankin Inlet for sale to local interests or transported south on the annual sea lift.

4.3 Underground Services

Materials installed in the underground will be left in place. This includes such things such as electrical cables, metal supports, metal pipes and ventilation ducting. These materials are inert, within the zone of continuous permafrost and will have no impact on the surface or subsurface environment.

4.4 Fuel, Drilling Supplies and Chemicals

Fuel will be removed by tanker to Rankin Inlet via the Phase 1 AWAR and be sold. The 50,000, 85,000 and 100,000 L double walled tanks, empty bladders and barrels will also be relocated to Rankin Inlet and either sold or shipped south. The empty bladders will be rolled up for transport. The bermed area will be leveled and re-vegetated with the liners being left in place.

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.

4.5 Non-combustible and Combustible Waste

All non-combustible, non-hazardous, solid waste will be removed to the landfill or will be transported to southern Canada. Combustible, non-hazardous waste such as wood will be burned. It will be consolidated on a rock pad to reduce the number of burn sites and to avoid burning on the tundra. All burn sites will be raked, any metal collected and recycled.

5. Reclamation of Meliadine 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 could 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.

Seven 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 and walkways - Gravel has been placed on the lease area either to establish a level supporting surface under fuel tanks and buildings, or to replace wooden walkways in high foot traffic areas. The natural surface remains stable and is bordered by natural vegetation. The gravel surface will be treated with peat and fertilizer and dispersed. The original ground surface under the gravel walkways will be fertilized and allowed to re-vegetate naturally.

- 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 until the decontamination will be completed.

- Roads – Roads leading from the camp to the underground portal, the landfill and borrow pit 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.

6. Reclamation of Drill Sites

Slightly less than half of all drill holes are located within the footprint of the future open pits, waste rock and overburden management areas, tailings management area, rock pads, roads and other infrastructure. Should a mine be approved, these drill sites would either be excavated as part of the open pits or covered by various infrastructure.

If the mine is not built, this being the basis of this Plan, all drill sites will be reclaimed. 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.

7. Reclamation of Underground Exploration Area

The final Geochemistry Static Test Report, May 2010 by the company's independent consultant, Golder Associates, found that the waste rock poses no risk of acid rock drainage[4]. The ore, however, was classified as having an uncertain ARD potential and should be treated as potentially acid generating. The quantity of waste rock and ore resulting from the two bulk samples are provided in Table 2. The ore was all crushed to -1 inch while the waste rock is of irregular size.

Non-salvageable Equipment

The vast majority of equipment that cannot be salvaged will be cleaned of hydrocarbons and shipped south for recycling.

[4] Kinetic testing showed that leachate from waste rock is expected to meet Metal Mining Effluent Regulations monthly mean effluent limits.

Table 1 Underground Exploration Program Waste Rock and Ore

Underground exploration program	**2007 - 2008**		**2011**	
	tonnes	loose m^3	tonnes	loose m^3
Overburden Portal	25,890	19,417	NA	NA
Waste Rock Portal	17,609	9,435	NA	NA
Waste Rock Decline	82,328	44,105	-[1]	-
Ore	25,521	13,065	4,573	2,341
Total Rock	125,458	66,605	4,573	2,341

1 Minimal waste rock was extracted in re-sampling the ore body.

Waste Rock and Ore

- The waste rock pads are on average 2 metres thick, have no ARD potential and will be left in place after the ore is removed. The surface of the pads will be scarified to promote re-vegetation and the edges contoured to minimize erosion;

- The ore has an uncertain ARD potential and will need to be isolated from the environment. Crushed ore on the waste rock pad totaled 13,065 loose m^3 from 2007 to 2008, and 2,341 loose m^3 from 2011 to 2012. The ore from the extension program will returned underground.

- The cover over the box cut leading to the portal entrance will be removed. It would either be dismantled and moved south, or demolished and placed in the bottom of the box cut or in the landfill.

