Baffinland
Iron Mines Corporation

POPULAR SUMMARY





MARY RIVER PROJECT

Final Environmental Impact Statement

February 2012

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1.0 PROJECT SUMMARY

Baffinland Iron Mines Corporation (Baffinland) has prepared an Environmental Impact Statement (EIS) for the proposed development of its Mary River Project. The Project is located on northern Baffin Island, in the Nunavut Territory, in the Canadian Arctic. The Nunavut Impact Review Board (NIRB) issued guidelines for the preparation of this EIS on November 16, 2009 and an amendment to the guidelines on November 3, 2010. These guidelines outline the information that Baffinland should include in its EIS.

The EIS is part of the environmental assessment process established for a project under the Nunavut Land Claims Agreement. Under this environmental assessment process, the proponent of a project, such as the Mary River Project, describes the surrounding environment and the proposed development. Potential effects are then predicted and mitigation plans are developed. The severity or "significance" of residual effects (effects remaining after mitigation measures have been applied), are evaluated based on established criteria and expert opinion.

A draft EIS was submitted on January 23, 2011 and has been the subject of extensive review, technical meetings and numerous requests for additional information. The Final EIS responds to the issues and concerns raised through this year-long review period. The Final EIS will now be reviewed by the federal and territorial government agencies, Inuit organizations, local communities and other stakeholders. This Popular Summary is one important part of the Final EIS and provides the main highlights from the complete document.

1.1 THE PROPONENT

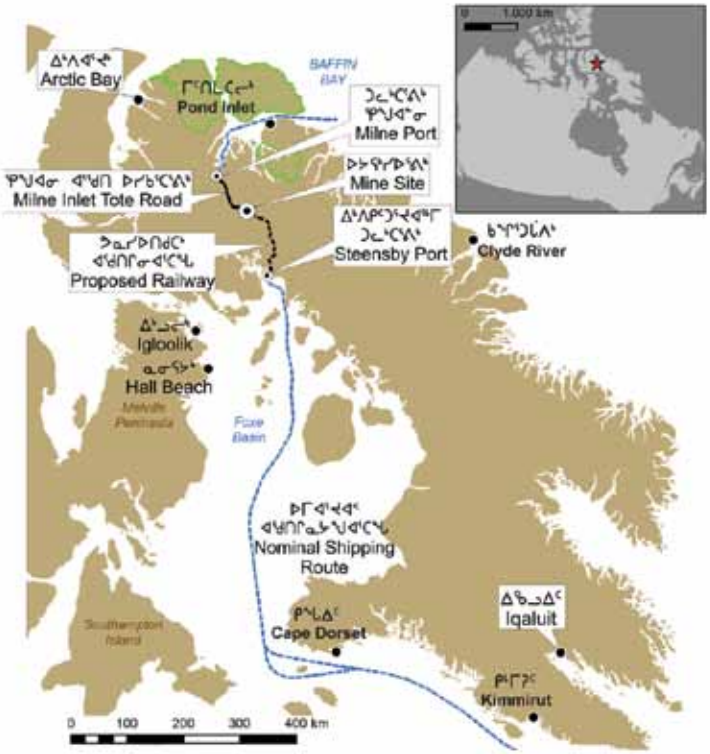
Baffinland Iron Mines Corporation ("Baffinland") is owned 70% by ArcelorMittal and 30% by Iron Ore Holdings LP. Baffinland's head office is located in Toronto, Ontario, Canada. In addition to its head office, Baffinland maintains a year-round presence at its exploration camp at the Mary River site, and community liaison offices in Iqaluit, Igloolik, and Pond Inlet. ArcelorMittal is one of Canada's leading suppliers of iron ore to steel markets around the world, generating some 40 per cent of Canada's total production. Recognized for the excellence of its products, the skills of its employees and its leadership in the industry, ArcelorMittal is one of the world's largest steel companies, operating in more than 60 countries. The Company's engineering and environmental teams have a wealth of Arctic development experience. Baffinland is also developing key partnerships with companies who have specific northern experience, for example, in shipping and ice-breaking. ArcelorMittal is putting in place all the ingredients necessary to ensure that the project is developed in a sustainable manner and will deliver a success story for Nunavut and all Canadians.

1.2 THE PROJECT

The Mary River Project (the Project) consists of mining iron ore from the reserve at Deposit No. 1 at a production rate of 18 Million tons per year (Mt/a). The Project includes the construction, operation, closure, and reclamation of an open-pit mine and associated infrastructure for extraction, transportation and shipment of iron ore. There are three main project locations – the mine site, Milne Port north of the mine site, and Steensby Port south of the mine site. Milne Port is connected to the mine site by an existing road, approximately 100 kilometers (km) in length. A railway of approximately

150 kilometers (km) will be constructed to connect the Mine Site to Steensby Port. For the construction period, supplies and equipment required for construction at the Mine Site and the northern portion of the railway will be received through Milne Port. Likewise, construction equipment and supplies for Steensby Port and the southern portion of the railway will be received at Steensby Port.

MAP OF PROJECT AREA AND SURROUNDING COMMUNITIES



It is expected that Steensby Port facilities and the Railway will take up to four years to construct. During construction, supplies will be brought to both Milne Port and Steensby Port during the open water season. Once the Railway is operational, 18 Mt/a of iron ore will be transported by railway and shipped from Steensby Port. Shipping of iron ore will occur year round and will require vessels with icebreaking capabilities. When Steensby Port is operational, Milne Port will only be used occasionally for the delivery of oversized equipment for the Mine Site. The main destination for the iron ore is European steel makers.

1.3 NEED FOR THE PROJECT

The world needs iron ore to continue to build and develop the materials our society uses every day. Global iron ore demand is expected to increase as countries such as China, India, and other emerging areas continue to grow and develop while the economies of western countries continue to improve. Baffinland proposes to develop the Project to supply high quality iron ore to world markets and provide an acceptable profit for its investors.

EXISTING MARY RIVER SITE

For the people of Nunavut, the Project will contribute to the development of infrastructure, skills, jobs, business opportunities, and will provide increased revenues to the Government of Nunavut and the Inuit birthright corporation (Nunavut Tunngavik Inc.). The Project is expected to bring many benefits to local communities, by supporting both the traditional lifestyle of Inuit, as well as the generational shift occurring in the Inuit community as youth show an interest to participate in the wage-based lifestyle.

The Inuit Impact and Benefits Agreement (IIBA), presently being negotiated between Baffinland and the Qikiqtani Inuit Association (QIA), will ensure that benefits from the Project flow to nearby Inuit communities and the Qikiqtaaluk Region of Nunavut. The development of the Project is consistent with the Nunavut Planning Commission's broad planning principles, policies, and goals as well as the Government of Nunavut's strategy for mining development. The Project should help to attract additional investment to the region.

The Project also contributes to Canada's northern strategy for strengthening Canada's sovereignty in the North, protecting the country's environmental heritage, promoting economic and social development in the region, and improving Northern governance.

1.4 PROJECT DEVELOPMENT APPROACH

Baffinland will carry out the Project in an environmentally and socially responsible manner. The needs and values of others, particularly hunters and trappers, will be respected throughout development and operation of the Project.

