

**SAFETY AND HEALTH WORK PRACTICES  
FOR CONTRACTORS  
WORKING WITH PEARL HARBOR NAVAL SHIPYARD  
AND INTERMEDIATE MAINTENANCE FACILITY (PHNSY & IMF)**

- Ref: (a) 29 CFR 1915, OSH Standards for Shipyard Employment  
(b) 29 CFR 1910, OSH Standards for General Industry  
(c) NAVSHIPYARDPEARL INST 11320.5, Shipyard Fire Regulations  
(d) NAVSEA Technical Publication S0570-AC-CCM-010/8010, Industrial Ship Safety Manual for Fire Prevention and Response (8010 Manual)  
(e) NAVSEA Standard Item FY 20  
(f) COMUSFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual

Encl: (1) Contractor Safety & Mishap Prevention Form

1. Purpose/Scope

a. Worker safety is the Navy's first priority. Ships undergo a variety of availabilities, all of which involve considerable repair, maintenance or refit work. This heavy industrial work is beyond the scope of normal shipboard operations and presents unique hazards. Safety and occupational health precautions and standards apply to all workers, military and civilian, but may differ slightly depending on the employer.

(1) Contractors working on Navy ships follow Federal Occupational Safety and Health Administration (OSHA) standards including references (a) and (b) above, which are invoked by the Naval Sea Systems Command (NAVSEA) Standard Items. These Standard Items may invoke specific, unique requirements, such as daily fire safety and housekeeping inspections.

(2) Navy safety standards are based on OSHA regulations, and promulgated via the Navy Occupational Safety and Health (NAVOSH) Program Manual, OPNAVINST 5100.23 series. Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY&IMF) civilian and military employees are also required to comply with local safety and health requirements.

(3) Ship's Force personnel follow safety standards contained in OPNAVINST 5100.19, NAVOSH Program Manual for Forces Afloat.

While the NAVSEA Standard Items, NAVOSH Program Manual and local Occupational Safety and Health (OSH) instruction differ slightly in application, they all comply with Department of Labor OSHA standards, references (a) and (b). Compliance with occupational safety and health standards, instructions and/or rules is an employer responsibility. Employers retain all legal obligations and liabilities for the safety and health of their employees.

b. The purpose of this Memorandum of Agreement (MOA) is to establish safety and health requirements for all project maintenance activities, ensure that contractor personnel comply with applicable safety and health requirements, and partner with PHNSY&IMF to ensure safe project sites throughout the availabilities.

c. PHNSY&IMF is recognized as a STAR site under OSHA's Voluntary Protection Programs (VPP). The contractor shall commit to operating an effective occupational safety and health management system that embraces the four basic elements of OSHA's VPP in support of this effort. These four elements include:

(1) Management Leadership & Employee Involvement. Top management must be visible. They must be "on the deck plates" on a regular basis discussing safety issues, demonstrating interest and dedication to safety and health performance, and encouraging dialogue with employees.

(2) Work Site Analysis. New or modified equipment processes, and materials are analyzed and evaluated. Self-inspections of all work sites are performed, hazards related to individual jobs and processes are analyzed. Related safety and health training is provided.

(3) Hazard Prevention and Control. Identified hazards must be eliminated or controlled in a timely manner. A hierarchy of controls must exist, beginning with engineering out or eliminating hazards; and extends to enclosing, barricading, or isolating the hazards; developing administrative procedures and controls; and finally to use of personal protective equipment (PPE).

(4) Safety and Health Training. Training must foster a positive atmosphere that instills the belief that safety is a team effort and includes everyone from top managers to line workers. Employee training should incorporate awareness of hazards, safe work procedures, and emergency preparedness.

d. PHNSY&IMF OSHE Office Points of Contact

Office Title	Code	Office Number	Cellular
OSHE Office	106	(808) 473-8000, ext. 4459	(808) 368-0106
Safety & Health Division	106.1	(808) 473-8000, ext.7382	(808) 347-0679
Health Branch	106.11	(808) 473-8000, ext. 4453	(808) 306-9317
Safety Branch	106.12	(808) 473-8000, ext. 4438	(808) 368-0473
Waterfront Branch	106.13	(808) 473-8000, ext. 4437	(808) 347-3197

