

DEPARTMENT OF THE NAVY

PACIFIC MISSILE RANGE FACILITY P.O. Box 128 KEKAHA, HAWAII 96752-0128

IN REPLY REFER TO:
PMRFINST 5100.2J
N64/FD:cs
28 Feb 20

PACMISRANFAC INSTRUCTION 5100.2J

From: Commanding Officer, Pacific Missile Range Facility

Subj: HAZARDOUS MATERIAL CONTROL AND MANAGEMENT PROGRAM

Ref: (a) OPNAVINST 5100.19

(b) OPNAVINST 5100.23

(c) OPNAV-M 5090.1

Encl: (1) HMC&M Program Annual Inspection Sheet

- 1. <u>Purpose</u>. To attain and maintain operational effectiveness, Navy barges require specific types and quantities of hazardous material (HAZMAT). Great care must be taken in handling, using, and storing HAZMAT to prevent injury to personnel, damage to equipment, or harm to the environment. Risks associated with HAZMAT are greater aboard ship than ashore because of the limited number, confined nature, and "at sea" environment of shipboard spaces. Consequently, both special precautions and an effective HAZMAT program are needed. The maintenance of safe and healthy working conditions for HAZMAT is the responsibility of the chain of command. Implementation begins with the Mobile-At-Sea-Sensor System (MATSS) Officer-In-Charge (OIC) and extends to each individual crewmember and all personnel embarked temporarily or performing work on the vessel.
- 2. Cancellation. PMRFINST 5100.2H.

3. Responsibilities

- a. In accordance with references (a) and (b), the Hazardous Material Control and Management (HMC&M) Program Manager must perform the following:
- (1) Provide awareness training to all newly reported personnel upon check-in and annually thereafter.
- (2) Audit the program utilizing enclosure (1) upon assuming the duties as the HMC&M Program Manager and annually thereafter.
- (3) Maintain a program binder with applicable instructions, Safety Data Sheets (SDSs) for all HAZMAT onboard, and an Authorized Users List (AUL). The AUL shall be a list consisting of the manufacturer, nomenclature, SDS number, and location of all HAZMAT onboard.

- (4) Store and maintain SDSs for each HAZMAT item in the storage lockers.
- (5) Ensure all historical records, audits, and documentation are maintained in the program binder for a minimum of two years.
 - (6) Inspect each HAZMAT locker monthly, at a minimum.
- (7) Provide monthly program updates to the MATSS OIC and appropriate supervisors or more frequent as deemed appropriate.
- (8) Ensure applicable Occupational Safety Health Administration HAZMAT publications are available either by hard copy or via the internet.
- (9) Ensure that HAZMAT not being used is stored in an authorized container with the appropriate and required labels.
- (10) Ensure no HAZMAT is being used or brought onboard the barge unless there is an SDS readily available for reference.
- (11) Maintain a spill kit consisting of Personal Protective Equipment (PPE), absorbent materials, and cleanup items that shall be used solely for the purpose of a HAZMAT spill response.
- b. All crewmembers and especially supervisors must be active entities in order for a successful HMC&M Program to exist. Additionally, it is the responsibility of all crewmembers to:
 - (1) Ensure personnel are utilizing the appropriate PPE when utilizing HAZMAT.
 - (2) Ensure HAZMAT Waste is properly stored and disposed of.
- (3) Ensure HAZMAT not being used is stored in authorized containers with the required labels.
- (4) Ensure HAZMAT is stored ONLY in an area designated by the HMC&M Program Manager.
- (5) Ensure any observed violations are corrected immediately and reported to the appropriate supervisor for trend analysis and compliance with command culture environment.
- (6) Ideas, inputs, and feedback which are provided to the HMC&M Program Manager to continually enhance this program in order to make it more user friendly while adhering to compliance regulations.
- 4. <u>Training</u>. As per reference (a), the Occupational Safety and Health Administration (OSHA) regulations require employers to train their employees on the specific hazards and safe work

practices for the HAZMAT and chemicals they use in the workplace. The regulations include training requirements for personnel involved in HMC&M and personnel who must handle HAZMAT or hazardous waste (HW). HAZMAT awareness training must be provided at indoctrination (within five days of checking onboard) and annually thereafter to all personnel. This training must include information on the process for requesting material from the appropriate sources, reutilization, handling, storing (compatibility), use, disposal, spill response and reporting. In addition, employees must know how to use an SDS, what it is, what it contains, and where a copy is available for review.

