



Memorandum

Date: July 21, 2015

To: Luis Manzo (KIA), Maria Serra (KIA)

From: Richard Nesbitt (HESL), Andrea Smith (HESL), Neil Hutchinson (HESL)

Re: J150077 – Meliadine Water Licence Completeness Review

As requested by the Kivalliq Inuit Association (KIA), we have completed our completeness review of the Water Licence application submitted by Agnico Eagle Mines Ltd. (AEM) to the Nunavut Water Board (NWB): 2AM-MEL---Application for Type 'A' Water Licence, Meliadine Gold Project; Agnico-Eagle Mines Ltd. Our review focused on ensuring AEM's application provided sufficient information for a full technical review and conformed to the minimum requirements of the NWB. The latter relied on the "150513 2AM-MEL---Master Concordance Table Meliadine Type A Water Licence-IMLE".

We have proceeded with our conformity check with a further focus on the following seven questions necessary to ensure we can complete a full technical review of AEM's application:

1. Has AEM tried to harmonize its AEMP with the requirements outlined under the Metal Mining Effluent Regulations (MMER) for Environmental Effects Monitoring (EEM)?
 - *Yes, AEM has worked to harmonize the AEMP with EEM requirements. This has been presented in the AEMP Design Plan and includes harmonization of study design and reporting.*
2. Has the effluent plume in Meliadine Lake resulting from the diffuser been properly documented?
 - *Yes, AEM has outlined the diffuser design in Appendix E of the Water Management Plan. Rationale for each input into the plume delineation model, CORMIX, was not provided. This issue is raised in KIA-WL-09.*
3. Have effluent quality limits been described, their derivation been outlined and has AEM proved they can be met using proven technology?
 - *The effluent quality limits have been described and their derivation is contingent on meeting specific water quality criteria at the edge of the mixing zone. The Actiflo water treatment plan will be used to reduce TSS in effluent discharges; AEM has not indicated a need for further water treatment; dilution will be sufficient to meet the proposed discharge criteria at end of pipe.*
4. Have effluent limits been set for all contaminants of potential concern (COPC)?
 - *Most COPCs have associated discharge criteria. We note that site specific water quality objectives were developed for fluoride, arsenic and iron but only arsenic has an effluent limit set.*

5. Is the site water balance robust and does it address climate change?
 - *The site water balance does not appear robust nor does it appear to address climate change. Please see KIA-WL-03 for more details.*
6. Has a list of key internal monitoring points been provided with accompanying rationale?
 - *Yes, this has been provided in Section 9 of the Water Management Plan.*
7. The Kivalliq Inuit Association raised several issues during their Environmental Impact Statement Review which were to be covered in the water licence application. Several of these issues have not been fully addressed.
 - *FEIS-KIA-IR 22: Assimilation Modelling in Meliadine Lake. See KIA-WL-09.*
 - *FEIS-KIA-IR-23: Fate of Overburden and Potential Use for Closure. See KIA-WL-01 and KIA-WL-02.*
 - *FEIS KIA-IR-29: KIA-FEIS: Historic mercury fish tissue samples and global mercury cycling. See KIA-WL-12.*

Over the course of our review, we have also generated a preliminary set of information requests and technical comments focusing on the following sections of AEM's application:

- ❖ Type A Water Licence Main Application Document
- ❖ Water Management Plan
- ❖ Aquatic Effects Monitoring Program (AEMP) Design Plan 6513 -REP-03
- ❖ Preliminary Closure and Reclamation Plan

A complete list of comments will be provided in our full technical review.

At this point, we generally accept that AEM's application for a Type 'A' Water Licence for the Meliadine Gold Project is complete, with the exception of the aforementioned issues. We would like to thank the NWB for granting the KIA this extension and note our review was completed within the constraints of a relatively short timeline; Hutchinson Environmental Sciences Ltd. (HESL) received the request for review from the KIA on June 16, 2015 with a deadline of July 21, 2015. We are nevertheless confident remaining technical issues can be addressed in the next stage of the permitting process acknowledging that further documentation will be provided by AEM in response to information requests submitted by the KIA and other interveners.

We hope this memo meets your current needs. Should you wish to discuss our comments and concerns, please do not hesitate to contact Richard Nesbitt (richard.nesbitt@environmentalsciences.ca) or Neil Hutchinson (neil.hutchinson@environmentalsciences.ca). We would be happy to answer any questions you may have.



