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November 19, 2014

Ryan Vanengen
Environment Superintendent
Agnico Eagle Mines Ltd. – Meadowbank Division
P.O. Box 540
Baker Lake, NU X0C 0A0

Sent via email: ryan.vanengen@agnicoeagle.com

Re: The Nunavut Impact Review Board's 2013-2014 Annual Monitoring Report for the Meadowbank Gold Project and Board's Recommendations

Dear Ryan Vanengen:

The Nunavut Impact Review Board (NIRB or Board) is hereby releasing its 2013-2014 Annual Monitoring Report for Agnico Eagle Mines Ltd.'s (AEM) Meadowbank Gold Project (Monitoring Report) along with the 2014 Site Visit Report for the NIRB's monitoring of the Meadowbank Gold Project (NIRB File No. 03MN107) (included as Appendix I to the Monitoring Report). The enclosed Monitoring Report is based on the NIRB's monitoring activities as set out within the Meadowbank Gold Mine Project Certificate and Sections 12.7.1 and 12.7.2 of the Nunavut Land Claims Agreement. This report provides findings that resulted from monitoring of this Project that took place from October 2013 to September 2014.

By way of a motion carried during its regular meeting held in October 2014 the Board has issued the following recommendations to assist AEM in achieving compliance with the Meadowbank Gold Mine Project Certificate and to ensure that the NIRB has all information necessary to adequately discharge its mandate with respect to provisions within section 12.7 of the NLCA as such pertain to the Meadowbank Gold Project.

Acid rock drainage/metal leaching – Project Certificate Condition 15

Condition 15 requires that AEM re-evaluate the characterization of mine waste materials to confirm FEIS predictions and to re-evaluate rock disposal practices. Within its 2013 Annual Report, AEM provided a description of its sampling of blast holes for sulphur and carbon to differentiate non-potentially acid generating materials from those that are potentially acid generating as well as its testing methods for metal leaching. It appeared that no discussion had been provided comparing predictions made in the FEIS and the results of AEM's current sampling. Furthermore, it was unclear how the results of the tailings sampling were used to re-evaluate rock disposal practices in order to incorporate preventative and control measures into

the Waste Management Plan. There was also no discussion on how systematic sampling of waste rock was incorporated into the Plan.

Recommendation 1: Recognizing that AEM has re-evaluated the characterization of mine waste materials, the Board now requires that it provide a comparison of its results with the FEIS predictions and an explanation of how it re-evaluated rock disposal practices in order to incorporate preventative and control measures into the Waste Management Plan. It is requested that this information be provided to the NIRB within AEM's 2014 Annual Report.

Spills – Project Certificate Condition 26

Condition 26 requires that AEM ensure that spills, if any, are cleaned up immediately and that the site is kept clean of debris. As reported in the 2014 Site Visit Report, the Monitoring Officer observed that spill pads and drip pans were not in use during refueling of vehicles. AEM staff informed the NIRB that the re-fuelling area was lined and that materials therein would be disposed of during reclamation and closure.

Recommendation 2: The Board recommends that in addition to the standard spill kits (barrels) AEM has available on site, it also employ the use of additional standard spill containment equipment such as drip pans at all re-fuelling stations. It is requested that a response outlining AEM's plan of action to address this recommendation be provided within 30 days of receiving this correspondence.

Gathering of Traditional Knowledge – Conditions 39 & 40

Condition 39 requires that AEM hold annual community information meetings in Chesterfield Inlet and respond to concerns. AEM noted in its 2013 Annual Report that it held meetings in the community of Chesterfield Inlet in 2013 to discuss different topics including shipping. Furthermore, while a summary of a meeting held on May 8, 2013 with AEM and the Hamlet and HTO of Chesterfield Inlet was provided, no indication of a wider community-level meeting was provided. Also pursuant to Condition 39, while consultation reporting is to be provided to the NIRB's Monitoring Officer within one month of any such meeting; no reporting outside of AEM's Annual Report (received in April 2014) has been received in respect of this Condition and pertaining to community meetings in 2013.

