



# **AGNICO EAGLE**

**MELIADINE GOLD MINE**

## **ROADS MANAGEMENT PLAN**

**JANUARY 2024  
VERSION 9\_NWB**

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## EXECUTIVE SUMMARY

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Agnico Eagle Mines Limited (Agnico Eagle) operates the Meliadine Gold Mine (Meliadine Mine), located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. The Meliadine Mine is located within the Meliadine Lake watershed of the Wilson Water Management Area (Nunavut Water Regulations Schedule 4).

### Roads Management

The Plan includes access, service, and haul roads within the Meliadine Mine area, and covers construction, operations, closure, and post-closure phases of the Meliadine Mine. Roads outside the mine area include:

1. A 30 km All-weather Access Road (AWAR) from Rankin Inlet to the mine site. The AWAR is used to transport the building materials, construction/mining equipment, fuel, reagents, supplies, workers, and contractors to the mine site. This road is operated with controlled and limited public access providing rules of the road are observed.
2. A 5.9 km bypass road around the Hamlet of Rankin Inlet from the Rankin Inlet Itivia land-based facilities (Itivia) to the AWAR. This road is closed to public use.

A manned gate is located on the south side of the AWAR past km 10 to prevent public access to the mine site. The road is closed during periods of bad weather, in the event of a road accident, during periods of major road maintenance, and during caribou migration.

This Plan presents mitigation measures and protocols to be implemented during operations to preserve wildlife, to prevent permafrost degradation, to control surface runoff and sedimentation, and to mitigate dust. Agnico Eagle has put in place operational procedures for daily operation and maintenance of the roads including dust suppression methods, snow removal, de-icing and snow drifts/banks management, and snow management at bridges and culverts.

Protocols for accidents and anticipated use of police services are presented within the Plan. Agnico Eagle has procedures in place and will keep resources close-at-hand to respond to emergencies on the roads in a timely manner. Agnico Eagle also reports all reportable incidents to the appropriate Government authorities.

Reclamation of the access, service and haul roads will follow the completion of all mining. For a third party to take over the road(s), that third party would have to complete its own arrangements with the landowner (the Kivalliq Inuit Association and/or the Hamlet) and then complete its own environmental assessment and permitting process covering future use.

**Dust Management**

Agnico Eagle uses best management practices to minimize dust generation from becoming airborne at the mine site, Itivia, AWAR, Bypass road, service roads, and haul roads. This includes identification of major sources of dust, implementation of dust mitigation measures, inspections for unacceptable levels of dust, and recording dust monitoring data to document Agnico Eagle's success in controlling and reducing dust at the Meliadine Mine. The Dust Management Plan focuses primarily on dust generated from roads, with some reference to other mining activities such as the tailings storage facility which are addressed in other plans, including the Mine Waste Management Plan.

Dust could potentially be generated by such activities as road use, drilling, blasting, crushing, conveying, loading, hauling, unloading, stockpiling, and by wind erosion of dry, exposed mine areas. Dust emissions are prevalent during late spring and summer, while being much reduced in fall and winter.

Mitigation measures to control dust include mine design and operational procedures. Operational practices, such as speed limits and road maintenance, assist in reducing dust. Water and the addition of Calcium Chloride ( $\text{CaCl}_2$ ) is used to control and reduce dust on roads and other mine areas when airborne dust becomes a safety hazard or impacts sensitive natural areas.

Dust suppression measures are in place during operations and closure.

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## DOCUMENT CONTROL

| Version | Date           | Section    | Page   | Revision                                                                                                                                                                                    | Author                                                                                 |
|---------|----------------|------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1       | September 2012 |            |        | First draft of the Roads Management Plan                                                                                                                                                    | John Witteman, Env. Consultant, Agnico Eagle                                           |
| 2       | March 2013     |            |        | Additions made throughout the Plan                                                                                                                                                          | John Witteman, Env. Consultant, Agnico Eagle                                           |
|         |                | 6.4        | 17     | Addition of Section 6.4                                                                                                                                                                     |                                                                                        |
| 3       | April 2014     | 1.2.1      | 4      | Added IQ box                                                                                                                                                                                | Larry Connell, Corp. Dir. Reg. Affairs, Agnico Eagle                                   |
|         |                | 1.2.5      | 6-7    | Details on snowmobile trails                                                                                                                                                                |                                                                                        |
|         |                |            | 8      | Added new Figure 1-2 (Itivia)                                                                                                                                                               |                                                                                        |
|         |                | 2.2        | 12-14  | Update including <i>Navigation Protection Act</i>                                                                                                                                           |                                                                                        |
|         |                | 4          | 17     | Added details on consultation wrt road mgmt. and use                                                                                                                                        |                                                                                        |
|         |                | 6.1        | 20     | Details on emergency reporting Territorial Park                                                                                                                                             |                                                                                        |
|         |                | 6.5        | 23     | Periodic survey of road use                                                                                                                                                                 |                                                                                        |
|         |                | 6.6        | 24     | Section on sedimentation control                                                                                                                                                            |                                                                                        |
|         |                | 7.1        | 25-26  | Protection of archaeological sites Meadowbank experience wrt winter maintenance                                                                                                             |                                                                                        |
|         |                | 7.2.1      | 28     | Role of the Royal Canadian Mounted Police (RCMP)                                                                                                                                            |                                                                                        |
|         |                | 7.3        | 29     | New Appendix: Dust Management Plan                                                                                                                                                          | John Witteman, Env. Consultant, Agnico Eagle                                           |
|         |                | 8.2        | 34     |                                                                                                                                                                                             |                                                                                        |
|         |                | App. C     |        |                                                                                                                                                                                             |                                                                                        |
| 4       | April 2015     |            |        | Complete plan update based on Feasibility Study and NIRB Conditions for the Water Licence Application                                                                                       | John Witteman, Env. Consultant, Agnico Eagle                                           |
| 5       | March 2017     |            |        | General review of the plan                                                                                                                                                                  | Environment Department, Agnico Eagle Mines                                             |
| 6       | March 2018     |            |        | Update plan based on NIRB requests                                                                                                                                                          | Environment and E&I Departments, Agnico Eagle Mines                                    |
| 7       | March 2019     |            |        | -General review/update of the plan reflecting production phase.<br>-Updated Appendix A<br>-Added information about trucking of treated saline water to Itivia.<br>Traffic Management update | Terry Ternes, Sean Arruda, Bethany Hodgins, Environment Department, Agnico Eagle Mines |
|         |                | 1.2.3, 6.4 | 3      |                                                                                                                                                                                             |                                                                                        |
|         |                |            | 23, 24 |                                                                                                                                                                                             |                                                                                        |
|         |                | 6.1        | 20,21  |                                                                                                                                                                                             |                                                                                        |

| Version | Date          | Section                                                                        | Page  | Revision                                                                                                                   | Author                                     |
|---------|---------------|--------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|         |               | 10                                                                             | 42    | Updated information on bypass road                                                                                         |                                            |
|         |               | 1.1                                                                            | 1     | Removed mine plan from introduction as it is non-essential to the Roads Management Plan                                    |                                            |
|         |               | 10.1                                                                           | 39-40 | Updated with AWAR closure during Caribou migration                                                                         |                                            |
| 8       | December 2019 | 1.2                                                                            | 1     | Updated strategy for conveying saline water to Itivia                                                                      | Environment Department, Agnico Eagle Mines |
|         |               | 1.2.3                                                                          | 4     | Updated the estimate saline truck quantity                                                                                 |                                            |
|         |               | 2.2                                                                            | 11-12 | References to the Amendments to the <i>Canadian Navigable Waters Act</i> that came into force August 28 <sup>th</sup> 2019 |                                            |
|         |               | 4                                                                              | 15    | The agreement signed between Agnico Eagle and the KHTO                                                                     |                                            |
|         |               | 6.4                                                                            | 24-25 | Adjusted number for the increased volume of saline water discharge                                                         |                                            |
| 9_NWB   | January 2024  | A yellow arrow in the right-hand margin indicates where updates have been made |       | Submitted to Nunavut Water Board as part of the Meliadine Mine Water Licence Amendment.                                    | Permitting Department                      |

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**ACRONYMS**

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|              |                                                                        |
|--------------|------------------------------------------------------------------------|
| Agnico Eagle | Agnico Eagle Mines Limited                                             |
| ARD/ML       | Acid Rock Drainage/Metal Leaching                                      |
| ATV          | All-Terrain Vehicle                                                    |
| AWAR         | All-weather Access Road                                                |
| CGS          | Department of Community and Government Services, Government of Nunavut |
| DFO          | Department of Fisheries and Oceans Canada                              |
| ERT          | Emergency Response Team                                                |
| GN           | Government of Nunavut                                                  |
| HTO          | Hunters and Trappers' Organization                                     |
| INAC         | Indigenous and Northern Affairs Canada                                 |
| IOL          | Inuit Owned Lands                                                      |
| IQ           | Inuit Qaujimajatuqangit                                                |
| KivIA        | Kivalliq Inuit Association                                             |
| MDAG         | Multidisciplinary Advisory Group                                       |
| NIRB         | Nunavut Impact Review Board                                            |
| NLCA         | Nunavut Land Claims Agreement                                          |
| NTI          | Nunavut Tunngavik Incorporated                                         |
| NU           | Nunavut                                                                |
| NWB          | Nunavut Water Board                                                    |
| RCMP         | Royal Canadian Mounted Police                                          |

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**UNITS**

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|    |           |
|----|-----------|
| km | kilometre |
| m  | metre     |

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## SECTION 1 • INTRODUCTION

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### 1.1 Project Description

Agnico Eagle Mines Limited (Agnico Eagle) operates the Meliadine Gold Mine (Meliadine Mine), located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut.

Figure 1-1 provides an overview of the Meliadine Mine access road network. There is presently a controlled access All-weather Access Road (AWAR) between the mine site and Rankin Inlet (constructed in 2013/2014). A bypass road that was built around the Itivia site and links to the AWAR outside of Rankin Inlet. The remote location of the Meliadine Mine necessitates that access, service, and haul roads be built to support the development of the mine.

The following structures and facilities are part of the Meliadine Mine site:

- Two open pits for the Tiriganiaq gold deposit and ancillary facilities;
- Underground and ancillary facilities;
- Tailings storage facility consisting of dry stack tailings;
- Overburden/waste rock/ore storage facilities;
- Plant site and ancillary facilities;
- Storage areas;
- Fuel tanks holding up to 9 million litres;
- Quarries and granular borrow pits;
- Water management facilities;
- All-weather access, bypass, service and haul roads;
- Incinerator building;
- Landfarm for petroleum hydrocarbon contaminated soils and snow/ice; and
- Industrial waste landfill.

