Schools

The impact of closing the Nanisivik school will be minor at this point. There are now only 2 or 3 families with children who may return to this school. It won't have a significant impact on student – teacher ratios. Currently, we have between 16 and 22 students per teacher, with a high of 29 students for one Grade 9 teacher.

Combined impacts

Loss of income and increasing costs are the two main impacts that are anticipated when Nanisivik closes. This raises some concerns amongst Arctic Bay's social agencies:

We do think about the impact of closure on our work — decreasing income and increasing costs are known to kick-start trouble. Still our situation may be a little unique, since many people have alternatives.

3.0 Looking to the future

Arctic Bay has been growing and evolving. The Mine, on the other hand, didn't change [with the times]. check recording.

Options for the future of Arctic Bay's economy

I don't see what will replace it — I don't see tourists coming down here to Arctic Bay.

The new mine owner got out of the marathon, so we took it over. When the mine sponsored it over 100 people took part each year, but there was little benefit for Arctic Bay. In 2000 we ran it ourselves. We hoped to provide some cultural entertainment for the runners and they were very keen. But in July everyone is camping over at Victor Bay. People don't understand this interest people have in Inuit culture.

Our culture is unique. People around the world are becoming interested in us and our wildlife. Just look at the 'Discovery Channel.' Tours will be important. Young people need to prepare to take on the tours that will be travelling here.

We need to find good opportunities for the young people who are graduating from the high school. They need to be able to use their skills. What can government do to create opportunities in small communities?

We need the facilities — government needs to make these available. Business mall, recreational facilities.

There are significant barriers for small business start-ups here. e.g. setting up stores or restaurants require approvals from Department of Health — you need the appropriate spaces, separate kitchens and so on. These spaces are not available, and require money.

Arctic Bay is the muktaaq capital of the world. The Japanese in British Columbia are willing to buy narwhal meat, but you can't legally sell it to them.

Use of the Nanisivik site

When we found out they would be closed, we don't want to se things in the town moved away. It should remain, so the town can be used for other purposes. There is talk of a diamond mine that will be set up in the next few years. There is also the park — Simirlik Park — nearby. Nanisivik could be a departure point for this park. There should be things set up to do over at Nanisivik. Even though there are now lots of dangerous equipment there, we know from experience with Pan Arctic Oil that these things will be buried. The site will be safe for other uses. This would help to maintain the jet service. We want these things not for ourselves, but for our grandchildren. - elder

If something goes in at Nanisivik there could be other issues. Some alternatives could create problems like those around Fort Smith — lots of single people, away from the social order of home. If it's a training centre, there would be more interaction with Arctic Bay. — local agency

Suggestions for the next community

One person we spoke with provided a neat summary of how local outfitters use a range of local human resources to meet labour needs as well as to develop future skills. This approach could be used as a model for industrial HR development as well, perhaps:

We hire local elders as well as young people. We use three groups of people: elders with knowledge; youth to help out; and youth who want to learn traditional skills. This ensures we are able to maintain a high level of knowledge and the ability to look after people out on the land.

Several comments suggested that the level of communication between the mine and the community could have been improved:

I don't know of any public meetings to resolve these sorts of issues. Maybe the hamlet met with them.

Learning from experience

If there is another mining situation, I would want to ensure that we have a seat on the Board of the company. That would ensure that our voice is heard right at the top level. The problem with the Nanisivik agreement was that it seemed to get lost during the various changes in mine ownership.

Other communities need to set out an agreement with the company that would stay in place regardless of who the managers were from time to time. That's what we did wrong here. The Agreement was only followed by some managers.

In future agreements, we need to be involved in negotiating the agreement and in its subsequent enforcement. These agreements should be geared toward improving the community and skills. We don't want to repeat past mistakes. There should be training on the job. The Agreement needs to be assessed and evaluated. Efforts could be made to involve more women e.g. office administration. We never came close to the 60% target.

Mining companies need to be more concerned about safety. There should be zero fatalities. There have been some deaths of Qallunat and some serious accidents involving Arctic Bay people.

I can only think of positive things from the mine — haven't seen impact on wildlife, it was a very safe mine, with only a few incidents. – former worker

When I heard all the buildings will be removed — I will miss this — we need to leave the buildings there, empty, to remind us of the place. At least there should be a memorial. — elder B

Advise future companies that they must plan the construction so that buildings can be used after the operation shuts down. This should be planned in advance. – elder B

Way back in the mid 1970s, Brian Pearson — then MLA — argued that the Nanisivik infrastructure should be build at Arctic Bay, not Nanisivik. Then it would have been available to benefit people today.

I am happy for this opportunity to talk about this. I sometimes feel like I should talk to the mine manager — the best way to iron out these wrinkles is by talking. – elder B

Commemorating the legacy

I asked if there should be something done to recognise the closing of Nanisivik:

We should have a celebration at the Dome to recognise the long-time workers and do some celebration, traditional events. The Mine could give out plaques to employees who worked there over the years. – hunter and former worker

There should be a mention of the names of people who worked there in the early days. It is important for us.

