

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

ECCC File: 6100 000 008/002 /
6100 000 008/014
NIRB File: 03MN107/16MN056



July 6, 2020
(Revised July 7, 2020)

via email at: licensing@nwb-oen.ca and info@nirb.ca

Richard Dwyer
Manager Licencing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Karen Costello
Executive Director
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Dear Richard Dwyer and Karen Costello

RE: 03MN107/16MN056 – Agnico Eagle Mines Ltd. – Meadowbank Gold Mine and Whale Tail Pit Projects - 2019 Annual Report

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Impact Review Board (NIRB) regarding the above-mentioned annual report by Agnico Eagle Mines (the proponent).

ECCC would like to note that the proponent has substantially addressed our comments from previous year's annual reports, and would like to commend the proponent on the presentation of the data and structure of the reporting.

ECCC's specialist advice is based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*

ECCC provides the following comments:

Meadowbank Gold Mine – 2019 Annual Report

1. NO₂ monitoring location

Reference(s)

- Meadowbank Gold Project 2019 Annual Report
- Appendix 62 – Meadowbank and Whale Tail Air Quality and Dustfall Management Plan Version 5



Comment

In the Meadowbank and Whale Tail Air Quality and Dustfall Management Plan, the proponent committed to conducting continuous monitoring of nitrogen dioxide (NO₂) in order to satisfy the new term and condition (#1) of the Whale Tail expansion project. The proponent proposed to place this monitor at a new sampling site, DF-7, which is near the site of a new communications tower. The Whale Tail project site is located approximately 30 km from this monitoring location. Thus, the project will have little influence on the ambient NO₂ measured at this monitoring site (apart from the influence of a nearby generator, discussed below). In addition, since concentrations at this far-distance monitoring site are expected to be close to background, effective comparisons to the predictions made in the Final Environmental Impact Statement (FEIS) cannot be made. The proponent is also conducting passive NO₂ sampling at other sites near the mine. Measured concentrations from the passive samplers can be validated by co-locating a passive NO₂ sampler at the site with the continuous monitor.

The proponent also stated that the DF-7, location is powered by a diesel generator, and that the monitoring site will be placed 200 m downwind of this generator. The single nearby generator placed downwind of the monitor might unduly influence readings, rather than capture emissions from the greater site.

ECCC Recommendation(s)

ECCC recommends that the location of continuous NO₂ monitoring be within 10 km of project activities, to allow effective comparisons to the FEIS predictions as a result of the project. The proponent should site monitoring to ensure that power generation (specifically to power the monitoring station) does not influence the monitoring results. ECCC also recommends that the site containing the continuous NO₂ monitor be co-located with a passive NO₂ sampler.

2. Dustfall sampling height

Reference(s)

- Meadowbank Gold Project 2019 Annual Report
- Appendix 62 – Meadowbank and Whale Tail Air Quality and Dustfall Management Plan, Version 5
- Appendix 41 – Meadowbank and Whale Tail 2019 Air Quality and Dust Monitoring Report
- ASTM International. Standard Test Method for Collection and Measurement of Dustfall (Settleable Particulate Matter) D1739-98. Reapproved 2017.
- Environment And Climate Change Canada's Final Submission to the Nunavut Impact Review Board respecting the Whale Tail Pit Expansion Project (125418/16mn056) proposed by Agnico Eagle Mines Limited. July 26, 2019

Comment

During the Environmental Assessment (EA) technical meeting and hearing process for the Whale Tail Expansion Project, ECCC raised the issue of the sampling height of dustfall canisters (ECCC-TC-3). ECCC requested that the sampling be conducted at a height of two

meters, as recommended by the ASTM method (2017). On July 11th 2019, the proponent contacted ECCC by email, and agreed to conduct dustfall sampling at the recommended sampling height. Because of this commitment, ECCC considered the matter resolved in the final submission on the expansion project to the NIRB (2019). In section 4.2.3.3 of the Meadowbank and Whale Tail 2019 Air Quality and Dust Monitoring Report, the proponent indicated that all future sampling will take place at a 2 to 3 meter height. However, the proponent has not revised the current Air Quality and Dustfall Management Plan to reflect this commitment.