- No ore will be moved underground as all 15, 406 m^3 of ore can be accommodated in the box cut leading to the portal.

- The box cut has a volume of approximately 17, 000 m^3. All the loose m^3 of ore will be placed in the box cut and then covered with at least 2 metres of waste rock/overburden/glacial materials to ensure the buried materials are below the active layer and remain frozen year-round. The area will be gently contoured to have positive drainage so water does not pond over the buried material.

- AEM presently has 5 thermistors installed in the area of the boxcut. Three of the thermistors are about 100 meters from the portal and decline. These sites are monitored on a periodic basis with the temperature profiles well known. Freezing of ore is fully expected which will serve as a mitigation measure against possible acid drainage.

Hydrocarbons/Waste Oils/Hazardous Materials

- In the event that there may be evidence of spills (diesel fuel, oils, etc.), the soil in the affected area will be excavated and treated.

- Waste oil, fuel and glycol stored in 45 gallon drums will be shipped to Rankin Inlet for recycling in the south in accordance with AEM's existing waste treatment program.

- Hazardous materials, such as hydrocarbon soaked rags, oil filters and old lead acid batteries will be appropriately packaged for transportation to a certified waste management company for treatment.

The final phase of the reclamation and closure will comprise primarily of demobilizing materials and equipment that has been prepared and assembled for removal to Rankin Inlet for sale or shipment south. All materials shipped south will be undertaken during the ice free shipping season.

- Trucks will be used to demobilize equipment, materials and hazardous waste to Rankin Inlet along the Phase 1 AWAR. All loads will be hauled to a designated muster area in Rankin and either sold or prepared for shipment south via ship or ocean going barge.

8. Storage of Drill Core

At closing the core in both locations will be evaluated for long term storage stability. Core stored in unstable conditions will be restacked on more durable and stable pads for long term storage and access.

9. Tiriganiaq Borrow Pit

Upon closing, the borrow pit will have gently sloping walls and will have positive drainage if possible. With prudent initial design, the borrow pit should require little reclamation. The entrance will be blocked with large boulders. Should acid-generating borrow pit material be exposed, the area will be covered with a minimum two metres thick layer of non-acid generating borrow material to encapsulate it below the active layer. The area will be gently contoured to have positive drainage so water does not pond over the buried material. The surface would then be allowed to re-vegetate.

10 Landfill

Upon closure, it is estimated that the landfill could hold up to 1,600 cubic metres of waste from camp activities. Added to this will be all demolished buildings and other non-hazardous waste resulting from closing the site. The landfill will be covered with a minimum of 3 metres of non ARD/ML waste rock/overburden/borrow pit material. This will result in waste in the landfill being below the active zone and becoming permanently frozen and thereafter stable. The landfill cover will be designed to shed water so as to minimize any water infiltrating into the cover.

11. 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.

12. Cost of Implementation

Costs of executing this Reclamation and Closure Plan, and of other Plans covering a worst case scenario with the ongoing advanced exploration program, are covered in the Site Liability Security Deposit Review document provided to the NWB in September 2007. This report provides details on AEM'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-MEL0914. Together, the total security held by KIA and the federal government is $1,589,000.

The security has remained unchanged since 2007. On or about July 8, 2011, AEM and AANDC 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, AEM recalculated the security using the Reclamation Cost Estimating Model -Version 6.1 (RECLAIM Model).

13. Post Closure Monitoring

The longer term environmental monitoring of the site after the major restoration work has been completed is covered in the Water Management Plan and the Waste Rock and Ore Storage Management Plan, and is not repeated here. Clearly, 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.

Revegetation at the Mel East camp will be monitored using annual photographs showing the recovery of areas previous covered by various buildings.