Baffinland will comply and, where it is economically and technically feasible, exceed Nunavut and federal regulatory requirements by applying technically proven and cost-effective environmental protection measures for each part of the Project. Baffinland's decision-making will be guided by sound management principles where the sequence of "Policy – Planning – Implementation and Operation – Checking and Corrective Actions – Management Review" are systematically followed. At each of these stages community involvement will be an important part of the process. An approach that

BAFFINLAND AND QIKIQTANI EXECUTIVE MEMBERS TOURING SITE-2011

emphasizes learning as you check the effects of actions will allow Baffinland to continuously improve and adapt quickly to changing conditions. Baffinland is committed to precaution to avoid and/or reduce potentially adverse effects of its operations to ensure the safety of its employees, the well-being of the residents of Nunavut, and the protection of the natural environment.

Baffinland has adopted progressive employment and business principles that will guide the Company through the life of the Project. Safety for employees is a cornerstone of all decisions. Baffinland will provide a work environment that will attract, develop, and retain qualified personnel and maximize Inuit participation. To the extent possible, the Company will hire employees from the five communities closest to the Project (Igloolik, Pond Inlet, Clyde River, Arctic Bay, and Hall Beach). Baffinland will work closely with the Qikiqtani Inuit Association (QIA) and others to deliver necessary training to employees and support community programs which will increase the benefits of the Project and provide local residents with skills that will continue to be important for them beyond the life of the Project.

The construction workforce will range in size from 1,700 to 2,700 persons. The estimated workforce during the operation phase is about 950 persons. Workers from Nunavut communities will work a rotation of two weeks at the site followed by two weeks off. Southern workers will likely work the common remote-site construction schedule of four weeks on and two weeks off.

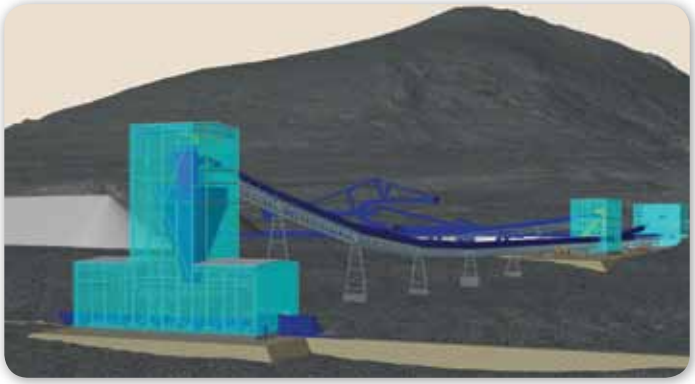
All workers will be transported to and from Project sites by air. Baffinland will provide air transportation from the five closest communities in the North Baffin region as well as from Iqaluit and a southern location. Other locations may be considered in the future.

1.5 PROJECT CHALLENGES

The development of a major mining project in a remote location of Nunavut faces several important challenges:

- High costs associated with building and operating a mine operation and transportation infrastructure in the Arctic.
- Logistical challenges associated with the construction and operation due to the limited seasonal access to the site and lack of existing transportation infrastructure.
- Long winters and extreme cold affects efficiency of construction crews and operations.
- Difficult geotechnical conditions (permafrost, ice lenses) require specialized design and construction techniques.
- The competitive nature of the steel-making industry demands a steady, consistent, and secure supply of iron ore.

In order to satisfy these requirements, the Project must ensure a reliable and consistent shipping operation throughout the year. It is expected that one ship will load



SCHEMATIC OF SORTING AND CRUSHING FACILITY AT MARY RIVER

SCHEMATIC OF SHIP LOADING AT STEENSBY PORT

STEENSBY PORT LOCATION

ore at Steensby Port on average every two days throughout the year including the ice covered period. Shipping frequency will increase during the open-water season when sea-lifts will provide annual re-supply and extra vessels may be chartered to ship additional ore. Winter shipping of ore is essential and the Project includes a fleet of ice breaking ore carriers capable of reliably meeting the shipping schedule.

There are also two additional important factors to consider:

- The Project must provide real and measurable benefits for Baffinland shareholders, as well as, for Inuit landowners, local communities and land users.
- Baffinland's revenues depend on the world commodity prices for iron ore.

Together these challenges and factors have shaped Project design and implementation strategy.

1.6 PROJECT SCHEDULE AND PROJECT LIFE

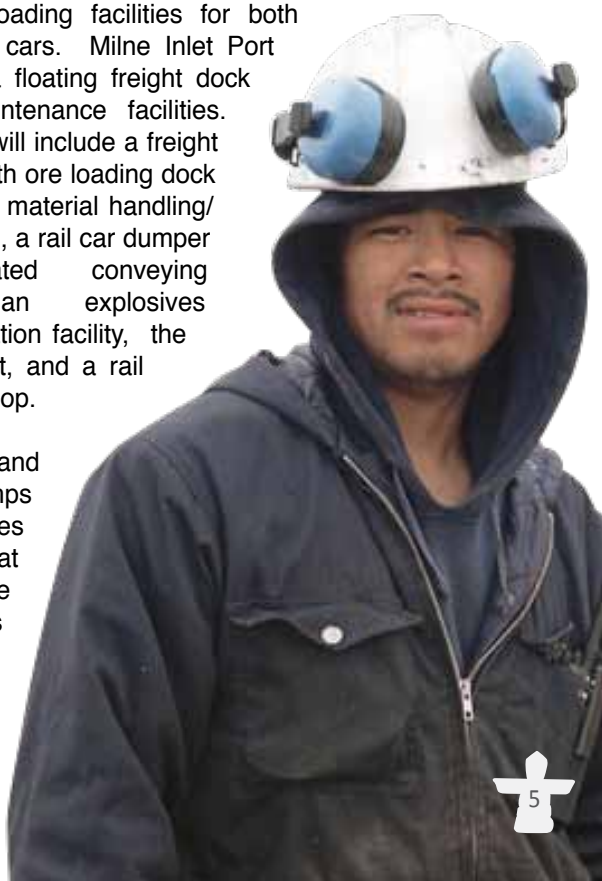
The Project is divided into a number of phases. First, the construction from start to beginning of operation will take an estimated four years. The operational phase, based on current ore reserves, would span 21 years at the production rate of 18 Mt/a. Closure of the facilities is expected to be carried out over a three to five year period and post-closure monitoring will follow for an additional five years. If closure objectives are not met, post closure would extend beyond five years.

1.7 HIGHLIGHTS OF THE PROJECT

The Mine Site, Milne Port, and Steensby Port are the three major Project sites. Each site will have all the facilities it needs to operate effectively including maintenance and administrative buildings, warehouses and laydown areas, ore stockpiles and associated runoff management facilities, camps, water supply, wastewater treatment plants, waste management facilities including landfills, power generation, fuel depots, telecommunication facilities, and airstrips.

In addition to these facilities, the Mine Site includes the open pit mine, the fleet of trucks to support the mining, facilities to prepare and store explosives, a waste rock pile, ore sizing facilities, ore loading facilities for both trucks and rail cars. Milne Inlet Port also includes a floating freight dock and truck maintenance facilities. Steensby Port will include a freight dock, a two berth ore loading dock with associated material handling/ loading facilities, a rail car dumper and associated conveying equipment, an explosives storage/preparation facility, the main fuel depot, and a rail maintenance shop.

Permanent and temporary camps of varying sizes will be built at each of these three sites as well as at several points along the rail line.



EXAMPLE OF STEENSBY SITE LAYOUT DURING EARLY CONSTRUCTION

The camps will include dormitories, cafeterias, medical and leisure facilities. Four additional temporary camps will also be required for the construction of the railway. During the operation phase the number of people that can be accommodated in camps will be reduced. These camps will be of modular construction and will be built at the beginning of the construction phase and later downsized for the operation phase.

