

20 April 2011

Mr. Mark Dahl  
Ocean Disposal Specialist  
Environmental Assessment and Marine Programs Division  
Environment Canada  
150 -123 Main St.  
Winnipeg, Manitoba  
R3C 4W2

Dear Mr. Dahl:

**RE: Pangnirtung Harbour Development Project, Disposal at Sea Permit Application**  
**Your file no. 4704 004 041**  
**NIRB file no. 09UN052**

We would like to bring to your attention a change in scope of the Disposal at Sea activities as described in the original permit application and supporting Environmental Assessment document.

The assumption made in the application documents was that dredging and thus ocean disposal activities would take place over a 16 hour working day, beginning in late June or early July. Depending upon when the ice was out of the fjord and the harbour. This operational schedule has had to be changed as a result of Transport Canada restrictions on the types of ocean-going vessels which are allowed to ply these northern ice-infested waters. In the case of the selected design/build contractor's vessels, these restrictions limit the earliest access to the Pangnirtung Fjord as 10 August 2011. The result is that the dredging and associated disposal at sea activities are now scheduled to take place on a 24/7 basis.

We have checked the sunrise/sundown times for this area during the fall period; these indicate that there will be 19 hours as at 01 August, 15 hours at 01 September and 12.5 hours at 01 October. With pre-dawn light and the dusk period, the hours with normal visibility will be extended by one to one and a half hours. The primary concern thus relates to the extended work hours, a portion of which results in working in the dark and which limits the ability of Observers to work effectively (NIRB recommendation no. 33) and to effectively maintain a 3 km buffer as required by the Environmental Assessment document.

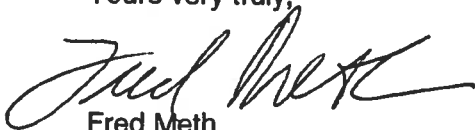
The risk to marine mammals as a result of this change is considered to be small. The mammals of concern are beluga whales and narwhales, the former seen sporadically in the fjord during May/June, while the latter arrive from time to time in August/September. These migrations are infrequent and the specific timing of migrations is inconsistent. Mr. Don Cunningham, General Manager of the Pangnirtung Fisheries plant, confirms that these excursions into the fjord last for less than a day, and are very rare (this was corroborated by DFO biologists with whom he was meeting at the time of our discussion). In fact, these in-migrations are so rare that when they do occur the entire population of the hamlet interrupts activities to watch the show. It appears that the whales follow schools of fish in and out of the fjord.

We are cognizant of the need to protect these mammals by limiting any potential interaction with the disposal activities. In addition to the use of Observers during daylight hours, we propose to extend the Observer activities to cover the 24/7 operating schedule and to use strong lighting and possibly ship-borne radar to spot whales during periods of reduced visibility/darkness. Thus we will still be in a position to trigger the avoidance measures indicated elsewhere as mitigation measures in those documents referenced in the draft permit.

We trust that this additional mitigation will be acceptable.

Thank you for your consideration.

Yours very truly,

A handwritten signature in black ink, appearing to read "Fred Meth", written in a cursive style.

Fred Meth  
Senior Environmental Consultant

C.c.: J. Davidson, Public Works and Government Services Canada