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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

File Nos: **2AM-MEL1631**  
**2BB-MEL1424**

September 15, 2020

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**RE: NWB Technical Review of the 2019 Annual Report for the Meliadine Project; Water  
Licences Nos: 2AM-MEL1631 and 2BB-MEL1424**

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Dear Ms. Savoie:

The Nunavut Water Board (NWB or Board) has completed its technical review of the 2019 Annual Report submission provided to the Board by Agnico Eagle Mines Limited (Agnico Eagle or Licensee) to fulfill the requirements of Part B of Water Licences Nos: 2AM-MEL1631 and 2BB-MEL1424. This submission was provided to the Board on April 14, 2020 and subsequently amended on April 30, 2020 to address the comments provided by the Nunavut Impact Review Board (NIRB). Upon receipt, the submission was distributed for public review and comments.

Copies of all documents received during public review can be accessed through the NWB's Public Registry and FTP site using the following link:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEL1631%20Agnico/3%20TECH/B%20GENERAL/2%20ANNUAL%20RPT/2019/>

The final amended submission included the following updated management plans:

- Water Management Plan – Version 9, March 2020
- Groundwater Management Plan – Version 5, April 2020
- Mine Waste Management Plan – Version 6, March 2020
- Ore Storage Management Plan – Version 2, March 2020
- Explosives Management Plan – Version 6, March 2020
- Blast Monitoring Plan – Version 2, March 2020

- Ammonia Management Plan – Version 2, March 2020
- Noise Abatement and Monitoring Plan – Version 3, March 2020
- Air quality Monitoring Plan – Version 2, April 2020
- Oil Pollution Emergency Plan – Version 3.1, April 2020
- Meliadine Mine Plan –January 2020
- Ocean Discharge Monitoring Plan– Version 2, July 2019

On April 14, 2020, the NWB distributed the 2019 Annual Report and additional associated information for public review with a deadline for comments set at June 15, 2020 and later extended to July 6, 2020 at the request of the Kivalliq Inuit Association (KivIA). On July 6, 2020, comments were received from the KivIA, Crown-Indigenous Relations and Northern Affairs (CIRNA) and the Environment and Climate Change Canada (ECCC). The table below summarises the issues and recommendations provided by the interveners and the NWB as part of the Report review. Please note that the KivIA and ECCC provided a combined list of comments for both the NIRB and the NWB. Therefore, only the comments pertaining to the Water Licence requirements were included into the table below. For a full list of issues raised by the interveners, please refer to the NWB public registry at the link referenced above.

No.	Concerns/ Recommendations	Response Deadline
Kivalliq Inuit Association (KivIA)		
1.	<i>Total Dissolved Solids (TDS) and Drawdown of Collection Pond 1 (CP1)</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Elaborate on why the TDS discharge criterion at MEL-14 was not met resulting in the failure to complete drawdown of CP1 in 2019;</li> <li>• Take steps to address the identified problem to ensure future adherence to the 1,400 mg/L discharge criterion outlined in the Water Licence while still drawing down CP1 by the fall of each calendar year.</li> </ul>	
2.	<i>Water Quality and Water Balance Model</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Update Water Quality and Water Balance Model to include sensitivity analysis accounting for higher concentrations of key parameters including TDS in contact water, greater inflows of saline groundwater within the underground, and wet year scenarios that exceed the 95 percentile as calculated from measurements collected at the ECCC Rankin A weather station (should be calculated based on a period of record that includes measurements collected after the last iteration of the water balance model);</li> <li>• Develop specific adaptive management strategies within the scope of the existing Water Licence and Project Certificate that can be used to mitigate potential impacts to the environment and circumvent the need for future project certificate and water licence amendments</li> </ul> <p>Also, see comment #3 from the NWB.</p>	

