

# **Research and information needs concerning community health impacts and benefits from mining – A 2010 community visit report**

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## **Introduction**

In August 2010, a team of three researchers visited Baker Lake (Qamani'tuaq) and Rankin Inlet (Kangiqliniq) in Nunavut to learn from community members, institutions, and regional representatives about the health impacts and benefits of mining, community well-being, and associated information and research needs. The team was particularly interested in exploring the types of information and research needed to understand better how mining can contribute to Inuit health and community well-being. Also, these discussions helped identify community interest in partnering on research and knowledge translation activities focusing on community health and well-being in the context of resource extraction.

The report presented here summarizes information received from about 33 individuals. In addition, throughout this report the reader will find text boxes providing background information about mining and its context in Baker Lake and Rankin Inlet.

Inuit Tuttarvingat of the National Aboriginal Health Organization (NAHO)<sup>5</sup> and the University of Guelph's Geography Department partnered to support the visit, which involved team members Cathleen Knotsch, Senior Research Officer, and Maatalii Okalik, summer student, at Inuit Tuttarvingat, as well as Kelsey Peterson, Masters student at the University of Guelph. Professor Ben Bradshaw of the University of Guelph led the project.

The team members brought to this project a strong interest in the impacts of mining on health and well-being. Inuit Tuttarvingat of NAHO explored the topic of resource extraction first in 2006 with the report *Resource Extraction Development and Well-Being in the North*, noting several areas of resource development impacts unique to Inuit communities found described in literature and interviews. In 2008, NAHO organized a roundtable called *Exploring Community-Based Responses to Resource Extractive Development in Northern Canada* to bring together people with first-hand experience in local responses to resource extractive activities in

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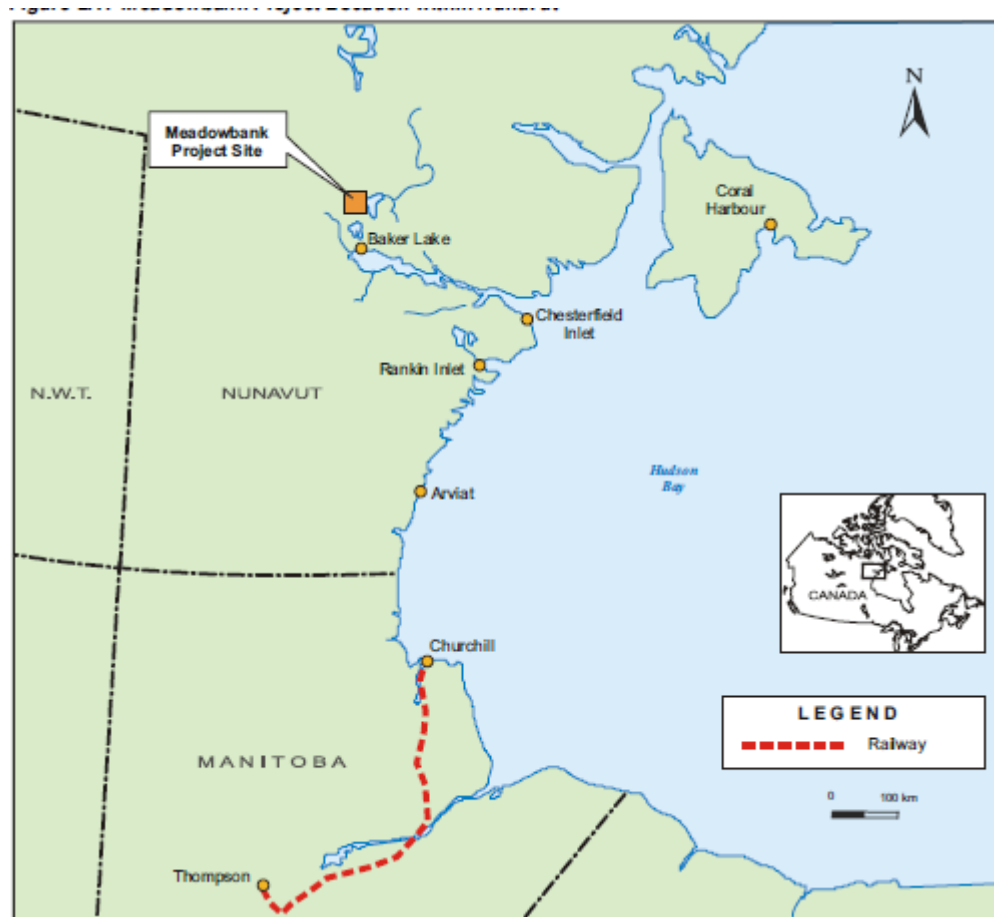
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<sup>5</sup> Inuit Tuttarvingat of the National Aboriginal Health Organization (NAHO), has the mandate to advance and promote the health and well-being of Inuit individuals, families and communities by working in strong partnerships to collect information and share knowledge. [www.naho.ca/inuit](http://www.naho.ca/inuit)