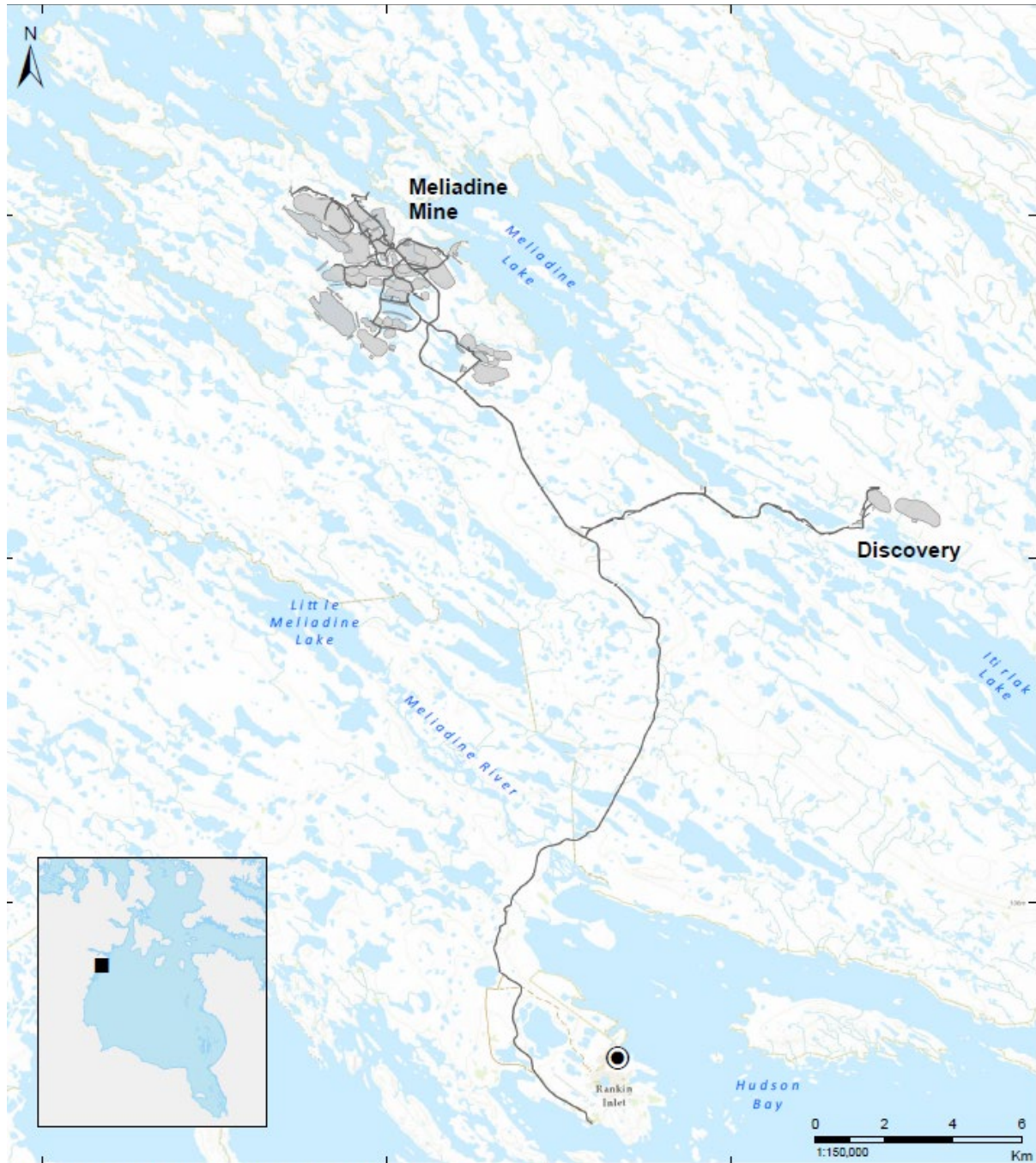
The Application to amend the Water Licence is to complete licensing of components approved under Project Certificate No.006, which includes open pit mining at the Pump, F Zone, Wesmeg, and Discovery deposits.

The following structures and facilities located in Rankin Inlet include:

- Spud barge located at Itivia and serving as a dock;
- Oil Handling Facility at Itivia holding up to 33.5 million litres of diesel;
- Laydown yard at Itivia;
- 5.9 km bypass road around the community;

- Two kilometres of the AWAR located on municipal land;
- Bridges over the Char and Meliadine Rivers on municipal land; and
- Reclaimed rock quarry (R19) on municipal land.

Figure 1-1 Meliadine Access Road Network



### Meliadine Mine Water Licence Amendment Site Location



## 1.2 Roads

### 1.2.1 All-weather Access Road

The AWAR, as shown on Figure 1-1, connects Rankin Inlet to the mine site. The route was selected following consultation with the Inuit. The AWAR is built with a 6.5 m running surface between the Char River bridge turn-off and the mine site, and has passing turnouts approximately every  $400 \pm 50$  m (9.5 m total road width at passing turnouts), to allow vehicles to pass each other when travelling in opposite directions.

There is a year-round manned gate at kilometer 10 at the south end of the AWAR. The road is closed during periods of bad weather, in the event of a road accident, during periods of major road maintenance and, during caribou migration. A sign will be installed near Rankin Inlet giving the daily status of the AWAR stating whether it is open or closed to restricted public use.

Construction of the waterline has commenced and will run adjacent the AWAR to convey treated saline water to Itivia Harbour. Following the completion of the waterline construction, saline water will no longer be hauled by truck on the AWAR.

The road to the Discovery deposit is approved and will be built so as to ensure that no contact can occur between haul trucks and vehicles on the access roads. The public will have access to a boat launch located at the southeast corner of Meliadine Lake. Signage will be installed along with warning signs requiring light vehicles to give way to the mine haul trucks.

### 1.2.2 Hamlet Bypass Road

A bypass road was completed in 2018 and is built around the south of the airstrip to Itivia as shown on Figure 1-1. Its design and width is identical to the AWAR (6.5 m). The bypass road is approximately 5.9 km long and allows traffic from Itivia to bypass the Hamlet in delivering materials and fuel to the mine site or saline water to Itivia from the mine. By building the bypass road, use of municipal roads by Agnico Eagle is kept to a minimum. The bypass road is closed to the public.

### 1.2.3 Traditional ATV and Snowmobile Trails

The building of roads and the infrastructure at Itivia impacts existing ATV and snowmobile trails. Where these trails cross a road, a ramp has been constructed to ease road crossing, and signage is in place to alert road users of the crossing. Similarly, there are signs alerting ATVs and snowmobiles when approaching a road. Maintenance of the roads would ensure the snowmobile crossings are kept clear of snow.

Rankin Inlet residents, the Rankin Inlet and Kangiqliniq Hunters' and Trappers' Organization (KHTO) have identified that there is an existing snowmobile trail in the area of the Itivia laydown yard that local residents use in winter months to access the sea ice at Melvin Bay. Agnico Eagle is aware of this trail and has accommodated the trail to allow continued unfettered snowmobile access along the east



side of the laydown yard to the sea ice at Melvin Bay. The location of this trail in relation to the laydown yard is shown in Figure 1-2. Trails around Meliadine are presented in Figure 1-3.

While the laydown area is fenced, this snowmobile trail is not hampered or blocked by any fencing.

**Figure 1-2** *Itivia General Arrangement and Access*

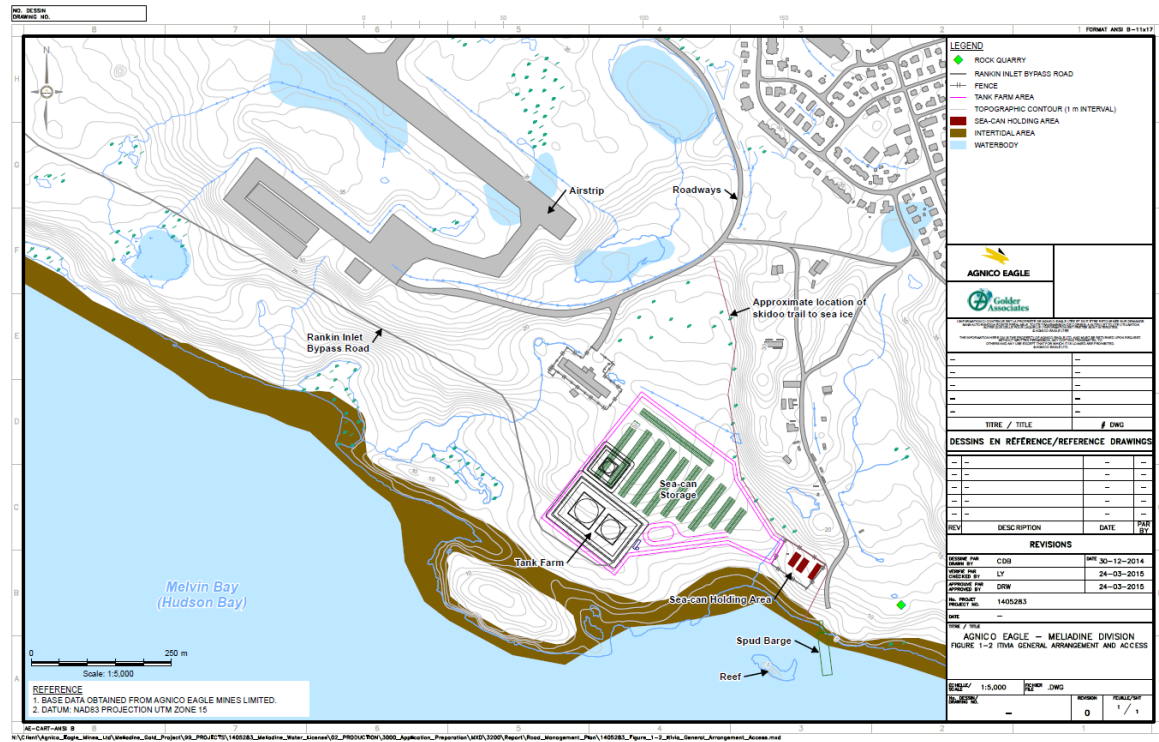
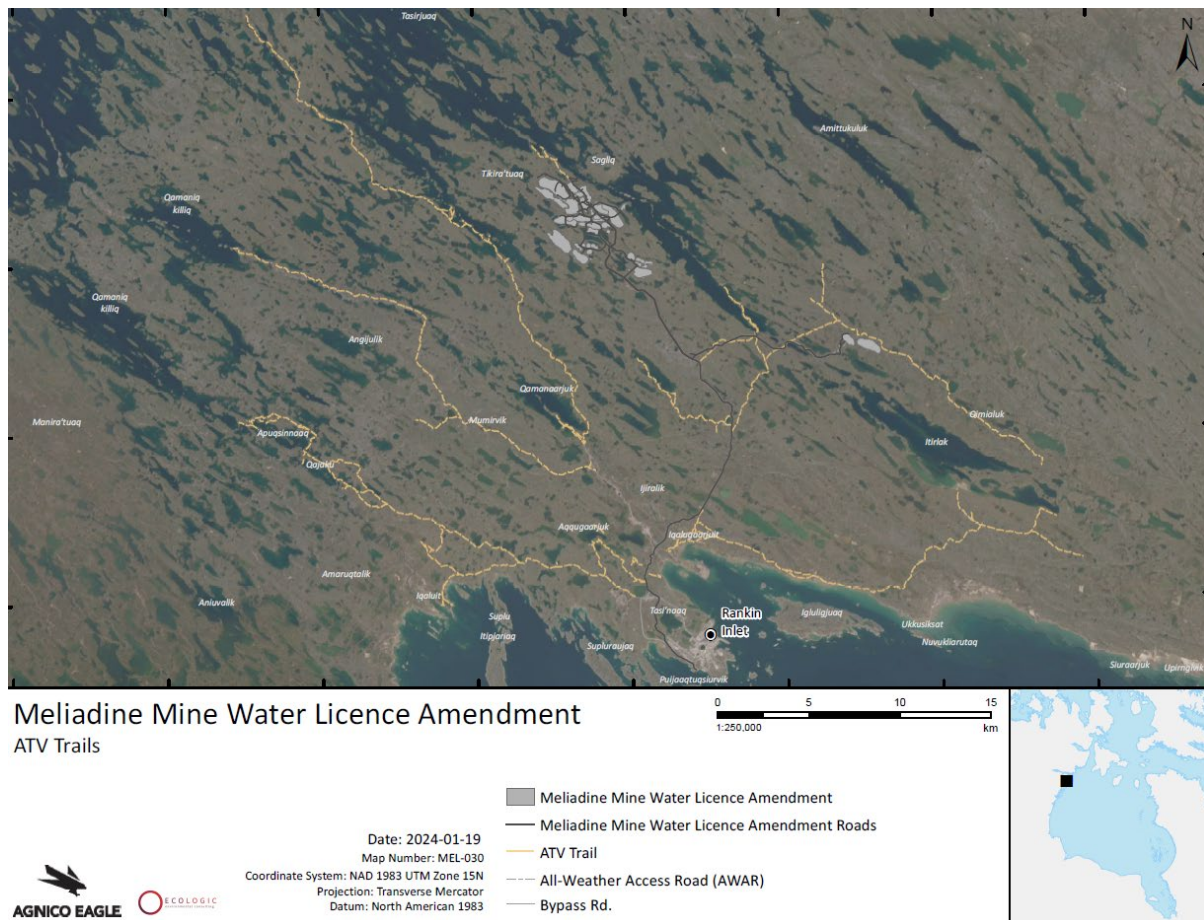