3.	<i>Nutrient Enrichment in Meliadine Lake</i>	March 31, 2021
	<ul style="list-style-type: none"> <li>• Provide appropriate mine staff with additional guidance to help minimize nitrogenous blasting residues and subsequent loading to Meliadine Lake;</li> <li>• Include additional considerations into blasting practices to limit nitrogen loading to the receiving environment from blasting residue (keep blasting materials dry prior to ignition).</li> </ul>	
4.	<i>Nutrient Concentrations vs. Phytoplankton Biomass</i>	March 31, 2021
	Include soluble reactive phosphorus or orthophosphate in the list of parameters assessed at both MEL-13 and MEL-14, and use those concentrations in addition to TP to evaluate the relationship between nutrient concentrations and phytoplankton biomass.	
5.	<i>Discrepancies in TSF and Waste Rock Volumes</i>	October 9, 2020
	Clarify the total volume of tailings and waste rock placed in the Tailings Storage Facility (TSF) in 2019 (there are discrepancies in values reported for total volume of tailings placed in the TSF, and waste rock placed as progressive cover material, between the text and tables in the Annual Report).	
6.	<i>Non-reportable Spills</i>	October 9, 2020
	Provide the missing information on (i) how the number of non-reportable spills compares to previous years, (ii) what ultimate action was taken to manage the April 16 fuel spill, and (iii) what hazardous material was spilled on May 19 in Cell 6 TSF. This information should be provided in all future Annual Reports.	
7.	<i>Reportable Spills and Follow-up Reports</i>	March 31, 2021
	Ensure consistency in reporting for all reportable spills, by providing government spill report forms for all spills, reporting numbers for all spills, and organizing spill reports in chronological order (e.g., April reports appear in April and December).	
8.	<i>Report # 19-171 – Spill into Lake B7</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Explain what steps will be taken to prevent lengthy delays in responding to and reporting on spills in the future;</li> <li>• Discuss how effective the delayed clean-up efforts were at removing oil from lake B7. Given that clean-up efforts did not start until eight days after the spill, how does Agnico Eagle know that the absorbent pads removed all the oil from Lake B7?</li> </ul>	
9.	<i>Report # 19-169 – Spill into Lake B7</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Explain what steps are being taken to avoid heat from drills melting ice on waterbodies where work is being conducted. Has Agnico Eagle considered only operating drills on ice below a certain temperature to minimize this risk?</li> <li>• Describe how spill reporting requirements are communicated to contractors to avoid delays in reporting to regulatory authorities, and what follow-up is in place to ensure compliance.</li> </ul>	

10.	<i>Report # 19-346 – Discharge to Sea Exceedance</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Provide more details on the in-house analysis conducted to determine that discharge could resume on September 24, including results of the in-house acute lethality tests;</li> </ul> <p>Also, see comment #5 from the NWB.</p>	
13.	<i>Total Suspended Solids (TSS) Measurements in Pooled Water and Snowmelt</i>	October 9, 2020
	Discuss whether TSS measured in pooled water and snowmelt runoff triggers a management response. If so, please explain what level of TSS triggers action, what action is taken, and what mitigation measures are used to prevent recurrence of the problem.	
14.	<i>Saline Water Treatment Plant (SWTP) Performance</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Explain why the SWTP did not meet its design capacity for treating groundwater in 2019;</li> <li>• Discuss what steps are being taken to improve the SWTP performance in the future.</li> </ul> <p>Also, see comment #5 from the NWB.</p>	
15.	<i>Water Balance Model</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>• Clarify what is considered a significant difference between predicted and observed groundwater inflow rates, which would warrant the review and update of the Water Balance Model (Section 3.4.2.4 of the Groundwater Management Plan states that if significant deviations from the model are found, then “<i>the assumptions/inputs behind the model will be reviewed and the model updated, if required</i>”);</li> <li>• Update the groundwater inflow rates in the forthcoming iteration of the Water Balance Model.</li> </ul> <p>Also, see comment #3 from the NWB.</p>	
16.	<i>Ponds Covered by the Waste Rock Storage Facilities (WRSF) 1 and 2</i>	October 9, 2020
	Explain how the development of WRSFs 1 and 2 will comply with the 2019 <i>Fisheries Act</i> prohibition against the harmful alteration, disruption or destruction of fish habitat.	
28.	<i>Dust Suppression on All-Weather Access Road (AWAR) and the Bypass Road</i>	October 9, 2020
	Clearly detail dust suppression activities conducted on Meliadine roads in 2019 (details on suppressants used and efficacy of the treatments). If these activities are not reported in the Annual Report and the Air Quality Monitoring Report, then clarify where these data are annually presented.	
29.	<i>Discrepancy in Total tonnage to be Extracted in 2020</i>	October 9, 2020
	Confirm that the tonnages to be extracted and milled in 2020 are those described in Appendix I-11 (rectify the 4,492,000 t discrepancy in the total tonnage presented in Section 2.2 of the Annual report vs. Table 4.2 of the Mine Plan).	