Aboriginal communities. Those discussions are summarized in the roundtable's *Final Report* (2008), which is available on NAHO's website along with an annotated bibliography and several other background documents. In addition, *Impact and Benefit Agreements: A Tool for Healthy Inuit Communities?* (Knotsch and Warda, 2009) provides a general overview of the impact and benefit agreements (IBAs) currently in place in the Arctic regions of Canada. The report discusses practices in negotiating, developing, and implementing these agreements and focuses on their role in promoting community well-being.

### Locating Baker Lake and Rankin Inlet on the map



Source: Cumberland Resources. (2003). Meadowbank gold project – project description. Vancouver. P. 2-2.

The Geography Department of the University of Guelph offers well-respected academic expertise in the fields of resource management, community research, and Impact and Benefit Agreements (IBAs). Professor Bradshaw leads an extensive research network on IBAs ([www.impactandbenefit.com](http://www.impactandbenefit.com)) and specializes in research focusing on community resilience and well-being.

The partnership between Inuit Tuttarvingat of NAHO and Professor Bradshaw's research team grew out of a common interest in the linkages between health, community well-being, and resource extraction. The research team's primary interest is in identifying research and information needs of communities located close to mines, with Inuit Tuttarvingat also focusing on knowledge translation and transfer needs.

### **Mining in the Canadian Arctic**

When the mining company Agnico-Eagle Mines Limited opened the Meadowbank mine in February 2010, the event was welcomed as a signal of Nunavut's return to mining. Economists report that since the beginning of production, the Meadowbank gold mine has been driving the economy of Nunavut and has increased the territory's gross domestic product by 11.8 per cent (Conference Board of Canada, 2011). This was the first mineral production in Nunavut since the Tahera Diamond Corporation's Jericho diamond mine in the Kitikmeot region closed in 2007. Prior to that, the longest running mine was the Nanisivik lead and zinc mine, which operated close to Arctic Bay on north Qikiqtaaluk from 1976 to 2002. In the Kivalliq region, the North Rankin nickel mine, located near Rankin Inlet, operated from 1957 to 1962, and the Cullaton Lake – Shear Lake gold mine, located 230 km west of Arviat, was active from 1981 to 1985.

Meadowbank mine is the first of four gold projects underway in Nunavut. The Meliadine gold project, an underground mine under development just 60 km north of Rankin Inlet, is expected to start operating in 2013. Two other gold projects in development are Hope Bay, southwest of Kugluktuk, and the Goose/George Lake project near Bathurst Inlet. Other mining in the exploratory stages includes the Kiggavik uranium project west of Baker Lake; Hackett River, a silver, copper, lead, and zinc deposit south of Bathurst Inlet; and the Mary River iron deposit situated 160 km south of Pond Inlet, Qikiqtaaluk (Baffin Island). Mary River is the largest mining project ever undertaken in the Canadian Arctic.

