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DRAFT Hazardous Material Off-Load and Turn-In Guidance

1. Purpose

a. Ensure hazardous material afloat is managed in accordance with OPNAVINST 5100.19 (series), NSTM 670, OPNAVINST 5090.1 (series), and the NAVSUP P-485. (Note: The content of this manual will be reflected in the next revision of the NAVSUP P-485.)

b. Ensure hazardous material that is no longer required, but currently aboard afloat units and determined to be “used/excess hazardous material (HM),” is properly processed by afloat personnel prior to receipt by the shore installation providing HM offload support. CHRIMP technicians will determine the restock/disposal potential.

c. Ensure proper consolidation of like material, preparation of turn-in documentation, proper packaging of material, and appropriate labeling prior to review and acceptance by the shore side support activity.

d. Provide standardized feedback to the ships and their respective superior commands on offloads that do not conform to state, federal, or Navy regulations. Feedback to the unit will be in the form of a “nonconformance report” that details the scope of the violation, the potential repercussions, and corrective actions to prevent recurrence.

e. Ensure the safety of shipboard, NAVSUP, and NAVFAC personnel, as well as ships and equipment by properly segregating, containerizing, and managing HM at all times during the collection and offload process.

2. Applicability

This document applies to all U.S. Navy vessels (surface ships and submarines) offloading HM at locations listed in section 4.f.

3. Preparation Process.

a. Afloat Hazardous Material Minimization Center (HAZMINCENTER) Responsibility:

1) On the vessel, the afloat HAZMINCENTER shall collect and store all used, excess, and expired HM for which they are the cognizant authority. A designated collection area ensures an organized and efficient offload effort and allows HM to be offloaded in a way that does not endanger the vessels' personnel and the environment.

b. Used/Excess HM Turn-in.

1) Used or excess HM shall be processed through the HAZMINCENTER and stored in an approved storage location. If an approved storeroom is not available for collection and used/excess HM is stored in an area without proper ventilation and fire-fighting systems, follow the guidance listed below for each category of HM.

2) The selected consolidation area shall be large enough to accommodate all necessary drums and containers, configured to be easily accessible by Material Handling Equipment (MHE), and protected from the weather.

3) Collection areas located on the weather deck or exposed to the weather shall employ measures to secure material to prevent accidental discharge overboard. Responsible personnel for the area shall perform daily inspections of the collection area to ensure that the area remains in

safe working order and that no additional material was added without Supply Department knowledge.

4) A standardized turn-in document has been developed based on the Hazardous Material Inventory Control System – Windows (HICSWIN) hazardous material management system. The document is essentially a spreadsheet containing all the information necessary for NAVSUP and NAVFAC to properly evaluate, restock, or dispose of unwanted hazardous materials and waste. This document will be used for HM offload and turn-in at all Navy ports.

c. General Collection Requirements.

1) Receive and store HM with like material and properly segregate containers from incompatible material per the compatibility charts in NSTM 670. If the material is unknown, segregate separately from all other HM. Never containerize, store, stage or offload oxidizers with flammables on the same pallet/triwall.

2) The type and size of collection container (i.e. 5-gallon vs. 55-gallon drum) for each type of HM shall be based on HM originator knowledge and in accordance with this document. A list of NSNs for HM containers can be found in NSTM 670, Volume 1, Appendix G.

3) Collect HM in a manner to prevent leakage.

4) For offload while in-port or to a MSC support vessel:

a) If drums cannot be transported or are not expected to become full, partial or empty HM containers stored within a drum can be transferred to a clear, plastic bag for offload.

b) Only dry materials may be turned in using clear bags (e.g., rags or empty and dry containers.)

5) Do not transfer to a bag if liquid or strong vapors are present in the drum. Consult the Health and Safety Officer. Note: Material placed in non-transparent bags will be returned to the vessel (for vessels in port) and will result in a non-conformance report to the unit's Supply Officer.

d. Labeling.

1) Containers shall be clearly and properly labeled with the original manufacturer's label or one generated by the vessel if the original label is damaged or secondary containers are used. Vessel-generated, approved HM labels, per NSTM 670, Volume I, include the DoD Hazardous Chemical Warning Label (DD Form 2521/2522) and Hazard Classification Code (HCC)

2) For all material to be off-loaded as Used HM, a Used HM Identification Label (NSN 0107-LF-016-9100) – see below - must be clearly visible on the exterior packaging (outside of the shrink wrap, cardboard box, drum, etc.) Ensure the following are identified:

a) What the material is used for (e.g. used spring bearing lube oil, circuit board cleaning solvent, dried out epoxy paint).

b) Known impurities the material may contain based on routine planned maintenance system (PMS) analysis (e.g. Naval Oil Analysis Program (NOAP) tests results).

c) Special stowage requirements.

d) When multiple NSNs/Products are offloaded on the same pallet, within a drum or container, the label shall list the hazard (example flammable paint).