Figure 1-3      *ATV Trails around Meliadine*

#### 1.2.4      Service and Haul Roads

Service roads (e.g., around the mill site, leading to waste rock storage facilities) are exclusively for Agnico Eagle and its contractors use; the public does not have right of entry to these roads that service mine areas. Service vehicles, trucks carrying explosives, and small trucks with mine personnel use the service roads. All Agnico Eagle workers and its contractors using service roads receive training before doing so.

Haul roads are kept separate from access and service roads to ensure road safety. Haul roads outside the open pits are 26 m wide to allow for two way traffic, or 17 m for single lane traffic with passing zones spaced accordingly. A two-lane 17 m wide haul road designed for 70-t trucks in dual lanes is required for access to the TSF and Paste Plant. Safety berms are installed where necessary along the haul roads.

The ramps and haul roads were designed for the largest equipment (70 payload tonne class haul trucks), with an operational width not exceeding 5.7 m, in accordance with Nunavut mine

regulations. For double lane traffic, the ramp width will be 21.5 m decreasing to 15.8 m for single lane traffic at the pit bottom (last three benches) to reduce waste stripping. The ramp's width will include a protection berm and a drainage ditch. The safety berm on the outside edge will be constructed of crushed rock to a height equal to  $\frac{3}{4}$  of the rolling radius of the largest tire using the ramp. To facilitate drainage, ramp gradients will be established at 10% and will increase to 12% for the last three benches at the bottom of the open pit.

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## SECTION 2 • REGULATORY SETTING

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### 2.1 Land Tenure

The majority of all access, service and haul roads are located on Inuit Owned Lands (IOL) administered by the Kivalliq Inuit Association (KivIA). The surface ownership of the land encompassing the roads right-of-ways was transferred to the KivIA when the Nunavut Agreement came into effect. Land and environmental management in this area are generally governed by the provisions of the Nunavut Agreement.

Closer to Rankin Inlet, 2.3 km of the AWAR and the complete bypass road are on Commissioner's land held by the Department of Community and Government Services (CGS) for the benefit of the Hamlet of Rankin Inlet.

The AWAR was constructed under land use permits issued by CGS on municipal land, and the KivIA on IOL. Leases followed the completion of construction and a legal survey of the road right-of-way. The width of the land leases is 20 m for the length of the roads, wide enough to accommodate their 6.5 m width.

Service and haul roads will exclusively be constructed on IOL under the mine lease(s) issued by the KivIA.

### 2.2 Permitting Regime

Agnico Eagle is responsible for obtaining all necessary permits, licenses, approvals, notifications required prior to construction and operation of all roads. Relevant licenses and regulations applicable to the roads includes:

- to allow right-of-way for AWAR across Inuit lands
  - Licence Number KVRW11F02 (Permanent Road Right-of-Way) issued by the KivIA
- to allow right-of-way for AWAR and bypass road located on municipal lands
  - Licence L-51809T (Right-of-Way permit AWAR on Municipal land) issued by GN-CGS
  - Licence L-51808T (Right-of-Way permit Bypass Road km 2-7) issued by GN-CGS
  - Licence 102893 (Right-of-Way permit Bypass Road km 1-2) issued by GN-NAD
- Conformity determination with Keewatin Regional Land Use Plan
- NIRB Project Certificate; allows to build and operate roads
- Type A Water Licence; for construction of the mine and related roads
- *Navigation Protection Act* evaluation
- Inuit Impact and Benefits Agreement

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**SECTION 3 • RELATED DOCUMENTS**

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The following documents provide input to the Roads Management Plan:

- Terrestrial Environment Management and Monitoring Plan;
- Spill Contingency Plan;
- Interim Closure and Reclamation Plan;
- Sediment and Erosion Management Plan;
- Borrow Pits and Quarries Management Plan; and
- Dust Management Plan.

The Plan is part of the Environmental Management and Protection Plan for the Meliadine Mine and will be in effect during the operation and closure of the Meliadine Mine.

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## SECTION 4 • CONSULTATION

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Consultations on the road route with the community of Rankin Inlet, Inuit Elders, Kangiqliniq HTO and KivIA have been ongoing from as early as 2004. A chronological record of consultation on the AWAR is provided in Appendix A.

Agnico Eagle and the KHTO signed an Memorandum of Understanding (MOU), which outlines the KHTO assistance with providing wildlife monitoring services for Agnico Eagle along the AWAR.

### 4.1 Consultations Prior to Opening the All-weather Access Road to Public Use

Agnico Eagle wants to meet the expectation of Rankin Inlet residents in opening the AWAR to public use in the future. However, Agnico Eagle shares the concerns of others that all AWAR users need to abide by 'rules of the road' to protect their own safety and that of others. While Agnico Eagle will maintain the AWAR in good operating condition and close it when poor driving conditions prevail, it will be incumbent on all organizations and the public to share in the responsibility in educating AWAR users in safe and responsible road use. This could be as simple as leading by example to participating in developing and endorsing the rules of the road.

Prior to the opening of the AWAR to public use, Agnico Eagle will:

- Undertake consultation with the KivIA, HTO, residents of Rankin Inlet, and the Hamlets of Rankin Inlet and Chesterfield Inlet with the purpose of developing rules of the road and safety requirements for public use of the AWAR;
- Update this Plan, with particular emphasis on public safety, and submit it to the Nunavut Impact Review Board, KivIA, KHTO, the Government of Nunavut (GN), Nunavut Water Board (NWB), Hamlet of Rankin Inlet and authorizing agencies;
- Hold community meetings to go over the rules of the road and impress on all potential AWAR users their responsibility for their own safety and that of others in using the AWAR safely; and
- Place signs emphasising safe use of the AWAR at strategic locations along the AWAR.

The rules of the road will be posted on community bulletin boards; and on a quarterly basis, read over the community radio and placed on the local television station. Agnico Eagle will also post them on its Nunavut web site.

### 4.2 Road Use by Nunavummiut and Other Developers

The AWAR partly covers existing ATV and snowmobile trails, which were used as access to traditional areas for hunting, fishing, and recreation in the Meliadine Lake, Machum Lake, and Twin Lakes areas. Agnico Eagle is unaware of any possible future developments near the Meliadine Mine that could make use of the access and/or service roads.

It is Agnico Eagle's responsibility to decommission and reclaim the roads once its activities in the area are complete. For a third party to take over the road(s), that third party would have to complete its own arrangements with the landowners (the KivIA and the Hamlet) and then complete its own environmental assessment and permitting process covering future use. Agnico Eagle does not own the land on which the roads are constructed and, thus, cannot transfer future ownership or use privileges to any third party. Agnico Eagle must complete its obligation to decommission and reclaim all roads unless directed otherwise by a combination of the landowners and other regulatory agencies who issued permits/authorizations for the roads.

#### **4.3 Use of Inuit Qaujimajatuqangit in the Planning of the Roads Management Plan**

Inuit Qaujimajatuqangit (IQ) is the most successful and oldest monitoring practice in Nunavut, where the resource users do the observing or monitoring. Information collected through IQ can contribute to mine design and planning, as well as monitoring activities. Agnico Eagle is committed to including IQ and public concerns raised through IQ, where practical, in the design of management and monitoring plans for the Meliadine Mine. Agnico Eagle continues active engagement with communities and Inuit organizations as the Meliadine Mine proceeds through permitting, operations, and closure. Additional IQ collected through consultation and engagement will be included in updates to the design and implementation of environmental programs.

The Road Management Plan considered IQ (including TEK, TLU) and concerns regarding Meliadine Mine effects on traditional resources and TLU sites through the following design and mitigation measures:

- In allowing public access on the AWAR, Agnico Eagle took into consideration that the area in the vicinity of the Meliadine Mine will continue to be used for traditional purposes during the construction, operation, and closure phases.
- Access to traditional use sites are being mitigated by constructing ramps and installing signage along Meliadine Mine roads to facilitate road crossings for existing ATV and snowmobile trails. Snow clearing takes into consideration the location of snowmobile trails such that they are not blocked, and snowmobile crossings are identified with signs identifying the location of the trail prior to snow removal.
- The Itivia laydown yard was designed to avoid impacting the existing snowmobile trail so that local residents can continue to access the sea ice at Itivia Harbour.
- Elders expressed the greatest concern regarding potential effects of the Meliadine Mine on caribou, including road construction and motorized vehicles potentially limiting or altering their movement patterns, and the potential for overhunting to occur as a result of increased access to caribou migration routes and calving grounds. Agnico Eagle consulted with the GN, the KivIA, the Kivalliq Wildlife Board (KWB), local HTOs, and the public in developing appropriate monitoring and mitigation measures related to the ease of harvesting of caribou

- afforded by the AWAR. The result of these consultations was a Road Access Management Agreement (see Section 10.2).
- IQ indicated that land mammals including Arctic fox, wolverine, and wolf are important traditional resources for harvesting, and community concerns were raised regarding the potential effects of snowmobiles, and the potential of road construction creating barriers to wildlife movement. The routing and design of the AWAR and service roads were selected to minimize potential Meliadine Mine effects on the environment, including wildlife movement. Potential adverse effects to wildlife abundance or movement were considered in setting the rules of the road, including setting maximum speed limits and ensuring wildlife has right-of-way on the roads, wildlife will not be harassed and hunting is prohibited within 1 km of the AWAR. Furthermore, locations of large aggregations of animals are reported and all incidents between vehicles and wildlife will be reported and investigated. Finally, a wildlife monitoring program will be implemented with input from the local stakeholders to record the species, numbers and location of wildlife observed along the roads, with particular focus on caribou, muskoxen, bears, wolves, migratory birds and raptors.
  - Community concerns were also raised regarding the potential for the Meliadine Mine to change the land and water, subsequently impacting the diet of land animals. There was also concern that road construction could affect environmental stability and contaminate water. IQ also indicated that berry harvesting is an important activity in the area, and community members expressed concerns over dust that could impact the health of both water and vegetation. These concerns were considered in proposing the following mitigation measures and protocols to be implemented during construction and operations to preserve wildlife, prevent permafrost degradation, control surface runoff and sedimentation, and mitigate dust:
    - Sedimentation and erosion control measures were implemented prior to the start of work and maintained until after all disturbed areas have been stabilized; and
    - Regular inspection of the roads are conducted to identify areas of ponding, erosion or sedimentation.
  - IQ indicated that the rivers and Meliadine Lake are considered important fish harvesting sites, and community concerns were raised regarding potential contamination of waterbodies in the entire Meliadine watershed, and for potential adverse effects to fish and other traditional resources. Accordingly, to protect fish spawning and nursery periods of local fish populations, no in-water work will take place from May 1<sup>st</sup> to July 15<sup>th</sup>. In addition, areas where dust deposition could impact fish habitat and/or water quality, mitigation measures were implemented, including grading of the road surface, placement of new coarser topping, and/or watering/addition of CaCl<sub>2</sub> on the road surface.
  - IQ has indicated that the entire Meliadine valley, including Iqalugaarjuup Nunanga Territorial Park, has a long history of traditional use and many important cultural sites. To mitigate the potential for disturbance to cultural sites, all employees or contractors are not allowed to construct any side roads/trails off the west side of the AWAR between Km 1 and Km 8, and

regular road inspections occur to ensure that no unauthorized trails or access routes leading from the AWAR into the Park are being created. In addition, Agnico Eagle and GN-DoE Park staff will work together to discuss what other measures can be taken to prevent unauthorized access into the park, including potential signage, public education and the placement of barriers.

