





Analysis of the Risk of **Temporary Mine Closure**

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1. Introduction

As part of the Meliadine Project Certificate No. 006, term and condition No. 90, Agnico Eagle has been asked to "*identify risks and potential effects of temporary mine closures on communities and to develop appropriate offsetting measures*" (Nunavut Impact Review Board, 2015). More specifically:

"Prior to the commencement of operations, the Proponent is required to undertake an analysis of the risk of temporary mine closure, giving consideration to how communities in the Kivalliq region may be affected by temporary and permanent closure of the mine, including economic, social and cultural effects. The results of this analysis are to be provided to the NIRB upon completion." (Nunavut Impact Review Board, 2015).

2. Temporary Closure

A temporary closure occurs when Agnico Eagle ceases to operate the Meliadine Project with the intent to resume mining activities in the future, and maintains activities relating to the facilities necessary to protect humans, wildlife and the environment. Temporary closure could last for a period depending on economic, environmental and social factors (Agnico Eagle Mines Ltd and Kivalliq Inuit Association, 2017, p. 28).

The Meliadine Operation is planned to be continuous for the entire proposed operating period, however, temporary closure could occur if, for any reason, the Project became uneconomic and was expected to remain so for an extended period of time (Agnico Eagle Mines Ltd, 2014, p. 20). Examples of situations that could contribute to the Project becoming uneconomic include labour disputes, unfavorable gold prices, critical breakdowns, or shipping delays.

Notification of temporary closure would be presented to the staff and the local population with at least 30 days' notice; a longer notice period will be provided where possible. The staff maintained at site would be sufficient in number and expertise to successfully carry out care, maintenance and monitoring duties, and to address and remediate any potential problems that may arise (Agnico Eagle Mines Ltd, 2015, p. 142).

As per the Meliadine Inuit Impact and Benefit Agreement (IIBA), written notice of a temporary closure decision would be given immediately to the Kivalliq Inuit Association (KIA) and the Parties would "*enter into good faith negotiations and use commercially reasonable efforts to conclude an agreement on appropriate implementation measures which shall be in keeping with the purpose and the objectives of*" the IIBA (Agnico Eagle Mines Ltd and Kivalliq Inuit Association, 2017, p. 17).



3. Effects of Temporary Closure on Kivalliq Communities

Any potential temporary closure scenario would likely be unplanned and therefore would have more potential for negative effects (Agnico Eagle Mines Ltd, 2014, p. 20). However, if a temporary closure were to occur early in the Project's life cycle, many of the anticipated socio-economic impacts described in the Meliadine Project Final Environmental Impact Statement (FEIS) may not have fully developed (Golder Associates, 2014, p. 186) and may thus attenuate any negative impacts of a temporary closure.

The extent to which mine closure affects Kivalliq communities will vary depending on the size of the Agnico Eagle and contractor labour force from each community that is employed at the Meliadine Project. The impacts will likely be higher in the community of Rankin Inlet as this community currently provides over 60% of Agnico Eagle's Inuit labour force (Aglu Consulting and Training Inc and Stratos Inc, 2018, p. 17).

3.1 Anticipated Socio-Economic Impacts

Anticipated socio-economic impacts of the Meliadine project have been detailed in Volume 9 – Social Environment of the FEIS through pathway and effects analysis. A primary pathway is likely to result in a measurable environmental change that could contribute to residual effects on a VSEC relative to baseline values (Golder Associates, 2014, p. 12) The table below summarizes the primary pathways by valued socio-economic components (VSEC):

Valued Component	Primary Pathway topics
Population Demographics	Population stability
Traditional Activity and Knowledge	Traditional and commercial harvesting
	Land use and mobility
	Food security
Economic Development and	Employment
Opportunities	GDP and Economic Growth
	Inflation and Consumer Price Index
	Trade Balance
	Investment
	Government Fiscal Situation
	Business Opportunities and Contracting
	Economic Development
	• Income



Education and Training	 Education achievement, dropout rates, school attendance Available training in existing education system Capacities of existing education system Funding of existing education system Education and skill levels of local labour force
Individual, family and community wellbeing	Physical and Mental HealthSafetySavings
Community infrastructure and Public Services	 Population stability (effects of migration on housing, police, and health/social services, financial services, communication services, school services and community/infrastructure services) Local and regional transportation
Governance and Leadership	 Fiscal performance of government Operational capacity of government Regulatory and monitoring capacity of government
Non-Traditional Land Use and Resource Use	 Hunting and fishing Tourism, recreation, parks and protected areas
Worker and Public Health and Safety	 Health and safety performance for the Project (Project Activities) General Public, Workers
Cultural, Archaeological and Paleontological Resources	Site specific