3) If the contents of the container or drum are unknown, record "Unknown Material" on the Used HM Identification Label and provide any information relevant to the process generating the HM. Unknown materials will require analysis and the vessel may be billed for the laboratory costs and associated labor charges required to identify any "unknown" HM accepted by the shore activity.

USED	
SHIP _____	WORK CENTER _____
NAME OF MATERIAL _____	
PROCESS IN WHICH MATERIAL USED _____	
ANY KNOWN IMPURITIES _____	
SPECIAL STOWAGE REQUIREMENTS _____	
DIVISION OFF. SIGNATURE _____	DATE _____
HAZARDOUS MATERIAL	
<small>OPNAV 5100/18 (12-93)</small>	<small>DESIGNED-PERFORM</small>

e. Specific used/excess HM categories.

1) Empty Paint Cans and Empty Solvent Containers

a) Ensure the can or container is empty. Per NSTM 670, Volume 1, a container is considered empty if it meets both of the following criteria:

i) There is no liquid in the container - to ensure the container holds no liquids, turn the container upside down, and pour paint/solvent into a compatible container for proper disposal until there is no free flowing liquid.

ii) Ensure that no liquid is trapped in the container under a surface film (common in paint) and that there is less than one inch of solid residue (hardened product) on the bottom.

iii) Dry the can or container in a metal, open container beyond 12 nautical miles (NM). To ease the process, use a spatula to remove residual material. NOTE: When within 12 NM, certain jurisdictions have very specific requirements on air-drying so contact your local Navy Environmental Coordinator.

b) If a can compactor is installed aboard, crush dried containers in accordance with NAVSEA operating instructions for the equipment. Do not crush non-dry containers. Failure to follow NAVSEA policy on compactor operation will result in a nonconformance report. Oil and other cans may be included provided they are completely empty before crushing.

c) If a compactor is not available, pack uncrushed paint and solvent cans in removable-head steel drums. Keep lid closed when not in use.

d) If using the can compactor, ensure the resulting crushed can “pucks” are properly wrapped in plastic film prior to offload.

d) Store steel drums in Flammable Liquid Storage Cabinet (FLSC) or cover with Fire Containment Cover (FCC).

2) Liquid Paint

a) Consolidate in a closed-top steel drum

b) Multiple paint NSNs may be poured into one drum

i) Do not mix part A and part B paints

ii) Do not consolidate isocyanate paints (check label or Safety Data Sheet (SDS) with other paints or HM)

iii) Do not fill container greater than 90% of capacity to allow for expansion. This would equate to approximately 3.5 inches of head space in a 55 gallon drum.

iv) Store drums and containers in FLSC or cover with FCC.

3) Paint Chips

a) Collect in clear plastic bags.

b) Store bags in removable-head steel drums.

c) Ensure the drum is only half full to prevent exceeding the maximum weight of the drum.

4) Paint rags, paint debris, brushes, and rollers

a) Collect in clear plastic bags.

b) Do not pour paint into the bags. Wet paint on rollers, brushes, etc., is acceptable.

c) Multiple compatible paint NSNs are allowed in one bag.

d) If wet, keep materials used with isocyanate paint separate (check label or SDS)

e) Store bags in removable-head steel drums. Keep lid closed when not in use.

f) Store drums and containers in FLSC or cover with FCC.

5) Fuel – Flammable

a) Flammable fuels have HCC of F1-F4. Flammable fuels may include, but are not limited to JP-5 and gasoline.

b) Consolidate into a closed-top steel drum following bonding and grounding rules. Check with your Safety Officer, however common practices include:

i) Keeping metallic transfer equipment (e.g., fill spout, nozzle, fill pipe, funnel, strainer, etc.) in continuous contact with the edge of the fill opening to maintain bonding and ensuring drum is grounded to dissipate any static electricity

ii) Attaching a bond wire between metal parts of both containers followed by attaching a ground wire between metal parts of each container to the ground

c) Multiple NSNs may be present in a single drum if they meet compatibility specifications found in NSTM 670.

d) Do not fill container greater than 90% of capacity to allow for expansion. This would equate to approximately 3.5 inches of head space in a 55 gallon drum.

e) Store drums and containers in FLSC or cover with FCC.

f) SPECIAL NOTE: Keep gasoline separate from all other fuels.