As of 2010, the Meadowbank gold mine is the only operating mine in the territory of Nunavut, and, along with Voisey's Bay (Nunatsiavut) and Raglan (Nunavik), is one of three mines operating today within Inuit Nunangat.

The research team initially intended to visit communities located in the vicinity of mines in each of the four Inuit regions; however, budgetary constraints forced the team to focus on one site. The community of Baker Lake was chosen because it is located in the vicinity of the 'youngest' operating mine in Inuit Nunangat and community members indicated their interest in collaborating with researchers and Inuit Tuttarvingat. Preparations for the Baker Lake visit began in June 2010, with the team's travel taking place in August, followed by a short visit to Rankin Inlet to speak with regional and territorial representatives.

## Methodology

The community visits were conducted according to guidelines for ethical research in Canada (Canadian Institutes of Health Research et al., 2010, p.110) and Nunavut (Nunavut Research Institute, 2006). Following recommendations for engagement with the community prior to beginning formal research for ensuring mutual benefits from research, the team visited the communities of Baker Lake and Rankin Inlet in the Kivalliq region of Nunavut in order to discuss possible research and information needs.

In preparation for the visit, 33 individuals were contacted to gather information from them about communication and research needs related to mining benefits and impacts on community well-being. These individuals represented as many sectors as possible including several levels of government. The researchers worked with the assumption that representatives of community, sub-regional, regional, and territorial agencies and institutions will have different priorities and perspectives about what they see as important indicators of community well-being.

The research team spoke with representatives from a variety of sectors (education, health, municipal and other governments) and populations (elders, youth). At the time of the visit, 15 individuals in Baker Lake and six individuals in Rankin Inlet made time for conversations with the team. In addition, the team met with 12 community elders of Baker Lake, willing to discuss their perspectives and information needs with the team. The duration of conversations ranged between one and three hours.

Conversations were loosely structured around three lines of questioning: what are positive, negative, and desired impacts of the mine on the community; what is needed to improve individual health and community well-being; and, what research and/or information would be useful for the community. We explicitly focused on the impacts and benefits of the gold mine and did not discuss other ongoing mining exploration.

Each team member took notes of the conversations. The notes were summarized into a spreadsheet, which was discussed by the team and reviewed by each team member. Several topics (e.g., hospital care) and themes (e.g., mental health) were easily identifiable. The team identified about 25 themes that respondents mentioned frequently and described in various contexts, with health services, education, and new income mentioned most often. The following

### **The Hamlet of Baker Lake, Nunavut**

- Located 1,600 km north of Winnipeg, Manitoba.
- Population in 2006: 1,728 (90 percent Inuit).
- Over half of the population is under the age of 18.
- Nunavut's only inland community.
- Gateway to Thelon and Kazan Rivers, both Canadian Heritage Rivers.
- Access to Thelon Wildlife Sanctuary.
- Non-renewable resources: gold, diamonds, uranium, base metals, nickel, copper and platinum group elements (PGEs).
- Connected with Meadowbank mine via a 110 km all-weather access road.

is a summary of the comments of those who generously shared their time and concerns with the team.

## New income and employment

### What is mining?

Mining is a form of mineral resource development in which people use environmental resources available in the earth to create products and wealth. Mining is capital intensive at the start, which means it requires large financial investments in advance. As a result, mining is often undertaken by large international companies specializing in resource extraction.

Products that are mined from the earth include valuable minerals and geological materials that cannot be grown or created in laboratories or factories. These products are also finite, which means they do not re-grow, and once extracted, they are not renewable.

There are different types of mining. **Surface mining** removes surface vegetation and dirt. It includes open-pit mining, which extracts rock or minerals by removing the materials from the earth's surface layer by layer. Sub-surface, or **underground mining**, uses tunnels or shafts dug into the earth to reach the ore (a type of rock that contains minerals) deposits. The lifespan of a mine is usually divided into four phases: mineral exploration, mine development, mine operation, and mine closure. Sometimes, a fifth stage is discussed, in which the exploration phase is separated into early exploration and late exploration.