1. Technical Comments and Information Requests

1.1 Segregation of Overburden

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-01 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Segregation of Overburden |
| References: | Main Application Document p.38, p.64-65, Water Management Plan p.18, Section 3.3.3. Appendix G Section 4.2, FEIS-KIA-IR-23 |
| Issue / Concern or Information Deficiency and Rationale: | <p>AEM has indicated the “<i>results of geochemical characterization indicate that the overburden produced is NPAG, and leachate concentrations are generally lower than waste rock and meet MMER monthly mean limits.</i>” However, AEM further indicates “<i>Waste rock and overburden have compatible geochemical characteristics such that overburden material can be managed together in the same disposal facility.</i>”</p> <p>The proponent only commits to “<i>explore the feasibility and practicality of topsoil/organic matter salvage as part of phased approach to Project development, with updates to its Closure and Reclamation Plan to reflect any changes based on this investigation.</i>” At present, the proponent plans to store overburden and waste rock together in waste rock storage facilities (WRSFs) within the project footprint.</p> <p>However, the proponent also states “<i>An engineered cover will be progressively placed on the surface of the tailings storage facility. The proposed cover includes a 0.5 m thick of overburden followed by a layer of 2.5 m thick waste rock. The overburden material placed is intended to limit runoff water infiltration into the tailings.</i>” This suggests that the overburden can be applied sequentially with the waste rock, which would only be possible if they are stored separately.</p> |
| Technical Comment/ Information Request: | <p>The proponent should clarify how they intend to store overburden and waste rock on site. If overburden materials are not stored in the WRSF then it is less likely they will be frozen and can then be used for revegetation.</p> <p>AEM should include their specific plans to investigate the feasibility and practicality of segregating overburden during construction for use at closure within the Preliminary Closure and Reclamation Plan for intervenor review.</p> <p>The proponent should commit to segregating the overburden throughout the project life for use at closure. This does not necessarily require the 3m tailing cap (indicated in the Water Management Plan) to increase in depth, rather ensure 2.5m of waste rock and 0.5m overburden are applied sequentially to the dry stack tailings rather than collectively.</p> |



1.2 Additional Cover Material and Re-vegetation

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-02 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Neil J. Hutchinson, Hutchinson Environmental Sciences Ltd. |
| Subject: | Additional Cover Material and Re-vegetation |
| References: | Main Application Document p.38, p.64-65, Water Management Plan p.18, Section 3.3.3. Appendix G Section 4.2, Closure and Reclamation Plan p. vii, , FEIS-KIA-IR-23 |
| Issue / Concern or Information Deficiency and Rationale: | <p>The proponent states: <i>“All disturbed site areas will be re-graded to suit the surrounding topography. In areas where the original ground surface was lowered for site grading or structural requirements, the slopes will be stabilized and contoured. Cover materials may be required for erosion and dust control. It is anticipated that a succession of indigenous plant species will naturally re-vegetate the surface over time.”</i></p> <p>However, we note that the goals outlined in the Closure and Reclamation Plan do not mention re-establishment of vegetation as a closure objective or the subject of monitoring.</p> <p>This appears to run counter to AEM’s admission that the project will result in <i>“Potential [residual] vegetation effects...relating to the use of water or disposal of waste include the potential loss or alteration from the waste rock, ore, and tailings storage facilities and the general construction/operation of the mine.”</i></p> <p>Segregated overburden can be used at closure to mitigate potential residual effects to vegetation by encouraging natural re-establishment of the plant community on site over time.</p> |
| Technical Comment/ Information Request: | <p>Please indicate the source of overburden and cover material referenced here in the Closure and Reclamation Plan. Importantly, will additional land need to be disturbed to obtain this or will AEM provide segregated storage for overburden produced during construction?</p> <p>Furthermore, please provide commentary on the expected timelines for re-establishment of a) grasses, b) woody shrubs and c) lichens with reference to examples from Arctic climates.</p> |