Table 2- Reclamation of the Meliadine Site (2BB-MEL0914)

COMPONENT		TOTAL COST		LAND LIABILITY		WATER LIABILITY
Tiriganiaq Borrow Pit		$1,500		$1,500		$0
Underground Portal & Ramp		$189,255		$111,297		$79,558
Tailings		$0		$0		$0
Waste Rock Pile		$0		$0		$0
Buildings & Equipment		$759,758		$239,940		$519,818
Chemicals & Soil Management		$31,238		$12,495		$18,743
Water Management		$0		$0		$0
Post-Closure Monitoring		$51,542		$0		$51,542
		$1,033,293		**$365,232**		**$669,661**
		PERCENTAGES		**35%**		**65%**
Mobilization/Demobilization		$125,135		44,231		81,098
Project Management - 5%		$51,665		$18,262		$33,483
Bonding - 1%		$10,333		$3,652		$6,697
Insurance - 1 %		$10,333		$3,652		$6,697
Engineering -5%		$51,665		$18,262		$33,483
Contingency -20%		$206,659		$73,046		$133,932
GRAND TOTAL - CAPITAL COSTS		**$1,489,082**		**$526,337**		**$965,051**

Table 3- Reclamation of the Meliadine East Water (2BE-MEP1318)

What remained at the Mel East camp site are the core shack, core racks, storage shed, an emergency shelter and an outhouse. All these are small stick built structures, excepting the core racks, will be demolished and either burned on site or removed to the Meliadine site for disposal.

RECLAIM MODEL for 2BE-MEP1318 - SUMMARY OF COSTS						
COMPONENT TYPE		**TOTAL COST**		**LAND LIABILITY**		**WATER LIABILITY**
Buildings & Equipment		$16,860		$10,116		$6,744
SUBTOTAL		**$16,860**		**$10,116**		**$6,744**
		PERCENTAGES		**60%**		**40%**
Mobilization/Demobilization		$11,871		7,123		4,748
Project Management - 5%		$843		$506		$337
Bonding - 1%		$169		$101		$67
Insurance -1%		$169		$101		$67
Engineering - 5%		$843		$506		$337
Contingency - 20%		$3,372		$2,023		$1,349
GRAND TOTAL - CAPITAL COSTS		**$34,126**		**$20,476**		**$13,651**

Table 4- Reclamation of the Meliadine Road (2BW-MEL1215)

The security to reclaim the 23.8 km of all weather access road, 8 water crossings using culverts and 2 water crossings using bridges is detailed below. Complete details are provided in the *All-Weather Access Road Reclamation and Closure Plan for the Phase 1 All-Weather Access Road between Rankin Inlet and the Meliadine Site.*

Activity/Material	Units	Quantity	Unit Cost	Total Cost	% Land	Land Cost	Water Cost
Scarify Road	km	23.8	$ 3,250	$ 77,350	50%	$ 38,675	$ 38,675
Remove 8 water crossings	each	8	$ 4,000	$ 32,000	0%	$ -	$ 32,000
Remove 2 clear span bridges	each	2	$ 35,000	$ 70,000	0%	$ -	$ 70,000
Block road with 100m3 rock	m^3	100	$ 15	$ 1,500	100%	$ 1,500	
Reclaim road borrow sources (truck + dozer)	hrs	132	$ 455	$ 60,060	0%	$ -	$ 60,060
Camp support & supplies	man days	300	$ 250	$ 75,000	50%	$ 37,500	$ 37,500
Mobilization (dozer, crane, dump truck, loaders)	allow	1	$ 25,000	$ 25,000	50%	$ 12,500	$ 12,500
Demobilization(dozer, crane, dump truck, loaders)	allow	1	$ 25,000	$ 25,000	50%	$ 12,500	$ 12,500
			Sub-total	$ 365,910		$ 102,675	$ 263,235
Indirect Costs	**Percentages**						
Engineering	5%			$ 18,296		$ 5,134	$ 13,162
Project Management	5%			$ 18,296		$ 5,134	$ 13,162
Contingency	20%			$ 73,182		$ 20,535	$ 52,647
Total				**$ 475,683**		**$ 133,478**	**$ 342,206**