Condition 40 requires that AEM report annually to the NIRB and the Kivalliq Inuit Association on traditional knowledge (TK) gathered from local Hunters and Trappers Organizations and workshops held in Chesterfield Inlet. Following the 2012-2013 monitoring period, the Board found that AEM was not in compliance with Condition 40 and on November 27, 2013 requested that it report on further Traditional Knowledge gathered in its future annual reporting as submitted to the NIRB. In AEM's January 7, 2014 response to the Board, and in its 2013 Annual Report submitted in April 2014, AEM indicated that it held an IQ workshop in Chesterfield Inlet in 2010 and that there was no change in the TK reported to AEM during meetings held in 2012 and that as a result it concluded that no operational changes were necessary. However the NIRB found no information was provided in AEM's 2012 or 2013 Annual Reports regarding any additional TK collected from residents of Chesterfield Inlet on marine mammals, cabins, hunting and other local activities in the Inlet. While the NIRB acknowledges that within the May 8, 2013 meeting minutes there was discussion about the future development of a hunter harvest study with collaboration between AEM and the Chesterfield

Inlet Hunters and Trappers Organization, the Board also notes that TK may change and evolve over time and that as such, it is important that AEM continue to collect and report on TK regarding wildlife and local activities to accurately understand traditional land use and potential impacts of the project on various components of the environment. Considering that the Project is now well into its operations phase and that marine mammals, hunting, and other local activities may have changed throughout the Project life thus far, determining changes to local knowledge and concerns is essential.

Recommendation 3: The Board strongly encourages AEM to undertake additional workshops in Chesterfield Inlet and Baker Lake to annually gather Traditional Knowledge at both the community level and from the Chesterfield Inlet and Baker Lake HTOs. It is requested that a response be provided to the NIRB within 30 days of receiving this correspondence, and that applicable follow-up be included within AEM's 2014 Annual Report to the Board.

Participation in Surveys – Conditions 51 & 54

AEM noted that there were less participants in its 2013 Hunter Harvest Study as compared to the 2012 study, and that the recorded caribou harvest was less than had been indicated by the last four years of collected data. AEM suggested that the lower reported harvest numbers of caribou within five kilometres of the AWAR collected through its 2013 Hunter Harvest Study could be attributed to participant fatigue and a decrease in participant response rate rather than a decrease in wildlife abundance, although it was unsure how the decline in participants had affected the results. In addition, AEM's results of creel surveys as presented within its 2013 Annual Report indicated that study participants were less willing to travel long distances to catch fish, regardless of AWAR access. AEM noted that "based on the number of reported trips in the 2013 creel survey, it appears that fishing effort is decreasing, or, as observed with the hunter harvest study, study participation and reporting rates could be on the decline". The NIRB appreciates AEM's efforts to engage local harvesters and encourages it to continue this work, however notes that additional measures may be needed to better understand caribou and creel populations within the LSA.

Recommendation 4: The Board recommends that AEM consider increasing its efforts to participate in other regional population level studies carried out by the HTO, GN or other agencies to better understand Project-related effects on caribou and creel populations around the Local and Regional Study Areas. It is requested that additional information regarding its efforts and relevant results of further studies be provided within AEM's 2014 Annual Report.

Provision of Updated Information – Condition 56

Condition 56 requires that AEM place maps of updated caribou migration paths in site offices and upgrade these as new information on corridors becomes available. During the NIRB's 2014 site visit to the Meadowbank site, it was noted that while a map of caribou migration routes was posted at site, the site mapping was based on 2010 migration paths and had been previously submitted as part of AEM's 2011 Annual Report. Furthermore, it remains unclear whether or how information collected from consultation with Elders and local HTOs had been incorporated into the development of the mapping, as data sources were noted as being based on satellite and GPS survey data.

Recommendation 5: The Board requests that updated maps as presented within AEM's 2013 Annual Report be posted at site and that AEM provide details to clarify whether and how information collected from consultation with Elders and local HTOs has been incorporated into the updated mapping. It is requested that a response be provided to the NIRB within 30 days of receiving this correspondence.

Socio-economic Monitoring – Condition 64

Condition 64 requires that the Proponent develop a Meadowbank socio-economic program. Both the GN and AANDC acknowledged AEM's participation within the Kivalliq Socio-Economic Monitoring Committee (SEMC) within their respective review of AEM's 2013 Annual Report, but indicated that this may not fulfill the requirements of Condition 64. The NIRB notes that AEM could provide more comprehensive project-specific data with the development of a project specific monitoring program as envisioned by this Condition.

Recommendation 6: The Board requests that AEM provide the NIRB with its progress to date in developing a project-specific socio-economic monitoring program, and that this is provided within 30 days of receiving this correspondence.

Recommendation 7: The Board requests that future reporting on socio-economic data include a breakdown of the types of positions held by Inuit beneficiaries and non-Inuit Nunavummiut at the Meadowbank site. It is requested that information be provided in AEM's 2014 Annual Report.

