

Impact Assessment of the Meliadine Extension Proposal **By the Nunavut Impact Review Board issued November 17, 2023**



Nunavut Impact Review Board Public Hearing in Rankin Inlet, Nunavut in September 2023

The Nunavut Impact Review Board (NIRB or Board) completed its assessment of Agnico Eagle Mines Limited’s Meliadine Gold Mine “Extension Proposal” and due to the considerable uncertainty of the potential for the Proposal to have negative, lasting effects on caribou, and the uncertainty of cumulative effects, the Board is recommending that:

the Meliadine Extension Proposal should not be allowed to proceed at this time.

The Board’s full report details the assessment completed in accordance with the *Nunavut Agreement* and the *Nunavut Planning and Project Assessment Act (NuPPAA)*, how the Board considered the potential benefits and Impacts of the proposal, and the Board’s recommendation to the Ministers.

Highlights Document

This document is a summary of the Board’s Reconsideration Report and Recommendations (referred to in this document as “the Report”) and includes references to guide the reader to the applicable section of the Report that includes the full details. Please refer to the Report for the authoritative description of the topic and recommendations.

Project Summary:

Related Project:

Meliadine Gold Mine

Proposal:

Meliadine Extension
(Extension Proposal)

Proponent:

Agnico Eagle Mines Limited
(Agnico Eagle)

NIRB File No.: 11MN034

Online Document Registry:

www.nirb.ca/project/125684

Why was a new assessment required? - Report section 1

Agnico Eagle proposed changes to the previously approved Meliadine Gold Mine, called the Meliadine Extension Proposal, and the Nunavut Planning Commission as well as Nunavut Impact Review Board determined that that these changes were a significant modification to the existing project, which required an updated impact assessment. The assessment requires the Board to assess the potential environmental and socio-economic impacts of the new proposed activities with participation of impacted communities, project regulators and government departments, Designated Inuit Organization, and any other interested parties.

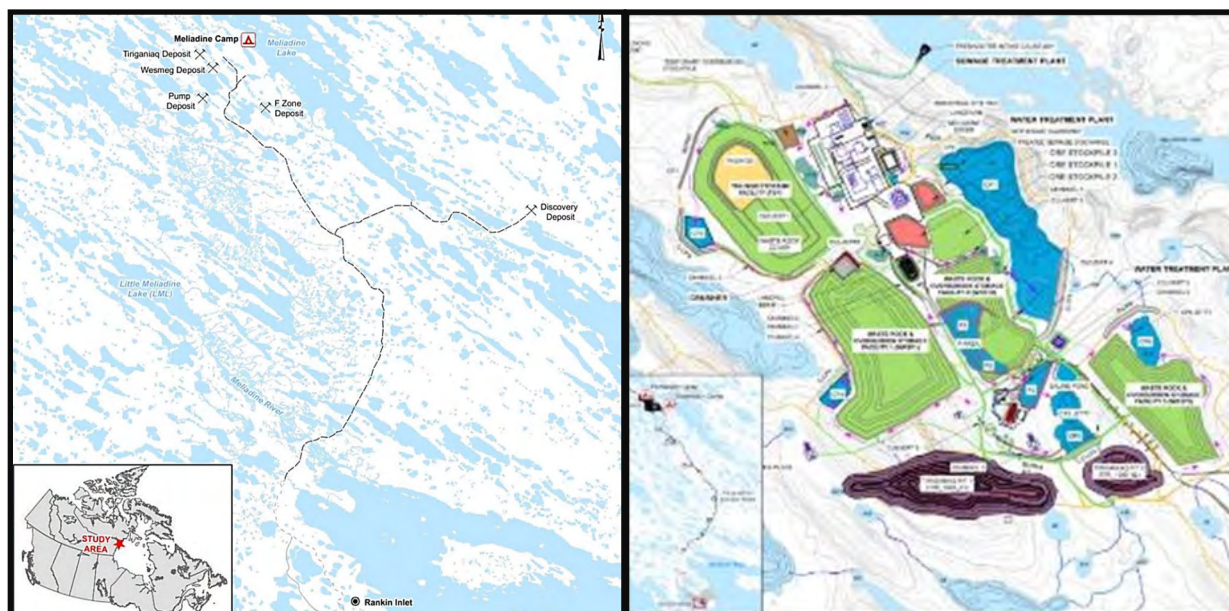
What is a Project Certificate?

A list of conditions issued by the Board, that guide a Proponent and regulators in implementing mitigation and monitoring of approved projects, to identify and reduce negative impacts to the environment and communities

Project History - Report section 1.3

The Meliadine Gold Mine was approved to proceed in 2015

Agnico Eagle is currently operating the Meliadine Gold Mine Project located in the Kivalliq region of Nunavut. The approved mine plan is for the development of five separate mineral deposits: Tiriganiaq, Wesmeg, Pump, F-zone and Discovery. All deposits were approved for open pit mining with Tiriganiaq being the only deposit with underground mining as well. The three main mine components include the Mine site 25 kilometres (km) northwest of Rankin Inlet, the fuel storage and laydown facility at Itivia Harbour, and a bypass road and the All-Weather Access Road (AWAR) to connect the components.