2. General

a. The contractor shall ensure that their employees and sub-contractors comply with all applicable Federal and State OSH standards and regulations and/or specific Navy OSH requirements (e.g., NAVSEA Standard Items). The contractor shall submit a "safety and accident prevention plan" to PHNSY&IMF Occupational Safety, Health, and Environment Office (Code 106), for concurrence prior to start of work that addresses hazards inherent to the work planned, with appropriate controls described for those standards. The written plan shall include, but is not limited to:

(1) Work involving hazardous constituents (e.g., lead or chromate containing paint, asbestos, silica) that requires specific health controls and/or air monitoring. The contractor and sub-contractors are responsible to contract for their own industrial hygiene support as required.

(2) Hot work operations conducted on-board ship and in-and-around the dry-dock basin. The contractor shall identify the type of hot work being performed, means of fire prevention and control, firefighting equipment and capabilities, and emergency actions and procedures in the event of a fire. The contractor shall conduct housekeeping and fire prevention inspections required by NAVSEA Standard Items; ensure good housekeeping, and store materials and equipment in an orderly manner.

(3) The contractor shall provide the name, phone number, and pager number of the individual(s) responsible for the contractor's OSH regulatory compliance oversight.

b. The contractor shall notify the project manager and PHNSY&IMF OSH Office of injuries and occupational illnesses occurring on the project as soon as possible, and submit an Attachment A initial report IAW reference (e). If a serious injury/illness or electrical shock occurs, the Contractor shall notify the Regional Dispatch Center (RDC) by dialing 911 on any Shipyard phone or 474-1271, secure the scene, and notify Code 106.13. Copies of the completed mishap report shall be provided to PHNSY&IMF Code 106.13. Notify the project manager and Code 106.13 of planned mishap critiques. Provide copies of the completed critique reports to the OSH Office.

(1) The contractor shall provide total hours worked to PHNSY&IMF OSH Office on a monthly basis. Prime Contractors shall also provide their subcontractor's total hours worked (OSHA Directive CSP 03-01-002-TED 8.4 VPP: Policies and Procedures Manual).

(2) The contractor shall provide Total Case Incident Rate (TCIR) and Days Away, Restricted, or Transferred (DART) rate data to PHNSY&IMF OSH Office (per OSHA Directive CSP 03-01-002-TED 8.4).

(3) The contractor shall provide PHNSY&IMF Code 106.12 with a copy of their OSHA 300 Log annually (only injuries or occupational illnesses related to contract work) not later than 15 January of each year.

c. Maintain work areas in the highest reasonable state of cleanliness consistent with the work. As a minimum, trash, industrial waste and mechanical or grinding debris will be removed at least daily. If mechanical or grinding debris contains lead/chromate-containing paint debris, additional packing/labeling requirements and environmental disposal requirements may apply.

d. The Project Superintendent of contractor work shall oversee work that may impact the health or safety of PHNSY&IMF personnel. This includes work with or on hazardous materials or for work requiring boundaries and/or containments. Boundaries or containments shall have prominent signage indicating hazards and PPE required entering the area. Work shall be coordinated with the Project Superintendent to ensure PHNSY&IMF personnel are adequately protected and/or removed from the immediate work area as required. PHNSY&IMF may elect to have workplace monitoring conducted around the perimeters of work requiring boundaries and/or containments, in the interest of the Navy and to ensure adequate protection for PHNSY&IMF employees. Such monitoring will not replace any industrial hygiene sampling the contractor is required to perform according to the contract, nor will Navy monitoring results be used to determine potential exposures to contract personnel.

e. The contractor shall ensure that work performed by their employees does not create safety or health hazards for PHNSY&IMF personnel.

f. The contractor shall ensure that their employees comply with posted PPE requirements (e.g., safety glasses with side shields, hard hats, safety shoes, hearing protection. etc.) while going to, working on, and leaving the ship.

(1) Safety glasses with side shields shall be worn when personnel are conducting eye hazardous operations and when in or passing through an eye hazardous area. This includes:

(a) All portions of submarines, surface craft, and other vessels undergoing modification, alteration, repair, or overhaul.

