



NIRB File No. 11RN017

NWB File No.: 2BB-MEL0914

KIA File No.: KVRW11F02 and KVCA11Q01

20 June 2011

Kelli Gillard
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B0C0

RE: Clarification Requested for NIRB Screening of AEM's "All-Weather Road" Project Proposal

Dear Ms. Gillard,

Agnico-Eagle Mines Limited (AEM) is pleased to provide clarification on issues raised in your letter of 10 June 2011. In this we add to what was already written in the Project Description and in the more recent responses to the Information Requests.

AEM is continuing an active program at the Meliadine site, which includes camp operations; helicopter transport; and condemnation, geotechnical, exploration and resource conversion drillings. Added to this is the re-activation of the underground exploration and bulk sampling program. All this activity will increase AEM's knowledge of the site, and is being used in the feasibility study for the mine and in planning the underground program.

Your letter begins by noting an example where substantively countering information is presented in the Information Responses compared to the Project Description. What was written in the Project Description and the Information Response offers two perspectives on the same issue. The Project Description reflected the new transportation strategy for Nunavut, which would "*focus on improvements in the territory's regional centres and making connections between communities and nearby resources*".¹ This assumed that the Government of Nunavut would take responsibility for the road when AEM completes its Project(s), something that is not known at this time. In reality we do not know today whether the Government of Nunavut will ever build a road network connecting the Kivalliq Communities to each other and/or Manitoba. We also do not know what routing these potential road connections will follow if they are constructed. Thus we have no certainty that any part of the AEM proposed Meliadine all-weather access road will ever become part of a future Nunavut highway

¹ Statement by the director of transportation policy and planning with the Department of Economic Development and Transportation to CBC News May 2009. See also Ingirrasiliqta, Let's Get Moving: Nunavut Transportation Strategy. Objective 15

network. Thus we have to limit ourselves to what is known right now. Anything else is speculation. AEM has consulted with the Government of Nunavut on this issue and they are not in a position to advise us with any certainty in relation to the timing or final routing of any future Territorial roads in this area.

Analysis of need for, and alternatives to, the project

The scope and magnitude of the underground exploration and bulk sampling program remains unchanged from the original application submitted by Comaplex to the Nunavut Water Board on 25 February 2010. The extension of the underground work will run from 2011 to 2013 inclusive (it was mistakenly said to run from 2011- 2014 in AEM Response to Comments, page 57). The existing portal will be used. Underground work commenced in April - June 2011 with the machinery being reconditioned and the portal and decline being reactivated. The amount of mineralized and waste rock to be generated is approximately 10,000 and 300,000 tonnes, respectively. Originally 22,000 tonnes of mineralized rock were to be generated while the quantity of waste rock remains largely unchanged. The maximum depth of the decline extension remains approximately 400 m from surface and should remain within permafrost.

The only substantive change to the original underground application could be the placement of approximately 110,000 m³ of waste rock that will be generated in the ramp development. In Comaplex's application the waste rock was to be used to expand the pads to hold the mineralized rock and widening the roads at select locations. While the roads may still be widened, the pads have already been expanded using quarried till material. As a result the waste rock may be placed elsewhere. This will be influenced by the fact that the existing portal and pads may be within the footprint of the proposed Tiriganiaq open pit. Options are being explored in locating this waste rock in a location where it will not require moving it should the proposed mine be built.

As set out in the application, it is anticipated that 7.6 million litres of fuel will be used over the three year underground program². The underground by itself is expected to use some 1.2 million litres of fuel in 2011. In 2012 and 2013, 3.2 million litres are expected to be used each year. The statement in the Project Description for the road, "*A total of 2 million litres will be used in 2011.*" is unclear as it refers to all activities on site, not only the underground. Even so, other activities on site are using more fuel than anticipated and the original estimate was too low. The 2.5 million litres delivered to site over the winter road is proving to be insufficient for all activities. While the fuel use in the underground remains unchanged, that for other activities has expanded.

In 2010, six fuel tanks were constructed in Rankin Inlet having a combined storage capacity of 16.3 million litres. AEM plans to rent 9 million litres of space, should it not be needed by the hamlet.

² Although this is felt to be a good estimate based on previous underground activities, actual fuel use will be monitored throughout the program. Some deviation can be expected as actual fuel use by larger underground equipment in 2012 and 2013 is not known at this time.

Road Design and Safety Features

Safety was paramount in the road design and will be in its use.

As indicated, the south gate will not be manned but will on occasion be closed should conditions warrant. This could include deteriorating weather conditions, road maintenance, heavy site traffic and/or when wide loads are expected on the road. The community would be informed on community radio, emails, HTO, Hamlet office and/or on the AEM website should the road be closed to the public.

The location of the south gate will be near the start of the road. The ability to circumvent the gate will enter into the final decision on its location. The northern manned gate would be located near the end of the road between M25 and M27, just before entering the active exploration area. This gate is to prevent the public from inadvertently entering the Meliadine site where large equipment can be expected and could place the public in harm's way.

Flexible delineators (flags) with reflective markings will be placed at 100 metre intervals along the road. The same holds true for kilometre markers. Key haulage equipment operating on the road will be supported by radio. The road will not have any shelters due to its short length. However, a safety feature being incorporated is the installation of a cell tower to the North of Rankin Inlet, which will give cell phone coverage to the complete road. This will allow anyone to call for assistance should they be stranded on the road.

The road will be 8 metres wide but every 500 metres or so, the road width will increase to 11 metres for a length of 20 metres. This is of sufficient length to allow a B-train transport truck and smaller vehicles to pull off the road and still allow two-way traffic to continue. As a normal practice, wide loads would have vehicles leading and following the load with warning lights and signs.

