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Washington, DC 20229

U.S. Customs and Border Protection

HQ H258063

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CATEGORY: Carriers

Jonathan K. Waldron, Esquire
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Watergate
600 New Hampshire Avenue, N.W.
Washington, DC 20037

RE: 19 U.S.C. § 1466; Vessel Repair; Installation of Exhaust Gas Cleaning Systems; M/V HORIZON ANCHORAGE, M/V HORIZON TACOMA and M/V HORIZON KODIAK; Horizon Lines, Inc.

Dear Mr. Waldron:

This is in response to your letter of October 9, 2014, requesting an advisory ruling on behalf of your client, Horizon Lines, Inc., (hereinafter "Horizon") to determine whether the proposed work described below will constitute modifications for the purposes of 19 U.S.C. § 1466 (the "Vessel Repair Statute"). Our advisory ruling is set forth below.

FACTS

You seek our advice with respect to proposed modifications to three United States-flag vessels, the M/V HORIZON ANCHORAGE, M/V HORIZON TACOMA and M/V HORIZON KODIAK (hereinafter, the "Vessels"). Horizon proposes to carry out modifications on the vessels which will alter the engine exhaust systems and install exhaust gas cleaning systems ("EGCS" or "scrubbers") to lessen the vessels' environmental impact. In order to comply with the newly-implemented air pollution standards of Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL), your client desires to install an EGCS in each of the vessels. The installation of EGCS systems will allow the vessels to continue burning the fuel their engines were designed to burn while complying with MARPOL requirements.

The proposed project involves modifying the vessels' existing main and auxiliary engine exhaust systems and installing classification society-approved EGCSs. The new EGCSs will be arranged to treat the exhaust gas from the main engines and from two of the auxiliary diesel generators. The EGCSs may operate in either the "open loop" or "closed loop" modes, as appropriate to the geographical emissions control area in which the vessels may operate.

In the “open loop” mode, exhaust gas will be cleaned by seawater pumped to the scrubber and then discharged overboard. In the “closed loop” mode, the exhaust gas will be cleaned by a fresh water and sodium hydroxide (“NaOH”) solution recirculated through the scrubber. Equipment and piping will be installed to clean a portion of the water and sodium hydroxide cleaning solution and to store removed contaminants onboard for discharge ashore. Tankage will be provided to store the clean effluent from the cleaning system on board when operating in zero discharge zones. The new system will also include a tank and piping system for storage and transfer of the NaOH solution used to maintain proper NaOH levels in the recirculated closed loop cleaning fluid.

The anticipated scope of the modification includes the following:

1. Existing main engine and auxiliary diesel generator exhaust piping will be removed at a point just above the Main Deck level. Existing exhaust silencers in the auxiliary engine exhaust lines will be removed and reinstalled at new locations as required by the new equipment arrangement. New exhaust gas piping will be installed to route the engine exhausts from the retained exhaust piping to the EGCS, as well as to discharge the cleaned exhaust gas from the scrubber to the atmosphere.

2. Existing main engine exhaust gas economizer, external steam drum, circulating pumps, and interconnecting piping will be removed, and a new exhaust gas economizer with integral steam drum and new boiler feed pumps will be installed. New feed water, steam piping, and accessories will be installed to connect the new waste heat boiler to the existing steam system.

3. The majority of the existing auxiliary piping, electric cables, electrical outfit, light fixtures, ladders, platforms and associated support structure will be removed from the engine room uptakes above the Main Deck level. These items will either be reinstalled at new locations or replaced with new material or equipment at new locations that suit the final EGCS equipment arrangement.

4. The engine casing will be enlarged. The forward bulkhead of the engine casing above the 06 Level will be moved forward approximately 4 feet to the aft side of the accommodation house. The inboard bulkheads of the engine room ventilation air inlet plenum and the ventilation supply fan room port and starboard will be moved outboard approximately 2 feet. They must be relocated in order to allow the EGCS to be moved into place in the engine casing, because the new EGCS will not fit through the opening formed by the existing bulkheads.