(b) Dry docks (topside and basins) where submarines, surface craft, and other vessels are undergoing modification, alteration, repair, or overhaul. Topside includes the area around the dry dock between the chain guardrails and the outer portal crane track.

(c) Portions of lay down areas around dry docks and along piers, shops, and buildings throughout PHNSY&IMF where eye hazardous operations are conducted.

(2) Hard hats shall be worn in designated areas, in situations where injuries can be prevented by wearing hard hats, and where signs indicate the use of hard hats, pier areas where surface craft, submarines, and other vessels are undergoing repair availability. Hard hats shall be worn when going onboard the ship and while working on the exterior of the vessel as well as in the dry dock basin and topside around the dry dock. Topside includes the area around the dry dock between chain guardrails and the outer portal crane track. Hard hats shall be worn when working under the hull of the ship and when working under Herculite and other plastic (shrink wrap, polyethylene, etc.) covered staging structures.

g. The contractor shall ensure their employees and sub-contractors understand the PHNSY&IMF Fire Safety Plan, requirements and actions to take in the event a fire or emergency occurs during work onboard the ship. For all types of fires and emergencies, contact RDC. The Federal Fire Department (FFD) shall investigate whenever a fire aboard ship occurs. Ensure FFD access to inspect the fire scene, to ensure the fire is extinguished and to determine the cause of the fire. Ensure workers are familiar with shipboard fire prevention and evacuation, references (c) and (d):

(1) Smoking is prohibited aboard ship and in dry dock. Designated smoking areas shall be identified, posted, and provided with adequate butt cans and/or ashtrays. Smoking is prohibited outside of designated smoking areas.

(2) Rubbish and scrap materials will be disposed of in properly identified cans, receptacles, or bins. Rubbish will be cleared from the ship at the end of the workday. Work areas will be kept free of accumulation of combustible debris.

(3) Emergency and fire access lanes shall remain clear and free of obstruction.

(4) Brief employees assigned to shipboard work on evacuation plans, e.g., evacuation signals, escape and alternate routes, muster procedures and stand-by areas on pier-side. Unless specifically excused, contractor personnel are expected to fully participate in any fire or other emergency drills.

(5) Fire Safety

(a) Securing of Temporary Services

1. Service lines and leads shall be suspended 1/8" Orange Teflon coated stainless steel wire rope with 1/8" swage sleeve. Teflon wire rope shall be placed in hull in major passageways at 10 foot intervals

2. In addition, service lines shall also be suspended using a noncombustible string. All suspension points shall be secured to brackets, not be tied to ship's piping or equipment and shall not hinder equipment operation or valve positioning.

3. Temporary services shall be routed within the topmost area of the opening, such that the unobstructed opening of any doorway/hatch with services run shall be at least 50 inches high and 26 inches wide. Services shall be kept "High and Tight" ensuring clear passageways and will not obstruct access and egress.

(b) Quick Disconnect Fittings. Service lines and leads in topside hatches, watertight doors and through any other hull cut or hull penetration of a submarine in dry dock or that is waterborne shall have quick disconnect devices installed within 5 feet of the exterior opening, preferable located topside for hull openings and hatches. Ensure quick disconnect are marked with "orange" highly visible tape or tags for easy identification in the event of a casualty.

(c) Metal Canister Vacuums

1. To reduce the risk of a major fire in the ships undergoing availabilities, all vacuum cleaners used shipboard are required to have metal canisters. Vacuum cleaners shall be permanently and legibly marked with the appropriate responsible organization and/or shop/code. Metal canister vacuum cleaners are available through the Shop 06 Tool Room.

2. Plastic canister vacuum cleaners are allowed for general housekeeping in shops, dry docks and work areas off-hull. Plastic vacuum cleaners shall be labeled "NOT FOR SHIPBOARD USE".

