

STANDARD WORK TEMPLATE

SHIP: N/A ITEM NO: 992-31
COAR: N/A PCN: None
SWT FILE NO: 992-031 CMP: N/A
REVISED: **30 JUL 2015** PLANNER: _____

1. SCOPE:

1.1 Title: Cleaning and Pumping; accomplish

1.2 Location of Work:

1.2.1 Text

1.2.2 Text

1.3 Identification:

1.3.1 Not Applicable

2. REFERENCES:

2.1 Standard Items

2.2 S9086-T8-STM-010/CH-593, Pollution Control

2.3 S9086-SP-STM-010/CH-542, Gasoline and JP-5 Fuel Systems

2.4 MIL-HDBK-291, Military Handbook Cargo Tank Cleaning

2.5 S9086-CJ-STM-010/CH-075, Fasteners

2.6 S9086-CM-STM-020/CH-078, Gaskets and Packing

2.7 MIL-DTL-1222, Studs, Screws and Nuts for Applications Where a High Degree of Reliability is Required; General Specification for

3. REQUIREMENTS:

3.1 Open, ventilate, empty, clean, render dry, and maintain any tank or space including adjacent tanks, spaces, or piping systems where the scope of repairs will result in a need for certification during the performance of this Job Order.

3.1.1 Spaces listed in 1.2.____ through 1.2.____ shall be certified and maintained throughout the availability.

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3.1.2 Tanks listed in 1.2. through 1.2. are to support inspections by Government inspectors.

3.1.3 Ensure that harmful vapors, fumes, and mists are ventilated to the exterior of the vessel.

3.1.4 Submit one legible copy, in approved transferrable media, of a report listing the location, origin, and quantity of each manhole cover removed in 3.1 with respect to its tank, ship's frame, and distance off centerline to the SUPERVISOR.

3.1.5 Clean and disinfect each CHT/sewage tank and associated piping in accordance with 2.2.

3.1.5.1 Maintain one system for Ship's Force use at all times.

3.1.6 Clean each tank and associated piping in accordance with 2.3 and 2.4.

3.1.7 Clean and inspect each removed fastener for wear and defects, using Paragraph 075-8.3 of 2.5 for accept or reject criteria. Visually inspect to ensure material type is the same as required in 3.9 (CRES, Brass, Nickel-copper, galvanized or zinc coated steel). Retain fasteners found acceptable for reuse.

3.1.7.1 Accomplish a visual inspection to verify correct material for application.

3.1.7.2 Submit one legible copy, in hard copy or approved transferrable media, of a report listing results of the requirements of 3.1.7 and 3.1.7.1 to the SUPERVISOR.

3.2 Steam clean each area where the removal of preservative is required.

3.2.1 Install new rust preventative compound conforming to MIL-PRF-16173, Grade One or 3.

3.2.2 Install new Monel fill and drain plugs conforming to QQ-N-281, Class B, to replace those removed to accomplish steam cleaning.

3.3 Pump tanks containing petroleum products to the low suction level of each tank.

3.3.1 Off-loading or transferring of petroleum products shall be accomplished during daylight hours only.

3.3.2 Hoses, pumps, and containers shall be clean and dry prior to start of off-loading.

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3.3.3 Submit one legible copy, in approved transferrable media, of completed Attachment A (inventory schedule-petroleum products) to the SUPERVISOR.

(V) (G) "VERIFY OFF LOAD/TRANSFERRING COORDINATION"

3.4 Coordinate the off-loading or transferring of fluids through the ship's Damage Control Assistant (DCA), via the SUPERVISOR, to maintain ship's stability and to prevent flooding.

3.4.1 Obtain a list from the SUPERVISOR of petroleum soundings for tanks prior to start of pumping operations.

3.5 Clean each bilge of spaces listed in 1.2 free of trash, debris, grease, oily liquids, and other liquid contaminants prior to the initial certification.

3.5.1 Maintain each bilge to a clean, dry condition for the duration of the availability on a 7-day-a-week, 24-hour-a-day basis.