6) Fuel Filters – Flammable

a) Drain filters into collection drums.

b) Collect the filters in removable-head steel drums. The filters may be placed in clear, plastic bags before placing in the drum. Keep lid closed when not in use.

c) Multiple fuel filter NSNs may be disposed of in a single drum.

d) Store drums and containers in FLSC or cover with FCC.

7) Oils and Lubricants (Liquid) – Combustible

a) Combustible oils and lubricants have HCC of V5 and V6. They include 2190, hydraulic fluid, and engine oil.

b) Consolidate into a closed-top steel drum or leave in original container.

c) Multiple NSNs may be present in a single drum if they meet compatibility specifications found in NSTM 670.

d) Do not fill container greater than 90% of capacity to allow for expansion. This would equate to approximately 3.5 inches of head space in a 55 gallon drum.

8) Oily Rags, Oily Debris, and Absorbents

a) Burn lightly oiled rags (not dripping without wringing) in an incinerator if installed.

b) If unable to burn, collect in clear plastic bags. Double-bag, and ensure no free liquids.

c) Multiple NSNs may be present in a single bag if they meet compatibility specifications found in NSTM 670.

d) Collect clear plastic bags in a removable-head steel drum. Keep the lid closed when not in use.

9) Oil filters - Combustible

a) Drain filters into collection drums.

b) Collect the filters in removable-head steel drums. The filters may be placed in clear, plastic bags before placing in the drum. Keep lid closed when not in use.

c) Multiple NSNs may be present in a single drum if they meet compatibility specifications found in NSTM 670.

10) Aerosol cans

a) Collect empty cans in removable-head steel drums. Keep lid closed when not in use.

b) Remove plastic cap and nozzle from can before placing in drum and treat as plastic waste material (normally placed in the plastic waste processor).

c) Do not puncture aerosol cans. There are no NAVSEA approved devices to puncture cans.

d) With the exception of the below, multiple NSNs may be present in a single drum if they meet compatibility specifications found in NSTM 670.

i) Keep pesticides (i.e., insecticide cans) and corrosives (i.e., oven cleaning compound, and polyurethane coating cans) separate from other aerosols.

e) Store drums in FLSC or cover with FCC.

11) Liquid Solvents – Flammable

a) Flammable solvents have HCC of F1-F4. It includes paint thinners and isopropyl alcohol.

b) Do not pour unused solvents into a collection container. Offload in original container. Original containers may be consolidated into a removable-head steel drum. Keep the lid closed when not in use.

c) Used solvents from painting, repainting, cleaning or other purposes should be accumulated in an appropriate, compatible container.

d) Store containers in FLSC or cover with FCC.

12) Adhesives – Flammable

a) Do not pour adhesives into a collection container. Offload in original container. Original containers may be consolidated into a removable-head steel drum. Keep the lid closed when not in use.

b) Store drums in FLSC or cover with FCC.

13) Batteries

a) Segregate batteries by type (e.g. lithium, alkaline, lead-acid, nickel-cadmium, nickel metal hydride, silver, zinc).

b) Tape battery terminals. Clear tape is preferred. Do not obscure labels.

c) If small enough, segregate (by type) into plastic drums.

d) If batteries do not fit into a plastic drum, segregate by size and palletize. Batteries must be secured to the pallet using wire banding or shrink wrap. Any damaged batteries must be packaged and offloaded separately.

14) Lamps – e.g. Fluorescent, Incandescent, HID, LED, and Mercury Vapor

a) Retain intact. Package in a manner to prevent breakage. Use the original container or other box, if available.

b) Do not crush lamps. Some lamps emit a small amount of mercury vapor that can be hazardous to your health. Under no circumstances shall crushing be used as a means to reduce the volume of these bulbs.

c) Segregate lamps by type, i.e. fluorescent, LED, etc., to allow for proper disposal.

15) Other HM Categories

a) Segregate by HCC per Chemical Compatibility Chart in NSTM 670.

b) Prevent co-mingling of incompatible products and containers.

