

U.S. Department of
Homeland Security

United States
Coast Guard



Director
National Vessel Documentation Center

792 T J Jackson Drive
Falling Waters, WV 25419
Staff Symbol: NVDC
Phone: (304) 271-2506
Fax: (304) 271-2405
Email: Timothy.V.Skuby@uscg.mil

16713/5/2
January 29, 2015

Kent Roberts, Esq.
Schwabe, Williamson & Wyatt
Pacwest Center
1211 SW 5th Ave., Suite 1900
Portland, OR 97204

Dear Mr. Roberts:

I refer to your letter of January 14, 2015, which was written in connection with your representation of Vigor Fab, LLC ("Vigor"), a commercial shipyard operator headquartered in Portland, Oregon. As you have indicated, Vigor is in negotiations for the construction of an unmanned ocean ammonia gas tank barge to carry liquefied anhydrous ammonia for use in the fertilizer industry. It is your customer's intention that the barge, when completed, will be documented in the United States and qualified to engage in the coastwise trade of the United States.

In that regard, you have sought confirmation that the barge, as proposed to be constructed, will be deemed to have been built in the United States for purposes of the requirements of 46 U.S.C. § 12112(a)(2)(A) and under the standards of 46 C.F.R. § 67.97.

As you have described your intentions, the barge hull and superstructure will be entirely fabricated and assembled at Vigor's facilities in the United States and that the machinery will be from mostly U.S. manufacturers. Your specific question, however, concerned the liquefied ammonia cargo tanks. In order to expedite the construction schedule, you have indicated that Vigor wishes to consider having the tanks fabricated by a foreign manufacturer and then imported to be assembled into the barge in one of Vigor's U.S. shipyards. You have sought our confirmation that doing so would not jeopardize the determination that the barge, when completed as described, had been built in the United States for purposes of its coastwise qualifications.

You have described those tanks and their installation in the barge in pertinent part as follows:

"Because of the cryogenic nature of liquefied ammonia gas, the prismatic cargo tanks will not be permanently attached to the hull. The cargo tanks will be set on steel foundations which in turn rest on compressed plywood wafers between the foundations and the hull. Likewise, the sides and ends of each cargo tank are restrained by a system of chocks, with

anti-roll chocks on the sides and anti-flotation chocks on the top of each cargo tank. The chocks restrict transverse and vertical movement, and like the foundations, have compressed plywood wafers insulating the chocks from steel on steel contact with the hull.”

And further:

“Each cargo tank will be fitted with two dome structures that penetrate the main deck. These dome structures have a flexible neoprene seal between the dome and main deck in order to prevent the ingress of moisture into the cargo hull inter-barrier space surrounding the liquid cargo tanks, while avoiding a hard connection between the tank domes and the deck. There will be no piping or other hard connections of any type on the tanks to the hull or deck.”

In order for a vessel to be determined to have been built in the United States its construction must satisfy both of the requirements of 46 C.F.R. § 67.97; namely:

“To be considered built in the United States a vessel must meet both of the following criteria:

- (a) All major components of its hull and superstructure are fabricated in the United States;
and
- (b) The vessel is assembled entirely in the United States.”

For the purposes of these criteria the term “hull” is defined at 46 C.F.R. § 67.3, in pertinent part, as follows:

“*Hull* means the shell, or outer casing, and internal structure below the main deck which provide both the flotation envelope and structural integrity of the vessel in its normal operations...”

Your letter, with its enclosures, was provided to the Coast Guard’s Naval Architecture Division (“NAD”) for review. The question put to the NAD for technical review by the facts presented was straightforward: Would the cargo tanks as described form part of the “hull”, as that term is used in 46 C.F.R. § 67.97 and defined by 46 C.F.R. § 67.3? If so, then likely (your letter does not provide weight calculations) weight limitations on the foreign fabrication of the hull or major components of the hull would or could be exceeded, notwithstanding that they would be installed into the barge in the United States. If not, then their foreign fabrication would not adversely implicate the first prong of the test of 46 C.F.R. § 67.97 and, provided that they are assembled into the barge in a shipyard in the United States (as you have indicated would be the case), the second prong of that test would also not be adversely implicated.

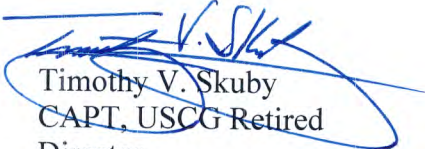
After review, the NAD concluded that the ammonia tanks, as described, are not part of the hull. Rather, it was found that the pads and chocks are designed to isolate the tanks from any bending stresses of the hull in a seaway and to isolate the hull from any stresses due to thermal expansion and contraction of the tanks.

Consequently, based upon the NAD findings and conclusions, as well as our own review, I

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conclude and confirm that the cargo tanks as described may be fabricated outside of the United States and, provided that they are assembled into the barge in the United States, the barge would nevertheless be determined to have been built in the United States and qualified to engage in the coastwise trades of the United States.

Sincerely,


Timothy V. Skuby
CAPT, USCG Retired
Director