- To prevent potential ice buildup at the lower Meliadine River crossing bridge resulting in flooding of important cultural sites upstream from the bridge, regular inspections and monitoring occurs so that potential risks to cultural sites can be mitigated.



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**SECTION 5 • MEASURES TO PREVENT PERMAFROST DEGRADATION**

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Roads have been designed with a minimum fill thickness to maintain permafrost conditions within the subgrade soils. The thermal modelling indicated a minimum road fill thickness of 1 m is required above ice poor subgrade soils to maintain the soil in a frozen condition year-round. Similarly, a minimum road fill thickness of at least 1.3 m is required above ice rich subgrade soils.

To the greatest extent possible, roads are constructed in the winter when the subgrade soils are frozen to prevent insulation of thawed subgrade soils. A rough base is advanced at the full road width so that the base of the roads is laid down in winter frozen ground conditions. The stream crossing culverts are also installed in the winter. Once the rough base and stream culverts were installed, the remainder of the construction was completed by building up the rough base primarily under winter conditions, and placing the final topping materials during the spring and early summer.

Mitigation and environmental design features to reduce the potential for permafrost degradation are as follows:

- Road alignments avoid, where possible, fine-grained, poorly drained, ice-rich, frost susceptible soil conditions as noted by geomorphologic mapping, due to their susceptibility to thaw related settlement;
- Regions of high ground relief (higher elevations) are sought to provide better drainage conditions, to minimize the potential for snow drifting on the road and to avoid organic depressions and/or other poor ground conditions, which are more abundant in the low lying areas;
- Road fill material was placed directly over the existing soil layer without cutting, stripping, or grubbing to avoid disturbing the subgrade soils;
- Thick drifted snow was removed before road fills were placed;
- The road fill thickness was a minimum of 1 m in thaw-stable soils, and 1.3 m in thaw-sensitive soils; and
- Construct access, service, and haul roads in the winter when the subgrade soils are frozen to prevent insulation of thawed subgrade soils, to the greatest extent possible.

The road and its shoulders are inspected weekly (at a minimum) during the summer period (June to August) for evidence of seasonal freeze and thaw adjacent to the toe of the road embankment. Such movements are expected and may lead to longitudinal cracking and thaw settlement especially for portions of the road founded on thaw susceptible (ice rich) soils. When such areas are discovered, the affected area is repaired using granular material and/or crushed rock. Agnico Eagle will maintain stockpiles of such material in select borrow/quarry areas along the road.

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**SECTION 6 • TRAFFIC MANAGEMENT ON ACCESS ROADS**

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**6.1 Management of Agnico Eagle Traffic on the Access Roads**

All of the required fuel, supplies, and equipment for the mine will be transported to the mine via the bypass road and AWAR. Until the waterline is constructed, saline water delivery from the mine to Itivia occurs on the bypass road and AWAR. All drivers transporting these materials and personnel will either be Agnico Eagle employees or employees of contractors directly hired by Agnico Eagle. They must possess a valid driver's license from a Canadian province or territory, for the appropriate class of vehicle, for them to be allowed to operate vehicles on access roads. Agnico Eagle educates all of its employees and all of its contractor's employees on road safety rules during the safety introduction training that occurs when first starting work at the mine site.

All Agnico Eagle vehicles that routinely travel on the access roads are equipped with a radio set to the requisite road frequency. Similarly, contractor's vehicles that routinely travel on the access roads are also equipped with a radio set to the requisite road frequency. Consequently, Agnico Eagle and contractor traffic on the road always have radio contact with the gatehouse, security, Agnico Eagle and contractor traffic. This system is used to report any unusual conditions along the roads such as: location of other vehicles, presence of wildlife on or near the roadway, presence of non-Agnico Eagle traffic such as ATVs, snowmobiles or other vehicles on the access roads, special road conditions, and special weather conditions. All Agnico Eagle drivers and contractors using the road are required to monitor and report to the gatehouse by radio any observed unauthorized or unsafe use of the road.

When there is a scheduled shut down of the road due to weather or special shipments of restricted products Agnico Eagle will notify the Hamlet. The following guidelines are presently being used to notify the public:

- Signage at the Rankin Inlet end of the road and at the mid-point Emergency Spill Response station (at a minimum) will provide the public with the Agnico Eagle phone contact number (site security) to which the public can report an emergency along the AWAR.
- Signage near Rankin Inlet will provide the current status of the AWAR, stating whether it is open or closed to public use that day.
- Include this information on periodic public information sessions on the rules of the road and road safety procedures delivered in Rankin Inlet.
- Include this information in periodic community radio and TV announcements.
- Information is provided on Agnico Eagle's Nunavut web page.
- Agnico Eagle webpage indicates road closures and information.
- The gatehouse at the 10 km marked will be closed and the gate house attendant can discuss the closure with interested parties.

## 6.2 Management of Non-Agnico Eagle Traffic on the All-weather Access Road

The rules of the road (see Section 8 for more detail) developed for the roads apply to all users of the road, including Agnico Eagle employees, Agnico Eagle contractor employees, and the public. Agnico Eagle holds public information sessions in Rankin Inlet for AWAR users, on a regular basis (minimum of twice per year). A copy of the rules of the road, which has a strong emphasis on road safety, is presented at these sessions.

Agnico Eagle also holds public information sessions in Chesterfield Inlet for AWAR users on a regular basis (minimum of once per year). A copy of the rules of the road are presented at these sessions. This is required because Chesterfield Inlet has built approximately 17 km of trail/road south from their community towards Rankin Inlet and occasionally drive their ATVs/snowmobiles to Rankin Inlet.

Agnico Eagle also uses other communication tools to get the road access procedures and road safety rules out to the public in Rankin Inlet. These include community radio and TV (minimum of 4 times per year), Facebook page, postings around town, through the Meliadine Mine office in Rankin Inlet, and via Agnico Eagle website. The communication are in both English and Inuktitut. All non-Agnico Eagle road users are also be encouraged to monitor and report any observed unsafe use of the roads to Agnico Eagle.

## 6.3 Other Access Control Procedures

There are occasions when access to the AWAR will be restricted for short time periods for special reasons. This includes bad weather, unsafe road conditions, maintenance activity on the roads, heavy project related truck traffic, movement of oversized loads, cyanide transportation, and/or presence of large numbers of caribou on or adjacent to the road. The AWAR could also be temporarily closed in the event of an incident, accident or other event requiring mitigation or response. These short-term closures will be required to ensure safety.

In communicating such short-term closures, Agnico Eagle will take the following actions:

- Agnico Eagle will issue a daily road condition bulletin by means of email to a subscriber list, through an Agnico Eagle website, and through community radio. The bulletin will provide information on current road and weather conditions and on special activity planned for that day on the AWAR.
- Agnico Eagle (with the consent of the Hamlet of Rankin Inlet) will set up and maintain a sign in English and in Inuktitut to be located close to Rankin Inlet on the existing municipal road out to the Char River and the Territorial Park that indicates whether the AWAR is “open” or “closed” at that specific point in time.
- Agnico Eagle will limit access and, in certain conditions, close the roads to all traffic during bad winter weather (blizzard or white out conditions). In the worst weather, the southern gate on the AWAR will be closed and signed accordingly.

- Agnico Eagle will limit access to the AWAR when it is not safe as a result of an accident or a road maintenance problem.
- Agnico Eagle will limit access to the AWAR when large numbers of caribou are near to or crossing the road. This will occur in consultation with the Kangiqliniq HTO.
- Agnico Eagle will work with the GN, KivIA, and HTO to establish a one kilometre no shooting zone on both sides of the AWAR to ensure that project workers and all other road users are not inadvertently exposed to the risk of accidental shooting.
- Agnico Eagle reserves the right to refuse access to individuals who do not respect the rules of the road on safety, speed and the no shooting zone when using the AWAR.

Agnico Eagle has committed to work with the GN-DoE to reduce/prevent potential unauthorized access from the AWAR (i.e., the area northeast of the Meliadine River Bridge) to the Iqalugaarjuup Nunanga Territorial Park. In this respect, Agnico Eagle will take the following actions:

- Agnico Eagle commits that it will not allow any of its employees or contractors to construct any side roads/trails off the west side of the AWAR between Km 1 and Km 7. Agnico Eagle has no intention of constructing any side roads and/or trails off the designated AWAR corridor at any point along its length, and if so, additional regulatory approval would be needed under the Terms of the Road Use Lease with the KivIA and/or Community & Government Services before any side road/trail could be constructed;
- Agnico Eagle will task its Road Supervisor with keeping an eye on this critical section of the AWAR as part of its regular road inspections (as outlined in Section 7 of this Roads Management Plan) with the objective of identifying any signs of unauthorized trails/access routes leading from the AWAR into this area of the Park. If any evidence of unauthorized access trails is discovered, the Road Supervisor will contact GN-DoE Park Staff in Rankin Inlet to inform the GN-DoE Park staff of the discovery and to jointly work on a plan to prevent any further use of such access points. Agnico Eagle would then take the agreed upon measures to implement the plan provided that such measures are reasonable; and
- Agnico Eagle will continue to periodically meet with GN-DoE park staff (at least annually, but more frequently if required) to discuss protection of this designated preservation zone within the Park.

#### **6.4 Projected All-weather Access Road Traffic between Itivia and the Mine**

Table 6-1 provides the updated projected traffic for the bypass road and AWAR. Agnico Eagle and contractor vehicles which use the road include, but are not limited to: pick-up trucks, cube vans, buses, fuel trucks, tractor-trailers, snowplows, and graders. The amount of traffic is highly dependent on the level of activity on site and the time of year, such as when supplies and materials arrive by sea.