The railway consists of a rail embankment, wooden ties, and steel rails. The railway construction will require the construction of a temporary access road and several quarries. About 30 bridges will be constructed for the railway, two tunnels, and rock cuts along Cockburn Lake. Level crossings will be prepared at key areas along the railway's length to enable hunters and caribou to cross the tracks safely.
Once the railway and port facilities are complete, the Steensby Port will operate year-round and will be accessed by a specially built fleet of very large, ice breaking ore carriers.

ORE BEING LOADED ON BARGE - BULK SAMPLE 2008

1.8 ORE PRODUCTS

Since the Mary River iron ore is of a very high-grade, there is no need to have a process plant (or mill) on site, resulting in no tailing being generated. As such, no tailings pond will be required. This is accomplished by crushing and screening of the ore to produce two iron ore "products":

- a lump ore product in which the pieces of ore are between 6.3 mm and 31.5 mm in size (about golf ball size), and;
- a fine ore product, in which the pieces of ore are less than 6.3 mm in size (about pea size).

Crushers and screens will be installed inside buildings, and conveyors will be covered and equipped with wind ventilation hoods to reduce wind exposure and the potential for dust generation. All ventilation ducts will be routed to dust collectors which will limit dust emissions.

CRUSHED IRON ORE DURING BULK SAMPLE 2008

1.9 CLOSURE AND POST-CLOSURE

Throughout all phases of the Project, Baffinland will plan and conduct operations in a manner designed to return the Project sites to a safe and environmentally stable condition. Baffinland will undertake ongoing reclamation activities throughout the mine life. Temporary facilities required for the construction camps will be decommissioned and removed at the end of their useful life. Borrow areas, quarries, temporary roads and other disturbed sites will be stabilized to limit erosion of ground surfaces and rehabilitated once they are no longer required. Environmental and safety monitoring will continue as long as necessary.

2.0 POTENTIAL FOR FUTURE DEVELOPMENT

The current Project has been designed for an estimated 18 Mt/a of iron ore. Annual production rates can vary with factors such as market conditions, ore grades and unanticipated events. To ensure that any peak activity levels remain safe and that some extra flexibility exists to handle unforeseen events, the Project infrastructures are designed for a capacity of 30 Mt/a. All Project sites are thus capable of accommodating additional stockpiles, material handling equipment and personnel.

As well, regional exploration over the past two years has enabled Baffinland to identify additional iron ore deposits that appear, based on surface sampling, to be of similar high-grade iron ore as Deposit 1. While these other deposits have not yet been thoroughly evaluated, Baffinland's regional exploration program points to considerable potential for additional development. Having the mine and associated shipping, road, and railway infrastructure in place will facilitate such future development in the region. A significant expansion of the Project would trigger additional review processes.

COMMUNITY MEETING - AUGUST 2011

SECTION 2.1 - COMMUNITY INVOLVEMENT

There has been ongoing and extensive consultation with many communities and organizations that have an interest in the Project. Engagement has included the public, local, and regional Inuit organizations, the Government of Nunavut, and federal agencies. There has been a particular focus on the Inuit communities near the Project sites.

Inuit of the Baffin Region enjoy a rich oral tradition. This tradition has influenced how Baffinland has engaged local

MARY RIVER SITE TOUR 2011

communities. The company has focused on establishing a presence in the region through local Community Liaison Officers, held numerous face-to-face meetings with community members and arranged site tours where possible. Since the main language through the north Baffin region is Inuktitut, with a number of regional dialects across Baffin Island, translation using local interpreters has been an important element in supporting effective communication. In all instances, detailed records were prepared for the various meetings and other in-person discussions.

There have been specific efforts at assembling, recording and integrating traditional knowledge into project design decisions. Inuit knowledge of the area is extensive and extremely valuable especially when integrated into scientific studies and understanding.

In addition, community acceptance and preferences were important factors considered in the evaluation of project alternatives such as the use of Milne Inlet, the location of the Steensby Port, the shipping route in the Foxe Basin and the work rotation schedule.

Following the submission of the Draft EIS, there have been numerous interactions with many government agencies both federal and territorial, the regional Inuit Association (QIA) and other interested parties with many individual meetings, workshop sessions and written submissions. Through these efforts the overall understanding of the project and its potential effects are increasingly better understood and these efforts feed into improvements in project design. The content of the Final EIS reflects the outcomes of these discussions and analysis and moves the project design forward to the next phase.

SECTION 3.0 - PROJECT SETTING
3.1 PHYSICAL SETTING

The landforms and the iron ore deposits in the Mary River Project area are associated with widespread past and current glaciation on Baffin Island. Surface geology consists of locally abundant sediment deposits from glaciers and rivers. The North Baffin region containing the Mary River area lies within the Committee Belt, a granite greenstone terrain mixed with sedimentary and volcanic rock. Occasional outcrops of granitic and sedimentary rock formations occur. The mountains to the east are older than 540 million years old, and the lowland plateaus to the west are about 250 to 540 million years old.

The Project is situated in the Northern Arctic Ecozone. The climate is semi arid and permafrost coverage is continuous extending to a depth of 500 metres, with an active layer of up to 2 metres. The extremely cold temperatures of the region, combined with the permafrost, result in a short period of runoff that typically occurs from June to September. All rivers and creeks, with the exception of the very largest systems, freeze completely during the winter months. Due to the combination of low temperatures and the low capacity of the soil to hold moisture, vegetation is minimal and surface water is abundant. The region is dotted with thousands of small lakes and streams.

The region experiences near 24-hour darkness with less than two hours of twilight from November to January. During the winter months the treeless topography and fine powdery snow produce blowing snow conditions, resulting in restricted visibility. There is continuous daylight from May to August and frost-free conditions occur from late June to late August. The months of July and August usually experience the greatest precipitation. From September to November, temperature and the number of daylight hours decrease, and by mid-October the mean daily temperature is generally well below 0°C. The highest snowfall typically occurs during this period.

Air quality is very good and noise levels are low in the Project area as is typical of a remote environment. Freshwater quality measurements in the Mary River area indicate naturally elevated concentrations of dissolved oxygen, aluminium, and iron. As well, significant dissolved solids lead to increased turbidity of the water. Some average values for pH, as well as cadmium and mercury in the fresh water environment are currently greater than levels recommended by the guidelines of Canadian Council of Ministers of the Environment.

3.2 BIOLOGICAL SETTING

Plant life is relatively sparse in much of the Project area and is generally consistent with the plants that usually occur in arctic regions. No plant species considered to be “rare” in Canada were found to occur in the survey locations.

Terrestrial mammals in the region include barren-ground caribou of the North Baffin herd, wolf, arctic and red fox, ermine, arctic hare, and lemmings. Marine mammals are found in abundance in the region, including polar bears, narwhals, beluga whales, bowhead whales, several species of seals, and walrus. Killer whales and northern bottlenose whales were found in small numbers.

North Baffin caribou are currently present at low densities and their numbers seem to vary in accordance with a 60- to 70-year cycle. The last period of caribou abundance in the area was 1980 to 2000, and the previous period of low abundance was in the 1940s. Caribou are expected to remain at low numbers for the next couple of decades. However, there is evidence that caribou do occur throughout the entire region. While some populations of caribou migrate between preferred habitats in summer and winter, North Baffin caribou appear to be non-migratory and are likely to be found relatively equally in many locations throughout the Project area.

Migratory bird species observed in the Mary River area include snow geese, ducks, eiders, loons, and mergansers. Raptors found include rough-legged hawks, peregrine falcons, gyrfalcons, and snowy owls. Relatively low densities of songbirds and shorebirds were recorded throughout the region. There are also numerous sea birds in the area of the shipping route including thick billed murres and many types of gulls.

