

Naartok East Portal

NWB Water Licence 2AM-DOH1335 Modification

Submitted to:

Nunavut Water Board

Submitted by:

Agnico Eagle Mines Limited

July 19th, 2022



Kitikmeot Inuit Association	Rec No.:	Information Request 01

Information Request: What is the increase in the area of the rockfill pads of the MN site associated with the expansion of the waste rock pad and the rockfill pad required for the infrastructure at the NECP area?

Agnico Eagle's Response:

The increase in area of the rockfill pad of the MN site associated with the expansion of the waste rock pad is approximately 34,000 m².

The increase in rockfill pad area for the infrastructure at the NECP area is approximately 7,000 m^2 .



Kitikmeot Inuit Association	Rec No.:	Information Request 02
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Information Request: Given the proposed expansion of the waste rock facility from 0.646 MT to 1.3MT, what is the impact on the hydrology of the local water shed that would be reporting to the MN CWP. Non significant changes. Finalization to be done with 60 days notice.

Is there any impact to the volume of water reporting to the MN CWP during the design storm event? In the 60 days notice to be provided later.

Do the impacts to the hydrology of the local water shed require any design or operational changes to the MN CWP? No. maybe configuration – outline maybe a bit smaller or larger.

Agnico Eagle's Response:

This proposed CWP design was first presented as part of the 2017 FEIS and has a catchment area of 110,000 m². Table 1 presents the catchment areas for the as-bult and proposed Madrid CWP, which are also presented in Appendix A.

Table 1: Catchment Area Summary

Catchment Description	Catchment Area (m²)
Madrid North Contact Water Pond (As Built)	48,000
Proposed Madrid North Contact Water Pond	110,000
(WRSP Expansion)	

Hydrotechnical design and an alternatives assessment of the proposed CWP is presented in the site-specific Water Management Design Report (SRK 2017). The impact to the volume of water reporting to the CWP during the design storm event is based on the respective catchment area and the design precipitation. Both the as-built and proposed pond design have been designed with the capacity to contain at a minimum the contact water from the 1:100 year, 24-hour storm event (55 mm), and the maximum daily snowmelt (18 mm).

As part of the construction procedure of the expanded WRSP and new CWP, a detailed design report will be produced and submitted to the NWB 60 days prior to commencement of construction which will indicate the exact CWP specifications required for the expanded WRSP. Minor changes to the footprint of the proposed CWP may occur once the catchment area and pond size are sized appropriately for the proposed WRSP.

There are no operational or design basis changes required based on the proposed Madrid CWP. Specific operational criteria and design objectives will remain the same.



Kitikmeot Inuit Association	Rec No.:	Information Request 03

Information Request: What is the revised schedule for backfilling of the NECP excavation? If left until the end of mine life, what is AEM's rational for not considering backfilling of the excavation as a closure cost? What is the volume of rockfill required for backfilling the NECP excavation and what are the costs of backfilling the excavation? Given the upper slopes of the excavation consist of frozen overburden, what contingency measures will be implemented if permafrost degradation occurs during the extended period prior to backfilling?

Agnico Eagle's Response:

Backfilling of the NECP excavation will be done at closure as the portal will continue to be in use during Operations. The required rockfill volume for the NECP is estimated at 152,000 m³. As part of the Madrid North tranche, financial security was allocated to dismantle the Madrid North concentrator. At this time, Agnico Eagle is not planning to build the Madrid North Concentrator and is proposing to replace the amount of money allocated to reclaim this infrastructure to backfill the NECP infrastructure instead. Another option would be to use the contingency that was allocated under the Madrid North tranche to cover this additional activities. Agnico Eagle would like the Kitikmeot Inuit Association to advise on the preferred option or provide guidance if another option should be selected.

The upper slopes of the NECP are protected by a thermal cover and are visually inspected and surveyed monthly. Additionally, the water level within the NECP is surveyed monthly to monitor the freeboard to the frozen overburden located on the upper slopes. The level of monitoring at the NECP ensures that signs of permafrost degradation can be detected early – before significant degradation can occur.

If signs of permafrost degradation are detected, mitigation methods may include the following:

- the thickness of the thermal cover could be increased to provide additional insulation, to accommodate for a deeper seasonal active layer thaw
- The upper slopes of the NECPR could be flattened or benched back to reduce the overall slope angle, improving the overall stability of the slope if permafrost degradation leads to reduced internal shear strength of the overburden soil