

WA Army National Guard
Pamphlet 200-3

Environmental Quality

Hazardous Materials Management Program



Headquarters
Washington National Guard
Camp Murray, WA
11 April 2023

SUMMARY of CHANGES

This pamphlet was revised throughout to update acronyms.

Contacts were updated throughout.

Responsibilities have been updated to better reflect the Hazardous Materials Management Plan.

The procurement of Hazardous Material requirements was revised.

Policy TM 38-400 was updated to TM 38-410.

Updated the location of the Safety Data Sheets (SDS).

References to HSMS were removed.

The ordering system throughout has been updated to reflect the current system used.

The spent battery turn-in method has been updated.

References to the Hazardous Materials Office, Building 27 (and associated phone and fax numbers) in Chapters 3, 4, and 9 have been deleted.

The title for Chapter 5 has been revised as follows: Chapter 5 Safety Data Sheets.

An SDS Sheet Table of Contents has been added for reference.

The hazardous materials steps and procedures have been removed as units turn in hazardous materials through DLA.

Shelf-life tracking and management systems have been updated.

The title for Chapter 10 was revised as follows: Chapter 10 Petroleum Oil Lubricant (POL) Trailers.

The Appendix has been updated with links to forms and relevant tables.

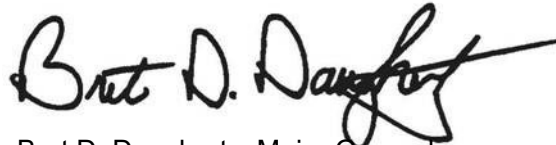
Changed title of 4-1 from "Daily Usage" to "HazMat Inventory."

HEADQUARTERS MILITARY DEPARTMENT
STATE OF WASHINGTON
Camp Murray
Tacoma, Washington 98430-5000
11 April 2023

Environmental Quality
HAZARDOUS MATERIALS MANAGEMENT PROGRAM

By Order of the Adjutant General

Official:



Bret D. Daugherty, Major General
The Adjutant General
Washington Military Department

History. This printing is the second revision of this pamphlet.

Summary. This pamphlet provides uniform policies and procedures for environmental compliance in the Washington Army National Guard (WAARNG) and the Military Department.

Applicability. This pamphlet applies to the WAARNG, Washington State Guard, and civilian employees of the Washington Military Department.

Proponent and exception authority. The proponent for this pamphlet is the WAARNG Environmental Programs Office (EPO).

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to the Military Department-State of Washington, ATTN: Environmental Office, Camp Murray, WA 98430-5080.

Distribution A-Army National Guard, Washington State Guard

This pamphlet supersedes WAARNG Pamphlet 200-3, dated 18 February 2005.

Contents

Chapter 1 - INTRODUCTION.....	5
Legal Statement.....	5
1-1. Purpose	5
1-2. References.....	6
1-3. Explanation of Abbreviations and Terms	6
1-4. Responsibilities	6
Chapter 2 - SETTING UP STORAGE AREAS FOR HAZARDOUS MATERIALS.....	10
2-1. Operational Safety Warning	10
2-2. Storage Cabinets	10
2-3. Storage Buildings, Rooms, and Trailers.....	12
2-4. Storage for Compressed Gases	13
Chapter 3 - PROCUREMENT of HAZARDOUS MATERIALS	14
3-1. Authorized Use List.....	14
3-2. Procuring Hazardous Materials	15
3-3. Local Purchase of HM.....	16
3-4. Mission Training Events.....	16
3-5. Battery Requisition and Returns.....	16
3-6. Emergency Ordering Procedures.....	17
Chapter 4 – USAGE AND INVENTORY.....	18
4-1. HazMat Inventory.....	18
4-2. Monthly Test Date Survey	18
Chapter 5 – SAFETY DATA SHEETS.....	19
5-1. Safety Data Sheets.....	19
Chapter 6 - COMPATIBILITY.....	20
6-1. Determining Hazardous Material Compatibility.....	20
6-2. Determining the HCC	20
Chapter 7 – SHELF LIFE.....	21
7-1. Shelf-Life Management.....	21
7-2. Shelf-Life and Tracking Survey.....	21
Chapter 8 – COMPRESSED GAS	24
8-1. Cylinder Purpose	24
8-2. Responsibility	24
8-3. Information and Storage	24
Chapter 9 – EXCESS AND STOCKAGE LEVELS	26
9-1. General.....	26

9-2. Stockage Levels.....	26
Chapter 10 – PETROLEUM OIL LUBRICANT TRAILERS	27
10-1. Best Management Practice	27
10-2. Inspection.....	27
10-3. Product Test Dates, Product Rotation.....	27
Appendix A References	28
Appendix B MIL FORM 510	29
Appendix C HCC Segregation Chart.....	30
Appendix D Compatibility Chart 6-2	31
Glossary	34
Section I - Abbreviations	34
Section II - Terms	36

Chapter 1 - INTRODUCTION

This Hazardous Materials Management Plan (HMMP) sets responsibilities, policies, and procedures for storing and managing hazardous materials within the Washington Army National Guard (WAARNG). Required by Army Regulation (AR) 200-1, Environmental Protection and Enhancement, the HMMP is written to ensure WAARNG compliance with applicable federal, state, and local laws and regulations.

Legal Statement

As reflected in this pamphlet, compliance with laws and rules regarding Hazardous Material Management is vitally important. Violating these requirements can result in issuing a notice of violation by the Washington Department of Ecology and the Federal Environmental Protection Agency. Such a notice of violation can result in a fine of thousands of dollars. The person responsible for the violation may be held personally liable for the violation and the penalty. Further, failure to comply with the requirements and procedures of this pamphlet may subject the violator to adverse administrative action, termination from employment, and military or civilian criminal prosecution.

1-1. Purpose

- a. The Hazardous Material Management Program (HMMP) is to manage the procurement and use of Hazardous Materials (HM) to support Washington Army National Guard (WAARNG) missions, ensure the safety and health of personnel and surrounding communities, and minimize WAARNG dependence on HM. The HMMP includes the activities and infrastructure required for the ongoing identification, management, tracking, and minimization of HM.
- b. This pamphlet documents the WAARNG HMMP. It applies to:
 - (1) All units and activities under the command of the WAARNG
 - (2) Any other activity that orders or maintains HM while using WAARNG training sites.
 - (3) Training conducted outside of Washington or on active-duty installations within the state unless the host activity's Standing Operating Procedure (SOP) dictates otherwise. Activities permanently located on active-duty installations must comply with this pamphlet unless the SOP for the host activity dictates otherwise.
- c. The goals of the HMMP are to ensure proper storage of HM, reduce the use of HM, and reduce the amount stored within facilities and units. The primary means to reduce the amount of HM purchased are:
 - (1) Requisition the Exact Quantity Required - review the quantity needed and order that amount regardless of the Unit of Issue (UI) listed by the FEDLOG.
 - (2) Substitute Less Hazardous Materials to Complete the Job - The Army Materiel Command's (AMC) Pollution Prevention Office has targeted many hazardous materials for reduction and substitution. Contact the Hazardous Materials Management Office for assistance in identifying adequate substitutes.
 - (3) Reduce Inventories -Activities should refer to chapter 9 for procedures to determine reorder points (ROP) and requisitioning objectives for hazardous material. Battery requisitioning procedures are found in chapter 3. These procedures will assist in requisitioning only the amount needed, thus reducing excess products on

the shelves and waste due to inventory mismanagement.

- (4) Increase Safety/Health of Personnel - The goal is to lower baseline stock levels and decrease the potential for exposure to HM, thus creating a safer, healthier work environment. Additionally, the occurrence of a release to the environment will be reduced.
- (5) Decrease Waste Disposal - When smaller quantities are purchased, the potential for shelf-life expiration and unused portions are reduced, thereby reducing the costs associated with waste disposal of the HM.
- (6) Shelf-Life Management- Ordering the smallest quantity of HM to accomplish a task reduces the need to manage the shelf life on many containers of the same product. Units should use the first in, first out (FIFO) method of managing products.

1-2. References

Appendix A lists publications referenced in and related to this document.