There are two fish species in the freshwater environment: arctic char and a minnow species named nine spine stickleback. The inland waters near the Project mainly contain landlocked arctic char, though sea-run char are present in a lake next to Steensby Port and up the Cockburn River system next to a portion of the railway. Fish in the marine waters include arctic char, sculpin, and Atlantic lumpfish at Steensby Inlet, and Arctic char, sculpin and Greenland cod at Milne Inlet.

3.3 SOCIO-ECONOMIC SETTING

The Baffin Region of Nunavut has a rich and visible archaeological heritage dating many thousands of years. There are many archeological sites both small and more significant, particularly around Milne Port and Steensby Port but also along some sections of the rail line.

The five communities of northern Baffin Island in the immediate vicinity of the Mary River Project, listed alphabetically, include Arctic Bay (280 km), Clyde River (415 km), Hall Beach (192 km), Igloolik (155 km), and Pond Inlet (160 km). Each of these communities has long term social, economic and environmental ties to the Project area. For many of these North Baffin households, harvest of country

food provides an important contribution to their overall well-being, both physical and cultural. In all five communities, caribou, ringed seal, and arctic char are of major importance. In addition, walrus is a significant species in Hall Beach and Igloolik, while narwhal is a key component of the harvest among households in Arctic Bay, Pond Inlet, and to a lesser degree, Clyde River.

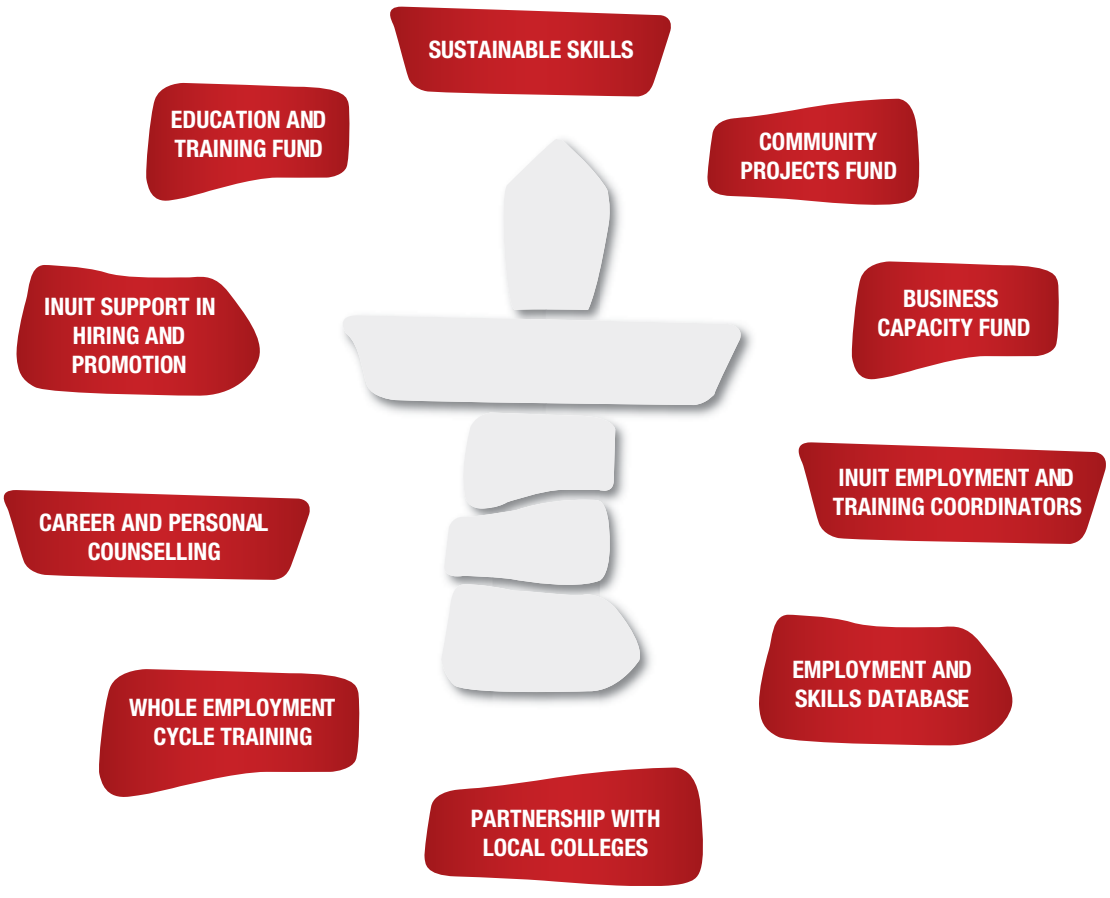
The land-based economy is a major part of the livelihoods of many residents of the North Baffin. Harvesting from the land and sea is estimated to produce food worth between $12 million and $20 million per year in this region. The amount of work to harvest this food is estimated to be 350 full-time jobs.

In addition, residents of the region earn money through sales of arts and crafts, through employment, and from various government social programs such as Income Support. The personal income reported by residents of the five North Baffin communities amounted to $83 million per year.

The Inuit of the North Baffin region have experienced tremendous social and cultural change over the course of a few decades. In particular, initiatives such as residential schools, have affected family integrity and by implication, social cohesion. Elders are becoming increasingly engaged in community life and in promoting the learning of traditional culture for the younger generation. At the same time, a shift toward western middle-class expectations appears to be taking place among Inuit youth. These communities have experienced dramatic population growth over the last 20 years. Over 70% of the population is under the age of 25. Unemployment and lack of opportunities are contributing to social stress.

Demand amongst residents for wage employment is very high. People want to work, even when this work requires flying to remote locations away from the community. However, job opportunities in North Baffin are limited. Inuit employment in North Baffin is characterized by many individuals earning small levels of income, well under what full-time work would pay, and a small number earning full-time, year-round incomes. Most residents working in full-time jobs in Iqaluit do so year-round. In North Baffin, many more full-time workers are engaged in these jobs for only short periods. Women who work full-time jobs in North Baffin are more likely to work year-round than are men.

OPPORTUNITIES FOR NUNAVUT



Still, there are good-paying, full-time, year-round employment opportunities available. These are often in government and the "public sector" and require levels of education and kinds of experience that many residents do not have. Community Elders recognize that the communities need to position themselves to enter the wage economy.

The number of jobs occupied by women has generally increased at a greater pace than those occupied by men. However, women in the region are working mostly in the public sector. The past public sector growth is not likely to continue and this suggests that as young women start to look for employment, they may need to find work in sectors not traditionally filled by women.

BAFFINLAND COMMUNITY MEETING AUGUST 2011

Approximately one-in-five jobs in North Baffin and in Iqaluit require a university education. One-quarter to one-third of jobs in the region require college or apprenticeship levels of training and skills. A similar number require high school education and/or occupation-specific training. The remainder can be accessed by unskilled workers with on-the-job training. Clearly the opportunities for employment are much more limited for those who do not have good education or training.

ZERO TOLERANCE AT CAMP SITE - 2011

The Government of Nunavut relies on federal transfer payments for at least 90% of its revenue. Government employment is a mainstay of the wage economy with many of Nunavut's small businesses and retail outlets established to support government needs, or those of public servants. Government jobs in administration, education, and health areas account for about half of all employment earnings in the territory. Construction employment has also been growing to support the development of government infrastructure.