I would support the idea of a celebration to recognise workers and Nanisivik as well. To thank them for their contribution over the years — gasoline, bringing in boats for us, Christmas meals. Nanisivik also helped to clean out boulders two years ago on a part of the trail to Pond Inlet. - elder and former worker

Part Two: What The Numbers Tell Us

This Chapter looks at Arctic Bay's economy, using data and data estimates gathered and generated from a variety of sources. The purpose of this summary is to begin to answer two questions:

- How important has Nanisivik been to Arctic Bay's economy?
- What will Arctic Bay's economy look like once the mine closes?

We address these questions by seeking data for:

Nanisivik data:

- money earned by Arctic Bay people working at Nanisivik
- the number of people working at Nanisivik
- distribution of the money earned amongst these people
- receipt of El payments related to Nanisivik work
- anticipated El payments payable following closure
- payments made to Arctic Bay businesses

Arctic Bay data:

- money earned by people in Arctic Bay
- the number of people working in Arctic Bay
- other sources of money in Arctic Bay apart from earned wages
- how Arctic Bay people spend their money
- business activity in Arctic Bay

1.0 Nanisivik's contribution to Arctic Bay's economy

Direct Contribution

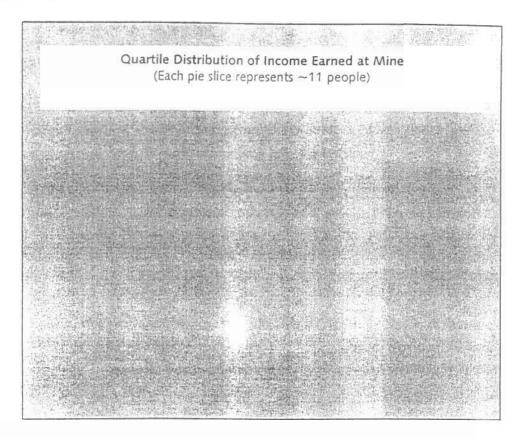
Payroll data provided by the mine shows that in 2001, there were 45 Arctic Bay people who worked for some period of time at the mine. Of these, 5 were women and 40 were men. Three families (four workers) were living in Nanisivik during that year. These 45 people earned a total of \$1,006,643 in 2001. The table below shows how this money was distributed amongst these workers.

Table 1 Distribution of Wages, 2001

| | Amount earned at the mine by Arctic Bay people | | | | |
|-------------------------------|--|------------------------------|-------------------------------|-------------------------------|-----------------------|
| | less than \$5,000 | \$5,000 to under \$10,000 | \$10,000 to under \$25,000 | \$25,000 to under \$55,000 | More than \$55,000 |
| Number earning this amount | 15 people | 11 people | 5 people | 7 people | 7 people |
| Total earned by this group | \$36,605 | \$81,926 | \$68,930 | \$294,596 | \$524,586 |

Source: Payroll data from Nanisivik Mine

Described in another way, the top 11 workers from Arctic Bay earned \$726,906, while the 12 people who earned the least amount in 2001 were paid a total of \$22,479. The figure below illustrates this distribution of income. Each section of the pie chart represents the same number of people (the smallest slice actually represents 12 people), with the size of the chart showing how much each group earned.



Women made up 11% of the Arctic Bay workforce at the mine, and earned 8% of the total wages, or \$72,805, in 2001.

In addition to wages earned at the mine, employment provides potential access to Employment Insurance benefits. This can be particularly important for workers who have access only to seasonal work or temporary jobs. El payments will also be available to workers laid off when the mine closes down this year. The following table provides an estimate of the value of El payments made because of Nanisivik employment in the past, and how much El may payable to workers who are laid off when the mine closes.

Table 2 El Benefits paid and payable to Nanisivik workers from Arctic Bay

| cooking d | lata for thisin tho | meantime use estimate | of \$50,000 |
|-----------|---------------------------|-----------------------|-------------|
| seeking u | iata ioi tilis — III tile | meanume use esumate | 01 \$30,000 |

Finally, the Nanisivik mine has been a customer for local businesses. The primary contract is for a shuttle service to transport workers between Arctic Bay and Nanisivik each day. In the past, some

char was purchased for meals at the Dome. However, the mine has not generated much business for local retail stores. In total, expenditures by the mine at Arctic Bay businesses are probably under \$75,000 each year.

The table below provides a summary of the direct economic impact that Nanisivik mine currently has on the community of Arctic Bay. Both wages and the number of jobs created are considered. For the purposes of comparison, jobs are considered as "full-time job equivalents." This is needed due to the large number of casual jobs that exist both at the mine and in the community of Arctic Bay. An arbitrary wage of \$60,000 is used to represent one full-time job equivalent. [May want to review this level].

