

**Marine Corps Base Quantico  
Ammunition Supply Point  
Standard Operating Procedures  
(SOP)**



**Warnings, Caution, Notes**

1. Mandatory and Advisory Phrases:

- a. "Shall," "will," and "must" are directives in nature and require mandatory compliance.
- b. The use of "should" appears when the procedure is recommended. "Should" is advisory in nature.
- c. The use of "may" and "can" appear when application of a procedure is optional.

2. This Standard Operating Procedure uses NOTES, CAUTIONS, and WARNINGS. The following apply:

**NOTE**

**The word "NOTE" is used for cases that affect product or process quality.**

**CAUTION**

**The word "CAUTION" is used for cases that would potentially damage equipment or facilities.**

**WARNING**

**The word "WARNING" is used for cases of potential personnel death or injury.**

**NOTE**

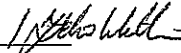


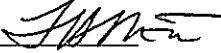
**SOPs, along with applicable reference publications, shall be accessible in the work area with the procedures readily available for use when performing an operation.**



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**SOP REVIEW AND VALIDATION PROCESS DOCUMENTATION**

1. Initial Review. Personnel responsible for the technical requirements and execution of the process, as well as personnel responsible for supporting the process in accordance with applicable sections of the procedure must conduct an initial review. Further, occupational safety and health, medical and environmental personnel are consulted where warranted. The minimum personnel required for initial review are as follows:

- a. Quality Assurance/Safety Observers.
- b. ASP Operations Chief/ASP SNCOIC
- c. Explosive Safety Officer
- d. Officer-In-Charge

TITLE	RANK/NAME/SIGNATURE	DATE
Developed by: ASP OIC	<u>CWO3 WILLIAMS, FRANKLIN</u> / 	<u>23 MAR 23</u>
Validated by: QA/SO	<u>SSgt Mastin, Ethan</u> / 	<u>25 MAR 23</u>
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Approved by: A/C S G4	<u>LTCO2 PETERSON, F.H.</u> 	<u>19 APR 23</u>

2. Continuous Review. The review of processes and procedures is continuous. A documented annual review will be completed and annotated below.

Year	Date	Printed Name	Signature	Billet/Position
2024				
2025				
2026				
2027				

**NOTE**

This document shall be continuously reviewed as part of its implementation/use and remain in effect unless revised and/or amended. The SOP shall be reviewed in its entirety by all personnel involved in its development after 4 years following the SOP approval date. Review and approval from the MCB Quantico Explosives Safety Officer is required prior to re-issuance.

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<b>REFERENCES</b>

**1. The following references were used in the development of this Standard Operating Procedure (SOP).**

a.	40 CFR	Code of Federal Regulations
b.	MIL-STD-129R	Military Marking for Shipment and Storage
c.	MIL-STD-1386	Loading of Hazardous Materials in MILVAN Containers
d.	MIL-HDBK-138B	DOD Handbook: Guide to Container Inspection for Commercial and Military Intermodal Containers
e.	DTR 4500.9R	Defense Transportation Regulation Part IV
f.	NAVSEA OP 5 Vol 1 series	Ammunition and Explosives Safety Ashore
g.	NAVSEA SWO20-AC-SAF-010	Transportation and Storage Data for Ammunition, Explosives and Related Hazardous Materials
h.	NAVSEA SWO20-AF-HBK-010	Motor Vehicle Driver and Shipping Inspector's Manual for Ammunition Explosives and Related Hazardous Material
i.	NAVSEA SWO23-AG-WGM-010	On-Station Movement of Ammunition and Explosives by Motor Vehicle
j.	NAVSUP P-805	Navy and Marine Corps Conventional Ammunition Sentencing Receipt, Segregation, Storage, and Issue Sentencing
k.	MCBO 8020.1 series	Marine Corps Base Quantico Explosive Safety Program
l.	MCINCR-MCBQ 3565	MCBQ HERO/EMCON Bill
m.	MCO 4400.201-V7	Ammunition and Explosives
m.	MCO 5090.2 Vol 4	Environmental Compliance and Protection Manual
o.	MCO 5100.29C Vol 2	Risk Management
p.	MCO 5100.29C Vol 8	Marine Corps Explosives Safety Management Program
q.	MCO 5530.14A	Marine Corps Physical Security Program
r.	MCO 5585.5	Marine Corps Military Working Dog Manual
s.	MCO 8023.3 series	Personnel Qualification and Certification Program
t.	TM 11240-15 series	Motor Transportation Official Licensing Manual

<b>Chapter 1</b>
<b>GENERAL SAFETY PROCEDURES/PRACTICES</b>

**1. General Safety Information.** The term “supervisor” in the context of this SOP refers to the senior ammunition technician present at each site for ammunition operations. The supervisor shall be the senior Marine present, having the qualification and certification (Qual/Cert) of either a Quality Assurance Safety Observer (QASO) or a Team Leader (TL).

**WARNING**

**Unsafe acts in or around the Magazine Storage Area may cause death or severe injury. Unsafe acts in or around the Magazine Storage Area or conveyances transporting A&E shall be immediately corrected and promptly reported to the ASP OIC/SNCOIC. Any Marine has the authority to stop any phase of an explosive operation if they believe unsafe conditions exist.**

**2. Fire Prevention, Protection, and Emergency Procedures**

a. Fire is the greatest hazard when working with ammunition and explosives. It is the responsibility of all personnel involved with ammunition and explosives to recognize and observe fire prevention practices, and to understand thoroughly the procedures for fighting and controlling fires that involve explosive materials.

b. Fire protective equipment inspections. Fire extinguishers and firefighting equipment designated for use in the vicinity of ammunition operations shall be inspected by QASO’s or TL’s prior to commencing any ammunition operations.

(1) All fire extinguishers shall be inspected monthly. The results of the inspection shall be recorded on the fire extinguisher.

(2) Firefighting equipment located inside equipment boxes and eye wash stations shall be inspected and inventoried monthly. The results of the inspection/inventory shall be posted inside the equipment box and retained on file.

c. Flame and Spark producing devices. Matches, lighters, or other flame or spark producing devices are prohibited in the ASP. All flame or spark producing items shall be surrendered at the Access Control Point (ACP) (Building 27066) prior to entering the ASP.

d. Smoking Regulations. Smoking and the use of electronic cigarettes (e-cigarettes or similar vapor producing type products) are prohibited in the ASP. The designated smoking area.

e. Prior to any welding or cutting operations that may cause sparks or slag, approval for (Hot work) must be obtained by the both the base Explosive Safety Officer (ESO), and the local Fire Department Chief.

f. Firebreaks shall be maintained in accordance with Chapter 4 of reference f.

g. Fire bills shall be posted at every explosive operation site.

h. In the event of a fire or explosion:

(1) Sound the alarm. Notify all personnel in the immediate vicinity by voice and then transmit the alarm over handheld radios or telephones. Clearly and calmly report the location and description of fire. An example of the report is

**“Fire in the ASP. Magazine Two. Brush Fire. I say again, fire in the ASP, Magazine Two, brush fire.”**

(a) ACP will serve as the Emergency Operations Center until all personnel have been evacuated.

(b) Upon notification of a fire, personnel located in Building 27067 will sound the fire alarm located on the bulkhead outside of the records office and call 9-1-1.

(c) Upon notification of a fire, the ASP Officer in Charge (OIC) or Operations Chief will initiate the notification process outlined in the Emergency Action Plan. Notifications will be made to the fire department, Base Operations, and Base G4.

(2) Try to close all magazine hatches.

(3) Evacuate all non-essential personnel to the closest safe fire assembly area. Maintain two person teams.

(4) Fight the fire to the level of ability with all available means and without awaiting specific instructions.

(a) If the fire involves explosive material and cannot be extinguished with on hand equipment, evacuate to the nearest safe fire assembly area. Only continue to fight fires involving explosive material to remove an individual from the immediate threat of the fire who has become incapacitated or non-ambulatory.

(b) If the fire does not involve explosive material, use all means to prevent the fire from spreading to the vicinity of explosive material.

(5) Once evacuated to the fire assembly areas, the senior organic Quantico ASP 2340/2311 will take accountability and report by fire assembly area to ACP in the below prescribed sequence:

(a) Number of MCB Quantico ASP Marines

(b) Number of Supported Unit personnel

(c) Number of Contractors/Visitors

(6) ACP will then request, by fire assembly area, an alphabetized by name accountability of all personnel present in the below prescribed sequence:

(a) Number of MCB Quantico ASP Marines

(b) Number of Supported Unit personnel

(c) Number of Contractors/Visitors

(7) ACP will clear “fire free” routes and direct each fire assembly area to evacuate the ASP.

### **3. Supervisory Responsibilities:**

1. Supervisors are solely responsible for thorough instruction and training of all procedures enclosed in the references and this SOP.

2. Nothing contained herein shall be construed as to limit the supervisors’ full responsibility for safety or quality assurance.

3. Supervisors are responsible for the correct employment and operation of tools, equipment and supplies used to support operations or activity. Supervisors shall verify safe operating conditions of tools, equipment and supplies and direct all personnel to report any unsafe conditions.

4. Personnel assignments shall be made consistent with operational requirements. Personnel shall work in a minimum of two person teams during ammunition operations. This will allow prompt assistance in the event of an emergency.

5. Supervisors shall review and recommend changes to this SOP as required.

6. Supervisors shall ensure that all personnel involved in/with ammunition operations are adequately trained in fire procedures.

### **4. Explosive Operations:**

a. The current DDESB approved explosive safety quantity distance (ESQD) limits of each site shall not be exceeded (see enclosure 9).

b. A red flag known as a “Bravo flag” must be displayed at the magazine storage area entrance (main gate/entrance) when there are personnel working with ammunition and explosives signifying that explosive operations are being conducted.

c. Personnel handling and storing A&E shall meet the Qualification and Certification guidelines and requirements in accordance with reference (q).

d. Inside magazines, personnel shall be kept to an absolute minimum to provide uninterrupted operations. No more than the posted maximum quantity of individuals are authorized in a magazine at a time during ammunition operations. No less than 2 individuals shall be in a magazine at a time.

e. Rings, jewelry, wristwatches, etc., shall not be worn on any job involving moving/rotating machinery, exposed electric currents, material handling, and explosive type operations.

f. Any evidence that A&E has been handled roughly or explosive material is exposed shall be reported immediately to the ASP OIC/SNCOIC.

g. Every precaution shall be taken to avoid A&E from contacting sand, earth, gravel, and/or other abrasive or spark producing materials. A&E shall not be unnecessarily exposed to inclement weather or direct sunlight.

h. Food is prohibited beyond the Access Control Point gate entrance located at building 27067. Resealable beverage containers are authorized throughout the Ammunition Supply Point.

i. A&E containers include inner and outer packing material typically referred to as "ammo cans." Containers shall be clean, dry, and properly marked prior to being used for A&E storage. Containers of A&E shall not be opened within magazines unless:

(1) Opening a minimum of containerized units is required for visual inspection.

(2) Minor maintenance and repair of A&E containers is required.

(3) Unpacking, inspecting, and repackaging HC/D 1.4 A&E when the magazine is limited to the storage of HC/D 1.4 only.

(4) Issuing limited amounts of packaged material from an original shipping container in which the item is packaged; ensuring it is closed and secured after the times' removal. A maximum of four people and one box can be involved at any time.

(5) An A&E container is required to have or display markings consistent with the physical contents.

j. A current site map displaying the HC/D of magazines, location of fire assembly areas shall be displayed in building 27067. This site map will be disseminated to the MCB Quantico ESO and Base Fire Department as required by changes.

## **5. Vehicle Operations**

a. Speed limits for vehicles in the ASP are as follows:

(1) Material Handling Equipment (MHE): 5 MPH when loaded.



(2) MHE: 10 MPH when not loaded

(3) All other vehicles 15 MPH.

b. Ammunition laden vehicles ALWAYS have the right of way.

c. Ammunition laden vehicles shall not perform jumping/slaving, refueling, towing or repair operations. If an ammunition laden vehicle becomes disabled, it shall be downloaded and moved to at least 100' from potential explosive site(s) (PESs) prior to movement or repair.

d. Ammunition laden vehicles shall have the wheels chocked to prevent unintended movement, and (1) fire extinguisher placed 10 feet in front of the vehicle when parked.

e. All vehicles will be parked/staged by "backing in" to increase evacuation readiness.

f. Privately owned vehicles are prohibited within the Magazine Storage Area except in emergency situations when government vehicles are not available.

## **5. Tools and Equipment**

a. Tools and equipment used in support of explosive operations shall only be used only for the specific operations they were designed and approved for.

b. Tools and equipment shall be operated within their designed limits and capacity.

c. Tools and equipment shall be operated by authorized personnel who have been instructed in the methods of operation and applicable safety procedures.

d. Only personnel who have been instructed on the proper use of tools and equipment shall be authorized to use specific tools and equipment.

e. All tools and equipment shall be inspected prior to use. When/if defects are found, operations shall be stopped, and steps shall be taken to correct/replace any defects or abnormality.

(1) Unserviceable tools and equipment that cannot be repaired by authorized means will be "tagged out"/deadline using a "Do Not Operate" sign posted in a conspicuous location.

f. Mechanical guards or safety appliances of any kind shall not be removed, tampered with, or rendered inoperative except when authorized for repairs, maintenance, or cleaning. Machinery or equipment shall not be used until safety equipment has been replaced. Modification of any tool or equipment is prohibited unless specifically authorized.

g. Pry/crow bars shall not be less than 48 inches in length.

## 7. Material Handling Equipment (MHE)

- a. MHE will only be inspected/operated by licensed and trained individuals.
- b. MHE will be inspected using the MHE inspection form (enclosure 1) before and after operation of the vehicle.
- c. Each vehicle is required to have an operational fire extinguisher, inspected monthly.
- d. A spacer may be used on the forklift tines to prevent toppling or puncturing holes in the second row of containers. After the intended container has been removed, the spacer must also be removed so the load fits snugly against the backrest of the forklift.
- e. MHE shall not be modified in any manner which is not authorized by the manufacturer (i.e., overhead coverings, etc.)

## 8. Hazardous Materials.

a. **MPPEH/MDAS/MDEH.** Material Potentially Presenting an Explosive Hazard (MPPEH), Material Documented As Safe (MDAS), and Material Documented as an Explosive Hazard (MDEH) operations include identification, recovery, collection, inspection, determination of the material's explosive safety status, marking, storage, including segregating by the explosive safety status; security; demilitarization; the accountability, when appropriate and the transfer or release, including sale.

(1) All previous markings on empty containers to be released from Marine Corps control to the DLA for disposition must be removed or obliterated.

### NOTE

**Do not obliterate markings on powder/Tank canisters that will be returned to Depot for reuse.**

(2) Do not comingle MPPEH/MDEH with MDAS. If MPPEH arrives at the ASP, Supported Unit and ASP personnel will immediately inspect and document and classify the material. If certified as MDAS, store in the MDAS lot. If determined MDEH, contact the OIC/SNCOIC for further instructions.

(3) Two trained, certified, and appointed personnel shall conduct a 100% visual inspection of the material.

(4) Keep MDAS protected from the elements/precipitation, covered with tarps, and secured.

(5) Segregate, store, and transfer the material in accordance with MCO 5100.29C\_ and the DoDI 4160.28.

(6) Ensure all ammunition containers are serviceable. Do not purposely destroy or alter containers to render the container unserviceable to circumvent the MPPEH/MDAS process.

**b. Occupational Hazardous Materials (HAZMAT).** A thorough review of required Safety Data Sheets (SDS) shall be performed prior to handling or using hazardous materials, such as chemicals, solvents, paints, etc. MSDS's shall be available in the work area where hazards exist or are stored. Marines conducting ammunition operations may encounter hazardous materials.

(1) These materials include:

- (a) Paints and Spray Paints.
- (b) Oils and Hydraulic fluid.
- (c) Greases.
- (d) Solvents.
- (e) Gasoline and Diesel Fuel.

(2) Adhere to the Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS) when utilizing any of these items. Operations personnel are available to provide SDS/MSDS upon request.