30.	<i>Risk Assessments and Workshops</i>	October 9, 2020
	Provide complete documentation of all the risk assessments and workshops related to the High Risk operational status of D-CP-1	
31.	<i>Discrepancies in the NP-Ca and Total S% Data</i>	October 9, 2020
	Confirm the correct values for the NP-Ca and Total S% Data related to the filtered tailings	
32.	<i>Updated Closure and Reclamation Cost Estimates</i>	October 9, 2020
	Confirm the discussion schedule for the updated 2019 closure and reclamation cost estimate (\$59,514,717)	
Crown-Indigenous Relations and Northern Affairs (CIRNA)		
1.	<i>High Water Levels in CP1, CP3 and CP4 and Potential Risk to Stability of D-CP1</i>	October 9, 2020
	Provide a summary of the measures taken in 2019 to address the issues related to the high water levels of CP-1, CP3 and CP4 and the potential stability risk of D-CP1.	
2.	<i>Higher-Than-Expected TDS in CP1</i>	October 9, 2020
	Provide a summary of the measures taken in 2019 to identify the sources and to reduce the TDS loads to CP1	
3.	<i>Reclaiming Water in CP1 for Ore Processing</i>	October 9, 2020
	Evaluate the options of reclaiming contact water from CP1 for ore processing and other purposes in order to better manage mine site water and minimize freshwater usage from Meliadine Lake	
4.	<i>Higher-Than-Predicted ARD Potential of Filtered Tailings</i>	October 9, 2020
	Re-evaluate and update the Water Quality Model and all Management Plans associated with the monitoring and management of the filtered tailings and submit them for review, as the current geochemical monitoring and the tailings Management Plans were designed based on the assumption that the filtered tailings were Non-PAG, instead of PAG.	
5.	<i>2019 Updates to the Water Balance and Water Quality Models and Modelling Results</i>	October 9, 2020
	Update the Water Balance and Water Quality Models and provide modelling results for review, so that the issues and the causes of the issues can be fully understood and appropriate mitigation measures identified.  Note: This issue was previously raised by CIRNA in comment #3 of their 2018 Annual Report review and has never been addressed.  Also, see comment #3 from the NWB.	
6.	<i>Insufficient Details in the Main Report</i>	March 31, 2020
	Produce the main Annual Report document to adequately address all the annual reporting requirements of NWB Type A Water License 2AM-MEL1631 and Type B Water License 2BB-MEL1424 with sufficient	

	details, analysis, discussions, and summaries in future years, as some of the critical data and information were buried in the various thick-volume appendices.	
Environment and Climate Change Canada (ECCC)		
2.	<i>Surface Runoff Quality Samples – Monitoring Locations</i>	October 9, 2020
	<p>Provide clarification as to whether there is any Surface Runoff monitoring at the main mine site, and if so, provide locations and where the runoff reports to. If the proponent is not currently conducting surface water run off monitoring, then the ECCC recommends that it commence.</p> <p>Note: As part of their 2018 Annual Report review, the ECCC requested to provide a map showing locations of all Surface Runoff sampling sites (Comment #3).</p> <p>Also, see comment #2 from the NWB.</p>	
3.	<i>Runoff/ Drainage from Explosive Storage Locations</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>Expand Section 2.1.1 (Explosive Storage) of the Ammonia Management Plan to clarify where runoff/ drainage from storage locations (i.e., surface storage area, underground storage areas, and emulsion plant storage area) would report to;</li> <li>Update Table 1 (Water Monitoring Stations) to include monitoring details for runoff/ drainage from all storage locations.</li> </ul>	
4.	<i>Preventative Measures</i>	October 9, 2020
	Describe what measures are in place to prevent ammonia-based explosives and raw materials from directly and indirectly entering the aquatic receiving environment within the Ammonia Management Plan.	
5.	<i>Cyanide Data Error</i>	October 9, 2020
	Verify and correct the Total Cyanide annual average (incorrectly reported as 1121.24 mg/L), and provide the correct value to all parties.	
6.	<i>Reporting (Groundwater Management Plan)</i>	October 9, 2020
	<ul style="list-style-type: none"> <li>Include a reporting section into the Groundwater Management Plan, which will describe how the proponent will report management actions and monitoring results;</li> <li>Outline any additional information requirements, and specify the reporting frequency;</li> <li>Provide raw and summarized monitoring data, highlight any exceedances, describe management actions and outcomes, and include any updated predictions or other relevant information collected in the reporting year.</li> </ul>	
7.	<i>Toxicity Testing of the CPI Effluent</i>	October 9, 2020
	Provide clarification of the rationale for conducting sublethal testing (algal growth, <i>Ceriodaphnia dubia</i> 7 day mortality, and <i>Fathead Minnow</i> 7 day mortality) on untreated rather than treated effluent.	