Table 3 Direct Contribution of Nanisivik Mine to Arctic Bay's Economy, 2001

| Economic impact | Value of this contribution (full-time job equivalents) | |
|------------------------------|--|--|
| irect wages \$1,006,643 (17) | | |
| Annual EI eligibility | \$50,000 | |
| Local procurement | \$75,000 (1) | |
| Total impact | \$1,131,643 (19) | |

Source: Payroll data and estimates based on interviews. The El estimate is very rough.

Indirect Contribution to Arctic Bay's Economy

In addition to direct wages paid, El eligibility opportunities provided, and local services purchased, Nanisivik mine may be expected to have indirect impacts on Arctic Bay's economy.

These indirect impacts will arise from an number of sources:

- income and business activity created by the Nanisivik town site and airport.
- jobs created by businesses supplying goods and services to Nanisivik
- goods and services purchased by Nanisivik employees from outside Arctic Bay
- an "income effect" increased local spending of wages earned by Arctic Bay residents at the mine
- a "domestic economy effect" created by increased money to purchase hunting supplies and decreased time available to hunt

[Narrative to be developed]

Table 4 Direct economic impact of Nanisivik town site

| | Jobs to Arctic Bay residents | Wages | Business Activity | Imputed Jobs |
|----------------------------------|------------------------------|-----------|----------------------|--------------|
| Government services ¹ | 6 | \$363,352 | | |
| Purchase of Arctic Bay business | no data | no data | no data | 7 casual |

| services for Nanisivik town site | | |
|----------------------------------|--|--|
| and airport | | |

¹ Nanisivik government wage data provided by NEU. Includes base salary and northern allowance for Arctic Bay people working at the school, health centre, airport, and for public works.

Table 5 Indirect Impact: Goods and Services Purchased by Nanisivik Employees

| Type of good or service | Value of purchases | Jobs created |
|---|--------------------|--------------|
| Purchase of retail goods at Arctic Bay stores | negligible | 0 |
| Purchase of carvings | \$50,000 (a guess) | |
| Purchase of sewing | negligible | 0 |
| Outfitting/tourism spending | negligible | 0 |
| Purchase of transportation (taxi) | no data | _ |
| Use of Arctic Bay hotel | negligible | 0 |

Source: These rough estimates are based on interviews with residents of Arctic Bay.

Table 6 Indirect Impact: Reduced Freight Costs

Loss of jet service will increase air freight costs — the amount of this impact may lead to increased food and dry goods costs. It will depend upon whether the jet service continues.

Loss of mine-related cargo ships will have some impact on freight costs, since these were used by Arctic Bay employees to bring in items. Loss of the employee freight allocation (a benefit of Nanisivik employment) will also have an impact on freight costs. Data indicating the extent to which these benefits were used by Arctic Bay employees was not, however, available. The value of the subsidy is therefore not known.

Other indirect effects — spending of income by Arctic Bay workers in Arctic Bay, and the impact of Nanisivik wages on the domestic economy — require a consideration of Arctic Bay's economy before estimates can be made.

2.0 Snap Shot of Arctic Bay's Money Economy

The closure of Nanisivik will result in the loss of the income identified in the previous section — an amount estimated to be just over \$1.1 million dollars per year. This section will put this loss in perspective with the total Arctic Bay economy.

Sources of Personal Income

Two sources have been used to estimate Arctic Bay's money economy. The first is from Statistics Canada's 1999 Neighbourhood Income and Demographics. This source provides a total personal income estimate of \$7.8 million in 1999. The second estimate was made by estimating income from various sources in the community and from Nanisivik. This 2001 calculated estimate suggests total personal income in Arctic Bay is in the range of \$8.6 million.

Table 7 Sources of Personal Income in Arctic Bay

| Source of Income | StatCan 1999 Estimate ¹ | Calculated 2001 Estimate ² |
|---|------------------------------------|---------------------------------------|
| Employment | \$6,339,000 | \$6,924,619 ³ |
| Investment income | \$38,000 | \$38,000 |
| Employment Insurance | \$103,000 | (not yet available) |
| Social Assistance | \$514,000 | \$730,000 ⁴ |
| Child Tax Benefit | \$262,000 | \$262,000 |
| Other transfers (tax credits, CPP, GST credits etc) | \$340,000 | \$340,000 |
| Other Income | \$248,000 | \$186,000 ⁵ |
| Total income | \$7,844,000 | \$8,583,619 |

¹ StatCan data includes data for taxfilers who use the Arctic Bay post office as their mailing address.

These estimates suggest that the income gained from the Nanisivik mine (\$1.1 million) accounts for approximately 12.5% (one-eighth) of the money flowing into the community. This amount increases to \$1.5 million — or 17% — of total Arctic Bay income when the income currently generated from the Nanisivik town site is taken into account.