- 5. <u>Procedures</u>. It is imperative that the HAZMAT program is followed to ensure standardization, compliance, effectiveness, and efficiency for the safety of personnel.
- a. Labels: All HAZMAT containers must be labeled with either the original manufacturers label, DD 2521 Hazardous Chemical Warning Label (8-½ x 11), DD 2522 Hazardous Chemical Warning Label (4 x 6), or one generated by barge leadership if the original label is damaged or secondary containers are used. Barge generated labels must meet the following criteria:
- (1) Labels for barge identification of HAZMAT containers must clearly identify at a minimum the product name, the manufacturer's name, stock number (if applicable), and the nature of the hazard (e.g., flammable, corrosive). A label may be a tag, sign, placard or gummed sticker. All material transferred into another container, such as a spray bottle, small dropper bottle, or grease gun must be labeled with the minimum required information.
- (2) DD 2521 Hazardous Chemical Warning Label (8-½ x 11) and DD 2522 Hazardous Chemical Warning Label (4 x 6) forms are available at the Department of Defense Forms Management Program Web site at: http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm.
- b. Inspections: Random spot, quarterly and annual inspections are the most effective way to determine that the HMC&M Program is adhered to and followed. Inspections can be conducted anytime by the HMC&M Program Manager, but shall not be longer than the prescribed intervals. Missing inspections and not keeping an 'up-to-date' program binder can provide crewmembers with inadequate references, improper PPE requirements, and emergency medical information. If not updated regularly, this could cause loss of eyesight and injury or death.
- c. Storage/Disposal: Corrosive and flammable HAZMAT shall never be stored in the same locker. This instruction and applicable SDSs pertaining to each respective storage locker will be in the vicinity of that locker for easy reference. Storage of HW while at sea shall be in such a way that different chemicals do not mix and any larger quantities, 50 gallon and above, have a secondary containment to prevent any accidental environmental spills. As per reference (c), HAZMAT required in support of the U.S. Navy's mission must be packaged, labeled, handled, stored, transported, issued, tracked, used, and disposed of in a manner compliant with Occupational Safety and Health Administration (OSHA) requirements and Department of Transportation, Emergency Planning and Community Right-to-Know Act, Pollution Prevention Act, Resource Conservation and Recovery Act, Clean Air Act, and other applicable laws, Executive Orders, and regulations. An effective HMC&M Program is critical to achieving

pollution prevention (P2) goals by minimizing HW generation and subsequent disposal costs. U.S. Navy policy is to employ a comprehensive HMC&M approach to support the various environmental requirements associated with the use of HAZMAT. HW will not be disposed of while underway and will be disposed of only by qualified Naval Facilities Engineering Command, Hawaii technicians.

- d. AUL: The AUL provides a comprehensive list of all materials onboard, the manufacturer, and the 'common' name of the HAZMAT, the ordering number, the SDS number and location.
- 6. <u>Spill Response and Reporting</u>. Because of the extremely hazardous nature of many materials used aboard ships, only trained personnel are authorized to respond to a HAZMAT spill. Personnel must be trained in order to clean up small HAZMAT spills as well. For descriptive purposes, the spill response procedures have been divided into nine phases: Discovery and notification, Initiation of action, Evaluation, Containment and damage control, Dispersion, Cleanup and decontamination, Disposal of contaminated materials, Certification for re-entry, Follow-up reports and spill response kit replenishment.
- a. <u>Discovery and notification</u>. Spills or potential spills of HAZMAT may be discovered by regularly scheduled inspections of workshops and during routine operations. All discoveries of spills or situations that may lead to a spill must be reported immediately to supervisory personnel and the OIC. Crewmembers are not to remain in the area to investigate the spill. Whenever possible, however, the discoverer or initial response team must report the information contained in the following subparagraphs 5a(1) through 5a(10).
 - (1) Time of spill discovery.
 - (2) Location of spill.
 - (3) Identification of spilled material.
 - (4) Behavior of material (reactions observed).
 - (5) Source of spill (e.g., tank or container).
 - (6) Personnel in vicinity of spill (list by name and department).
 - (7) Volume of spill.
- (8) Anticipated movement of spill (e.g., leakage to lower deck passage from amidships toward galley, floating in water toward pier, etc.).
- (9) Labeling or placarding information (copy data from spilled container only after exposure to spill is eliminated).
- (10) Overboard spills of reportable quantities of oil (in bilge water or as oily waste) and HAZMAT must be reported in accordance with reference (b).