1-3. Explanation of Abbreviations and Terms

Abbreviations and special terms used in this pamphlet are explained in the glossary.

1-4. Responsibilities

The following responsibilities are organized according to the WAARNG command structure.

a. The Adjutant General

1. The Adjutant General (TAG) is responsible for establishing a comprehensive environmental program complying with all federal, state, and local environmental laws and implementing environmental regulations and all aspects of the environmental policies and programs.
2. The Adjutant General is responsible for establishing and emphasizing environmental compliance policy for the WAARNG.

b. The Assistant Adjutant General

1. The Assistant Adjutant General (AAG/Army) will assume the duties and responsibilities without The Adjutant General.
2. The AAG/Army will establish organizational structures to implement the WAARNG Hazardous Materials Management Program (HMMP).
3. The AAG/Army will consider environmental protection and natural/cultural resource preservation (and implement these measures whenever necessary) when executing WAARNG's overall mission.
4. The AAG/Army will ensure that Major Subordinate Commands (MSCs), Battalions, Companies, Activities (i.e., a non-unit structure such as a Field Maintenance Shop [FMS]), and any other unit under their jurisdiction, appoint Environmental Compliance Officers (ECOs).
5. The AAG/Army will serve as the Environmental Quality Control Committee (EQCC) Chairman.

c. Environmental Programs Manager (EPM)

1. The EPM will advise the AAG/Army on WAARNG Hazardous Materials Management in

complying with federal, state, local, and Army regulations.

2. The EPM will define and implement the overall WAARNG HMMP for all federal, state, and civilian members of WAARNG. As described in this regulation, the EPM will serve as the point-of- contact for all staff functions whose activities may involve any hazardous material.
3. The EPM will assist and coordinate with directorates on environmental issues that affect them. The EPM will serve as a member of the EQCC.
4. The EPM will participate in developing the Environmental Training Plan. The EPM will ensure that the Hazardous Materials Environmental Training Plan definitively states the training requirements for WAARNG personnel.

d. Deputy Chief of Staff - Logistics (G4)

1. The G4 Logistics is responsible for implementing the WAARNG HMMP at facilities under its control and during WAARNG hazardous material transportation.
2. The G4 will provide a method of disposing of all materials and wastes regulated by federal, state, and local environmental regulations.
3. The G4 will determine the most cost-effective operational method for procuring materials and services to manage the WAARNG HMMP.
4. The G4 activities will ensure that the appropriate SDS with each hazardous material is available.
5. The G4 will minimize solid and hazardous (dangerous) waste generation and identify alternative procedures and materials per the WAARNG Hazardous Materials Management Program (HMMP). The G4 will ensure that all dangerous waste generated during operations is managed in accordance with all local, state, and federal requirements. The G4 will maintain an accurate and current inventory of dangerous wastes and hazardous materials.
6. The G4 will ensure the training of all personnel assigned to the directorate in accordance with the training matrix for Full-Time Manning (FTM) personnel and Traditional Soldiers. The G4 will forecast appropriate funding to NGB to fund and comply with training requirements (particularly for FTM personnel).
7. The G4 will ensure that WAARNG logistical plans and operations (including POL storage facilities and transfer operation activities) and any proposed changes are reviewed for environmental consequences and compliance with environmental regulations, as necessary.
8. The G4 will ensure that activities appoint one ECO and one assistant ECO for each facility or activity. The ECO will coordinate the implementation of the WAARNG EMS for actions governed by the directorate.
9. The G4 will coordinate all necessary WAARNG logistical regulations and SOPs with the EPM to ensure all policies and procedures are IAW federal, state, and local regulations.
10. The G4 will comply with all local, state, and federal environmental regulations. The DCSLOG will ensure that WAARNG vehicle maintenance facilities (i.e., Field Maintenance Shop [FMSs], the Unit Training Equipment Site [UTES], the Mobilization and Training Equipment Sites [MATES], and the Combined Support Maintenance Shop [CSMS]) comply with the WAARNG HMMP and all applicable federal, state, and local requirements.
11. The G4 will provide the information needed to prepare reports for local, state, and

federal regulatory agencies.

e. Occupational Health Nurse

1. The Occupational Health Nurse (OHN) is responsible for administering the state industrial hygiene/occupational health program, the radiation safety program, and the state respiratory protection program.
2. The OHN is responsible for the development and annual review and update of all health plans (as they pertain to federal facilities and employees), including but not limited to the Hazard Communication Plan (HCP), medical surveillance, and health assessments.
3. The OHN will participate in developing the Environmental Training Plan.

f. Safety Office (SAFO)

1. The SAFO is responsible for the development and annual review and update of all health and safety plans and programs (as they pertain to federal facilities and employees).
2. The SAFO will evaluate, prescribe, and provide proper PPE to meet the WAARNG hazardous material requirements to ensure the safety of all federal WAARNG personnel. The SAAO prescribes and reviews adequate safety equipment to meet the WAARNG EMS requirements, including hazardous material storage, state and local Fire Marshal Requirements, and an overall safe working environment.
3. The SAFO will participate in developing the Environmental Training Plan.
4. The SAFO is responsible for safety concerns and is a member of the EQCC.

g. Battalion/Group Commanders

1. Battalion/Group Commanders will integrate activities to comply with the WAARNG HMMP as a part of planning and executing the command's mission.
2. Battalion/Group Commanders will ensure that all POL, hazardous substances, and wastes are inventoried, managed, handled, and disposed of IAW local, state, and federal regulations.
3. Battalion/Group Commanders will oversee WAARNG Hazardous Material Management within their command to ensure compliance with the programs by subordinate units.
4. Battalion/Group Commanders will ensure that environmental awareness training is provided to traditional soldiers.
5. Battalion Commanders will appoint:
 - (a) One Primary full-time ECO. The suggested Primary ECO should be either the Battalion Maintenance Officer (BMO) or the Battalion S4 Noncommissioned Officer (NCO).
 - (b) One Alternate ECO. The Alternate ECO will assist the Primary ECO and act in their absence. The Alternate ECO will be a traditional soldier.
 - (c) A facility/activity manager for each facility (including armories and FMSs) to oversee Hazardous Material Compliance. This person will oversee everything within the fence line. This person may be an activity commander, the ECO, or both. In the event of an outside environmental compliance inspection by federal and/or state regulators, an environmental compliance assessment system, or an internal compliance assessment system, this person will provide access to all

storage areas, cabinets, lockers, CONEXs (etc.). This person will also have access to all environmental documents (e.g., inspection logs, training records, inventories, dangerous waste manifests, etc.).

h. Company / Detachment Commanders

1. Company / Detachment Commanders will integrate activities to comply with the WAARNG HMMP as a part of planning and executing the command's fundamental mission.
2. Company / Detachment Commanders will ensure that all personnel who inventory, manage, handle, and dispose of POL, hazardous substances, and wastes IAW local, state, and federal regulations are trained.
3. Company/ Detachment Commanders will establish an organizational structure to plan, execute, and monitor hazardous materials programs.
4. Company / Detachment Commanders will report all regulatory agency inspections, Notices of Violations (NOVs), or other environmental corrective actions through the Chain of Command, thru DCSOPS, to the JOC, with a cc to CFMO: Attn - EPM
5. Company / Detachment Commanders will report discoveries of illegal dumping IAW 4 above.
6. Company/ Detachment Commanders will report all spills IAW 4 above.
7. Company/ Detachment Commanders will appoint a Primary and Alternate ECO. The Alternate ECO will assist the ECOs and will act in their absence. One must be full-time, and one should be a traditional soldier. The suggested ECOs are the Executive Officer (XO) and the supply NCO.

i. Environmental Compliance Officers

1. The ECO (who may be an officer or NCO) will oversee compliance with the provisions of the WAARNG HMMP as this regulation describes.
2. ECOs shall be of Wage Grade-7/9 or above for personnel serving in a federal technician status.
3. ECOs shall be of SSG / E6 or above if serving in a military status. ECO responsibilities may be delegated to WG-7 or E5 and below with oversight from a WG-7/9 or SSG / E6. Primary ECOs must be full-time employees of the unit or activity they represent. An Alternate ECO (a traditional soldier) will support the Primary ECO for MSCs, Battalions, and Companies. A full-time person at activities will support the Primary ECO.
4. The Primary and Alternate ECO will be appointed on orders. The ECO will be responsible for the WAARNG HMMP at only one unit or one activity.

