

## MARY RIVER PROJECT ENVIRONMENTAL IMPACT STATEMENT

### **SECTION 6.2 – BIOLOGICAL SETTING**

Killer whales and northern bottlenose whales were found in small numbers. The question then is who found that there were small numbers? There was a video taken, recently of a large pod of Killer whales including sightings seen of over 60 Killer whales excluding underwater ones in and around Pond Inlet and Arctic Bay area. Is the number of the two species just specific to the Milne Inlet area?

Narwhals are present along the northern shipping route primarily during the open-water period, and about 20,000 animals summer in the Eclipse Sound and Milne Inlet area. Narwhals are thought to calve and feed in this summering area

The comment, Narwhals are thought to calve and feed in the summering area...is based on a thought.

#### **Access to Training and Apprenticeship Opportunities (Volume 4 pg 39)**

Access to training opportunities can be a barrier to learning given the small population size and associated need to limit the range of programs that can be made available at the local level. Individuals who seek to pursue education in areas where there are not others interested in the same program are likely to need to travel either to Iqaluit or to the south. In the area of the trades, the apprenticeship system requires the apprentice to work under the guidance of a qualified journeyman who will certify the hours worked. The availability of these apprentice positions is limited by access to journeyman trades people at the local level who are willing to take on an apprentice.

- In light of Baffinland's statement above and as apprenticeship opportunities for future trades persons are limited in the communities, apprenticeship programs should be made available at the mining sites. Future plumbers, mechanics, electricians, and carpenters will have a chance to get their apprenticeship hours while experiencing working at a mine.
- Mining companies should be encouraged to provide scholarships to students and other community members who are enrolled in education programs that focus on the skills the mines are looking for in the workforce.
- Although Qikiqtani Logistics is involved in hiring Inuit labor, the mine should consider hiring an Inuit Employment Coordinator and to be located at the mine site.

#### **Livelihood and Employment:**

##### *Experience from the Mary River exploration and bulk sample activities*

A total of 1.3 million hours of fly-in/fly-out labour was delivered during the Mary River exploration and bulk sample activities by 776 workers from across Canada over a three-year period. Of this labour, 0.4 million hours were provided by 265 North Baffin residents, and 212 residents of Iqaluit. Women accounted for 11% of the total number of people involved at the Project. During peak activity in 2008, 0.8 million hours were worked at the Project, of which 0.2 million hours were provided by residents of the LSA.

Approximately 4-in-6 workers hired from North Baffin worked for at least three rotations of two weeks in, followed by two weeks back home. However a substantial number, 1-in-5, did not complete one full 14-day rotation. Among workers hired from Iqaluit, 1-in-8 did not complete one full rotation. Both North Baffin and Iqaluit labour forces continued to supply new workers for the three-year period for which data were analyzed. Therefore, the project definition phase did not "tap out" the study area labour force.

As mentioned in the public meeting held in Pond Inlet March 1, 2011 what was heard by a Pond Inlet resident while in Iqaluit for people to go to Frobisher Inn for those who wish to work at Mary River and try to compete against the people of Pond Inlet. With Mary River being on the Pond Inlet's Land use plan it is suggested that those affected people in the adjacent communities be given top priority.

To bring this into perspective, according to 2001 statistics, unemployment figures for Pond Inlet was at 158; Clyde River 96; Hall Beach 107; Arctic Bay 85 and Igloolik at 202 not factoring in how many is employable but to give an idea that much more is needed.

It is suggested that Baffin Land ensure that an exit survey form be given to each worker that is leaving and the completed forms be sent to QIA to compile the data to try to ascertain the reasons why people do not return or leave early.

#### Human Health and Well-Being:

- In Clyde River, there are two excellent organizations: Illisaqsivik Society and Ittaq, which have developed skills in dealing with such problems. It was suggested that Baffinland and other communities work closely with those organizations.
- Cumulative effects of ore for workers should also be monitored, for example at Nanisivik, the cumulative effect of a worker who had worked at the mine for 30+ years caused his heart to be calcified and hardened due to zinc and other mine properties entering to his body.

#### 1.4.4.1 Sea Ice

Pack ice was considered as a subject of note in the residual effect analysis in Volume 8. The subject of note identified a disruption of pack ice in Hudson Strait and Foxe Basin by Project shipping activities. The analysis identified a negligible effect on ice regime on the assumption that ship tracks would closed within hours of the ship passing. This is based on the mobile characteristic of pack ice, subject to wind and tide currents, and on the low frequency of Project shipping activities in the ice covered season

No details on shipping are available other than an acknowledgement that year-round shipping may be required. Based on an assumption that 50,000 DWT Panamax sized ice breakers were utilized, approximately 20 voyages per year would be required to transport 1 Mt/a of iron nuggets, equating to a shipping frequency of one ship every two to three weeks.