b. <u>Initiation of Action</u>. Coordination and direction of spill response efforts at the scene of a HAZMAT spill shall be accomplished any knowledgeable crewmember who is to initiate the following actions:

CAUTION:

Do not enter the contaminated area until the necessary protective clothing and equipment have been determined

- (1) Evacuate all personnel from areas that may be exposed to the spilled material.
- (2) Cordon off the affected area.
- (3) Arrange first aid for injured personnel.
- (4) Establish a command post and communications network.
- (5) Prevent spills from entering other compartments by any means that do not involve personnel exposure to the spill, such as closing drains, ventilation ducts, doors, and hatches.
- (6) Disperse gases or vapors to weather using local exhaust ventilation or by natural ventilation such as opening doors or hatches. If atmosphere is suspected to be flammable or explosive, only explosion-proof fans are to be used for ventilation.
- (7) Eliminate any fire or explosion hazards such as electrical equipment, incompatible materials, and open flames.
- c. <u>Evaluation</u>. Proper evaluation of a spill can prevent fires, explosions, and personal injury, or permit steps to lessen their impact. This evaluation consists of the following three steps:
- (1) Obtain as much of the following information as possible from container labels and SDS before starting response actions.
 - (a) Type and concentration of the spilled material.
 - (b) Hazardous characteristics of the spilled material, such as:
 - 1. flash point.
 - 2. toxicity.
 - <u>3</u>. corrosiveness.
 - <u>4</u>. potentially incompatible substances.

- <u>5</u>. effects resulting from exposure (fainting, dizziness, skin or eye irritation, nausea); and
 - <u>6</u>. first aid measures for exposure.
 - (c) Determine dangerous conditions or potential consequences of the spill, including:
 - 1. Fire or explosion.
 - 2. Presence of oxygen-deficient atmosphere in compartment.
 - <u>3</u>. Presence of toxic or explosive gases.
 - 4. Possibility of dangerous vapors being drawn into ship's ventilating system.
- <u>5</u>. Other HAZMAT in the compartment that would play a role in a fire or explosion or is incompatible with the spilled material.
- (d) Determine from the SDS the appropriate spill response equipment and protective clothing necessary for safe and effective response.
- d. <u>Containment and Damage Control</u>. Actions taken during this phase are directed toward controlling the immediate spread of the spill and minimizing the impact to the ship and crew. Depending on the type of spill, some or all of the following procedures may be employed.
- (1) Fight fire (if any), being careful to use firefighting methods compatible with the material involved.
 - (2) Shut off or otherwise stem the spill at its source, whenever feasible, by:
 - (a) replacing leaking containers.
 - (b) plugging leaks in tanks.
 - (c) emptying tank of remaining contents.
 - (d) encapsulating a leaking container into a larger, liquid-tight container.
 - (e) segregating leaking containers.
- (3) Predict spill movement and take further action to prevent the spill from possibly entering other compartments by closing scuppers, drains, ventilation ducts, doors, or hatches.
- (4) Contain liquid material using barriers, such as sand, sorbents, or other equipment suitable to dam the flow.