SECTION 4.0 - PROJECT INTERACTIONS AND EFFECTS ON VECS AND VSECS

Public consultations have enabled Baffinland to identify the key interests and concerns of the communities and stakeholders of the Project. As well, extensive scientific baseline studies were carried out to establish current conditions. Interviews with many Inuit Elders provided valuable insight into their traditional knowledge of the region. Through these studies and consultations the Project team was able to clearly identify the key areas for assessment and review. These areas of focus are identified in the EIS as the "valued ecosystem components (VECs)" and "valued socio-economic components (VSECs)" of the Project.

4.1 VALUED ECOSYSTEM COMPONENTS

The VECs include both the natural environment and the wildlife that depends on the health of that environment. The VECs can be grouped in theme areas related to key components of the environment. Significant indicator species were identified and provided a focus for the assessments.

Atmospheric Environment – Climate change; Air quality; Noise and Vibration

Land Environment – Landforms, soil and permafrost; Vegetation; Terrestrial wildlife and habitat; Birds

Freshwater Environment – Surface water and sediment quality; Water quantity; Freshwater fish, fish habitats and other aquatic organisms

Marine Environment – Sea ice; Marine water and sediment quality; Marine habitat and biota; Marine mammals

4.2 VALUED SOCIO-ECONOMIC COMPONENTS

The VSECs are related to the well-being of the people, their communities and the overall social and economic health of the area.

People: Population demographics; Education and training; Human health and well-being,

Community: Community infrastructure and public service; Cultural Resources; Resources and land use; Governance and leadership: Livelihood and employment

Economy: Economic development and self-reliance; Contracting and business opportunities; Benefits, taxes and royalties

4.3 VECS AND VSECS INTERACTION WITH THE PROJECT

Through the review process the interactions of the Project with the various VECs and VSECs were identified and where appropriate key indicator species were identified and analysed. Extensive studies combined with traditional knowledge were used to establish the pre-Project conditions. Using scientific understanding, experience from past developments and traditional knowledge predictions are made on the effects of various interactions. Where negative Project interactions could not be avoided, plans were developed to minimize or offset these effects.

Taking into account the adjustments and mitigation measures included in the Project to limit negative effects, residual effects of the Project were then assessed for their significance on the biophysical and socio-economic environments. The EIS presents the outcomes of these assessments. A summary by theme area follows.

4.3.1 PROJECT EFFECTS ON VECS

INTRODUCTION

The Project design sought to minimize the interactions of the Project with the natural environment and to implement measures to minimize the potential negative effects of interactions that did indeed occur. With these measures in place, the effects of the Project on the natural environment overall was assessed as not significant. The following sections summarize key Project interactions and mitigation measures that will be implemented.

Atmospheric Environment - Climate change; Air quality; Noise and Vibration

Climate change is predicted to have little effect on the very cold and deep permafrost conditions in area over the planned life of the Project. The Project facilities will also be designed to account for any changes in site conditions induced by climate change. On the other hand, Project activities will produce Greenhouse gases even though many Project design elements will minimize their levels. Although these GHG emissions are a significant increase compared to current Nunavut levels, these emissions are very small compared to those on a national scale and add very little to overall GHG emissions for Canada.

Ore handling, as well as driving on access roads, and emissions from power plants, trucks, and camp incinerators will reduce air quality through the generation of dust and other emissions. The use of low-sulphur arctic diesel fuels and ensuring modern emission controls on equipment will reduce these emissions. As well, air pollution controls such

as dust suppressants, enclosing facilities and the use of dust-collection equipment will prevent significant effects on air quality.

Project activities will increase noise levels but these will be limited to areas close to the activities. As well, the use of mufflers and regular maintenance of engines and equipment will prevent significant noise effects.

Land Environment: Landforms, soil and permafrost; Vegetation; Terrestrial wildlife and habitat; Birds

Sensitive landforms in the Project area include frozen soils that contain ice lenses or areas that could shift under pressure. Sensitive landforms will be mostly avoided and appropriate engineering designs will be used to protect the sensitive areas in situations where such landforms cannot be avoided. In addition, site preparation will include adequate drainage to prevent water pooling during thaw periods.

The design of all Project facilities minimizes the amount of land that the Project needs to disturb. Thus the amount of vegetation that is affected is minimal compared to the amount of vegetation cover in the region. Numerical modelling was done to predict the amount of dust that could settle on the vegetation in the area and these studies concluded that the dust suppression actions would prevent significant dusting of plants.

Caribou are the main indicator species used to assess potential effects on terrestrial animals. The main project interaction with caribou would be when caribou cross the road or rail line. Although it is possible that individual caribou could be involved in collisions with trains or trucks these numbers are expected to be limited and will not be significant compared with total numbers in the region. Several measures are in place to avoid collisions with caribou. Strict speed limits will be in place for trucks and trains, thus decreasing the probability of collision. Trucks will be required to stop if wildlife is observed on or next to the road. Trains cannot stop to avoid collisions with caribou, but during seasons when large herds of caribou return, the train can cease operation until caribou move through the area. Crossings will be provided in specific locations (historical trails) for easy movement of animals across the track and snow banks will be reduced where needed to allow caribou to cross.

There are many birds through the region and a very small, but not significant, amount of habitat loss for migratory birds is expected to result from Project activities. These are not expected to lead to effects on populations of key species such as peregrine falcons, snow geese, eiders, and loons. Prior to initiating Project activities, nests and nesting areas will be identified and avoided where possible until fledging occurs.

Freshwater Environment – Surface water and sediment quality; Water quantity; Freshwater fish, fish habitats and other aquatic organisms

A number of proven mitigation measures have been included in the Project to reduce potential effects on water quality, freshwater fish, fish habitat, and other aquatic organisms. Specific Management Plans detail the many ways that water will be protected.

Water use will be reduced to the minimum necessary and all used water will be tested and treated as required before it is released back to the environment. Modern sewage treatment facilities will ensure that all discharged water meets or exceeds established standards. Run-off water from fuel storage and maintenance facility areas will be contained and wastewater from truck and rail maintenance facilities and explosives equipment-washing facilities will meet established standards before being discharged to the natural

environment. An Emergency and Spill Response Plan will be in place and will ensure that there is prompt and appropriate clean-up of any spills should they occur.

The potential for acid-generating drainage from the waste rock pile, ore stockpiles or quarries is very low, but will be carefully managed, treated where needed and monitored through the life of the Project.

The roads and railway cross a large number of watercourses, and a portion of these contain fish habitat. Culverts and bridges for stream and river crossings will be designed to limit barriers to fish movement. Because railways cannot turn sharp corners, building sections of the railway into the edge of several lakes will be unavoidable. While some fish habitat will inevitably be lost, a compensation plan has been proposed to offset this unavoidable loss. This plan will be further developed and finalized in consultation with Fisheries and Oceans Canada and the Qikiqtani Inuit Association.

Marine Environment – Sea ice; Marine water and sediment quality; Marine habitat and biota; Marine mammals

Near-shore including port activities will be carefully managed to protect the marine environment. All sewage and wastewater from maintenance facilities and explosives will be treated before discharge and runoff from Project areas will be contained, monitored, and treated to meet water effluent quality requirements before discharge. Fuel transfers will take place following the Canada Shipping Act regulations.