Table 1: Summary of VSECs with primary pathway analysis 9.2-9.10 (Golder Associates, 2014)

Of the identified impacts with primary pathway analysis in the FEIS, those that would be most affected by a temporary closure are listed below:

• **Employment:** Temporary closure would have a significant impact on employment. As per the FEIS, during operations, the Meliadine project is expected to directly employ 700 people per year (Golder Associates, 2014, p. 182). Although the Meliadine Project FEIS makes no specific predictions regarding Kivalliq community's resident employment rates, Agnico Eagle is committed to maximizing employment opportunities for the greatest number of Inuit (Agnico Eagle Mines Ltd and Kivalliq Inuit Association, 2017, pp. 7,56).



- Income: Employment income paid by Agnico Eagle at the Meliadine Project will result in competitive wages for people working on the Project, including for unspecialized workers (Golder Associates, 2014, p. 185). In the event of a temporary closure, incomes may be negatively affected as employees shift to employment insurance (in the case of a layoff) or work reduced hours in the case of work sharing or other mitigation measures that Agnico may implement.
- Business Development: A temporary closure will have direct impacts on project expenditures, GDP, government revenues including IIBA-related royalties and business development as Agnico spending is reduced. The most significant anticipated impact would be on Kivalliq businesses, particularly in Rankin Inlet and Baker Lake, where 70% of the Kivalliq's NTI-registered businesses are located (Golder Associates, 2014, p. 118).

It is not expected that a temporary closure would greatly impact workforce training and community education. As per the Meliadine Inuit Impact and Benefit agreement, Agnico Eagle is required to maintain Inuit training expenditures at around \$3.6 million in addition to spending an additional \$1 million (half of which is spent by Agnico and half is paid to the KIA) on initiatives that serve to assist in obtaining at least 50% Inuit employment for all Nunavut Projects (Agnico Eagle Mines Ltd and Kivalliq Inuit Association, 2017, p. 66).

While IIBA provisions may be suspended during a temporary closure, if other Agnico projects are still operating normally in Nunavut (e.g. Whale Tail), then these general requirements would likely still be in effect. Given this, while the types of workforce training and community education may shift in order to attenuate employment effects of a temporary closure, the overall dollar amount spent would likely not be affected unless temporary closure occurred at all Agnico sites in Nunavut. In the case of a temporary closure at all Agnico sites in Nunavut, training expenditures would be impacted, however these impacts cannot be assessed since changes to IIBA provisions would need to be negotiated with the KIA.

3.2 Mitigation Measures

3.2.1 Building Capacity

Agnico Eagle is committed to not only enhancing access to economic opportunities during the Meliadine Project's life, but to also give consideration to an eventual final closure. It is Agnico's intent to, by Project final closure, have increased the capacity of Kivalliq labour and business to engage in economic activities independent of the Project. The principles below contribute to achieving this goal and could help mitigate effects of a temporary closure (Agnico Eagle Mines Ltd, 2014, pp. 19-20):

- **Employment**: Preferential employment, training and culturally sensitive employment practices that contribute to job performance, satisfaction, retention and advancement for people in the Kivalliq Region.
 - This, and the inclusion of targeted Inuit employment as a criterion for evaluating bids from contractors, will build the capacity of Inuit employees to participate in a



wage economy. These measures will provide the work experience that will give people a competitive edge in competing for jobs elsewhere in the economy.

- Education and training: Programs that emphasize not only preparation of adults for work at the Project (e.g. work readiness training), but that encourage youth to value education with a view to either Agnico Eagle employment or other participation in the formal wage economy has implications for long-term employability. In addition, the expectation is that such programs will provide motivation to higher education in areas such as health, education, public security, and business administration.
- **Contracting**: Preferential contracting, assistance with the development of business expertise and including the use of Kivalliq region businesses as a criterion for evaluation of bids from businesses supplying to the Project, will contribute to building experience and capacity in the Kivalliq. In addition, Agnico Eagle will support local suppliers to enhance their service offering with a view to diversify their client base and be less dependent on Agnico as a primary client.
- **Support of traditional culture**: The consideration and support for individual decisions to combine formal wage employment with traditional activities and practices in employment and education and training programs contributes to resilience in face of economic dislocation.
- **IIBA and community contributions**: Continued implementation of the IIBA will contribute to economic growth, but also to the social and cultural wellbeing that underlies the ability of people to create and take up life opportunities.