ECCC Recommendation(s)

ECCC recommends that the Proponent conduct dustfall sampling for all sampling locations at a height of 2 meters, according to the ASTM method (2017), and that they revise the Air Quality and Dustfall Monitoring Plan, in order to reflect the commitment they made in July 2019

3. Meadowbank and Whale Tail 2019 Wildlife Monitoring Summary Report

Reference(s)

- Meadowbank and Whale Tail 2019 Wildlife Monitoring Summary Report

Comment

As indicated in section 15.4, ECCC confirms that we had discussions with the proponent regarding the project's migratory bird monitoring program and possible plans moving forward.

ECCC did advise the proponent that a more comprehensive analysis of the existing data is necessary to inform the discussion and for ECCC to support a change of the monitoring objectives as was being proposed.

ECCC looks forward to reviewing the comprehensive analysis and continue discussions with the proponent and other interested parties.

ECCC Recommendation(s)

No recommendation for the NIRB's information only

4. Pore Water Sampling

Reference(s)

- Appendix 23 Pore Water Quality Monitoring Program Section 4.1 Sample Collection and Frequency; Section 4.4 Data Analysis

Comment

The Pore Water Quality Monitoring Program (PWQMP) report Section 4.1 states that:

"Once Goose Pit has reached its full storage capacity, pore water samples will be collected directly from the in-pit tailings, once it is safe to do. Agnico will sample in-pit tailings for two

(2) subsequent years. If year two is within 20% or lower of year one, and within our prediction, then no further sampling in-situ will be performed."

The purpose for the pore water sampling is to identify the potential for poor-quality water to migrate upwards through the tailings, primarily in connection with upwelling groundwater. Once the pit is filled and thus acting to reduce the hydraulic head of the groundwater, this will limit the potential for groundwater to flow into the bottom of the pit. It is not clear how far ahead of the pit reaching its final water fill elevation that the tailings deposition will be finished. If there is still the potential for groundwater upwelling to move pore water upwards during pit re-watering, the monitoring should continue. Two years of such monitoring may not be sufficient to identify changes and impacts.

Section 4.4 *Data Analysis* notes that the chemistry of the tailings effluent pore water and reclaim water will be compared to Water Licence effluent limits, to identify potential risks for impacts to biota during closure and post closure. Acknowledging that there will be a delay in obtaining in situ pore water quality data, it would be useful to outline how that data will be used. The front-end information will help with flagging parameters of concern, but the purpose of the monitoring program is to identify the risk to biota at closure; that will require ongoing monitoring of pore water quality and movement, and a focus on changes in chemistry at the tailings-water interface.

ECCC Recommendation(s)

ECCC recommends that the proponent base the duration of pore water monitoring on the potential for further movement of contaminants, as well as monitoring results, rather than a fixed time frame.

ECCC recommends that the PWQMP include a description of the purpose and data analysis for the future in situ pore water monitoring data.

5. Monitoring Results at ST-16

Reference(s)

- Meadowbank Gold Project 2019 Annual Report Section 8.5.3.1.7 Portage Rock Storage Facility (ST-16) Table 8-19 (page 225)

Comment

Table 8-19 provides a compilation of chemistry for station ST-16, which is the sump adjacent to NP-2 Lake. ECCC has the following points for clarification for the data:

1. It appears that Total Dissolved Solids (TDS) and Total Suspended Solids (TSS) results have been transposed. Confirmation of this is requested, or if that has not happened, then an explanation for the very high TSS values.
2. Total Organic Carbon (TOC) results for 2019 are lower than the Dissolved Organic Carbon (DOC) values. ECCC requests confirmation of these results.
3. Total Aluminum has been averaged for 2019, and it appears the result is reported in ug/L rather than mg/L. The proponent should confirmed or corrected these values.
4. The 2018 results for Total and Dissolved Manganese appear to represent ug/L rather than mg/L. The proponent should confirm or correct these values.

ECCC Recommendation(s)

ECCC requests clarification or correction of the data anomalies identified for Table 8-19.

6. Recommendation(s) for future groundwater monitoring

Reference(s)

- Meadowbank Gold Project 2019 Groundwater Monitoring Report

Comment

Section 6.2 (Recommendations for future groundwater monitoring) provides a number of technical recommendations for future groundwater monitoring

ECCC Recommendation(s)

ECCC recommends that the proponent include a discussion of whether the recommendations provided in Section 6.2 (Recommendations for future groundwater monitoring) of the 2019 Groundwater Monitoring report will be implemented in the next groundwater monitoring report.