Meliadine Gold Mine Location

Main Mine Site

Amendment 1: Saline Effluent Discharge (approved in 2018)



Additional Activities:

- subsea waterline and diffuser installed into Melvin Bay
- Discharge 800 cubic metres of saline water per day during open water season
- Trucking saline water from mine to Itivia Harbour by 16 round trips per day

Amendment 2: Waterlines (approved in 2020)

Additional Activities:

- Increase discharge of saline effluent into Melvin Bay to a maximum of 20,000 cubic metres per day still only during open water season
- Instal 2 waterlines along the All Weather Access Road and bypass road, covered by rock
- Instal a new line and diffuser into Melvin Bay



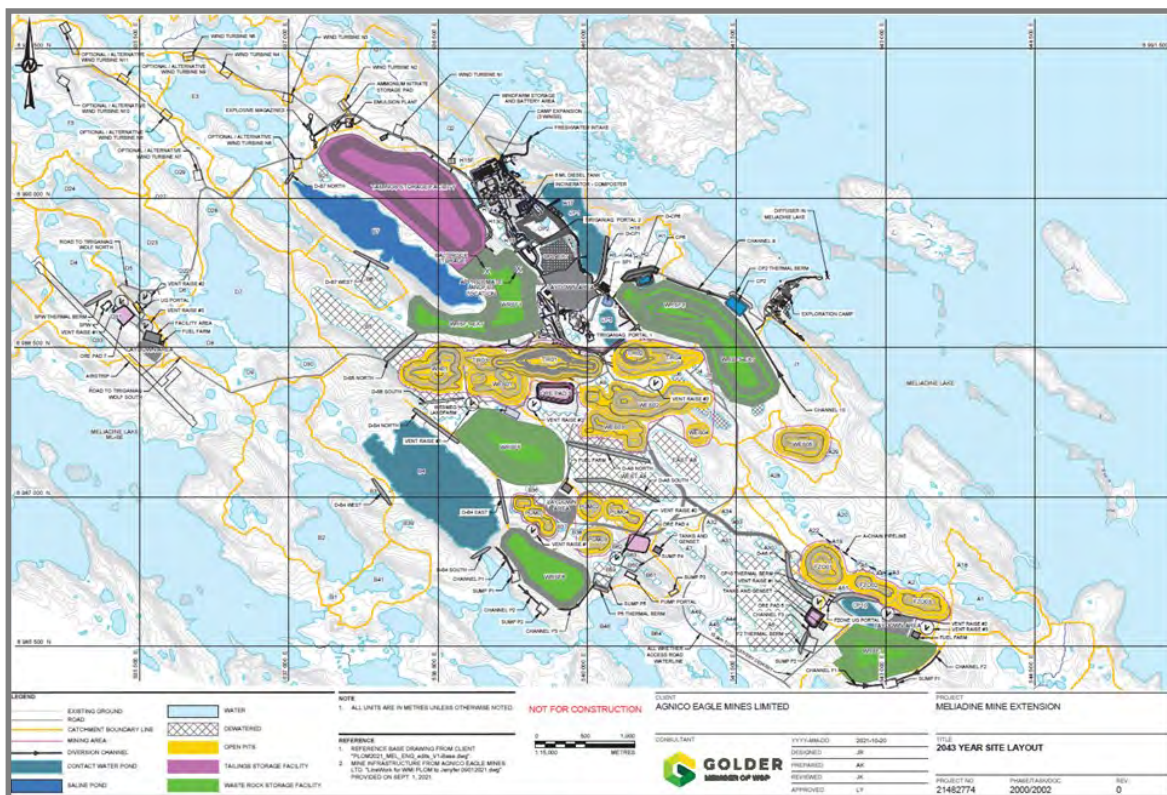
Current Amendment: Meliadine Extension Proposal