	<h2>MATERIAL SAFETY DATA SHEET</h2>	prepared 12/03/01
<p><b>HAZARDS IDENTIFICATION (ANSI Section 3)</b></p> <p><b>Primary hazards of exposure:</b> Irritation, skin contact, eye contact, ingestion.</p> <p><b>Effects of exposure:</b></p> <p><b>Inhalation:</b> Irritation of respiratory tract. Prolonged inhalation of dusts. Irritation of eyes and mucous membranes/respiratory tract. Headache, dizziness, sneezing.</p> <p><b>Skin contact:</b> Irritation of skin.</p> <p><b>Eye contact:</b> Irritation of eyes. Prolonged or repeated contact may cause irritation of eyes, redness of eyes.</p> <p><b>Ingestion:</b> Irritation of oral cavity, inflammation and damage due to application of material into nose, mouth and throat irritation, nausea, diarrhea, gastrointestinal disturbances, abdominal pain.</p> <p><b>Medical conditions aggravated by exposure:</b> Tuberculosis, preposition of contact lens, chronic respiratory disorders.</p>		
<p><b>FIRST-AID MEASURES (ANSI Section 4)</b></p> <p><b>Inhalation:</b> Remove to fresh air. Remove and support continued breathing. Use oxygen if available. Remove if available. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.</p> <p><b>Skin contact:</b> Flush skin with water. Then wash thoroughly with soap and water. Remove contaminated clothing. Wash contaminated clothing before reuse.</p> <p><b>Eye contact:</b> Flush immediately with large amounts of water, except for contact lenses. At least 15 minutes. If contact lenses are present, obtain directions for their removal.</p> <p><b>Ingestion:</b> If swallowed, obtain medical attention immediately.</p>		
<p><b>FIRE-FIGHTING MEASURES (ANSI Section 5)</b></p> <p><b>Fire extinguishing media:</b> Dry chemical or foam. Do not use water. Avoid contact with water. Use only if exposure to substance is a fire. Do not breathe vapors or fumes. Cause of fire may vary.</p> <p><b>Fire fighting procedures:</b> Water may be used to contain product spillage on non-flammable surfaces. Avoid use full protective clothing, eye protection, and self-contained breathing apparatus.</p> <p><b>Hazardous decomposition or combustion products:</b> Carbon monoxide, carbon dioxide, fumes of calcium.</p>		
<p><b>ACCIDENTAL RELEASE MEASURES (ANSI Section 6)</b></p> <p><b>Steps to be taken in case of material is released or spilled:</b> Employ all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Spills may be collected with absorbent materials. Place collected material in proper container.</p>		
<p><b>HANDLING AND STORAGE (ANSI Section 7)</b></p> <p><b>Handling and storage:</b> Store in airtight container. Keep away from heat, sparks and open flames. Keep from freezing.</p> <p><b>Other precautions:</b> Use only with adequate ventilation. Do not eat or drink. Keep out of reach of children. Avoid contact with skin, clothing, and breathing apparatus. Wash hands thoroughly after</p>		
<p><b>EXPOSURE CONTROL/PERSONAL PROTECTION (ANSI Section 8)</b></p> <p><b>Respiratory protection:</b> Consult current local, state or federal applicable exposure standards when using this material. Where respiratory protection is determined to be necessary, use a NIOSH/MSHA approved and an NIOSH approved electrostatic safety, suitable for use in an indoor work environment. Consult with your local health department for more information. Do not use the product for purposes not intended by the manufacturer. Consult 29 CFR 1910.134 for selection of respiratory protection (29 CFR 1910.134).</p> <p><b>Ventilation:</b> Provide adequate ventilation or local exhaust to prevent the dust from being inhaled.</p> <p><b>Personal protective equipment:</b> Use water, safety glasses, safety goggles, face mask or gloves, impervious clothing, etc. should be used.</p>		
<p><b>STABILITY AND REACTIVITY (ANSI Section 10)</b></p> <p><b>Under normal conditions:</b> Stable, see section 9 for fighting measures.</p> <p><b>Materials to avoid:</b> Oxidizers, heat, strong oxidizers.</p> <p><b>Conditions to avoid:</b> Flammable temperatures, lightning, sparks, open flame.</p> <p><b>Hazardous polymerization:</b> Will not occur.</p>		
<p><b>TOXICOLOGICAL INFORMATION (ANSI Section 11)</b></p> <p><b>Supplemental health information:</b> No additional effects are anticipated.</p> <p><b>Carcinogenicity:</b> A complete carcinogen since which is contained in a hazardous inorganic, has been classified as a known human carcinogen by the International Agency for Research on Cancer (IARC). It has been classified as a known human carcinogen by the International Agency for Research on Cancer (IARC). It has been classified as a known human carcinogen by the International Agency for Research on Cancer (IARC).</p> <p><b>Reproductive effects:</b> No reproductive effects are anticipated.</p> <p><b>Mutagenicity:</b> No mutagenic effects are anticipated.</p> <p><b>Teratogenicity:</b> No teratogenic effects are anticipated.</p>		
<p><b>ECOLOGICAL INFORMATION (ANSI Section 12)</b></p> <p>No ecological testing has been done by 3M on this product as a whole.</p>		
<p><b>DISPOSAL CONSIDERATIONS (ANSI Section 13)</b></p> <p><b>Waste disposal:</b> Dispose in accordance with all applicable regulations. Do not discharge to natural waters.</p>		
<p><b>REGULATORY INFORMATION (ANSI Section 15)</b></p> <p>As of the date of this MSDS, all of the components in this product are listed in an otherwise current form in the Federal Register. This product has been classified in accordance with the hazard criteria of the CERCLA and RCRA as a hazardous material and the MSDS meets all of the requirements required by these laws.</p>		
<p><small>This information contained herein is based on data available at the time of preparation of this document which it is not intended to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. 3M Paints shall not be responsible for the use of this information, or any methods, methods or apparatus mentioned, and you must make your own determination of its suitability and compliance for your business, for the protection of the environment, and the health and safety of your employees and the users of this material. © copyright 2001 OSHA hazard communication standard 29 CFR 1910.1200.</small></p>		

Figure 1-Material Safety Data Sheet

**9. Hazards of Electromagnetic Radiation to Ordnance (HERO).** The HERO program is centered on prevention of accidental ignition of Electro-Explosive Devices (EED) in ordnance due to or caused by Radio Frequency (RF) electromagnetic fields. Explosives are most susceptible to RF energy during assembly, disassembly, handling, loading, and unloading.

a. There are three types of HERO categories:

(1) HERO Unsafe Ordnance. This hazard applies to any ordnance item or systems when its normal wiring is physically exposed during assembly, disassembly, or while conducting electrical tests that require additional electrical connections to the item.

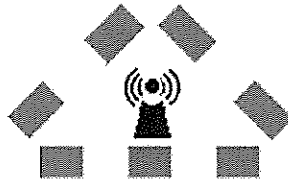
(2) HERO Susceptible Ordnance System. Any ordnance system containing EED's that suffers adverse effects from RF energy as proved by testing, to a degree that compromises the safety and/or reliability of the system.

(3) HERO Safe Ordnance. Any ordnance item sufficiently shielded or otherwise protected so that all EED's contained are immune to adverse effects when deployed in expected environments.

b. HERO Requirements for radios, cell phones, or other electronic devices. Portable cell phones, handheld radios, smart-watches, tablets, PDAs, or other electronic signaling/radio transmitting devices must be authorized to operate under MCINCR-MCBQ 3565 local HERO procedures. These items will have an attached HERO sticker showing the separation distance required from ordnance items.

**WARNING**

**Prior to conducting operations, personnel must determine whether ammunition items are HERO UNSAFE or SUSCEPTIBLE and take appropriate safety precautions.**



**WARNING: RADIO FREQUENCY HAZARD**

<b>RADIO TRANSMISSION PROHIBITED WITHIN:</b>
<b>* Feet From:</b> <b>- Closed Magazines</b> <b>- HERO SUSCEPTIBLE ORDNANCE</b>
<b>* Feet From:</b> <b>- Open Magazines</b> <b>- Explosive Ordnance Buildings</b> <b>- HERO UNSAFE ORDNANCE</b>

*Figure 2- HERO Label*

**Chapter 2****PHYSICAL SECURITY AND ACCESS CONTROL**

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations pertaining to physical security and access control of ammunition and explosives (A&E).

a. Physical Security is the responsibility of all personnel involved with A&E operations. Immediately report any violations or discrepancies of Physical Security measures to the supervisor.

b. Only authorized personnel are allowed access to the magazine storage area. All personnel requesting access to the ASP shall check-in and out at the ACP window of building 27066. Visitors or personnel not granted unescorted access **will not** be granted access to the magazine area without an escort.

c. Escorted personnel shall be issued an access badge prior to entering the magazine storage area. This badge shall always be displayed.

d. Security sensitive matters are a need-to-know basis.

e. Recording devices such as photographic cameras and video cameras are prohibited in the magazine area unless specifically authorized by the ASP OIC.

f. Unauthorized personnel that have breached or attempted to breach the ASP perimeter shall be escorted out of the Magazine Storage Area and directed to Provost Marshalls Office (PMO). Immediately notify the ASP OIC/SNCOIC.

g. Except for designated guard force personnel, all personnel shall surrender weapons and associated security ammunition to ACP prior to being granted access to the Magazine Storage Area.

(1) ACP personnel will inventory supported units' security ammunition jointly with the supported unit and log the inventory into the visitors weapons control logbook.

(2) ACP personnel will label supported units rifle/pistol magazines to ensure return to appropriate supported units upon departure.

**2. Procedures.** The Access Control Section is responsible to the Access Control Officer/OIC of the ASP for the security, accountability, and access to magazine keys, vehicle keys, radios, and assigned QA seal presses.

The Key Control Custodian will: Complete an inventory of all controlled items quarterly and maintain the results of this inventory in a history file. Report discrepancies to the Access Control Officer immediately.

- a. Maintain Key Control Registers for three years.
- b. Maintain Entry Rosters and Visitor Control Logs for three years.
- c. Maintain a log of Annual Lock and Key rotations for three years.
- d. Maintain Personnel Access Roster for three years.
- e. Issue Keys to personnel qualified and certified as a TL or higher and only to personnel whose duties require access to them.
- f. Inventory keys at the beginning and end of each work day.
- g. Issue a QA seals to assigned individuals.

**3. Entry Control Point.** Entry Control Point (ECP) personnel are responsible for manning the ASP's ingress/egress point, and controlling pedestrian/vehicular traffic. ECP personnel will:

- a. Search all personnel and vehicles, regardless of rank or status that enter/leave the ASP for prohibited items.
- b. Ensure all visitors read and sign the Hazard Control Brief.
- c. Issue and retrieve ASP/visitor badges as required. Report lost badges to the Access Control Officer.
- d. Ensure the bravo flag is prominently displayed whenever personnel enter the wire to conduct ammunition operations, including after-hours/Duty Tech operations.
- e. Restrict unescorted access in accordance with the current access roster.
- f. Inspect explosive laden vehicles entering and exiting the ammunition supply point utilizing the DD626 vehicle inspection checklist and DD2890 DOD Multidomal Dangerous Goods Declaration form.
- g. Collect all pre and post MHE inspection sheets daily.

#### **4. Magazine Keys and Lock Procedures**

- a. General

(1) Magazine keys serve to identify and validate who has access to specific magazines during a specific period. Therefore, keys shall not be passed off to other individuals who have not signed for them.

(2) Only personnel designated in writing by the Commanding Officer are authorized to receive keys used to secure ammunition and explosives.

(3) Only authorized personnel may sign for keys and make appropriate key register logbook entries.

(4) Padlocks and high security locks shall be locked to the magazine hatch whenever magazine doors are opened to prevent theft, loss, or substitution of the lock. Keys shall be retained in the Marine's possession.

(5) Lost, misplaced, or stolen keys will immediately be reported to the SNCOIC/OIC to prevent unauthorized access.

(6) Unlocked magazines shall not be left unattended at any time.

(7) Magazines equipped with IDS shall be used to store security sensitive ammunition. Personal identification numbers (PIN) are issued to Marines who have been granted access. Sharing or allowing others to use PIN's that have not been issued to them is unauthorized.

(8) Security risk category (SRC) I and II items require constant surveillance by ammunition or guard personnel, unless stored in a locked magazine equipped with IDS.

(9) SRC III and IV items in open storage (pre-staged or in preparation for shipment) require constant surveillance by ASP personnel or designated guard force during operating hours (0800-1630 Monday-Friday) and one patrol per hour during non-operating hours.

(10) A&E staged in the Vehicle Staging Area (VSA) or in open storage configuration shall adhere to surveillance requirements.

(11) For safety and security purposes, no less than two individuals may enter a magazine at any given time.

b. In the event of IDS failure:

(1) Notify the IDS monitors at (703) 784-4171. The IDS monitor will notify PMO at (703) 784-2251/2252.

(2) Notify the ASP OIC/SNCOIC

(3) The ASP OIC/SNCOIC will ensure sentries are posted on all Security Risk Category (SRC) I/II storage locations, and patrols are adequate.



**Chapter 3**  
**STEP BY STEP PROCEDURES**

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations involving but not limited to the receipt, segregation, storage, and issue (RSSI), administration and management of ammunition and explosives (A&E).

**WARNING**

If material is determined to be unsafe at any step in the process **CEASE** further movement/inspection and notify the supervisor. Personnel will wear approved and recommended safety equipment appropriate to the operation being performed, e.g., hard hats, safety boots, ear protection, eye protection, etc.

**WARNING**

The following indicators represent unacceptable levels of exposure to personnel, equipment, facilities, and/or the environment: unexplained smoke, mist, or unusual smells; crystallization, exudation, and outgassing; missing or incomplete components of individual items; and missing or incomplete packaging material. If the threat of fire or explosion exists, remove yourself and all other personnel from the immediate area of the threat and if practical, secure magazine doors. Sound the alarm via the fastest means possible.

**WARNING**

If material is determined to be unsafe at any step in the process **CEASE** further movement/inspection and notify the supervisor. Personnel will wear approved and recommended safety equipment appropriate to the operation being performed, e.g., hard hats, safety boots, ear protection, eye protection, etc.

**WARNING**

Pentachlorophenol (PCP) is a hazardous chemical previously used to treat and preserve wooden boxes common to ammunition. Wooden boxes treated with PCP are marked with a "P" and present serious hazards to personnel through dust inhalation or absorption through the skin. If you encounter PCP treated wood, notify the supervisor immediately. Acceptable alternative preservatives that do not present the same hazards as PCP are marked as follows:

PA = Copper-8-Quinolinolate  
PB = Zinc Naphthenate  
PC = Copper Naphthenate

In the event of PCP contamination to personnel, remove the patient(s) immediately from the contaminated area to fresh air. Support respiration, provide a clear airway, and keep patient at rest. The symptoms of lung edema do not become apparent until a few hours later and physical effort will aggravate the condition. Radiographic examination of lungs should be routine. Do not induce vomiting.

**WARNING**

**Tampering, disassembly/assembly of ammunition, ammunition components, and explosives is dangerous, and prohibited. All personnel who handle ammunition shall be especially alert for the presence of damaged or leaking containers, unusual odors or sounds, unusual centers of gravity, damage to the package or adjacent ammunition. Do not move ammunition determined to be unsafe, unless not moving the item will increase the hazard. Ammunition determined to be unsafe to handle shall not be inspected other than an external visual inspection.**

**WARNING**

**Keep explosive handling to a minimum, exercise care in handling all hazardous materials. Do not drop, roll, tumble, or toss ammunition and explosives. Two or more persons shall handle items weighing over 50 lbs. Use only certified vehicles and Material Handling Equipment (MHE). Properly secure ammunition and explosives to a pallet prior to moving with MHE. All MHE movements within magazines require a ground guide.**

**WARNING**

**Place gas masks inside, or so that they are immediately accessible for any magazine placarded with the "Wear Breathing Apparatus" placard.**

**2. Pre-Operation Requirements.** Prior to the start of any ammunition operations, or work within the Ammunition Supply Point the following conditions must be met and maintained:

a. Supervisors shall verify all assigned personnel:

(1) Have received a safety and Hazard Control Briefing (HCB)

(2) Are properly and adequately trained, qualified, and certified for the operation to be performed. Personnel who are not Qual/Cert for the operation being performed are prohibited from participating in the explosive operation.

(3) Have reviewed this SOP in its entirety and signed the appropriate supervisor or worker statement.

(4) Have been instructed on Emergency Response Procedures contained in this SOP. Supervisors shall periodically reiterate these procedures to all personnel to ensure personnel can execute the Emergency Response Procedures safely and competently.

**WARNING**

**Operations will not commence/continue unless all involved personnel are wearing appropriate Personal Protective Equipment (PPE).**

(5) Are equipped with adequate PPE for the operation to be conducted.

a. Only those designated in writing by the Commanding Officer are authorized to access AA&E keys in accordance with MCO 5530.14\_\_.

b. Obey Posted Fire Bills and Net Explosive Weights (NEW) displayed inside each magazine. Review these documents and update every six months as appropriate.

c. Inspect all Material Handling Equipment (MHE), tools, and equipment required for operations prior to each day's use.

d. Keep firefighting equipment in the immediate vicinity of all explosive handling operations. Inspect fire extinguishers.

e. Properly instruct all personnel handling ammunition and explosives prior to each handling evolution with an emphasis on employment and safety precautions associated with the specific items being handled.

f. Safety Regulations for Handling and Storage of Explosives are mandatory for all magazine operations and expressed in figure 3.

g. Prior to being granted access to the Magazine Storage Area,

(1) Prominently display a Bravo flag at the entrance to the magazine area when conducting ammunition operations.

(2) All personnel will be indoctrinated into A&E Safety, HERO, and be screened for prohibited items which may include:

(a) Flame or spark producing items such as lighters, matches, torches, welders, grinders, etc. Some flame or spark producing items may be permitted only after obtaining authorization from the ASP OIC via the Explosive Safety Officer.

(b) Cellular phones, tablets, MP3 players, smart-watches, or other electronic devices with signal transmission capabilities.

(c) Un-approved radios (walkie-talkies). Vehicular mounted radios and cameras shall be turned "off" or covered as to restrict the transmission of radio/video signals for the duration access to the Magazine Storage Area.

(d) Electronic cigarettes or similar vapor emitting items.

(3) Authorized personnel will surrender a photographic ID Card to the entry control point. Adequate Logbook entries shall be made indicating name, rank, date, and time of entry for all personnel accessing the Magazine Storage Area.

(4) A Safety Observer (SO) will be present in the ASP to supervise whenever ammunition operations occur.

## NAVAL SEA SYSTEMS COMMAND

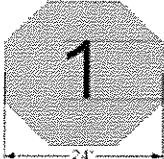
**THESE INSTRUCTIONS ARE NOT ALL INCLUSIVE AND NAVSEA OP 5  
MUST BE CONSULTED FOR MORE DETAILED INSTRUCTIONS**

### SAFETY REGULATIONS FOR HANDLING AND STORAGE OF EXPLOSIVES

#### GENERAL REGULATIONS

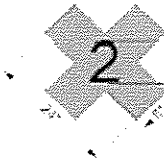
1. Smoking is not permitted in magazines, railroad cars, vehicles or areas containing ammunition, explosives or other dangerous materials.
2. Hot work involving cutting, grinding, welding requires a permit from the local Safety Office.
3. This magazine must be placarded inside the door with permissible storage and explosive limits. The appropriate fire and chemical hazard symbol must be placed outside.
4. Minimize the number of personnel in the vicinity of ammunition/explosives.
5. Use only approved lights. Contact local Safety Office for determination of approved lights.
6. Ensure proper fire fighting equipment is present and usable before beginning work. Contact Safety Office/Fire Department if unsure what fire fighting equipment should be used.
7. Keep the magazine clean. Do not allow debris, especially oily rags or paint rags, and combustible material in the area. Keep sand and gravel out of the magazine.
8. Only approved material handling equipment can be used. Contact the local Safety Office for guidance. Only qualified and licensed operators are allowed to operate material handling equipment.
9. Do not carry lighter or matches.
10. Do not leave open containers in magazine.
11. Only operations pertaining to storage and shipping are permitted in this magazine.
12. Ammunition and explosives found in unacceptable containers must be removed. Consult requirements and precautions for the specific explosive/ammunition type. Clean up all loose powder immediately while other operations are halted.
13. Stow all materials in accordance with an approved plan and in stable stacks.
14. Store ammunition on metal dunnage to prevent wicking of floor moisture to stored material.
15. Do not leave this magazine open and unattended while it contains ammunition/explosives.
16. Immediately contact your supervisor, local Safety Office or EOD personnel in the event of abnormalities or emergencies.
17. Grounding shall be in accordance with applicable instructions.
18. All magazine workers shall be instructed in static electricity principles before commencing operations.
19. Stack ammunition no less than 6 inches from walls and ceiling and leave a front clearance of 2 feet. Magazines less than 1000 cubic feet - maintain minimum separation for ventilation.

#### FIRE HAZARD SYMBOLS (Orange Background)



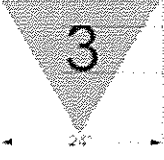
**CLASS 1, DIVISION 1**

Denotes the presence of DOD Hazard Class/Division 1.1 explosives which present primarily a blast hazard and can be expected to mass detonate when involved in fire.




**CLASS 1, DIVISION 2**

Denotes the presence of DOD Hazard Class/Division 1.2 explosives which present both a blast and a fragment hazard.



**CLASS 1, DIVISION 3**

Denotes the presence of DOD Hazard Class/Division 1.3 explosives which present primarily a mass fire hazard.




**CLASS 1, DIVISION 4**

Denotes the presence of DOD Hazard Class/Division 1.4 explosives which present primarily a moderate fire hazard.