7. References to Canadian Council of the Ministers (CCME) of the Environment Guidelines

Reference(s)

- 2019 Water Management Report and Plan, Section
- 2.3 North and South Cell TSF Reclaim Ponds (ST-21)
- 2.3.1 Measured vs Forecasted Concentrations

Comment

This section variously refers to the CCME guidelines as “discharge guidelines” or criteria for discharges. Table 2-2 refers to the CCME guideline for copper as a discharge criterion (footnote 4), and refers to the various parameters’ CCME guidelines as a “limit” in the text, on the figures, and in Table 2-3.

ECCC Recommendation(s)

For clarity, the proponent should refer to the CCME guidelines as guidelines rather than limits or criteria, which implies a regulatory basis. As guidelines or objectives, the CCME concentrations provide a yardstick for the evaluation of parameters of concern. Also, they should be kept in the context of being receiving environment guidelines.

8. Reclaim Water Treatment

Reference(s)

- 2019 Water Management Report and Plan V. 8 Appendix C. Meadowbank Water Quality Forecasting Update for the 2019 Water Management Plan, SNC Lavalin, Apr. 2020

Comment

Section 3.2 of the Forecasting Update notes that “*The main source of cyanide, copper, iron, selenium, other metals, ammonia (i.e. via the hydrolysis of cyanate), nitrate, chloride, sulfates and total dissolved solids in the TSF Reclaim Pond is the Mill Effluent.*” Many of the parameters were observed to be substantially higher than originally predicted due to the geochemistry of the Amaruq ore, and the mill effluent concentrations have been adjusted to account for this. The modeled predictions presented in Section 4.3 indicate that treatment may be required for heavy metals, fluoride, arsenic, selenium and total nitrogen, as well as for suspended solids. The report states that treatment could be done of water in the pit at the end of tailings deposition, or in the TSF South Cell Reclaim Pond.

Treatment processes may involve the use of reagents (e.g. aluminum sulphate, ferric sulphate) which can increase sulphate, which is already predicted to exceed objectives at closure. If the full volume of reclaim water is to be treated at closure, then treatment residuals should be factored into the predicted pit water quality to be managed. The proposed use of ion exchange treatment to remove TDS (chloride, sulphate) is suggested in the report as an option at closure. However, this technology is costly and has volume limitations. Planning for treatment at closure may have obstacles that could be reduced with earlier treatment implementation.

Figure 4.21 outlines the Water Treatment Decision Flow Process for implementing treatment, and includes the option of treating reclaimed water during operations. This has not been presented in the 2019 Annual Report as an option being actively considered. However, it would make sense in respect of reducing contaminants at source rather than treating much larger water volumes later at closure. In addition, given that the Amaruq expansion will be proceeding there may be higher loadings of the contaminants of concern over the remaining life of mine, and earlier treatment reductions would reduce that environmental liability.

ECCC Recommendation(s)

ECCC requests that the proponent provide a discussion of the feasibility of treating reclaimed water earlier in the mine operations, e.g. segregating high-concentration water and treating to remove contaminants.

9. CCME Guidelines – Dissolved Manganese and Zinc

Reference(s)

- Appendix 22 Meadowbank predicted water quantity and quality (2012-2019)

Comment

The proponent has provided predictions for the dissolved form of metals for comparison to measured dissolved metals, with reference to the CCME guidelines (for total fractions) for comparison. Dissolved zinc (<http://cegg-rcqe.ccme.ca/download/en/360>) and manganese (<http://cegg-rcqe.ccme.ca/download/en/361>) guidelines are now available and would be relevant to include in the tables.

ECCC Recommendation(s)

ECCC recommends including the dissolved guidelines for zinc and manganese in the tables in Appendix 22.

Whale Tail Pit 2019 Annual Report

10. Sea Bird Monitoring

Reference(s)

- Whale Tail Marine Mammal and Seabird Observer Report – 2019 Shipping Season
- Gjerdrum, C., D.A. Fifield, and S.I. Wilhelm. 2012. Eastern Canada Seabirds at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. Canadian Wildlife Service Technical Report Series No. 515. Atlantic Region. vi + 37 pp.

Comment

Section 2.3 of the Whale Tail Marine Mammal and Seabird Observer Report (2019 Shipping Season) indicates that “surveys from moving and stationary platforms are completed in 5-minute intervals”. However, section 3.3.2.1 states that “...stationary platform survey datasheets lacked survey end times”.