Recommendation 8: The Board requests that future reporting on socio-economic data in AEM's post-environmental assessment monitoring program include percentages of the most common reasons reported for employee voluntary termination. It is requested that information be provided in AEM's 2014 Annual Report.

Recommendation 9: The Board requests that AEM report on its pre-apprenticeship program, including: enrollment numbers; successful completion rates; and how many successful participants found employment with AEM or, if known, other opportunities. Each of these details should include a breakdown of Inuit beneficiaries and non-Inuit Nunavummiut. It is requested that information be provided in AEM's 2014 Annual Report.

Monitoring of Country Foods – Condition 67

Condition 67 requires that the Proponent monitor contaminant levels in country foods in consultation with Health Canada (HC). In 2012, the Board invited HC to provide comments on the wildlife screening level risk assessment (WSLRA) and the preliminary quantitative risk assessment reports prepared by AEM in order to meet the requirements of Condition 67, and to indicate whether or not additional information may be required with respect to the monitoring program. HC indicated that it was unable to provide comments on the WSLRA report as it did not possess the relevant expertise in the areas of modeling emissions and deposition, environmental transport, fate and/or contaminant uptake by plants or wildlife (country foods) and suggested that another department may have the expertise necessary to review the WSLRA.

Recommendation 10: The Board requests that AEM and authorizing agencies, including the Government of Nunavut, Environment Canada, and Health Canada, confirm whether

each has the necessary expertise and/or jurisdiction to comment on AEM's wildlife screening level risk assessment. It is requested that this information be provided within 30 days of receiving this correspondence.¹

Air Quality Monitoring – Condition 71

Condition 71 requires that the Proponent conduct annual air quality monitoring and report its results to the NIRB. AEM conducted its second study of dustfall along the AWAR to determine whether impacts predicted in the Final Environmental Impact Statement were being exceeded. AEM noted that while it had conducted a 'more robust' dustfall study in 2013, the results had been compromised as a result of disturbance to sampling canisters. AEM explained that data from only seven of the 35 canisters (plus four duplicates) could be collected and analyzed as the other 28 had been knocked over during the data collection. Although AEM noted that it would conduct a third dustfall sampling program in 2014, after addressing the support system of the canisters, it did report that data collected along the AWAR and nearer to the Meadowbank site were at levels within range of the commercial/industrial levels pursuant to Alberta Environment's ambient air quality guideline. AEM again noted that although some of the successful results of the dustfall study indicated levels that exceeded some of the nuisance guidelines published by Alberta Environment along the AWAR and at the mine site, total dustfall rates were generally less than those measured at the Ekati Diamond Mine, where no change in vegetative communities was reported. AEM also noted that there were no observed impacts to water quality along the AWAR. The NIRB notes AEM's conclusion that there is less dust present along the AWAR than predicted in the FEIS, however is hesitant to accept this conclusion with confidence, given the limitations to sample collection as reported by AEM, noting that of 35 canisters set out to sample, only 7 were fit for analysis.

Recommendation 11: The Board requests that AEM provide study results which corroborate its conclusions, and that it undertake additional sampling in the 2014 year and run additional analyses with the data collected. It is requested that AEM provide study results corroborating conclusions within the 2013 Annual Report within 30 days of receiving this correspondence and that it report on additional sampling in the 2014 year within its 2014 Annual Report.

On-site Incinerators – Condition 72

Condition 72 requires that the Proponent conduct annual stack testing of the on-site incinerators to demonstrate that they are operating in compliance with the required standards. Similar to the NIRB's review of AEM's 2012 Annual Report, upon review of the available 2013 Incinerator Daily Report Logbook, the NIRB notes that the incinerator temperature in the secondary chamber was below the recommended 1000 °C temperature on several occasions. It was previously noted by EC that the incinerator temperatures in the secondary chamber should be above 1000 °C to ensure complete combustion and to minimize the formation and release of contaminants. A number of entries into its Daily Report Logbook were also missing, with no data entered as to burn temperatures recorded. AEM noted within its 2013 Annual Report that per its discussions with EC, incinerator stack testing would be undertaken every two years, and that it would conduct stack testing again in 2014.

¹ Note that AEM is not responsible for a response to this recommendation.

Recommendation 12: The Board requests that AEM provide an explanation for the incinerator having not achieved recommended temperatures in the secondary chamber on multiple occasions in 2012, and that it provide a note of any discussions it has had with Environment Canada or other regulators regarding these occasions. It is requested that this be provided within 30 days of receiving this correspondence.