New income and employment were prominent topics in all conversations. These factors were clearly welcomed and seen as positive outcomes of mining however, participants noted that the gains resulting from employment with the mine are in contrast to the fragile condition of other employment sectors. A common theme in discussions about the positive versus negative impacts of mining was that the two often occur at the same time. That is, while describing a consequence from mining as a positive factor, that same consequence also produces a downside or negative factor in another area of community life.

For example, employment at the mine is seen as a positive impact that contributes to individual and familial income, but trained workers leaving other community jobs to work at the mine has a negative impact on the delivery of municipal services. It is difficult for municipalities to compete with the salaries offered by the mine, and investing in employee training just to lose those individuals to other employers places an extra burden on municipal governments. For example, there is now a shortage of certified truck drivers to work for the hamlet and deliver drinking water to homes, which has a negative impact on all households. Small local governments do not have extensive human resource departments that can afford to run advertising campaigns for professional careers in municipal government.

While local governments were once the focal point of economic development and community affairs in the past, interest in economic opportunity now focuses on the mine. Increased cash income from work at the mine is welcomed and considered a positive impact. However, the lack of financial institutions and access to financial advice and services in the hamlet severely limits individuals and families in their financial planning. At times, participants noted that people might overextend themselves financially and become caught in high, long-term payments that cannot be adjusted when family circumstances or expenses for other needs change. The resulting shortage of cash brings hardship to the entire family.

The increase in material wealth for those working at the mine is described as an undeniably positive impact, citing, for example, children having bicycles and toys and adults owning more vehicles.

These items require storage at home, which then highlights the limited space available in the average home of mine

workers. Garages are rare, and some storage shacks exist where the space around buildings permits. Most people store items such as bicycles outside their houses. Changes in material wealth are highly visible to all others in the community, which can create social tension.

#### Timeline of the Meadowbank project

- 1970s** The discovery of uranium in the Baker Lake Area results in regional grassroots gold exploration.
- 1983** Ground is staked.
- 1987** Prospectors find the first gold.
- 2003** Meadowbank is established as a major Canadian gold project.
- 2005** Feasibility study results are announced.
- 2006** The Nunavut Impact Review Board recommends development of the project.
- 2007** A Development Partnership Agreement is signed with the Nunavut government. Agnico-Eagle acquires the project from Cumberland Resources.
- 2008** An all-season road is completed from Baker Lake to the site. Preparation for mining is carried on through 2009, including building dykes and draining water.
- 2010** The first gold is poured. Processing plant achieves commercial production on March 1<sup>st</sup>.
- 2011** Exploration program underway to consider expansion of the mine.

*Expected mine life until 2019.*

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Source: [Agnico-Eagle Mines](#). Accessed July 20, 2011.

## The arts and crafts sector

Arts and crafts have a relatively long history in Baker Lake as an economic sector with the community's printmaking artists being particularly well-known in the arts world. Development of

### Mining projects have four phases:

PHASE ONE	PHASE TWO	PHASE THREE	PHASE FOUR
<p><b>Mineral exploration</b></p> <ul style="list-style-type: none"> <li>• Prospecting: Locate sources of metals and minerals, get license, get permission where surface and subsurface rights are with separate property holders.</li> <li>• Staking a claim.</li> <li>• Investigating, surveying ground, and trenching.</li> <li>• Sampling and drilling.</li> <li>• Conducting environmental baseline studies.</li> <li>• Evaluating preliminary deposit.</li> </ul>	<p><b>Mine development</b></p> <ul style="list-style-type: none"> <li>• Increasing the company's knowledge of the resources (field tests, drill holes, get samples).</li> <li>• Developing the mine plan and infrastructure.</li> <li>• Consulting between mining company and government, communities (to meet requirements).</li> <li>• Evaluating financial (feasibility studies), socio-economic, and environmental impacts (baseline studies).</li> <li>• Obtaining permits, licenses and mining lease.</li> <li>• In Nunavut, finalizing Inuit Impact and Benefit Agreements (IIBA).</li> <li>• Developing final evaluation of project.</li> <li>• Building mine and facilities, ready to start operations.</li> </ul>	<p><b>Mine operation</b></p> <ul style="list-style-type: none"> <li>• Complying with Acts and regulations (potential impacts and mitigation of impacts).</li> <li>• Environmental monitoring.</li> <li>• Socio-economic monitoring.</li> <li>• Implementing impact and benefit agreements.</li> <li>• Hiring.</li> <li>• Training.</li> <li>• Commissioning.</li> <li>• Producing ore.</li> <li>• Expanding mine if feasible.</li> </ul>	<p><b>Mine closure</b></p> <ul style="list-style-type: none"> <li>• Shutting down production.</li> <li>• Decommissioning of facilities and equipment.</li> <li>• Reclaiming/restoring disturbed land as closely as possible to its original condition.</li> <li>• Monitoring success of reclamation post-closure.</li> </ul>

