



January 11<sup>th</sup>, 2021

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

**Re: Agnico Eagle Mines – Whale Tail Project Responses to Operational ARD-ML Sampling and Testing Plan November 2020 Version 6 Comments**

Dear Mr. Dwyer,

As requested, the following responses are intended to address the comments made in the below letter:

- ECCC – December 15<sup>th</sup>, 2020, 2AM-WTP1826 Agnico Eagle Mines Ltd. Whale Tail Pit Operational ARD-ML Sampling and Testing Plan

Should you have any questions or require further information, please do not hesitate to contact us.

Best regards,

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Environmental Project Coordinator



## 1 Waste Rock Segregation Mitigations

**Reference 1:** Operational ARD-ML Sampling and Testing Plan Whale Tail Pit Project. November 2020. Version 6, Section 2.2 Waste Rock Segregation - Waste Rock from Underground

**Comment 1:** The Proponent states ‘Waste rock from Underground will be stockpiled temporarily on surface in the Waste Rock Exploration Pad and will not be used for construction purposes. This rock will be entirely used as backfill in the mine such that no waste rock from underground will remain on surface after mine closure.’

It is not clear what mitigation measures are being implemented to manage any seepage or run off that will occur from the waste rock from the underground that will be stockpiled temporarily on the surface before it is used for backfill after the mine closure.

**Recommendation 1:** ECCC recommends that the proponent provide a mitigation plan to manage runoff and/or seepage from the underground waste rock stockpiled temporarily on the surface awaiting to be used as backfill after closure.

### **Agnico Eagle’s Response:**

*Runoff from the underground waste rock stockpile is managed into GSP-1. A saline ditch system is built around the waste rock exploration pad to ensure this runoff water is conveyed into GSP-1 without seepage to the site.*

## 2 Waste Rock Segregation

**Reference 2:** Appendix B - Flow Chart for Waste Rock Delineation and Segregation, ARD/ML Plan Attachment B: Flow Chart (Page 26)

**Comment 2:** In the excerpt below are some of the steps identified by the Proponent in the segregation of waste rocks after segregation.

3. Complete QA/QC of data against onsite results by calculating an RPD value. RPD values below 35% are considered acceptable.
4. If the ARD and/or ML designation determined by the external lab data are different than that determined by the onsite lab, a more rigorous QA/QC program is required and refinements must be considered in the block model designation.
5. If required, revisit the cut off criteria for total arsenic based on updated leach test data.

ECCC notes that in step #4 above, the proponent indicates that if the ARD and/or ML designation determined by the external lab data are different from that determined by the onsite lab, a more rigorous QA/QC program is required and refinements must be considered in the block model



designation. Step #5 addresses revisiting cut off criteria for total arsenic, however, there is no mention of revisiting the criteria for the segregation of the waste rock for ARD before external lab confirmation. It is not clear how refinement of the block model changes the segregation approach or criteria.

**Recommendation 2:** ECCC recommends clarification of how refinement of the block model changes the segregation approach or criteria.

**Agnico Eagle's Response:**

*The block model or changes made to it does not affect the segregation approach criteria. Those segregation criteria are based on the original characterization made by Golder about the different ARD/ML potentials for each lithological (geological) domains. Agnico believe that the nomenclature "block model" might have been confused for the lithological model (3D interpretation of the different geology domains). At the end, if there is any refinement made to either the block model OR the lithological model, they don't affect the segregation criteria.*

### **3 Waste Rock Sampling Rate Reduction Study**

**Reference 3:** Whale Tail Project Operational ARD ML Sampling Testing Plan - Waste Rock Sampling Rate Reduction Study, Section 3.0 Conclusion (page 43)

**Comment 3:** The Proponent concluded, 'Following this, as illustrated in the Figure 17, it is recommended to change the sampling ratio in the north domain (PAG) to a 1/16 instead of 1/4. It has been demonstrated that this ratio will provide enough coverage to confirm the quality of the material as PAG and remove, by doing so, an unnecessary burden to our laboratory facility.'

The sampling ratio in the south of the pit will still remain 1/4 to be able having a tighter coverage and define all the NAG material available for construction usage and future WRSF capping needs. Estimated tonnage required for building the cover and the reclamation works is about 20 Mt which is under the available NAG material estimated at 37 Mt.'

ECCC does not have any concerns with the proposed reduction in sampling ratio in the north domain, as long as all rocks in the north domain are classified as and managed as potential acid generating (PAG). However, ECCC is of the view that should any of the sampling at the ratio of 1/16 indicate non-potentially acid generating (NPAG), that the sampling ratio should return to 1/4 ratio for verification before any classification segregation changes are made, in order to ensure that the NPAG is not just a pocket of rock or sampling error.

**Recommendation 3:** ECCC recommends that the sampling ratio in the north domain return to 1/4 for verification before any waste rocks from the north domain are designated as NPAG.



**Agnico Eagle's Response:**

*If there is any NPAG results coming back in the north domain with the 1/16 sampling ratio and even if they seem to be regrouped, no NPAG will be recovered from it. Everything will be systematically discarded and sent to the PAG because as observed so far, only very thin and scarce intervals of NPAG are usually observed in the north domain and usually not continuous enough to be segregated from the PAG. However, if like mentioned, a bigger cluster of NPAG results seems to appear, on the following bench below, in the same area, Agnico will go back to a 1 /4 sampling ratio to make sure we capture any significant changes that could occur in the geology. Thus, capturing any additional NPAG that could become available. To recap, no NPAG will be recovered in the north domain with a 1/16 sampling ratio. It will first have to be changed back to a 1 /4 ratio if deemed necessary.*