Other Outstanding ECCC Comments from the Previous Reporting Year		
12.	<i>Total Dissolved Solids Predictions (or 2018 ECCC Comment #1)</i>	October 9, 2020
	<ul style="list-style-type: none"><li>• Provide clarification on the source of high modeled salinity levels in P-Area and whether saline mine water has been incorporated into the model;</li><li>• Provide updates to the Water Balance and Quality Forecast Results for review and include a description of the assumptions and inputs used.</li></ul> <p>Also, see comment #3 from the NWB.</p>	
13.	<i>TSS-turbidity Correlation (or 2018 ECCC Comment #5)</i>	October 9, 2020
	Review the need for periodic calibration of the TSS/turbidity correlation for CP1 discharges, confirming whether operational data demonstrate the turbidity readings that are consistently representative of TSS. (Note that this item was partially addressed in the Agnico Eagle’s March 2019 letter <sup>1</sup> . Please address this item fully).	
14.	<i>Disposal of Wastewater Treatment Sludges (or 2018 ECCC Comment #6)</i>	October 9, 2020
	Provide a characterization of treatment sludges to identify potential closure concerns with sediment quality in the sludge disposal area. (Note that this item was partially addressed in the Agnico Eagle’s March 2019 letter <sup>1</sup> . Please address this item fully).	
Nunavut Water Board (NWB)		
1.	<i>Management Plans Updates</i>	March 31, 2021
	<u>Summary:</u> Comment NWB-1 of the 2018 Annual Report review requested to provide a table summarising all updates to Management Plans within the Annual Report. The Board notes that Section 9.2 of the 2019 Annual Report lists all management plans updated in the reporting year, but does not provide all information previously required.  <u>Recommendations:</u> Provide a table listing all Management Plans modified in the reporting year and include the following information: <ul style="list-style-type: none"><li>• title of the plan;</li><li>• most recent NWB Approval date (for approved plans);</li><li>• most current update date;</li><li>• brief description of the update including sections modified;</li><li>• classification of the update (significant vs. insignificant as per Licensee); (Note that upon review of the plan, the Board will make their own determination of significance independent of the Licensee’s suggestion).</li></ul>	

<sup>1</sup> Martin Thériault (AEM) to Richard Dwyer (NWB), Re: AEM – Meliadine Division Response to the Updated Water Management Plan and Updated Environmental Management & Protection Plan comments from CIRNAC and ECCC, dated March 22, 2019.