Chapter 2 - SETTING UP STORAGE AREAS FOR HAZARDOUS MATERIALS

2-1. Operational Safety Warning

Reference: TM 38-410, Joint Service Manual for Storage and Material Handling
WAARNG personnel must properly store hazardous material to minimize hazards to persons and property when checking new products or maintaining current stock. Hazardous material can be stored in approved storage cabinets, rooms, buildings, trailers, or racks. There are guidelines for storing compressed gases.

WARNING!

- Do not store tools or personal items in any hazardous material storage location.
- Do not store combustible materials with flammable hazardous material, such as cardboard, paper, or rags.
- Do not store flammable or reactive hazardous material within 50 feet of the property boundary.
- Do not store hazardous material in unauthorized vehicles, personal wall lockers, or in areas with high foot or vehicle traffic.
- Do not store pesticides in any hazardous material storage locker (See WAARNG Integrated Pest Management Plan).
- Do not store propane cylinders in flammable cabinets.
- Store non-bulk containers of hazardous material in cabinets and containers approved by OSHA (29CFR1910.106 (d) (3))([1910.106](#)); or for bulk containers in CCFMO-approved storage rooms.

NOTE: Ensure the area is properly grounded and bonded when dispensing flammable hazardous material.

2-2. Storage Cabinets

Activities will place orders through G4 Logistics. G4 Logistics researches and verifies standards for United States Property and Fiscal Office P&C (USPFO-P&C) for procurement of cabinets and containers.

- a. Use OSHA-approved storage cabinets in the work area to store daily amounts of commonly used hazardous material, such as grease tubes, quart cans of oil, aerosol cans, etc. The cabinet color designates the type of material being stored. It is good practice to check local fire codes to ensure that the fire cabinets ordered are compliant with local Uniform Fire Codes.

- b. The following color scheme is required:

<u>Hazardous Material Type</u>	<u>Locker Color</u>
Flammables	Yellow
Corrosives	Blue
Oxidizers	Red

- c. Keep the cabinets clean and orderly. Conduct weekly inspections of cabinets for structural integrity, including doors, hinges, and shelves. Do not remove the door or ventilation bungs, penetrate the wall, modify ventilation, or otherwise modify the cabinet. Keep cabinet doors closed when materials are not being transferred.

d. To set up a cabinet,

STEP 1. Use the following guidelines to select a location for the cabinets:

- Cabinets located indoors must be placed in a well-ventilated area.
- Cabinets located outdoors should be undercover and on concrete, if available.
- Maintain easy access to the cabinet.
- Do not block doors.
- Do not place cabinets near break rooms, bathrooms, offices, or other occupied non-shop areas.
- Do not place cabinets near floor drains, drainage channels, catch basins, storm drains, or areas with high foot or vehicle traffic.
- Check compatibility before placing a storage cabinet within a storage area. Direct any questions regarding Storage Cabinet placement to the Environmental Office Pollution Prevention (P2) Manager.
- Ensure the words "Flammable-Keep Fire Away" are marked on storage cabinets that contain flammable chemicals.
- Clearly mark each cabinet with "No Smoking within 50 Feet".

STEP 2: Assign a four-character identifier to the cabinet and mark it on the front top right corner.

This identifier will consist of one of the below abbreviations and a 2-digit sequential number (for example, FL01). The following abbreviations will be used to identify the different types of cabinets.

- FC - Flammable Cabinet
- CC - Corrosive Cabinet
- OC - Oxidizer Cabinet
- TL - Trailer

Each cabinet must have a unique number designator. Only use designators once in any compound.

STEP 3: Post any warning signs required by the WAARNG SAFO. Do not place unauthorized signs, labels, stickers, or markings on the cabinets.

STEP 4: Ensure that appropriately rated fire extinguisher and spill response equipment is located nearby.

STEP 5: Before following the information before setting up the cabinets. This information will be used to obtain SDSs.

- Chemical name
- National Stock Number (NSN)
- Chemical manufacturer name
- Chemical manufacturer's city, state, and phone numbers (if the chemical is not from the military supply system)

STEP 6: Obtain an SDS for each HM stored in the cabinets.

STEP 7: Manage shelf life IAW Chapter 7.

- STEP 8: Ensure all material in the cabinet is compatible IAW chapter 6.
- STEP 9: Organize cabinets with larger containers near the storage cabinet's bottom. Ensure containers within the cabinet are closed.
- STEP 10: Store materials IAW TM 38-410.
- STEP 11: SDSs shall be present near hazardous materials.

2-3. Storage Buildings, Rooms, and Trailers

- a. CFMO will approve all buildings and rooms before hazardous material storage is allowed.
- b. Keep buildings, rooms, and trailers clean and orderly. Conduct weekly inspections to ensure structural integrity, including doors, hinges, and shelves. Do not remove doors, penetrate walls, modify ventilation, or modify the building or room. For POL trailers, the use of the CMD insert is directed. Refrain from placing CTA-50 items, generators, or other equipment in the POL trailers.

NOTE: All 55-gallon drums must be stored off the floor and have spill containment under them, and Totes or Intermediate Bulk Containers must have spill containment under them.

- c. To set up a storage building or room:

STEP 1: Inspect the area to meet all applicable rules and regulations.

STEP 2: All CMD-approved areas will provide secondary containment equaling 100% of the largest container capacity plus 10%. Areas not pre-approved by CMD may not meet the requirement.

STEP 3: Ensure appropriately rated fire extinguishers and spill response equipment are located nearby.

STEP 4: Post any warning signs required by the SAFO. Do not place unauthorized signs, labels, stickers, or markings on the room or building.

STEP 5: SDSs shall be present near hazardous materials.

- d. To set up a Trailer

STEP 1: Readily identify the trailer with a sign on the rear door stating, "POL Storage."

STEP 2: Ensure CMD-approved trailer inserts and all component pieces are installed and serviceable. All CMD-approved inserts will provide adequate secondary containment. Trailers operating without inserts do not meet containment requirements.

STEP 3: Establish AT and IDT Stockage levels equal to the amount the activities reasonably expect to consume during AT or within 2 IDT periods. Unit activities must manage shelf life and rotation within the trailer IAW Chapter 9 instructions. Activities failing to follow this guidance do not comply with the HMMP storage and use. Excess material will be turned into the activity supporting FMS.

STEP 4: Ensure appropriately rated fire extinguisher and spill response equipment is located nearby.

STEP 5: Post any warning signs required by the SAFO. Do not place unauthorized signs, labels, stickers, or markings on the room or building.

STEP 6: SDSs shall be present near hazardous materials.

Post any warning signs required by the SAFO. Do not place unauthorized signs, labels, stickers, or markings on the room or building.

2-4. Storage for Compressed Gases

NOTE: This section does not apply to fire extinguishers or spray cans. See Chapter 8 for specific guidance.

- a. Compressed gases are under pressure and should be handled with extreme care, particularly flammable and explosive gases. If you are storing compressed gases, there are additional guidelines to follow.

CAUTION

- Do not use cylinders as rollers or supports or for any other unintended purpose.
- Do not accept, issue, or use a cylinder unless the contents are identified.

- b. Storage of compressed gases will follow Chapter 8 instructions.

Chapter 3 - PROCUREMENT of HAZARDOUS MATERIALS

Hazardous Material (HM) can be found within all classes of supply. The product listed in the FEDLOG with a Hazardous Materials Indicator Code (HMIC) P or Y is considered HM under the Hazardous Material Management Plan (HMMP). This section outlines the procedures for ordering HM through the WAARNG automated supply system.

Under the distributed HMMP, participating activities are responsible for hazardous material management. Users rely on existing sources of supply and perform all aspects of hazardous material tracking, including receipt, storage, issue, turn-in, disposal, and reporting.

