

Sikumiut Community Management Committee  
c/o SmartICE Mittimatalik  
General Delivery  
Pond Inlet, NU X0A0S0  
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January 11, 2021

Nunavut Impact Review Board  
PO Box 1360  
Cambridge Bay, NU  
X0B 0C0.

**RE: Written Submission about sea ice / Baffinland Phase 2 from Sikumiut Community Management Committee, Pond Inlet**

Dear NIRB,

On behalf of the Sikumiut Community Management Committee<sup>1</sup>, we would like to offer the NIRB an understanding of Inuit Qaujimajatuqangit about our sea ice in the Pond Inlet area so that you can make the best decision about potential impacts of Baffinland Iron Mine's proposed Phase 2 Expansion. The sea ice is as important to Inuit food security as farms are to people down south. Damaging the ice will damage our ability to feed our community, but it goes deeper than this. Our submission will help you to understand exactly why the sea ice is important to Inuit, and how Baffinland's plan to ship in the shoulder season will be harmful to the ice, to the animals that depend on ice, and ultimately to Inuit.

**Introduction**

While most people understand that Inuit "use" the sea ice, we know that it can be difficult to understand what WE mean when we tell you that our culture, language, identity, health, and well-being depend upon our ability to travel and hunt safely and successfully on the ice. Sea ice provides the platform for Inuit culture. Inuit culture is a reflection of our connection to the ice; therefore, if the ice changes, our culture will change. Since we are already dealing with the effects of climate change, we need to minimize cumulative impacts on our sea ice.

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<sup>1</sup> In 2013, SmartICE (smartice.org) was co-developed with Inuit to integrate their knowledge of ice safety with new community-based monitoring technology and satellite imagery to help make sea-ice travel safer for communities. SmartICE involves Inuit in all aspects of its operation and decision-making. To this end, each participating community convenes a Community Management Committee, comprised of a cross-section of experienced community ice users. In Pond Inlet, the local SmartICE Community Management Committee, self-titled Sikumiut (meaning "people of the ice"), is comprised of 2 Elders, 2 young hunters, an outfitter, the GN Wildlife officer, and representatives of the MHTO, Parks Canada, Canadian Rangers, Search and Rescue, and Ikaarvik. The committee meets at least 4 times a year and all meeting minutes are documented.

We are attaching a visual of points that Ikaarvik youth researchers from Pond Inlet created to explain how the sea ice touches every part of our lives (see attached photograph). In reviewing these interactions, you will have a better understanding of the concerns that we express about how Baffinland's potential impacts upon the ice will affect our lives. Our concerns centre on Baffinland's intentions to extend shipping into the "shoulder seasons", what we would consider late spring (late June, early July) and late fall (mid October to mid-November). We will show how Inuit Qaujimajatuqangit can inform decision-making around the following issues involving icebreaking and extended shipping through ice:

1. Impacts to the ice
2. Impacts to animals that depend upon the ice
3. Impacts on Inuit society, economy, and culture

## **1. Impacts to the ice**

### *Problem: Shipping dates I*

Inuit Qaujimajatuqangit tells us that disturbing the sea ice in late spring will accelerate breakup. Typically, as the ice melts and begins to break up in Eclipse Sound, it still is anchored along the coasts of Bylot Island to the north and Baffin Island to the south. Leads and fractures running north-south divide the ice into large blocks. Both the timing and routing of ships entering Eclipse Sound from the east and transiting perpendicular to the main leads will accelerate break-up by cutting through the anchored ice blocks.

**Recommendation:** It is critical that Baffinland does not begin shipping before local ice experts have confirmed that the community of Pond Inlet is ready for break-up to begin. The MHTO currently has the responsibility to inform Baffinland when shipping can begin, and we want to ensure that this continues.

### *Problem: Shipping dates II*

The proposed extension to Baffinland's shipping schedule proposes a calendar date of November 15 to close the shipping season, rather than relying on ice conditions each year. This may result in changes to the sea ice in late fall, which persist for the remainder of the ice season.

Sikumiut members do not believe that Baffinland should be using a calendar date to end the shipping season. Inuit Qaujimajatuqangit tells us that "ice is the boss" and it should be the one to decide, especially as ice conditions vary from year to year around Pond Inlet (Wilson et al., 2020; Arreak and Wilson, 2020/2021). Shipping during early freeze-up will cause ice deformation that persists through the ice season. This deformation, in the form of ridging and roughness, creates a travel hazard for Inuit, especially during the dark season.

We have real experience with the impact of shipping through newly formed ice. The last trip for Baffinland vessels in 2018 left a ship track of broken and rough ice that could be viewed on satellite images for much of the ice season. Sikumiut wants you to understand that ice deformation in the late fall results in hazardous conditions for ice travel for the remainder of the ice season. This track of roughness through the sea ice cuts us off from other communities,

from our camps, and from our traditional hunting places. We are the ones travelling and hunting, and have seen and felt the impacts of rough ice. When you are travelling by snowmobile, especially during the 3 months of dark season, hitting a section of broken, angular ice is a risk to both your snowmobile and your life.