Ship routing will minimize disruption to the ice patterns and no waste will be discharged into the sea by ships. In addition, ships are required to exchange ballast water at sea. Ore carriers will carry ballast water during their inbound trips to Steensby Port. This water is required in order to keep the vessels stable and at an even draft. The water is pumped overboard as the vessels approach Steensby Port. Ballast water will only be slightly different (in temperature and salinity) from the water in the Inlet. Modeling has shown that discharge will not alter the quality of water in Steensby Inlet. There is an important concern that ballast water could result in the unintended introduction of invasive species to such receiving waters. There are strict protocols developed by regulatory agencies that will protect against this concern, including mid-ocean transfer of ballast water and treatment of the ballast water prior to discharge, before entering Canadian waters. Ships will meet all future regulatory requirements for the treatment of ballast water using methods identified by Transport Canada. Such practices will limit the risk of introduction of invasive species.

The key marine mammal species include ringed seals, bearded seals, walruses, narwhals, beluga whales, and bowhead whales.

Ringed seals are present year-round along both the northern and southern shipping routes. Landfast ice offers preferable seal habitat for making breathing holes and lairs. Females give birth in March and April and nurse their pups for five to eight weeks. Ringed seals are generally quite tolerant of on-ice industrial activity and shipping. However, ringed seals are thought to be susceptible to disturbance during periods when they are giving birth and nursing their pups. Icebreakers will transit a small proportion of landfast ice in Steensby Inlet along the shipping corridor and at the dock site. Small numbers of ringed seal mortalities could occur as a result of icebreaking activity. However, the interaction of the Project with the ringed seal population will be limited to the shipping lane and will not affect the population overall.

Walrus occur year-round in the area and are present in relatively high numbers in northern Foxe Basin. Traditional knowledge reports that walruses regularly are present in

BULK SAMPLE BEING LOADED IN MILNE INLET - FALL 2008

Steensby Inlet in small numbers. Walruses also occur in Hudson Strait. Along the shipping route from Steensby, walruses that are in the open-water or hauled out on ice may be aware of the noise from the vessels many kilometers away but will not likely be disrupted by this distant noise. Based on behaviour in other situations, walruses at terrestrial haul-out sites are not predicted to be affected by Project activities. The potential interaction of the Project with the walrus population will be limited geographically to areas near the shipping route and the shipping route itself was chosen to avoid the largest concentrations of walrus that occur west of Koch Island. Ongoing monitoring will be important to detect any unexpected effect on walrus and to implement any additional needed mitigation measures.

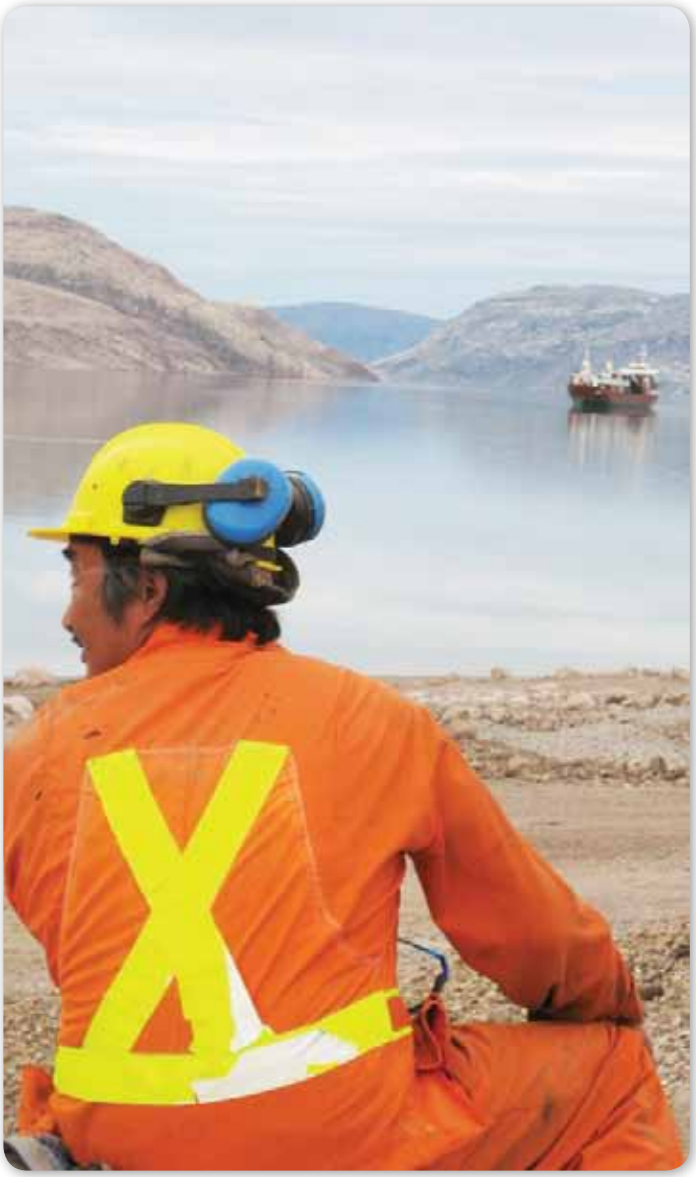
Bearded Seals are common in the region throughout the year and primarily occur in areas with shallow water and pack ice where ice pans are sufficient for haul-out sites. The pupping period varies through the period from mid-March to early May. The ship track in the mobile pack ice will quickly disappear because of the movement of the ice by winds and tides and it is likely that bearded seals will re-use this area of ice. The overall interaction of the Project with the bearded seal population will be limited.

Narwhals are present along the shipping route from Milne Inlet primarily during the open-water period where about 20,000 animals summer in the Eclipse Sound and Milne Inlet area. Narwhals are thought to calve and feed in this summering area. Relatively few narwhals have been present in Foxe Basin but narwhals are thought to overwinter in the eastern portion of Hudson Strait. Limited observations in the Project area indicated that narwhals do not seem to respond to vessels (including the passage of an ore carrier). The interaction of the Project with the narwhal population will be mostly limited to the shipping activities in Milne Inlet. These shipping activities are not extensive and will occur only during the early construction period and rarely afterward.

Beluga whales occur in the region year-round although there are relatively small numbers of belugas present in Eclipse Sound and Milne Inlet during the open-water period. Hudson Strait has been identified as an overwintering area for beluga. In Foxe Basin, small numbers of belugas are present in the vicinity of Igloolik, Hall Beach, and likely Steensby Inlet during July to early September. Studies show that belugas avoid icebreakers and vessels travelling in areas of ice at greater distances than they would for vessels travelling in open water. Belugas will likely habituate to frequent shipping, including ice breaking.

Bowhead whales are present along the proposed shipping route during summer and fall. A bowhead nursery area has been identified in a small area in northern Foxe Basin. Hudson Strait has been identified as a primary wintering area. Based on studies of bowhead response to ships and icebreakers, bowheads will likely avoid at least the immediate area around ships thus it is expected that the interaction of the Project with the bowhead whale population will be limited.

Polar Bear occur in the area throughout the year and are abundant in northern Foxe Basin, including the shorelines of Steensby Inlet and Koch, Rowley, and Bray islands. Elders noted that the southeastern portion of Steensby Inlet provides good denning habitat. Polar bears also overwinter in Hudson Strait. Polar bears are expected to avoid ships and port sites however they may also approach these areas where they sense activity. Project personnel will be educated about bear safety and the strict management of waste will reduce the chances of human bear interactions.



4.3.2 PROJECT EFFECTS ON VSECS

INTRODUCTION

The Project will provide many potential social and economic benefits to the residents of North Baffin. These will arise from employment and training opportunities as well as from opportunities for businesses and from payments made to government and Inuit organizations. Careful planning is needed in order to improve the ability of people to attain these opportunities. Individuals and families will also require support as they cope with the challenges associated with the fly-in/fly-out style of life and with the wealth and financial responsibilities that come with this lifestyle. The assessment of valued socio-economic components is an important way to identify issues and develop appropriate mitigation measures. Overall the Mary River Project represents important and significant socio-economic benefits to Nunavut.