1.3 Water Balance Assumptions

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-03 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Water Balance Assumptions |
| References: | Main Application Document p.79, Water Management Plan Appendix B |
| Issue / Concern or Information Deficiency and Rationale: | <p>The proponent has chosen to calculate the site-wide water balance under a mean precipitation year scenario for “<i>CP1 to CP6, Tiriganiaq Pit 1, Tiriganiaq Pit 2, water in the underground mine operation, make-up water for the mill, water for the WTP, and freshwater from the mine construction to mine closure</i>”. Use of the mean does not account for varying degrees of infiltration associated with greater and lesser magnitude precipitation events, nor does it account for the response of various water management and reclamation infrastructure.</p> <p>We are further concerned that modeling was conducted on precipitation data and runoff conditions based on average conditions at Rankin Inlet from 1982 to 2009, which does not include climate change predictions.</p> <p>We acknowledge that the “<i>water management infrastructure will be designed to handle a 1 in 100 wet-year spring freshet</i>”, but this does not provide sufficient confidence in the water balance provided. We assert that the water balance can be equally influenced by unusually wet conditions as well as dry conditions. AEM has not provided full details of the water balance in the Water Management Plan and thus a full review cannot be completed to assess whether it is sufficiently robust.</p> |
| Technical Comment/ Information Request: | <p>The proponent should include a full list of assumptions and supporting rationale as well as all results for the site water balance in the water licence application. The water balance should be calculated under at least three scenarios: mean precipitation, 1:100 precipitation and under drought conditions.</p> <p>We further request the proponent expressly state how climate change scenarios have been incorporated into the site water balance; the mean precipitation and runoff conditions at Rankin Inlet between 1982 and 2009 may not adequately represent conditions under future climate change scenarios differing from the status quo.</p> |



1.4 Incorporation of Inuit Qaujimajatuqangit into Monitoring Activities

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-04 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Incorporation of Inuit Qaujimajatuqangit into Monitoring Activities |
| References: | Water Management Plan P3, Section 1.5 |
| Issue / Concern or Information Deficiency and Rationale: | The proponent states <i>“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.”</i> AEM has demonstrated that IQ concerns regarding the project effects have been considered in the Water Management Plan, summarized in Section 1.5 of the Plan. These concerns briefly indicate that IQ has been incorporated into mine design and planning. The plan does not however, indicate how IQ has been incorporated into ongoing monitoring activities. |
| Technical Comment/ Information Request: | Please provide a discussion on how IQ has been incorporated into the monitoring activities associated with the water management plan. |



1.5 Saline Groundwater Inflows

| Comment Source: | Kivalliq Inuit Association | | | | | | | | |
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| Information Number: | KIA-WL-05 | | | | | | | | |
| Project: | Meliadine Gold Project WL | | | | | | | | |
| Comment From: | Kivalliq Inuit Association | | | | | | | | |
| Comment For: | Agnico Eagle Mines Limited | | | | | | | | |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. | | | | | | | | |
| Subject: | Saline Groundwater Inflows | | | | | | | | |
| References: | Water Management Plan p.28, sec 4.4.7.2, Appendix F, Main Application Document p.31 section 3.2.3., NIRB T&C #25. | | | | | | | | |
| Issue / Concern or Information Deficiency and Rationale: | <p>The proponent outlines volumes of saline groundwater projected to flow into the underground works in Table 4.5:</p> <table border="1"> <caption>Table 4.5 Estimated Rates of Passive Groundwater Inflow to Underground Mine</caption> <thead> <tr> <th>Year</th><th>Estimated Passive Inflow (m³/day)*</th></tr> </thead> <tbody> <tr> <td>Yr -5 to First Quarter of Yr -3</td><td>0</td></tr> <tr> <td>Second Quarter of Yr-3 to End of Yr-3</td><td>420</td></tr> <tr> <td>Yr -2 to Yr 7</td><td>526</td></tr> </tbody> </table> <p>AEM states: “A hydrogeological investigation program is planned for 2015 and 2016, which will provide additional information on potential volumes and quality of the saline groundwater to be managed.”</p> <p>We note that a saline water management plan was requested from the NIRB as Term and Condition (T&C) #25; Appendix F of the Water Management Plan does not provide full details for the management plan. Mean salinity of groundwater below the permafrost which will infiltrate the underground workings is approximately 57,000 mg/L. The volume and concentration of the groundwater indicate that T&C #25, the saline water management plan, should be fully developed prior to issuance of the water licence.</p> <p>We agree with AEM’s preferred option, ocean disposal, but require more information to fully assess this option. One primary concern arises from AEM’s statement that “<i>excess underground water will be treated for TSS and metals, and pumped to a surface tank for temporary storage prior to being trucked to a discharge facility at Itivia Harbour.</i>” We request that AEM also treat these discharges for nutrients, particularly nitrates, and oil and gas residue due to blasting and contact with machinery.</p> | Year | Estimated Passive Inflow (m ³ /day)* | Yr -5 to First Quarter of Yr -3 | 0 | Second Quarter of Yr-3 to End of Yr-3 | 420 | Yr -2 to Yr 7 | 526 |
| Year | Estimated Passive Inflow (m ³ /day)* | | | | | | | | |
| Yr -5 to First Quarter of Yr -3 | 0 | | | | | | | | |
| Second Quarter of Yr-3 to End of Yr-3 | 420 | | | | | | | | |
| Yr -2 to Yr 7 | 526 | | | | | | | | |
| Technical Comment/ Information Request: | AEM should provide full details of the saline water management plan in the water licence application. Full details including volume and discharge criteria should be provided for the preferred disposal/treatment option. | | | | | | | | |