It is unclear if the stationary seabird surveys conducted in 2019, as part of the Marine Mammal and Seabird Observer (MMSO) program, followed established ECCC seabird survey protocols (Gjerdrum et al. 2012). The instantaneous stationary surveys should usually only last a few seconds (i.e. using instantaneous counts or snapshots of birds within the area), or else you cannot obtain accurate abundance estimates.

ECCC has noted unusual observations of species outside their range (e.g. Manx shearwater and Wilson’s storm petrel). Wherever possible, photographs should accompany these types of observations.

ECCC noted observer-training records in the 2019 report, and encourages the proponent to continue these efforts to improve the quality of information collected.

Section 4.0 states that a 2020 action plan was created to improve the effectiveness of the MMSO Program. ECCC welcomes any discussions with the proponent related to the seabird-monitoring program. ECCC requests an opportunity to review and discuss any proposed changes to the seabird monitoring components prior to implementation.

Similar to previous years, ECCC would like to request a copy of the seabird data recorded during the MMSO surveys conducted in 2019. If the seabird data has not been entered into a database already, then an existing ECCC seabird database is available to assist the proponent with data entry and facilitate data sharing. The proponent should contact ECCC at ec.eenordrpnru-eanorthpnrnu.ec@canada.ca to request a copy of the database and share the seabird data from the MMSO surveys.

ECCC Recommendation(s)

ECCC recommends that the proponent confirm that the MMSO program followed established ECCC seabird survey protocols (Gjerdrum et al. 2012), and include a reference to the protocols in future annual monitoring reports.

ECCC recommends that the proponent contact ECCC to review and discuss any proposed changes to the seabird monitoring components prior to implementation.

Additionally, ECCC requests a copy of the seabird data recorded during the MMSO surveys conducted in 2019.

11. Migratory Birds Mitigation

Reference(s)

- Whale Tail Migratory Bird Protection Plan Version 3

Comment

The FEIS predictions and significance determination were based on the assumption that mitigation would be applied and be effective to deter bird from nesting in the flooded area. The 2018-2019 field results indicate that selected suite of deterrents were not effective at deterring birds from nesting.

Section 2.3.3 of the Whale Tail Migratory Bird Protection Plan states that “*no deterrents will be specifically implemented in 2020 for the Whale Tail area flooding*” despite observed and predicted impacts to nesting birds during the 2018-2019 field seasons.

It is unclear how the proponent will demonstrate due diligence and remain compliant with the *Migratory Birds Convention Act* in 2020 related to project-induced flooding.

ECCC Recommendation(s)

ECCC recommends that the proponent clarify what is being proposed in 2020 to ensure compliance with the *Migratory Birds Convention Act* related to ongoing project-induced flooding.

12. Dike Construction Monitoring Results

Reference(s)

- Whale Tail 2019 Dike Construction and Dewatering Monitoring report; Appendix B (TSS /Turbidity Monitoring Results); Table B-1 (Calculated TSS concentrations (mg/L) for dike construction monitoring locations measured by handheld turbidity meter and converted to TSS using site-specific relationship) and Table B-2 (Field-measured parameters for dike construction monitoring stations)

Comment

Table B-1 indicates a probe malfunction on several different dates at several stations. This table reports several “NA” and “0.00” results, and contains many blank data cells. Table B-2 reports several “0” results, and many data cells contain a dashed line instead of data. As the proponent did not provide footnotes for either table, it is unclear how to interpret cells containing zeros, dashed lines and “NA”, and blank data cells.

ECCC Recommendation(s)

ECCC recommends that the Proponent:

- Describe how the zero concentrations reported in Tables B-1 and B-2 were derived, and clarify whether any zeros were based on any missing data;
- Provide footnotes for Tables B-1 and B-2 to clarify how to interpret cells containing zeros, dashed lines and “NA”, and blank data cells; and
- Discuss whether steps were taken to mitigate/address probe malfunctions, and whether a monitoring contingency has been identified for managing any future probe malfunctions

13. . Dewatering Monitoring Results

Reference(s)

- Whale Tail 2019 Dike Construction and Dewatering Monitoring report; Appendix D (Effluent Water Quality Monitoring Results for Whale Tail Lake Dewatering); Table D-1 (Water quality monitoring results and calculated means for comparison to NWB Water License criteria for dewatering effluent station ST-DD-7) and Table D-2 (Water quality monitoring results and calculated means for comparison to NWB Water License criteria for dewatering effluent station ST-DD-9)

Comment

Both Tables D-1 and D-2 contain the footnote “*1/2 detection limit use in the mean calculation*”, but the meaning of this footnote is unclear. As well, both tables contain several “NA” entries but do not provide a footnote to describe these entries.