As with the base case, the cumulative effects of the expansion scenario are not anticipated as effects of ship passage on sea ice are all considered as standalone events within a highly dynamic ice environment where the ship track usually becomes indiscernible within hours after ship passage.

Additionally, the spatial distribution of ship tracks is miniscule in the context of the large geography of Foxe Basin and Hudson Strait. Ice cover is expected to be reduced due to climate change. It is not expected that ice breaking through the pack ice combined with climate change will result in a measurable cumulative effect.

#### 3.5.4 Injury to Passing Hunters at Steensby Inlet

Seasonal hunting of terrestrial and marine wildlife is one of the main land-use activities of Inuit in the Baffin Region. Hunters usually travel by boat or on Snow-mobiles to the Steensby area to hunt for caribou, seals, whale and other wildlife. To prevent accidental injury to passing hunters, community education and awareness programs will be establish to warn hunters of project activities in the area. If possible, alternative hunting routes and trails will be established by the Project in consultation with the QIA, HTO, etc. Where such alternative routes are not possible or practical, localized exclosures will be developed with appropriate warning signs.

- Crossing shipping routes. Concern was expressed about the location of shipping routes and how to get across the open water they create. With year round shipping, it may be necessary to choose different routes for different times of year. It will also be necessary to consider how to get people across the shipping routes. Will the communities be informed of any proposed changes in the shipping routes prior to action?
- If hunters have to travel longer distances to get around leads in the ice created by ships, it will increase their fuel costs. This will need to be addressed and may already be discussed in the IIBA agreements.
- Could empty ships bring back food or other goods for the communities?
- There is a need for clean-ups protocols and emergency clean-up measures in place in the event there is a ship spill be it natural gas or oil. With increased mining activity, there is a need to

have protocols and plans in place to react to potential risks that may occur. I feel these are areas which we must be able to respond to in an efficient, effective manner.

## 2.3 CONSTRUCTION PHASE

Mine development includes pre-stripping, removal of overburden, and extraction of about 3 Mt/a of ore from Deposit No. 1, which is scheduled to begin about eighteen months after the start of construction. Beginning in Year two of construction, ore will be transported by truck, year-round via the Milne Inlet Tote Road for stockpiling at Milne Port and shipment from Milne Port during the open water season.

Construction of the Railway and infrastructure for Steensby Port is expected to take four years. The Railway is necessary for shipment of iron ore to Steensby Port. To expedite its completion, concurrent construction of the Railway will occur at a number of locations. Construction of the north end of the Railway will be staged from Milne Port via the Mine Site and Steensby Port will be the staging area for the south end.

### 3.1.1 Mobilization and Re-Supply

In 2011, the land-based permanent fuel tank farm constructed at Steensby Inlet will receive fuel deliveries. The existing bladder tank farm at Milne Inlet will continue to be utilized and a steel tank farm will be constructed for additional capacity.

It was a concern at one of the Baffinland public meetings that there has been seepage from the existing bladder tanks at Mary River and was suggested that the bladder tanks not be used as the material is rubber. To stop unnecessary site contamination other forms of containers should be used.

#### Dwellings: (Volume 5 page 87 of 136 )

A dwelling is defined in D038 as permanently or seasonally-occupied residences, including trailer parks and campgrounds in regular and consistent use. Worker residences, dormitories, and construction camps are specifically excluded as dwellings under D038. There is an old cabin at the far east portion of the beach at Milne Port which is in poor condition but is available for refuge from the weather by hunters if necessary (Figures 5-3.10 and 5-3.11). The beach area to the east of the cabin is occasionally used for camping by residents of Pond Inlet. This cabin and camping area would not meet the D038 definition of a dwelling as a noise-sensitive receptor, since it is not in regular and consistent use. The cabin is nevertheless considered in the noise assessment.

While there are currently cabins at each of the Mine Site (in usable condition) and Steensby Port (not in usable condition), it is expected that these cabins will be no longer available for use (Volume 4, Section 10) and as such, there are no dwellings considered within the Mine Site and Steensby Port LSAs.

Currently, local hunters are not allowed to dwell in any of the units at Mary River and the cabin which is deemed unnecessary is used for refuge during whiteout or blizzard conditions even during the spring/summer months as winds gust up to 90 due to the canal or valley structure of the land. For people who go over to quarry at the site, the cabins are used as well. Regardless of the condition, the cabins are quite necessary for local hunters and will continue to be of use.