3-1. Authorized Use List

- a. In coordination with the P2 Manager, all activities will develop an HM "Authorized Use List" (AUL) to meet their mission requirements. The AUL consists of a list of approved activities by the Activity supervisor/commander and the P2 Manager of NSNs that minimize HM concerns and meet the appropriate Lubrication Order. The AUL will contain the NSN, nomenclature, unit of issue, the unit of measure, and quantity required on hand. The AUL will be updated and maintained by the activity and P2 manager.
- b. Hazardous Materials will be requisitioned through the existing automated supply system to the maximum extent possible. Suppose materials must be procured via local purchase. In that case, proper justification must be provided and forwarded to the P2 manager, approved, and then forwarded to the supervisor/Approving Official (AO) - who may then authorize the procurement. Local purchase of HM may be purchased on an emergency basis. Failing to manage HM inventories effectively does not constitute an emergency. For example, a pipe may rupture, requiring an emergency repair and using a particular HM. However, the HM is unavailable for the repair activity in this scenario. HM, in this situation, may be purchased without adding it to the AUL **if it is for one-time emergency use**. However, the supervisor must file an emergency justification to the HM Program Manager within 24 hours of use. If this material is expected to be recurring, it must go through the AUL approval process. The AUL will denote products typically authorized for purchase by credit card.
- c. Repeated credit card use for the same purchase may indicate abuse of the supply system and credit card.
 1. Products may be added to the AUL by submission of MIL FORM 510 (Authorized Use List Change Request) in Appendix B to the P2 Manager for approval. The requested product(s) must have supporting justification documentation. This justification may include previous emergency purchases, changes in mission, and equipment changes.
 2. Products can be removed from the AUL by submission of MIL FORM 510. Within 30 days, any on-hand HM removed from the activity's AUL will be turned into the activity's supporting FMS.
 3. Excess turned into the activity's supporting FMS will be removed from the activities AUL.
- d. As an inspectable product, the AUL will be used to determine compliance with the HMMP. During inspections, products not authorized for use will be recovered for reuse or disposal. Material on the AUL will have a Reorder Objective and Reorder Point set under the provisions of Chapter 9-2. Any material found to be excess per Chapter 9-2 of this regulation during inspections

will be turned in, and the activity cited for failure to follow established procedures. A monthly usage report will be generated and maintained at the activity to support the AUL Activities will be required to submit a copy of the monthly usage roll-up to the environmental office. The HSMS database and software will be made available at the user level to automate the tracking of and use of HM.

- e. **Restricted Products:** Some materials may be restricted or banned based on chemical characteristics. Products on the Restricted Items List may pose a significant risk to human health and safety that may result in a usage restriction. Before the local purchase of HM, activities will refer to the Restricted Products List to ensure the product does not contain banned or restricted chemicals. If you have questions about a product, contact the P2 Manager. Prohibited or restricted chemicals will be published on the environmental website, share point, or directly available as Environmental Updates from the Environmental Office.
- f. **Products Not Tracked by the HMMP:** Products determined to have minimal risk to personnel and the environment returned to the supply system for repair, and products with special supply/funding channels are not monitored under the HMMP. These products are requested through normal supply channels and are funded by the requestor. For example:
 - 1. Consumable products that present minimal risk to personnel and the environment, e.g., office supplies, cleaning supplies, and toner cartridges purchased through the General Services Administration (GSA). These products are funded through unit allotments from DCSLOG.
 - 2. Products that are not consumed in use and are returned to the supply system for repair or disposition, such as drive train components, brake shoes/pads, and repairable Class IX products, e.g., Line Replaceable Units (LRU), are returned to the depot for repair and are funded through Class IX channels.
 - 3. Products recycled on contract with a local vendor through an established exchange program, such as compressed gas cylinders and lead-acid batteries recycled on a "one-for-one" exchange with local vendors.
 - 4. Products having special supply/funding channels, such as bulk fuel, ammunition, and most medical supplies are not tracked by the HMMP.

3-2. Procuring Hazardous Materials

- a. This section serves as a guide to all units, all Field Maintenance Shops (FMS), Army Aviation Support Facilities (AASF), the Combined Support Maintenance Shop (CSMS), the Mobilization and Training Equipment Site (MATES), the Unit Training and Equipment Site (UTES) all maneuver area training sites, and all personnel who purchase products at the shop/unit level. The WAARNG will strive to substitute less hazardous or non-hazardous materials whenever practical in compliance with existing Technical Manuals.
- b. Data from products ordered through the supply system will be extracted from GCSS Army and sent to the Environmental Office. This will facilitate daily use reporting at activities throughout the state.

Follow the steps listed below to identify the applicable requisitioning procedure.

STEP 1: Consult your activities AUL for the correct NSN and unit of issue based on the NSN. Further help and or guidance can be obtained from the Environmental Office.

STEP 2: Consult the AAC code to determine if the product needs to be ordered through the GSA website, local purchase, or regular supply channels.

- STEP 3: Products with an AAC of "L" are local purchase products and may be locally procured provided the product is on your activities AUL.
- STEP 4: Input the request into one of the following systems: GCSS or another authorized requisitioning system.
- STEP 5: Assign the project code of "HZM." This is a locally assigned code used by USPFO to extract information on requests and manage resources.
- STEP 6: Once the material has been ordered, it is the responsibility of the activity to initiate a follow-up on the delivery status of the material. This is done to prevent multiple requests for the same product.

3-3. Local Purchase of HM

The cardholder will complete the "Government VISA Request/Receipt Information" form and forward it thru the P2 manager env@mil.wa.gov, who will approve, substitute, or disapprove the request and deliver it to the Approving Official (AO). The AO will review the form and approve or disapprove the request (based on funding and criticality). An Approving Officer WILL NOT approve a request that has been DISAPPROVED by the P2 officer. This form will be used to track locally procured hazardous materials.

3-4. Mission Training Events

Activities/units will submit a usage report to the Environmental Office for all training events.

3-5. Battery Requisition and Returns

- a. Objectives. To establish the procedures for the requisition and turn-in of CL IX batteries, to increase CL IX battery waste stream visibility/accountability, and to reduce the costs associated with CL IX batteries.
- b. General: These procedures apply to all CL IX Alkaline and Carbon-Zinc, Lithium, Magnesium, Mercury, Lead-acid, and Nickel-Cadmium batteries turned in through the environmental office with a Waste Turn in request. Before ordering new batteries, all used batteries will be returned using the turn-in procedures below:
- c. Turn-in Procedures
 - STEP 1: Review the Waste Profile Sheet and ensure containers are correctly marked, packaged, and labeled IAW the Waste Profile Sheet (see WAARNG Pam 200-1, Appendix A, Dangerous Waste Management Pam).
 - STEP 2: Close and seal the waste containers. Use strapping or packing tape when sealing boxes. DO NOT use duct tape or masking tape. Activities turning in will be required to have batteries sorted according to type. Batteries in plastic trash bags will only be accepted if sorted by type. For open-head drums, seal the drums with the ringbolt's assembly pointing down so the containers may be double-stacked later. Screw locking nuts into the middle section of the bolt on the open-head drum before turn-in.
 - STEP 3: Complete a DA 3161 or WMD-approved Waste Turn sheet for the batteries to be turned in.

STEP 4: Schedule pickup with the Environmental Office.

NOTE: Units may transport UNIVERSAL Wastes without a hazardous waste manifest under the UNIVERSAL WASTE generator exclusion in WAC 173-303-070(h). However, units must still schedule the transport of hazardous materials through the Environmental Office

3-6. Emergency Ordering Procedures

When products are needed in an emergency, the following procedures apply:

After Duty Hours and Weekends: Obtain approval from your AO and purchase supplies using a government credit card. DCSLOG-S will assign a control number and return the form. The AO will coordinate with DCSLOG-S the first working day after the purchase. The cardholder will complete the "Government VISA Request/Receipt Information" form and forward it to the Approving Official (AO). The AO will review the form and forward the form via E-mail to the Environmental Office for review at env@mil.wa.gov. This form will be used to track locally procured hazardous materials.

NOTE: Always contact the P2 Manager before bringing a new product to installation. Always obtain an SDS from contractors for all products containing HM purchased with a government credit card.