**Recommendation:** Inuit sea ice experts need to be the ones that determine when the ice is no longer suitable for shipping. The MHTO is currently determining when shipping can start; we believe they should also be the ones to determine when the season should end. Only Inuit ice experts such as Sikumiut members and the MHTO Board understand the point at which persistent damage to the ice surface will occur. Shipping must stop when the ice reaches 3 inches thickness or our ability to harvest and travel safely will be compromised. We request that Sikumiut is consulted to develop a monitoring plan that accurately reflects the extent of the issue and includes IQ in the analysis of the data.

*Problem: Black carbon and dust*

Ikaarvik youth researchers in Pond Inlet have come up with the saying that “Inuit are the original Arctic scientists” and we agree. We have the benefit of hundreds of years of observation and understanding about the Arctic. We know that darker materials on the ice will speed up its melt. We are therefore concerned about increasing emissions from shipping along the ship route and dust from the port site affecting the ice quality and condition.

**Recommendation:** We do not believe that Baffinland is adequately understanding or monitoring the situation. We request that Sikumiut is consulted to develop a monitoring plan that accurately reflects the extent of the issue and includes IQ in the analysis of the data.

## **2. Impacts to animals that depend on the ice**

### *Seal*

Our experience as hunters lets us know that seals are very sensitive to sound, movement, and reverberations through the ice. When we wait at seal holes we know that even the slightest noise or motion will prevent them from surfacing. We fear that the intense noise, movement, and reverberations resulting from shipping through ice will have irreversible impacts on seal. Inuit Qaujimajatuqangit tells us that it is critical for seals to have peace and quiet when they are committing to staying in an area while the ice is forming. Throughout the ages, *freeze-up has always been a silent time in the Arctic*, and seals would naturally choose the best areas to create their breathing holes. Our Elder Gamalie Kilukishak recalled how seals fled the area around Pond Inlet and stopped making their breathing holes and dens after the introduction of snowmobiles to Pond Inlet. He stated in our meeting that if Baffinland were allowed to ship through ice during freeze-up, seals would leave the area. This will have an incredible impact on Pond Inlet harvesters as we describe below.

### *Polar Bear*

As Inuit, we know that if seals are frightened away from the area, the polar bears that feed on them will be affected as well.

### *Narwhal / Killer Whales*

We fear that a faster spring breakup could result in killer whales making their way into Eclipse Sound and Milne Inlet earlier than normal. We have seen an increasing number of killer whales preying upon narwhal, and do not want to amplify this occurrence by helping killer whales to enter local waters earlier than normal, as a result of icebreaking.

**Recommendation:** Sikumiut members request that the NIRB accept our Inuit Qaujimajatuqangit as a well developed, tested, long-term source of knowledge and understanding about our environment. Inuit, as the original Arctic scientists, have a proven understanding of the delicate balance of life in these waters, and have shared with you the potential impacts of shipping through ice. Please follow the recommendation we have listed as well as those set out by the MHTO.

### **3. Impacts on Inuit society, economy, and culture**

Inuit Qaujimajatuqangit tells us that ice formation in late fall sets travel and hunting conditions for the rest of the ice season. While this may be logical and understandable to the NIRB, it may not be as clear to understand what this means in practical purposes for Inuit. For comparison, what if you suddenly encountered and had to drive over fractured concrete at normal road speed? In the winter darkness, it is almost impossible to see the rough ice until you are driving over it. Rough ice affects our travel as:

- It makes travel slower and potentially riskier – this means time and financial cost to harvesters and travellers, as well as increasing the potential for machine breakdown and personal injury
- It creates a barrier that is difficult or sometimes impossible to cross – this could mean that we are cut off from our normal travel and harvesting areas
- We know from our experience with Baffinland's 2018 late season ship track that the harder, angular ice has a far greater potential to damage the underside of snowmobiles – this means additional costs to Inuit for repairs, the potential loss of transportation, and time away from harvesting if machines need to be repaired.

**Shipping through sea ice will create an obstacle for Inuit that will cost us extra time and money, create a hazard for our livelihoods and our equipment, and cause mental stress. Inuit can't afford any of these unnecessary risks or costs.**

### *Harvesting*

Shipping through ice will have negative impacts on our ability to harvest the marine mammals that we depend on. Sikumiut would like to reinforce that this is not just an issue of food security; Inuit depend on hunting to support our identity, cultural sharing practices, Inuktitut language, as well as our dependence on sealskins for the most appropriate Arctic clothing. In short, impacting our ability to harvest will have long-term consequences for our entire culture and way of life.

**Recommendation:** Sikumiut is in complete support of the MHTO Final Written Submission, which states, "The costs to us of losing animals and the ability to hunt far outweigh the benefits of mining in our community."