#### HANDLING AND STOWAGE OF CHEMICAL AMMUNITION


##### CHEMICAL HAZARD SYMBOLS



**RED FIGURE AND RIM DENOTES:**

The presence of casualty agents which cause death by absorption and/or inhalation.


- Wear full protective clothing (SET 1)
- Gas Mask, M9A1
- Impervious suit (coveralls, hood, gloves, fireman boots, and boot covers)



**YELLOW FIGURE AND RIM DENOTES:**

The presence of harassing agents (not control agents and smokes).


- Wear full protective clothing (SET 2)
- Gas mask, M9A1 or M17A1
- Coveralls
- Protective gloves



**WHITE FIGURE AND RIM DENOTES:**

The presence of white phosphorus.


- Wear full protective clothing (SET 3)
- Flame-Resistant coveralls
- Flame-Resistant gloves
- Gas mask, use current approved mask



**DENOTES:**

The presence of material that requires wearing of a breathing apparatus (gas mask) when involved in a fire.

- Wear breathing apparatus



**DENOTES:**

The presence of material for which water is not a suitable extinguishing agent, and water will not be applied if involved in a fire.

- Apply no water

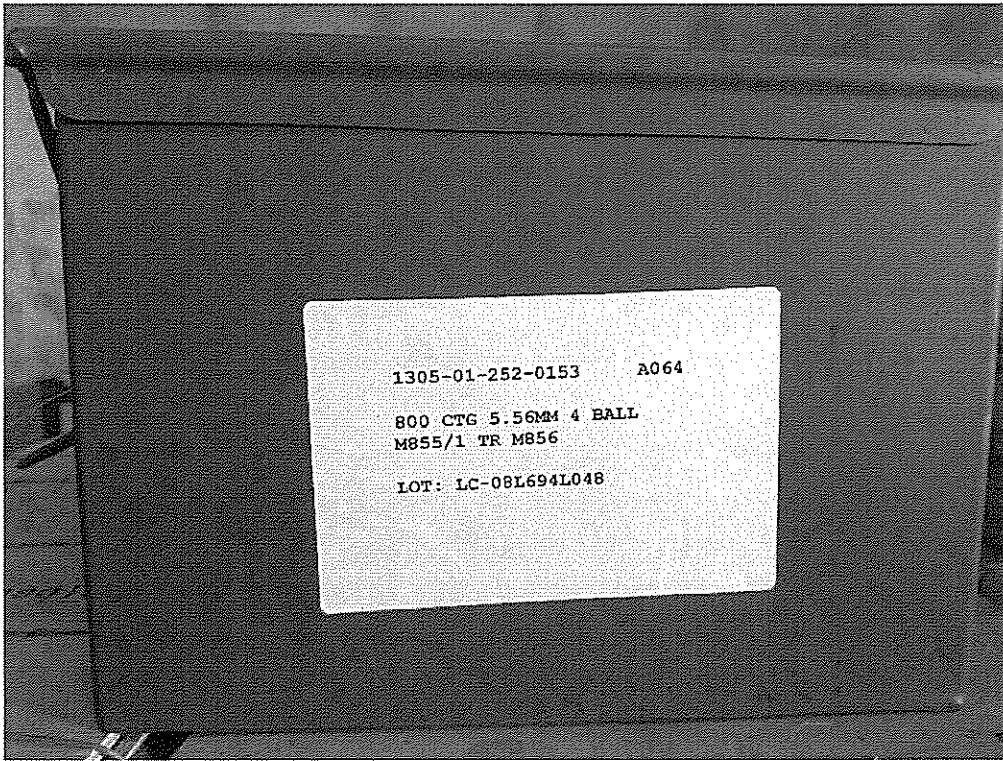
NSWC 12046 (REV. 8-06)

Figure 3- Safety Regulations for Handling and Storage of Explosives

**3. Labeling and Marking.** Labeling and marking will be accomplished in accordance with MCO 8015.3, MIL-STD-129, and NAVSUP P-805.

a. Markings

(1) Size of Markings. The lettering/markings shall be in capital letters of equal height, clearly visible, and the largest size practical for the package size permits. Markings shall not be less than 3/32 of an inch. Figure 4 displays an example of how to mark an ammunition container.



*Figure 4 Correctly Marked Ammunition Container*

(2) Hand marking/printing is **NOT AUTHORIZED** for any ammunition containers. Stencils or printed labels must be used to mark ammunition containers. Figure 5 displays an example on how NOT to mark an ammunition container.

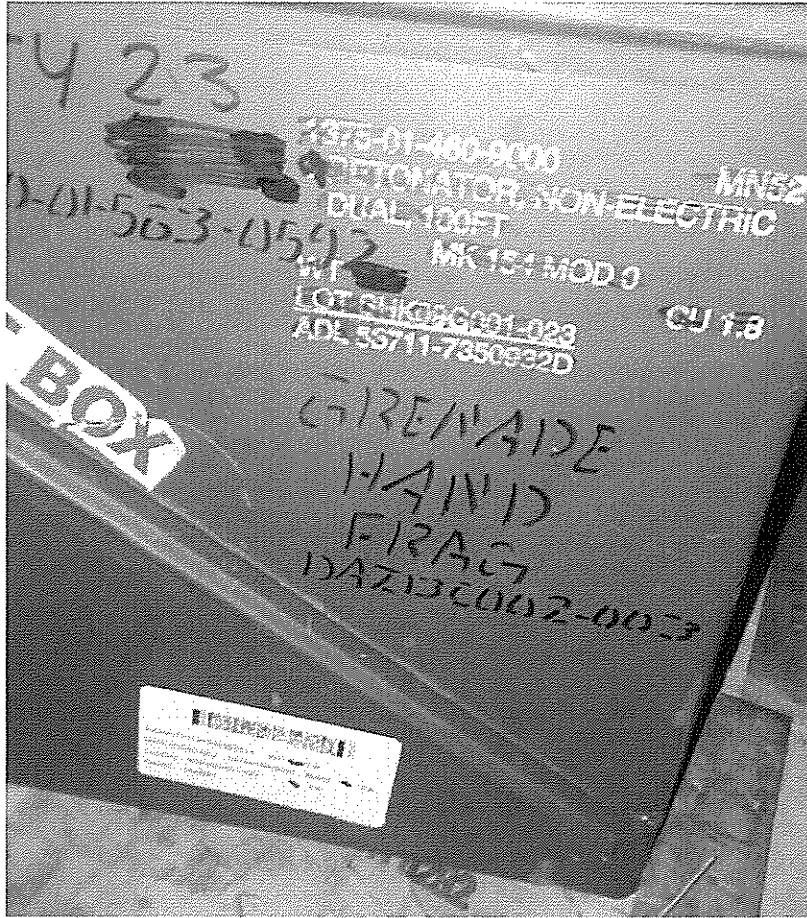


Figure 5 – Incorrect/Unauthorized Container Marking

(3) Marking color.

(a) Packages or containers constructed of wood or lightly colored materials shall be marked using dark (black or olive) markings.

(b) Packages or containers constructed of dark materials (ammunition cans) should be marked using light (tan, yellow or white markings).

(c) When printed labels are used, the color of ink must be contrasting to the color of the label (i.e., black ink on white paper/vinyl tape).

(3) The following identifying attributes shall be marked on all unit packs, intermediate containers and unpacked items containing ammunition:

(a) NSN

(b) DODIC

(c) Quantity (Qty)

**NOTE**

**When the Unit of issue (UI) is linear, use feet (ft) and refer to Chapter 8**

(d) Nomenclature

(e) Lot number/Serial number (if applicable). The word "LOT" shall precede the lot number and "S/N" shall preclude the serial number.

(f) Condition code (C/C). Manufacturers are not required to print C/C's on containers. Therefore, when ammunition packaging is received from the factory and factory banded, outer packaging is not required to be marked with C/C.

**NOTE**

**Words such as "NSN," "DODIC," and "Nomenclature" shall not be included as part of the identification markings.**

(4) **Light boxes.** When a package contains less ammunition or explosives than the package is designed to contain, the box must be specifically marked as "LIGHT" or "LITE" in the largest practical letters using a contrasting orange color scheme. Additional markings shall be placed on the top, ends and sides of the container/ammunition can. For cylindrical containers such as artillery propellant containers, light box markings shall be placed on the bottom, opposite sides, and top edges of the opening end of the cylinder where light box is not visible.

(5) Empty Containers

(a) Regardless of their origin, empty containers must be inspected for markings and seals certifying their empty condition. Containers which do not meet these requirements must be opened, inspected, marked, and sealed, certifying their empty condition.

(b) All previously used to identify attributes shall be removed/obliterated completely.

(c) The word "EMPTY" shall be stenciled on both ends and both sides of the container in 1-inch letters.

(d) The lid for the container shall be removed and placed inside the empty container where feasible.

(e) Certified empty containers shall be stored inside building 3195. Excess containers shall be prepared for shipment to DRMO.

#### 4. Magazine Opening Procedures

**WARNING**

**DODIC C870, 81mm Smoke Red Phosphorus (RP) M819 poses a very toxic phosphine gas hazard that may be odorless or have the odor of decaying fish or garlic. Magazines or enclosed areas storing C870 shall be ventilated for a minimum of 20 minutes prior to entering to reduce potential phosphine exposure. Adhere to the following for C870 storage:**

- 1. The magazine will be open and ventilated for NLT 20 minutes prior to personnel entering if appropriate breathing apparatus is not worn.**
- 2. Inner packaging will be opened down wind of personnel and ventilated for 10 min before cardboard tubes will be opened.**

- a. Locate the appropriate magazine.
- b. Visually inspect lightning protection systems (LPS) air terminals and all grounding/bonding for serviceability on magazine hatches. LPS air terminals shall be free of obstruction and vertical. Grounding/bonding straps shall be free of fray.
- c. Disarm intrusion detection system (IDS) as required.
- d. Unlock the magazine hatch(es). For padlock style high security locks (Internal Locking Device (ILD)), the lock shall be replaced on the hatch, and the keys shall be retained on the Marine's person.
- e. Open the magazine hatches ENTIRELY.
- f. The QASO or TL shall inspect the fire extinguisher for serviceability and documented inspection has been annotated on the fire extinguishers inspection card within the last 30 days.
- g. The QASO or TL shall verify the presence and accuracy of the General and Local fire bills.

#### 5. Magazine Closing Procedures

- a. Conduct a visual inspection of the entire magazine and its contents and ensure compliance with all storage regulations outlined in this SOP (e.g., stack configuration, can/container markings, application of traceable seals, magazine data cards, general housekeeping, etc.).
- b. Remove all tools, paint, and trash from the inside of the magazine.
- c. Close the magazine hatches and lock the ILD.
- d. If required, rearm the IDS.



- e. Visually inspect the outside of the magazine and surrounding area prior to departure.

**6. Housekeeping Procedures.** When conducting housekeeping procedures in areas where ammunition and explosives are, or intended to be present, the section shall:

- a. Keep operating areas and spaces between buildings clear of any combustible material. Do not allow rubbish and trash such as empty boxes, scrap lumber, nails, and strapping materials to accumulate in these areas. Remove these materials from the magazine area by the close of business each day.

- b. Keep the amount of flammable material such as wooden dunnage, pallets, or boxes to an absolute minimum.

- c. Do not allow empty containers, packing materials, excess dunnage, tools, skids, or other similar materials in magazines except when the material is required for the ammunition operation.

- d. Keep magazines and areas surrounding magazines clean and in an orderly state of police.

- e. Keep inspection aisles and safety exits clear.

**6. MHE Procedures.** MHE will be inspected daily by the operator prior to use in accordance with NAVSUP P-538 MHE Inspection Form (Appendix 1) and discrepancies reported to the ASP OIC/SNCOIC. The ASP SNCOIC shall maintain completed inspection forms.

- a. MHE will only be inspected/operated by trained individuals.

- b. MHE shall be inspected prior to and after operation using the MHE inspection form.

- c. Operators shall be cognizant not to exceed the weight restrictions of the MHE they are operating. Safe working load and gross weight should be always in view of the operator during operation.

- d. Ground guides must be used when moving loads that obstruct the operator's view, when loads are too long for the operator to judge end clearance, and/or when operating inside of magazines.

- e. Loads shall be securely banded or strapped prior to movement. Operators shall execute caution when traversing uneven terrain and shall avoid sudden movements associated with accelerating/decelerating to prevent toppling.

- f. At the end of each workday, MHE shall be inspected for adequate fuel; refuel as required and stow in the designated MHE storage location.

- g. Forklifts are restricted to hardball/improved/pavement only.

## 8. Document Control

- a. All documents such as 1348-1A and Material Work Orders (MWOs) consisting of either Storage Work Orders (SWOs) or Records Work Orders (RWO)) must be strictly controlled to prevent loss or misplacement.
- b. Section NCOICs are encouraged to return processed documents periodically throughout the workday as they become complete to reduce processing time at the end of the workday.
- c. Documents generated by the Records section may be signed out of the Records office as they are generated for action. Section NCOICs who possess a QA or TL Qual/Cert may receive documents from the Records section. The Records section will ensure the documents are recorded in the corresponding Records Document Control Logbook.
- d. Documents shall be returned to the Records section (completed or not) **NO LATER THAN 1500** each day unless specifically directed otherwise by appropriate authority. This provides the Records section with adequate time to process the documents and direct/apply corrective action as required.
- e. The Section NCOIC who signed the documents out from the Records office may use a runner to deliver the documents to the Records section in which case the Section NCOIC will legibly print, sign, and date the document in the lower-left most portion of the document.
- f. Removal of documents from the ASP is prohibited.

**NOTE**

**ASP will not secure for the end of the day until the Records section has 100% positive control of all documents and verifies the accuracy of all BOHs.**

- g. Document control flow charts for Storage Pull Process and Issue Process are displayed in Figure 6 as a quick reference. Refer to chapters 4 and 5 for additional details.
- h. Document control flow charts for Segregations and Receipt Process are displayed in Figure 7 as a quick reference. Refer to chapters 5 for additional details.

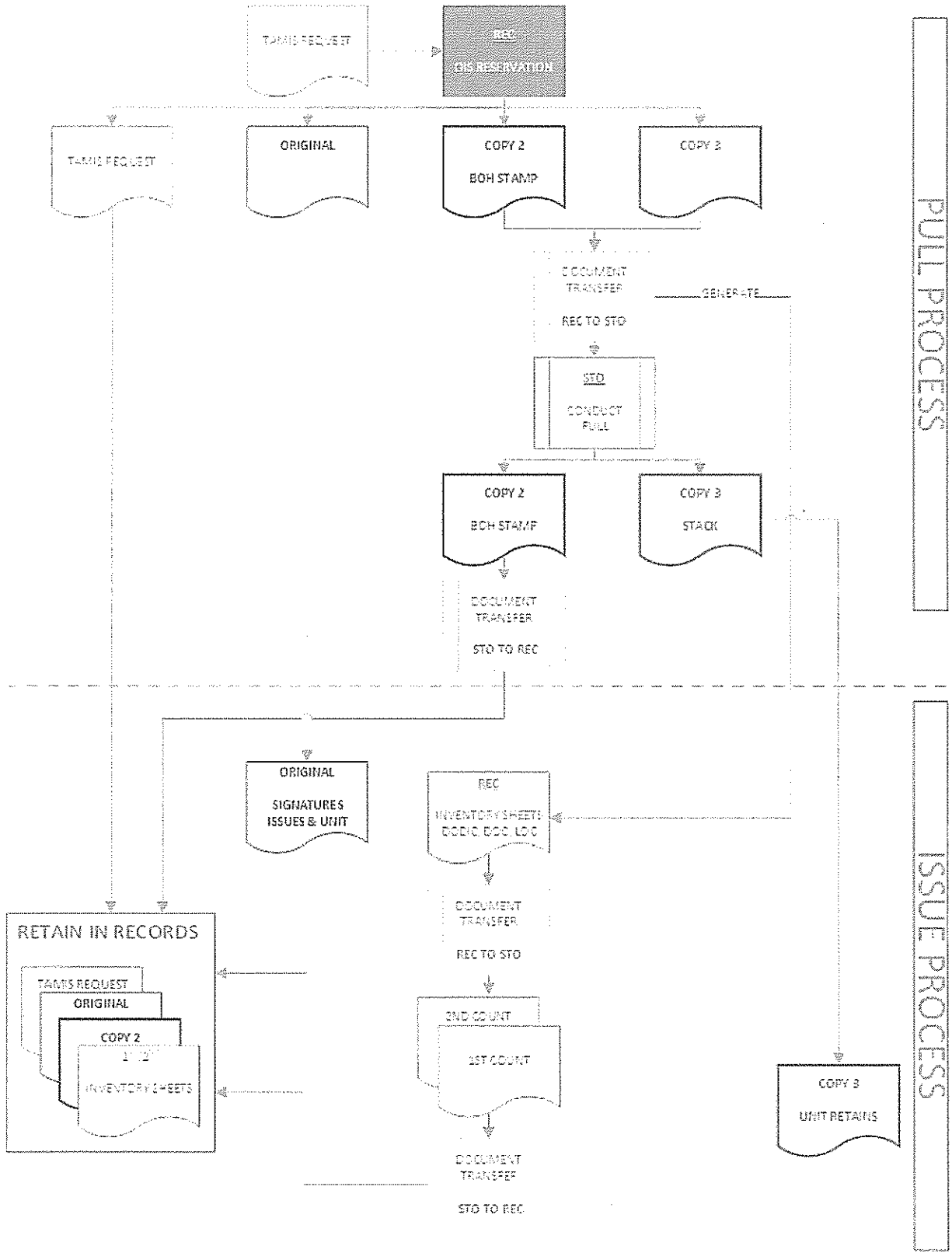


Figure 6 - Pull/Issue Process Document Control

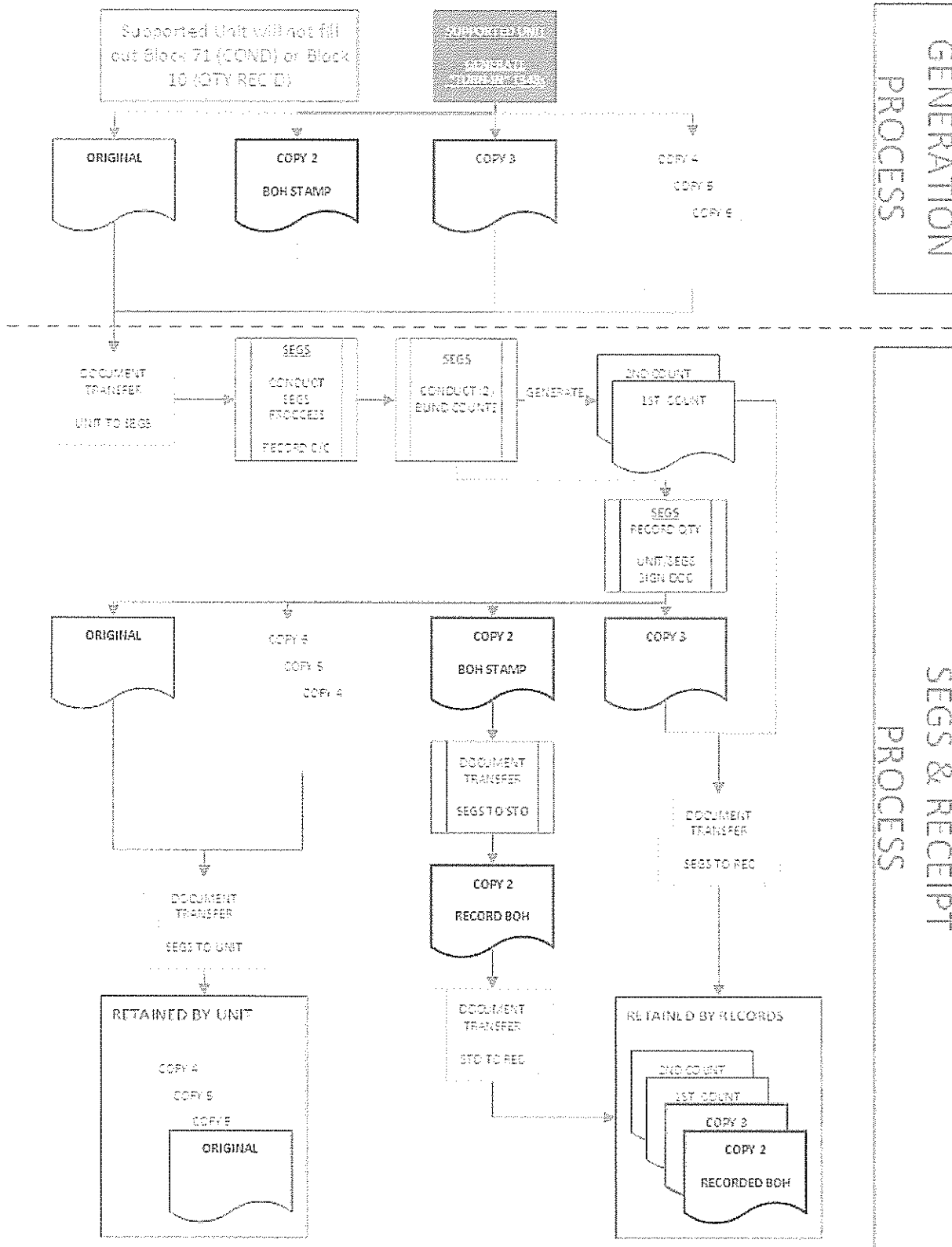


Figure 7- Segregations and Receipt Process Document Control

<b>Chapter 4</b>
<b>STORAGE PROCEDURES</b>

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations involving but not limited to the storage, administration, and management of ammunition and explosives (A&E).