- Report section 1.4

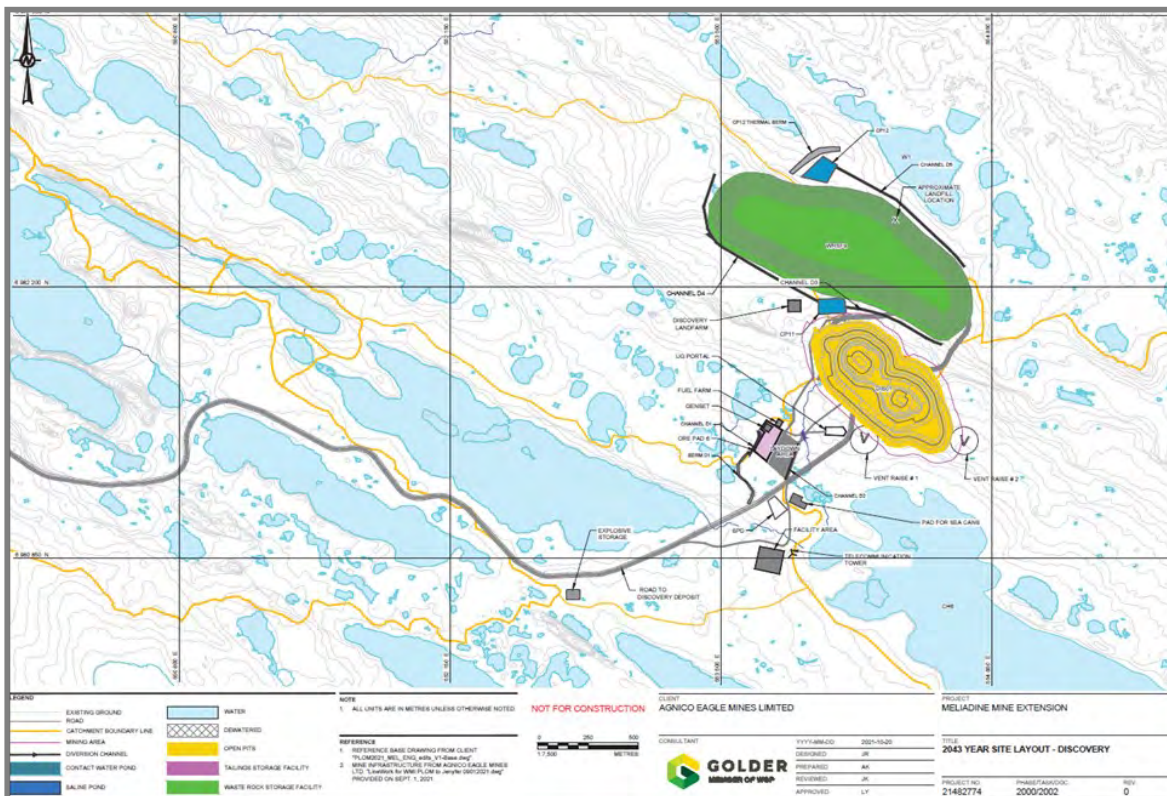
In July 2022, Agnico Eagle submitted a proposal to change various parts of the project:

- Extending mine life by 11 years to 2043 by adding underground mining to specific targets
- Increasing employment
- Adding 11 wind turbines and associated infrastructure
- Adding waterline along Discovery Road and additional water management infrastructure
- Deposit waste rock and tailings in mined out pits and additional waste management infrastructure on site
- Adding more fuel storage
- Using new borrow pits and quarries for construction
- Continued use of existing infrastructure including the main Mine Site, All Weather Access Road and bypass road, as well as Itivia Harbour development area

**while originally proposed with the application, Agnico Eagle removed a proposed airstrip from the list of activities.*



Extension Proposal: Proposed Plan at the Main Mine Site



Extension Proposal: Proposed Plan at the Discovery Site

Agnico Eagle's Assessment

- see Report section 2

Agnico Eagle's Final Environmental Impact Statement Addendum describes its assessment of the potential environmental and socio-economic impacts of the proposed changes to the Meliadine Gold Mine:

Positive Change:

- Greenhouse Gases and Climate Change
- Economic Development
- Employment

No Change/Negligible Change:

- Air Quality
- Noise
- Permafrost
- Water Quality
- Fish
- Birds
- Marine
- Education
- Traditional Activity
- Human Health
- Accidents and Malfunctions

Minor Impacts:

- Vegetation
- Terrestrial Wildlife



Footprint Change to Main Mine Site



Proposed Windfarm Location

Agnico Eagle's Conclusions for the Extension Proposal:

"Overall, the Meliadine Extension represents a negligible change from the 2014 FEIS and approved Meliadine Mine activities. Significant lasting impacts are not anticipated, aside from socio-economic benefits (e.g., training, jobs, business partnerships, tax revenue), as well as through the reduction of greenhouse gases. Cumulative effects are considered not significant for all wildlife (including caribou), birds, and marine components."

