

NAVSEA
STANDARD ITEM

FY-15 (CH-2)

ITEM NO: 009-24
DATE: **10 JUL 2015**
CATEGORY: I

1. SCOPE:

1.1 Title: **Shipboard** Authorization, Control, Isolation, Blanking, and Tagging Requirements; accomplish

2. REFERENCES:

- 2.1 Joint Fleet Maintenance Manual (JFMM)
- 2.2 9002-AK-CCM-010/6010, Industrial Ship Safety Manual (ISSM) for Submarines
- 2.3 S0400-AD-URM-010/TUM, Tag-Out Users Manual
- 2.4 845-4612172, Hydrostatic Test Blanks
- 2.5 MIL-STD-777, Schedule of Piping, Valves, Fittings, and Associated Piping Components for Naval Surface Ships
- 2.6 802-5959353, MIL-STD-777D Modified for DDG-51 Class, Schedule of Piping, Valves, Fittings, and Associated Piping Components
- 2.7 29 CFR Part 1915, Occupational Safety and Health Standards for Shipyard Employment

3. REQUIREMENTS:

3.1 Accomplish the requirements of Volume IV, Chapter 10 of 2.1, for administration, work authorization procedure, transfer of non-nuclear systems and nuclear instrumentation and control systems, work authorization form revisions, and barrier criteria. For submarines only, accomplish the requirements of Volume IV, Chapter 10 of 2.1 for safety of ship maintenance item identification, listing, and control, or the requirements of 2.2 for Ship's Plan of the Day (SPOD).

3.2 Accomplish the requirements of 2.3 for equipment, systems, circuits, components, piping, and valves that require isolation.

3.2.1 Ensure the isolation, deenergization, drainage of the isolated area, and depressurization of mechanical, electrical, electronics, and pressure system has been accomplished.

3.2.2 Train and qualify contractor's designated representative in the Work Authorization Form (WAF) and Tag-Out process in accordance with 2.1 and 2.3.

3.2.2.1 Maintain a current copy of the plan utilized to train and qualify contractor's designated representatives in accordance with 2.1 and 2.3 for reference by the SUPERVISOR.

3.2.2.2 Notify the SUPERVISOR of revisions to the plan as they occur.

3.3 Post warning signs and barriers and install temporary positive means to prevent closure or movement of components that create a safety hazard at hull and deck openings.

3.4 Install and maintain blanks and plugs, painted blaze orange (existing system fasteners used for blanking and that will be either discarded or re-used for installations are excluded), on piping, valves, equipment, ventilation systems, on components being stored, installed, or removed, on openings aboard ship resulting from the removals, immediately upon each removal, and on openings requiring isolation to accomplish work in the Work Items including tanks. The use of cloth, polyvinyl sheet, paper, tape, and rubber sheeting as blanks is prohibited. DC plugs, wood, or wood products are prohibited as blanks on pressurized systems, but may be used on non-pressurized systems. Wooden materials are prohibited for use as foreign material exclusion prevention devices on all systems.

3.4.1 Blanks installed on equipment, valves, and piping openings in systems which are subject to pressure shall be in accordance with 2.4 to withstand maximum system pressure and secured in place with gaskets and fasteners in accordance with 2.5 and 2.6.

3.4.1.1 Pressure blanks shall have a positive means of attachment for affixing tags. Tags must endure the repair process, and must stay attached and be readable until the blanks are removed.

3.4.2 Blanks/plugs installed on openings in equipment, valves, and piping systems not subject to pressure shall preclude entry of foreign material and protect flanges and threaded areas.

3.4.3 Remove blanks/plugs installed in 3.4 immediately prior to installing piping, valves, or equipment and when work requiring isolation is complete.

3.4.4 Provide and maintain a written record **by work item, verifying installation and removal**, of temporary blanks/plugs used, including those used for Foreign Material Exclusion (FME), documented on a signed and dated check-off sheet. Include type, size, quantity, and associated system/equipment name or tank number and location (frame, port, starboard, below or above water line).

3.4.4.1 Maintain the list for the duration of the availability.

3.4.4.2 Maintaining a written record per 3.4.4 for material that has been removed from the ship is not required; however that material must be entered into the written record of 3.4.4 when it is returned to the ship.

3.4.4.3 For tanks, the check-off sheet for the removal of blanks shall be at the tank closing and the removal shall be verified by Ship's Force representative and the SUPERVISOR prior to tank closing. After the tank closing is satisfactory, the check-off sheet shall be submitted.

3.4.4.4 Submit one legible copy, in hard copy or approved transferrable media, of the temporary blank/plug record and check-off sheet to the SUPERVISOR.

3.4.5 Piping, ventilation, and equipment components designated as scrap prior to removal do not need to be blanked to maintain cleanliness. However, precautions shall be taken to preclude spillage of system contents.

3.5 Install identification tags on each removed piping section, valve, ventilation system, interference, and equipment to indicate company name, ship's name, hull number, system, location, and Work Item number prior to removal from system. Tags must endure the repair process, and must stay attached and be readable until the removed piping section, valve, ventilation system, or equipment is reinstalled.

3.6 Tape and insulate cable ends disconnected from equipment to prevent shorting out or grounding in the event a system is accidentally energized.

3.6.1 Tag each cable indicating circuit number and location of panel and fuse box-energizing cable.

3.6.2 Install dust covers on equipment connectors following disconnection of cable plugs.

3.7 Use the company's lockout/tag-out plus program for unmanned craft and barges in accordance with 2.7.

3.7.1 Position equipment to achieve required isolation, deenergization, drainage of the isolated area, and depressurization, and use lockout/tag-out plus program when lock-out of equipment, systems, circuits, components, piping, or valves is required in accordance with 2.7.

3.7.2 Provide a copy of the contractor's lockout/tag-out plus program when requested by the SUPERVISOR.

4. NOTES:

4.1 JFMM (2.1), 6010 (2.2), and TUM (2.3) are available on-line at:
<http://www.submepp.navy.mil/jfmm/index.htm>

4.2 FME is used to maintain system cleanliness. Should cleanliness be lost or suspected of being lost, restore cleanliness per NSI 009-107.