1.6 Site-Specific Water Quality Objective Derivation

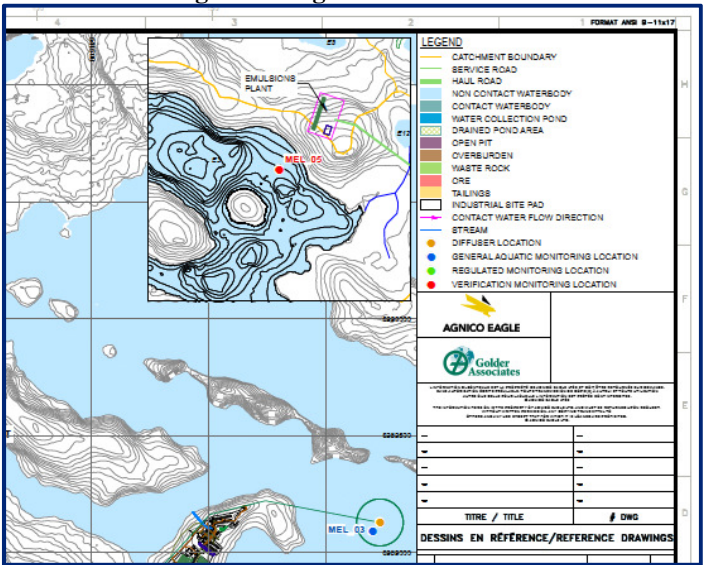
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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-06 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Site-Specific Water Quality Objective Derivation |
| References: | Water Management Plan p.46 Section 8.3., Appendix H Table 302 |
| Issue / Concern or Information Deficiency and Rationale: | <p>AEM states that “<i>The long-term, post-closure water quality in the Project ponds and in the flooded open pit lakes are anticipated to meet MMER limits and CCME water quality guidelines for the protection of aquatic life (CCME-WQG) or the SSWQOs developed for the Meliadine site for aluminum, fluoride, and iron. Arsenic concentrations in CP4 could slightly exceed the [site-specific water quality objective] SSWQO post-closure, a criteria that is conservatively protective of the receiving aquatic environment (Golder, 2013a).</i>”</p> <p>While the exceedances of a calculated SSWQO may be minor, it can only be deemed non-significant if the SSWQO has been appropriately derived. AEM has not included the derivation methodology for any SSWQO for review in the application.</p> <p>This also applies to discharges to Meliadine Lake via the diffuser.</p> |
| Technical Comment/ Information Request: | Please provide a discussion of how all SSWQOs used for the project were derived. This should specifically include the Golder, 2013a reference ¹ . We note that the CCME SSWQO derivation protocols ² are the preferred methodology. |

¹ Golder. 2013a. *Site specific Water Quality Objectives (SSWQO) Assessment – Meliadine Gold Project, Nunavut. Document 371. Report to Agnico-Eagle Mines Ltd. February 22, 2013. 57 p.*

² Canadian Council of Ministers of the Environment. 2003. *Canadian water quality guidelines for the protection of aquatic life: Guidance on the Site-Specific Application of Water Quality Guidelines in Canada: Procedures for Deriving Numerical Water Quality Objectives. In: Canadian environmental quality guidelines, 1999, Canadian Council of Ministers of the Environment, Winnipeg.*