Table 6-1 Estimated Average Daily Roundtrip Traffic on the All-weather Access Road

| Month        | 2014 FEIS Predictions |
|--------------|-----------------------|
| January      | 28.4                  |
| February     | 28.4                  |
| March        | 28.4                  |
| April        | 28.7                  |
| May          | 28.4                  |
| June         | 44.4                  |
| July         | 44.1                  |
| August       | 44.1                  |
| September    | 44.1                  |
| October      | 28.4                  |
| November     | 28.7                  |
| December     | 28.4                  |
| <b>Total</b> | <b>404.5</b>          |

Projected public traffic on the access roads has greatest uncertainty. Agnico Eagle estimates that 25-50% of the anticipated trips will be incremental to current access, which is by ATVs and snowmobiles. During periods of mild weather, more traffic can be expected as those living in Rankin Inlet may travel up the AWAR for a day of fishing, hunting, berry picking, or other leisure activities. During poor weather conditions, public traffic on the road can be expected to drop significantly and it is likely that no public access will occur during such conditions.

Agnico Eagle collects information on traffic volume on the AWAR on a daily basis. The survey information records the number and types of mine vehicles, and the number and types of public vehicles using the AWAR over a 24-hour period. The surveys will gauge the accuracy of the predictions contained within Table 6-1. The survey results form part of Agnico Eagle's annual report.

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**SECTION 7 • INSPECTION AND MAINTENANCE OF ROADS**

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Agnico Eagle has the sole responsibility for the ongoing inspection and maintenance of all of the components of the access, service, and haul roads, including road beds, bridges, culverts, and borrow/quarry sites used in the construction and maintenance of the roads. Agnico Eagle has a supervisor who is responsible for the ongoing road inspection and maintenance of the access, service and haul roads. The operation and maintenance of all roads applies the same principles.

The supervisor conducts periodic inspections (minimally on a weekly basis) of the roads to ensure that the roads are maintained for safe travel of personnel, equipment, and supplies. These inspections are recorded, including deficiencies which are followed up by a corrective plan. These periodic inspections include an inspection of the bridge abutments and a visual observation of the road surfaces to assess the status of road foundation.

During the summer period (June to August), the road surface is maintained with fresh gravel being spread as required and regular grading of the road. By September, the road starts to freeze; therefore, gravel is added for safety reasons. Snow clearing and road sanding along the road are done to operate vehicles on the roads safely. The manner in which the snow is cleared will also take into account the road configuration to avoid snow accumulation that could cause problems during the freshet or block snowmobile trails.

All roads are inspected for signs of accumulation of ponded water either on the road surface or along the sides of the road. Where noticed, the Agnico Eagle supervisor evaluates and monitors the accumulation to determine why water is accumulating in these areas. Based on these evaluations, the supervisor takes remedial action where and when necessary to correct the cause of such ponding, such as grading of the road surface to remove areas of ponding or installation of additional culverts if the road is causing excessive water ponding.

**7.1 Sedimentation Control**

The Sediment and Erosion Management Plan addresses in detail the actions that Agnico Eagle takes to monitoring and mitigating actions related to three specific periods of activity for Meliadine:

- Periods of construction near water – during construction and operation;
- Periods of freshet or significant runoff events – during construction, operation, and closure;
- Periods of potential impact to waterbodies – during operation.

**7.2 Watercourse Crossings Inspections and Maintenance**

The watercourse crossing inspection and maintenance program has three main components:

- A regular inspection program to identify issues relating to watercourse crossings, such as structural integrity and hydraulic function;

- An inspection program to track the impacts of large storm events on watercourse crossings, such as structural integrity and hydraulic function; and
- A culvert location inspection program to ensure that culverts have been installed in the right locations with respect to the watercourse and that culvert capacity is adequate to ensure that the culvert(s) pass the water under all hydraulic conditions. In most cases there will be multiple culverts installed at different elevations at each stream crossing to ensure that these culverts can adequately pass normal summer flows as well as spring freshet and heavy rainfall flows.

### **7.2.1 Regular Crossing Inspection and Maintenance**

Just prior to spring freshet, all culverts and stream crossings (including the bridge crossings at the Char River, lower Meliadine River and at the M5 Bridge (see Figure 1-1) will be inspected to confirm that they are in a state that will allow them to accommodate the rapid spring thaw that is seen in the north. During the freshet period, crossings inspections will be performed twice a week (mid-May through June) and weekly during the remainder of the ice-free period prior to fall freeze-up (July through October).

These inspection activities for each watercourse crossing will consist of:

- Visual inspection of its infrastructure to identify defects, cracks or any other risks to structural integrity. Particular attention will be paid to the inlet and outlet structures of culverts, and to bridge abutments and their foundations, as required;
- Visual inspection to identify sediment or other debris accumulation impeding the free flow of water through the crossings. Maintenance operations will consist of hand removal of accumulated debris and repairing damages as soon as possible; and
- Visual inspection of upstream and downstream channel to identify bed erosion or scour around the watercourse crossing structure. Particular attention will be paid to bridge abutments and abutment foundations as they will be vulnerable to scouring and erosion during flood events. Particular attention will also be paid to potential sources of sediment transport at the crossing.

Inspection results will be recorded by Agnico Eagle to help track changes in conditions over time. Maintenance operations will consist of undertaking remediation of any detected problems and repairing damage as soon as possible.

### **7.2.2 Archaeological Sites and Ice Buildup**

Potential ice buildup at the site of the lower Meliadine River bridge crossing can cause water to back up and flood important archaeological sites upstream from the bridge in the Iqalugaarjuup Nunanga Territorial Park. As a result, Agnico Eagle completes inspections (twice weekly) at the lower Meliadine River Bridge in the spring/early summer freshet period in order to take appropriate action in a timely

manner should ice buildup reach the point where archaeological sites are at risk of flooding. Agnico Eagle will work with the GN if additional measures are needed.

### **7.2.3 Event Crossing Inspection and Maintenance**

Inspection frequency will increase just after heavy or prolonged rainfall storm events. Visual inspection of each watercourse crossing will be completed to identify potential risks to the crossing's structural integrity, debris accumulation, and whether erosion and scouring have occurred. Water accumulation along the road will also be monitored. Results will be recorded by Agnico Eagle to help track changes in condition over time. The remediation of any detected problem and any necessary damage repairs will be undertaken as soon as possible, under the direction of Agnico Eagle's supervisor.

### **7.2.4 Culvert Location Inspection**

Following their installation, the culvert crossings were visually inspected to confirm they have been properly executed and installed. These culverts were installed during winter conditions and thus it is possible that a culvert will not be sited correctly to pass all ponding of water through the road. The road supervisor or designate checks for such conditions during the first snow melt and after rain events so that adjustments can be made accordingly. Additional culverts will be installed, if necessary, should the inspection indicate that the culverts were installed in a location that does not optimally route water flows.

## **7.3 Snow Removal and Snow Management – Winter Maintenance**

Sections of the Meliadine roads experience snow drifts because of strong winds over the winter period (e.g., Apache Pass). As much as possible, this snow is cleared to the downwind side of the road to limit the wind re-depositing the same snow on the cleared road. Routine spring snow management includes the removal of any snow that accumulates at bridges and culverts so that water at freshet can move freely through the culverts and under bridges. In the case of culverts, snow is removed from both ends but not from the inside.

Where snowmobile trails cross the road, snow clearing will be mindful of not placing snow on the trails thereby making crossing the roads easy.

The design of the AWAR factored in snow accumulation and this is one of the reasons the road is located along the height of land as much as possible and has a northerly alignment.

Dangerous ice formation on road surfaces, including the AWAR, is expected to occur periodically leading to their temporary closure until the roads can be graded and/or sanded. Road sanding and grading equipment is available at Meliadine to address icy road conditions.

## **7.4 Dust Suppression**

The Dust Management Plan addresses in detail the actions that Agnico Eagle takes to suppress dust generated by road traffic.



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**SECTION 8 • ROAD SAFETY**

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Agnico Eagle security personnel along with Agnico Eagle's supervisor monitor activity on all roads through radio contact with both staff at the gatehouse and drivers on the roads, and through periodic patrols of the roads. All Agnico Eagle and contractor vehicles that routinely travel on the roads are equipped with a radio set to the requisite road frequency (Section 6). This radio system is used to report any unusual conditions along the roads such as:

- Location of other Agnico Eagle vehicles;
- Presence of wildlife on the roadway;
- Presence of non-Agnico Eagle traffic such as ATVs, snowmobiles, or other vehicles;
- Non-Agnico Eagle vehicles broken down on the roads;
- Any unsafe practices noticed;
- Any special road conditions; and
- Any special weather conditions; etc.

Agnico Eagle works to develop partnerships with the residents of Rankin Inlet, community organizations, and government departments in developing rules of the road, and educating the non-Mine related users on road safety, on good driving practices, and on influencing people's behaviour on the roads. Emphasis is directed to the use of helmets, seat belts, observing the posted speed limits, improving one's visibility by wearing reflective clothing when on a snowmobile or ATV, not drinking and driving, dealing with driver inexperience, etc.

These are the same safety rules that apply to all users of the roads, including Agnico Eagle employees, Agnico Eagle contractor employees, and public users of the roads. The rules of the road include but not limited to the following:

- Maximum speed limits:
  - on AWAR: 50 km/h;
  - on the bypass road: 30 km/h;
- Use of seat belts by all drivers and passengers is mandatory;
- Driving under the influence of alcohol or intoxicating drugs is prohibited;
- Wildlife has right-of-way on the roads, and no harassment of wildlife is allowed;
- All hunting activity must avoid shooting across the road and should respect a safe shooting distance from the road (suggested at 1 km);
- Hunting is prohibited within 1 km of the AWAR and the Meliadine Mine;
- Vehicles are not to park on the travelling surface of the roads but pull off the road at a safe location such as passing turnouts to prevent accidents (passing turnouts are spaced approximately every  $400 \pm 50$  m along AWAR length); and

- No public traffic is allowed within mining areas; these are industrial work sites and, thus, non-Mine related vehicles are stopped at the gate when in operation. Signs are posted warning of an upcoming gate.

Agnico Eagle holds public information sessions in Rankin Inlet for users of the roads prior to the roads opening and on a regular basis thereafter (minimum of twice per year). The rules of the road and safety considerations are presented at these sessions, and modified if necessary based on broad and frequent consultation.

Agnico Eagle also uses other communication tools to get the road access procedures and rules of the road and safety considerations out to the public in Rankin Inlet. These include community radio, community TV, Facebook/Internet, postings around town, signage near Rankin Inlet indicating whether the AWAR is open, through the Project office in Rankin Inlet and via the Agnico Eagle Project website. The communication is in English, Inuktitut, and French.

Agnico Eagle has placed an emergency spill response sea can at km 7 and km 18 along the AWAR. The station has the necessary spill response supplies to address any spills that may occur along the road in an emergency situation.

### **8.1 Road Signage**

Agnico Eagle has posted appropriate road signs along the roads in both English and Inuktitut. Typically, signs advise drivers of the posted speed limit, of approaching bridges, of approaching curves, and/or areas of lower visibility (blind hills or obstructed curves).

English and Inuktitut signs are posted at the southern and northern ends of the AWAR, and at an appropriate mid-point to advise any public travelling by snowmobile or ATV that they are entering an area that may be potentially hazardous due to the presence of heavy vehicle traffic. This recognizes that snowmobiles and ATVs can enter and leave the road from any point along the roads. Signs are also posted to advise the public that they are approaching the gate at the northern end of the AWAR where public access is not allowed. This is just before entering the mine site, where heavy industrial activity and large vehicles can be expected. Both ends of the bypass road have automatic manually operated gate with signs indicating it is not open to public access.