Recommendation 13: The Board requests that Environment Canada provide comments on the information contained within AEM's 2013 Incinerator Daily Report Logbook, including whether it agrees to the continuation of biennial incinerator stack testing, given the reported instances of lower than optimal secondary chamber burn temperatures and the number of daily log insertions that were missed within its 2013 Incinerator Daily Report Logbook. It is requested that this be provided within 30 days of receiving this correspondence.²

Suppression of surface dust – Condition 74

Condition 74 directs the Proponent to employ environmentally protective techniques to suppress any surface road dust. During the 2014 site visit, AEM confirmed that no dust suppressants were currently in use along the all-weather access road (AWAR). AEM noted in its 2013 Annual Report that dust suppression techniques have been limited to haul roads at the mine site, and between the Meadowbank and Exploration Camp sites. Dust suppression measures in use by AEM at these areas were noted to include liquid calcium chloride at the onsite roads and water along the airstrip. The NIRB recognizes the efforts made by AEM to suppress dust around the Meadowbank and Exploration Camp sites, however reminds AEM of commitments made during the NIRB's Review of the Meadowbank project and furthermore, of condition 74 of the Project Certificate which requires the application of dust suppression measures along project roads. The NIRB notes that AEM has been in non-compliance with this condition since the Project entered operations, as no dust suppression measures are employed along the AWAR from Baker Lake to the site.

Recommendation 14: The Board reminds AEM that its Access and Air Traffic Management Plan (2005) indicated that dust control measures on the roads, including the AWAR, would include regularly watering during the dry periods and the application of calcium chloride if necessary. The Board requests that AEM provide a plan of action for dust suppression along the AWAR during dry periods to be undertaken during 2014 and all remaining years of Project life. It is requested that a response be provided within 30 days of receiving this correspondence.

Accidents and Malfunctions – Condition 75

Condition 75 requires that the Proponent provide a complete list of possible accidents and malfunctions for various Project components which includes an assessment of the accident risk and mitigation developed in consultation with Elders and potentially affected communities. In its 2013 Annual Report, AEM complied with most of this condition, including the provision of a list of possible accidents and malfunctions, although it is unclear in the submitted management

² Note that the Board will be inviting Environment Canada to comment on this matter under separate cover, and that AEM is not responsible for a response to this recommendation. It has been included here for information only.

plans whether and how these were developed in consultation with Elders and potentially affected communities.

Recommendation 15: The Board requests that AEM provide within its 2014 annual reporting, further discussion as to how various management plans relating to accident risk and mitigation have been developed in consultation with Elders and potentially affected communities.

Appendix D and the Annual Report

Within its 2013 Annual Report, AEM provided a detailed analysis of results from its 2013 monitoring program and compared observed impacts to predictions made within the FEIS. AEM's evaluation focused on the valued ecosystemic components (VECs) that had been identified in the FEIS, including the aquatic environment, the terrestrial and wildlife environment, noise quality, air quality, permafrost and socio-economics. The NIRB acknowledges that AEM has worked to improve upon its reporting of findings within its post-environmental assessment monitoring program (PEAMP). The NIRB appreciates the general clarity of the presentation of information in AEM's tables, but found that the discussion and analysis within the PEAMP could have been more comprehensive, particularly as related to observed effects, accuracy of predictions and monitoring protocol and mitigation measures. Furthermore, given the current presentation of data, it was difficult for the NIRB to ascertain whether trends of effects over time may be resulting from, or associated with, the Meadowbank Project.

Recommendation 16: The Board clarifies for AEM that as a part of its reporting on the post-environmental assessment monitoring program (PEAMP), references are to be made with respect to observed impacts over time, and furthermore, the Board requests that the Proponent include in future reporting, a measurement of the effects of the project as well as information used to reach any relevant conclusions.

Recommendation 17: The Board requests that the Proponent continue to provide tables as presented in its 2013 discussion of the PEAMP and that it further include columns identifying project-related effects or measurement values as predicted within the FEIS for each VEC or VSEC, as well as observed measurement values and/or effects as noted in the previous and current monitoring years (e.g., in its 2014 Annual Report, AEM should include data on effects observed and/or measured values in 2013 and 2014 in addition to values and effects as predicted within the FEIS).

Recommendation 18: The Board requests that the Proponent provide a summary description of any changes between proposed monitoring measures as included within its FEIS and the measures it has actually employed within its evaluation of the effectiveness of project monitoring procedures and plans.