2.	<p><i>Surface Runoff Monitoring</i></p> <p><u>Summary:</u>  Comment NWB-2 of the 2018 Annual Report review suggested to include a map showing all Surface Runoff stations into the 2019 Annual Report. The current Report includes Figure 2 with Meliadine Site stations and Figure 3 with Reference stations. The only map showing Surface Runoff stations is located in the <i>Water Management Plan</i> (Figure 7.1b, Monitoring Locations at Itivia Site). Please include this map into all future Annual Reports.</p> <p>Additionally, the Board notes that Versions 6, 7 and 8 of the <i>Water Management Plan</i> (WMP) included a section on Surface Runoff management (Section 7.2.2). However, this information was omitted from the current Version 9 of the WMP. Please provide the rationale behind this change and include this section into the next revision of the WMP.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>• Provide a map (maps) showing location of all sampling sites within the 2020 Annual Report;</li> <li>• Include Surface Runoff information into all future Water Management Plans.</li> </ul>	March 31, 2021
3.	<p><i>Water Balance on Site</i></p> <p><u>Summary:</u>  The 2019 Annual Report does not provide any information on the volumes of water moved between different Containment Ponds and Treatment Plants in the reporting year. The Board notes that Section 5.4 of the WMP includes the estimated maximum annual input/ output volumes for various water management facilities. However, these are the theoretical estimates and not the measured data. The Board notes that it would be very helpful to see a detailed (at least monthly) post-factum data on all inflows/ outflows reported to/ from all Containment Ponds, Treatment Plants, as well as the Sewage coming from the exploration camp, to better assess the water management activities on site and the performance of the Treatment Plants.</p> <p>Additionally, the Board notes that Versions 6, 7 and 8 of the <i>Water Management Plan</i> (WMP) included Section 7.3. <i>Water Quality Forecast Update</i>, as well as the Water Balance results presented in Appendix H. However, this information was omitted from Version 9 of the WMP. Please provide the rationale behind this change and include this section into the next revision of the WMP.</p> <p>Sections 5.1 and 7.0 of the 2019 Annual Report state that the “<i>Water Balance Model update was submitted in January 2019 with Version 5 of the WMP</i>” and that “<i>the next updated version will be submitted in 2021 as per Part E item 12 of the Water License</i>”. The Board notes that although Part E, Item 12 of Water Licence 2AM-MEL1631 requires “<i>to update the Water</i></p>	October 9, 2020



	<p><i>Balance and Water Quality Model at a minimum of every two (2) years”, this requirement assumes that the previous Water Balance Model was satisfactory and there were no significant changes encountered during this period. As supported by comments CIRNA-3 and ECCC-1 from the 2018 Annual Report review, the 2019 Water Balance Model was not satisfactory, because it did not account for the saline water originating from the underground mine. Section 3.2 of the 2018 Annual Report stated that “the water quality results [...] do not account for saline water originating from the underground mine that will be removed from the site via discharge to Melvin Bay” and continued that “both the water balance and water quality model are undergoing revision in 2019 to address these deficiencies”. Additionally, according to Table 1 of the <i>Groundwater Management Plan</i> (GWMP), Version 5, the predicted Groundwater inflow rates have increased significantly compared to the previous versions of the GWMP and the increased discharge to the Melvin Bay has not been approved by the NIRB yet.</i></p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>• Provide the volumes of all inflows/ outflows to/ from the Containment Ponds and Treatment Plants in 2019 and include this information within all future Annual Reports;</li> <li>• Provide the updated Water Balance and Water Quality Models to account for the saline water inflows into the underground mine.</li> </ul>	
4.	<p><i>Saline Water Management</i></p> <p><u>Summary:</u> Section 3.1 of the GWMP states that “over 2019, inflow mitigation included both grouting (pre-production and in response to inflows) and avoiding mining in areas expected to produce high groundwater inflow rates” and further clarifies that the discharge to Melvin Bay via a waterline, as a “long-term groundwater management strategy, will aim to provide capacity to manage non-mitigated inflows over the life of mine”. Section 3.4.2.2 of the GWMP states that “saline water storage capacity will be at capacity by mid-May 2021”. It is unclear whether any other strategies (other than avoiding stopping within the cryopeg) have been considered in case the discharge via a waterline does not get approved on time or ever. Section 3.4.1.1 of the GWMP talks about a possibility to stop mining at the Tiriganiaq Pit 2 in order to accommodate the excess saline water. The Board understands that this change might have significant implications on production and would like to see a more detailed description of this option.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>• List all long-term strategies that were considered in response to the increased groundwater inflow rates;</li> <li>• Provide more information regarding the possibility to stop mining at the Tiriganiaq Pit 2 in order to accommodate the excess saline water.</li> </ul>	October 9, 2020