People: Population demographics; Education and training; Human health and well-being

The potential for the Project to cause non-Inuit migration into communities, as well as the potential for Inuit to move out of the communities as a result of the Project was assessed. Neither of these possibilities is identified as significantly affecting the composition and numbers of the North Baffin populations or the community social fabric.

Baffinland's education and training commitments will help upgrade the skills of North Baffin residents. Baffinland is committed to supporting training programs that will enable residents of nearby communities to develop the skills needed to qualify and perform jobs at every level of the Project operation. Baffinland has been actively pursuing education and training partnership initiatives. In particular, Baffinland, the QIA, Qikiqtaaluk Corporation, and Kakivak Association have agreed to develop and promote the delivery of mine-related training, training related to economic and community development, labour market research, curriculum development, career development, and other related activities for the benefit of Inuit in the communities associated with the Project. A similar agreement has been signed with the Government of Nunavut and Arctic College. As well, a minimum age of 18 for Project employment will serve as an incentive for students to complete high school. Experience gained at work will also help improve overall life skills.

The challenges associated with fly-in/fly-out work are recognized. Steps will be taken to help workers and families to succeed in this type of work environment. Orientation and training will be provided to help workers and families adapt to the work rotations and improve money management

practices. The shorter two-week work rotations will limit the period of absence of workers from their families and communities and provide opportunities for individuals to participate in traditional activities during two-week periods off work.

Concerns are sometimes raised about the potential effects of the Project on the transport of illegal substances through Project sites and on the affordability of such substances. To counter the possibility of increased substance abuse the company has a strict no drug–no alcohol policy. Addiction counselling will also be available.

Community: Community infrastructure and public service; Cultural Resources; Resources and land use; Governance and leadership: Livelihood and employment
The Project is expected to create competition for skilled workers. Hamlets have expressed concern that they may face difficulty in hiring the people they need to deliver local services. However, employment experience and ongoing training will significantly improve labour force capacity helping to equip local residents with the qualifications and experience. As a result, increased competition for workers will be balanced by increased capacity.

The Project will be making use of the public airstrips at Iqaluit and at the five nearest communities for transporting workers to and from worksites. The Project's transportation plans will be designed to avoid placing demands on the airport's facilities beyond its capacity. Some increased demand for infrastructure is also expected to arise indirectly due to the Project. For example, increased wealth might lead to more vehicles and a need for road improvements.

Education and training as well as on-the-job work experience and counseling will develop leadership skills that will significantly improve local governance. The participation of community residents and leaders in agreement negotiations with Baffinland and in initiatives to identify key indicators for regional monitoring programs has already contributed to local community leadership development.

Measures will be taken to respect and preserve the culture of Inuit employees while they are working. Policies that encourage respect of other cultures and diversity are in place. Baffinland supports the use of Inuktitut onsite, for signage and in work units. Traditional country foods will be provided in the Project cafeterias. Policies encouraging safety, employment equity, and, preventing harassment will be strictly enforced.

Archaeological sites have been identified in Project areas that contain features and artifacts representing substantial degrees of area use throughout the human past to the present. A number of important archaeological sites will be avoided by relocating Project infrastructure, and others will require protection through excavation, mapping, and artifact retrieval by a licensed archaeologist. Baffinland's Cultural and Heritage Resource Protection Management Plan outlines the policies and procedures for management of archaeological sites.

The Project will interact with existing land uses by Inuit. Measures to support these activities include check-in procedures at Project sites and a focus on public safety for the Milne Inlet Tote Road and the Railway. The ship track through the landfast ice in Steensby Inlet is expected to affect existing on-ice travel routes during the winter. To mitigate this, Baffinland proposes to establish a clear and safe detour route around the port site. Baffinland will accommodate travellers at Steensby Port and provide meals and additional fuel as required by hunters passing through the area. Baffinland will continue to work with communities in order to evaluate options for establishing other safety measures.

Economy: Economic development and self-reliance; Contracting and business opportunities; Benefits, taxes and royalties
Direct and indirect economic growth generated by the Project will create new opportunities for employment and business. The Project will enhance labour force capacity and may increase Inuit business capacity. Businesses may gain opportunities to expand through the supply of business services to the Project as well as indirectly through an expanded market for consumer goods and services. Baffinland will help Inuit firms, and in particular smaller Inuit firms located in communities in the Baffin Region to develop capacity to bid on and carry out contracts for the Project.

The Project will provide substantial cash payments to Inuit organisations and to government. These will arise through the Inuit Impact and Benefits Agreement with QIA as well as through royalty payments for the iron ore made to NTI. Payments to the Government of Nunavut will arise from fuel taxes, property taxes, and taxes on the profits earned by Baffinland. Some of these payments will start as early as the construction phase, while other payments will not kick in until later in the operations phase.

Through its contribution to human skills, to household wealth and to economic growth, the Project will support achievement of overall economic development goals, including progress toward improved self-reliance of individuals, communities, and the territory.

SECTION 5.0 - ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT

Baffinland is committed to protection of the health and safety of employees and the environment, and to ongoing community involvement and participation in the Project. The Project will meet or exceed the requirements of all applicable Nunavut and Canadian laws, regulatory requirements, agreements, permits, and licences. In addition, on conclusion of the EIS process, Baffinland will complete an Inuit Impact and Benefits Agreement (IIBA) under negotiation with the QIA.

Baffinland's Environment, Health, and Safety (EHS) Management System is the framework for adaptive management based on international best practices. The EHS embraces the Precautionary Principle and Sustainable Development. Within this framework individual plans have been developed to address all aspects of the company's activities and contain the detailed mitigation measures and monitoring to be implemented throughout the life of the Project in order to eliminate, limit or minimize adverse effects. All Baffinland employees and contractors are required to comply with these management plans. The reporting and documentation requirements for these management plans, auditing, and process of management review and revisions are all specified in the EHS Management System.