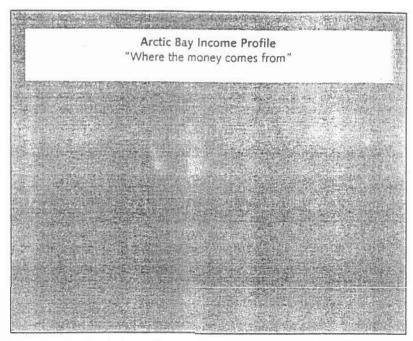
The following chart illustrates this situation. Of particular importance is the contribution of Nanisivik mine income to private sector income in Arctic Bay. The chart shows that when the mine shuts down, income flowing into Arctic Bay from the private sector will be cut in half.

² Where community research did not provide data, StatCan estimates are used.

³ Includes estimates for self-employment income (carving, sewing, sale of ivory etc). Also includes wages earned by Arctic Bay people living at Nanisivik. Details of this estimate are provided in Appendix 8.

A Rough estimate provided by Mark MacKay, GN, in response to StatCan estimate — "more presice number to follow."

⁵ This is StatCan's estimate for "other income" not including suppressed data.



"Where the money goes" — Expenditures

To assess the impact of the loss of income to Arctic Bay residents, it is also necessary to gain some understanding of how money is now being spent. In the absence of data, only the major expenditure areas have been estimated. These include estimates of sales at the two retail stores in Arctic Bay (Northern and the Co-op), and estimates of payments for housing (rent, power, fuel).

As shown in the following table, these major expenditure areas account for close to \$7 million of the total income of the community, or 80% of the total.

Table 8 Expenditure Estimates

| Area of Spending | Amount spent |
|---|------------------------------|
| Retail Sales: | |
| Co-op Sales | \$ 2.15 million ¹ |
| Northern Store Sales | \$2 million ² |
| Housing: | |
| Rent and mortgage payments | \$520,000 ³ |
| Heat, power, etc. | \$1,016,000 |
| Income taxes: | \$1,292,000 |
| Total Expenditure Accounted For (Estimate) | \$6,978,000 |
| Spending in all other areas — savings, out-of-town purchases, purchases | \$1,649,000 |

¹ From 2001 annual financial report

² Estimate made by Northern Store manager

³ Rent estimate is based on Housing Corp. estimate. Mortgage estimate is based on 51 privately owned homes and a guess of \$400/month average mortgage.

from local businesses, black market, etc. (calculated by subtracting known expenditures from estimated total income).

Part Three: An Outsider's Perspective

The previous two parts of this report are intended to be able to stand on their own. Part One reflects the knowledge and experience of people in Arctic Bay who have lived in a close relationship with Nanisivik over nearly three decades. Part Two is an attempt to peer inside the local economy through a look at income and expenditure numbers.

Readers of either, or both, these parts will no doubt bring their own perspectives, frameworks of experience and array of questions they are seeking to answer. They are invited to use the material presented to come to their own conclusions.

This is the same process that I will adopt in this final part of the report. I have chosen to use a rather personal style to emphasis that the comments and observations that follow here are only those of a visitor who spent a few days chatting with people. My insight is not clear, and certainly no clearer than those with whom I shared conversation and tea.

1.0 The Legacy of Nanisivik in Arctic Bay

As stated at the very beginning of this report, Arctic Bay's history did not begin when Nanisivik started operations, nor will it end with the mine's departure. As one person noted during our conversations, "Arctic Bay is not a mining town." A question worth considering, then, is, "What, if any, lasting impact will Arctic Bay's experience with Nanisivik have on the community in the long run?"

Social impacts and change arising from Nanisivik

This section seeks to gain an understanding of the social impacts and changes that may have arisen from Arctic Bay's experience with Nanisivik, as perceived by those people we spoke with. During the conversations held in Arctic Bay, I sought to discover how people felt the mine experience has affected individuals, families and the community as a whole.

In particular, I was interested in learning whether the various positive and negative impacts — both social and economic — were equally distributed amongst people. I have noted in other situations, for example, that while benefits from community — mining relationships are experienced by the individuals who get the jobs and earn the income, negative impacts may be more broadly felt by those not directly involved and not directly in receipt of these benefits. Does the experience of Arctic Bay reflect this situation? Have negative impacts been experienced by individuals or groups within the community who have not shared in the benefits?

Methodology is important in gaining insight into these sorts of questions. Problems may arise, for example, if certain groups — in this case, groups of people not directly involved in the benefits of Nanisivik but still affected by potential negative impacts — are not heard from adequately. While it is difficult to know with certainty that no group has been excluded. What can be said, though, is that the range of people who contributed to this study included an approximately equal number of men and women. Mine workers, past and present, as well as their spouses provided their input. Children of workers — many now grown, along with members of the Youth Council also contributed. A significant number of Arctic Bay's elders also shared their knowledge and wisdom. Interviews with people in key positions included a nurse, social worker, community wellness counsellor, and RCMP. With this broad representation I have reasonably high confidence that if there were other voices that needed to be heard. I would at least have become aware of this. I did not.