—Agnico Eagle 2022 FEIS Addendum

Procedural History of the Project Proposal

- see Report section 1.6

The key procedural steps that occurred throughout the NIRB's assessment:



Whale Cove Information Session



Hatchet Lake Information Session



Baker Lake Information Session

In-person Engagement Opportunities

- see Report section 1.6.2

Community Engagement:

-Information Sessions
(afternoon open house and evening meetings):

- Kivalliq Region, Nunavut
- Northern Manitoba
- Northern Saskatchewan

Community Roundtables:

- Pre-Hearing Conference
- Public Hearing

Written comments accepted at all in-person meetings and digitally throughout the assessment



Black Lake Information Session



Rankin Inlet Information Session

Involvement of Intervenors and Regulators:

Opportunities for written feedback:

- Information Requests
- Technical Review Comments
- Final Written Submissions

1 Technical Meeting

2 Pre-Hearing Conferences

1 Public Hearing



Tadoule Lake Information Session



Technical Meeting, Community Roundtable and Pre-Hearing Conference, November 2022

The Public Hearing

- see Report section 1.6.2.4 and Appendix A

The Public Hearing was held in Rankin Inlet, Nunavut, from September 12-20, 2023. It included a site visit of Meliadine Gold Mine, technical sessions, and a community roundtable.



Public Hearing Technical Sessions



Public Hearing Site Visit



Public Hearing Community Roundtable



Public Hearing

Intervenors at the NIRB Public Hearing:

Nunavut Tunngavik Incorporated
Kivalliq Inuit Association
Government of Nunavut
Crown-Indigenous Relations and Northern Affairs Canada
Environment and Climate Change Canada
Fisheries and Oceans Canada
Health Canada
Transport Canada
Natural Resources Canada
Kangiqliniq Hunters and Trappers Organization
Sayisi Dene First Nation
Northlands Denesuline First Nation
Athabasca Denesųliné NÉNÉ Land Corporation

Summary of Comments from Community Members

- see Report section 4

The Community Roundtable helps the Board gain a better understanding of each community's views, perspectives, and knowledge about the project proposal. The Inuit Qaujimajatuqangit, Indigenous Knowledge and Community Knowledge that is shared throughout the community roundtable is central in the Board's final decision and recommendation.

Invited Community Representatives:

Nunavut:

Rankin Inlet
Arviat
Baker Lake
Chesterfield Inlet
Coral Harbour
Naujaat
Whale Cove

Manitoba:

Lac Brochet
Tadoule Lake

Saskatchewan:

Black Lake
Fond du Lac
Hatchet Lake



Public Hearing Community Roundtable

Comments Heard from Community Members

Ecosystemic:

Air Quality
Water Quality
Caribou
Climate Change
Monitoring
Birds
Fish
Dust
Windfarm

Socio-economic:

Employment
Consultation
Food Security
Economic Opportunities
Inuit Qaujimajatuqangit
Traditional Land Use
Youth

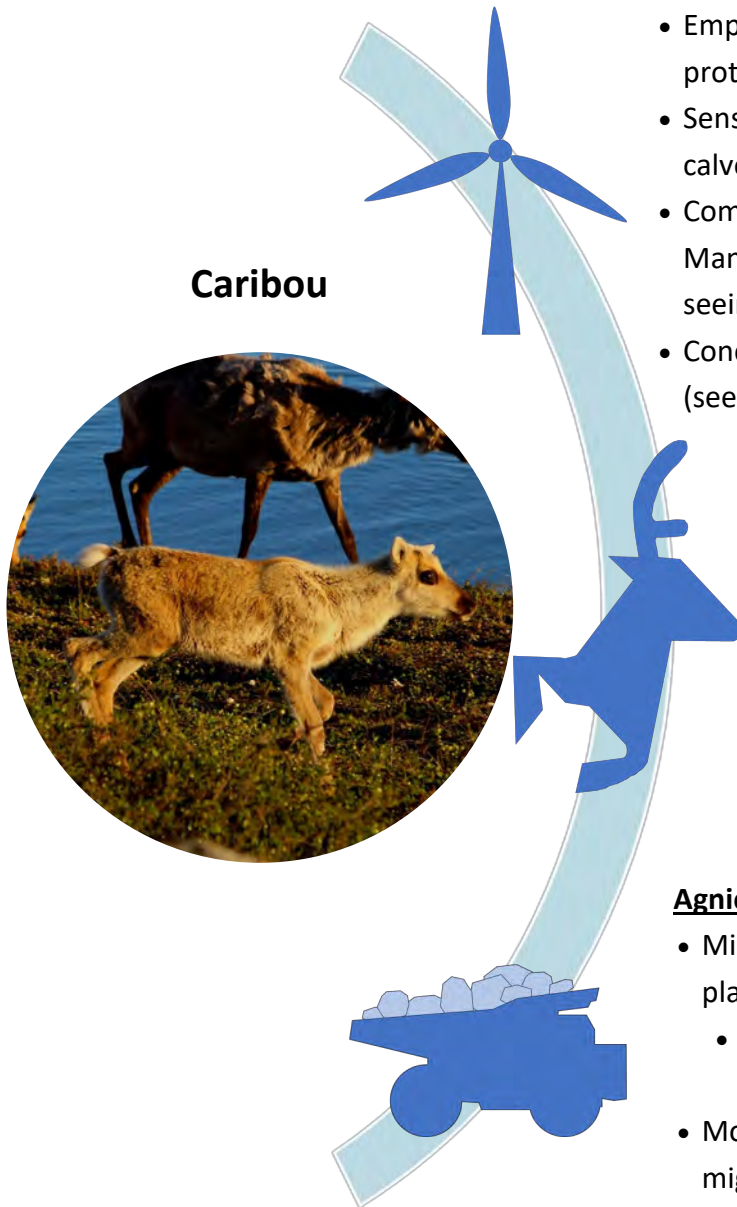
Other:

Alternative Energy
Alternatives
Terrestrial Advisory
Group
Working Together

"Our homes, our families, our communities are built on a foundation of our relationship with the caribou. Our bodies, mind, spirits are fed by the caribou. We are the caribou, so having the opportunity to speak today is very important to all of us."

—C. Sayazie, Black Lake First Nation Community Representative

Issues the Board Heard on Benefits and Impacts of the Meliadine Extension– see Report sections 3, 4 and 5



Communities

- Emphasized the importance of protecting caribou and migration
- Sensitivity of caribou especially young calves and their mothers
- Communities in Nunavut, and Northern Manitoba and Saskatchewan have been seeing changes in caribou migration
- Concerns with impacts of wind turbines (see next page)

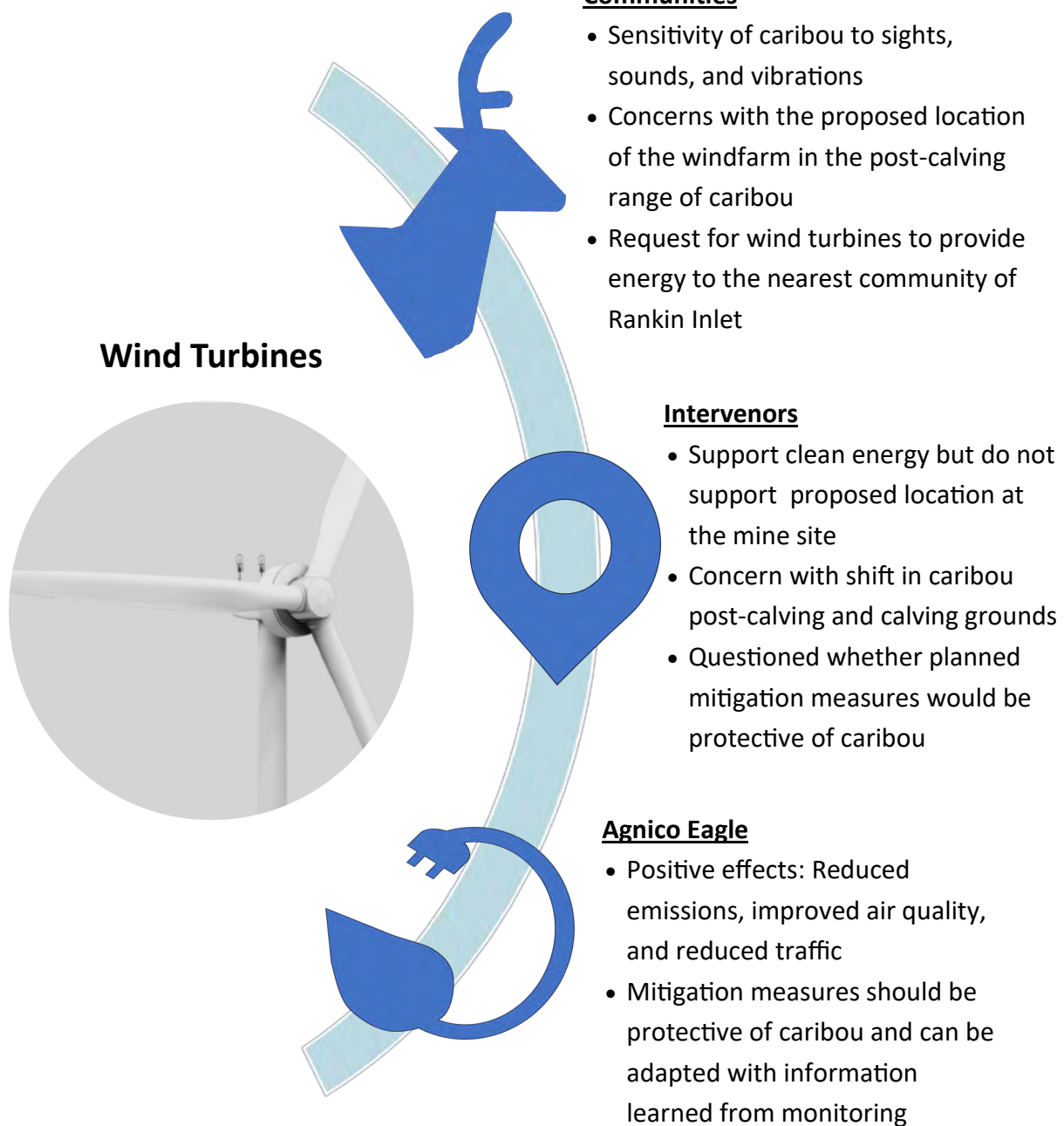
Intervenors

- Concern with shift in caribou post-calving and calving grounds
- Impacts from intensifying mining and mining for 11 more years
- Questioned current mitigation measures in place
- Concerns with impacts of wind turbines (see next page)