Chapter 4 – USAGE AND INVENTORY

4-1. HazMat Inventory

- a. Activities will track daily usage and fill out a HazMat Inventory log to enable computation of stock levels at the respective activity. Stock levels and usage logs will be forwarded monthly to the P2 Manager.
- b. Activities must keep and file a copy of the log. This log will be an Excel spreadsheet provided by the P2 Manager and will be used to produce the monthly usage roll-up report. Activities must submit an electronic copy of the monthly usage roll-up to the P2 Manager at env@mil.wa.gov. This report will be due NLT on the 10th of the following month. Activities failing to report will be reported to the AAG/Army.
- c. When a product's reorder point is reached on the HazMat Inventory log, that product should be reordered as soon as possible to avoid critical shortages at the end-user level. This method will ensure a constant product flow in the supply system to replenish what is being used.
- d. Data from this monthly usage report will also be used for Emergency Planning and Community-Right-To-Know Act (EPCRA) reporting requirements.

4-2. Monthly Test Date Survey

Activities will be required to verify that the test date expiration for an item has not been exceeded. The activity will conduct a monthly test date survey every month. The purpose of this inspection is to prevent the loss of material through test date expiration. Products not used by the activity before expiration must be turned in for reuse/redistribution or disposal BEFORE expiration. Systematic abuses with test date expiration will be documented and reported up the chain of command. Appointments and instructions for turn-in can be arranged by contacting the P2 Manager via email at env@mil.wa.gov.

Test date survey procedures

- STEP 1 Check products in the location to ascertain the test dates.
- STEP 2 Move the products with the oldest test date to the front of the location and place the products with the newest test date to the rear of the location.
- STEP 3: Every effort will be made to use the product within 30 days of the test date expiration or turned in.

Chapter 5 – SAFETY DATA SHEETS

5-1. Safety Data Sheets

- a. Before using HM, you must become familiar with associated hazards, specific handling procedures, and spill response measures. The product Safety Data Sheet (SDS) provides this handling information; every HM must have an SDS on hand.
- b. Steps for managing SDS sheets in your activity:
 - STEP 1: HM activities must have an SDS on hand before use. If one is out of hand, obtain one from the manufacturer, Hazardous Materials Information System (HMIS), Siri.org, or by contacting the P2 Manager. The SDS must be specific to the product's National Stock Number (NSN) and CAGE number (manufacturer's code), printed on the SDS and the HM container.
 - STEP 2: Create and maintain a facility SDS binder; ensure that the binder is readily accessible and visible to all employees. This binder must reflect the current inventory of the activity.
Archive non-current SDS IAW current army publication archive standards.
 - STEP 3: Utilize the Table of Contents to Organize the SDS binder to facilitate retrieval of a specific SDS. Table of Contents should include:
 1. Table of Contents:
 - a. Section 1: Environmental TAG Policy
 - b. Section 2: HMMP
 - c. Section 3: Spill Procedures
 - d. Section 4: Authorized User List
 - e. Section 5: Index of HM Being Used
 - f. Section 6: Safety Data Sheets
 - g. Section 7: Miscellaneous (Training roster, etc.)
 - STEP 4: Create an index of the SDSs and place it in the front of the binder.
 - STEP 5: Every activity must maintain a master SDS binder or catalog. The activity does not need to maintain SDS at each workstation; however, the SDS must be readily accessible when needed. A HM SDS must be available in each area where that material is used and stored.

Chapter 6 - COMPATIBILITY

6-1. Determining Hazardous Material Compatibility

To help activities determine what HM can be stored together and what cannot be stored together, the Department of Defense (DOD) created the Hazardous Chemical Compatibility System (HCCS). This chapter describes the basics of this sorting system. For more information, see TM 38-410, Storage and Handling of Hazardous Materials. HCCS is designed to work with SDSs generated from the HMIS; however, it will also work for most non-HMIS-generated SDSs. If the SDS is unavailable through the HMIS, you may obtain a copy from the P2 Manager, HMIS, Siri.org, or the manufacturer.

6-2. Determining the HCC

STEP 1: Locate the proper SDS for the material at hand.

STEP 2: Look in the section titled PHYSICAL/CHEMICAL PROPERTIES.

STEP 3: Look for HCC: XX, where XX is the 2-digit code of the HCC. Assume the code is F5.

STEP 4: Locate the Flammable Material Section in Appendix C.

STEP 5: Note that materials coded F5, F6, F7, and F8 are stored separately in different cabinets.

Material coded V2 and V3 are compatible and can be stored together but separately from all others. Material F1, F2, F3, F4, and V4 are compatible and can be stored together but separately from all others.

STEP 6: Refer to the charts in Appendices C and D for further guidance on segregation concerning horizontal spacing.

Chapter 7 – SHELF LIFE

7-1. Shelf-Life Management

- a. The goal of proper shelf-life management is to avoid extending the shelf-life of material by performing a monthly shelf-life survey, tum-in in excess stocks, and ordering the minimum needed to sustain the activity.
- b. The primary steps in stocking HM are listed below:

STEP 1: Obtain all SDSs and ensure that every container on-hand at your activity is appropriately labeled with the:

Product name

SDS number

Any warnings of physical or health hazards listed on the SDS.

Label any HM that does not have a readable label. You should maintain the original manufacturer's label with proper storage techniques. However, if the original label is missing or damaged, use the type of label shown below:

NSN: 6950-00-224-6656 Chemical Name: Cleaning Compound Rifle Bore Manufacturer Name: American Writing Ink Co DATE MFR: 10-2003 INSP: 10-2005
--

NOTE: If the material is transferred to a different container, label the new container with the NSN, Chemical Name, Manufacturer Name, and any appropriate hazard warnings before storing the new container.

STEP 2: IAW TM 38-410, Storage and Handling of Hazardous Materials, segregate material by compatibility of storage requirements in Chapter 6.

STEP 3: Store HM in an appropriate location and manner.

STEP 4: Place HM on shelves or racks following the guidance of the newest stock in the back of the shelf and the oldest in the front based on the date of manufacture.

7-2. Shelf-Life and Tracking Survey

- a. This section covers the WAARNG shelf-life program and how it works within the DOD shelf-life program. An understanding of the DOD shelf-life program is necessary for a shelf-life survey.
- b. Most HM purchased through the military supply system have an expiration date (test date or inspection date) printed on the container label, and these dates are critical to the shelf-life program.

NOTE: HM purchased locally usually does not have a published expiration date. Call the P2

Manager for guidance to establish a shelf-life for these products.

c. Using the DOD Shelf-Life Program

1. Shelf-life is the total period, beginning with the date of manufacture, cure, assemble, pack, or inspect/test/restorative action, that a product may remain in the storage system and remain suitable for the product's intended use.
2. Products commercially purchased that are similar to military products can be assumed to have a shelf-life (e.g., paint from NAPA can be deemed to have a shelf-life similar to paint ordered through the military system, which has a shelf-life of 24 months).

NOTE: Products procured locally can be assumed to have lost 1/3 of their shelf-life by the time it reaches the end user.

d. Shelf-life or non-shelf-life

1. To determine if the product has shelf-life expiration, access the WebFLIS (Web Federal Logistics Information System) Army Master Data File.

STEP 1: Enter the NSN.

STEP 2: Highlight the information in the SLC column and click the right mouse button.

2. If the product has a shelf-life expiration, properly manage it as a Type I or Type II Material, as explained in the following sections.

e. Type I Materials

Type I materials have an alphabetical shelf-life code and an expiration date. These materials are not extendible.

NOTE: DOD policy requires that Type I HM be used or turned in within 30 days of expiration.

f. Type II Materials

Type II materials have a numeric shelf-life code and either a test or inspection date. These materials may be extended through visual inspection or laboratory testing. For more information please consult:

Visual Inspection uses DOD manual 4140.27 Material Quality Control Storage Standard (MQCSS) and Account Management and Provisioning System (AMPS) to request a Shelf-Life Extension System. The MQCSS provides information from NSN on how to visually inspect a product.