**2. Storage Procedures.** Storage is the process of providing safe, secure, and protected supplies in support of operations, as well as production, maintenance, surveillance, and disposal processes. The storage process involves ammunition handling, periodic inspection, and performing inventory management procedures.

**3. General Storage Procedures:** Ammunition will be stored as follows:

a. A minimum of two authorized personnel is required for entry into a site approved storage location or operating building.

b. Raise materials off the deck with suitable metal pallets to provide ventilation. Wooden pallets received as a part of the packaged unit may remain in the magazine. Remove wooden pallets when empty.

c. Store like items together to the maximum extent possible within approved explosive limits and compatibility requirements. (See Storage Figure 8)

d. Inert items and live items shall not be stored in the same magazine.

e. Move ammunition by hand, or appropriate MHE only.

f. Maintain sufficiently wide access aisles to permit unhindered movement of MHE with the minimum necessary shifting of materials to reach desired stores.

g. Minimum clearances of 2 feet from the front wall and 6 inches from sidewalls, rear walls, and ceilings shall be maintained inside each magazine.

h. Maintain aisles at least 18 inches wide for inspection and inventory of ammunition.

i. Arrange stacks of ammunition so they are stable, orderly and facilitate the safe and effective handling and storage of material.

j. Store explosives, ammunition, and ammunition components in approved containers and stack in such a manner as to ensure against toppling or collapse.

k. Remove excess dunnage and material upon the conclusion of daily operations.

l. Magazine Data Cards (NAVMC 10765) shall be used for all stored ammunition and shall be prominently displayed on each stack. The following requirements apply to Magazine Data Cards:

Table 3-10. Storage Compatibility Chart for Shore Activities

GROUPS	A	B	C	D	E	F	G	H	J	K	L	N	S
A	X	Z											
B	Z	X	Z	Z	Z	Z	Z					X	X
C		Z	X	X	X	Z	Z					X	X
D		Z	X	X	X	Z	Z					X	X
E		Z	X	X	X	Z	Z					X	X
F		Z	Z	Z	Z	X	Z					Z	X
G		Z	Z	Z	Z	Z	X					Z	X
H								X					X
J									X				X
K										Z			
L													
N		X	X	X	X	Z	Z					X	X
S		X	X	X	X	X	X	X	X			X	X

## NOTES:

- The marking "X" at an intersection of the above chart indicates that these groups may be combined in storage. Otherwise, mixing is either prohibited or restricted per note 2 below.
- The marking "Z" at an intersection of the above chart indicates that, when warranted by operational considerations or magazine non-availability, and when safety is not sacrificed, logical mixed storage of some items of different groups may be authorized by NOSSA upon written request. Mixing of limited quantities of some groups, as authorized by note 5 below, does not require a written request. Authorization is not to be considered a waiver. Combinations that violate the principles of paragraph 3-9 require justification by waiver or exemption. Examples of acceptable combinations of class 1 are:
  - Division 1, group A initiating explosives with division 1, group B fuzes not containing two or more independent safety features.
  - Division 3, group C bulk propellants or bagged propelling charges with division 3, group G pyrotechnics without their own means of initiation.
- Equal numbers of separately packaged components of complete rounds of any single type of ammunition may be stored together. When so stored, compatibility is that of the assembled round; i.e., WP filler in group H, HE filler in groups D, E, or F, as appropriate.
- Ammunition designated "practice" by NSN and nomenclature may be stored with the fully loaded ammunition it simulates.
- Mixing of compatibility groups (except items in groups A, K, and L) is authorized when the total quantity does not exceed 1,000 pounds NEW. Mixed storage that exceeds 1,000 pounds NEW must be approved by NOSSA.
- Mixing in storage of hazard Class 1 ammunition or ammunition components with hazard Class 2 through 9 ammunition or ammunition components, or with non-regulated items assigned a compatibility group, is authorized, provided storage is in accordance with the compatibility group assigned.

*Figure 8 Storage Compatibility Chart*

(1) Magazine Data cards indicate Condition Code by the following color of cardstock used to create the form:

- Yellow. Serviceable material – Condition Codes A, B, and C only.
- Blue. Test/modification – Condition Code D only

- (c) Green. Unserviceable (repairable) – Condition Codes E, F, or G only.
- (d) Red. Unserviceable (condemned) – Condition Codes H, P, or V only.
- (e) Brown. Suspended material – Condition Codes J, K, L, or N only.

(2) Markings on the Magazine Data Card shall be made in red (records), blue (PICP), or **black** (Storage) ink except for “magazine/location”, “Condition Code”, “COG”, and “Owner Code”, which shall be made in pencil.

(a) There shall be no corrections authorized to the header section (DODIC, NSN, Lot Number, Nomenclature, and Remarks) of the Magazine Data Card except for “magazine/location”, “Condition Code”, “COG”, and “Owner Code”, which may be erased and rewritten as the attributes change.

(b) Corrections on the magazine data card’s body (Date, Document Number, Received, Issued, Balance, Full Name) shall be kept to an absolute minimum.

1. When an administrative error/mistake is made, line out the first five columns (date, document number, received, issued, and balance) of the magazine data card in pen with a single line. LEGIBLY print and sign in the full name column.

2. There shall be no more than 3-line outs per magazine data card.

a. Should more than 3-line outs occur, contact a QA, and rewrite the magazine data card.

3. Enter the Julian date in the DATE column.

4. Enter the DOCUMENT NUMBER in the column as it appears on the pull/turn-in document.

5. Enter the quantity of ammunition ISSUED or RECEIVED in the appropriate column.

6. Enter the initials of the individual conducting the transaction. Place the initials in the RECEIVED column for a pull, and place the initials in the ISSUED column for a turn-in.

7. Enter the After Balance on Hand (ABOH) in the BALANCE column

8. LEGIBLY print the rank and last name of the individual conducting the pull/turn-in in the FULL NAME column.

9. Figure 9 displays a correctly filled out Magazine Data Card.





b. Using the provided documentation, identify assets by DODIC, NSN, Lot Number, Condition Code, and Owner Code.

(1) Conduct an inventory of the ammunition stack to determine the Before Balance on Hand (BBOH) and record the BBOH on **COPY 2**.

(a) If the ammunition to be pulled is a measurable DODIC, refer to Chapter 8 for specific instructions.

(2) Verify the BBOH matches the Magazine Data Card. **DO NOT** proceed if the BBOH does not match the Magazine Data Card. See flowchart (Figure 10).

(3) Remove the ammunition pull from the stack and set aside.

(4) Conduct a second inventory of the ammunition stack to determine the ABOH. Record ABOH on **COPY 2**.

(5) Complete the required entries on the Magazine Data Card in **Black Ink**.

\* (6) Notify a TL that the ammunition pull is complete.

(7) The TL will verify the ammunition pull, Magazine Data Card, and all documentation.

(8) Complete the required entries on **COPY 2** and **COPY 3**.

(a) The TM (or higher) will sign and date blocks 30 and 31 (Packed by:)

(b) The TL (or higher) will sign and date blocks 32 and 33 (Inspected by:)

(9) Place the ammunition pull and **COPY 3** in the set-ups area of the magazine.

c. Reference the detailed flowchart (Figure 10) as a quick reference.

d. Complete the above process for all remaining ammunition pulls in the magazine.

e. Complete Housekeeping Procedures.

f. Conduct Magazine Closing Procedures.

m. Maintain strict document control in accordance with Chapter 3.

**NOTE**

**ASP will not secure for the end of the day until the Records section has 100% positive control of all MWO's, ORIGINALS, and COPY 2s and verifies the accuracy of all BOHs.**

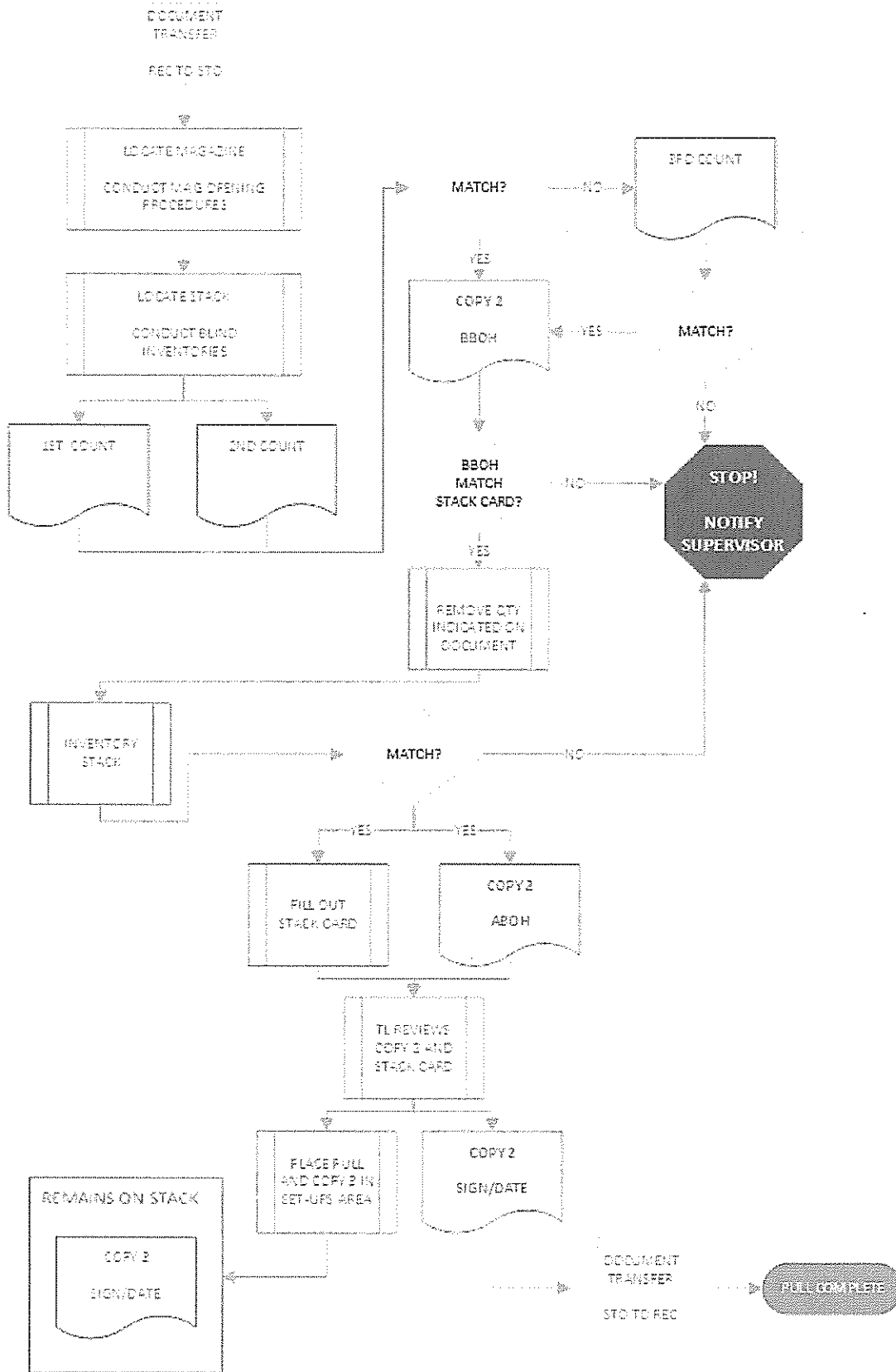


Figure 10 - Conduct an Ammunition Pull

4. **Conduct an Issue from Storage:** The issue process involves inventory, ammunition handling, inspection, and processing documentation. This process outlines the procedures taken by Storage personnel; refer to Chapter 5 for procedures referring to Issues personnel. This process begins with RSI personnel contacting Storage personnel to open storage locations.

a. The Receipts, Segregations, and Issues (RSI) Section will coordinate with the Storage Section for access to the required magazine(s).

**NOTE**

**An individual who verifies an ammunition pull from a stack are prohibited from conducting the functions of an issue (as an RSI tech).**

b. Open the storage location in accordance with Magazine Opening Procedures.

c. Issue the ammunition as prescribed below:

(1) Use the information provided by the RSI tech to locate the assets by Document Number, DODIC, NSN, Lot Number, Condition Code, and Owner Code in the magazine.

(2) Deliver the ammunition to the RSI Tech outside the magazine. Do not give **COPY 3** to the RSI Tech.

(3) The RSI Tech will conduct a blind inventory of the issue.

(4) If the blind inventory matches **COPY 3**, release **COPY 3** to the RSI Tech.

d. Reference the detailed flowchart (Figure 11) as a quick reference.

e. Complete this process for all remaining issues in the magazine.

f. Supported unit personnel will load, secure, and placard the vehicle before leaving the magazine.

g. Complete Housekeeping Procedures.

h. Conduct Magazine Closing Procedures.

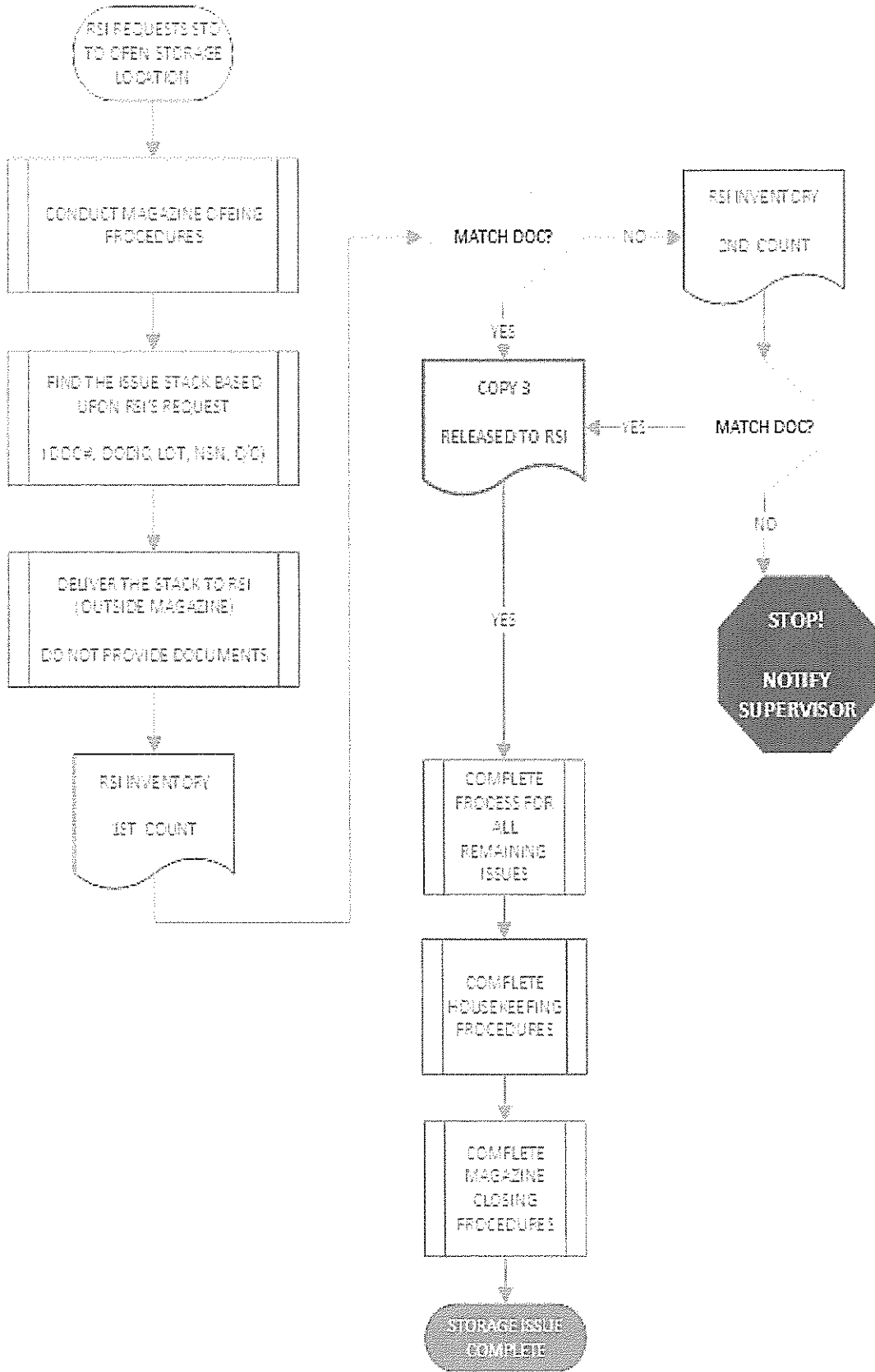


Figure 11- Conduct an Issue from Storage

**6. Conduct an “In-Mag” turn-in.** Direct to magazine turn-ins is for ammunition items whose size, N.E.W., or security risk categories present a concern. Direct stack turn-ins eliminate these concerns and streamline the segregations process. The direct stack process involves inventory, ammunition handling, inspection, and processing documentation.

a. The RSI Section will coordinate with the Storage Section for access to the required magazine.

b. Open the storage location IAW Magazine Opening Procedures.

c. Follow the steps below to conduct the direct to magazine turn-in:

(1) Conduct an inventory of the ammunition to verify the turn in matches the document. Do not proceed if the ammunition and document do not match. Contact an Area Supervisor.

