Agnico Eagle Mines Ltd.'s Whale Tail Pit Project

Nunavut Impact Review Board and Nunavut Water Board – Coordinated Process

Nunavut Water Board Public Hearing **Community Presentation** Baker Lake September 26-27, 2017













INAC's Role in the Nunavut Water Board Water Licensing Process

- Responsible Minister: Has decision-making role under the Nunavut Agreement, Nunavut Planning Commission, Nunavut Project Assessment Act (NuPPAA), and Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA).
- Intervenor: Provide expert advice.
- Regulator: Administration of federal public land and water licence inspections/ enforcement.

INAC's Contributions to the Water Licence Application Process

INAC has participated in this Water Licence Application through:

- Scoping
- Information Requests (IRs)
- Technical Review Comments (TRCs)
- Technical Meeting and Pre-Hearing Conference
- Final Submission







Summary of INAC's Review of the Whale Tail Pit Water Licence Application

In its review of this Water Licence Application, the department provided expertise on the following:

- Surface water quality and quantity (including monitoring)
- Groundwater quality and quantity
- Closure costs

The Department's final submission to the Nunavut Water Board (August 14, 2017) included seven (7) final comments:

- Five (5) specific to the new Water Licence Application for Whale Tail Pit (2AM-WTP----)
- Two (2) specific to the Water Licence Amendment Application for Meadowbank (2AM-MEA1525)











Review Comments Specific to 2AM-WTP----

- Final Comment 1: Waste rock will be put into a Waste Rock Storage Facility (WRSF) and covered to prevent contamination of nearby water bodies.
 - It will be difficult to make sure that the rock in the cover is 100% non-metal leaching. If the cover is contaminated, water seeping from the WRSF may need to be treated on a long-term basis.
- Final Comment 2: More information from the performance of the cover for the Meadowbank WRSF should be used when completing the final cover design for the Whale Tail Pit WRSF.
- Final Comment 3: There is still some uncertainty regarding how groundwater will flow around the Whale Tail Pit. If groundwater flows into the pit, arsenic may leach from surrounding rock, raising arsenic levels in the flooded pit after operations.
 - INAC has recommended some additional studies of groundwater flow before creating the open-pit.



Concerns Resolved After Technical Meeting Related to Water Quality

- Final Comment 4: Availability of cover material
 - INAC has had discussions with Agnico Eagle and accepts that there will be enough non-metal leaching rock to cover the WRSF effectively.
- Final Comment 5: Ammonia and nitrate concentrations from use of explosives
 - INAC has had discussions with Agnico Eagle about how they have estimated run off of chemicals from blasting and accepts the Agnico Eagle's calculations.













Review Comments on 2AM-MEA1525 Amendment

- Agnico Eagle has submitted an Amendment Application for 2AM-MEA1525 to accommodate activities at the Whale Tail Pit Project that will impact activities at Meadowbank.
- Final Comment 6: Agnico Eagle will be modifying the Tailings Storage Facility at Meadowbank to dispose of waste from the Whale Tail ore which will be processed at Meadowbank.
 - INAC suggested that this modification be reviewed by the NWB.
- Final Comment 7: 2AM-MEA1525 expires in 2025.
 - The Amendment Applications proposes water use until 2026 recommendation that Water Licence term should be modified to 2026.



Conclusions

- The information, analysis and presentation of the documentation was complete.
- Uncertainties remain as to long-term and post-closure water quality.
- INAC has recommended that Agnico Eagle undertake additional modeling as information becomes available and also include a more intensive monitoring program to better understand the remaining uncertainties and provide more confidence to predicted outcomes.
- Up-to-date modelling and monitoring during operations and closure may show that site conditions match predicted outcomes. However, outcomes that deviate from predictions could result in unintended impacts that require mitigation.



Thank you ᡩ᠘ᡶᠤ Maatna Merci