3.5.2 Remove and dispose of an additional _____ gallons of non-hazardous liquids from bilges listed in 1.2, generated by the Navy, after initial cleaning and certification is obtained. Removals shall be measured. Total amount of liquids removed greater or less than the above amount will be the subject of an equitable adjustment.

(V) (G) "SOURCE DETERMINATION"

3.5.2.1 Submit one legible copy, in approved transferrable media, of a report listing the amount of gallons removed in 3.5.2, responsible source of liquids, and date liquids were removed after each pumping operation.

3.5.3 Remove and install pumping equipment 3 evolutions after space turnover to support the requirements of 3.5.1 and 3.5.2.

(V) (G) "CLEAN AND DRY BILGES"

3.5.4 Prior to space turnover, when directed by the SUPERVISOR, accomplish a final detergent cleaning of each bilge of spaces listed in 1.2, removing all trash, debris, grease, oily liquids, and other liquid contaminants from the bilges.

3.6 Clean each chain locker free of silt, mud, and foreign matter.

3.7 Remove and dispose of liquids, including compensating sea water from compensating fuel tanks, sludge, and debris, in accordance with federal, state, and local laws, codes, ordinances, and regulations.

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3.7.1 Accomplish a chemical analysis of liquid waste, sludge, and debris in accordance with applicable federal, state, and local laws, codes, ordinances, regulations, and Naval Facility requirements.

3.7.1.1 One chemical analysis is required for each containment (Engine Room, Space, etc.) or for each type of liquid (fuel oil, JP-5, etc.).

3.7.1.2 Submit one legible copy in approved transferrable media, of each analysis to the SUPERVISOR. Also identify the volume of the liquid from which each sample was taken.

3.8 Tank Closure Repairs:

3.8.1 Clean, chase, or tap threaded areas prior to installing covers.

3.8.2 Weld up, drill, and tap a total of _____ stripped manhole cover bolting ring holes for tanks opened in 3.1.

3.8.3 Remove existing and install new a total of _____ missing, broken **or defective** manhole cover studs for tanks opened in 3.1 conforming to **2.7, Type IV, Grade 304**.

3.8.4 Accomplish the requirements of 009-12 of 2.1, including Table _____, Column _____, Lines One through _____.

3.8.5 Remove all paint from seal mating surfaces (both cover and tank ring) prior to 3.8.6.

3.8.6 Accomplish the requirements of 009-32 of 2.1 for surfaces in the vicinity of tank closure, to include manhole ring, sealing area, coaming and flanged areas.

(V) (G) "INSPECT TANK CLEANLINESS AND COMPLETION OF REPAIRS"

3.9 Inspect each tank for cleanliness and completion of repairs prior to final closing. Document the personnel who were present during the inspection and confirm that they have exited the space prior to closure of tanks, voids, and cofferdams. Designate one person to account for all personnel who may have entered the space.

(V) (G) "VERIFY TORQUE WRENCH WITHIN PROPER RANGE OF TORQUE VALUES" (See 4.7)

3.10 Install manhole covers.

3.10.1 Reinstall existing fasteners found acceptable in 3.1.7.

3.10.2 Install manhole cover for each tank, using new gaskets in accordance with Table 078-8-2 of 2.6, new _____ CRES washers conforming to FF-W-92, Type A, Grade One, Class B, and new _____ brass nuts conforming to MIL-

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DTL-1222, Type I, Grade 464, and/or new ___ CRES hex head cap screws conforming to ASTM F 593, Group 1, Alloy 304, or Group 2, Alloy 316.

3.10.2.1 Install new ___ CRES bolts conforming to MIL-DTL-1222, Grade 5, Class 316, for flush deck bolted manhole covers.

3.10.2.2 Install new 3/16-inch gaskets in accordance with Table 078-8-2 of 2.6, and new ___ brass hex head nuts conforming to MIL-DTL-1222, Type I, Grade 464, for DDG-51 Class ships' high temperature compartments.