Sources: Gibson and O'Faircheallaigh, 2010; Natural Resources Canada, 2006.

printmaking dates back to the late 1950s when government administrators actively encouraged the arts as an economic sector and opportunity to gain income. During the team's visit, participants mentioned that art production at the local craft shop was indirectly affected by mining given that mine workers and visitors no longer pass through Baker Lake to get to the mine and instead fly directly to the mine's private landing strip. However, the mining company invites crafts people and artists to the mine site at times to show and sell their work. In this case, participants recognized the efforts of the mining company to support other economic sectors in the hamlet.

Considering that the arts and crafts of Baker Lake (especially prints) are world renowned, participants believe that sector-specific professional support should be made available to market the local arts and crafts better. They also called for support for the printmaking studio and its activities as the print shop's future seemed threatened. Artistic expression of traditional and contemporary themes is valued beyond the money it generates and, in particular, printmaking is seen as a valuable venue to preserve the images and knowledge of community elders.

## Infrastructure and municipal services

As a result of the mine, there is increased barge traffic during summer months on the waterway between Chesterfield Inlet and Baker Lake. This is the same waterway used annually by the barges that supply the hamlet with materials and products that are not shipped by plane. Participants noted increased sea-based activities due to mining but did not discuss possible environmental and social impacts.

Baker Lake community members expressed great concern about dust in the hamlet caused by trucking on dirt roads and its impact on human health. The road through the community, rather than the road leading to the mine, is of biggest concern. Since the roads are not paved, the dust caused by traffic is picked up from the road and spreads widely. The municipality sprays water on the road every morning, but this is not enough to prevent the dust that rolls like a big cloud through the community. While recognizing that municipal roads are not the responsibility of the mine, several participants

### Who benefits from mining?

Many of today's products come from mining, including minerals found in toothpaste, circuits in computers, metal frames of automobiles, piping and cables, and jewellery. Mining companies gain from mining, as do governments and consumers.

The modern treaties, or land claims agreements, that Inuit have signed with the federal government of Canada, entitle Inuit to a share of federal royalties from mineral exploration on Inuit lands. The same treaties require mining companies to come to specific legal agreements with Inuit organizations on how negative environmental impacts should be off-set and compensated, and how benefits should be shared with the representative regional and national Inuit organizations.

These legal agreements are called Inuit Impact and Benefit Agreements, or IIBAs. In Nunavut, IIBAs have to be in place before a mine begins operations.

had expressed their desire for the main road in town to be paved.

Traffic safety is another concern that is common to industries that rely on road transportation. Baker Lake residents noted that they at times worry about the safety of pedestrians when large trucks are on the main road that has no sidewalks, and in particular when the drivers are not local, don't know the community, and might speed.

Pressure on municipal services and the hamlet's infrastructure caused by a growing community was mentioned as a negative impact. Housing pressure arises from immigrant workers who move in with relatives or friends to work at the Meadowbank mine. Workers are being bussed to and from work at the beginning and end of their two-week rotational shifts. This situation contributes to residential crowding in the community because housing is not freely available and wait lists for subsidized housing are long and move slowly. More residents per housing unit create increased demand for utilities and municipal services such as drinking water delivery, sewage and garbage removal while the number of houses recorded by the municipality remains the same.