With this in mind, what can be said about the influence of Nanisivik on social aspects of life in Arctic Bay? Four themes emerged from the conversations. These relate to:

- alcohol
- impacts on the family
- education and skills development
- cultural "bridging"

Alcohol

Arctic Bay residents consistently — and without me specifically asking about it — identify the availability and use of alcohol as directly contributing to major, negative social impacts in their community. Many people noted that Nanisivik's permissive policy toward bringing in alcohol, and the availability of alcohol during social events such as the Christmas/New Years parties as working against Arctic Bay's attempt to restrict alcohol in their community.

It should be said that several people did feel, however, that Nanisivik was not the only source of alcohol in Arctic Bay. The ability to get alcohol import permits from the local Alcohol Committee — and then bring it in from Iqaluit — was noted. Nonetheless, "Nanisivik alcohol", is clearly identified as the fuel that drove many of the other negative social impacts identified by people we spoke with to be associated with the mine.

Recommendations for future mine - community relationships are made in Section 6, below #Alcohol

Impacts on the family

Did the Nanisivik experience have serious and lasting impacts on families? Did it lead to changes in the roles played by different members of the family? Has the "alcohol effect" created significant impacts for Arctic Bay families?

I'll address the impact on roles first. Nanisivik is viewed by many of those we spoke with as a source of jobs that emerged during a transition from a domestic economy toward a wage economy. But this transition was happening, independently from Nanisivik. Several people noted that in the past, people worked for food but that now they work for money. Money is now important in the life of people in Arctic Bay, and Nanisivik is widely seen as having provided an important source for this resource.

Not one of the people I spoke with suggested that Nanisivik was in any way a cause of this transition. It is interesting to note that in the context of discussing this point, several people volunteered that they felt the schools have played a very significant part in changing the roles of parents and elders in raising children by taking the children out of the home. Clearly this community is still seeking ways to bridge traditional teaching and child-raising with modern education.

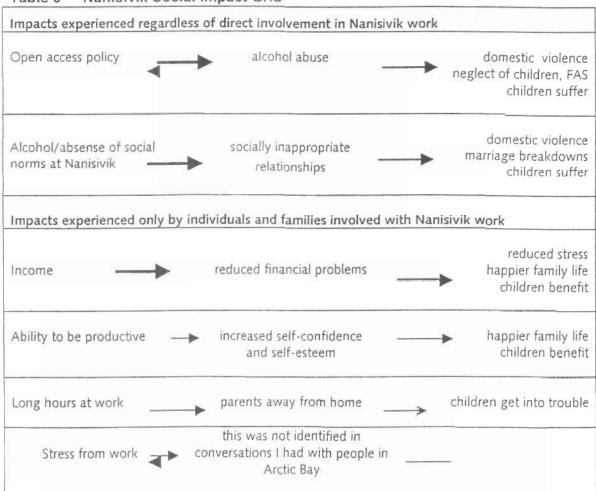
What about the impact of alcohol? Here the link between Nanisivik and negative impacts is reasonably strong. The message that Nanisivik contributed to alcohol availability was clearly made. Availability of alcohol in the community of Arctic Bay seems to be a contributing factor to a number of social problems. References to instances where children have been neglected and to instances where women have been abused included mention of alcohol being a contributing factor. Alcohol is also consistently identified as being a factor in socially inappropriate sexual activity at Nanisivik. These relationships have contributed to a range of social impacts directly affecting women and indirectly affecting families and children. Reference to Fetal Alcohol Syndrome was made by one

person I spoke with. These impacts were not directly related to work at Nanisivik. This is a clear area where those experiencing negative impacts may or may not be benefiting from increased income.

I was interested in learning whether work at Nanisivik itself contributed directly or indirectly to alcohol abuse and associated social impacts, either by increasing stress, or by providing income for the purchase of alcohol. Here the message was mixed and not particularly strong. Only a few comments were spoken related to benefits or negative impacts related to such personal areas of life. Some indication is that families and individuals living at Nanisivik where alcohol was most liberally available went through a transitional period of learning how to manage this substance. I am not, however, able to assess what level of suffering or lasting damage was sustained by family members as a result of alcohol.

To summarise, it is fair to say that Nanisivik contributed to alcohol-induced social problems both by increasing the availability of alcohol in Arctic Bay, by providing people from Arctic Bay with opportunities for drinking with workers and during organised events at Nanisivik itself, and by providing an environment for workers and their families living at Nanisivik where alcohol was readily available. Because alcohol-induced impacts were indirect, they were experienced both by people involved in Nanisivik work, as well as those who had no connection to the benefits flowing from Nanisivik in the form of work and income.