Agnico Eagle

- Mine has mitigation measures in place to protect caribou
 - The mine shuts down when caribou are within 5 Km
- Monitoring data of caribou migrating through site shows that current measures are protective of caribou

“The same blood that spills in the calving grounds during calving is the same blood that flows and flows through my veins. In order for our people to survive, we must protect the caribou and where the caribou calf.” -K. Mercredi, Fond Du Lac Community Representative



Relocation of the Windfarm

- During the Public Hearing Agnico Eagle proposed to relocate the windfarm to a location chosen in the future in consultation with the Kivalliq Inuit Association.
- Board determined that there could be different impacts at another location and not enough information was provided on alternate locations to allow for assessment in the current assessment.

Water Management



Communities and Intervenors

- Concern with water discharge into Meliadine Lake
- There are Elders and community members no longer using water or ice from Meliadine Lake or Meliadine River due to concerns on water quality

Agnico Eagle

- Water quality monitoring shows water in Meliadine Lake is safe to drink
- Discharge to Meliadine Lake is not increasing to more than has previously been approved

Communities and Intervenors

- More information required about areas being considered for storing waste rock and tailings
- Some information can be provided prior to activity starting but site specific information will be required

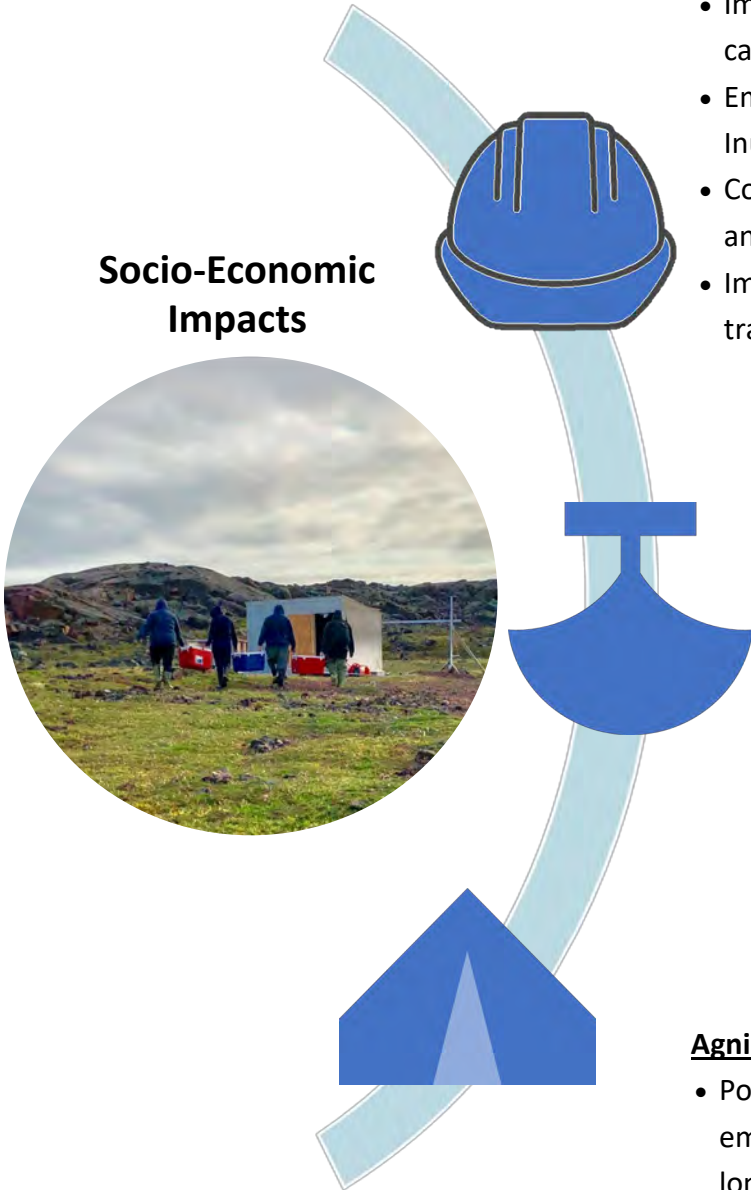
Agnico Eagle

- Further analysis to be completed and information will be provided in the Nunavut Water Board licensing process



