



October 07, 2020

MR. ROCKY SIMPSON
MLA, HAY RIVER SOUTH

Oral Question 282-19(2) Marine Transportation Services Double-hulled Barges

This letter is in follow-up to the Oral Question raised on June 2, 2020 regarding the double-hulled barges being constructed for the Marine Transportation Services (MTS). My predecessor as Minister of Infrastructure committed to provide information regarding the operability of the 3500 series double-hulled barges on the Mackenzie River, and if necessary, an alternative plan for use of the barges. There was also a commitment to confirm whether an engineering process was used to decide on the 3500 series barges.

The primary purpose of the 3500 series double-hulled barges is to deliver fuel and deck cargo in northern ocean waters, yet they are capable of operating on the Mackenzie River. Built to the standards of the International Convention for the Prevention of Pollution from Ships (MARPOL), they can operate anywhere in the world. The design of the 3500 series barges is such that they will operate efficiently on the River and will carry several fuel products (diesel, regular fuel, and jet fuel) simultaneously. This differs from the 1500 and 1000 series barges that carry only a single fuel product, and the Dehcho barges that carry two products. With the 3500 series barges, we will reduce the number of voyages to each of our northernmost communities each season, which will reduce operating costs and risks.

The chart on the following page compares the capacities of the barges to haul fuel and deck cargo. In the chart, 'outside' refers to operating in saltwater and 'inside' refers to the Mackenzie River.

The capacities outlined are with a five-foot draft – the maximum draft that can be used on the Mackenzie River. Barges in use on the River are loaded to ensure they do not exceed the five-foot draft mark, and loads are adjusted based on water depth in the River. Outside of the Mackenzie River, draft is not an issue.

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Barge Series	Outside Fuel Capacity (millions of litres)	Inside Fuel Capacity (millions of litres)	Multiple Fuels	# of barges
3500 (double hull)	3	1.48	yes - 3	4
1500 (double hull)	1.1	1.1	no	1
1500 (single hull)	0	1.5	no	14
DehCho (double hull)	2	1.5	yes - 2	2
1000 (single hull)	0	1	no	10

The 3500 series barges design was produced by Robert Allen Limited (RAL) for the Northern Transportation Company Limited. RAL is an internationally recognized Canadian firm of naval architects and engineers, and are very familiar with our marine shipping environment. The design was modified from the original in consultation with vessel captains and senior pilots based on their experiences operating on the Mackenzie River and in our northern ocean waters.

A risk assessment was conducted by Lloyds Registry in collaboration with MTS operational staff and Transport Canada, to ensure that the new barges would comply with MARPOL and with all Transport Canada regulations.

Following the successful two-week journey from China to Tuktoyaktuk in August 2020, I am pleased that the four new double-hulled barges are now part of the MTS fleet.



Diane Archie
Minister, Infrastructure

c. Clerk of the Legislative Assembly

Legislative Coordinator
Executive and Indigenous Affairs