5. The existing stack will be removed in order to allow the existing exhaust piping, waste heat economizer, steam drum and related components to be removed and the new EGCS, waste heat boiler, exhaust piping and related components to be lifted onboard and installed in the engine casing. After all installations have been completed the existing stack will be reinstalled.

6. Portions of the engine room supply air ventilation ducting will be removed and replaced with new ducting in a different configuration, because its current configuration will interfere with the new scrubber installation and will require reconfiguration.

7. A new sea water system, including pumps, motors, heat exchanger, piping, valves, cables, controls and instrumentation will be permanently installed to supply sea water to the scrubber and overboard in the "open loop" mode and to the fresh water/NaOH heat exchanger and overboard when operating in the "closed loop" mode.

8. A new sodium hydroxide storage and supply system will be installed to hold the NaOH solution and transfer it to the fresh water circulation system. This system will include an ISO 20-foot container designed to carry NaOH solution, a transfer pump, piping and associated fittings necessary to ensure the sodium hydroxide can be safely handled on board the vessels.

9. A new NaOH solution circulation system will be installed to circulate the solution through the scrubber for cleaning the engine exhaust gas. This system will include pumps, piping, circulation tanks, and associated controls and instrumentation. Cleaning equipment will be installed to allow a portion of the NaOH solution to be processed to remove captured pollutants. A new effluent holding tank and sludge tank will also be installed. The sludge tank will allow removed sludge to be held onboard for disposal ashore. The effluent tank will allow the cleaned water/NaOH solution to be stored aboard during periods of operation in zero discharge zones.

10. A new exhaust gas and sea water discharge monitoring system will be installed to monitor and record the quality of the exhaust gas and sea water being discharged from the scrubber.

Your client asserts that all of the systems and components contemplated to be removed or reconfigured are currently fully operational, in good repair, and would be removed solely to allow the installation of the EGCS. The EGCS and its auxiliaries would be new and permanently installed on the vessels. Further, the systems and components to be installed on the vessels are new systems designed to support or be compatible with the EGCS.

ISSUE

Whether the work described above constitutes modifications to the subject vessels under 19 U.S.C. § 1466?

LAW AND ANALYSIS

Title 19, United States Code, section 1466(a) provides for the payment of duty at a rate of fifty percent *ad valorem* on the cost of foreign repairs to and equipment for vessels documented under the laws of the United States to engage in foreign or coastwise trade, or vessels intended to be employed in such trade. In its administration of the vessel repair statute, CBP has held that modifications, alterations, or additions to the hull of a vessel are not subject to vessel repair duties. See HQ 111425 (June 26, 1991); HQ 111747 (Feb. 19, 1992); and HQ 113127 (June 14, 1994).

The identification of work constituting modifications vis-à-vis work constituting repairs has evolved from judicial and administrative precedent. In considering whether an operation has resulted in a modification, several factors have been considered. These factors are not by themselves necessarily determinative, nor are they the only factors which may be relevant in a given case. However, in a given case, these factors may be illustrative, illuminating, or relevant with respect to the issue as to whether certain work may be a modification of a vessel under 19 U.S.C. § 1466. The factors are:

> 1. Whether there is a permanent incorporation into the hull or superstructure of a vessel, either in a structural sense or as demonstrated by means of attachment so as to be indicative of a permanent incorporation. See United States v. Admiral Oriental Line[1], *citing* Otte v. United States[2], and 27 Op. Atty Gen. 228. However, we note that a permanent incorporation or attachment may not necessarily involve a modification; it may involve a dutiable repair or dutiable equipment.
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> 2. Whether in all likelihood an item would remain aboard a vessel during an extended lay-up.[3]
>
> 3. Whether an item constitutes a new design feature and does not merely replace a part, fitting, or structure that is performing a similar function.[4]
>
> 4. Whether an item provides an improvement or enhancement in operation or efficiency of the vessel.[5]

Additionally, we note that in order to qualify as a modification, rather than a repair, the documentation of record must reflect that the element which was replaced, if any, was in good and full working order at the time the work was performed. CBP has consistently ruled that newly designed systems and components permanently installed on a vessel, which would remain on board the vessel during extended layup, do not replace an item in need of repair, and will improve the operation or efficiency of the vessel are modifications. See e.g., HQ 114093 (Sept. 12, 1997); HQ H143219 (Feb. 22, 2011); and, HQ 116627 (Mar.16, 2006).