Signs are also located at the bypass road, where it enters the AWAR, indicating that the bypass road is a private and restricted road for Agnico Eagle employees and contractors only. A sign also occurs at the start of the bypass road located at Itivia indicating that the bypass road is a private road.

Speed limit signs are posted at intervals of approximately every 5 km along the roads. Reflective flags or bollards are installed along one side of the roads to help drivers identify the road shoulder during blizzard, white-out conditions or dense fog. Typically, these are nominally set at intervals of 100 to 200 m apart. Kilometer markers are posted at intervals of at least 1 km along the roads.

A list of road signage on roads is presented in Table 8-1.

Table 8-1 Road Signage

| Element                               | Location                                                                       |
|---------------------------------------|--------------------------------------------------------------------------------|
| Safety precautions and users advice   | at the southern and northern ends of the AWAR, and at an appropriate mid-point |
| Stop signs                            | where required at road junctions                                               |
| Give way                              | at haul and service road junctions                                             |
| Blind hill                            | 200 m ahead of the beginning of a blind hill                                   |
| Speed limit                           | nominally at 5 km intervals                                                    |
| Curve                                 | 200 m ahead of a curve                                                         |
| Bridge announcement                   | 200 m ahead of a bridge                                                        |
| Bridge side sign                      | On each side of the bridge                                                     |
| Flexible delineators (flags/bollards) | nominally at 100 to 200 m intervals                                            |
| Kilometres markers                    | nominally at 1 km intervals                                                    |
| Private Road                          | Bypass road at Itivia and where the bypass road intersects AWAR                |

## 8.2 Policing of Rules of the Road

For privately operated roads, responsibility for “policing” will not fall to the RCMP. Responsibility for all operating and maintenance activity on roads rests solely with Agnico Eagle. For the access roads, Agnico Eagle concentrates on raising public awareness and commitment to road safety, and improving communication, cooperation, and collaboration among all stakeholders on the safe use of the roads. For all roads, all Agnico Eagle employees and its contractors who use the roads are required to take road safety training before being allowed to access the roads.

Agnico Eagle uses its supervisor and site security to monitor what is occurring on the roads. They monitor activity on the roads through radio contact with the staff at the gatehouse, through periodic patrols of the roads, and in conversation with drivers on the roads at the time. Agnico Eagle monitors speed limit infractions by direct observation of drivers seen driving too fast and by recording the time taken to drive between the Project and the Hamlet. Agnico Eagle also relies on radio contact with all Agnico Eagle and Agnico Eagle contractor vehicles on the roads to monitor unsafe conditions or activity. Agnico Eagle records unsafe practices, warns the person causing the infraction, and in severe or repeated cases of violation, removes all privileges for future access to the roads by an offending driver. In the case when Agnico Eagle is aware of unsafe or illegal activity on the road, the RCMP will be informed.

Regulatory inspectors can inspect the roads and any associated infrastructure at will. Agnico Eagle abides with the recommendations and directives provided by the inspectors.

However, the *Criminal Code* of Canada applies to private roads. For example, if an accident were to occur on a road and alcohol was involved, that person could be charged by the RCMP. Under their current mandate, while the RCMP is not responsible for policing of the AWAR as it is a privately operated road, the RCMP will have the right to access the AWAR at any time to investigate any accident or incident where they believe there is a need.

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**SECTION 9 • ACCIDENTS, SPILLS, MALFUNCTIONS, AND EMERGENCY RESPONSE**

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Emergency response is reactive whereas prevention lowers the frequency of incidents occurring requiring emergency response. Agnico Eagle's emphasis will be on the latter, while at the same time keeping resources nearby to respond to emergencies on the roads in a timely manner.

Three possible causes of road emergencies are the road, vehicle, and people. It is the interplay of these three elements that lead to either safe use of the roads or emergency response.

Agnico Eagle verifies its vehicles are in good working order prior to use. Agnico Eagle, however, has little influence on the condition of the non-Agnico Eagle owned vehicles that will use the AWAR. Vehicles could be poorly maintained and individuals could also make poor decisions such as using an ATV in winter when a snowmobile would be more appropriate. Nonetheless, Agnico Eagle will provide emergency assistance where the health or safety of people is at risk when travelling on the AWAR or on the land near Project facilities. Additionally, Agnico Eagle trains its employees and contractors on road safety and emergency response (first aid, firefighting, spill response, etc.). By educating and protecting its workers, they lead by example in road safety.

While Agnico Eagle feels it can successfully manage the condition of the AWAR and influence what vehicles use it, shaping an individual's responsible driving habits and attitudes to safety could prove more difficult. As a result, Agnico Eagle, in cooperation with Inuit organizations, authorizing agencies and others, will, to the best of its ability, implement all such measures necessary to protect public and mine traffic on all roads open to unrestricted public use. Responsibility and risk comes with driving on the AWAR and Agnico Eagle will:

- Impress on AWAR users that they should always remain aware of what is happening around them as they drive and make responsible decisions about hazards and problems;
- Highlight the environmental and human costs of irresponsible driving habits, and a driver's accountability for his/her decisions; and
- Repeatedly inform AWAR users of the rules of the road.

Agnico Eagle has educated the public on road safety, shaping good driving practices and influencing people's behaviour on the roads. Emphasis was directed to the use of helmets, seat belts, observing the posted speed limits, improving one's visibility by wearing reflective clothing when on a snowmobile or ATV, not drinking and driving, dealing with driver inexperience, etc. This also included encouraging all drivers to abide by the rules of the road to control speeds and advance considerate driving. Vests and buggy whips will be available for borrow at the gatehouse (km 10) when accessing the AWAR.

An Agnico Eagle trained site-based emergency response and spill clean-up team (see the Risk Management and Emergency Response Plan) are available on site with appropriate equipment to respond to all spills and road accidents. The Emergency Response Team (ERT) are trained in

emergency response (firefighting, first aid, mine rescue, spill response, vehicle accidents, etc.). In addition, emergency response equipment and spill kits are carried in all Agnico Eagle vehicles using the roads to improve response in the event of an incident or accident. This equipment includes emergency first aid equipment, and initial spill response equipment. Spill response is implemented by environmental staff who advise, document, and report on initial response and clean-up actions. The Spill Contingency Plan is activated in responding to a major spill. Minor spills are handled safely without the assistance of the ERT using initial spill response equipment carried in the vehicle. Major spills require the involvement of the ERT, who use spill response equipment and supplies maintained by Agnico Eagle at the mine site or from the two emergency spill response stations on the AWAR and/or at Itivia. In urgent circumstances, where appropriate, Agnico Eagle may request assistance from other parties in Rankin Inlet.

### 9.1 Accidents and Malfunctions

Agnico Eagle understands that accidents can occur, but the prevention and mitigation measures along the roads, emergency response planning, training, and preparation will substantially reduce the risk, frequency, and severity of such incidents. Agnico Eagle emergency response personnel are tasked with responding to any vehicle accident resulting in personal injury or spillage of harmful material. Agnico Eagle will initiate response and transport to medical assistance at the mine's health centre or Rankin Inlet's medical center. Agnico Eagle staff will follow the procedures in place in Risk Management and Emergency Response Plan. The types of accidents and malfunctions that may occur are as follows:

- Vehicle collisions that may result in personal injury and spillage of potentially harmful materials such as fuel, lubricating fluids, saline water, and antifreeze;
- Contact between vehicles and wildlife that may result in harm to wildlife, personal injury and spillage of potentially harmful materials;
- Single vehicle accidents that may result in personal injury and spillage of potentially harmful materials;
- Risk of people getting stuck on the roads in bad weather such as in blizzard, white out or dense fog conditions, or due to mechanical breakdown;
- Risk of accident due to an intoxicated or impaired driver on the roads; and
- Spills of harmful materials onto the land or into water through a vehicle rollover or tipping over.

Agnico Eagle reports all reportable incidents to the appropriate Government authority (e.g., Mines Inspector, RCMP, NWB, NU Spill Line, Environment and Climate Change Canada, GN Department of Environment, Fisheries and Oceans Canada [DFO], KivIA, and Hamlet of Rankin Inlet).

The following actions are to be taken in the event of an accident on the roads involving other vehicles (including ATVs), or in the event of an accident involving contact with wildlife such as caribou, muskox, bear, or wolf, the ERT will:

- Check the condition of people involved in the accident and provide immediate first aid if appropriate;
- Call the Meliadine road dispatch by radio and report the location and nature of the accident and indicate the type of assistance required (medical help, environmental cleanup, fire and/or mechanical help);
- Secure the accident site so that the vehicles do not continue to present a hazard to others. This may involve moving the vehicles to the nearest pull off in the event of a minor accident, or blocking off the road in both directions in the event of a more serious accident; and
- If safe to do so, secure the site to prevent continued spill or leakage of contaminants into the surrounding environment.

Upon receiving the accident call, the road dispatch will initiate the emergency response procedure passing along the information to the emergency response coordinator. The emergency response coordinator will then call out the required emergency response personnel to assist at the accident site.

Once the accident site is secured and all people requiring assistance have been removed to medical care, the emergency coordinator will turn the scene over to the mine's safety personnel so that an appropriate accident investigation can be initiated.

In the event of an incident involving contact with wildlife, the road dispatch will notify the site security personnel and the environmental representatives. Security and the site environmental team will then initiate an appropriate accident investigation. The Environmental Department will ensure that appropriate reporting of such incidents is done in a timely manner to the KivIA, the Kangiqliniq HTO, and the GN Conservation Officer in Rankin Inlet.

In the event of a serious accident, the RCMP will be contacted and advised of the incident. The RCMP will then decide on whether they will become involved or take the lead on any subsequent accident investigation.

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**SECTION 10 • WILDLIFE MANAGEMENT**

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Wildlife is occasionally expected to be observed on or near the AWAR, service, and haul roads. Caribou and other wildlife will have the right-of-way at all times. In case of problems (e.g., aggregations of caribou), the environmental personnel on-site will be in charge of managing the situation and, with the collaboration of the security department, will advise road users by patrolling the roads. Meliadine Mine personnel will be notified by dispatch radio if any wildlife is observed on the roads.

The following protocol is implemented on the roads for the protection of wildlife:

- Vehicle traffic speeds on the access, service and haul roads will be limited to 50 km/h and 30 km/hr on the bypass road;
- Where small to moderate aggregations of caribou (i.e., 1 to 50 animals) are observed within 100 m of a road, travel speeds are reduced to 30 km/h;
- Where large aggregations of caribou (i.e., 50 or more) are observed within 100 m of a road, the protocol outlined in section 10.2 is followed;
- Caribou and all wildlife are given right-of-way on the road: vehicles must stop until the animal is off the road;
- Locations of large aggregations of animals are reported to the road supervisor who will inform all potentially affected employees and the environmental representative, and put the protocol in Section 10.2 into effect. Agnico Eagle's environmental coordinator will then inform the KivIA, the Hamlet, HTO, and the GN Conservation Officer in Rankin Inlet;
- All incidents between vehicles and wildlife are reported to the Agnico Eagle road supervisor and the environmental representative whether they are:
  - Near-miss;
  - Collision with injury to the wildlife; or
  - Accidental death.
- Each incident is investigated by the road supervisor and the Environment Department, and measures taken to avoid re-occurrence are put in place. Disciplinary measures will be taken against any employee if the investigation concludes that the accident is the result of negligence; and
- In the case of accidental death of an animal, the Environmental Coordinator will contact the GN Conservation Officer in Rankin Inlet. The carcass will be removed from the road and incinerated to avoid attracting scavengers such as Arctic foxes, wolves, grizzly bears, and/or wolverines.