3. Plastic canister vacuums found in-hull will be confiscated. Project Superintendents and Assistant Project Superintendents will ensure compliance.

h. The contractor shall perform hot work operations in confined and enclosed spaces in accordance with reference (a). The contractor shall ensure that their employees and sub-contractors understand, enforce and comply with shipboard hot work requirements.

i. Ensure contractor personnel do not relocate, alter, or modify PHNSY&IMF temporary services. Contractors shall not tap into or use temporary ventilation systems/ducting or installed temporary electrical power without prior authorization.

j. Ensure contractor personnel do not remove, alter, or tamper with staging erected by PHNSY&IMF.

k. Restrict entry into PHNSY&IMF work areas posted with hazard warning signs. Contractor personnel shall comply with all posted hazard control requirements. Entrance into PHNSY&IMF boundary or containment areas is restricted to personnel with necessary qualifications (e.g., medical, training, PPE). If entry is required, contact the PHNSY&IMF Business and Strategic Planning Office (Code 1214) to coordinate with applicable project management personnel.

l. Laser Safety. Notify the PHNSY&IMF OSH Office when any laser equipment will be used. Prior to using any laser equipment rated Class 3B or higher, provide the PHNSY&IMF OSH Department with a written report ensuring that a competent person has conducted appropriate LASER hazard evaluations. The evaluation shall include, but is not limited to, calculations and measurements of LASER safety parameters such as Nominal Hazard Zone (HMZ), Nominal Ocular Hazard Distance (NOHD), and required optical densities for LASER eyewear and/or shielding.

m. The contractor shall eliminate or control hazards promptly. Hazards requiring action and/or assistance by the project shall be immediately brought to the project's attention. PHNSY&IMF has the right to perform oversight inspections of contractor work sites to ensure compliance with NAVSEA Standard Items, safety and health requirements (including those contained in this MOA), and to ensure support of PHNSY&IMF VPP efforts. Such inspections will be documented in writing, and contractors shall provide written responses to the inspection reports detailing corrective actions taken.

### 3. Known Hazardous Procedures

a. The contractor will ensure their work does not create a safety or health hazard for other activities working in the area or downwind. In order to minimize personnel exposures to hazardous materials (both military and civilian) and to ensure personnel safety during the availability period, comply with requirements for the specific hazards listed below:

#### (1) Asbestos

(a) The contractor shall not undertake work requiring removal, repair and installation of thermal system insulation (TSI) material unless it has been confirmed to be asbestos-free by laboratory analysis of bulk insulation samples or review of material-specific documentation. Maintain a copy of the laboratory results/asbestos-free documentation on site while the TSI work operation is conducted.

(b) Contractors performing work on confirmed asbestos material shall comply with the State of Hawaii, Title 11 Hawaii Administrative Rules, Department of Health, Chapter 501, Asbestos Requirements and Chapter 504, Asbestos Abatement Certification Program. Provide copies of contractor Hawaii State certifications to the PHNSY&IMF Code 1214.

(c) The contractor must comply with storage, labeling, handling and disposal requirements of reference (c), and complete a Custody Transfer Form (CTF). CTFs are available by contacting the Environmental Division (Code 106.3) Hazardous Waste Packaging Facility. The bags shall only be disposed of in the specially designated asbestos dumpsters located at Building 1663. Contact the asbestos dumpster custodian, Code 106.3, at 473-8000, extension 4580, between the hours of 0630 and 1500.

(d) Restrict entrance into areas marked off by contractor personnel with "Asbestos Danger" signs to qualified asbestos workers.

(e) Prohibit installation of asbestos-containing materials including deck and floor coverings (e.g., vinyl asbestos tile and asbestos-containing tile mastic, terrazzo, underlayment, leveling compound). Ensure only asbestos-free decking materials are used for replacement of coverings to match original installation or replacement of floor covering for an entire space. Materials can be verified as asbestos-free from the review of product specifications.

## (2) Silica

(a) Deck covering shall be assumed to contain silica quartz unless confirmed to be silica-free by documentation. Crystalline silica quartz is a suspect human carcinogen and may pose a respiratory hazard when removed without adequate work and/or engineering controls.

(b) Ensure adequate containment and exhaust ventilation is provided for deck removal/installation operations with the potential for generating airborne concentrations of respirable silica dust. Mechanical removal of decking shall require total-compartment isolation with High Efficiency Particulate Air (HEPA) filtered local exhaust ventilation. Air exhausted from the silica containment shall not be re-circulated in shipboard spaces but shall be exhausted off the ship. During removal, deck material shall be removed in a wet state to minimize airborne dust generation. Total compartment isolation is required unless the contractor or sub-contractor provides documentation of recent (less than 1 year old) air monitoring performed by a Certified Industrial Hygienist of comparable shipboard deck removal operations that show the currently used work controls are sufficient to reduce respirable silica dust to below the permissible exposure limit (PEL).