Laboratory Testing Quality Status Listing (QSL) at <https://amps.dla.mil/>. The QSL provides laboratory-testing data for HM.

NOTE: You must use, extend, or turn-in Type II products before expiration.

g. Extending the Shelf-Life of Type II material

STEP 1: Before the shelf-life expiration, determine if the shelf-life can be extended by test or inspection.

STEP 2: If the product can be extended, see the Extending by Inspection section for specific information on using the QSL, visual inspection, or call the P2 Manager to extend the product.

STEP 3: If the product needs to be listed on the QSL, call the P2 Manager for guidance.

STEP 4: If the P2 Manager determines that the shelf-life cannot be extended. Turn-in IAW the DWMP.

For more information, consult the Shelf-Life Item Management Manual (DOD 4140.27-M). This manual prescribes codes for HM that meet shelf-life criteria, and the codes show the HM's shelf-life and how long it may be extended.

h. Extend the product based on the QSL.

STEP 1: Access the QSL online to see if the material has a test date.

STEP 2: If a new test date is available, mark each container with the following information:

- The new test date.
- Initials of the person who inspected and extended the product.

Chapter 8 – COMPRESSED GAS

8-1. Cylinder Purpose

- a. This chapter aims to guide the safe handling and use of compressed gas cylinders; this section is not all-inclusive of federal and state regulations. Compressed gases are unique because they represent a physical and potential chemical hazard (depending on the particular gas). The gases in these cylinders vary in chemical properties, ranging from inert and harmless to toxic and explosive. The high pressures of the gases constitute a serious hazard if the cylinders sustain physical damage and are exposed to high temperatures.
- b. Personnel responsible for storing, handling, or using compressed gases and gas cylinders must know the characteristics and hazards of each gas. Specific and detailed information on the properties and hazards of any gas is best obtained from the manufacturer or supplier of the product through Safety Data Sheets (SDS) or brochures. Additional information to that provided in this document is available in other reference material from commercial sources.

8-2. Responsibility

- a. Compressed gas cylinders should be handled only by experienced and properly instructed personnel.
- b. The user responsible for the cylinder and its installation should check the identity of the gas before use. If the cylinder content is not identified, the hydrostatic test date is past due, or the cylinder is damaged, the cylinder should be returned to the supplier.

8-3. Information and Storage

Further information may be obtained from the SAFO or by contacting the Environmental Office for a copy of AR 700-68.

- a. All compressed gas cylinders in storage waiting for use or shipment shall be secured by either palletizing them or storing them standing in a valve end upright position, nested tightly together, in an approved storage area where they are unlikely to be knocked over.
 1. Cylinders that cannot otherwise be secured shall be bound together in groups of three or more to reduce their capability of being knocked over.
 2. A chain will secure individual cylinders to a non-moveable object that prevents the cylinder from falling over.
- b. Cylinders inherently unstable in the vertical position must be palletized, boxed, crated, or secured to a fixed stanchion or fixture. Cylinders in an authorized storage area that permits pedestrian or vehicular traffic must be palletized, boxed, crated, or secured to a fixed stanchion or fixture.
- c. All storage facilities for compressed gases should be separated from other buildings by at least 50 feet.
- d. Compressed gases should be stored in roofed, open-sided sheds on an above-grade concrete slab if favorable climatic conditions and security precautions are adequate.

Sheds should be constructed of light, non-combustible materials.

- e. Cylinders of flammable gases and gases that support combustion must be stored in separate sheds with a distance of at least 50 feet between sheds or by an approved firewall or fire barrier. The storage arrangement should protect the cylinders from direct exposure to sunlight.
- f. To assure complete identification, compressed gas cylinders should be tagged/labeled with the stock number for the full cylinder and the stock number for the empty cylinder.
- g. Cylinder caps must be in place when cylinders are unused or stored.

Chapter 9 – EXCESS AND STOCKAGE LEVELS

9-1. General

- a. The definition of excess Hazardous Material is any material that will not be used for its intended purpose within six months from the date of receipt of the material.
- b. Excess hazardous material shall not be turned in as dangerous waste for turn-in. All excess hazardous inventory shall be turned back in through DLA by the units turning in the materials. Coordinate the paperwork with the Environmental Office before transporting the material.
- c. Material can only remain on-site for sixty calendar days after coordination.

9-2. Stockage Levels

Activities/Units will be on a 30/60-day supply cycle to preclude excess material from being generated. The charts below will guide on setting stockage levels. RO (reorder objective) is the maximum amount of material you want to stock on your shelf based on usage. ROP (reorder point) is the point at which you reorder the material that you use up.

30 day

MATES, UTES, CSMS, AASF-1, FMS (all), AASF-2

60 day

All Units

If an entity is on a 30-day cycle and uses 17 units of a product, then the 30-day chart tells you that your objective for stockage is 20, and the point at which you would reorder is 12 units. A simple formula to remember is $\text{On Hand} + \text{On Order} = \text{RO}$

Table 9-1. Stockage Levels

30 DAY

# Used	RO	ROP
1 - 5	5	3
6 - 10	10	6
11 - 15	15	9
16 - 20	20	12
21 - 25	25	15
26 - 30	30	18

60 DAY

# Used	RO	ROP
1 - 5	5	5
6 - 10	10	6
11 - 15	15	9
16 - 20	20	12
21 - 25	25	15
26 - 30	30	18

Chapter 10 – PETROLEUM OIL LUBRICANT TRAILERS

POL trailers pose a unique management issue. Product stored inside the trailers is exposed more to the elements than elsewhere and tends to be out of sight, out of mind. This creates a loss of product more to mismanagement than other storage areas.

10-1. Best Management Practice

- a. The preferred procedure for POL Trailers is not to store product in the trailers but to offload the product after each training event.
- b. Where the procedure in 10-1a is not feasible, follow the guidance in 10-2 and 10-3.
- c. Trailers containing product will be placarded with a DANGEROUS placard.
- d. EMPTY Trailers will not be placarded.

10-2. Inspection

- a. Trailers will be inspected every week, with particular attention to the overall condition of the trailer.
 - Inside inspection for water leaks
 - Condition of covering on the trailer
 - Condition of the storage racks
 - Standing water at the bottom of the trailer
- b. Product inspection will be performed every week with particular attention paid to the condition of the product containers.
 - Metal product containers will be inspected for rust
 - Leaking containers
 - Damaged labeling
 - Damaged container for grease tubes

10-3. Product Test Dates, Product Rotation

Management issues for POL trailers require a weekly survey of the test dates on the product stored within be performed every week.

- Product is rotated such that no product is allowed to reach test date expiration.
- Product with container degradation is rotated and used to the greatest extent.
- New ordered product is placed in storage, and old is rotated out for use by sending to another activity.

Appendix A References

Section I
Abbreviations

Section II
Terms

AR 200-1
Environmental Protection and Enhancement

AR 700-68
Storage and Handling of Compressed Gases and Liquids in Cylinders and of Cylinders

WAARNG Pam 200-1
Dangerous Waste Management Pamphlet

TM 38-400
Joint Services Manual for Storage and Material Handling

TM 38-410
Storage and Handling of Hazardous Materials

HMIRS
Hazardous Material Information Resource System

Appendix B MIL FORM 510

Authorized Use List Change Request

This is a Request the following HM action:

- Continuous purchase approval and add to Authorized Use List.
- One-time purchase approval and add product HM database for storage purposes only.
- Deletion of product from Authorized Use List.