In-pit Deposition





Socio-Economic Impacts



Communities

- Importance of country food including caribou and fish and food security
- Employment must be maximized for Inuit
- Communities need economic support and job training opportunities
- Impacts to caribou will impact traditional land use

Intervenor responsibilities

- Concerns about Inuit employment percentages and turnover
- More information required about employment barriers for women
- Importance of considering Inuit Qaujimajatuqangit and Indigenous Knowledge
- Concerns about impacts to availability of country food

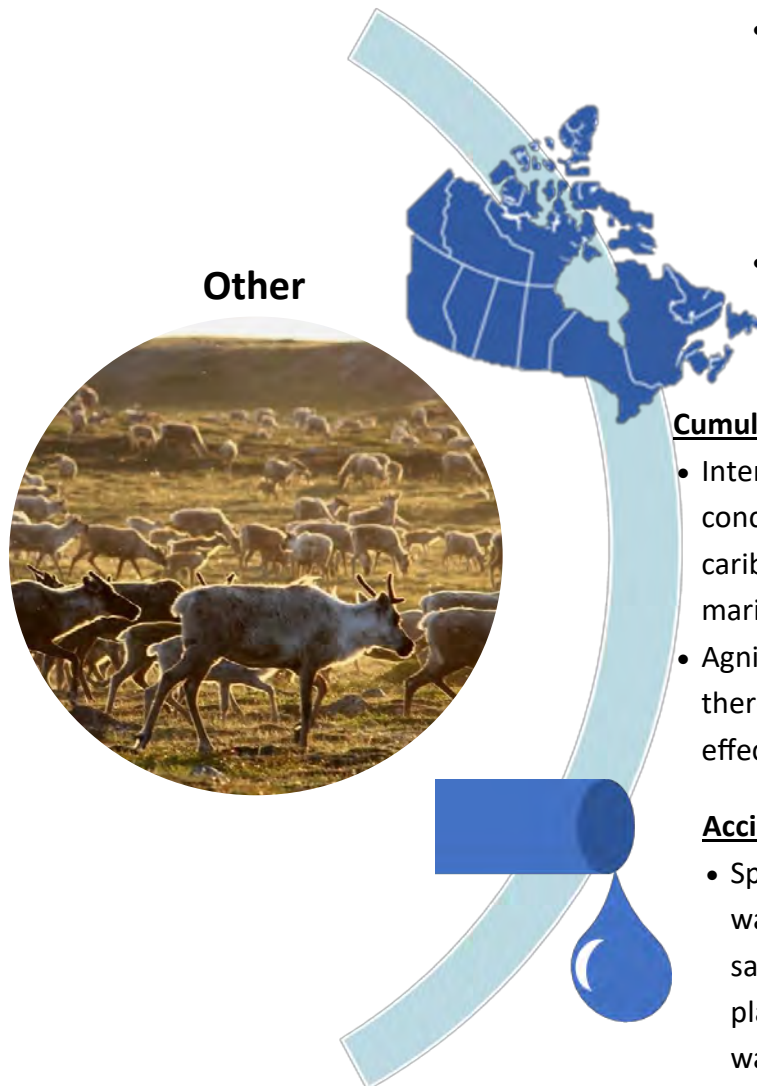
Agnico Eagle

- Positive effects: increased employment and employment for a longer period of time
- New program, Sanajiksanut, to improve Inuit training and hiring
- Terrestrial Advisory Group in place to provide Inuit Qaujimajatuqangit into monitoring and mitigation measures

"Inuit need the jobs... you better make darn sure we get the jobs and the ability to continue to live in our area where we choose to live in not force us to move somewhere else, and you better make sure you invest in the communities that are 28 kilometres from your mine site..."

-A Tattuinee, Rankin Inlet Community Member

“One of the most important aspects to us is the caribou and the lands that sustain them. The barren-ground herds have their calves in Nunavut and travel into our territories for fall and winter. Through these migrations of the caribou, we are connected to the lands and people across Nunavut.”—C. Sayazie, Black Lake First Nation Community Representative



Transboundary Effects

- Intervenors and community members from Manitoba and Saskatchewan discussed the importance of caribou for their food, culture, and spirit
- They are connected to Nunavut and the Project area through the Qamanirjuaq caribou herd range

Cumulative Effects

- Intervenors and community members had concerns about cumulative effects on caribou, water quality, air quality and the marine environment
- Agnico Eagle’s analysis concluded that there would be no added cumulative effects

Accidents and Malfunctions

- Spills from the proposed Discovery waterline would be controlled with the same leak detection and spill prevention plan in place for the approved waterlines

