

November 26, 2025

Barrie Ford
Director of Environment
Makivvik Corporation
P.O. Box 179
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**Re: NOTIFICATION ON FUEL SPILL MODELLING PROPOSED LOCATIONS – STEENSBY
COMPONENT OF THE MARY RIVER PROJECT**

Dear Mr. Ford,

Oil Spill Response Limited (OSRL), on behalf of Baffinland Iron Mines Corporation (Baffinland), intends to conduct a fuel spill dispersion modelling assessment to quantify potential impacts from a hypothetical accidental fuel release during shipping to Steensby Inlet. The model results will supplement findings from the baseline spill modelling completed for Steensby Inlet for the 2012 Final Environmental Impact Statement (FEIS). Findings will be integrated into emergency response planning for the Steensby Component of the Project.

The model domain is being developed for the Southern Shipping Route required under Term and Conditions 97 and 176 of Baffinland's Nunavut Impact Review Board (NIRB) Project Certificate. As detailed in Term and Condition 97, the fuel spill dispersion modelling will, at a minimum, consider:

- 1) Modelling of oil spills for the Southern Shipping Route in consultation with the Marine Environment Working Group. Considerations for the selection of spill locations includes:
 - a) Pinch points (a place where a marine waterway, channel or inlet becomes narrow, relative to the waterways adjoining it);
 - b) Approaches into Steensby Inlet;
 - c) Shallow water and shorelines; and,
 - d) Areas that have been identified as having high flows and/or high concentrations of marine mammals, marine fish or seabirds.
- 2) Open water and, where applicable, ice-covered conditions;
- 3) Spill volumes up to and including loss of a full tanker cargo; and,
- 4) Differences in the quantity and properties of each type of bulk fuel transported by vessels when they are at, or in transit to, the port at Steensby Inlet.

As per Term and Condition 176, the modelling shall include areas of Hudson Strait, such as Mill Island, as well as for mid-Hudson Strait during winter conditions.

Based on the considerations described above, four locations have been chosen for the spill modelling shown within the figure in Attachment 1. The locations include Steensby Port, Foxe Basin, Mill Island and mid-Hudson Strait and have been selected to represent the 'worst case' spill accident for the Project. The following information provides details and justification for each proposed location:

1. Steensby Port (SR1):

- Located at Steensby Port where all ship-to-shore fuel transfer activities will take place.
- As per requirements outlined in Project Certificate #97, spill modelling should be undertaken along the Southern Shipping Route including at 'pinch points' and in 'shallow water and shoreline' areas.
- Located in proximity to the following sensitive areas:
 - Areas of Importance for marine hunting and fishing, marine travel, trails and habitation, Inuit cultural continuity for the communities of Igloolik and Sanirajak (QIA 2019)
 - Walrus aggregation areas: The shallow waters of Northern Foxe Basin provide important foraging and haul-out habitat and supports the largest concentration of walrus in Canada, where they are found year-round. Recurring polynya system provides important walrus habitat during winter (Stewart and Howland 2009, NCRI 2008). Walrus hunting areas near Rowley Island and Manning Island (QIA 2019; Priest and Usher 2004)
 - Ecologically and Biologically Significant Area (EBSA) in Northern Foxe Basin (due south of this location) (DFO 2011)
 - Winter land-fast ice supports ringed seal pupping and breeding (NCRI 2008)
 - Areas of high fish abundance (NCRI 2008)

2. Foxe Basin (SR2):

- Located on shipping route directly west of Prince Charles Island.
- As per requirements outlined in Project Certificate #97, spill modelling should be undertaken in 'areas that have high concentrations of marine mammals, fish or seabirds.'
- Located in proximity to the following sensitive areas:
 - Walrus aggregation areas: The shallow waters of Northern Foxe Basin provide important foraging and haul-out habitat and supports the largest concentration of walrus in Canada, where they are found year-round. Recurring polynya system providing important walrus habitat (NCRI 2008; DFO 2011; COSEWIC 2017; NPC 2023)
 - Important Bird Areas (IBA) on Prince Charles Island, Air Force Island and Foley Island in Foxe Basin (IBA Canada 2023)
 - Bowhead whale migratory corridor due west of this location (NCRI 2008; QIA 2019; Stewart et al. 2015; NPC 2023)
 - Caribou winter range on Prince Charles Island, Air Force Island and Foley Island in Foxe Basin (IBA Canada 2023)

3. Mill Island (SR3):

- Located on shipping route directly south of Mill Island.
- As per requirements outlined in Project Certificate #176, spill modelling should be undertaken along the Southern Shipping Route including near Mill Island, where walrus concentrate.
- As per requirements outlined in Project Certificate #97, spill modelling should be undertaken in the 'approaches into Steensby Inlet'.

- As per requirements outlined in Project Certificate #97, spill modelling should be undertaken in 'areas that have been identified as having high flows and/or high concentrations of marine mammals, fish or seabirds.
- Located in proximity to the following sensitive areas:
 - Established walrus haul-out sites on Mill Island, Nottingham Island and Salisbury Island (DFO 2011; COSEWIC 2017)
 - Located in Western Hudson Strait EBSA (DFO 2011)

4. Mid-Hudson Strait (SR4):

- Located on the shipping route directly south of Kimmirut.
- As per requirements outlined in Project Certificate #176, spill modelling should be undertaken along the Southern Shipping Route in mid-Hudson Strait during winter.
- As per requirements outlined in Project Certificate #97, spill modelling should be undertaken in 'areas that have high concentrations of marine mammals, fish or seabirds.
- Located in proximity to the following sensitive areas:
 - Migratory pathway for beluga, narwhal, bowhead (Stewart et al. 1995; 2015)
 - Polynya area important during winter for seabirds (including migratory birds) and marine mammals (walrus, beluga, bowhead) (Stewart et al. 2015; Higdon et al. 2017; NPC 2023)
 - Established walrus haul-out site west of Kimmirut (NCRI 2008; Stewart et al. 2015; COSEWIC 2017; NPC 2023)
 - Located in Western Hudson Strait EBSA (DFO 2011)

Baffinland would be pleased to provide any additional information on this study upon request.

Should you have any comments or questions on the locations of the spill modelling, please submit these to the undersigned by December 19th, 2025.

Regards,



Joe Tigullaraq
Head of Northern Affairs

Cc: Elisabeth Luther, Senior Manager Regulatory Affairs (Baffinland)

Attachment 1 – Proposed Spill Model Locations

References

COSEWIC. 2017. COSEWIC assessment and status report on the Atlantic Walrus *Odobenus rosmarus*, High Arctic population, Central-Low Arctic population and Nova Scotia-Newfoundland-Gulf of St. Lawrence population in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxi + 89 pp

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Stewart, D.B., A. Akeeagok, R. Amarualik, S. Panipakutsuk and A. Taqtu. 1995. Local knowledge of beluga and narwhal from four communities in Arctic Canada. Canadian Technical Report on Fisheries and Aquatic Sciences. 2065. Viii + 48 p. + appendices.

Stewart, D.B., S.H. Nudds, K.L. Howland, C.G. Hannah and J.W. Higdon. 2015. An ecological and oceanographical assessment of alternate ballast water exchange zones in the Canadian eastern Arctic. DFO Can. Sci. Advis. Sec. Res. Doc. 2015/037. vi + 75 p.

Attachment 1

Proposed Spill Model Locations

