

ITEM 1: TANKS (FUEL SERVICE) CLEAN AND INSPECT

1 SCOPE

The intent of this item is to clean and inspect Fuel Storage tanks(s).

Government Furnished Property: NONE

2 REFERENCES

Coast Guard Drawings:

NGSS DWG ASC540001

Applicable Documents:

[MIL-HDBK-291, Rev -; Cargo Tank Cleaning](#)

[Federal Specification QQ-N-281, Rev Rev D, Amend 2; Nickel-Copper-Aluminum Alloy, Wrought \(UNS\) N05500](#)

[Society of Automotive Engineers \(SAE\) AMSC6183, Rev -; Cork and Rubber Composition Sheet; For Aromatic Fuel and Oil Resistant Gaskets](#)

3 REQUIREMENTS

The Contractor shall provide all tools, labor and material to accomplish the following in accordance with the General Requirements:

3.1 GENERAL

3.1.1 The concerned tanks are listed in Table 3.1.A. See the above CG Dwg for the location and arrangement of the designated tank(s).

Table 3.1.A

Cutter	Tank Number	Contents	Capacity (gallons)	Current Qty (gal)
WMSL 751	5-52-0-F	FUEL	14428	865

CAUTION

Toxic vapors may exist in tanks. Do not leave the tanks open unless certified “Safe for Personnel – Safe for Hotwork.” Do not allow open flames, sparking electrical apparatus, electric lights, flashlights, or tools that may cause sparks in or near open tanks.

3.1.2 The Contractor shall remove and dispose of all oil, oily water and fuel from tank listed above in accordance with state, local, and federal laws and regulations. Due to fuel piping modifications, cutter’s installed pumping system will not be available to pump off remaining fuel. Contractor will have to arrange offloading fuel by other means. A SHIP CHECK IS HIGHLY RECOMMENDED to determine best means and routes available for routing of pumps and hoses to offload remaining fuel.

3.2 INTERFERENCES

3.2.1 Tag-Outs – Secure, isolate, and tag-out all affected mechanical, piping, and electrical systems in accordance with the General Requirements.

3.2.2 Remove or protect all interferences surrounding the work areas. Obtain verification from the Coast Guard Inspector for protective measures.

3.3 SAFETY

3.3.1 Provide adequate explosion proof lighting to illuminate the work area during cleaning and inspection.

3.3.2 Notify the Coast Guard Inspector prior to opening any accesses to the designated tank. Open all accesses to the designated tank using non-sparking tools.

3.3.3 While manhole covers are removed, provide barriers over any open holes in the deck to prevent personnel from falling into open manholes. Post warning signs at the forward, aft, inboard, and outboard sides of all open accesses. Warning signs shall read: “DANGER, COVER IS REMOVED.” Provide adequate lighting during night hours to illuminate hazards.

3.4 GAS FREE CERTIFICATION

3.4.1 Ventilate the designated tank in accordance with the General Requirements to obtain gas free certification. Ensure that vapors do not contaminate adjacent compartments.

3.4.2 Gas free and certify the affected compartments/tanks in accordance with the General Requirements. The affected compartments/tanks must be certified as “Safe for Personnel – Safe for Hotwork” for the duration of work performed on this item.

3.4.3 Gas Free Certificates indicating the current status of each compartment/tank shall be posted on the Quarterdeck and at each open access to the compartment/tank. Provide one copy to the Coast Guard Inspector.

3.5 TANK CLEANING

3.5.1 Plug all inlet and outlet piping in the tank to prevent contaminants from entering the tank. Use plugs with an attached lanyard, ring or other system that will ensure plugs are not lost in the pipe openings. Maintain a plug accountability log outside the tank to prevent any of the installed temporary plugs from being lost inside the tank or forgotten inside at tank closure.

3.5.2 Clean designated tank in accordance with MIL-HDBK-291. Use non-sparking tools exclusively. Wipe the interior tank structure dry and free of all cleaning agents.

3.5.3 Remove and dispose all residual fuel, oil, water, sludge, marine and fungus growth, and other foreign materials and contaminants in accordance with all federal, state, and local laws and regulations. Clean the designated oil tank’s internal surfaces. Ensure tank is free of all residual water, sludge, rust, microbacteriological growth, and foreign material.

CAUTION

Flammable and toxic vapors may be present in fuel, oil, dirty oil sludge, or other tank contaminants. These vapors may be released from the tank into the compartment’s atmosphere during the cleaning process. Maintain gas free certification for the duration of all work performed in the tanks.

3.6 INSPECTIONS/TESTS

3.6.1 In the presence of the Coast Guard Inspector, inspect all designated tanks to verify cleanliness and condition of all tanks. Specific structural items which shall be inspected include, but are not limited to: tank plating, striker plates, sounding tubes, structural strength members, vents, pipes and pipe hangers, tank level indicators, tank access cover and tank coating system. Submit a CFR.

3.7 RESTORATION

3.7.1 Upon verification by the Coast Guard Inspector, remove all plugs, tools, and foreign objects from the tanks. The Coast Guard Inspector will conduct a final inspection of the tank to verify that all tools, plugs, and foreign objects have been removed.

3.7.2 Upon verification from the Coast Guard Inspector reinstall all tank access covers.

3.7.2.1 Install new gaskets conforming to SAE-AMS-C-6183. Install new cotton grommets on all studs. Chase threads on studs to ensure even installation of the access covers.

3.7.2.2 Renew any damaged or non-monel nuts with nickel-copper alloy (monel) nuts meeting QQ-N-281, Class A or B. The nuts and bolts shall be of different classes to prevent galling. Existing undamaged fasteners meeting this specification may be reused. For purpose of bid, assume only 10% of existing fasteners will require renewal.

3.7.3 Clearing Tags – Restore all affected systems and clear tags in accordance with the General Requirements.

3.7.4 Restore all interferences. Restore the work areas to a clean condition.

3.8 Coordinate all inspections with the designated Coast Guard Inspector to minimize production delays.