NAVSEA
STANDARD ITEM

FY-16

ITEM NO: 009-10
DATE: ***18 JUL 2014***
CATEGORY: I

1. SCOPE:

1.1 Title: Shipboard Asbestos-Containing Material (ACM); control

2. REFERENCES:

2.1 29 CFR 1915.1001, Occupational Safety and Health Standards for Shipyard Employment, Asbestos

2.2 MIL-STD-769, Thermal Insulation Requirements for Machinery and Piping

2.3 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants

3. REQUIREMENTS:

3.1 Consider insulation, lagging, deck tile, underlayment, gasket, shipboard cabling (see 4.2), and mastic to be asbestos-containing material (ACM) until it can be established by laboratory analysis, or other reliable method(s), that the material does not contain asbestos, in accordance with 2.1. This includes reusable covers as defined in 2.2.

3.2 Apply the following requirements for the removal, disturbance, or disposal of all asbestos containing materials during the initial monitoring, daily monitoring, and control of ACM throughout the work areas, and to Class I, II, III, or IV activities as defined in 2.1.

3.2.1 Ensure that responsibilities for personnel safety and environmental control of ACM existing or damaged during accomplishment of work are assigned and implemented.

3.2.2 Maintain written substantiation of the credentials of the Qualified Person.

3.2.2.1 The Qualified Person shall take airborne samples, monitor work practices, maintain daily logs, conduct on-site inspections, set up regulated areas, be capable of specifying the necessary protection and precautions to be taken during work with ACM, and accomplish the other requirements in accordance with Class I, II, III, and IV activities as defined

in 2.1. The Qualified person shall have successfully completed an initial EPA or state approved 40-hour Asbestos Supervisor's Course and annual refreshers.

3.2.2.2 Individuals performing airborne asbestos analysis must have successfully completed a NIOSH 582 course or equivalent and be rated proficient in either AIHA's PAT program or AAR program. Persons performing analysis of fiber type on bulk samples must have completed a McCrone Course in analysis of bulk asbestos samples and be rated proficient in either the NVLAP or AIHA's asbestos program.

3.2.2.3 Copies of certifications, licenses, notifications (such as advance notification to OSHA of new or modified control technology to be used to reduce exposure), and other documentation required by federal, state, and local regulatory authorities, shall be maintained at the worksite.

3.2.3 Identify removal routes and steps to be taken to protect insulation, repair damaged insulation, and to avoid asbestos contamination along those routes and obtain SUPERVISOR approval prior to proceeding.

3.2.4 Submit one legible copy, in approved transferrable media, of notifications made to regulatory authority, regarding ACM removal, to the SUPERVISOR within 2 days of providing such notices to the regulatory | authority.

3.2.5 Submit a written notice to the SUPERVISOR and to the Commanding Officer's designated representative, and post at the Ship's Quarterdeck or other designated location for each job or separate area of ACM removed or damaged aboard ship where there may be ACM at least 4 hours, but not more than 24 hours, prior to the start of work. The notice shall contain the following information:

3.2.5.1 Ship's name and hull number

3.2.5.2 Work Item number

3.2.5.3 Compartment

3.2.5.4 Class of activity and type of insulation, lagging, deck tile, underlayment, and mastic, i.e., ACM or possible ACM (provide basis for determination)

3.2.5.5 Date and time to start to work

3.2.5.6 Deliver notification for work planned over a weekend or Monday following that weekend to the Commanding Officer's designated representative no later than 0900 on the Friday immediately preceding that weekend.

3.2.5.7 Deliver notification of work planned on a federal holiday and on the day following the federal holiday to the Commanding

Officer's designated representative no later than 0900 of the last working day preceding the federal holiday.

3.2.6 Personnel accomplishing ACM work shall have a direct knowledge of the requirements of this procedure prior to beginning work. All training shall be under the direct supervision of a Qualified Person.

3.2.7 Monitor the affected areas daily to ensure compliance with 2.1. Monitoring shall include adjacent spaces to ensure the work area containments and work practices are effective. Results of surveillance shall be documented and the documentation shall be provided to the SUPERVISOR.

3.2.8 Submit one legible copy, in approved transferrable media, of a list of regulated areas, decontamination areas, and engineering controls to be established in accordance with 2.1, to the SUPERVISOR.

3.2.8.1 Identify configuration of critical barriers or isolation methods.

3.2.8.2 Identify location/configuration of decontamination areas, including the equipment room, shower (if necessary), and clean change room.

3.2.8.3 Identify ventilation and filtration requirements, including the negative pressure enclosure(s) if necessary.

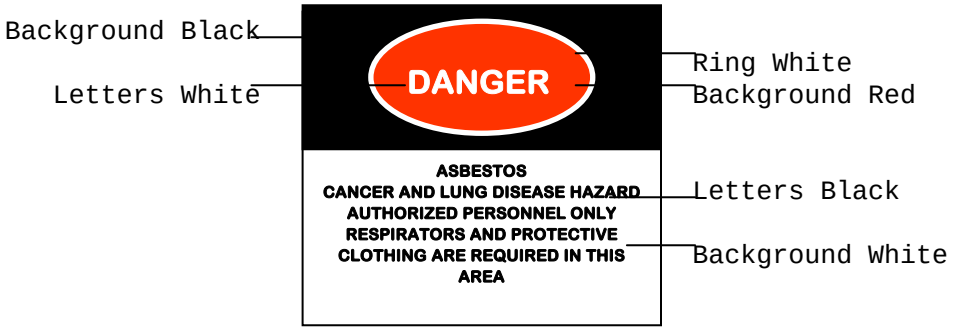
3.2.9 Isolate or blank the ship`s ventilation systems in work areas to prevent asbestos contamination.