User & Material Information:

Command: _____ Work Center Supervisor: _____

Division/Shop: _____ User Telephone #: _____

Product Name: _____

NSN (If applicable): _____

Manufacturer (Name and Address): _____

How will product be used?: _____

Unit of issue (i.e. cn, ea, gl.): _____ Quantity requested: _____

Will waste be generated? Yes No

Has substitution of less HM been considered? Yes No

Copy of Material Safety Data Sheet (MSDS) is attached? Yes No

Requester's Signature: _____ Date: _____

Environmental Approval Screening:

Request: Approved Disapproved

Reason for disapproval: _____

Signature: _____

MIL FORM 510 18Feb05
(WAARNG Pam 200-3)

Appendix C HCC Segregation Chart

Segregation Table for Hazardous Materials - 49 CFR §177.848

Class or Division	Notes	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3 gas zone A	2.3 gas zone B	3	4.1	4.2	4.3	5.1	5.2	6.1 liquids PG I Zone A	7	8 liquids	
Explosives		A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Explosives			*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Explosives			*	*	*	*	*	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Very insensitive explosives		A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Extremely insensitive explosives			*	*	*	*	*														
Flammable gases			X	X	O	X			X	O								O	O		
Non-toxic, non-flammable gases			X	X		X															
Poisonous gas Zone A			X	X	O	X		X				X	X	X	X	X	X	X	X	X	X
Poisonous gas Zone B			X	X	O	X		O				O	O	O	O	O	O	O	O	O	O
Flammable liquids			X	X	O	X		X	O							O		X			
Flammable solids			X	X	O	X		X	O							O		X			O
Spontaneously combustible materials			X	X	O	X		X	O									X			X
Dangerous when wet materials			X	X	O	X		X	O									X			O
Oxidizers		A	X	X	O	X		X	O	O								X			O
Organic peroxides			X	X	O	X		X	O									X			O
Poisonous liquids PG I Zone A		P	X	X	O	X		O				X	X	X	X	X	X	X	X	X	X
Radioactive materials			X	X	O	X		O													
Corrosive liquids			X	X	O	X		X	O			O	X	O	O	O	O	X			

§177.848 (e) INSTRUCTIONS FOR USING THE SEGREGATION TABLE FOR HAZARDOUS MATERIALS ARE AS FOLLOWS

- The absence of any hazard class or division or a blank space in the Table indicates that no restrictions apply.
- The letter "X" in the Table indicates that these materials may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation.
- The letter "O" in the Table indicates that these materials may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation unless separated in a manner that, in the event of leakage from packages under conditions normally incident to transportation, commingling of hazardous materials would not occur. Notwithstanding the methods of separation employed, Class 8 (corrosive) liquids may not be loaded above or adjacent to Class 4 (flammable) or Class 5 (poisoning) materials, except that shippers may load truckload shipments of such materials together when it is known that the mixture of contents would not cause a fire or a dangerous evolution of heat or gas.
- The "M" in the Table indicates that segregation among different Class 1 (explosive) materials is governed by the compatibility table in paragraph (f) of this section. See right table.
- The note "A" in the third column of the Table means that, notwithstanding the requirements of the letter "X", ammonium nitrate (UN 1942) and ammonium nitrate fertilizer may be loaded or stored with Division 1.1 (explosive) or Division 1.5 materials.
- When the §172.101 Table or §172.402 of this subchapter requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stored together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat, evolution of flammable, poisonous, or asphyxiant gases, or formation of corrosive or unstable materials.

ADDITIONAL NOTES

P Packages with POISON or POISON INHALATION HAZARD labels, or a POISON label displaying "PG III," or "PG II" marked next to a POISON label may not be transported with foodstuffs, feed or any other edible material, intended for humans or animals. For exceptions see 49 CFR 177.841(e).

§177.848(e) ADDITIONAL SEGREGATION REQUIREMENTS

In addition to the provisions of paragraph (d) of this section and except as provided in §173.12(e) of this subchapter, cyanide mixtures or solutions may not be stored, loaded and transported with acids if a mixture of the materials would generate hydrogen cyanide. Division 4.2 materials may not be stored, loaded and transported with Class 8 liquids; and Division 6.1 Packing Group I, Hazard Zone A material may not be stored, loaded and transported with Class 8 material, Class 8 liquids, and Division 4.1, 4.2, 4.3, 5.1 or 5.2 materials.

HazMat which have no applicable segregation restrictions in §177.848

Following classes / divisions have no restrictions with hazardous materials, as pointed out in the instructions for using the Segregation Table. But other requirements may apply e.g. 49 CFR §177 Subpart B (Loading and Unloading).

- Poisonous gas - Other than Zone A or B
- Poisonous liquids - Other than PG I Zone A
- Corrosive solids
- Miscellaneous hazardous materials

Compatibility Table For Class 1 (Explosive) Materials

COMPATIBILITY GROUP	A	B	C	D	E	F	G	H	J	K	L	N	S
A	X	X	X	X	X	X	X	X	X	X	X	X	X
B	X	X	X	X	X	X	X	X	X	X	X	X	4/5
C	X	X	X	2	2	6	X	X	X	X	X	3	4/5
D	X	X	2	2	6	X	X	X	X	X	X	3	4/5
E	X	X	2	2	6	X	X	X	X	X	X	3	4/5
F	X	X	X	X	X	X	X	X	X	X	X	X	4/5
G	X	X	6	6	6	X	X	X	X	X	X	X	4/5
H	X	X	X	X	X	X	X	X	X	X	X	X	4/5
J	X	X	X	X	X	X	X	X	X	X	X	X	4/5
K	X	X	X	X	X	X	X	X	X	X	X	X	4/5
L	X	X	X	X	X	X	X	X	X	X	X	1	X
N	X	X	3	3	3	X	X	X	X	X	X	X	4/5
S	X	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	X	4/5	X

§177.848 (g) INSTRUCTIONS FOR USING THE COMPATIBILITY TABLE FOR CLASS 1 (EXPLOSIVES) MATERIALS ARE AS FOLLOWS

- A blank space in the table indicates that no restrictions apply.
- The letter "X" in the table indicates that explosives of different compatibility groups may not be carried on the same transport vehicle.
- The numbers in the table mean the following:
 - "1" means an explosive from compatibility group L shall only be carried on the same transport vehicle with an identical explosive.
 - "2" means any combination of explosives from compatibility groups C, D, or E is assigned to compatibility group E.
 - "3" means any combination of explosives from compatibility groups C, D, or E with those in compatibility group N is assigned to compatibility group D.
 - "4" means see §177.835(g) when transporting detonators.
 - "5" means Division 1.4S fireworks may not be loaded on the same transport vehicle with Division 1.1 or 1.2 (explosive) materials.
 - "6" means explosive articles in compatibility group G, other than fireworks and those requiring special handling, may be loaded, transported and stored with other explosive articles of compatibility groups C, D and E, provided that explosive substances (such as those not contained in articles) are not carried in the same transport vehicle.
- Except as provided in paragraph (f) of this section, explosives of the same compatibility group but of different divisions may be transported together provided that the whole shipment is transported as though its entire contents were of the lower numerical division (i.e., Division 1.1 being lower than Division 1.2). For example, a mixed shipment of Division 1.2 (explosive) materials and Division 1.4 (explosive) materials, both of compatibility group D, must be transported as Division 1.2 (explosive) materials.
- When Division 1.5 materials, compatibility group D, are transported in the same freight container as Division 1.2 (explosive) materials, compatibility group D, the shipment must be transported as Division 1.1 (explosive) materials, compatibility group D.