(2) Conduct an inventory of the ammunition stack to determine the BBOH.

(3) Verify the BBOH matches the Magazine Data Card. Do not proceed if the BBOH does not match the Magazine Data Card.

(4) Return the ammunition to the stack.

(5) Conduct a second inventory of the ammunition stack to determine the ABOH.

(6) Complete the required entries on the Magazine Data Card.

(7) Complete the required entries on the documentation.

(8) Notify a TL that the ammunition turn-in is complete.

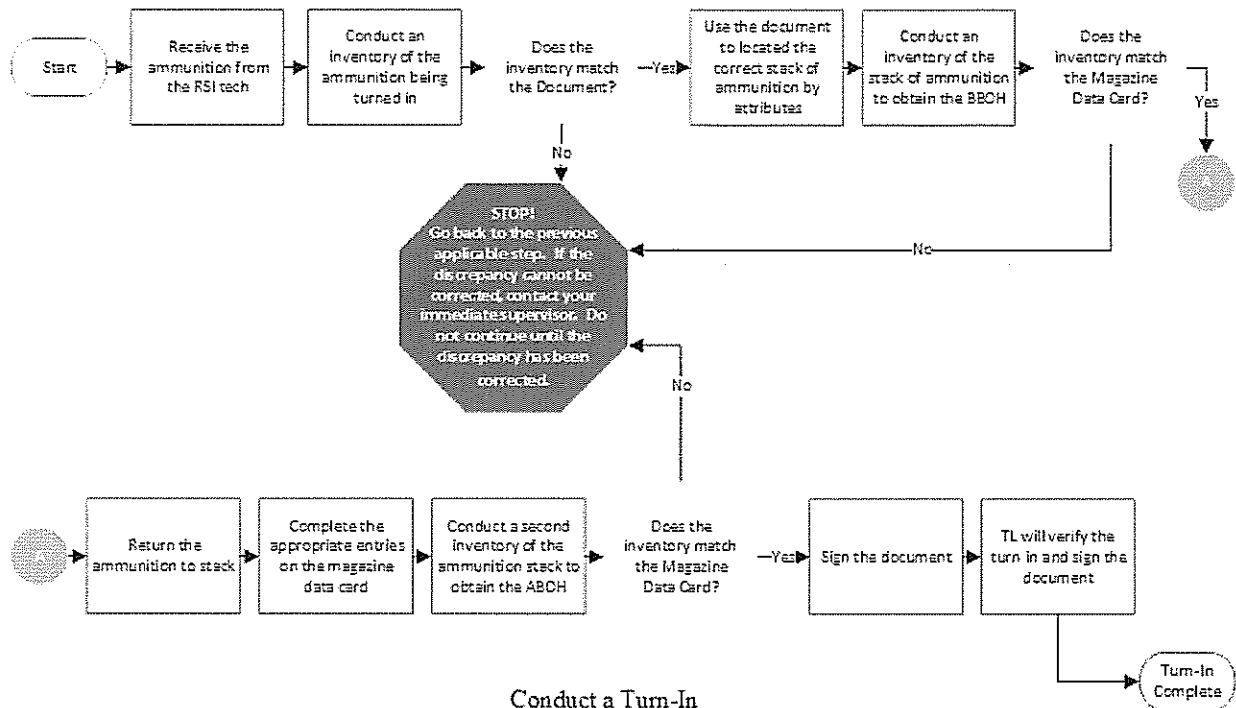
(9) The TL verifies the ammunition turn-in, Magazine Data Card, and all documentation.

d. Follow the detailed flowchart (Figure 12) for a quick reference.

e. Complete the above process for all remaining direct to stack turn-ins for the magazine.

f. Complete Housekeeping Procedures.

g. Conduct Magazine Closing Procedures.



Conduct a Turn-In

Figure 12- Conduct an "In Mag" Turn-In

**7. Conduct a Material Work Order.** Material Work Orders are used to direct the change of attributes or storage location. MWOs may be initiated by Records or Storage. MWOs involve documentation, inventory, shipment preparation, and transportation.

- a. Records Initiated MWO (Records Work Order). A RWO is used when Records directs action to be taken on the physical assets in storage (i.e., C/C change as directed by NAR).

Records will:

- (1) Use document control procedures.
- (2) Generate the MWO using NAVMC 11850 (Figure 13) and assign a Document Number.
- (3) A TL will review, verify, and sign the MWO.
- (4) Deliver the MWO to the Storage section using Document Control Procedures.
- (5) Storage will take appropriate action and return the MWO to the Records section for processing.

a. Storage Initiated MWO (Storage Work Order). A SWO is used when Storage directs action to be taken on the physical assets in storage (i.e., location change). Storage will:

- (1) Use document control procedures.

- (2) Generate the MWO using NAVMC 11850 (Figure 13).
- (3) Complete the MWO. A TL will review, verify, and sign the MWO.
- (4) A TL will review, verify, and sign the MWO.
- (5) Deliver the MWO to the Records section using Document Control Procedures.
- (6) Records will generate a document number and take appropriate action on the accountable record.

**NAVMC 11850 (02-12) (EF)**  
 FOUO - Privacy sensitive when filled in.

Print Form

CLASS V (W) MATERIEL WORK ORDER	
Document Number:	Date:
Records/Inventory Accuracy Action	
Asset Record (From)	Action Required (To)
Location:	Location:
DODIC:	DODIC:
NSN:	NSN:
Lot Number:	Lot Number:
C/C:	C/C:
NAR/CDC:	NAR/CDC:
Serial Number:	Serial Number:
Quantity:	Quantity:
Originating Individual (Print):	Originating Individual Signature:
Receipt, Storage, Segregation, and Issue Action	
Initial Status (From)	Action Required (To)
Location:	Location:
DODIC:	DODIC:
NSN:	NSN:
Lot Number:	Lot Number:
C/C:	C/C:
NAR/CDC:	NAR/CDC:
Serial Number:	Serial Number:
Quantity:	Quantity:
BBOH:	BBOH:
ABOH:	ABOH:
First Verifier (Print):	Second Verifier (Print):
First Verifier Signature:	Second Verifier Signature:
Records/Inventory Accuracy Validation	
Processing Individual (Print):	Processing Individual Signature:
Remarks:	

Reset Form

FOR OFFICIAL USE ONLY

Adobe LiveCycle Designer ES2

*Figure 13- Material Work Order*



<b>Chapter 5</b>
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<b>RECEIPTS, SEGREGATIONS, AND ISSUES (RSI) PROCEDURES</b>
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**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations involving but not limited to the receipt, segregation, issue (RSI), administration, and management of ammunition and explosives (A&E).

**2. RSI Procedures.** Receipt, Segregations, and Issue operations involve vehicle inspection, ammunition handling, sentencing, consolidation, shipment, documentation, and inventory management procedures.

<b>NOTE</b>
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<p><b>Hours for turn-ins are from 0800-1400 daily. Units arriving at or after 1400 will be directed to stage the turn-in until the following workday. Refer to After Hours Turn-In procedures. Ammunition Issues ALWAYS take priority over unit turn-ins.</b></p>
---

**a. Receipt Inspection Procedures.**

<b>NOTE</b>
-------------

<p><b>If the receipt is being returned to the ASP from a supported unit, the supported unit shall arrive to the ASP with original 1348-1A's for their assets. The supported unit is required to arrive with a completed DD 1348-1A "turn-in" document. The quantity (blocks 25-29, and 10), C/C (block 71) and additional data (block 27) shall remain blank.</b></p>
---

<b>NOTE</b>
-------------

<p><b>The turn-in process will not begin unless the supported unit has conducted an inventory of their ammunition.</b></p>
--

(1) Conduct an Initial Receipt Safety Inspection. Ammunition laden vehicles shall remain parked outside the ASP's Magazine Storage Area (in the Vehicle Queuing Lot) with wheels chocked and fire extinguisher placed 10 feet to the front of the vehicle until the completion of the Initial Safety Inspection. Certified and approved ASP personnel shall verify there is no immediate danger with the load by verifying the following:

(a) Verify the driver is licensed to operate the means of conveyance, and as required, has appropriate medical certifications/endorsements. Military vehicle operators shall have the following:

1. Valid civilian driver's license.
2. Current medical certificate.
3. Military license OF 346 (Appropriate to vehicle)

4. Current explosive license with Explosive Safety Office endorsement.
  5. NAVMC 10627: Driver's vehicle inspection report/Trip Ticket.
- (b) Conduct a Vehicle Inspection using DD Form 626.

**NOTE**  
**Tactical vehicles shall have a minimum of ¾ tank of fuel. Exceptions to this policy shall be cleared through the ASP OIC/SNCOIC**

- (c) Verify the unit load.
1. There must be no condition (e.g., compatibility grouping, pallet/adaptor damage, container position, improper seals, or broken, missing, loose, or improperly positioned strapping, etc. which would make the unit load:
    - a. Unsafe for handling, storage, or transportation.
    - b. Unacceptable for shipment or issue.
  2. Verify there is no brass, trash, excessive dunnage/materials in the compartment which contains ammunition.

(d) Vehicles which display the following characteristics shall be considered suspect cargo:

1. Seal serial numbers which do not match the GBL
2. Evidence of tampering with the cargo.
3. Evidence of theft.
4. Evidence of sabotage.
5. Unusual or unidentifiable items in cargo or conveyance.
6. Evidence of breakage, replacement, or tampering with anti-pilferage device (bolt seal, etc.) on commercial conveyance.

**WARNING**  
**If a vehicle arrives at the ASP with suspect cargo CEASE operations/inspection and notify the ASP OIC and SNCOIC. Confirmed suspect cargo shall be redirected to "C" Demo Range. The ASP OIC/SNCOIC will notify EOD and PMO.**

- (e) Verify all security weapons and ammunition have been surrendered to the ACP.

(f) Only after the Initial Safety Inspection has deemed the driver(s), vehicle(s), and load(s) are safe for further transport, the unit shall be escorted to building 27170 for receipt inspection.

**WARNING**

**If unsafe conditions are identified, CEASE operations/inspection, evacuate the immediate area, and notify the OIC and ASP SNCOIC. Do not move the ammunition or direct the vehicle to move.**

(2) Conduct a Receipt Inspection. A receipt inspection shall be performed on all ammunition received by or returned to the ASP in accordance with the references. The two main purposes of the receipt inspection are Safety and Accountability. An additional purpose of the receipt inspection is to provide assurance that the ammunition is correctly sentenced (assigned to the correct condition code (C/C)) with the appropriate Defect Codes. The accuracy of the true C/C is **VITAL** for reasons of safety, security, readiness, efficiency, and inventory accuracy.

**NOTE**

**BEFORE opening any ammunition container (can or box/inner or outer pack), inspect the container for the presence of traceable seal(s).**

**PRIOR TO REMOVING ANY TRACEABLE SEALS, NOTE AND RECORD THE TRACEABLE SEAL NUMBER ON THE INVENTORY SHEET.**

(a) Specific instructions for the receipt inspection of specific types of ammunition are found in chapter 4 of reference j. Additionally, the Field-Return Inspection Guide can be used as a tool to assist ASP personnel during the inspection of ammunition being returned by supported units prior to acceptance. The following standard practices shall be adhered to during the receipt inspection process:

(b) **NAR/AIN.** Verify the DODIC, NSN, lot number and serial number (as applicable) of the ammunition as identified on the receipt document has not been subjected to reclassification based on current NAR/AIN data. If a NAR/AIN has been released, follow reclassification direction as required.

(c) **Visual Safe Inspection.** Verify that ammunition is visually safe. Visually safe is defined as the absence of any/all visual defects. If any of the below defects are present, notify the supervisor immediately.

1. Indications or warnings of unsafe conditions. The Field Return Guide available on the Marine Ammunition Knowledge Enterprise (MAKE) website may be used as a quick reference should safety concerns arise. Determining safe condition shall include, but is not limited to the following:

- a. Set to "Safe" (not armed)

- b. Identification of the ammunition by DODIC, NSN, Lot Number, and Serial Number (if applicable)
  - c. Serviceability (dents, scratches, or missing components)
2. Proper packing material
  3. All information on the DD-Form 1348-1A matches the ammunition that is being received (DODIC, NSN, Lot, Serial, Quantity).

**CAUTION**

**If the identity or condition of the ammunition cannot be determined, ammunition shall be subjected to segregation processing to determine the identity and condition of the ammunition.**

4. Verify the appropriate container markings and labels against receipt documentation shall be examined to ensure the ammunition is correctly identified with all required attributes, i.e., DODIC/NALC, stock number, serial number and/or lot number, quantity, and C/C, necessary for local stock and inventory control.
5. Adequate/appropriate packing material.
6. Wooden boxes must show no visible sign of crystals or crystallization residue indicating PCP contamination. If wooden boxes show signs of PCP crystals or crystallization residue, tag the item, and notify supervisor.

**NOTE**

**Pentachlorophenol (PCP) is a hazardous chemical previously used to treat and preserve wooden boxes common to ammunition. Wooden boxes treated with PCP are marked with a "P." Acceptable alternative preservatives that do not present the same hazards as PCP, are copper-8-quinolinolate, zinc naphthenate, and copper naphthenate and are marked as follows:**

**PA = Copper-8-Quinolinolate  
PB = Zinc Naphthenate  
PC = Copper Naphthenate**

**PCP crystallization found on boxes, secured with steel strapping, and handled with forklift or hand truck will not produce dust containing PCP and therefore does not present an immediate hazard. However, tagging to identify the condition for replacement is required.**

7. Check the ammunition markings, identification, and documentation. There must be no observable or unsafe conditions and/or conditions required for special handling/treatment such as:
  - a. Cracked or ruptured explosive or propellant case. [Notify OIC, SNCOIC to contact Explosive Ordnance Disposal (EOD)]

- b. Armed condition [Notify OIC/SNCOIC]
- c. Explosive exudate or leakage [Notify OIC, SNCOIC to contact EOD]
- d. Indication of misfire/hang fire, explosive accident/incident or other similar markings. [Notify supervisor and record/report incident]
- e. Absence of indication that commercial dynamite has been visually inspected for deterioration within 30 days. This requirement applies to M585 and M587. [Correct immediately, notify supervisor, and record/report each nonconformance.]

**8. Special Safety Inspection.**

- a. Commercial Dynamite Visual Inspection. The Quantico ASP may store, handle, or transport commercial dynamite.

**NOTE**

**Dynamite is a generic term for a wide variety of high explosive formulations containing a blend of liquid and solid nitrate esters mixed with solid oxidizers and carbonaceous fuels. The primary ingredients can include nitroglycerin, nitro glycol, ethylene glycol dinitrate, nitrocellulose, oxidizing salts and fuel combined with special purpose ingredients such as dyes, antacids, sodium chloride and proprietary compounds. The wide variety of ingredients used, and the wide variety of storage environmental histories makes it extremely difficult to predict deterioration rates and effects on safety. Military Dynamite is an RDX and TNT based mix and does not require shelf life.**

**WARNING**

**Commercial Dynamite may exude nitroglycerin which is extremely sensitive. It may initiate during handling.**

**WARNING**

**Do not wear boots with exposed nails, metal plates or other spark producing material in the inspection area.**

**Use only non-spark producing wooden wedges and mallets to open boxes.**

**Open dynamite one box at a time**

**WARNING**

**Wear rubber or plastic gloves always when handling dynamite.**

**Nitroglycerin gives dynamite a heavy, pungent, sweet odor. Nitroglycerin liquid and vapors are quickly absorbed, are toxic, and will cause very severe and persistent headaches in a brief period.**

i Commercial dynamite must be inspected every 30 days for crystallization and/or deterioration. Commercial dynamite inspection sheet(s) (see enclosure 4) shall be maintained on stacks of commercial dynamite. The inspection sheet will remain with the magazine data card.

ii Depalletize individual dynamite boxes, if applicable. Once depalletized, check each box/container for indication that inspection for deterioration has been performed within the past 30 days. If the box/container has not been inspected, proceed. If the box/container has been inspected continue the receipt inspection.

iii Note identification of traceable seal(s) prior to opening box.

iv Open box.

v Inspect the entire first visible row or layer of the cartridges (sticks) prior to removing any dynamite from the box. The dynamite cartridges must be free of deterioration. Obvious signs of deterioration are hardness, discoloration, excessive softness, leaking to the extent of saturating the sawdust or shipping container, or a crystallized deposit on the cartridge(s).

If any deterioration is observed do not remove the cartridges from the box. Stop inspection. Do not move the box. Notify supervisor, SNCOIC and OIC for EOD emergency disposal.

If no deterioration is observed, remove the row/layer of cartridges from the box and set aside for repackaging. As each cartridge is removed from the box, maintain its packaged orientation by annotating its rotational markings. If no markings are present, mark the "top" of each cartridge with a "T" in sharpie marker.

vi Continue inspecting each row or layer of cartridges until deterioration is observed or all dynamite has been inspected.

vii Visually inspect the lot number and date of manufacture of all dynamite cartridges.

If the lot or date of manufacture cannot be identified **STOP the inspection and notify the Supervisor/SNCOIC and OIC for EOD disposal.** C/C "H," Defect Code (D/C) "MMKZ50" applies.

If the dynamite cartridges are more than 18 months old **STOP the inspection and notify the Supervisor/SNCOIC and OIC for EOD disposal.** C/C “H,” D/C “MAAZ20” applies.

viii Return cartridges to the box, or place the cartridges in a replacement box, rotating each cartridge 180 degrees by using the rotational markings (“T”) as a guide.

**WARNING**

**Use only non-sparking hammer mallets to close boxes.**

- ix Close box and apply traceable seal(s).
- x Repalletize individual dynamite boxes (previously depalletized) as required.
- xi Complete receipt inspection.

**(d) Identification.**

1. Ammunition is identified by a DODIC, an NSN, a lot number and a serial number if applicable. These identifying attributes and numbers are **CRITICALLY IMPORTANT** for reasons of safety, performance, and planning support; they are used for configuration management, for inventory management, and to stratify specific ammunition populations in terms of serviceability, restrictions, or limitations. For many ammunition items the identification is present only on the container exterior or on the inner packaging. When ammunition is removed from its container/packaging and positive association with its container/packaging is lost, it cannot be identified.