## Health services and hospital

Most of the comments the team heard about the mine's impact on human health described negative consequences. Although participants expressed great appreciation for existing health services and programs, they still noted shortcomings in the provision of health services and persistent difficulty in accessing doctors and hospitals as negative impacts, along with increased drug and alcohol abuse and addiction, spousal abuse, and domestic violence. The need for more mental health services and locally offered addiction treatment was mentioned repeatedly.

### The purpose of an IIBA

#### The purpose of an Inuit Impact and Benefit Agreement (IIBA) is to ensure that Inuit:

- Benefit from mining projects.
- Are compensated for the negative impact of the mines on communities, land, and traditional ways of life, for those losses that cannot be prevented or reduced.
- Have the opportunity to identify land areas that need to be protected and/or excluded from mining activities.
- Have equitable access to employment, contracting opportunities, training programs, and scholarship programs.

Mental health counselling was also seen as a need at the mine site, with the expectation that this service would be provided by the mine owners.

Respondents noted the lack of a hospital in the hamlet as having a negative impact, indicating that at some point expectations were raised for Baker Lake to have medical capacities beyond the existing nursing station, including a doctor. They also noted that many users of the nursing station are newcomers to the community, coming to work at the mines, and their needs for health services add to the nursing station's already

demanding work load. That said, the presence of a hospital in Rankin Inlet was seen as a benefit, as Rankin Inlet is closer to Baker Lake than are Churchill or Winnipeg that also provide medical services to Inuit of the Kivalliq region. Participants said that the building of a hospital in Baker Lake would be a clear benefit of mining taking place in their community. Several participants returned to concerns about the nursing station being overtaxed due to higher demand despite unchanged levels of capacity. They cited the desire to have a medical doctor stationed in Baker Lake. Treatment of mine accident victims was deemed a non-issue given that they are treated on-site and evacuated if needed from the mine site to a hospital.

Sexually transmitted infections (STIs) were mentioned as being on the rise. The increased prevalence of STIs is seen as a negative impact resulting from the presence of migrant mine workers at the mine and in the community. This scenario is felt as a negative impact from being close to the mine. The presence of previously unknown street drugs in the community as well as a perceived increase in drug use is seen as a direct negative impact from the mine.

## Family and community well-being

The shift work schedule for mine workers was described as being particularly disruptive to family life with negative impacts on health such as increased substance abuse, jealousy, family violence, child neglect, poor performance in school for children, and less opportunity for traditional activities. Participants expressed disappointment over the choices community youth are making currently with respect to drug and alcohol use, particularly after witnessing increased alcohol abuse in public among adults. They also noted that among youth there is a growing sense of feeling unsafe in town, especially at night.

Increased risk to and neglect of elders were mentioned as negative impacts. Tensions and shifts in roles within families are surfacing. Given the limited knowledge of the Inuit language among youth and the unilingualism of elders, these generations are drifting apart. Although these social issues are not directly attributable to the mine, participants see the mine as being well positioned to help support elders and help bridge the gap between the generations. Elders wish to bring young people out onto the land to teach the traditional skills that youth are lacking. Elders also wish to have a meeting place where they can meet, play games, and exercise. At this time, youth have such a meeting place but elders do not.

## Governance

Knowledge about the institutions and processes involved in determining whether a mining exploration or production will proceed is very uneven in the community. Of concern to participants is that there seems to be little recognition of the relationship between governance and benefits from the mine. Knowledge about the nature of impact and benefit agreements seems limited, and many have not heard about such agreements in a community context. For some, mentioning Inuit Impact and Benefit Agreements (IIBAs) triggers feelings of being excluded from a process that could provide the community with much needed funds. The relationship between the mine and the community appears to be viewed by participants as

independent from other agreements that the mine has with regional stakeholders. For example, there is confusion about who to seek help from in times of conflict; whether that is the hamlet, the mining company, or someone else. Also, expectations of benefits are higher than what the IIBA can do or has done; and some individuals are not aware of how the IIBA relates to life in Baker Lake.