Noise Quality Monitoring

In 2013, the Board requested that AEM provide a discussion regarding the potential impacts of noise to human health at site. AEM anticipated that project-related noise levels would decrease with increasing distance from noise monitoring stations at site, and noted that it would continue to conduct annual monitoring at stations located at various distances from the mine footprint area. Within its 2013 Annual Report AEM noted that noise related health impacts to on-site

workers would be under the purview of the Health and Safety department and should not be discussed under the environmental monitoring program.

Within its comment submission regarding AEM's 2013 Annual Report, the Government of Nunavut (GN) noted that it disagreed with AEM's conclusion that the Project did not exceed the threshold in Section 4.4.2.2 of the Terrestrial Ecosystem Management Plan (TEMP), specifically that mine related activities would not preclude caribou and muskoxen from using suitable habitats beyond 500 metres (m) of mine buildings, facilities and roads. The GN further noted that the presence of caribou within this 500 m buffer is not indicative of the Project having had no noise-related effect on wildlife and recommended that AEM further investigate mine related disturbance. AEM responded to the GN's comments on noise related effects on wildlife and noted that its noise target levels are based on recommendations made by Environment Canada's "Environmental Code of Practice for Metal Mines". It further noted that as no equilibrium sound pressure levels (Leq) in 2013 exceeded target sound levels of 55 decibels (dBA) during the daytime and 45 dBA during the nighttime, that mine activities did not preclude caribou from using suitable habitat near the mine site.

Recommendation 19: The Board requests that AEM confirm which agency or government department oversees its noise related health impacts on-site, particularly as related to Condition 62 of the NIRB Project Certificate, and what, if any, monitoring and reporting of these impacts are required. It is requested that this information be provided within 30 days of receiving this correspondence.

Recommendation 20: The Board encourages AEM and the Government of Nunavut to work together to investigate mine related disturbance on caribou and wildlife and report back to the NIRB on the progress of these discussions. It is requested that a response be provided within 90 days of receiving this recommendation. The Proponent is expected to include any further investigation into noise monitoring within its annual reporting to the NIRB.

General Clarification

In Table 7.1 of its 2013 Annual Report regarding spills, AEM did not include the unit numbers for quantities of spills which makes it difficult to provide consideration of these incidents.

Furthermore, the NIRB noted potential discrepancies and ambiguity within AEM's 2013 Annual Report as to which of the four monitoring locations were used for noise sampling. For instance, in Table 8.37, results were provided from monitoring stations R2, R3, R4, and R5 while in the discussion of its Post Environmental Assessment Monitoring Program, AEM discussed sound levels relating to monitoring stations R1, R2, R3, and R5.

Relating to the AWAR, Condition 32 (c) of the Project Certificate requires that the Proponent post signs in English and Inuktitut at the gate, each major bridge crossing, and at every 10 kilometres along the road, stating that unauthorized public use of the road is prohibited. The Monitoring Officer observed that no signage was present on the sea-can at the bridge crossing located at approximately kilometre 23.

Recommendation 21: The Board requests that AEM provide a revised Table 7.1 from its 2013 Annual Report which includes units of each spill incident. It is requested that this revised table be provided within 30 days of receiving this correspondence, and that in future years, AEM ensure that similar tables presented within its annual reporting include

quantitative measurements or other essential details to enable clear understanding of materials presented.

Recommendation 22: The Board requests that AEM clarify within its future annual reporting which sampling sites are included as reference sites only, which are active sampling sites, and which were not included in data collection. Discussion within its post environmental assessment monitoring program (PEAMP) should also provide a clear description of results, ensuring that any anomalies or changes to the monitoring program are identified.

Recommendation 23: The Board reminds the Proponent to ensure that signs are posted at each major bridge crossing, in both English and Inuktitut, and that the sea can at kilometre 23 be outfitted with appropriate signage. It is requested that a response outlining action taken by AEM with respect to this recommendation be provided within 30 days of receiving this correspondence.

The Board respectfully requests that for items requiring follow-up action by AEM that a response be provided within the timeline as requested for each of the recommendations.

Should you have any questions or require further clarification regarding this request or related to the NIRB's monitoring program for the Meadowbank Gold Mine Project, please contact me directly at (867) 983-4606 or hrrasmussen@nirb.ca.

Sincerely,



Heather Rasmussen, M.Env-EIA
Meadowbank Gold Project Monitoring Officer
Nunavut Impact Review Board

cc: Stéphane Robert, Agnico Eagle Mines Ltd.
Meadowbank Gold Distribution List

Enclosure: The Nunavut Impact Review Board's 2013-2014 Annual Monitoring Report for the Meadowbank Gold Project