2. Check marking, labels, and documents for the accurate presence of identifying attributes per table 1-1. Item markings must agree and must be legible. [Correct as appropriate.

Identification Element	DD Form 1348-1A Block No.	Package Marking
DODIC	17	*
NSN	25	*
Lot/Serial Number	40	*
Quantity	10 (1)	*
Condition Code	71 (1)	*
Nomenclature	17	*
Notes: (1) Not applicable until verified through inventory.		

*Table 1-1. —Ammunition Receipt Inspection Material Identification*

**(e) Acceptable Packaging**

1. Ammunition shall be packaged according to manufacturers' specifications. When ammunition is returned to the ASP, the supported unit shall make every effort to retain original packaging material. The ammunition shall be repackaged as close to factory configuration as possible.

2. The C/C of ammunition can be affected by the condition of its packaging.

3. Wood, Styrofoam or polystyrene and paperboard containers must not be damaged, weathered or decayed to the extent that the contents are not adequately protected for storage, handling, or transportation.

4. Metal containers must not be punctured, creased, or dented to the extent that would prevent removal of contents, prevent proper alignment of lids/covers or allow moisture to enter.

5. Humidity indicators. Requirements for ammunition packaging frequently include the placement of air-drying desiccant inside the container and a humidity indicator that is visible from the container exterior. When used, humidity indicators shall be inspected for acceptable levels as indicated on the indicator.

**(e) Receipt Inspection Sentencing**

1. Ammunition shall be sentenced in accordance with chapter 4 of reference j and only by Marines with Qual/Cert for work task code 13 for items which they sentence.

2. Suspended Condition. If ammunition is sentenced to a suspended condition (C/C "J," "K," "L," "M," "N") or if further inspection is warranted/required to determine the condition, screen, or sort, proceed to segregation sentencing inspection procedures.

3. Serviceable/Unserviceable Condition. If ammunition is sentenced to a serviceable condition (C/C "A," "B," "C") or unserviceable condition (C/C "E," "F," "G," or "H") proceed to receipt procedures (or take applicable repair/completion steps).

**c. After Hours Turn-In Procedures**

<p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;"><b>Hours for turn-ins are from 0800-1400 daily. Units arriving at or after 1400 will be directed to stage the turn-in until the following workday.</b></p> <p style="text-align: center;"><b>Ammunition Issues ALWAYS take priority over unit turn-ins.</b></p>
---

(1) Supported Unit.

(a) At no point will a supported unit be turned away while attempting to conduct a turn-in.

(b) The supported unit shall conduct link-up procedures with the Duty Ammunition Technician (Duty Tech).



(c) The duty tech shall perform an initial safety inspection as prescribed by paragraph 2.a.(1) of this chapter.

1. If the supported unit passes the initial safety inspection, the vehicle shall be stored in the Vehicle Staging Area or designated location.

2. If the supported unit fails the initial safety inspection, the supported unit will not be granted access to the Magazine Storage Area until annotated discrepancies are fixed. The vehicle is prohibited from departing the ASP.

(2) Commercial Shipments.

(a) Commercial shipments arriving after hours shall be staged until the following workday.

(3) Commercial Shipment Receipts

(a) Upon arrival of a commercial shipment, an initial safety inspection will be as applicable. In addition, anti-pilferage devices (Seals) shall be inspected and verified against the Bill of Lading. Any discrepancies shall be reported using the Report of Discrepancy (ROD) Standard Form 364 or Transportation Discrepancy Report (TDR) Standard Form 361 as required.

(b) The driver shall provide the Commercial Bill of Lading (CBL) or Government Bill of Lading (GBL), DD Form 2590 or DD Form 1348-1A, DD Form 1907 (as applicable), and the Packing list to the ASP Records Section.

(c) Upon successful completion of initial safety inspection, the commercial vehicle shall be escorted to the designated offload area.

(4) A&E shall be downloaded and segregated in accordance with this SOP.

(5) Once offloaded, the cargo area of the commercial vehicle shall be verified empty prior to releasing the vehicle from the Magazine Storage Area under escort.

(6) The driver and Records section shall endorse the CBL/GBL and DD Form 1907 as applicable.

(7) Segregation, Sentencing, and Storage shall be performed in accordance with this SOP.

**b. Segregation Procedures.** Refer to reference j. for specific segregation procedures.

**c. Receipt Procedures**

**NOTE**

**Hours for turn-ins are from 0800-1400 daily. Units arriving after 1400 will be direct to stage the turn-in until the following workday. Refer to After Hours Turn-In Procedures. Ammunition Issues ALWAYS take priority over unit turn-ins.**

(1) Perform Receipt Inspection Procedures

(2) Perform Segregations Procedures (as required)

(a) Ammunition sentenced to C/C H shall adopt the lot number comprised of the DODIC- "UNK"- [Serial Number]. The Serial number is directed by the Records section, the SNCOIC, or OIC.

(b) Example C/C H lot for A059 is "A059-UNKNOWN".

(c) Serial numbers associated with C/C H lots are used for requesting disposition instructions and should be sequential.

**NOTE**

**The turn-in process will not begin unless the supported unit has conducted an inventory of their ammunition.**

(3) Assign RSI personnel to conduct the turn-in process in accordance with the flowchart (Figure 14).

(a) Conduct at least two blind inventories on inventory sheets until at least two blind inventories match. If inventories do not match stop and obtain a third blind inventory from a QA.

(b) Obtain signatures from supported unit.

(c) The TL will sign block 22 of the document and Julian date block 23.

(d) Copy 1, 4, 5, and 6 are provided to the supported unit.

(e) RSI personnel will retain **COPY 2** and **COPY 3**.

(f) Request Storage personnel to open the destination storage location and conduct Magazine Opening Procedures.

(g) RSI personnel will direct the transfer of ammunition to outside the destination storage location. In most instances the destination storage location is the same location as the original issue location.

**NOTE**

**Personnel performing RSI functions are not authorized inside ANY storage magazine.**

(h) Storage personnel will conduct blind inventories to verify the turn in DODIC, NSN, Lot, and Quantity. Special attention shall be given to C/C as it may change because of the physical condition of the ammunition.

(i) After Storage personnel have verified assets and received the ammunition from RSI personnel:

1. RSI personnel will:

a. Provide Storage personnel with COPY 2(s) and Records personnel with COPY 3(s).

b. Verify the vehicle is appropriately placarded and escort the supported unit to the next destination magazine(s) as required.

c. When no additional destination(s) are required, RSI personnel will escort the supported unit out of the Magazine Storage Area.

2. Storage personnel will:

a. Return the ammunition to the stack in accordance with Chapter 4.

b. Annotate BBOH/ABOH on COPY 3(s).

c. Conduct Housekeeping procedures and Magazine Closing procedures.

d. Deliver/provide all COPY 2's to the Records section.

(i) Refer to the detailed flow chart (figure 14) as a quick reference

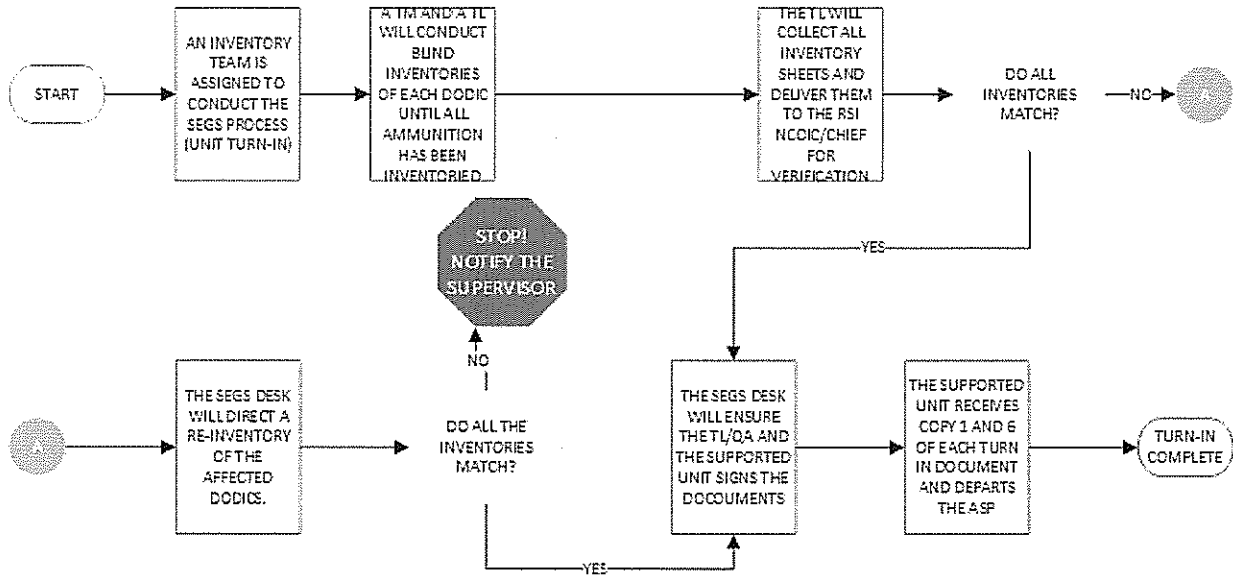


Figure 14- Segregations Process (Turn-In)

#### d. Issue Procedures

(1) Prior to the Supported Unit's issue, the Issues personnel will:

- (a) Retrieve all Issue Documentation from the Records Section for the issue.
- (b) Screen the ammunition for current reclassification as directed by NAR.
- (c) Create inventory sheets for each Supported Unit's ammunition issue. The inventory sheets will contain at least the following information:

1. Magazine location.
2. DODIC.
3. Document Number.

(2) The day of the Supported Unit's RDD:

- (a) Conduct an Initial Issue Safety Inspection. Vehicles intended to become ammunition laden shall remain parked outside the ASP's Magazine Storage Area (in the Vehicle Queuing Lot) until the completion of the Initial Issue Safety Inspection. Certified and approved ASP personnel shall verify the vehicle/driver are safe to transport ammunition by verifying the following:

**NOTE**

**Supported Units shall arrive at the ASP with acceptable means of conveyance NLT 1100 on the day of their issue.**

**Units which fail to meet the standards of inspection criteria by 1100 on the date of their issue will receive a Discrepancy Report and be directed to AMD their request to the following workday or cancel the request.**

1. Verify the driver is licensed to operate the means of conveyance, and as required, has appropriate medical certifications/endorsements. Military vehicle operators shall have the following:

- a. Valid civilian driver's license.
- b. Current medical certificate.
- c. Military license OF 346 (Appropriate to vehicle)
- d. Current explosive license with Explosive Safety Office endorsement.
- e. NAVMC 10627: Driver's vehicle inspection report/Trip Ticket.

2. Conduct a Vehicle Inspection using DD Form 626.

**NOTE**

**Tactical vehicles shall have a minimum of  $\frac{3}{4}$  tank of fuel. Exceptions to this policy shall be cleared through the ASP OIC/SNCOIC**

3. Inspect and verify the unit has generated/prepared a vehicle load plan and all ammunition intended to be loaded will fit with consideration to compatibility, cube space, and net weight.

(b) Conduct Issue Document Inspection

1. Only personnel on the current and ASP accepted Delegation of Authority (DOA) are authorized to receive ammunition. Individuals on the DOA shall have a "YES" in the "receive" column of the DOA.

a. Specific requirements for the release and subsequent transportation of SRC I & II items are listed below.

i. SRC I

SRC I items must only be issued to SNCO (E6 or higher) or Officer who has been delegated the authority to “receive” SRC I assets on the DD form 11797 Delegation of Authority.

All SRC I assets must have an accompanying Signature and Tally Record DD Form 1907 signed prior to release from the ASP.

In addition to the above, the receipt of SRC I assets shall be accomplished by individuals who meet the personnel requirements of references (m.) and (q.). The movement of the subject assets shall be under armed surveillance always accompanied by a SNCO/Officer (as recorded on the DD Form 1907)

i. SRC II

SRC II items must only be issued to an individual who has been delegated the authority to “receive” assets on the DD form 11797 Delegation of Authority.

All SRC II assets must have an accompanying DD Form 1907 signed prior to release from the ASP.

All SRC II movements will be escorted by a SNCO/Officer riding in the vehicle conveying SRC II assets or in a security escort vehicle.

(c) Assign an RSI technician as an escort for the supported unit. The escort is responsible for the conduct of the Supported Unit during the issues process. **The RSI tech will:**

1. Coordinate with the Storage section for access to required magazine(s).
2. Escort the supported unit to the designated storage area and direct the vehicle operator to shut off the engine, chock the tires, and place fire extinguisher 10 feet in front of the vehicle.
3. Request and verify the ammunition from the Storage Tech by providing identifying attributes except quantity (e.g. Supported unit name, DODIC, Nomenclature, Lot Number, Serial Number, Condition Code and Document Number).

NOTE

**Personnel performing RSI functions are not authorized inside ANY storage magazine.**

4. Conduct a blind inventory of the ammunition and annotates their findings on the inventory sheet.

a. Care should be taken as to not break any factory sealed containers during the inventory.

b. Containers that are not sealed shall be opened and inventoried.

5. Upon confirmation of assets and the specified quantities, the ammunition shall be loaded into the means of conveyance.

a. Ammunition and explosives shall be managed in a manner to prevent shock or friction that may cause a fire, explosion, or damage to the material. These materials shall not be thrown, dropped, dragged, or tumbled over floors or other containers.

b. Ammunition shall be loaded into compartments based upon the transportation segregation table and vehicle load plan.

c. Ammunition shall be raised from the vehicle bed using sufficient dunnage (warehouse pallet(s)) and stacked as to prevent toppling during movement.

d. Ammunition shall be secured to the vehicle to prevent toppling during movement with at least two appropriately weight rated straps. Securing the load shall prevent vertical or horizontal movement of the load.

e. A tactical fire-retardant tarpaulin shall be placed over the ammunition and the tarpaulin shall be secured (no commercial tarpaulin, i.e., blue tarp).

f. Prior to moving the vehicle, it shall be placarded using the correct DOT explosive hazard placards.

6. Complete the above steps for all remaining ammunition and magazine locations and return to the designated Blind Count area.

(d) A second RSI Tech will conduct a second blind inventory of the ammunition on the Supported Unit's vehicle(s).

1. Conduct at least two blind inventories on inventory sheets until at least two blind inventories match. **RSI techs who conducted the 1st and 2nd blind inventories shall sign and date blocks 28 and 29, respectively.** If inventories do not match stop and obtain a third blind inventory from an. Additional TL/TM.

(e) The supported unit technician as indicated as a receiver on the supported unit's DOA shall sign and date **COPY 2** (Blocks 22 and 23) of the Issue Document.

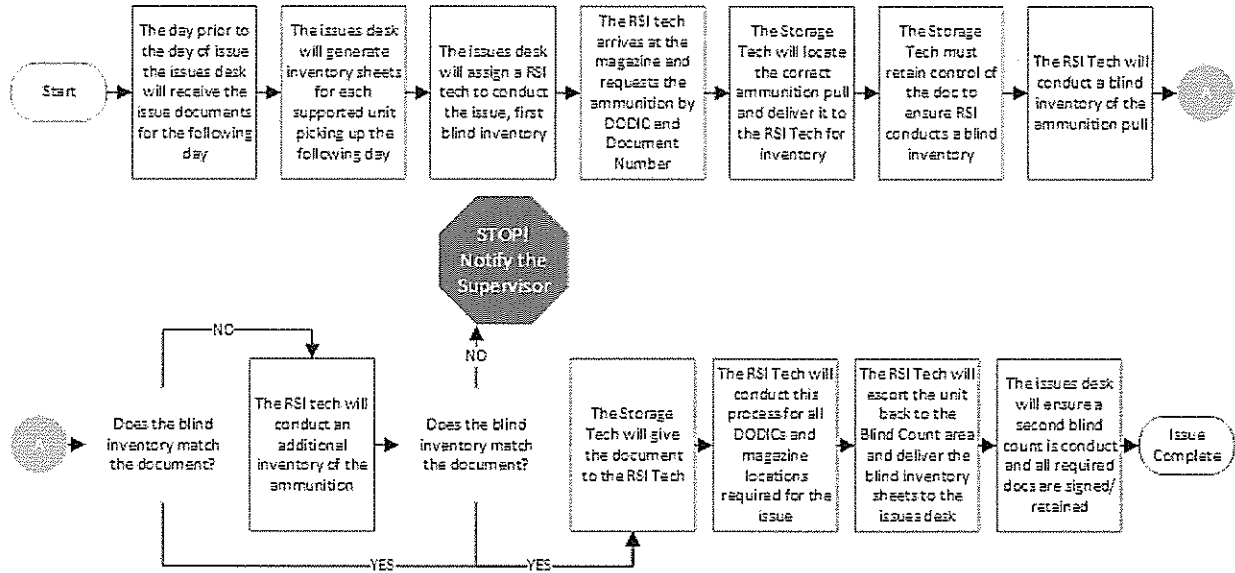
(f) Retain

1. Original issue document with 1<sup>st</sup> and 2<sup>nd</sup> inventory signatures

2. Original inventory sheets for all blind counts

(g) Provide the supported unit with the original DD Form 626, 2890 (as applicable), and 1907 (as applicable) and all COPY 2's. If staged, these documents MUST remain on the dashboard of the vehicle for the duration of the time stored in the VSA.

(h) Refer to the detailed flow chart (Figure 15) as a quick reference.



Conduct a Supported Unit Issue

Figure 15- Conduct a Supported Unit Turn-In



<b>Chapter 6</b>
<b>RECORDS PROCEDURES</b>

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations involving but not limited to the administration, and management of ammunition and explosives (A&E).

**2. Records Procedures.** The Records Section is responsible for maintaining the Asset Record for the ASP. Ancillary duties include preparing corespondence, submitting reports, processing unit ammunition requests and turn-ins, maintaining the Ordnance Information System- Marine Corps (OIS-MC), computing ammunition requirements, requisitioning ammunition, executing the requirements of the Physical Inventory Control Program (PICP), conducting causitive research, maintaining Notice of Ammunition Reclassification (NAR), Ammunition Information Notice (AIN), and Over Head Fire (OHF) messages.

a. General

(1) Process a supported unit Request:

- (a) Verify the supported unit's Delegation of Authority (DOA).
- (b) Accept the Supported Units request in the Total Ammunition Management Information System (TAMIS).
- (c) Reserve/select the ammuition in OIS-MC by lot numbers, DODICs and condition codes and create the issue documents.
- (d) A second Records Clerk will verify the document for accuracy and log in the records logbook.
- (e) Release the document to storage for processing according to the Required Delivery Date (RDD).

(2) Conduct a BOH Check by verifying lot number, condition code, and BOH's. Documents that fail BOH verification require causitive research.