5.	<i>Meliadine Site Water Quality</i>	October 9, 2020
	<p><u>Summary:</u></p> <p>Pre-treatment data from the monitoring station MEL-12 presented in Appendix H-3 shows that there is a significant increase in TDS concentration from 2018 to 2019, having annual averages of 1152.5 mg/L and 2131.43 mg/L, respectively. Further examination of the individual components of the TDS data revealed that some signatures of saline underground water were present within the CP1 material: significantly elevated Chloride (from 480 mg/L in 2018 to 920 mg/L in 2019), Sulphate (from 53 mg/L to 141 mg/L), Sodium (from ~140 mg/L to 343 mg/L), and Magnesium (from ~25 mg/L to 51.46 mg/L).</p> <p>Section 3.4.2.1 of the GWMP states that in 2019 desalinated water from the SWTP, which apparently experienced some “<i>design challenges</i>”, was discharged to CP5 and subsequently to CP1. Section 3.1 of the WMP, Version 9, states that the “<i>water collected in CP5 is either treated by an RO treatment plant prior to discharging to CP1 or discharged to CP1 directly, depending on the in situ CP5 water quality</i>”. Please clarify how efficient was this treatment strategy if the end-material still preserved the signatures of saline water from the underground mine.</p> <p>The Board notes that this question on the treatment system efficiency was asked as part of the last year’s Annual Report review. While the Concordance Table of the 2019 Aquatic Effects Monitoring Program (AEMP) Annual Report provided some information on the Nutrient loadings in Meliadine Lake, the actual intent of this question was to evaluate the efficiency of the SWTP/ Saline Effluent Treatment Plant (SETP)/ Reverse Osmosis (RO) system to reduce TDS, which <i>Azimuth</i> responded to as follows: “<i>The purpose of the Aquatic Effects Monitoring Program is to evaluate changes in water quality in the receiving environment, not the efficacy of treatment methods and pre-treatment water quality</i>”. Therefore, this part of comment NWB-3 from the 2018 Annual Report review has never been addressed by the Licensee.</p> <p>Additionally, the Board agrees with the KivIA’s Comment #14 that more information on the SWTP performance should be provided to better assess the efficiency of the treatment system on site. Also, in addition to the KivIA’s Comment #10, the NWB would like to ask for clarification on the steps taken to avoid the SETP chlorine overdosing in the future.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"> <li>• Provide a discussion on the efficiency of the SWTP and RO treatment strategies to reduce the TDS components in CP1 water;</li> <li>• Provide further clarification regarding the steps taken to avoid the SETP chlorine overdosing in the future.</li> </ul>	

6.	<i>MEL-19 - Monitoring Station for CP2</i>	March 31, 2021
	<p><u>Summary:</u> Sections 7.3.1.17 of the Annual Report states that “CP2 was not required under the actual construction of the site”, and this is why monitoring station MEL-19 was not sampled in 2019. Please clarify whether this monitoring station should be omitted from the Monitoring Program or it will be used in the future.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>Clarify whether monitoring station MEL-19 should be omitted from the Monitoring Program or it will be used in the future.</li> </ul>	
7.	<i>Aquatic Effects Monitoring Program (AEMP) updates</i>	March 31, 2021
	<p><u>Summary:</u> Tables 1-1 and 1-2 of the 2019 AEMP Annual Report present some edits made in 2019 to the AEMP benchmarks for the protection of aquatic life and drinking water quality. Additionally, Table 2-4 of the 2019 AEMP Annual Report presents the revised normal range concentrations for water quality parameters in Meliadine Lake.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>Update the current AEMP Design Plan to reflect the changes in benchmarks and normal ranges.</li> </ul>	
8.	<i>AEMP Sampling Inconsistency</i>	March 31, 2021
	<p><u>Summary:</u> The Board notes that the number of sampling events as part of the AEMP has changed over time. For example, Near-Field and Mid-Field areas were sampled once (March) during the under-ice season in 2018 and 2019, but twice per season (January, February) in 2016 and 2017. The Board understands that the AEMP Design Plan requires Exposure Area to be sampled only once during under-ice season. However, some discussion regarding extra samples in 2016-2017 and reduction to the designed requirement in 2018 and 2019 would be appreciated. The Board also notes the ECCC’s recommendation from their 2017 Annual Report Review suggesting to “include multiple sampling events at all reference area to ensure adequate assessment of seasonal and year-to-year variability”. This recommendation needs to be addressed within the next Annual Report.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>Provide further clarification on under-ice sampling inconsistency and address the ECCC’s 2017 comment.</li> </ul>	
9.	<i>Updated Design Report for CP6 and CP6 Berm</i>	October 9, 2020
	<p><u>Summary:</u> NWB correspondence, dated March 04, 2020, requested to revise the <i>Design Report for CP6 and CP6 Berm</i> to reflect the addition of Table 4 and the updates to Tables 1 and 2, as presented in the Technical Memo prepared by</p>	