3.3 Post prominent caution signs as required by 2.1 outside of affected areas.

3.3.1 In addition to caution signs required by 2.1, provide danger signs at the entrance to affected areas.

3.3.1.1 Danger signs shall be 14 inches by 20 inches and be painted black and red for the top 5 inches and white for the remaining 9 inches.

3.3.1.2 The lettering shall be as follows with 3-inch minimum letters with an oval ring around them for the first line and one-inch minimum letters for the remaining lines:



3.4 Monitor work areas.

3.4.1 Determine areas of airborne concentrations and potential personnel exposure to airborne asbestos fibers in accordance with the requirements of 2.1.

3.4.2 Take air samples and monitor regulated areas in the vicinity of access openings that are not tightly secured.

3.4.2.1 If the airborne concentration of asbestos fibers is at, or exceeds, 0.1 fiber, longer than 5 micrometers, per cubic centimeter of air, corrective action shall be taken to reduce the concentration to less than 0.1 fiber, longer than 5 micrometers, per cubic centimeter of air.

3.5 Accomplish ACM removal as follows:

3.5.1 Secure and tag out ventilation systems securing the work area.

3.5.1.1 Blank ventilation systems to prevent contamination of the ventilation systems and other compartments.

3.5.2 Air discharged to the environment from any containment zone shall have passed through a HEPA filter and otherwise conform to 2.3. A negative pressure will be maintained in the containment area where possible.

3.5.3 Remove materials which may contain ACM, using wet work practices and engineering controls that will minimize airborne contamination in and adjacent to the work area.

3.5.3.1 Removal tools and work practices shall minimize the generation of airborne contamination and the deposit of ACM in the work area.

3.5.3.2 Equip vacuum cleaners used to help prevent the dispersion of asbestos fibers with HEPA filters.

3.5.3.3 Clear the work area of loose ACM, including ACM dust, prior to returning the area to normal status.

3.5.4 Contain edges of insulation exposed by removal operations by cutting the exposed surface true and square and sealing the surface. Encapsulate exposed ACM surfaces with insulating cement conforming to ASTM C 195.

3.6 Dispose of ACM by bag method described below:

3.6.1 Collect and dispose of ACM waste, scrap, debris, and special clothing consigned for disposal, which may produce airborne concentrations of asbestos fibers, in sealed, impermeable polyethylene bags (minimum thickness, 6 mils). Prior to placing in bags, asbestos waste shall be wet down to reduce airborne concentrations of asbestos fibers.

3.6.2 Bag ACM scrap, debris, and waste at the worksite.

3.6.3 ACM shall be placed in sealed, 6-mil or heavier, impermeable polyethylene bags before removal from the work area. Pieces of insulation too large to fit into bags shall be encased in 6-mil, or heavier polyethylene film with edges sealed with tape conforming to MIL-C-20079.

3.6.4 Vacuum outer surfaces of bags containing ACM in affected areas immediately after removal from and adjacent to the worksite.

3.6.5 Place the ACM waste while wet in leak-tight double bags.

3.6.6 Affix a danger label, in accordance with 2.3, to each bag prior to removal from affected areas. Label shall read as follows:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

3.6.7 Affix a legible label to each bag stating the contractor's name, the name of the ship the asbestos was removed from, the name of the facility where the work was performed and date of the removal. The label shall be in permanent waterproof marking.

3.6.8 Dispose of bags containing ACM waste in accordance with applicable federal, state, and local regulations. Provide a copy of the completed Waste Shipment Record to the SUPERVISOR within 15 days after initial shipment. |

3.7 Monitor the area for asbestos upon completion of work and after cleanup.

3.7.1 The airborne concentration of asbestos fibers after work and cleanup shall be less than 0.1 fiber, longer than 5 micrometers, per cubic centimeter of air on an 8-hour, time-weighted average basis. The workspace shall not be released for entry of unprotected personnel until verification

has been provided to the SUPERVISOR that the airborne level of asbestos is less than the 0.1 fiber level.

3.7.1.1 Submit one legible copy, in approved transferrable media, of the lab analysis listing results of air monitoring certifying the area to be less than 0.1 asbestos fiber longer than 5 micrometers per cubic centimeter of air, to the SUPERVISOR.

3.8 Remove ACM from salvage or scrap equipment, piping, and structural components prior to delivery to the GOVERNMENT.

4. NOTES:

4.1 See additional notification requirements of NAVSEA Standard Item 009-01.

4.2 Shipboard cabling as used in 3.1 refers to all shipboard cabling, with the exception of low smoke, coaxial cables, and lamp cord cabling.

4.3 The following ACB circuit breakers listed by manufacturer contain non-friable asbestos arc chutes:

4.3.1 SPD, ITE, ITE/Gould: 640R, 900RC, 901R, 1600R, 1600HR, 1600HRC, 2000HR, 2000RC (450V), 2601R, 2801R, 3200HR, 4000HR.

4.3.2 General Electric: All types.

4.3.3 Westinghouse: All DBN types.

4.4 The term "asbestos fibers" is defined in 2.1.

4.5 Salvage - Property has some value in excess of its basic material content, but repair or rehabilitation to use for the originally intended purpose is clearly impractical. Repair for any use would exceed 65 percent of the original acquisition cost.

4.6 Scrap - Material that has no value except for its basic material content.