ECCC Recommendation(s)

ECCC recommends that the Proponent:

- Clarify the meaning of the footnote “*1/2 detection limit use in the mean calculation*” from Tables D-1 and D-2;
- Provide a footnote for Tables D-1 and D-2 to describe/explain the “NA” entries; and
- Describe whether the numbers provided in Tables D-1 and D-2 incorporate or reflect any underlying missing data points.

14. Managing Missing Data

Reference(s)

- Whale Tail 2019 Dike Construction and Dewatering Monitoring report

Comment

The report does not describe how the proponent managed missing data during data analyses.

ECCC Recommendation(s)

ECCC recommends that the Proponent:

- Clarify whether the proponent has a standard approach to managing missing data points during data analyses;
- Clarify whether the numbers provided in the monitoring tables incorporate or reflect any underlying missing data points; and
- Describe how the proponent managed missing data during data analyses for the Dike Construction and Dewatering Monitoring report

15. . Flooded Pit Lake Water Quality

Reference(s)

- Whale Tail Water Management Plan, Version 4 (March 2020)

Comment

The Executive Summary states that: *“Dikes will not be breached until the water quality in the flooded area meets the Canadian Council of Ministers of the Environment Water Quality Guidelines, baseline concentrations or appropriate site-specific water quality objectives.”*

Section 3.2 Water Management During Closure states that: *“Water management during closure and reclamation will involve maintaining contact water management systems on site until monitoring results demonstrate that water quality is acceptable for discharge of all contact water to the environment without further treatment. Once water quality meets the discharge criteria, the water management systems will be decommissioned.”*

Table 3.6, regarding closure, states that: *“Whale Tail Dike and Mammoth Dike are breached when i) the South side and the North side of the Whale Tail Dike are at the same water level (i.e., at natural water level) and ii) the water quality monitoring results meet discharge criteria to allow water to naturally flow to the receiving environment; and regarding post-closure: Treated contact water from the Whale Tail WRSF Sector is discharged in Lake A16 (Mammoth Lake) through the existing diffuser system. This water is treated until water quality meets direct discharge criteria, following which the water management system is decommissioned.”*

Section 3.2.1 Open Pit and Refilling of Whale Tail Lake (North Basin) states that: *“...the north and south parts of the Lake A17 (Whale Tail Lake) will be at the same elevation 8 years after the end of the operational phase and then the Whale Tail Dike and the Mammoth Dike will be breached when the water quality monitoring results meet discharge criteria to allow water to naturally flow to the receiving environment.”*

ECCC notes that it is not sufficient for water quality to simply meet discharge criteria prior to decommissioning the contact water management system and breaching the dikes. Instead, it will also be necessary to demonstrate that the water quality of runoff, seepage and the

flooded area has stabilized and will be consistently meet closure water quality objectives (rather than discharge criteria) over the short-, medium- and long-term.

The above sections should be consistent with the focus on meeting objectives as noted in Section 4.10 Closure: Flooding of Whale Tail Pit and Refilling of Whale Tail Lake (North Basin): The proponent has noted that the re-flooding strategy will be adapted during closure based on future water quality predictions validated with site monitoring data. The goal will be for pit lake water to meet quality objectives concurrently with completed re-flooding such that lake re-connection can happen as soon as possible thereafter.

ECCC Recommendation(s)

ECCC recommends that prior to decommissioning the contact water management system or breaching the dikes, monitoring results and water quality predictions demonstrate that the water quality of runoff, seepage and the flooded area has stabilized and will be consistently meet water quality objectives and be safe for aquatic life over the short-, medium- and long term, taking into account seasonal and inter-annual variability and climate change considerations.

16. Hydrology Model

Reference(s)

- Whale Tail Water Management Plan, Version 4 (March 2020); Appendix C: 2019 Water Balance Report (Golder, March 2020); Appendix A Project Design Document; Table 22: General Assumptions and Limitations of the Hydrogeology Model

Comment

Table 22 states that the proponent provided hydrogeology model predictions for the 'EA Scenario' but does not provide a description of the EA Scenario. This description should be included in the report for ease of reading.

ECCC Recommendation(s)

ECCC recommends that future annual water balance reports provide a definition of "EA Scenario" to clarify the prediction scenario used for the hydrogeology model.