Table 9 Nanisivik Social Impact Grid



Apart from impacts related to alcohol, has Nanisivik led to other serious and lasting impacts on families? Additional negative impacts were indirectly referred to by one person I spoke with who mentioned that he and his wife gave up their jobs at Nanisivik because they "worried a lot about their older son." While I did not hear sufficient commentary on the problems experienced by children due to parental absence to develop a good understanding of the issue, clearly this sort of impact could have a serious and lasting impact on the child and the family. Another person noted that workers at the mine had to deal with stress related to their work experience. Spouses of workers also experienced stress and loneliness related to absence of their partner during the long work week periods away from home. I also received comment related to a perception that Nanisivik work has led to some marriage breakdowns. Domestic stress and relationship problems can have serious and lasting impacts on children caught in the midst of these things, as well as on the individuals involved. Again, I do not have a clear picture of the intensity of these impacts.

These impacts were experienced by families that had direct involvement in the mine work and therefore that also enjoyed whatever benefits arose from this work. It is not clear to me whether the income benefit from the mine was able to reduce negative impacts of low income living sufficiently to provide the family — workers, spouses, children, grandparents and other relatives with a net benefit from the work. Regardless of whether or not wages earned were able to mitigate negative impacts, These sorts of comments are indicative of situations that may arise. In future projects, they should be anticipated and steps taken to avoid the associated problems.

Recommendations for future mine - community relationships are made in Section 6, below. <u>Family</u> impacts - stress, absence

Significant and lasting benefits to families were also clearly reported as being associated with Nanisivik. These benefits included

- reduced domestic stress arising from low income
- increased confidence, increased sociability arising from having work
- ability to forge stronger kinship ties by sharing of proceeds of work (income, freight allocation, lending snow machines, buying gasoline etc.)

[to be further developed]

The 1980 BRIA Report noted that while "Separation from Family" was the most frequently identified reason amongst all Inuit workers for quitting a job at Nanisivik, this was not a major concern of workers from Arctic Bay. (BRIA Table 7.8, p 197) However, separation from family was identified by Arctic Bay workers as the thing "most hated" about Nanisivik work. (BRIA Table 7.11, p 201).

What Others Have Found:

BRIA also spoke with partners of workers, "In summary, the wives appear to be typically less content with the implications of the Nanisivik employment than were the men. The reason clearly is that it is the wives who have to cope with the problems of running a household and raising the children alone.... The

Education and skills development

People who attended the Nanisivik school while living with their parents at Nanisivik expressed satisfaction with their educational experience. Leaning English, smaller student to teacher ratios than at Arctic Bay, and higher expectations both amongst teachers and students had positive impacts on learning the skills needed to function in future jobs. Others — elders and educators — also noted improved ability to function in English amongst this group. This was considered a positive thing. Some comment was made that in the past the student population was a majority of southern students whose parents placed higher

expectations on schooling than was the case in Arctic Bay

During the process of carrying out interviews with people in key hamlet positions, I got a strong sense that a disproportionate number of these positions were filled by "alumni" from the Nanisivik school.

Another aspect of education I was interested in was whether the presence of mine jobs at Nanisivik had the effect of improving educational attainment at Arctic Bay. Such an influence has been suggested in relation to the impact of Polaris at Resolute (Arman, 1997). According to people I spoke with, this does not appear to have been the case in Arctic Bay, however. Several reasons were offered. First, the relationship between various types of mine jobs and education does not seem to have been made clear by anyone involved — either from the mine, the government, or the Inuit organisations.

Secondly, success in school is said to be determined by the attitude toward education within the family. As noted above, there is a significant level of concern that school is responsible for having negative impacts on traditional family roles. As a result, perhaps, parents or grandparents may be less supportive of formal schooling — performance expectations on students are not, then, as high as they may be. Finally, it is only in the past five years that the Arctic Bay school has had a high school program. Prior to this students had to go to Iqaluit if they wished to obtain a high school diploma — a fairly significant barrier to education. It may be the case, however, that families where the parents themselves attended the Nanisivik school — experiencing high expectations and, often, the reward in terms of finding good jobs afterward — may begin to change the attitude toward education.

Skills acquired at Nanisivik related to several trades (electrical, mechanical, welding) and skills (general skills related to structured industrial work place and specific skills in heavy equipment operation, first aid/CPR, workplace safety and mining). While some of these skills were previously acquired through work with Pan Arctic Oil, Nanisivik provided further opportunity to use the skills and to develop lots of real work experience

Cultural bridging

[cosmopolitan influence, learning the Qallunat "work" culture School trips from Arctic Bay to Nanisivik site, ... comment to the effect that "cultural learning took place amongst the Inuit while the mine did not change."]

Other social impacts and benefits

[To be developed:]

- social events at the Dome
- ability to "get out of Arctic Bay"
- recreational opportunities at Nanisivik
- distribution of these between those associated with Nanisivik work and families of non-workers

Summary of social impacts, benefits and change

The overall impression I have from the discussions with people from Arctic Bay is that apart from alcohol-related impacts, residents of Arctic Bay do not feel that Nanisivik has had a dramatic negative social impact on the community as a whole, nor on specific groups within the community. Positive social impacts were also equated with Nanisivik.