1.7 Mixing Zone Water Quality Monitoring

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-07 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Mixing Zone Water Quality Monitoring |
| References: | Water Management Plan p.48 Section 9 Table 9.1, AEMP Design Plan Figure 2-1., p.50 Section 9.2. |
| Issue / Concern or Information Deficiency and Rationale: | <p>Only one mixing zone site is provided for the project near the diffuser (MEL_03). The effluent is not discharged into a river where one site downstream would be sufficient to capture the impact to the receiving environment. Wind (particularly in an area prone to high winds) and flow effect mixing zone dynamics limit the capacity of a single monitoring station (MEL_03) to appropriately monitor the mixing zone and assimilative capacity of Meliadine Lake.</p> <p>Subsection of AEMP Design Plan Figure 2-1</p>  <p>A minimum of three sites around the discharge point are recommended to characterize the impacts to the receiving environment and capacity of the mixing zone to assimilate the effluent. This is based on the assumption that <i>“The Mine will be operated so that water quality objectives are met at the edge of the mixing zone in Meliadine Lake and the Project does not have a significant adverse effect on opportunities for traditional and non-traditional use of fish, and the health of aquatic life, and human health.”</i></p> <p>We note that <i>“The monitoring programs summarized [in the AEMP Design Plan] are provisional, and both the regulated monitoring program and verification monitoring program, including monitoring parameters, frequency, and reporting, will be further developed through the water licencing process.”</i> We will provide further design recommendations in our full technical review.</p> |
| Technical Comment/Information Request: | Please provide two additional monitoring sites around the diffuser or sufficient rationale why a single monitoring station is sufficient to characterize the receiving environment at the edge of the mixing zone for discharges to a lake. |



1.8 Sample Locations at Rankin Inlet

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-08 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Sample Locations at Rankin Inlet |
| References: | AEMP Design Plan, Environmental Management and Protection Plan |
| Issue / Concern or Information Deficiency and Rationale: | No water sampling locations are provided around Rankin Inlet. The hamlet port will be the primary shipping route and monitoring should be included to assess potential impacts from shipping. Potential impacts may arise from, for example, ballast water exchange and spills. |
| Technical Comment/ Information Request: | Please add aquatic sample locations around Rankin Inlet to the AEMP Design Plan and provide specific discussion on the management of aquatic invasive species. This may be provided as a standalone management plan or a subsection to the Environmental Management and Protection Plan. |



1.9 Plume Delineation Model Assumptions

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-09 |
| Project: | Meliadine Gold Project FEIS |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Plume Delineation Model Assumptions |
| References: | Water Management Plan Appendix E Table 2.2-1, Appendix H Table 3-2., FEIS KIA-IR-22 |
| Issue / Concern or Information Deficiency and Rationale: | <p>The effluent plume was delineated using CORMIX as outlined in Appendix E of the Water Management Plan. We approve the conservative approach applied which accounted for the $\pm 50\%$ accuracy of CORMIX by dividing the dilution at the edge of the mixing zone (100 m) by 2. However, we are concerned by the validity of some of the inputs to the model. For example, a maximum wind speed of 15 m/s was assumed which corresponds to 54 km/h. This is not realistic in an area that regularly experiences wind speeds of over 100 km/h.</p> <p>We also note that under ice modeling has not been provided as per FEIS KIA-IR-22.</p> |
| Technical Comment/Information Request: | Please provide a discussion on the appropriateness of each input to the CORMIX model for review. This may impact the proposed end of pipe discharge criteria presented in Appendix H if inputs are not found to be sufficiently conservative. |



1.10 Quality Control Responses

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-10 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Quality Control Responses |
| References: | AEMP Design Plan p.34 Section 5.1.5.2.1. |
| Issue / Concern or Information Deficiency and Rationale: | AEM states it will collect duplicate samples and assess them using a 20% relative percent difference (RPD) threshold. However, no discussion is provided on how data violating this QA/QC threshold will be handled. High quality data is essential for accurately monitoring the receiving environment. Standardized protocols for QA/QC data that violate established thresholds are essential to prevent low quality data from being considered alongside data that accurately reflect the sampled environment. |
| Technical Comment/ Information Request: | AEM should provide a discussion on how data will be handled if the 20% RPD threshold is violated. Please provide a discussion on what criteria will be used to disqualify the inclusion of, for example: single parameters, discrete samples and sampling events. |