#### Existing IIBAs between Inuit and mining companies, 2011

MINE	INUIT IMPACT AND BENEFIT AGREEMENT (IIBA)	LAND CLAIMS AGREEMENT
Raglan mine, Nunavik	1995 Falconbridge (now Xstrata) and Makivik Corporation, the communities of Salluit, Kangirsujuaq, Ivujivik and the Landholding Corporations in each of the three communities.	1975 James Bay and Northern Quebec Agreement  2002 Sanarrutik Partnership Agreement  2008 Offshore Nunavik Inuit Land Claims Agreement (for offshore islands)
Voisey's Bay mine, Nunatsiavut	2002 Vale-Inco and Labrador Inuit Association	2005 Labrador Inuit Land Claims Agreement
Doris North Project, Kitikmeot, Nunavut	2006 Newmont Mining Corporation and Kitikmeot Inuit Association	1993 Nunavut Land Claims Agreement
Meadowbank mine, Kivallik, Nunavut	2006 Agnico-Eagle Mines Ltd., Nunavut Tunngavik Inc. and Kivalliq Inuit Association	1993 Nunavut Land Claims Agreement
Meliadine development, Kivallik, Nunavut	(In preparation in 2010) Agnico-Eagle Mines Ltd. and Nunavut Tunngavik Inc., Kivalliq Inuit Association	1993 Nunavut Land Claims Agreement

## Education and Training

Discussion of the current negative community effects from mining often led participants to suggest changes or desired benefits. In the area of education, training in the trades is seen as positive, but more training should be provided in Baker Lake. Preparation of high school

graduates to qualify for postsecondary studies outside the hamlet is seen as an urgent need, as is access to higher education so that future generations can qualify for supervisory and management positions.

As noted above, trainees must relocate to receive mining-related job training and this is seen as a negative for the community. Participants reiterated that training should be provided locally or at the mine site. As required by the IIBA, the mining company has helped establish a regional training centre in Rankin Inlet that focuses on the trades used in resource extraction and construction. Still, on participants' "wish list" for inclusion in an IIBA is a local training centre in Baker Lake for job training related to the mine.

While those currently of working age are benefitting from training and employment, there will not be enough jobs at the mine for the younger generation, either because jobs that require relatively short training times are taken for years to come, or because positions that might be vacant will require education and training that takes longer than the currently expected mine life time of eight years. This reinforces the need for diversification in postsecondary education in Baker Lake. The younger generation needs to be informed now of their choices in education and future professions.

It was not entirely clear how elders perceived the benefits from the mine. All of those who spoke with us (12 elders) felt the loss of the land that had been converted from hunting grounds to the mine site. There was interest in seeking compensation for pollution of the land (as elders could identify pollution events from memory), and also for the risk of the land becoming polluted. Interest in intergenerational community activities, and facilities to support these activities, was very pronounced. Baker Lake has a comparatively large population of elders and those we spoke with indicated great interest in sharing their knowledge with the younger generations.

## **Barriers that prevent the community from benefitting from the mine**

### **Information gaps**

Respondents felt that information is lacking among community members about how a mine changes life in the community. There appear to be gaps in information and knowledge of resource extraction and what it means for a small community to be close to a large economic undertaking. While basic knowledge about geology and the activities involved in surface mining appears common, and is also dealt with in the local high school, knowledge is lacking about the principles of resource extraction as an economic activity, the phases and time frames of exploration and production, and the consequences for local economic development.

Most individuals we spoke with found that community members are not well informed about governance and relations between the mining company, Inuit organizations, and territorial and federal governments. Most participants were not able to describe how to access information on this topic as well. There seems to be lack of clarity as to who is responsible for providing information on governance and impact and benefit agreements. Participants felt strongly about

the need for information but also noted that limited resources and capacity make it difficult to produce this information within the community.