Considering the proposed work to be carried out on the vessels:

1. With regard to the proposed removal of existing main engine and auxiliary diesel generator exhaust piping, contemplated removal and reinstallation of existing exhaust silencers, and installation of new exhaust gas piping, your client asserts that this equipment is currently in use, structurally sound, in good repair and not in need of replacement. Considering the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the vessels. The

[1] United States v. Admiral Oriental Line, 18 C.C.P.A. 137, 139 (C.C.P.A. 1930).
[2] Otte v. United States, 7 Ct. Cust. 166, 169 (Ct. Cust. App. 1916).
[3] 18 C.C.P.A. at 140, *and* 27 Op. Atty Gen. 228 at 19.
[4] Horizon Lines, LLC v. United States, 626 F.3d 1354, 1360 (Fed. Cir. 2010), *citing* Admiral Oriental, 18 C.C.P.A. at 141.
[5] Id.

proposed modifications involve the removal of portions of the vessels' exhaust piping and the installation of new exhaust piping. The new materials to be installed will be permanently incorporated and integrated into the structure of the vessels and will not be capable of being removed from the vessels without significant labor and possible structural damage. Similarly, the reused existing exhaust silencers would be permanently re-incorporated and re-integrated into the structure of the vessels at new locations and would not be capable of being removed from the vessels without significant labor and possible structural damage.

Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the hulls and fittings is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new materials to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new and relocated materials to be installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function; the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new exhaust piping performing the same function as that removed, the new exhaust piping and relocation of the silencers would facilitate the installation of an entirely new design feature, the EGCS, and would constitute a new exhaust system design. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the Vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

2. With regard to the proposed removal of the existing main engine exhaust gas economizer and external steam drum, circulating pumps, and interconnecting piping, your client asserts that this equipment is currently in use, structurally sound, in good repair and not in need of replacement. Also, a new exhaust gas economizer with integral steam drum, new boiler feed pumps, new feed water and steam piping, and accessories will be installed. Considering the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the vessels. The proposed modifications involve the removal of the vessels' exhaust gas economizers and associated pumps and piping and the installation of new economizers and associated pumps and piping. The new materials to be installed will be permanently incorporated and integrated into the structure of the vessels and will not be

capable of being removed from the vessels without significant labor and possible structural damage.

Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the hulls and fittings is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new materials to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new and relocated materials to be installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new exhaust gas economizers and associated pumps and piping performing the same function as those removed, the exhaust gas economizers and associated pumps and piping would facilitate the installation of an entirely new design feature, the EGCS, and would be of a new, more compact design with reduced back pressure compatible with the EGCS. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the Vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

3. Your client proposes to remove the existing auxiliary piping, electric cables, electrical outfit, light fixtures, ladders, platforms and associated support structure from the engine room uptakes above the Main Deck level. All of these items will either be permanently reinstalled at new locations or replaced with new material or equipment at new locations that suit the final EGCS equipment arrangement. Your client asserts that all of these items are currently in use, are structurally sound, in good repair and not in need of replacement.

   Considering the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the vessels. The proposed modifications involve the removal of existing auxiliary piping, electric cables, electrical outfit, light fixtures, ladders, platforms and associated support structure from the engine room uptakes and their reinstallation at new locations or replacement with new material or equipment at new locations in accordance with the new EGCS equipment arrangement. The new or relocated materials to be installed will be permanently incorporated and integrated into the structure of the vessels and will not be capable of

being removed from the vessels without significant labor and possible structural damage.

Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the hulls and fittings is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new materials to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new and relocated materials to be installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new exhaust gas economizers and associated pumps and piping performing the same function as those removed, the exhaust gas economizers and associated pumps and piping would facilitate the installation of an entirely new design feature, the EGCS, and would be of a new, more compact design with reduced back pressure compatible with the EGCS. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the Vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

4. As part of the enlargement of the engine casing, the forward structural bulkhead of the engine casing above the 06 Level will be moved forward approximately 4 feet to the aft side of the accommodation house. The inboard bulkheads of the engine room ventilation air inlet plenum and the ventilation supply fan room port and starboard will be moved outboard approximately 2 feet. They must be relocated in order to allow the EGCS to be moved into place in the engine casing, because the new EGCS will not fit through the opening formed by the existing bulkheads. Your client asserts that these bulkheads are structurally sound, in good repair, and not in need of replacement.

   Considering the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the vessels. The proposed modifications involve the removal of the engine casing, engine room ventilation air inlet plenum and the ventilation supply fan room port and starboard bulkheads and their reinstallation at new locations with new material in order to accommodate the new EGCS equipment arrangement. The new bulkheads will be permanently incorporated

and integrated into the structure of the vessels and will not be capable of being removed from the vessels without significant labor and possible structural damage.

Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the bulkheads is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new bulkheads to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new bulkheads to be installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new bulkheads performing the same function as those removed, the placement of the bulkheads would facilitate the installation of an entirely new design feature, the EGCS, and would be of a new design compatible with the EGCS. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

5. The existing stack will be removed in order to allow the existing exhaust piping, waste heat economizer, steam drum and related components to be easily removed from the ship and the new EGCS, waste heat boiler, exhaust piping and related components to be easily lifted on board and installed in the engine casing. After all installations have been completed the existing stack will be reinstalled. Your client asserts that these items are currently in use, structurally sound, in good repair, and not in need of replacement.

   With regard to the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the Vessels. The proposed modifications involve the removal of exhaust piping, waste heat economizer, steam drum and related components and the installation of the new scrubber, exhaust piping, waste heat economizer, steam drum and related components, and the reinstallation of the old stack. The new materials to be installed will be permanently incorporated and integrated into the structure of the vessels and will not be capable of being removed from the vessels without significant labor and possible structural damage.

   Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the hulls and

fittings is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new materials to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new and re-used materials to be installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new exhaust piping, waste heat economizer, steam drum and related components performing the same function as those removed, the new equipment would facilitate the installation of an entirely new design feature, the EGCS, and would constitute a new exhaust system design. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the Vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

6. Portions of the existing engine room supply air ventilation ducting will be removed and replaced with new ducting having a different configuration, because its current configuration will interfere with the new scrubber installation and will require permanent reconfiguration. Your client asserts that the existing ducting is currently in use, is structurally sound, in good repair and not in need of replacement.

   With regard to the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of the work to be done to the vessels' hulls and fittings is such that it would constitute a permanent incorporation into the Vessels. The proposed modifications involve the removal of the existing engine room supply air ventilation and the installation of new ducting having a different configuration. The new materials to be installed will be permanently incorporated and integrated into the structure of the vessels and will not be capable of being removed from the vessels without significant labor and possible structural damage.

   Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the work to be done to the hulls and fittings is such that it indicates that the contemplated items would remain aboard a vessel during an extended lay-up. The new materials to be installed will be permanently incorporated and integrated into the vessels' structures, usually accomplished by welding. They will not be capable of being removed from the vessels without significant labor and possible structural damage. For this reason, the new materials to be

installed during the modification would remain in place during an extended layup period.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work indicates that a modification is contemplated. Although the proposed work would result in new ducting in a different configuration performing the same function as that which had been removed, the new equipment would facilitate the installation of an entirely new design feature, the EGCS, and would constitute a new exhaust system design. We are of the opinion that this sufficiently meets requirements to be considered a new design feature.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the Vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

7. A new sea water system, including pumps, motors, heat exchanger, piping, valves, cables, controls and instrumentation will be permanently installed to supply sea water to the scrubber and overboard in the "open loop" mode and to the fresh water/NaOH heat exchanger and overboard when operating in the "closed loop" mode. This reflects a new installation in order to permit the new scrubber system to function and would not merely replace a part, fitting, or structure that is performing a similar function. Accordingly, we find this item to be a non-dutiable modification.