	<p>Tetra Tech Canada Inc. and dated February 18, 2020. The updated version of the Design Report was supposed to be provided to the Board for review within the 2019 Annual Report submission. The Board has no record of receiving this information to date.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>• Provide the updated Design Report to the Board for review.</li> </ul>	
10.	<p><i>CIRNA Inspection, April 10-11, 2019</i></p> <p><u>Summary:</u>  The Inspection Report, dated April 10-11, 2019, indicated that <i>“the landfarm at the Exploration Site is potentially over capacity due to spills on site. [...] The licensee informed the inspector that they will be taking contaminated soil from the Exploration Camp landfarm and treating it in the Main Camp landfarm”</i>.</p> <p>The Inspector requested <i>“that the licensee provide the amount of contaminated soil and snow deposited in both landfarms in the last 3 years, the amount remediated in the last 3 years and the treatment capacity of the exploration landfarm”</i> by May 22, 2019.</p> <p>Additionally, the Inspection Report indicated that <i>“Pond #3 was not properly constructed and is currently unable to effectively retain water, the licensee intends to line Pond #3. [...] The Inspector is requesting a time line for this work to be completed”</i>.</p> <p>The Board notes that the aforementioned deficiencies were not addressed within the 2019 Annual Report submission and requests some clarification regarding the status of these items.</p> <p>Additionally, the Board notes that Section 7.3 of the 2019 Annual Report states that <i>“CP3 arsenic concentration may exceed MDMER on occasion”</i> and continues further that <i>“water from CP3 will be pumped to CP1 where it will mix with other site waters before discharge”</i>. Appendix H-3 shows that the average annual concentration of Arsenic at MEL-12 has increased from 0.0043 mg/L in 2018 to 0.0055 mg/ L in 2019. Although the change is insignificant, the Board would still like some discussion pertaining to CP3 deficiency and clarification on how the Inspector’s concerns were addressed.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>• Provide a discussion on how the Inspector’s concerns identified in the aforementioned Inspection Report were addressed.</li> </ul>	October 9, 2020
11.	<p><i>CIRNA Inspection, December 2, 2019</i></p> <p><u>Summary:</u>  The Inspection Report, dated December 2, 2019, indicated that <i>“the Licensee shall revise the Spill Contingency Plan to include a section on dust releases”</i></p>	October 9, 2020

	<p>and submit it to the Inspector by January 7, 2020.</p> <p>The Board notes that the updated <i>Spill Contingency Plan</i> was not provided within the 2019 Annual Report submission and requests some clarification regarding the status of this item.</p> <p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>• Provide the updated <i>Spill Contingency Plan</i> requested by the Inspector to the Board for review.</li> </ul>	
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The technical review of the 2019 Annual Report Submission for Water Licence No: 2AM-MEL1631, including the Management Plans listed above, determined that the information provided generally addresses the requirements of current Water Licence. However, some information still needs to be provided to the Board in order for the 2019 Annual Report to be deemed acceptable. Please ensure the comments provided in the table above are addressed by the deadlines specified, as most of these comments are directly related to Agnico Eagle's Amendment Application that is currently being reviewed by the Board.

The NWB notes that the 2BB-MEL1424 2019 Annual Report was incorporated into the 2AM-MEL1631 2019 Annual Report. After completing a technical review of the Type B portion of the above-mentioned report, the Board found that the information provided addresses the requirements of Water Licence No: 2BB-MEL1424. The Board understands that all effluent from the exploration camp STP is still being hauled to CP1.

Additionally, the Board recommends Agnico Eagle to submit all future Annual Reports and respective supporting documents for Water Licences 2AM-MEL1631 and 2BB-MEL1424 as separate submissions under each Licence. The NWB does understand that these projects are connected and there may be duplications, however, having all information amalgamated into one package creates certain challenges associated with keeping the records for each Licence, as well as their respective technical review.

Should you have any questions, please feel free to contact the undersigned at (867) 360-6338 (extension 29) or [sergey.kuflevskiy@nwb-oen.ca](mailto:sergey.kuflevskiy@nwb-oen.ca), at your earliest convenience.

Sincerely,




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Sergey Kuflevskiy  
Technical Advisor  
**NUNAVUT WATER BOARD**

Enclosure: Comments – KivIA, CIRNA, ECCC

Cc: Distribution List – Meliadine