3.10.2.3 Install new ___ nickel-copper hex head, self-locking nuts conforming to NASM-25027 for LSD-41 and LSD-49 Class ships.

3.10.2.4 Install new gaskets conforming to Table 078-8-2 of 2.6, using gasket sealant conforming to MIL-S-45180, Type II, new ___ CRES 303 nuts conforming to MIL-DTL-1222, Grade 304, and new galvanized steel washers conforming to SAE-1040, for compensating tanks on LHD and LHA Class ships.

3.10.2.5 Install manhole cover for each tank, using new gaskets conforming to MIL-PRF-6855, Class One, Grade 60, new CRES washers conforming to MS21044C5, and new CRES 316 hex head cap screws conforming to NAS501-5-10A on LCACs.

3.10.2.6 Install access cover for the fresh water tank listed in 1.2.__, using new gaskets in accordance with Table 078-8-2 of 2.6, and new CRES washers conforming to NAS1149CO632R, and new CRES 316 hex head cap screws conforming to NAS501-6-11A on LCACs.

3.10.3 Install access cover for each potable water, feedwater, and sewage tank, using new gaskets conforming to Table 078-8-2 of 2.6, new ___ zinc coated steel nuts conforming to MIL-DTL-1222, Type I, Grade 5, and new ___ CRES washers conforming to FF-W-92, Type A, Grade One, Class B.

3.10.4 Determine the proper tightening sequence from Figure 075-4-1 of 2.5 and 078-8.2.3 of 2.6 (078-8.2.3 refers to Figure 078-8-4 to illustrate several bolt tightening patterns).

3.10.5 Tighten fasteners uniformly. Apply 10 percent of the specified torque first to make sure that the parts are solidly together. Then, apply torque in 25 percent increments (i.e., 25, 50, 75, and 100 percent). Reverse previous sequence (i.e., 6, 5, 4, 3, 2, 1), tightening to 100 percent of required torque.

(V) (G) "VERIFY THREAD ENGAGEMENT"

3.11 Verify proper thread protrusion in accordance with Paragraph 7.5.1 and 8.2.3 of 2.5.

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3.12 Coordinate the filling of the compensating fuel tanks with sea water upon completion of work in accordance with 3.4.

3.12.1 Have Ship's Force engage the compensating water system for the Group of tanks that was emptied. Vent each tank in the Group, starting with the expansion tank and working in order to the receiving tank. Vent each tank until a steady stream of liquid comes from the vent valve.

3.13 Accomplish the requirements of 009-32 of 2.1 for new and disturbed surfaces.

4. NOTES:

4.1 For the purpose of this Work Item, the term "tank or space" includes voids, cofferdams, and inaccessible or confined areas.

4.2 Consider each bilge to contain contaminated oily salt water.

4.3 Booklet of General Plans and Tank Sounding Tables are available for review at the office of the SUPERVISOR.

4.4 The SUPERVISOR will provide sequence of tanks and dates of inspections referenced in 3.1.2.

4.5 Associated piping is defined as, "An assembly of pipe, tubing, valves, fittings and related components forming a whole or a part of a system which starts or terminates in subject area, thus being common to and associated with same."

4.6 PTFE string gasket material of 100 percent virgin 3500 VALVERLON 3/32 inch diameter (manufactured by A.W. Chesterton Co) may be used as a means of ensuring a watertight seal of manhole and access covers.

4.7 Torque wrenches shall be selected in such a manner that the required final torque falls within 20 to 90 percent of the torque wrench range.

4.7.1 A torque wrench with a scale range of 0-100 ft-lbs can be used for a maximum torque of 90 ft-lbs and minimum torque of 20 ft-lbs.

4.7.2 A torque wrench with a scale range of 0-250 ft-lbs can be used for a maximum torque of 225 ft-lbs and a minimum torque of 50 ft-lbs.

5. GOVERNMENT FURNISHED MATERIAL (GFM):

5.1 LLTM:

1. None.

5.2 PUSH MATERIAL:

1. None.

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5.3 KITTED MATERIAL:

1. None.

