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Honorable Jeff Miller
Chairman
House Committee on Veterans' Affairs
336 Cannon House Office Building
Washington, D.C. 20515

Re: Attempt to locate Agent Orange residue on decommissioned ships

Dear Mr. Chairman:

I have been informed that you have requested the Navy to examine the distillation system decommissioned ships that served in Vietnamese waters during the war. I had discussed this with your staff members in March and believed, apparently incorrectly, that you were not going to pursue that avenue. I have recently been made aware that I misunderstood. I apologize for that misunderstanding and assure you that if I realized you were going to continue with this request I would have reached out to you earlier.

I have the highest respect for your staff and have historically enjoyed good relations with them. I do know, however, that you do not have a Navy surface warfare officer with steam engineering experience on the staff. As you may know I retired as a surface warfare officer from the Navy in 1994. During that time I was recognized as possessing a mechanical engineering subspecialty based on significant experience. I was Chief Engineer on three Navy ships and second in command of a repair ship. I was also qualified as a Navigator and for command at sea. As Chief Engineer, I was responsible for the water distillation, distribution and storage system as well as all main propulsion and auxiliary equipment. My responsibilities also included the supervision of shipboard repair of equipment at intermediate maintenance and depot facilities.

I can assure you that there is very little likelihood that any residue is present aboard any inactive ship. This is very different from the C-123 aircraft that were stored in the dry heat environment of the Arizona desert. Ships remain in the water which is very susceptible to temperature changes. These temperature changes cause condensation inside of the hull, especially in the engineering spaces which are located below the waterline. Moisture is usually absorbed by desiccant packages which are routinely inspected and changed.

More importantly, the water distribution system would have been continuously flushed while leaving Vietnamese waters. Ships continued to distill water for months, years and sometimes decades before they were decommissioned. The constant flow of water would have eventually removed the dioxin. Additionally, the internals of the distillation plant were removed

on an annual basis for descaling and in later years sand blasting. The internal shell of the evaporator distillation equipment would be hand scraped to remove the scale that accumulated during operations. This was critical to maintaining purity and efficiency as the scale affected heat transfer.

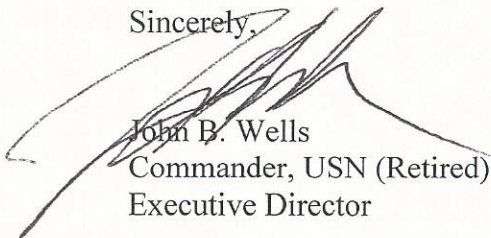
These ships were also on a five year overhaul cycle. The water distribution piping was located in the bilges and often suffered corrosion damage due to immersion in water, including salt water. It was normally inspected and if necessary replaced during the overhaul cycle. Distillation pumps were inspected quarterly and often refurbished on an annual basis. The water tanks were drained and cleaned to remove moisture. The tanks were inspected and if necessary the interiors were repainted. Most major equipment would be refurbished during that depot level overhaul.

It is slightly possible that some residue might be found in boiler tubes of ships that were decommissioned and moth balled immediately after returning from Vietnamese waters. The most likely location would be in the superheater tubes. As the superheater contained gaseous rather than liquid substances, it is possible that the 950°F heat would have caused some of the dioxin to have adhered to the wall of the superheater. Should the superheater have been flushed by water jetting however, I believe any residue would have been removed. Water jetting, which occurred every 1800 hours of operation, flushed the system with pressures approaching 8000-10000 psi. Water jetting was in use at depot and intermediate facilities and were commonly used by steam ships. While it is possible that a ship exists that was not water jetted, I find it highly unlikely.

Should the Navy find a ship that they wish to test, I would like to participate in that test, at no cost to the government. I would also like to review that ship's maintenance history should it still exist.

I hope that you find this information helpful. Military-Veterans Advocacy is prepared to be your resource on this issue. Should you have any further questions, please feel free to contact us.

Sincerely,



John B. Wells
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Executive Director