**10.1 Wildlife Monitoring Program**

Agnico Eagle has implemented a monitoring program to record on a systematic basis the prevalence of wildlife seen along the roads. This program is developed with the input of the local HTO and the



KivIA as needs change. The program is focused on caribou, muskoxen, bears, wolves, migratory birds, and raptors.

The current program consists of year-round weekly ground surveys of wildlife observed along the roads. The survey is logged and includes type of wildlife observed, estimate of numbers, and nearest kilometre marking along the roads. The data is aggregated and presented in the annual report for the mine. Complete details on wildlife monitoring can be found in the Terrestrial Environment Management and Monitoring Plan (TEMMP).

During caribou migration daily AWAR surveys are completed.

## 10.2 Road Management Agreement

Agnico Eagle has consulted with the GN, the KivIA, the KWB, local HTOs, and the public in developing appropriate monitoring and mitigation measures related to the ease in harvesting of caribou afforded by the AWAR. The result of these consultations are known as the Road Access Management Agreement that endorses the following measures:

- During periods when large aggregations of caribou (greater than 50 individuals) are detected within 1 km of the AWAR, the southern gate is closed to public vehicles. Public access using ATVs will still be allowed.
- In consultation with the KWB, as required under the *Nunavut Wildlife Act*, Agnico Eagle will seek the establishment of a no-shooting zone (1 km wide) on either side of the road. If the KWB, other agencies and the public are in agreement, AWAR use by hunters will be conditional on observing the 1 km no-shooting zone.
- Dedicated 'road monitors' patrol the road to ensure compliance relating to public safety and wildlife. Monitoring is increased during periods of road closure when large aggregations of caribou are present;
- All incidents of hunting involving shooting along or across the AWAR are reported by the Agnico Eagle to the GN.
- During periods when large aggregations of caribou are detected near the Project, harvest monitoring intensity is increased to properly document harvesting levels of caribou.

The Agnico Eagle supervisor, in consultation with the environment coordinator, or designate is responsible for ordering the southern gate shut and preventing the use of bridges by ATVs while large numbers of caribou remain on or near the AWAR. Similarly, the supervisor, in consultation with the environment coordinator, would open the southern gate and bridges to traffic once the caribou have moved on.

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**SECTION 11 • RECLAMATION**

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Reclamation of the access, service, and haul roads will follow the completion of all mining. Progressive reclamation will, in some instances, lead to roads being reclaimed after they are no longer needed. As described in the Interim Closure and Reclamation Plan, the access roads should be one of the last mining components to be reclaimed.

In most circumstances, the AWAR will continue to be open to public access during any temporary closure of the mine. The status of the road during such periods would be assessed by Agnico Eagle on a case-by-case basis. In general, if during the short-term or long-term shutdown period there is ongoing activity planned at the site, the AWAR would for the most part remain open to public access. However, if during the shutdown period there is no ongoing activity planned at the site, the road would not be maintained, thereby limiting public access to snowmobiles or tracked vehicles during winter and to ATVs during summer months.

The question as to how public use of the AWAR will be monitored and how road use rules and procedures will continue to be enforced during any short-term or long-term temporary closure of the mine has been raised as a valid concern.

- For short-term temporary closures (up to 12 months in duration), the AWAR would continue to be monitored, maintained and operated (enforcement of rules and procedures) in the same manner as those laid out in this Plan for normal operations; and
- For long-term temporary closures or for indefinite shutdowns (greater than 12 months in duration) where further site activity is being curtailed and the intention is that the mine will resume operations as soon as possible after the cause for the indefinite shutdown has been addressed, then AWAR monitoring, maintenance and enforcement activities would be significantly reduced. A decision on the estimated length of the indefinite shutdown would be made after the initial one year period. Decisions on possible extensions to the indefinite shutdown would be made every 6 months thereafter and would be based on the conditions at that time. At present, the maximum length of time or number of extensions for interim shutdown before moving to final closure has not been defined.

When further site activity is curtailed, a physical barrier would be established on the AWAR after the Meliadine River Bridge that prevents open public access by cars, trucks, or other motorized vehicles larger than an ATV. This would likely be a rockfill barrier with appropriate signage. During winter months, the road would not be kept open thus curtailing travel other than by snowmobile or tracked snow vehicle. In summer months, Agnico Eagle would continue to carry out environmental monitoring both along the AWAR and at the mine site but at a reduced frequency in accordance with its license/permit requirements. During these inspections, Agnico Eagle personnel would continue to monitor for inappropriate use of the AWAR and for conditions along the AWAR that could result in risk to public safety or to the environment (e.g., wash outs, erosion, plugged culverts, etc.). This would

include monitoring and addressing any unauthorized trails/access into the designated preservation zone of the Iqalugaarjuup Nunanga Territorial Park as discussed in Section 6.3 of this Plan.

For the permanent closure scenario and as outlined in the Interim Closure and Reclamation Plan, the AWAR will remain available for use during closure as access to the mining areas is required until post-closure and reclamation activities have been completed. The road surface will at this point be rehabilitated to promote natural re-vegetation, water crossings removed, and natural drainages re-established.

Agnico Eagle would like to emphasize that it has the responsibility of decommissioning and reclaiming all roads once construction, operations, closure, and post-closure activities are complete. For a third party to take over the road(s), that third party would have to complete its own arrangements with the landowners (the KivIA and the Hamlet) and then complete its own environmental assessment and permitting process covering future use. Agnico Eagle does not own the land on which the roads are constructed and, thus, cannot transfer future ownership or use privileges to any third party. Agnico Eagle must complete its obligation to decommission and reclaim all roads unless directed otherwise by a combination of the landowners and other regulatory agencies who issued permits/authorizations for the roads.

Decommissioning of the roads will start from the Meliadine Mine site and progress south towards Rankin Inlet and will include reclamation of the bypass road. Stream crossings will be rehabilitated as they are encountered during the progression of the work. The culverts and bridges, as previously mentioned, will be removed from the crossings using a backhoe and crane, and then removed materials (i.e., culvert steel, bridge decks, abutment steel, etc.) will be transported to Rankin Inlet using a semi-tractor and a low-boy trailer, for disposal and salvage.

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## REFERENCES

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- Agnico Eagle 2012. Monitoring Plan for the Phase 1 All-weather Access Road between Rankin Inlet and the Meliadine site;  
<ftp://nunavutwaterboard.org/1%20PRUC/2%20MINING%20MILLING/2B/2BW%20-%20Watercourse/2BW-MEL1215%20AEM/3%20TECH/9%20MONITORING/120119%202BW-MEL----%20Monitoring%20Plan-IMLE.pdf>
- Golder Associates 2010. Geochemical Assessment of Potential Road Construction Material, Meliadine Golder Project, Nunavut. Submitted to Agnico-Eagle Mines Limited. December 2010.
- Golder Associates 2011a. Phase 1 – Meliadine All-weather Access Road Project Description and Environmental Assessment.
- Golder Associates 2011b. All-weather Access Road, Meliadine Gold Project, Feasibility Level Design. Prepared for Agnico-Eagle Mines Ltd. January 2011. Report number 09-1426-0015/4700-085, Rev.1.
- Golder Associates 2011c. Technical memorandum preliminary snow drift assessment of Meliadine all-weather road from Rankin Inlet to Meliadine Site, Nunavut. Prepared for Agnico-Eagle Mines Ltd. 30 August 2011. Report number 11-1428-0011/9999-152 Ver. 0 Rev.1.
- GN (Government of Nunavut) 2014. Guideline: Dust Suppression on Unpaved Roads. Published by the Government of Nunavut Department of Environment.

**APPENDIX A • AGNICO EAGLE CONSULTATION ON THE ALL-WEATHER ACCESS ROAD**

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A chronological record is provided of the consultation undertaken on the routing of the AWAR between Rankin Inlet and the mine site.

| Date          | Location           | Parties involved and purpose of meeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2004/10/21    | Rankin Inlet       | Presentation on Project status to KIA Board of Directors with a request for a proposal of motion to support a future road from Rankin Inlet to the site.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2007/03/26    | Chesterfield Inlet | Presentation to the KIA Board of Directors on the proposed underground Program and 2007 Meliadine West exploration plans. Verbal Motion of Support from the Board                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2007/03/27    | Rankin Inlet       | Presentation of the proposed 2007 Meliadine West exploration program to the Rankin Inlet Community Lands and Resources Committee.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2007/03/28    | Rankin Inlet       | Presentation of the proposed 2007 Meliadine West exploration program to the Kivalliq Chamber of Commerce.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2007/03/28    | Rankin Inlet       | Town hall meeting - presentation of the proposed 2007 Meliadine West exploration program.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2007/07/04    | Rankin Inlet       | Briefing on Project status to Hamlet Council with specific discussions on road alignment and overwinter fuel storage in barge.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2007/07/04    | Rankin Inlet       | Elders Luncheon at Nunavut Arctic College. Project overview and immediate project plans for underground exploration was presented by Mark Balog with a slide show. Issues that were raised: <ul style="list-style-type: none"> <li>– employment opportunities for young people;</li> <li>– all-season road location and utility for other projects;</li> <li>– Soapstone from Newfoundland.</li> </ul> Attendees: Hamlet Elders including Mr/Mrs Tatty, Mr/Mrs. Itinuar, Mr/Mrs Kabvitok, Mrs. Pissuk, others: Comaplex Minerals: Mark Balog, Ben Hubert. Arranged by John Hickes. |
| 2009/05/06-08 | Rankin Inlet       | Multidisciplinary Advisory Group (MDAG), chaired by Bernie MacIsaac, INAC: all regulatory groups in attendance. Presented the Project and All-weather Road to regulators. Met regulators who will work on Project, including Jackson Lindell and Stephen Hartman, KIA, and Keith Morrison and Jorgan Aitaok, NTL.                                                                                                                                                                                                                                                                  |
| 2009/06/17    | Rankin Inlet       | Meeting with Manager CED (Robert Connelly) and Nunavut Transport (Alan Johnson) regarding proposal to access federal infrastructure money for the Meliadine River bridge and Comaplex fund the road. Visit to the bridge site.                                                                                                                                                                                                                                                                                                                                                     |
| 2009/06/18    | Rankin Inlet       | Discussion with Rankin Inlet Mayor John Hickes, the SAO, and several council members. Project update and proposed application for road and bridge funding.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2010/06/01    | Chesterfield Inlet | Mark Balog and John Witteman, Comaplex sponsored a town hall meeting providing an update on the Project and the building of an All-weather Road. The road would link to the planned road to Chesterfield Inlet.                                                                                                                                                                                                                                                                                                                                                                    |
| 2010/06/02    | Rankin Inlet       | Mark Balog and John Witteman, Comaplex sponsored a town hall meeting providing an update on the Project and the building of an All-weather Road. The meeting was particularly well attended and there were no objections to the routing to the All-weather Road. There were no objections to the proposed road alignment.                                                                                                                                                                                                                                                          |
| 2010/01/09    | Meliadine site     | John Witteman and Jacek Patalas (Golder Associates) met with Gary Cooper and Nicola Johnson of DFO to discuss fisheries habitat and compensation issues relating to the development of the Meliadine Gold Project. Discussions regarding compensation for road crossings were also discussed.                                                                                                                                                                                                                                                                                      |
| 2011/01/06    | Cambridge Bay      | Eric Lamontagne, Denis Gourde and John Witteman met with Ryan Barry, Kelli Gillard and one more staff member, NIRB, to describe the status of the Project and in particular the AWAR. Agnico Eagle described what had been done in regards to gathering baseline information for the road, regulatory permits required and use of the road (having it open access).                                                                                                                                                                                                                |
| 2011/02/07-09 | Rankin Inlet       | Larry Connell and John Witteman met with the Lands Division of KIA to discuss the road and other matters. A meeting with the HTO was cancelled due to a blizzard.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2011/03/01    | Rankin Inlet       | John Witteman, Bertho Caron and Selma Eccles of Agnico Eagle attended a meeting with the HTO, Rankin Inlet. The HTO raised a number of concerns with the route of the road, bridge location over the Meliadine River, wildlife monitoring along the road, plans for the Itivia port area, fish concerns with the bridge. Agnico Eagle talked to each of the concerns raised and were subsequently informed that the HTO Board was satisfied with the responses received                                                                                                            |
| 2011/03/23    | Rankin Inlet       | Denis Gourde, Eric Lamontagne, Larry Connell, Selma Eccles, John Witteman met with the Hamlet Council to describe the AWAR and ongoing activities at the Meliadine site. The Hamlet Council supports the All-weather Access Road and a letter of support can be expected. The underground program was explained and what is hoped to be gained from carrying out this work - getting needed information on the deep ore. The question of dust control was raised and lands available in town for development. The underground development was discussed.                           |