[Develop this summary, making reference to findings of previous research as well].

Has the Nanisivik mine led to social change in Arctic Bay? The answer is not obvious to me. On the one hand, the community is described by outside observers, both Inuit and Qallunat, as being one of the more traditional Baffin communities. On the other hand, significant social change has taken place during the period that Nanisivik has operated in the region. But is this change a consequence of Nanisivik or part of a wider cultural change caused by many interrelated factors?

One of the things I was looking for was whether 30 years of wage earning at the mine has led to a shift away from sharing, toward greater individualism when it comes to economic production in the household and in the community at large. The role of money has clearly increased in Arctic Bay over the years. Some families acknowledge that they now live from money, not from the land. It would be too great a leap, though, to suggest that this shift has been caused wholly by mine employment. Further, many people described how money earned by one family member would be spread around to assist both immediate family members as well as relatives. Sharing of major purchases such as snow machines also is widespread in the community. There was no evidence offered that the level of sharing of country food has been reduced by increased wage earning, and some suggestions that this has not occurred, that food continues to be shared in traditional ways.

Another form of social change I was interested in learning about related to changes in the roles of elders, parents, and children. When I asked about changing roles, many people expressed strong opinions that the roles of parents and elders with respect to raising children are changing. Elders no longer live in constant contact with parents and their children and are loosing their role in raising children. However the cause of this shift was almost entirely identified as the school system — which takes children out of the home all day — and not work.

It was interesting to hear two elders, speaking on different occasions, draw parallels between working at a job and hunting out on the land. In the first instance, the comment was made that when a man is away from his partner all day working, it is no different than if he were out hunting far from the home. The second comment equated working for money with working for food (hunting) — "it's the same thing." Money is a resource just like any other. This view of money as a resource was new to me and was therefore quit striking. To repeat the words of [an elder], "When the mine closes, people will suffer because there will be less money to earn." Money is a resource that comes and goes over time.

- changing roles in the family ... shift from arranged marriages (elders had role) to young people getting together in the community regardless of economic means. Impact of schools on relationship between children and elders

Economic change related to Nanisivik

[To be developed]

Impact on working families

Impact on traditional harvest activities

Community-level effects from business and income

Summary of economic impacts

Hamlet development

Human capacity

[Leadership development, organisational capacity and focus; skilled people in organisations; migration]

- apparent preference for hamlet work over Nanisivik work
- influence of Nanisivik school
-

Entrepreneurial capacity

- is Arctic Bay in a better position to capitalize on present or future business opportunities because of Nanisivik?
- Did the entrepreneurs in Arctic Bay come to Arctic Bay because of the mine? (apparently not). Did business with the mine develop their entrepreneurial abilities or divert their energies to "dead-end" businesses? (the businesses that were involved with the mine are very limited transportation of people and goods. Nanisivik contracts probably helped these businesses to build up assets that may be focused on new opportunities. For example, the company that runs the bus service between the Arctic Bay and the mine, later went on to operate the Arctic Bay school bus. There has been little investment by local business in capital that is vulnerable to the mine shut-down. The greatest capital stock are the vehicles used for hauling and transport of people. Some of this capacity may become surplus or be under utilised with the shut down of the mine depending upon whether or not some future use is made of the Nanisivik site. Some loss of capital investment would therefore be incurred, although this investment may well have already made a reasonable return through past business.
- Lost opportunities

Impact on local artists

Arctic Bay suffers problems that are similar to other communities in that there is little stock of local art work available for tourists passing through to view and select from. Carvers have found a good market for their work amongst Nanisivik workers from the south — these people are sufficiently permanent that they are available to view works when the carver is able to complete them. This is not the case with, say, with cruise ship tourists coming in to Arctic Bay for a brief visit, or from runners up for the Midnight Sun Marathon who are in the region for only a couple days.

Has the easy Nanisivik market had the effect of delaying the development of more aggressive marketing strategies. Has this easy market led Arctic Bay to fall behind the "best practice" in terms of promoting its artistic talent, when compared to other Nunavut communities? Or has this local

Nanisivik market been a positive influence on the Arctic Bay carving scene by providing an avenue for sales in a time where the Co-op has stopped purchasing these works?

I am not able to answer these questions based on my conversations in Arctic Bay. People generally perceived the Nanisivik market as a good thing for local carvers that provided a good price. I found no evidence to suggest that opportunities to promote and develop markets for individual Arctic Bay artists had been foregone as a result of this localized market opportunity. However, the possibility is there and might be considered in the context of efforts to better understand and develop Nunavut's art sector. It must be noted, in this context, that the hamlet has recently initiated, with GN funding, a revolving fund to purchase local Inuit art so that a selection of high quality works are available for viewing and sales when visitors come to the community

Infrastructure

- energy and \$\$\$ to Nanisivik rather than Arctic Bay and other North Baffin communities. (see my notes from Hickling report)
- implication of Nanisivik town site for social impact of Nanisivik.