“...caribou are exposed in the bigger picture -- all the way from northern Manitoba and Saskatchewan to here, they're exposed to power lines, fires, climate change, new predation. We have grizzlies showing up now that we didn't have before. Exploration, mines, roads. And there's exploration going on east of here, west of here, south of here. All these impacts the caribou. So any small increase in activity at this mine will add to the effects on the caribou population.”— B. Zawadski, Rankin Inlet Community Member

Conclusions and Recommendations of the Board

– see Report sections 5, 6, and 7

The NIRB’s conclusions and recommendations after careful consideration of all the technical comments and information, Inuit Qaujimajatuqangit and Indigenous Knowledge provided throughout the assessment were that due to the considerable uncertainty remaining of the potential for the Proposal to have negative, lasting effects on caribou, and the uncertainty of cumulative effects, **the Board recommended that the Extension Proposal should not be allowed to proceed at this time.**

Throughout the assessment the Board heard shared concern expressed by Intervenor as well as community members from the Kivalliq, Northern Manitoba and Northern Saskatchewan, that uncertainty remains regarding the nature and extent of potential negative impacts on caribou health, abundance and behaviour due to the intensification of mining, 11-year extension of the mine life and construction and operation of the windfarm as proposed in the Extension Proposal. The Board also heard from Intervenor and community members that there was concern about the potential for the Extension Proposal to have cumulative effects to freshwater quality, air quality, and the marine environment.

The Precautionary Approach

When data gaps or uncertainty exist in predicating effects during an impact assessment, it is Agnico Eagle’s responsibility to demonstrate that proposed measures are designed to prevent or mitigate adverse impacts to the environment, people, and communities.

Caribou

- Uncertainty whether mitigation measures would be sufficiently protective
Proposed measures considered were for shutting down mining operations, road, and wind turbines when caribou were in the area.
- The Board is not confident that these mitigation measures and adaptive management plans would be sufficient to protect the caribou during critical calving and post-calving periods, especially if the herds continue to shift the primary use areas towards the mine.
- Negative impacts on caribou would have immediate negative effects on the ability to harvest caribou, which could have devastating and lasting effects on the livelihood, health and culture of Inuit, Dene and Denesuline in the region.





Windfarm

- The Board is not confident that the potential negative effects on caribou due to the windfarm as proposed and assessed in the Extension Proposal, can be effectively prevented, mitigated or adaptively managed in the proposed location at this time.
- The Board is generally supportive of alternative energy sources, reduction on the reliance on hydrocarbons, and reduction in greenhouse gas emissions.

"...We cannot risk the health of the herd by experimenting with wind turbines in an area so critical for caribou well-being."

—J. Katz, Kivalliq Inuit Association

Cumulative Effects

There is considerable uncertainty in relation to the scale and scope of cumulative effects that the proposed intensification of activities and addition of 11 years to the mine life will have on:

- The movement, abundance and health of the Qamanirjuaq caribou herd
- Air quality
- Water quality in Meliadine Lake and Itivia Harbour
- The health, livelihood, culture and traditional land use of people in the region

Future Applications

With additional project and regional monitoring efforts, and operational experience with the operation of the approved Meliadine Gold Mine Project, there may be increased certainty regarding effects to caribou and cumulative effects. The additional experience and monitoring results may create a clearer picture of the abundance, health, and movement of caribou near the mine, and could provide an increased level of assurance that some or all of the activities, in the Extension Proposal could be conducted in a manner that would not unduly and adversely impact the ecosystemic integrity of the Nunavut Settlement Area.

Recommendation to the Minister

After considering all evidence heard throughout the assessment, the Board has determined that even with proposed mitigation, management, and revised terms and conditions, the potential for significant adverse ecosystemic and socio-economic effects associated with the Proposal cannot be effectively managed. Consequently, the Board recommends to the Responsible Ministers that the Extension Proposal, as currently proposed, **should not be allowed to proceed.**

Recommendation for Regulatory Agencies

The Board recognizes that it is not solely the responsibility of Agnico Eagle to improve understanding of the abundance, health and movement of caribou. Therefore, the Board encouraged regulators with jurisdiction over the Qamanirjuaq caribou herd to work together to reduce uncertainty of this herd on the regional level which will help to improve clarity for future assessments.

Next Steps

After receiving the Board's Report and Recommendations, the Responsible Ministers will review the Report and issue their decision in respect of the Proposal. Because the Board's recommendation for this assessment is that it should not proceed, within 90-180 days of the Ministers' receipt of the Report, the Ministers must:

Agree

Agree with the Board's reconsideration decision and recommendations

OR

**Reject
or Vary**

Reject or vary the Board's reconsideration decision and recommendations in any manner the Ministers consider appropriate

The Board is grateful to all who actively participated in and who generously shared their knowledge, experience and expertise. The NIRB recognizes and appreciates the sacrifices all parties made to attend the Board's in-person meetings, and thanks everyone for their willingness to meet and work together in a collaborative, and respectful manner during the assessment process.