All project vehicles using the road will be equipped with radios, safety provisions and equipment so that in the case of an emergency, major blizzards can be safely waited out at any point along the road. This would only be the last resort. In the case of an approaching blizzard the road will be closed and no travel allowed. The road will be maintained by AEM and/or its contractors to ensure timely delivery of freight for the underground program. Periodic patrols will be carried out by AEM security personnel. AEM will be meeting with the regulatory agencies (specifically the Mines Inspector and Safety Inspectors from the GN) to ensure that the proposed mitigation measures for the road are adequate to allow compliance with the Nunavut Mines Act and other Nunavut Health & Safety provisions. These provisions may apply to a mineral exploration road that is open to use by the public and, if necessary, may lead to other mitigation measures being developed with GN involvement.

A comparison of safety and operating features of the Meliadine and Meadowbank roads is provided in the following table.

Comparison of Operating & Safety Features of the Meliadine and Meadowbank Roads	Meliadine	Meadowbank
Open access road	Yes	No, closed access - approval by HTO required
Public education on use of the road	Yes	Yes
Bridges	Double Lane	Single Lane
Refuge Stations every 10 km	No	Yes
Turn outs at regular intervals	Yes, every 500 m the road will be 3 m wider for a length of 20 metres	Yes
Manned gate at South end	No - gate unmanned & closed if necessary	Yes
Manned gate at North end	Yes	Yes
Maximum Speed	50 km/h or less	50 km/h or less
Flexible delineators (flags) at 100 m intervals along the road	Yes	Yes
Kilometre markers each kilometre along the road	Yes	Yes
Radios in all AEM vehicles and at manned gate	Yes	Yes
Signage in English and Inuktitut	Yes	Yes
AEM vehicles supplied with safety provisions & equipment	Yes	Yes
Cell phone coverage over the road length	Yes	No
Road Section Method	No cuts, fill only	No cuts, fill only
Consultation on Road Operating Procedures	Yes - HTO, KIA, GN, Rankin Inlet	Yes - HTO, KIA, GN, Baker Lake
Maintenance	AEM or its contractors	AEM or its contractors
Transportation Management Plan	Yes - draft sent to KIA	Yes - Implemented
Spill Contingency Plan	Yes - to be updated to include the road	Yes
Periodic patrols of the Road by AEM personnel	Yes	Yes
Reporting unsafe use to AEM security	Yes	Yes
Only drivers holding a valid driver's licence for the appropriate class of vehicle can drive AEM & contractor's vehicles on the road	Yes	Yes
Posted signs of hazards along the road in English and Inuktitut	Yes	Yes
Wildlife management procedures for the road	Yes	Yes
Water quality sampling procedures for road water crossings	Yes	Yes

Road Use and Mine Development

The all-weather road was designed to support the underground program while at the same time keeping the proposed mine in mind. It was designed to generally accepted engineering standards for northern roads and these are the same whether the road is solely in support of the underground program or the proposed mine. As a result no changes are anticipated to the road should the mine be developed.

This is also why the cumulative effects outlined in the Project Description for the road deal specifically with cumulative socio-economic effects that could result should the mine be built. The information response on residual and cumulative effects is supplemental to that presented in the Project Description.

One environmental effect arising from the road would be the generation of dust from road traffic. The dust will settle down-wind leading to the early melting of snow along the road and this could negatively impact on vegetation. Mitigation measures will include the use of water and possibly other dust suppressants in key areas during the summer months, maintaining a speed limit of 50 km/hr or less for mine and contractor vehicles, and properly maintaining the road.

The spur road to the edge of Meliadine Lake follows 3.4 km of the future Discovery road. The geomorphology of the Discovery road alignment was completed earlier and it identifies potential site conditions, soil displacement hazards and possible aggregate sources. This information was used in the engineering design and will be used in future construction. A small end section of the road will deviate from the Discovery road alignment to the edge of Meliadine Lake. This location was selected as it ends on an esker that borders the lake and will allow one to easily launch a boat without banging it and the motor on rocks.

The vehicles listed on page 3 of AEM Response to Comments apply equally to the underground program and the proposed mine, not all of which will be devoted to the underground program. The number will undoubtedly increase should the mine be built and they may carry heavier loads. The road was designed to accommodate the larger number of vehicles and their loads. This will necessarily lead to greater road maintenance requirements during the construction and operation stages of the proposed mine.

The design for the three bridges to be installed on the road is based on Canadian Highway Code where the design is CSA, S6-06, CL-625. For design stress loads of two 18m long vehicles of GVW (gross vehicle weight) of 62,500 kg are considered travelling simultaneously on a bridge in opposite directions. The loading is factored by 40% dynamic allowance and another 60% safety factor. The rated capacity is around 125,000 kg. In the event that the mine is approved, this is adequate for the transport of all equipment and materials from Rankin Inlet to the Meliadine site.

In closing, AEM has attached a draft Transportation Plan that is presently being developed for the Kivalliq Inuit Association. It largely duplicates the same for the Meadowbank with differences relating to

location, length and access. Nonetheless it provides additional information on the operation of the road and the various steps to maximize the safe use by the residents of Rankin Inlet, and AEM and its contractors.

Should you have any questions or concerns, please do not hesitate in calling me at 819 277 5444 or jwitteman@agnico-eagle.com.

Yours sincerely,



John Witteman

C.c. Eric Lamontagne, Meliadine Project Manager,
Larry Connell, Corporate Director, Sustainable Development
Blandine Arseneault, Josée Noel, Sylvain Doire, AEM Environment