17. Water Quality Predictions

Reference(s)

- Whale Tail Water Management Plan, Version 4 (March 2020); Appendix D: Whale Tail water quality forecast update (Mine Site and Downstream Receiving Water Quality Predictions - 2019 Annual Report; Golder Associates Ltd., March 2020); Section 3.0 Water Quality Predictions

Comment

Water quality model results for on-site facilities and downstream lakes during operations, closure, and post-closure are discussed in Section 3.0 (Water Quality Predictions), and are

presented in Appendix C. However, the report does not describe the prediction scenario used to develop the water quality predictions.

ECCC Recommendation(s)

ECCC recommends that the Proponent:

- Describe the prediction scenario that was used to develop the water quality predictions presented in Appendix D: Whale Tail water quality forecast update (Mine Site and Downstream Receiving Water Quality Predictions - 2019 Annual Report; and
- Include a description of the prediction scenario for future water quality prediction reports.

18. Water Quality Model

Reference(s)

- Whale Tail Water Management Plan, Version 4 (March 2020); Appendix D: Whale Tail water quality forecast update (Mine Site and Downstream Receiving Water Quality Predictions - 2019 Annual Report; Golder Associates Ltd., March 2020); Section 2.2.2 Changes to the Approved Model

Comment

In Section 2.2.2 *Changes to the Approved Model*, Table 2 lists changes in surface facility assumptions that are used in the approved annual reporting model, and the reasoning. Several of these assumptions may be less conservative, for example using a 0.3 m interaction depth for runoff on the waste rock storage facility (WRSF) rather than 1m, or assuming no loadings from the pit walls.

ECCC Recommendation(s)

ECCC recommends that future model reviews in the Annual Reports include confirmation that the changes in assumptions are supported by monitoring and model calibration.

19. Decommissioning the Contact Water Management System

Reference(s)

- Whale Tail Waste Rock Management Plan, Version 5 (March 2020); Section 9.1 Whale Tail Waste Rock Storage Facility

Comment

Section 9.1 Whale Tail Waste Rock Storage Facility states that: *“The contact water management system for the Whale Tail WRSF (WRSF Dike and WRSF Pond) will remain in place until mine closure activities are completed and monitoring results demonstrate that water quality conditions from the Whale Tail WRSF are acceptable for discharge with no further treatment required. Water quality will be monitored as per the Whale Tail Pit Water*

License requirements. Once water quality meets the discharge criteria established through the water licensing process, the contact water management system will be decommissioned to allow the surface runoff and seepage water from the Whale Tail WRSF to naturally flow to the outside environment."

ECCC notes that it is not sufficient for water quality to simply meet discharge criteria prior to decommissioning the contact water management system. It will also be necessary to demonstrate that runoff and seepage water quality has stabilized and will be consistently acceptable for release over the short-, medium- and long-term.

ECCC Recommendation(s)

ECCC recommends that prior to decommissioning the contact water management system, monitoring results and water quality predictions demonstrate that runoff and seepage water quality has stabilized and will be consistently acceptable for release over the short-, medium- and long-term, taking into account seasonal and inter-annual variability and climate change considerations.

20. Deep Thermistors in South Portion of Whale Tail Lake

Reference(s)

- Whale Tail 2019 Groundwater Monitoring Report (April 2020); Attachment B: Whale Tail Lake Thermal Assessment report (Golder Associates Ltd.; April 2019)

Comment

Section 6.0 (Summary and Recommendations) of Attachment B (Whale Tail Lake Thermal Assessment report) states that: *"There currently are no deep thermistors installed in the south portion of the Whale Tail Lake, where the existence of open or closed talik is uncertain. Although results of water sampling obtained from the Westbay well system and results of the thermal models suggest there is open talik formation in that area, it is recommended that Agnico Eagle considers the installation of supplemental deep thermistors in the south portion of the lake to confirm this assumption."*

ECCC Recommendation(s)

ECCC recommends that the proponent clarify whether supplemental deep thermistors were (or will be) installed in the south portion of Whale Tail Lake to confirm the assumption of an open talik formation in that area. Commensurately, that the proponent describe what will be the adaptive management response mechanism if open talik is discovered.

If you need more information, please contact Eva Walker at (867) 669-4744 or eva.walker@Canada.ca.

Sincerely,

[original signed by]

Eva Walker
Senior Environmental Assessment Officer

cc: John Olyslager, Acting Head, Environmental Assessment North (NT and NU)