8. A new sodium hydroxide storage and supply system will be installed to hold the NaOH solution and transfer it to the fresh water circulation system. This system will include two ISO 20-foot containers designed to carry NaOH solution and a second tank similar to the NaOH tank that will be used to hold "sludge" accumulated on board as a result of scrubber operations for disposal ashore. Both the NaOH tank and sludge tank will be 20 foot ISO container tanks or a tank loaded on a flat rack. These tanks will not be permanently incorporated into the vessels structures. The tanks will be stored in cell guides mounted in the container ships similar to other containers carried aboard the vessels. In addition, they will be lifted in the same manner as the commercial containers carried aboard the vessels by shoreside gantry cranes. The reason for portability of both the NaOH tank and sludge tank is that there will be 2 tanks each for NaOH and sludge purposes assigned to each ship. When the onboard NaOH tank nears empty it will be removed by the shore based gantry crane for filling. Similarly, when the onboard sludge tank nears full it will be removed by the shore based gantry crane for emptying. The replacement tanks located dockside will then be loaded aboard the vessels as needed. The new sodium hydroxide storage and supply system will also include a transfer pump, piping and associated fittings to handle the sodium hydroxide.

   With regard to the transfer pump, piping and associated fittings to handle the sodium hydroxide, these items reflect a new installation in order to permit the new scrubber

system to function and would not merely replace a part, fitting, or structure that is performing a similar function. Accordingly, we find these items to be a non-dutiable modification.

With regard to the two ISO 20-foot containers designed to carry the NaOH solution and "sludge," and their replacement units, the first factor, whether there is a permanent incorporation into the hull or superstructure, the nature of these items indicates that they would not constitute a permanent incorporation into the vessels. These tanks would not be permanently incorporated and integrated into the structure of the vessels and their very nature indicates that they will be capable of being removed from the vessels without significant labor and or structural damage.

Regarding the second factor, whether, in all likelihood, an item would remain aboard a vessel during an extended lay-up, the nature of the tanks is such that it indicates that the contemplated items may not remain aboard a vessel during an extended lay-up. The tanks will not be permanently incorporated and integrated into the vessels' structures, being intended for easy removal and substitution. They will be capable of being removed from the vessels without significant labor and or structural damage.

The third factor of our analysis, whether an item constitutes a new design feature and is not merely replacing a part, fitting, or structure that is performing a similar function, the nature of the proposed work is indicative of a modification, being an integral part of an entirely new design feature, the EGCS.

Last, whether an item provides an improvement or enhancement in operation or efficiency of the vessel, the proposed work is intended to improve the vessels' pollution emissions and allow them to operate under new, more stringent standards. Such an outcome would result in enhancement in operation or efficiency of the vessels, indicating that the proposed work would qualify as a modification rather than as a repair.

However, we are of the opinion that the two ISO 20-foot containers designed to carry the NaOH solution and "sludge," do not, in and of themselves, constitute a non-dutiable vessel modification. Rather, these items constitute vessel equipment. "Customs has defined equipment as something that constitutes an operating entity unto itself, retains at least the potential for portability, and/or may be affixed to a vessel in a non-permanent fashion, such as by means of bolts or other temporary methods which is a feature distinguishing it from being considered an integrated portion of the hull and the superstructure of the vessel." See HQ 115729 (Oct. 8, 2002), HQ 114436 (Jan. 13, 1999). The jurisprudential foundation for this analysis was discussed in HQ 113798 (Jan. 9, 1997), in which we quoted Otte v. United States, 7 Ct. Cust. Appls. 166, T.D. 36489 (1916). The Otte court stated:

> That the Congress intended to distinguish between equipment and the vessel itself is apparent from a reading of the two subsections above quoted. The line of distinction between equipment and the vessel is somewhat difficult to

> mark. The question was considered by the Board of Naval Construction, and their report in part reads as follows:
>
> Equipment, used in a general sense, may be defined as any portable thing that is used for, or provided in, preparing a vessel whose hull is already finished for service. It is the furniture of whatsoever nature which is put into a finished ship in equipping her. The Queen's Regulations and Admiralty Instructions give the following definition: "Equipment, in relation to a ship, includes the furnishing a ship with any tackle, apparel, furniture, provisions, arms, munitions, or stores, or any other thing that is used in or about a ship for the purpose of fitting or adapting her for the sea or for naval service."
>
> In estimating the displacement of a ship naval constructors use the term "hull and fittings" in contradistinction to "equipment," the fittings of the hull being understood to be any permanent thing attached to the hull which would remain on board were the vessel to be laid up for a long period.