1.11 Significance Thresholds for Water Quality, Sediment Quality, and Fish Tissue Chemistry

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-11 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Significance Thresholds for Water Quality, Sediment Quality, and Fish Tissue Chemistry |
| References: | AEMP Design Plan Section 8.3 |
| Issue / Concern or Information Deficiency and Rationale: | The discussion of significance thresholds only focuses on potable water, fish consumption and vaguely on ecological function. The discussion of ecological function specifies, “ <i>Significance thresholds are not defined for water quality, sediment quality, and fish tissue chemistry as they relate to ecological function. Action levels are defined for these components [elsewhere]. These endpoints provide early warning indication of potential adverse effects to plankton and benthos (which are food for fish), to fish health, and to the maintenance of ecological function.</i> ” This does not address water quality, sediment quality and fish tissue chemistry as valued ecosystem components (VECs) in their own right. |
| Technical Comment/ Information Request: | Please provide significance thresholds for water quality, sediment quality, and fish tissue chemistry as standalone VECs. This should be accompanied by a discussion of specific changes in the receiving environment that necessitate progression through the adaptive management response framework. |



1.12 Fish Tissue Baseline

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-12 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Richard A. Nesbitt, Hutchinson Environmental Sciences Ltd. |
| Subject: | Fish Tissue Baseline |
| References: | FEIS KIA-IR-29, AEMP Design Plan Section 8.4 |
| Issue / Concern or Information Deficiency and Rationale: | <p>The KIA requested as part of the FEIS review process that AEM conduct a survey to collect fish tissue chemistry to provide a recent baseline dataset; this fish tissue baseline was over 10 years old and not necessarily appropriate for use as the site baseline.</p> <p>Table 8-2 indicates fish health will be assessed in part by examining “<i>statistically significant differences in fish health endpoints or fish tissue chemistry that are beyond the normal range</i>”. This normal range relies on a robust baseline which at this point does not exist. Table 8-2 indicates some benchmarks used in the AEMP will be set once “<i>supplemental baseline data are collected</i>”. AEM has not indicated additional fish tissue baseline data will be collected in the AEMP, a commitment by AEM as part of its response to FEIS KIA-IR-29.</p> |
| Technical Comment/ Information Request: | Please collect additional fish tissue data to update the baseline prior to issuance of the water licence. |



1.13 Additional Supplemental Information Guidelines

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-13 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Andrea L. Smith, Hutchinson Environmental Sciences Ltd. |
| Subject: | Landfarm and on-site storage of hydrocarbon contaminated soil |
| References: | Master Concordance Table 3.0 General Water Licence Application Section No. 15 d |
| Issue / Concern or Information Deficiency and Rationale: | <p>The proponent is required to provide information on any other Supplemental Information Guidelines that apply to the undertaking, including a landfarm and on-site storage of hydrocarbon contaminated soil. AEM has indicated that information about a landfarm is not applicable because <i>“This activity is currently not planned”</i>. The Main Application Document, however, has several sections pertaining to the design, creation and use of a landfarm, including:</p> <ul style="list-style-type: none"> ✿ Section 4, p. 43, 2nd paragraph: <i>“A landfarm will be constructed on-site to treat soils contaminated with light hydrocarbons”</i> ✿ Section 4.2.2 Proposed Site Infrastructure ✿ Section 4.2.7.3 Landfarm ✿ Section 7.7 Landfarm Management ✿ Appendix B, Table 4.6 Landfarm Design Criteria |
| Technical Comment/ Information Request: | Please indicate in the Concordance Table all sections of the Water Licence Application that refer to a landfarm and provide the requisite documentation. |



1.14 Plans for Abandonment and Restoration

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| Comment Source: | Kivalliq Inuit Association |
| Information Number: | KIA-WL-14 |
| Project: | Meliadine Gold Project WL |
| Comment From: | Kivalliq Inuit Association |
| Comment For: | Agnico Eagle Mines Limited |
| Reviewer: | Andrea L. Smith, Hutchinson Environmental Sciences Ltd. |
| Subject: | Plans for Abandonment and Restoration |
| References: | Master Concordance Table 3.0 General Water Licence Application Section No. 45 |
| Issue / Concern or Information Deficiency and Rationale: | <p>Section No. 45 indicates that the proponent is required to provide plans for the abandonment and restoration of the project, including detailed costs to carry out the plan, and a proposal for financial assistance to cover these costs.</p> <p>The information provided by AEM does not indicate the estimated costs of the plan, nor include information for how these costs will be covered.</p> |
| Technical Comment/ Information Request: | Please provide detailed information on the anticipated costs of the abandonment and restoration components of the project, as well as plans for addressing these costs. |