4. Offload Process

a. Ensure collection containers are correctly marked and accurately labeled to identify the type of HM stored in each container.

b. All HM for offload shall have an electronic HM offload report in Excel format sent to the appropriate major homeport email accounts (4.f. below) [email accounts will be obtained from your local CHRIMP Technician, and will be included in the final document] for screening and processing. Offloads will be scheduled after the receiving facility has contacted the HM offload requestor. Do not place HM on the pier in advance of scheduled off-load time. If the process is not followed, a non-conformance report will be issued.

c. Surface vessels create offload report in HICSWIN and manually input manufacturer (column J) and SDS information (column M). Any items not automatically loaded from HICSWIN will need to be manually added to the report.

d. Submarines will use HM offload report template and manually input all required information.

e. In the subject line of the email, ensure you list the location of desired pick-up (i.e., "Used/Excess HM pick-up – Bremerton" or "Used/Excess HM pick-up – Little Creek", etc.).

f. Each major homeport HM offload functional account is listed below. The HM offload functional account includes staff from the shore HAZMIN center, Afloat CHRIMP tech and NAVFAC environmental function, who will coordinate the offload request. [With the exception of the account for MIDLANT (HMOffload-NORF@navy.mil), these are only recommended at this point, and not actual e-mail addresses. Emails will be set up per local guidance]:

- | | |
|---|--|
| 1) _____ | (Bahrain and Jebel Ali) |
| 2) _____ | (Bangor, WA and Indian Island) |
| 3) _____ | (Diego Garcia) |
| 4) _____ | (Everett, WA) |
| 5) _____ | (Groton, CT) |
| 6) _____ | (Guam) |
| 7) _____ | (Kings Bay, GA) |
| 8) _____ | (Mayport, FL) |
| 9) NAVFAC.ML.IPTRH.HazMat(NRFK)@navy.mil | (Norfolk, VA, Little Creek, Yorktown) – ACTIVE |
| 10) _____ | (Okinawa, JA) |
| 11) _____ | (Panama City, FL) |
| 12) _____ | (Pearl Harbor, HI) |
| 13) _____ | (Rota, Spain) |
| 14) _____ | (Sasebo, JA) |
| 15) _____ | (San Diego, CA – NASNI, NAVSTA & Subase) |
| 16) _____ | (Singapore) |
| 17) _____ | (Yokosuka, JA) |

g. Afloat CHRIMP technicians will screen the HM offload report for potential reuse and annotate in column X whether acceptable by shore HAZMIN center. If not acceptable, annotate reason in column X. CHRIMP tech will complete columns I, L and N and email the HM offload report to the HM offload requestor and HM offload functional account to coordinate pickup of material. Do not

place HM on the pier in advance of response. If the process is not followed, a non-conformance report will be filed.

h. Once material is authorized to be off-loaded, follow the guidance found in section three of this document. Additionally:

1) Secure containers on pallets for offload.

2) Ensure containers are clearly and properly labeled with:

a) The original manufacturer's label or one generated by the vessel if the original label is damaged or secondary containers are used. Vessel-generated, approved HM labels, per NSTM 670, Volume I, include the DoD Hazardous Chemical Warning Label (DD Form 2521/2522)

b) For all material to be off-loaded as Used HM, a Used HM Identification Label (NSN 0107-LF-016-9100) – see Paragraph D – “Labeling” for example) must be clearly visible on the exterior packaging (outside of the shrink wrap, cardboard box, drum, etc.)

c) For pallets or triwalls containing multiple compatible HCCs destined for disposal (i.e. not restocking), each HM must be individually labeled and an inventory attached on the outer packaging.

3) Ensure NSTM 670 Volume 1 compatibility requirements are followed (i.e., do not place a drum of oxidizers on the same pallet as flammables.)

4) If any of the containers are damaged, badly rusted, or poorly sealed, the container and its contents shall be transferred to a new compatible container, or can be over-packed (an enclosure used to contain one or more packages to form one handling unit for convenience of handling and stowage) and properly labeled prior to offload.

5) A knowledgeable vessels' representative (LSC or above) must verify that all material has a Used/Excess HM label that is clearly visible to the exterior packaging of the item or collated (banded/shrink-wrapped) unit and shall be present at the time of offload and pickup. Do not leave used or excess HM unattended on the piers. This is considered “abandoned” waste and is subject to regulatory enforcement and potential fines from state regulatory agencies or the EPA.

5. NAVFAC Responsibilities

a. Document HM offloaded and destined for disposal.

b. Add any items that were not initially on the HM offload report and note on the non-conformance report (NCR).

c. Note any discrepancies on the NCR (see Attachment A for NCR).

d. Send initial NCR email to SUPPO (Ship) with cc to ASUPPO (Ship) within 3-5 working days of discovery (see Attachment B for sample email).

e. If acknowledgement of email is not received within 3 working days, then government representative will elevate first NCR to XO (Ship) with cc to SUPPO (Ship) (see Attachment C for sample email).

f. NAVFAC will provide quarterly reviews of all NCRs and send data to Fleet Afloat Environmental Program Managers.