One consequence from this information gap is raised expectations that cannot (or will not) be met. Residents developed expectations toward the mine and its contribution to community infrastructure and services, but were unaware of the phases in the development of a mine, the dates of benefit agreements coming into force, and their contents. (Note that IIBAs are proprietary [secret] agreements between the mining company and the regional/territorial Inuit organization.) Expectations included, for example, that the mine would build recreational facilities in Baker Lake before beginning production. A baseball diamond was built by Agnico-Eagle Mines as a gift to the community, only after the mine had begun production and generated profit. Another expectation was that the mine would support health care services for mine workers in the community, which did not happen and health services provided outside the mine property remain the jurisdictional responsibility of Nunavut. There was an expectation that the mine would provide university scholarships for community members, which was somewhat realized through a scholarship grant administered as an annual competition by the regional Kivalliq Inuit Association.

At the same time, as community members struggle with unmet expectations about the mine and experience negative social impacts, Baker Lake residents are viewed by other communities as being “flush with money” because of the local gold mine. They feel that this perception is based on the misunderstanding that royalties and financial compensation go directly to the community rather than region.

One very immediate consequence of the lack of information is that people often do not know to whom they should address their concerns for a response. As a result, residents turn to the hamlet office for help and expect, for example, that the municipal government will sort out tensions within the mine’s workforce on their behalf, address problems with work schedules or shifts, and clarify questions about employment benefits. Participants suggested changes to how IIBAs are negotiated so that the local municipality is included and becomes a signatory to the agreement, giving it a formal role in determining the agenda for the IIBA and its implementation.

### **Lack of local financial services**

Participants noted that the lack of financial institutions and services is a definite barrier for individuals and families to fully enjoy the benefits from the mine. In addition, the lack of information about banking, budgeting, and saving/investing seriously hampers families when they try to develop long-term financial plans.

### **Workforce tensions**

Cultural tensions within the workforce at a mine site are among the known possible impacts of resource extraction. At the Meadowbank mine, there appears to be an informal segregation of the workforce by language. It is a sensitive topic and was not openly discussed in the team’s conversations with community members. However, participants mentioned tensions arising from working in a French-speaking environment. The workforce at Meadowbank consists of 40 per

cent Inuit and approximately 60 per cent Quebec residents, most of whom speak French. The mining company has made an effort to reduce this tension with on-site training programs. In summer 2010, Agnico-Eagle Mines began a cross-cultural training program for the workforce to teach, inform, and sensitize workers about different practices and values in the culture of their co-workers (Agnico-Eagle, 2010, p. 46). These tensions may perhaps go deeper than language, and feelings of unfair treatment are reinforced on occasion when rumours at the community level suggest that the mine targets job advertisements to francophone populations outside the community or outside the territory. Those who feel they are negatively affected by these tensions are looking for clarification and information; but, without knowing who can address their concerns, these workers often turn to the municipal government for clarification.

## Conclusion

The purpose of this report was to describe the results of the team's conversations with participants about the impacts and benefits of the Meadowbank mine in Baker Lake, Nunavut, as well as their needs and interests in knowledge and research on community development and mining. The team reported on a pre-research community visit and conversations with members from the community, representing local and regional organizations, governments, and sub-populations. Participants repeatedly noted the need at the community level for more information and knowledge about resource extraction and its impact on the health and well-being of small communities.

Information needs were identified in particular in the areas of education, health services, governance of economic activities, entrepreneurship, and other economic potentials. Participants called for better information to improve communications, increase benefits, and better mitigate the negative impacts of mining on the community. Information about mining impacts on individual and community health in small communities was noted as entirely lacking in Baker Lake.

Participants indicated their interest in studies to capture the community's views about the mine now and to compare those views with the results of a future study in the years to come to see if the community's experiences change and its expectations are met. Participants also expressed their interest in long-term studies to determine what people identify as important for the community over time and, if residents think differently at the beginning of the mining cycle compared to later phases in the mine cycle.

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