(3) Man-Made Vitreous Fibers (MMVF) products have replaced asbestos as the primary source of insulation and lagging material and include glass fibers, glass wool, mineral wool and refractory ceramic fibers. MMVF may pose a respiratory hazard and cause skin and eye irritation when removed without adequate work controls. Ensure adequate containment and exhaust ventilation is provided for MMVF removal or installation operations with the potential

for generating airborne concentrations of MMVF. Mechanical removal of decking shall require total-compartment isolation with HEPA filtered local exhaust ventilation. Air exhausted from the silica containment shall not be re-circulated in the same space but shall be exhausted off the ship or to outside air. During removal, deck material shall be removed in a wet state to minimize airborne dust generation. Total compartment isolation is required unless the contractor or sub-contractor provides documentation of recent (less than 1 year old) air monitoring performed by a Certified Industrial Hygienist of comparable operation that show the currently used work controls are sufficient to reduce MMVF.

(4) Lead. Contractor operations may involve lead work, which could result in personnel exposure. Operations generating lead dust or fumes (e.g., mechanical removal of lead containing paint, transfer of lead ballast or hot work involving lead) shall be conducted in accordance with references (a) and (d) as applicable.

(5) Mercury. The PHNSY&IMF Controlled Industrial Area (CIA) is a mercury exclusion area. Components containing elemental mercury or mercury compounds must be controlled to prevent inadvertent release of this material.

(a) It is requested that the contractor provide a list of all mercury containing equipment and instrumentation being brought onboard ship or into the controlled industrial area in letter format by A-30. Forward the letter to PHNSY&IMF, Attention: Code 1214, with copies to Code 106 and Code 240. Negative reply is required.

(b) Expended, intact fluorescent tubes shall be wrapped or bagged at a rate of no more than ten tubes per bundle to contain spillage in case of breakage. Contact Code 106.3 for proper disposal requirements.

(6) Confined Space Entry/Gas Free Engineering. Where contractors are performing work at Navy Shipyards or ship repair facilities, the following provisions shall be observed:

(a) When performing shipboard operations, the contractor shall provide a Certified Marine Chemist or a shipboard confined space competent person as appropriate under the provisions of reference (a).

(b) When performing non-shipboard operations within a facility, the contractor shall provide a confined space competent person as required in ref (c).

(c) The contractor shall ensure that each employee who enters a confined or enclosed space and other areas with dangerous atmospheres is trained to perform all required duties safely.

(7) Freon. The following control procedures are invoked prior to commencing any work involving the use of Freon onboard ship:

(a) The ship Commanding Officer's permission will be obtained prior to use of Freon to perform maintenance.

(b) Freon will be handled as a controlled substance, used only while in port with adequate worksite ventilation provided.

**CONTRACTOR SAFETY & MISHAP INFORMATION**

Contractor \_\_\_\_\_

Contract No. \_\_\_\_\_

Project Title \_\_\_\_\_

Contractor local representative: \_\_\_\_\_  
(Print)

Phone number: \_\_\_\_\_ Title: \_\_\_\_\_

Local Government Representative overseeing contractor:  
\_\_\_\_\_  
(Print)

Phone number: \_\_\_\_\_ Title: \_\_\_\_\_

A. Brief description of work to be performed (Big picture):

\_\_\_\_\_  
\_\_\_\_\_

B. Location where work is to be accomplished:

\_\_\_\_\_  
\_\_\_\_\_

C. Time line for work accomplishment:

\_\_\_\_\_  
\_\_\_\_\_

D. Point of contact for contractor mishap reporting:

\_\_\_\_\_

Phone number: \_\_\_\_\_ Title: \_\_\_\_\_

E. List of work processes or procedures which could impact other employees working in the area and controls or preventive measures to be taken to mitigate hazard: \_\_\_\_\_

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F. Safety and Health Plans. Identify and provide a copy of the safety and health plans applicable to the contracted work. (e.g., hazard communication program, confined space program, asbestos abatement plan, lead abatement plan, respiratory protection plan, and emergency response plan.)

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