<b>NOTE</b>
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<b>Transactions will not be conducted on a bad BOH DODIC/lot number/condition code until causative research is completed, the stack has been corrected, or the voucher/MLSR package is complete.</b>
--

(3) Process a supported unit Turn-in:

- (a) Receive the document from RSI.

(b) Verify the Document Identification Code (DIC), signatures, NARS, and Common Defect Codes (if applicable).

(c) If the turn-in is C/C B or C, verify which NAR is associated with the ammunition.

(d) Conduct the BOH check as outlined in paragraph 2 above.

(e) Post the transaction in OIS-R.

**NOTE**

**Detailed procedures for individual records processes can be viewed in the Records Desktop Procedures.**

**3. Inventory Accuracy Control (IAC).** Duties include implementing the requirements of the Physical Inventory Control Program (PICP) in accordance with MCO 4400.201-V7, and ammunition identification, inventory, documentation, and verification.

a. IAC is responsible for:

(1) Daily Transaction Reporting and Archiving.

(2) Conduct Semi-Annual inventories of all category 1,2,6, and 8 ammunition.

(3) Ammunition Management Accountability Review (AMAR).

(4) Location Surveys (LOCAT).

(5) Commercial Shipments.

(6) Wall-to-wall.

b. Inventory Process. Regardless of the type of inventory conducted, the following steps are observed:

(1) Inventories will be conducted using a Magazine Inventory Form or a Serialized Inventory Form.

(2) Conduct the inventory. Use BLUE ink to note inventories on the Magazine Data Card.

(3) Return inventory sheets to Records for verification.

(4) Records verifies the inventory against the Asset Record.

(5) Records will conduct verification and execute additional inventories if required.

(6) Records will update Date of Last Inventory (DOLI) as required.

**4. Commercial Shipments (Inbound).** Processing Commercial Shipments includes, vehicle inspection, transportation, inventory, ammunition inspection, storage, and documentation.

(1) The commercial vehicle arrives at the ASP. The following applies:

(a) Working hours. Working hours for processing commercial vehicles are Monday through Friday, 0800-1400.

1. Inspect the vehicle utilizing DD Form 626 IAW the SW020-AF-HBK, and the CFR49 and sign the DD Form 626. Report any discrepancies to the RSI SNCOIC, ASP SNCOIC, or OIC.

2. Verify all documentation.

3. Verify the seals applied to the cargo area match the seals listed on the GBL.

4. Missing seals, or seal numbers that do not match the GBL is SUSPECT CARGO. Immediately notify the ASP OIC/SNCOIC.

**CAUTION**

**If suspect cargo arrives at the ASP, immediately notify the ASP OIC/SNCOIC. At the direction of the ASP OIC/SNCOIC the suspect cargo will be directed to "C" Demo Range and EOD will be notified. Until directed otherwise, evacuate all personnel from the Vehicle Queueing Lot and surrounding areas. Supervisors will notify the Explosive Safety Office and Explosive Ordnance personnel.**

5. Break the seals to verify contents.

**NOTE**

**It is important to scrutinize the GBL to ensure the shipment is for the Ammunition Supply Point before removing the seal and unloading the contents. The ASP may incur transportation costs if ASP personnel inadvertently unloads another activity's vehicle.**

6. Escort the vehicle to the designated offload areas located at Bldg 27145 (Mag 002) or 27170 (RSI Building).

7. Unload the vehicle utilizing appropriate MHE.

8. Conduct inventories once the ammunition is unloaded using the ASP-2311/TT-INV form.

9. Records will conduct a BOH check.
  10. Storage will transfer the ammunition to the magazine.
- (b) Refer to the Duty Tech section of this SOP for after hour operations.

<b>Chapter 7</b>
<b>PREPARING SHIPMENTS</b>

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations involving but not limited to the preparation of ammunition and explosives (A&E) for shipment.

**2. Preparing Shipments Procedures.** ASP Personnel shall construct ammunition packages for air, sea, and land shipments for training and contingency operations in accordance with the references. Marking requirements for shipments differ from marking requirements for storage. Personnel will become familiar with the following references to ensure compliance.

Code of Federal Regulations (CFR 49)

MCO 4030.19\_

AMC 19-4875

- a. Mark shipments in accordance with the references.
- b. Construct pallets ensuring DODIC and lot number integrity.
- c. Pallets will be square. Use EMPTY boxes or spacers. If LITE boxes are required, place them in the top row on the corner of the pallet.
- d. Seal all containers with a traceable seal.
- e. Pallets shall be no higher than 48 inches or require shipping diagrams.
- f. Tag pallets with the correct DD Form 157\_ (series) tag and a copy of DD Form 2890.
- g. Block and brace shipments.
  - (1) Distribution Management Office (DMO) will coordinate blocking and bracing for Commercial Shipments.
  - (2) ASP personnel will coordinate blocking and bracing for military shipments.
- h. Deliver DD Form 1149, cube/weight worksheet, and 4 copies of all shipping documentation to the OIC/SNCOIC.

<b>Chapter 8</b>
<b>MEASURABLE ITEM PROCEDURES</b>

## 1. Measurable Item Procedures

### a. General

(1) DODICs DWEI, M456, M670, M980, M981, M982, MM27, MM28, MM29, MM51, MM52, MM53, MM54, MU40, MU41, MU42, and MU43 are packaged to contain a specific quantity of material per container, e.g., 500 feet of detonating cord per spool. Manufacturing processes for these may vary from the quantity marked on the packaging. These variances are the result of manufacturing processes which are designated to meet an objective weight requirement, with no specific requirement to meet a tolerance for length.

(1) Measurable items stretch or shrink based on environmental conditions and tension. Tension shall be kept to the bare minimum when conducting measurements to alleviate stretching and measuring inconsistencies.

(2) The unit of issue for measurable items is **feet**. Round all measurements down to the closest foot. (e.g., 5 feet 11 inches of M456 is measured as 5 feet) **DO NOT** trim excess.

(3) Items less than 1 foot will be accounted for as 1 foot of unserviceable material.

(4) Only tape measures will be used for measuring items with a U/I of feet. Pre-existing marks on the deck are not an acceptable measurement tool.

## 2. Measurable Item Receipt Process

a. Measured items that are received in quantities less than those indicated below shall be sentenced to C/C "H."

(1) **Detonating cord: 10 feet**

(2) **Data Sheet: 2 feet**

(3) **Time Fuze: 5 feet**

b. At no time during the receipt process will factory sealed containers be opened for inventory.

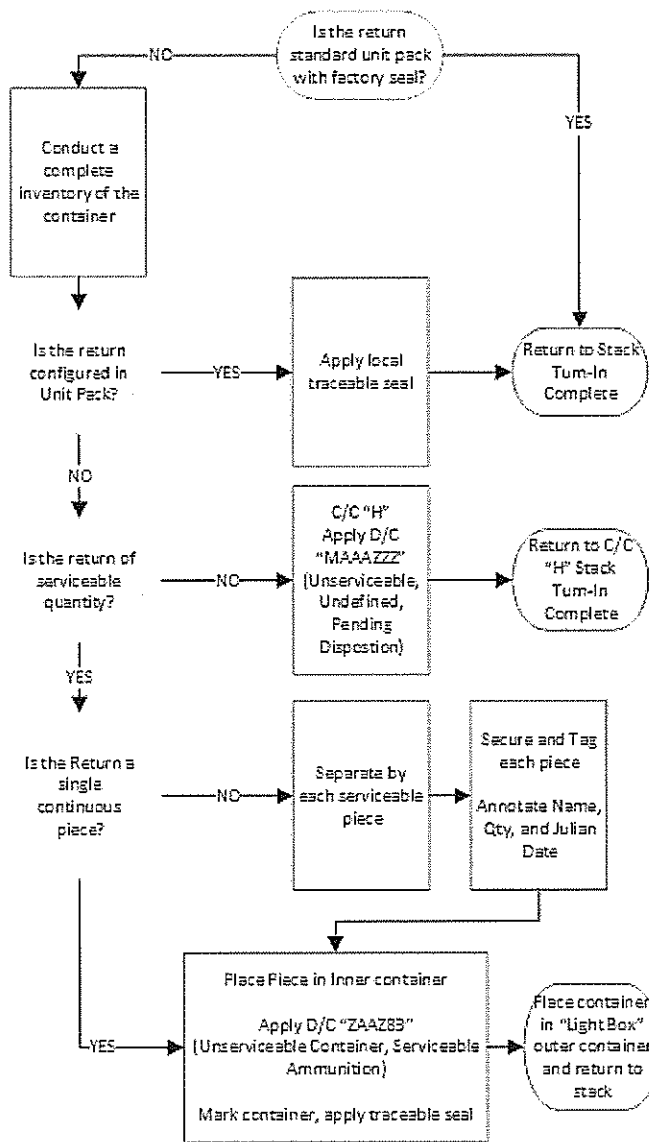
(1) Containers without a factory seal will have the contents inventoried.

(a) The contents will be secured (in a spool or roll) and the QASO or TL will affix a toe-tag with name, quantity, and Julian date.

(b) The ammunition shall be placed inside an appropriately marked container and sealed.

(c) Ammunition returned less than unit pack will be placed into the appropriate stack “light box”

(d) Figure 16 displays the measurable item receipt process decision chart to aid in receipt.



Measurable Item Receipt Process

Figure 16

### 3. Measurable Item Pull Procedure

a. Upon receipt of a DD 1348-1A issue document, storage personnel shall conduct two separate blind counts and record the BBOH/ABOH as prescribed by Chapter 2 of this SOP.

b. If a factory sealed container must be opened, verify there are no non-factory sealed containers in stacks of different lot numbers that could be used to complete the pull, then **Immediately** inventory the contents of the container to include any factory sealed, taped, or bagged contents.

(1) If no discrepancy/deviation regarding quantity is present, proceed to step (c).

(2) If the actual measured quantity deviates from the markings on the factory sealed container, retain seal, notify supervisor, and initiate causative research/vouchering process in accordance with Ammunition Information Notice 014-2011.

c. In the event a roll may need to be cut, a QA or TL will twice verify the location of the cut and execute the cut. Both pieces shall be re-measured, taped, and marked appropriately.

(1) Rolls should not be cut that produce C/C "H" trimmings unless specifically annotated on the TAMIS request. (e.g., a request is for 10 feet of M456. The stack contains a roll of 14 feet. Cutting the roll into a 10-foot piece will produce a 4-foot trimming of C/C "H". The issue shall be for 14 feet, unless specifically addressed in the TAMIS request.)

(2) Prior to providing the supported unit with additional measurable assets, Storage personnel shall contact the Records Section to verify the supported unit is able to receive additional measurable assets in excess to their request.

d. Continue the preparation of ammunition for issue as prescribed by Chapter 2 of this SOP.

#### **4. Measurable Item Inventory Accuracy**

(a) Measurable items taped and marked to reflect their contents are not required to be re-measured for inventory.

(b) Every effort must be made to return light boxes to factory packaging resembling their unit of issue.



**Chapter 9****MAGAZINE INSPECTION PROCEDURES**

**1. Purpose.** To provide local policy, responsibility, and procedure regarding all Ammunition Supply Point (ASP) evolutions/operations pertaining to magazine inspection for all ammunition and explosives (A&E) storage facilities.

**2. Magazine Inspection Procedures.** All areas used for long or short-term storage or holding of ammunition and explosives shall be inspected annually. For inspections, the term “magazine” refers to earth covered magazines, above ground magazines, and open storage locations.

a. General.

(1) Magazines shall be inspected prior to initial use, at the completion of use, and at least once annually to ensure the facilities are capable of safely storing ammunition, explosives, and other hazardous materials.

(2) The results of the Magazine Inspections shall be documented and signed by the individuals conducting the inspection.

**3. Pre-Operating Procedures**

a. Only authorized personnel will obtain keys to magazines where inspection(s) will be conducted.

b. Ensure magazine hatches are opened completely prior to entering any magazine.

c. Supervisors are responsible for verifying the serviceability of all fire-fighting equipment and PPE prior to commencing inspections.

**4. Inspection Procedures**

a. General

(1) The inspection checklist is provided in enclosure 12. Previous editions are obsolete for future inspections.

(2) The inspection will be performed by two Marines, of which one will be a QASO or TL.

(3) The information on the magazine inspection form will be legibly written in black ink.

(4) A check mark (☑) or “X” (☒) shall be placed in the appropriate “SAT,” “UNSAT,” or “N/A” column. No block on the inspection form shall remain blank.

(5) Any marking in the “UNSAT” column shall have a corresponding descriptive detailed remark of the finding.

b. Section A of the inspection form includes references and instructions for completing the inspection.

c. Section B of the inspection form includes the areas that shall be inspected and are listed below:

(1) Exterior

(a) All magazine inspections will begin on the exterior of the facility.

(b) Verify the presence and accuracy of posted fire symbol and chemical hazard symbol(s).

**NOTE**

**Due to the frequency of severe weather, fire symbol signs, chemical hazard symbol signs, and fire equipment boxes may be removed in preparation of severe weather. Immediately following the "all clear" of severe weather, all fire symbols, chemical hazard symbols and fire boxes shall be replaced.**

(c) Inspect the section equipment box and inventory the firefighting equipment. Inspect the presence and serviceability of special equipment such as leaker barrel(s), sodium bicarbonate solution, breathing apparatus, etc. and PPE as required.

1. Magazines storing white phosphorus (WP) shall have premeasured unmixed elements of sodium bicarbonate solution. The mixture will be composed of 5/6 cup of **DRY** sodium bicarbonate and one gallon of water.

2. Magazines storing WP shall have a 5-gallon pail/bucket or equivalent container and two sponges to permit sponging of affected body areas and flushing of the eyes.

3. Magazines storing WP shall have a set of band cutters to remove individual rounds from a banded pallet in the event of a WP leak.

(d) Inspect the hardball road and concrete entrance to the magazine area for cracks that would render handling of ammunition unsafe. Inspect the grounds for erosion. This region receives high volumes of rain that may accelerate soil erosion, especially around hardball and concrete. Report any suspected areas of erosion immediately to the supervisor.

(e) Inspect the vegetation (trees, grass, weeds, etc.) around the magazine area. Vegetation prevents soil erosion. Areas without adequate vegetation shall be annotated on the magazine inspection form as a note. Vegetation shall not be higher than 18 inches within 50 feet of the magazine.

(f) Inspect the magazine head wall (and blast wall if applicable) for signs of deterioration such as cracks or breakage.

(g) Inspect exterior lightning protection systems (LPS) for damage or wear. Air Terminals shall be vertical with no cracks in brackets. Grounding and Bonding straps shall be securely connected to terminals, hatches or grates and show no signs of wear or fraying. The unsatisfactory conditions of the LPS require immediate notification from the supervisor.

(h) Inspect exterior vents to ensure they are free of debris, rust and/or corrosion. Inspect screens for damage, rust and/or corrosion. Screens shall be grounded and/or bonded.

(i) Inspect magazine drainage tubes for the presence of screens which prevent rodents from entering the magazine.

(j) For magazines or buildings equipped with loading docks; inspect the loading dock for cracks. Inspect the guard rail for corrosion and missing hardware. The loading dock shall be free of dunnage and debris when not in use.

(k) Inspect the fire extinguisher for serviceability. Annotate the results of the inspection on the fire extinguisher. Immediately replace the fire extinguisher if it is over or under charged.

## (2) Magazine Hatches

(a) Inspect the magazine hatches for detrimental corrosion. Protective paint inhibits corrosion. Inspect magazine hatches for chips, scratches, and dents that have penetrated the protective paint and exposed bare metal.

(b) Inspect magazine hatches to ensure they close and seal to protect against dust, dirt, rain, rodents, and direct sun.

(c) Inspect the lock and key for serviceability. Keys should easily slide into the lock, and locks should open without excessive force being placed on the key.

(d) Inspect the chain and cog system used for opening magazine hatches. Magazine hatches should open with minimal resistance and should not be obstructed by ammunition, dunnage, or debris.

(e) Inspect the grounding and bonding straps attached to magazine hatches. As the magazine hatch is opened, grounding and bonding straps shall not be pinched or obstructed by the movement of the hatch. Pinching or obstruction to the grounding and bonding straps may cause undue stress to the welded connection of the strap and the hatch and degrade performance.

(f) Inspect the edges of the magazine hatches. Corrosion often occurs when water accumulates at the bottom of the magazine hatches and is not visible from the outside of the hatch.

## (3) Interior

(b) Inspect the posted General and Local Fire bills for accuracy. The local fire bill shall be reviewed every 6 months. Fire bills shall be posted on the interior front right bulkhead (from the entrance of the magazine). Immediately correct any discrepancy.

(c) Inspect the posted safety regulations for handling and storage of explosives concerning the material stored. Safety regulations shall be posted in the same area as Fire bills.

(d) Inspect posted net explosive weight (NEW) and maximum credible event (MCE) limits for the magazine. Posted limits for each magazine shall coincide with site approval limits (see enclosure 9). Limits shall be conspicuously posted on the inside of the front wall or on the magazine hatch. Limits shall consist of a minimum of 1-inch letters with Class/Division (C/D) in the left column and the maximum authorized quantity of explosives permitted in the magazine, by class and division as specified in the site approval in the right column.

(e) Inspect the magazine for general housekeeping. The magazine shall be clear of any dust, dirt, gravel, un-used dunnage (such as pallets or empty ammunition containers), or unnecessary equipment.

(f) Inspect magazine bulkheads for cracks, spalling (cracking or breakage of bulkheads) or evidence of water damage. If spalling has occurred which exposes rebar, immediately notify the supervisor.

(g) Inspect magazine decks for stains such as those caused by exudation or explosives; oil grease, or other materials that tend to make them slippery; protruding nails, splinters, holes, loose boards, and any items which constitute tripping hazards.

#### (4) Storage

(a) Inspect all ammunition to ensure it is raised off the deck by suitable wooden or metal pallets to ensure a minimum of one inch clearance between the bottom of the stack and the deck to protect the material in the stack from water and provide adequate ventilation.

(b) Inspect stacks of ammunition so that individual containers are accessible for inspection and offer no obstacle to the free circulation of air.

(c) Inspect stacks of ammunition for stability. The height of the stacks shall be limited by the weight which the lower pallet or container can safely support. The upper pallet shall not exceed the weight of the pallet(s) below.

(d) Inspect the distance between adjacent stacks, bulkheads, and ceilings. A minimum clearance of 18 inches will be between stacks; 24 inches between stacks and the front bulkhead; and 6 inches between side bulkheads, rear bulkheads, and ceilings.

**NOTE**

**Due to the cylindrical design of earth covered magazines, the bottom pallet of a stack may meet the 6-inch required clearance but the upper most pallet may not. Pay particular attention to the top of stacks when measuring clearances.**

(e) Inspect ammunition containers for appropriate markings. Marking guidelines are outlined in Chapter 3 of this SOP.

(f) Inspect ammunition containers for the presence of traceable seals. Except for ammunition pulled for issue, all containers shall be sealed, either by the factory or locally. All containers, specifically wooden boxes, shall be sealed to prevent access to ammunition.