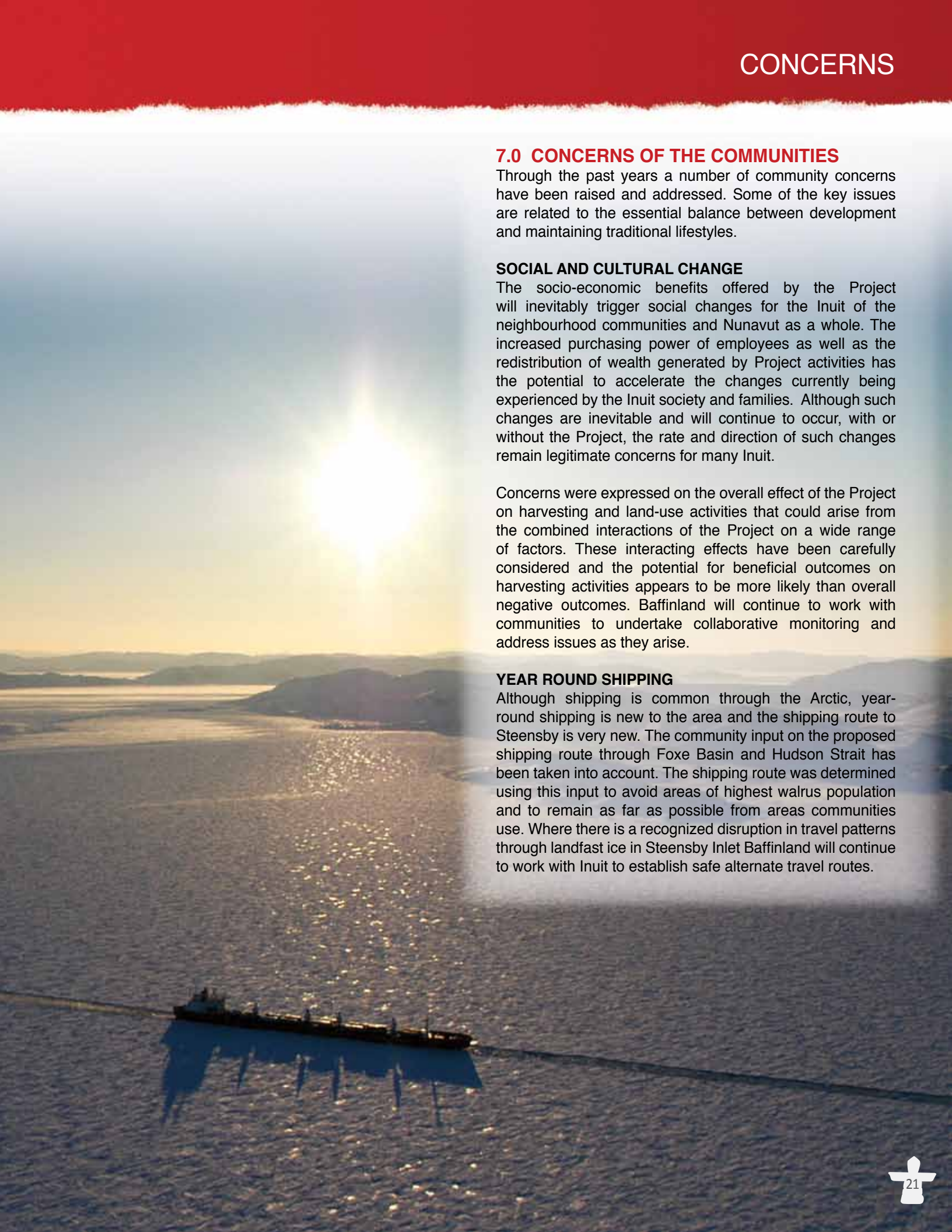
The accountability for safety and environmental protection is shared among all employees and contractors and Baffinland is committed to providing the necessary training and awareness programs for effective implementation of its policies and management plans. These training programs will be documented, procedure manuals will be maintained, and retraining schedules will be established. Baffinland's Human Resource Management Plan outlines these commitments.

One of the key management plans is focused on Emergency Preparedness and Response. In the unlikely event that a major diesel fuel spill would occur along the shipping lane, such a spill would have a significant environmental effect. However, refuelling of fuel depots is a well mastered routine activity in Arctic communities. Furthermore, Baffinland will receive fuel only during the open water season. A recent study published by the National Energy Board looked at the effectiveness of oil spill recovery techniques for the Beaufort Sea and the Davis Strait under a range of weather conditions. The study concludes that for the central Davis Strait during the months of June, July, August and September, at least one method of response intervention would be available given the expected weather and wave patterns. This study confirms that for the Mary River Project, the optimal months for fuel delivery are indeed during the July to September ice-free period in the Foxe Basin.

6.0 TRANSBOUNDARY AND CUMULATIVE EFFECTS

Consideration was given to potential cumulative effects from reasonably foreseeable projects, and the main potential cumulative effects are thought to arise if development of the Mary River Project would lead to further iron ore production up to twice the currently proposed production rate. Other projects in the area will have only minor cumulative effects. A doubled production rate of one or more other deposits would increase effects to a number of valued ecosystem and socio-economic components, but not to the extent that any of the cumulative effects are expected to be significant.

Transboundary effects to marine mammals will occur as a result of shipping, however, because the effects to marine mammals within the study area are not significant, the transboundary effects are similarly not significant. Socio-economic effects will occur in other jurisdictions of Canada as a result of employment of the Project by people living outside of Nunavut.



7.0 CONCERNS OF THE COMMUNITIES

Through the past years a number of community concerns have been raised and addressed. Some of the key issues are related to the essential balance between development and maintaining traditional lifestyles.

SOCIAL AND CULTURAL CHANGE

The socio-economic benefits offered by the Project will inevitably trigger social changes for the Inuit of the neighbourhood communities and Nunavut as a whole. The increased purchasing power of employees as well as the redistribution of wealth generated by Project activities has the potential to accelerate the changes currently being experienced by the Inuit society and families. Although such changes are inevitable and will continue to occur, with or without the Project, the rate and direction of such changes remain legitimate concerns for many Inuit.

Concerns were expressed on the overall effect of the Project on harvesting and land-use activities that could arise from the combined interactions of the Project on a wide range of factors. These interacting effects have been carefully considered and the potential for beneficial outcomes on harvesting activities appears to be more likely than overall negative outcomes. Baffinland will continue to work with communities to undertake collaborative monitoring and address issues as they arise.

YEAR ROUND SHIPPING

Although shipping is common through the Arctic, year-round shipping is new to the area and the shipping route to Steensby is very new. The community input on the proposed shipping route through Foxe Basin and Hudson Strait has been taken into account. The shipping route was determined using this input to avoid areas of highest walrus population and to remain as far as possible from areas communities use. Where there is a recognized disruption in travel patterns through landfast ice in Steensby Inlet Baffinland will continue to work with Inuit to establish safe alternate travel routes.

8.0 CONCLUSIONS OF THE EIS

The EIS for the Mary River Project includes a thorough environmental impact assessment of Project development plans. The EIS is based on extensive studies of the biophysical and socio-economic environments. Many consultations have been undertaken to identify and address the concerns and interests of local communities, regulatory agencies, and other interested stakeholders and to benefit from the knowledge of the Elders in the region. The EIS has addressed the topics identified by NIRB in the guidelines provided for the Project.

The Project will be designed to meet all relevant regulatory requirements and to avoid, limit, and, minimize negative effects where possible and to enhance socio-economic benefits. Baffinland is confident that it has proposed a Project that will provide positive economic returns to investors and benefits to the people, the Government of Nunavut, and Inuit organizations. A comprehensive management and monitoring system has been developed to ensure that the commitments in the EIS will be respected. Baffinland is committed to ongoing consultations with stakeholders and will address public concerns throughout the life of the Project.

NO SIGNIFICANT NEGATIVE IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

The environmental assessment concludes that residual effects of the Project on the valued ecosystem component (VECs) of the biophysical environment will be not significant.

POSITIVE SOCIO-ECONOMIC IMPACTS

Assessments of potential effects on the socio-economic environment have concluded that there will be significant positive effects on local employment and skills development and that significant revenue will accrue to the Government of Nunavut. The IIBA, currently under negotiation between Baffinland and the regional Inuit association, will ensure that benefits from the Project flow to nearby Inuit communities and the Qikiqtani Region of Nunavut. A major Project benefit will be a growing territorial economy that will increase economic stability in Nunavut. Increasing the number of ongoing mining projects in Nunavut will help stabilize the territorial economy.

Over the long term, the road, railway, and port infrastructure built by the Project will provide opportunities to access further mineral deposits in the North Baffin region and could improve access for Inuit harvesting and tourism. The two ports will provide opportunities for additional commercial uses and the bathymetry information collected by the Project will provide important information for shipping lanes through Foxe Basin.

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