### *Travel*

The sea ice is our highway. Imagine if you had to worry that the roads which you depend on to go to the grocery store, visit your family, or reach your favorite spot for relaxation and vacation were to be torn up and made impassable. **Deformed sea ice will add extra time, money and risk to travel to visit our families in other communities, have teams travel to tournaments, and hamper our ability to resupply our cabins.**

### *Mental Health*

Gamalie Kilukishak, one of the oldest, most knowledgeable Elders in Pond Inlet stated, "If the ice is impacted and Inuit can't travel then the mental health of the community will be affected. People will feel bad - stuck, unsafe with the ice and environment and this will affect both the household and the entire community. This will have an impact on Inuit mental health and well-being; we will be weighed down, depressed and negative."

**Recommendation:** The NIRB must consider the cumulative impacts of this project on our well-being. Inuit are already struggling with relocation, the impact of residential schools and climate change. We simply cannot have additional social, cultural and economic impacts from the Baffinland project heaped upon our community.

### **Summary**

Inuit, as the people most affected by the Baffinland project, should rightfully be the ones to determine both impacts and the significance of these impacts on our communities. Sikumiut knows that sea ice touches all aspects of Inuit lives; it supports our communities and the animals upon which we depend. Sikumiut also knows that the potential shoulder-season shipping impacts of the Baffinland Phase 2 expansion are too great to be absorbed by our land and our people.

Inuit Qaujimajatuqangit lets us know that ICE IS THE BOSS and we respect it as such. Sea ice is necessary to Inuit culture – we know that our very lives, livelihoods, identity and language depend on intact sea ice. While Baffinland may believe that they can mitigate or compensate for impacts to the ice and to our lives, we know from experience that culture lost cannot easily be regained. We humbly ask the NIRB to accept this submission of Inuit Qaujimajatuqangit about the impacts of Baffinland's Phase 2 project and learn from the Arctic's original scientists.

Sincerely,

A handwritten signature in black ink, reading "Angnatsiak". The signature is stylized with a large, looped initial 'A' and a long, sweeping underline.

David Angnatsiak

On behalf of the Sikumiut Community Management Committee

**Documents cited:**

Arreak, A. and Wilson, K. 2020/2021. Mittimatalik sea-ice climate atlas trends and patterns presented to Sikumiut Community Management Committee. Multiple meeting minutes, SmartICE regional office: Mittimatalik, Nunavut.

Wilson, K., Arreak, A., Bell, T., Moorman, L., Ljubicic, G. and Zagon, T. Co-producing the Mittimatalik community scale Inuit sea-ice climate atlas (1997-2019). ArcticNet Annual Scientific Meeting 2020, Virtual Conference, 7-10 December.



## Hunting on Ice Provides

- better nutrition
- physical activity
- mental wellness
- a respected role for hunters in the community
- a sense of identity
- connection to our ancestors
- allows our culture to thrive
- cultural pride
- connections between generations

• IQ. respect for animals  
• value to protect them

Habitat for  
animals we  
depend on

- ivory, bone antler for art
- skins for clothing
- connections between families
- bonding between generations
- providing traditional medicine
- country food = warmth, much more sustaining than store bought food
- It's our "soul food" for Inuit

- IQ of hunting shared between generations
- traditional food sharing
- better nutrition than store bought
- better value food than store bought

• Food security

## Hunting

- Inuktitut language for hunting, butchering, skin prep
- knowledge for traditional clothing production
- knowledge to make + use traditional tools

## Economy

- sales from hunting (meat)
- sales from sewing skins
- Inuit tourism companies
- commercial fisheries
- art, carvings sales

## Recreation

- healthy play area for children
- freedom
- relaxation
- day trips to get out of town
- creativity
- fight type II diabetes

## Health

### Physical Health

- one of the few opportunities for exercise
- develop physical skills
- hunting for healthy food
- clean drinking water source (Iceberg water)
- balance

### Mental Health

- Peace, calm, quiet, relax
- escape from crowded housing
- freedom
- pride in Inuk identity
- family bonding
- joy of having traditional experiences
- fun of having new experiences
- safe place to flee from household or community problems

# SEA ICE

## Highway / Travel

- hunting
- travel between communities
- family connections
- bonding between generations
- resupplying cabins/camps

## Inuit Qaujimaqatugangit

generations of knowledge on:

- ice conditions
- safe travel
- evaluating risk
- intergenerational learning / relationships
- proper Inuktitut language for ice / travel
- navigation skills
- traditional parenting / child-rearing (much happens on the ice)
- practical lessons in patience and other skills to become a capable adult Inuk
- logic
- observation

## Identity

- Inuit culture is a reflection of our connection to the ice
- connection to our ancestors
- Inuktitut language

## Safety

- Knowledge for safety - life + death implications
- cost - time, equipment and lives if ice is unsafe or if Inuit lose their knowledge
- experiential learning for children on ice safety