3.2.1 Workforce and Contract Transition Plan

As per the Meliadine IIBA, Agnico "*will use its Best Efforts to ensure that Inuit workers shall be the last to be laid off, with preference given to Inuit of the Affected Communities*" (Rankin Inlet and Chesterfield Inlet) (Agnico Eagle Mines Ltd and Kivalliq Inuit Association, 2017, p. 59). This provision as well as the hiring priority outlined in the IIBA are the main drivers behind the workforce transition plan.

One of Agnico Eagle's guiding principles in a temporary closure scenario is the minimize layoffs and job losses, however, depending on the nature and duration of the temporary closure, impacts would likely still be felt by Kivalliq communities.

Agnico Eagle intends to work with communities and government to agree on appropriate measures, including schedules, to ensure that effects of any temporary closure are managed as best as possible (Agnico Eagle Mines Ltd, 2014).

In the event of a temporary closure of the Meliadine Project, specific mitigation measures have been considered to reduce potential negative effects on Kivalliq communities (Agnico Eagle Mines Ltd, 2016, pp. 4-5):



- Secure full time jobs and income and whenever possible, minimize the length of the transition for employees affected.
- Encourage the use of vacations to cover lack of work period.
- Promote opportunities for Agnico Eagle employees to transfer to other Agnico mine site locations, including temporary assignments.
- Explore opportunities to progress projects or maintenance programs in order to maintain jobs and income.
- Offer training to employees to acquire the necessary skills to be able to take advantage of mitigation measures (e.g. transfers, maintenance programs). Training offered will be focused on enhancing acquired skills in same or equivalent position based on current and future operational needs.
- Introduce temporary unpaid leave of absence for those who would like to pursue other training or personal opportunities during a temporary closure.
- Exploring opportunities for Work-Sharing. Work-Sharing is an adjustment program with Services Canada designed to help employers and employees avoid layoffs when there is a temporary reduction in the normal level of business activity that is beyond the control of the employer. The measure provides income support to employees eligible for Employment Insurance benefits who work a temporarily reduced work week while their employer recovers. Employees on a Work-Sharing agreement agree to a reduced schedule of work and to share the available work over a specified period of time.
- Promote early retirement options for those who are eligible.
- Provide counselling to employees that are being laid-off to help them prepare for the effects of losing their jobs by reviewing their options and plan their next steps.
- Provide financial information and counselling to employees (such as any lay-off packages, RRSP management, stocks management, budgeting, information on government employment benefit programs, etc.)
- Maintain access to Agnico's Employee Family Assistance Program by laid-off employees during temporary mine closure.
- Meet with Inuit business contractors to discuss impacts of temporary closure to contracts and opportunities for care and maintenance contracts. Agnico Eagle will place emphasis on such opportunities for Rankin Inlet-based contractors.

It is noted that the economic effects of a temporary closure will to a large extent depend on whether or not there are economic alternatives available at the time of closure to replace the



Project. This in turn is expected to largely depend on progress in developing the mining sector in the Kivalliq Region, and Nunavut more generally (Agnico Eagle Mines Ltd, 2014, p. 20).

4. Conclusion

Ultimately, the depth of the effects of a temporary closure on Kivalliq communities will depend on the duration and scope of the closure. The capacity building integrated into the overall Project as well as the workforce and contract transition plan have been designed to minimize and mitigate any potential effects.

In the event of premature (temporary or final) closure of the Project, Agnico will consult with the Socio-Economic Monitoring Working Group and the Kivalliq Socio-Economic Monitoring Committee to update the Socio-Economic Management Plan (Agnico Eagle Mines Limited, Government of Nunavut, Government of Canada, 2017). Additionally, this analysis will be updated as necessary to reflect significant changes to the Project or the socio-economic conditions in the region that may increase the risks and potential effects of temporary mine closures (Nunavut Impact Review Board, 2015). Updates will be submitted to the Nunavut Impact Review Board.



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