| Date       | Location                          | Parties involved and purpose of meeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2011/03/23 | Rankin Inlet                      | Denis Gourde, Eric Lamontagne, Larry Connell, Selma Eccles, John Witteman hosted a town hall meeting with the community to discuss the All-weather Access Road and the proposed mine. A PowerPoint presentation in English and Inuktitut was presented.<br>The meeting was well attended with over 100 persons present. The road is widely supported by the community as it offers access to Meliadine Lake and also is expected to lead to more economic activity. The question of jobs and careers was frequently raised and what must be done to get jobs such as supervisors and managers. Education was emphasized by Agnico Eagle as well as on-the-job training. Support was voiced for the road and the proposed mine.                                                            |
| 2011/04/07 | Iqaluit                           | Meeting with NIRB and NWB in Iqaluit during the Nunavut Mining Symposium. PowerPoint presentation was made on the proposed Meliadine AWAR and our application to amend our Type B water license to allow for construction of this road. Good exchange with NIRB and NWB pointing out omissions in what was presented.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2011/05/06 | Geovector, consultant to KIA      | AWAR – quarry locations and need to check for ground ice, geochemistry of the waste rock and potential quarries, snow drifting along road, design of culverts, lessons learned from Meadowbank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2011/06/06 | Cambridge Bay, Gjoa Haven Iqaluit | Presentation to NIRB, NWB, Regulatory Agencies in Iqaluit. Discussions on next steps in EA process, possible predevelopment activities, class A water licence, Agnico Eagle's use of municipal infrastructure, need to submit a land use permit for crown land to be crossed by the AWAR, quarries along road.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2011/06/14 | KIA, Mayor of Rankin Inlet        | Possible predevelopment, Hamlet motion to approve AWAR, build only 1 lane at this time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2011/10/31 | Rankin Inlet                      | Larry Connell and John Witteman met with the HTO. A PowerPoint presentation was made on the All-weather Access Road and developments at the Meliadine site. The HTO wanted to discuss the alignment of the AWAR to the Meliadine site and the arrangement of Agnico Eagle facilities at Itivia. A more southerly route was proposed by the HTO but Agnico Eagle indicated it was too long and had too many water crossings. The HTO want a role and contract in monitoring wildlife along the AWAR. The arrangement at Itivia was raised but Agnico Eagle did not have maps of the area. Discussion was deferred to the next meeting when Agnico Eagle would bring maps of Itivia and surrounding area. Agreement was reached on a ski-doo trail along the east side of the laydown area. |
| 2012/02/29 | Rankin Inlet                      | A public meeting with the community. The meeting covered the status of the Meliadine Project with emphasis on the planned construction of the Phase 1 AWAR between Rankin Inlet and the Meliadine Project site. Options for a bypass road around the Hamlet were presented with support for keeping Agnico Eagle traffic outside the community. Other topics touched on the fate of the existing Char River Bridge, the formation of a Liaison Committee for Rankin Inlet, plans for the Itivia area and employment opportunities in the building of the road.                                                                                                                                                                                                                            |
| 2012/04/18 | Iqaluit                           | Presentation made to the NIRB and the NWB on the proposed Meliadine All-weather Access Road and update on the exploration project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2012/08/16 | Rankin Inlet                      | Site visit of the Phase 1 AWAR by two representatives of the Hunters and Trappers' Organization. Progress on the bridges and road was viewed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2012/09/11 | Rankin Inlet                      | Site visit of the Phase 1 AWAR by KIA and CLARC representatives. Progress on the bridges and road was viewed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2013/06/21 | Rankin Inlet                      | Meeting was held with the hamlet and Government Services (GN) concerning the removal of the Char River Bridge, the Apache Pass, and the airport by-pass road.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2013/06/27 | Rankin Inlet                      | Presentation on Agnico Eagle exploration activities, Phase 1 AWAR and road access made to town council, community, Land and Resources, Hunters and Trappers' Organization, Kivalliq Inuit Association, NTI.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2013/07/10 | Rankin Inlet                      | Discussions were held with the Airport Manager and Government Services (GN) concerning the airport by-pass road.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2013/08/08 | Rankin Inlet                      | Meeting with town council, community, Land and Resources, Hunters and Trappers' Organization, Kivalliq Inuit Association, NTI on the Phase 1 AWAR and Road Access Policy – minutes are available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2013/11/06 | Rankin Inlet                      | Meeting with HTO Board explaining the status of the Project, Phase 1 All-weather Access Road, caribou migration, sewage treatment – minutes available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2014/05/29 | Rankin Inlet                      | Rankin Inlet Public consultation on the road access by ATV.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2016/05/05 | Rankin Inlet                      | Meeting with the KHTO to discuss the proposed joint Wildlife Monitoring Program to be conducted along the AWAR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2016/06/09 | Rankin Inlet                      | Meeting with Nunavut Airports, Government Services (GN) and the Hamlet to present the updated road route for the bypass road. The permitting process was also discussed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Date       | Location     | Parties involved and purpose of meeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2016/07/07 | Rankin Inlet | Meeting with the KHTO to discuss the proposed joint Wildlife Monitoring Program to be conducted along the AWAR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2016/08/25 | Rankin Inlet | Meeting with Nunavut Airports, Government Services (GN) and the Hamlet to provide an update on the bypass road design process and hear concerns. The permitting process was also discussed.                                                                                                                                                                                                                                                                                                                                                                                              |
| 2016/09/20 | Rankin Inlet | Meeting with KHTO to discuss signage erected on AWAR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2016/11/28 | Rankin Inlet | Pre-Hamlet Council meeting with Nunavut Airports, Government Services (GN) and the Hamlet to discuss the bypass road project. Pre-Council concerns were also shared by all parties.                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2016/11/28 | Rankin Inlet | Hamlet Council Meeting. Bypass road project presented to request support for the project by the Hamlet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2016/12/13 | Rankin Inlet | Hamlet Council Meeting. Bypass road project receives support from the Hamlet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2017/02/27 | Rankin Inlet | Hamlet Council Meeting. Bypass road project application for lease presented for approval by Council. Outstanding concerns discussed. Vote postponed.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2017/03/13 | Rankin Inlet | Hamlet Council Meeting. Bypass road project application for lease discussed. Agnico Eagle is requested to provide design for road extension.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2017/07/17 | Rankin Inlet | Meeting with SAO on dust control measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2017/07/18 | Rankin Inlet | Public meeting on Itivia, including bypass road.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2017/07/27 | Rankin Inlet | Information and consultation on Itivia Boat Launch and Johnson's Cove Boat Launch, dust control, road maintenance, bypass road, snowmobile trail, shooting range relocation, caribou migration and gravel pits.                                                                                                                                                                                                                                                                                                                                                                          |
| 2017/11/24 | Rankin Inlet | Visit of bypass road area with HTO and Elder representative. Discussed access for ski-doo and hunters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2018/06/05 | Rankin Inlet | Meeting regarding Cyanide attended by: Rankin Inlet Emergency Services, HTO, Health Centre, RCMP and Gun Club, Nunavut Parks, Airports and Government. Topics covered included: International Cyanide Management Code, Cyanide transportation to Meliadine, Health and Safety regarding Cyanide storage and community sharing of the draft Emergency Response Plan. Main outcomes: Department of defence will restrict access to their site during transportation, Agnico Eagle will provide shipping window and mock drill dates and Agnico Eagle will reach out to other Stakeholders. |
| 2018/06/13 | Rankin Inlet | Public meeting on Meliadine and Itivia project update, AWAR health and safety procedures and Caribou Management on the AWAR.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2019/07/31 | Rankin Inlet | Rankin Inlet Emergency Services, HTO and Government meeting regarding cyanide. Topics covered included: International Cyanide Management Code, Cyanide transportation to Meliadine, Health and Safety regarding Cyanide storage and community sharing of the draft Emergency Response Plan.                                                                                                                                                                                                                                                                                              |
| 2019/08/18 | Rankin Inlet | Rankin Inlet Public meeting regarding cyanide. Topics covered included: International Cyanide Management Code, Cyanide transportation to Meliadine, Health and Safety regarding Cyanide storage and community sharing of the draft Emergency Response Plan.                                                                                                                                                                                                                                                                                                                              |
| 2020/03/10 | Rankin Inlet | Meeting with GN Parks and Rankin Gun Club to provide information to organizations that are along the by-pass road on the waterline project, answer questions and receive feedback.                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2020/07/15 | Rankin Inlet | Meeting with by-pass road organizations, including GN Parks to discuss the waterline project, answer questions and give opportunity for feedback.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2020/08/11 | Rankin Inlet | Meeting with Rankin Inlet first responders regarding Cyanide transportation. Topics covered included: International Cyanide Management Code, Cyanide transportation to Meliadine, Health and Safety regarding Cyanide storage and community sharing of the draft Emergency Response Plan, use of the road during transportation, community announcements for road closure via radio and social media, temporary limited access to the road for cabin owners during transportation.                                                                                                       |
| 2021/02/18 | Rankin Inlet | Meeting with KHTO to discuss and provide updates on AWAR and Meliadine waterline project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2021/04/07 | Rankin Inlet | Meeting between Agnico Eagle Management and Rankin Inlet HTO to discuss on Community based monitoring program, Flags on the AWAR, TAG, Virtual Meeting Room for upcoming projects at Meliadine.                                                                                                                                                                                                                                                                                                                                                                                          |
| 2021/06/15 | Rankin Inlet | Meeting with Rankin Inlet Hamlet council and Rankin Inlet RCMP to provide an overview of proposed 2021 sealift and shipping season scenario and operation.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2021/08/17 | Rankin Inlet | Meeting with Rankin Inlet first responders regarding Cyanide transportation. Topics covered included: International Cyanide Management Code, Cyanide transportation to Meliadine, Health and Safety regarding Cyanide storage and community sharing of the draft Emergency Response Plan, use of the road during transportation, community announcements for road closure via radio and social media, temporary limited access to the road for cabin owners during transportation.                                                                                                       |