Financial capacity

- is there investment money in Arctic Bay that will allow financing of entrepreneurial opportunities?
- Has money that was spent resulted in durable, productive capital {yes, in medium-term durables such as snow machines, some privately owned homes (against which mortgage debt may be able to be raised to support small business development).

Summary of the Impact of Nanisivik on Arctic Bay Development

[Note the early rationale for public investment in Nanisivik was to promote development of north Baffin communities such as Arctic Bay (refer to Hickling Report).

Community development builds on four key factors or strengths. These are

- human capacity;
- social and organisational capacity;
- financial capacity and access to productive infrastructure; and
- access to natural goods and service.

Have three decades of relating to Nanisivik had any influence on the state of these "ingredients for development" in Arctic Bay?

[My assessment to be developed: what I expect to say is:

- human capacity (yes positive, direct and indirect)
- social capital, organisational and entrepreneurial capacity (yes good and bad; maybe; and a little, but missed entrepreneurial opportunities)
- financial capacity and access to productive infrastructure; (yes but not clear if its long-term; yes, possibly slightly negative)
- access to natural goods and services (no comment topic of NWB/NIRB hearings).

Nanisivik — A Lasting Legacy? [To Be Developed]

2.0 Impact of Nanisivik's Closure

"When the mine shuts, it will be hard for the first couple of years. As if we've lost someone important. But people will get over it. It will become a memory."

- Koonoo Oyakuluk

[Narrative to be developed]

Impact on the Local Economy

Direct loss of jobs and income

For a small but significant number of high income levels, loss of Nanisivik jobs will have a dramatic effect on their livelihoods. While a small number may seek work in other regions, there is an expectation that most will remain in Arctic Bay. During the eligible period of time, these workers will have access to El payments. These may help to cushion the economic blow by providing an on-going — though much reduced — source of income. This will only be in effect for a maximum benefit period of 45 weeks, however. After that time, these workers will end up on the Income Support program if they are unable to find other work.

Loss of work may also be expected to affect other aspects of the well-being of these workers and their families. Reference was made to the positive effects of steady work on the overall "happiness" of some individuals and how this affected the entire family.

It was noted in Part Two that many Nanisivik workers have earned relatively small amounts of money at the mine. For example, Table 1 indicated that 26 people earned a total of \$118,531, or \$4,559 each on average. Most of these people will not be eligible for transitional Employment Insurance payments, since they have not worked a sufficient number of hours to qualify.

It may be reasonable to expect that for these casual workers, the psychological significance of the work is less significant than it may be for full-time workers. One psychological impact of loss of access to casual employment may be, however, the loss of a sense of economic choice. With Nanisivik in place, many people felt they were able to choose to work at the mine when they needed to earn a little money. Loss of this choice could lead to feelings of economic hopelessness, although

this is rather speculative on my part. It should be pointed out that access to Nanisivik work was clearly not available to anyone who wanted it, as evidenced by comments related to having job applications turned down or simply not responded to.

In addition to loss of full-time and casual work at the mine and the Nanisivik town site (if it also shuts down), as well as in local businesses providing services, some additional job losses should be anticipated. These "imputed" job losses relate to the loss of local expenditure that will be associated with loss of income. While it is not possible to calculate exactly what local jobs may be lost, some reasonable projections can be made. It is probably reasonable to project a reduction in local retail purchases of close to \$1 million (see Appendix xx for the calculation). This would mean a loss of 20% of retail revenues that should lead, in the medium term, to a loss of 20% of wages — or approximately \$80,000 — paid by retailers. If these lost wages would have been paid primarily to casual workers, I would suggest that 8 part-time jobs (paying a total of \$10,000 each per year) — equivalent to 1.5 full-time jobs — should be expected due to reduced local income.

Implications for local business

The following table provides an assessment of the impact that Nanisivik Mine closure will have on various local business sectors.

Table 10 Business Vulnerability Assessment Grid

| Business | Impact | | | | |
|--|----------------------|--------------------------|---|--|--|
| | Loss of mine-related | Loss of community income | Loss of port and jet service (hypothetical) | | |
| Local retail stores | | Reduced sales | freight cost | | |
| Carvings | 30 W | | Reduced tourism | | |
| Traditional clothing sales | | | Reduced tourism | | |
| Guiding and outfitting | | | Reduced tourism | | |
| Consulting/Translation | | | | | |
| Hauling company | | | | | |
| Local transportation company (taxi, bussing) | | | | | |
| Local hotel | | | Reduced tourism • | | |
| Other local businesses | | | | | |

Note: Darkest shading represents greatest loss of business. No shading indicates that little or no impact is anticipated.

Increasing Costs of Goods and Services

Relates to potential loss of jet service (speculative at this point) increased food costs; increased travel costs; increased medivac costs

Implications for harvesting

community