Appendix D Compatibility Chart 6-2

HCC	HAZARD CHARACTERISTICS GROUP	A	C	D	E	F	G	L	P	R	T	SECONDARY SEGREGATION
A1	Radioactive, Licensed	*										Note A
A2	Radioactive, License Exempt	*										Note A
A3	Radioactive, License Exempt, Authorized	*										Note A
B1	Alkali, Corrosive Inorganic		*									Note B
B2	Alkali, Corrosive Organic		*									Note C
B3	Alkali, Low Risk							*				Note F
C1	Acid, Corrosive Inorganic		*									Note D
C2	Acid, Corrosive Organic		*									Note E
C3	Acid, Low Risk							*				Note F
C4	Acid, Corrosive and Oxidizer, Inorganic		*									Note D
C5	Acid, Corrosive and Oxidizer, Organic		*									Note E
D1	Oxidizer			*								None
D2	Oxidizer and Poison			*								Note G
D3	Oxidizer and Corrosive Acidic			*								Note G
D4	Oxidizer and Corrosive Alkali			*								Note G
E1	Explosive, Military				*							Note H
E2	Explosive, Low Risk							*				Note A
F1	Flammable Liquid DOT PG I, OSHA IA					*						Note J
F2	Flammable Liquid DOT PG II, OSHA IB					*						Note J
F3	Flammable Liquid DOT PG III, OSHA IC					*						Note J
F4	Flammable Liquid DOT PG III, OSHA II					*						Note J
F5	Flammable Liquid and Poison					*						Note L
F6	Flammable Liquid & Corrosive, Acidic					*						Note L
F7	Flammable Liquid & Corrosive, Alkali					*						Note L
F8	Flammable Solid					*						Note K
G1	Gas, Poison (Nonflammable)						*					Note M
G2	Gas, Flammable						*					Note N
G3	Gas, Nonflammable						*					Note P
G4	Gas, Nonflammable, Oxidizer						*					Note R
G5	Gas, Nonflammable, Corrosive						*					Note S
G6	Gas, Poison, Corrosive (Nonflammable)						*					Note T
G7	Gas, poison, Oxidizer (Nonflammable)						*					Note U
G8	Gas, Poison, Flammable						*					Note V
G9	Gas, poison, Corrosive, Oxidizer (Nonflammable)						*					Note W
K1	Infectious Substance										*	Note X
K2	Cytotoxic Dru2s										*	Note Y
M1	Magnetized Material							*				None
N1	Not Regulated as Hazardous							*				None
P1	Peroxide, Organic, DOT Regulated								*			None
P2	Peroxide, Organic (Low Risk)								*			None
R1	Reactive Chemical, Flammable									*		Note Z
R2	Water Reactive Chemical									*		Note AA
T1	DOT Poison - Inhalation Hazard										*	None
T2	UN Poison, Packing Group I										*	None

Figure 6-2. Compatibility Chart.

T3	UN Poison, Packing Group II									*	None
T4	UN Poison, Packing Group III							*			Note BB
T5	Pesticide, Low Risk							*			None
T6	Health Hazard					*	*	*	*	*	None
T7	Carcinogen (OSHA, NTP, IARC)									*	Note CC
V1	Miscellaneous Hazardous Materials Class 9							*			None
V2	Aerosol, Nonflammable				*						Note EE
V3	Aerosol, Flammable				*						Note EE
V4	DOT Combustible Liquid, OSHA IIIA				*						None
V5	Hi-Flash Point Liquids, OSHA IIIB							*			None
V6	Petroleum Products							*			None
V7	Environmental Hazard							*			None
Z1	Article Containing Asbestos							*			None
Z2	Article Containing Mercury							*			None
Z3	Article Containing Polychlorinated Biphenyl (PCB)							*			None
Z4	Article, Battery, Lead Acid, Non-spill able							*			None
Z5	Article, Battery, Nickel Cadmium, Non-spill able							*			None
Z6	Article, Battery, Lithium									*	Note DD
Z7	Article, Battery, Dry Cell							*			None

Figure 6-2. Compatibility Chart (cont)

DEFINITION OF NOTES

NOTE A - Security Storage - must be well ventilated with limited access.

NOTE B - Inorganic Alkali Storage - store away from acids by at least one 4 ft aisle width and away from organic alkalis by at least one 4 ft aisle width.

NOTE C - Organic Alkali Storage - store away from acids by at least one 4 ft aisle width and away from inorganic alkalis by at least one 4 ft aisle width.

NOTE D - Inorganic Acid Storage - store away from alkalis (caustics) by at least one 4 ft aisle width and away from organic acids by at least one 4 ft aisle width. Separate from other acids with subsidiary risk labels by at least one 4 ft aisle width.

NOTE E - Organic Acid Storage - store away from alkalis (caustics) by at least one 4 ft aisle width and away from inorganic acids by at least one 4 ft aisle width. Separate from other acids with subsidiary risk labels by at least one 4 ft aisle width.

NOTE F - Further separate into Acid and Alkali Storage within the low hazard storage area to keep potentially incompatible products from mixing.

NOTE G - Separate from other oxidizers and oxidizers with secondary hazards by at least one 4 ft aisle width.

NOTE H - Magazine Storage.

NOTE J - Segregate into flammable liquid storage separate from flammable solids by at least one 4 ft aisle width.

NOTE K - Segregate into flammable solid storage separate from flammable liquids by at least one 4 ft aisle width.

NOTE L - Separate from other flammables and flammables with secondary hazards by at least one 4 ft aisle width.

NOTE M - Further segregate into Poison Gas storage within compressed gas area.

NOTE N - Further segregate into Flammable Gas storage within compressed gas area.

NOTE P - Further segregate into Nonflammable Gas storage within compressed gas area.
NOTE R - Further segregate into Oxidizer Gas within the Nonflammable Gas storage that is within the compressed gas area.
NOTE S - Further segregate into Corrosive Gas within the Nonflammable Gas storage that is within the compressed gas area.
NOTE T - Further segregate into Corrosive Gas within the Poison Gas storage that is within the compressed gas area.
NOTE U - Further segregate into Oxidizer Gas within the Poison Gas storage that is within the compressed gas area.
NOTE V - Further segregate into Flammable Gas within the Poison Gas storage that is within the compressed gas area.
NOTE W - Further segregate into Corrosive and Oxidizer Gas within the Poison Gas storage that is within the compressed gas area.
NOTE X - Further segregate into biomedical storage within the Poison Storage area.
NOTE Y - Further segregate into Medical Security storage within the Poison Storage area.
NOTE Z - Further segregate into a Spontaneously Combustible storage within the Reactive Storage area.
NOTE AA - Should not store in areas protected with water sprinkler system. Fire protection should be non-water based.
NOTE BB - Store away from food.
NOTE CC - Further segregation within Poison Storage area may be necessary if secondary hazards exist (i.e. flammable, corrosive, etc.)
NOTE DD - Separate from other products within the Reactive Storage area.
NOTE EE - Store aerosols from flammables by placing in separate room or barrier such as floor to ceiling wire mesh, chain link fence, etc. to protect personnel from aerosols that can become self-propelled projectiles.

Glossary

The following definitions are specific to this Pamphlet. In some cases, these definitions may vary from those found in the regulations, as they are summarized or are a composite of definitions from different regulations.

Section I - Abbreviations

AASF

Army Aviation Support Facility

AR

Army Regulation

AUL

Authorized Use List

CSMS

Combined Support Maintenance Shop

DA

Department of the Army

DOD

Department of Defense

DOT

Department of Transportation

ECO

Environmental Compliance Officer

EPA

Environmental Protection Agency

EPO

Environmental Programs Office

EPM

Environmental Programs Manager

EQCC

Environmental Quality Control Committee

FEDLOG

Federal Logistical Data System

FMS

Field Maintenance Shop

FTM
Full-Time Manning

GSA
General Services Administration

HAZCOM
Hazard Communication

HCC
Hazardous Characteristic Code

HCP
Hazard Communication Plan

MATES
Mobilization and Training Equipment Site

MQCSS
Material Quality Control Storage Standard

SDS
Safety Data Sheet
NGB
National Guard Bureau

NSN
National Stock Number

OSHA
Occupational Safety and Health Administration

P2
Pollution Prevention

POL
Petroleum Oil Lubricant

QSL
Quality Status Listing

SOP
Standard Operating Procedure

SPCC
Spill Prevention Control and Countermeasures Plan

SSO
State Safety Officer

TAG
The Adjutant General

TM
Technical Manual

UECO
Unit Environmental Compliance Officer

USPFO
United States Property and Fiscal Office

WAARNG
Washington Army National Guard

WAC
Washington Administrative Code

Section II - Terms

Hazardous Material (HM)

It is defined by the U.S. Department of Transportation (DOT) as anything that, due to its chemical, physical, or biological nature, causes safety, public health, or environmental concerns. HAZMAT includes HW and materials exhibiting explosive, flammable, corrosive, or oxidizing properties.

Safety Data Sheet (SDS)

The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard requires a collection of information. An SDS includes identifying hazardous chemicals, health and physical hazards, exposure limits, and safety precautions.

Activity

Unit, organization, installation that performs a function or mission; or a group on an installation or facility that is assigned space for a common use or function and is held operationally accountable by an authority other than the installation commander (e.g., airfields, hospitals, arsenals, commissaries)