Taking into account their portable nature and the stated intent that these items be removable from the vessel as necessary, we find that the two ISO 20-foot containers designed to carry the NaOH solution and "sludge" to be dutiable under 19 U.S.C. 1466 as vessel equipment.

9. A new fresh water/ sodium hydroxide solution circulation system will be installed to circulate the fresh water/ sodium hydroxide solution through the scrubber for cleaning the engine exhaust gas. This system will include pumps, piping, circulation tanks, and associated controls and instrumentation. In addition, cleaning equipment will be provided and installed to allow a portion of the fresh water/ sodium hydroxide solution to be processed to remove entrained pollutants. This reflects a new installation in order to permit the new scrubber system to function and would not merely replace a part, fitting, or structure that is performing a similar function. Accordingly, we find this item to be a non-dutiable modification.

10. A new exhaust gas and sea water discharge monitoring system will be installed to monitor and record the quality of the exhaust gas and sea water being discharged from the scrubber. This reflects a new installation in order to permit the new scrubber system to function and would not merely replace a part, fitting, or structure that is performing a similar function. Accordingly, we find this item to be a non-dutiable modification.

CBP has examined similar work in the past. In HQ 112050 (Apr. 7, 1992), we examined the dutiability of structural reinforcement operations performed on a vessel's longitudinal bulkhead. In that matter, we determined that foreign shipyard operations limited to modification processes with no repairs being performed were considered a duty-free modification. Similarly, in HQ 115346 (Apr. 30, 2001), we determined that permanent installation of steel panel breakers throughout a vessel's double bottom below the cargo tanks to reduce the overall plate loading, improving the local structural performance of the vessel, constituted a nondutiable modification to the subject vessel. Likewise, in HQ 115255 (Apr. 10, 2001), we ruled that removal of a vessel's

steel bottom, determined to be in good working order and not in need of repair, to be replaced with steel of a higher grade and thickness, thereby improving the safe operation of the vessel and extending the vessel's useful life, was a nondutiable modification. And, in HQ 113678 (Oct. 7, 1998), while noting that work performed to remedy actual bulkhead cracking was dutiable under the statute, modification work to eliminate the design defect in the original construction of the vessel which lead to the bulkhead cracking was not dutiable as a repair where there was no evidence of any need for repair at the time the work was performed.

Based upon the information provided by Horizon and after consideration of each of the four factors, we are of the opinion that that the proposed work, with the exception of the two ISO 20-foot containers designed to carry the NaOH solution and "sludge," would meet the above-discussed criteria for vessel modifications. Accordingly, the proposed work to the subject Vessels, the M/V HORIZON ANCHORAGE, M/V HORIZON TACOMA, and M/V HORIZON KODIAK, as described above, with the exception of the two ISO 20-foot containers designed to carry the NaOH solution and "sludge," and in the supporting documentation would meet the criteria for a modification under 19 U.S.C. § 1466.

HOLDING

The proposed foreign shipyard work described above, with the exception of the two ISO 20-foot containers designed to carry the NaOH solution and "sludge," constitutes non-dutiable modifications to the hull and fittings of the M/V HORIZON ANCHORAGE, M/V HORIZON TACOMA, and M/V HORIZON KODIAK.

We emphasize that this ruling is merely advisory in nature and does not eliminate the requirement to declare work performed abroad at the vessel's first United States port of arrival, nor does it eliminate the requirement to file a vessel repair entry showing this work. See 19 C.F.R. §§ 4.14(d) and (e). Furthermore, any final determination on this matter is contingent on CBP's review of the evidence submitted pursuant to 19 C.F.R. § 4.14(i).

Sincerely,

Lisa L. Burley, Chief
Cargo Security, Carriers and Restricted Merchandise Branch
Office of International Trade, Regulations and Rulings
U.S. Customs and Border Protection