- e. <u>Dispersion of Gas or Vapor</u>. If a flammable gas or vapor is released as a result of the spill, the gas or vapor must be dispersed or diluted as soon as possible. The gas or vapor must not be allowed to enter other compartments. Disperse using fans, ventilation, and natural air.
- f. <u>Cleanup and Decontamination</u>. During this response phase, personnel, as directed by the on scene leader, must employ the spill cleanup materials as applicable. The material in these spill response kits must only be used for spill response operations. All surfaces must be thoroughly cleaned of the spilled material. After the spill cleanup, the compartment must be thoroughly ventilated. Reusable protective clothing must be thoroughly decontaminated and otherwise maintained before it is returned to its proper storage location.
- g. <u>Disposal of Contaminated Materials</u>. All non-reusable cleanup materials are to be placed in impermeable containers, labeled, stored and disposed of per reference (b). These materials include unrecoverable protective clothing, sorbents, rags, brooms, and containers.
- h. <u>Certification for Safe Re-Entry</u>. The spaces affected by the spill must be certified safe by the OIC before normal shipboard operations are resumed in that space. The OIC must ascertain the following before allowing re-entry.
- (1) All surfaces (deck, counters, bulkheads, and overheads) have been thoroughly cleaned of the spilled material.
 - (2) All compartments have been adequately ventilated.
- (3) All contaminated cleanup materials, including protective clothing, have been packaged, marked and handled as used HAZMAT.
 - i. Follow-up Reports and Spill Response Kit Replenishment
- (1) Reporting procedures for overboard oil or HAZMAT spills are contained in references (b) and (c). The report must contain the following information:
 - (a) Date spill occurred.
 - (b) Spill location.
 - (c) Identity of spilled material.
 - (d) Cause(s) of spill.
 - (e) Damage or injuries resulting from the spill.
 - (f) Response and cleanup measures taken.
 - (g) Any problems encountered.

- (h) Method of disposing of contaminated material.
- (i) Action taken to prevent the repeat of a similar spill.
- (2) All depleted spill response kit components must be replenished with new stock and the kit returned to its designated storage location.
- 7. <u>Policy</u>. This instruction shall be reviewed for completeness and thoroughness every five years and will remain in effect until superseded.
- 8. <u>Records Management</u>. Records created as a result of this instruction, regardless of media and format, must be managed per Secretary of the Navy Manual 5210.1 of January 2012.

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Releasability and distribution:

https://g2.cnic.navy.mil/tscnrh/PMRFBARKINGSANDSHI/PMRF% 20 Directives/Forms/Instructions.aspx

HMC&M PROGRAM ANNUAL INSPECTION SHEET

QUESTIONS:	YES OR NO
1. Did the Command HMC&M Program Manager complete an initial Program Manager Assessment and annually thereafter?	
2. Has newly reported personnel received intial HAZMAT training and is the record of the training kept on file for at least two years?	
3. Do containers containing HAZMAT have correct product labeling?	
4. Does the HMC&M Program Manger maintain a program binder with all applicable instructions, all SDSs for all HAZMAT onboard, and an Authorized Users List (AUL)?	
5. Has each item on the activities AUL been assigned a unique identifier (letter, number or alphanumeric) for easy identification and reference?	
6. Does the HMC&M Program Manager maintain applicable SDSs for each chemical at each satellite HAZMAT storage locker?	
7. Does the HMC&M Program Manager maintain historical inspection sheets, AULs, and records of training provided for a period of at least 2 years?	
8. Are all publications available for use by personnel responsible for ensuring OSHA compliance for the Hazardous Material Control and Management Program?	
9. Does the HMC&M Program Manager provide monthly program updates to the MATSS Officer In Charge (OIC) and appropriate supervisors or more frequent as deemed necessary?	
10. Does the HMC&M Program Manager inspect each HAZMAT locker monthly, at a minimum, utilizing Enclosure 3, to ensure standardization and compliance?	
11. Does the HMC&M Program Manager ensure that personnel are utilizing the appropriate Personal Protective Equipment when utilizing HAZMAT?	
12. Does the HMC&M ensure HAZMAT Waste is properly stored awaiting disposal and is properly disposed of?	
13. Does the HMC&M ensure applicable Occupational Safety Health	

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Administration HAZMAT publications are available for reference either by hard copy or via the internet.		
14. Does the HMC&M ensure HAZMAT is stored in appropriate containers with the appropriate labels?		
15. Does the HMC&M ensure that no HAZMAT is used or brought onboard	f	

the barge unless there is a SDS readily available for reference?

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