(g) Inspect the placement of "light boxes." Light boxes shall be conspicuously placed on top (within appropriate height limitations) and in front (the side closest to the magazine entrance) of each stack when used. Only one light box per stack is authorized.

(h) Inspect ammunition containers and pallets for serviceability. Ammunition containers shall be free of damage which prevents the loading/unloading of ammunition into the container. Pallets and other dunnage shall be free from damage that may induce toppling or create an unsafe condition.

(i) Ensure all ammunition stored is compatible.

## **5. Record Keeping**

a. Upon completion of the magazine inspection, the individuals who conducted the inventory will sign and date the inspection form.

b. The Storage Chief will review each inspection checklist for accuracy and completeness. Following review, the Storage Chief will sign and date the cover page to the inspection form in red ink.

c. The unit safety representative will review the inspection form and record any findings. If required, subsequent work requests shall be generated to correct any findings.

d. Any work requests generated will be recorded, tracked, and maintained by ASP Safety personnel and any outstanding service request will be reported to the Explosives Safety Officer for assistance in resolution.

e. The inspection forms will be maintained for **ten years**. The inspection forms will be filed according to magazine locations.

<b>Chapter 10</b>
<b>BANDING OPERATION PROCEDURES</b>

**1. Purpose.** To establish procedures for safe banding operations.

**2. Discussion.**

a. Banding is the process of applying galvanized steel strapping to ammunition to mitigate movement, palletize and/or unitize loads.

b. Banding straps shall be replaced when they are damaged or become loose.

c. Loose strapping shall be removed and disposed of, and new strapping shall be applied. Loose strapping shall never be reused or re-tensioned if it is found to be loose during load inspection.

**3. General.**

a. All banding tools and safety equipment shall be stored indoors (not in magazine storage locations) when not in use.

b. At a minimum, two sets of banding gear will be available for issue at any time. A set of banding gear includes:

(1) Band Cutters.

(2) Band Stretchers.

(3) Band Crimpers.

(4) Band Clips.

c. Only 1 ¼ inch non-coated galvanized steel banding (non-painted, typically metallic in appearance) shall be used for A&E banding operations.

(1) Coated steel banding may only be used for non-A&E banding operations such as dunnage, or container palletization.

**4. Inspection of Tools.**

a. Prior to initial use, ensure all banding gear and PPE is serviceable.

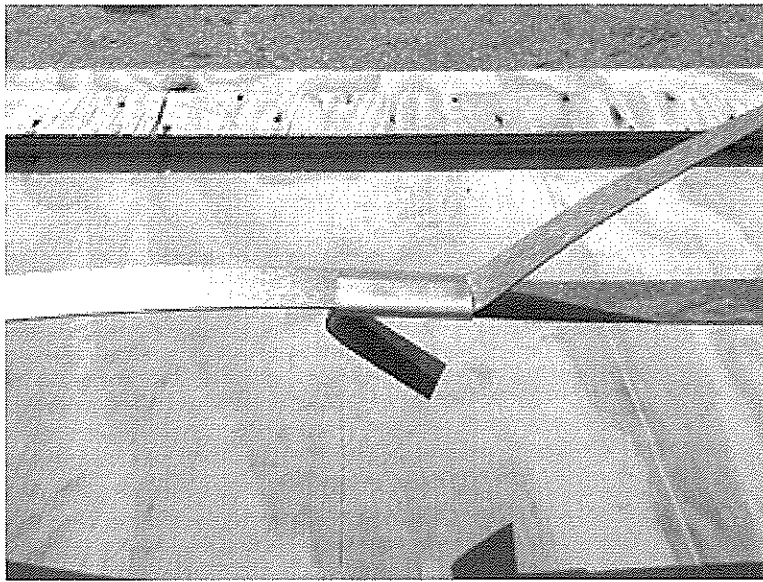
(1) Visually inspect the banding stretchers' retainer and gears for serviceability.

(2) Ensure the crimpers form two distinct notches; if not, ensure the clips are large enough to facilitate a double crimp.

(3) Visually inspect the crimpers prior to use. Inspect for cracks, deformation, loose, bent, or misaligned components in the jaw area.

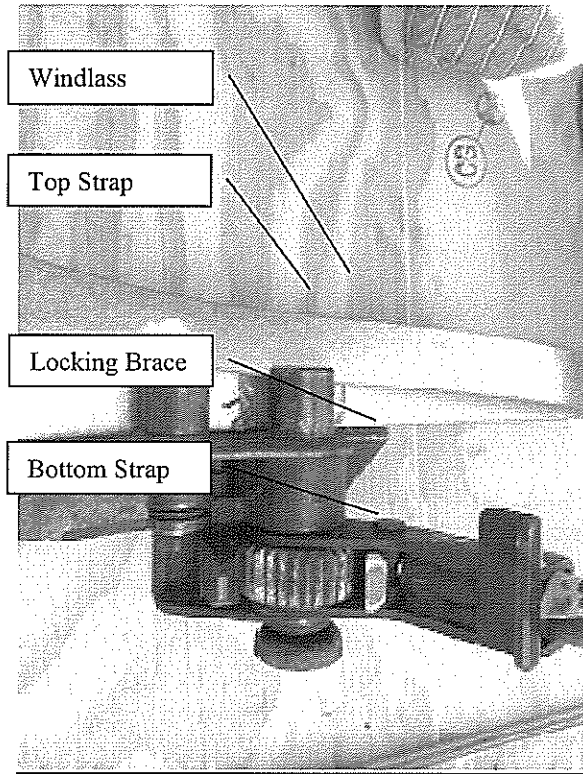
## 5. Banding Procedures.

- a. Don required PPE.
- b. Inspect the banding intended for use. Banding intended to be used for A&E shall conform to the requirements of paragraph 3.c of this chapter.
- c. Ensure all personnel performing banding operations wear eye protection and gloves prior to the start of the operation.
- d. Wrap loose banding around the pallet so there is a ~12-inch overlap while leaving minimal slack around all sides of the pallet.
- e. Slide the two ends of the banding strap into a banding clip. The bottom strap may be bent downwards to hold the banding clip in place during the banding process as displayed in figure 5-1.



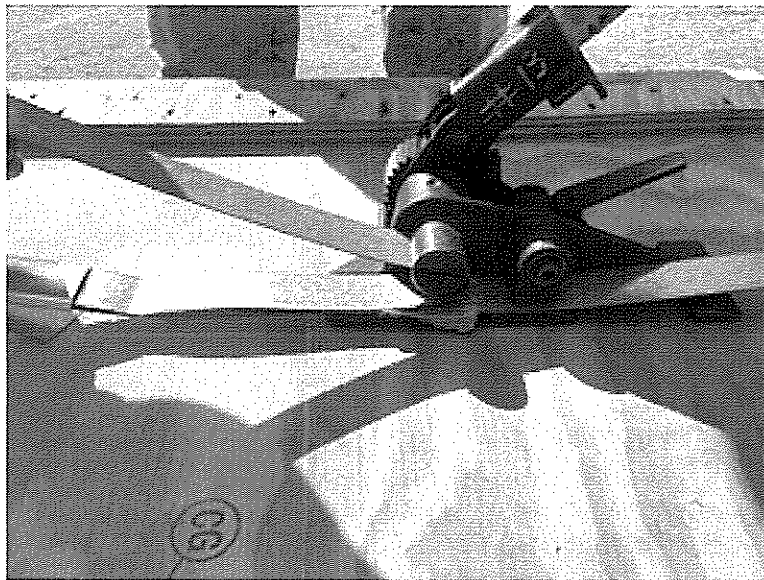
**Figure 5-1.**

f. Slide the bottom strap into the banding tensioner and under the locking brace. Slide the top strap through the windlass and over the locking brace, ensuring the banding clip remains 4-6 inches away from the windlass. Set the top strap fully into the windlass. The top strap is not seated fully in the windlass in figure 5-1 for demonstrative purposes.



**Figure 5-2.**

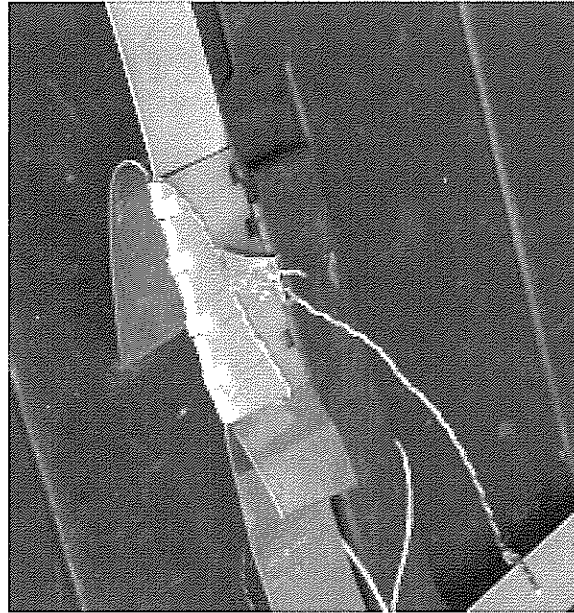
g. Tighten the banding strap using the tensioner handle ensuring the banding clip does not become bound in the windlass. Hold the handle in place and inspect the pallet to ensure banding tension does not damage the container. See figure 5-3.



**Figure 5-3.**

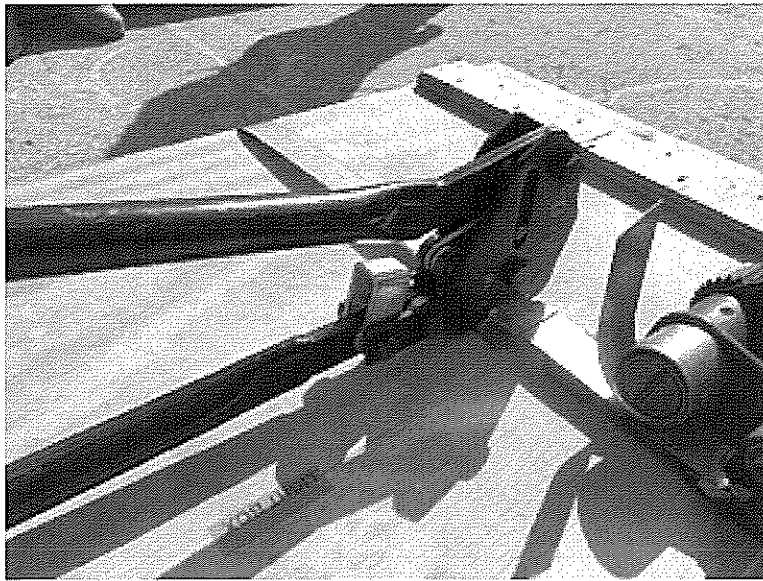
h. Apply traceable seals to banding crimps as required for shipment. See Figure 5-4.





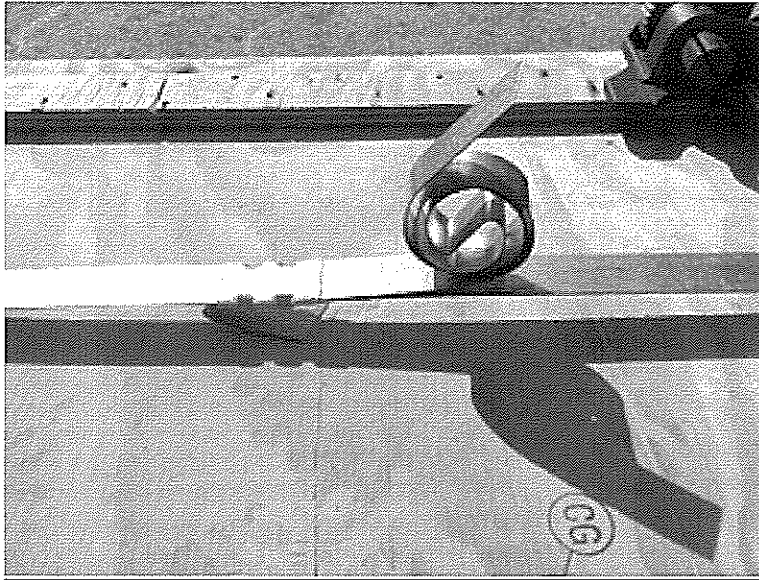
**Figure 5-4.**

- i. Use the crimpers to crimp the banding clip in two locations (double crimp). See figure 5-5.



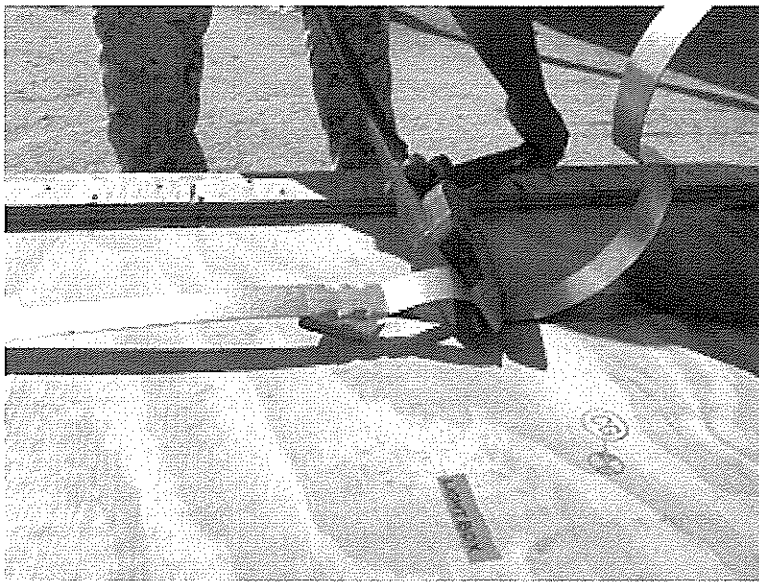
**Figure 5-5.**

- j. Release the tension from the stretcher ensuring the clip holds the banding taut against the material. See figure 5-6.



**Figure 5-6.**

k. Cut the excess banding material remaining after crimping the banding. Bend each cut edge of banding downward to prevent damage to materiel and personnel. See figure 5-7.



**Figure 5-7.**

1. Repeat steps c through j as required until banding operations are complete.

<b>Appendix A</b>
<b>Hazard Control Briefing (HCB)</b>

**1. Purpose.** To identify potential hazards and exposure mitigation steps that Ammunition Supply Point (ASP) personnel, operators and/or visitors may encounter while at the MCB Quantico ASP.

**2. Discussion.**

a. Scope. The hazards listed in this HCB are not all encompassing. **SAFETY IS PRIORITY** and paramount in all direct or indirect explosive operations. At no time will safety instructions or devices be violated or ignored. The best judgement shall be used to mitigate hazards to reduce risk at all costs.

b. Administration.

(1) This HCB shall be read and reviewed by all persons requesting access to the MCB Quantico ASP prior to being granted access.

(2) Personnel who have read the HCB shall sign and date the HCB muster sheet.

(3) Personnel shall review the HCB at a minimum, annually.

(4) Only personnel who have been found fully qualified and certified in accordance with reference q. shall manage ammunition. At no time will personnel with incomplete, expired, suspended, or revoked Qual/Cert status handle ammunition.

c. Individual Responsibility. Every individual is a safety observer regardless of Qual/Cert level or rank. If at any time an individual witnesses an unsafe act, immediately **CEASE** operations until the unsafe condition is corrected.

d. Supervisory Responsibilities.

(1) Supervisors are solely responsible for thorough instruction of all personnel on proper hazard identification, control, and mitigation such as fire procedures, safety regulations, and special instructions pertaining to these operations. Supervisors shall use the utmost care in the selection and training of all personnel to ensure they are qualified for performing the operations and are fully informed regarding hazards they might encounter.

(2) Nothing contained herein shall be construed as to limit the supervisor's full responsibility for safety.

(3) Supervisors will ensure tools, equipment, and supplies authorized herein are used in the manner to which designed, are appropriately maintained, and safely operate as intended.

(4) Personnel assignments shall be made consistent with the operating procedures, to ensure that a minimum of two people will be working in the same vicinity during hazardous operations.

(5) Prior to commencing operations, the supervisor shall ensure the following information is displayed in the work area:

(a) Diagram of the building or site showing the locations of various safety related items such as fire alarms, fire extinguishers, fire assembly areas, emergency telephones, first aid kits, eye wash stations, and emergency showers.

(b) Explosive Limits, Evacuation Routes, and Emergency Exits.

(c) Fire bills and spill plans.

(6) Supervisors shall review all posted information concurrently with this HCB.

(7) Supervisors shall ensure that all personnel involved in these operations know the location of fire extinguishers and fire alarm boxes in the vicinity of their work area.

**WARNING**

**Flagrant disregard of safety precautions, reckless operation of explosive material handling equipment, or other behavior indicating incompetence or unreliability shall be cause for mandatory suspension of certification. The immediate supervisor will ensure the individual is appropriately retrained prior to recertification.**

**3. General Hazards and Controls.** Personnel who have been granted access may be exposed to the following hazards regardless of the specific nature of their task(s) or operation to be performed:

a. General Ammunition-Handling Safety Precautions.

(1) Ammunition, explosives, and ordnance materials in containers, in bulk, or loaded into projectiles, cartridges, or ammunition components shall be managed carefully to prevent shock or friction that might cause a fire, or explosion or damage to the material. These materials shall not be thrown, dropped, dragged, or tumbled over floors or over other containers. They should be protected from shock of any kind. There might be occasions when larger items must be transported in van-type vehicles or railcars that prevent direct handling of the items by forklifts. In such circumstances, it might be necessary to move one or more items by skidding or pulling the item(s) out of the vehicle. This practice should only be used when no other practical means for moving the items are available. Rollers and pallet trucks should be used whenever possible during removal operations.

(2) Managing of ammunition and explosives shall be reduced to a minimum to prevent damage and the creation of hazardous conditions. Every precaution shall be taken to avoid ammunition and explosives from contacting sand, earth, gravel, and other abrasive or spark-

producing substances. Ammunition and explosives shall not be exposed unnecessarily to inclement weather or to direct sunlight.

(c) Any evidence that ammunition and/or explosives have been managed roughly or explosive material exposed shall be reported promptly to the supervisor.

(d) A red flag shall be displayed at the entrance to the magazine area; to signify that work involving ammunition and explosives is in progress.

(e) All personnel involved in handling ammunition and explosives shall be trained and qualified to perform their work expeditiously and safely.

b. Fire/Explosion

(1) Discussion. Fire is the greatest hazard to the MCB Quantico ASP. Many of the materials stored/managed are extremely sensitive to heat and react at temperatures lower than those required to ignite ordinary wood, paper, or fabrics. Even indirect heat generated by a fire could initiate a reaction and result in an explosion. Every effort shall be made to keep ammunition and explosives away from excessive heat.

(2) Controls.

(a) Training. ASP personnel shall be thoroughly familiar with the fire hazards, fire-fighting equipment, and safety practices of operations for which they are responsible. Each person shall be familiar with the provisions in fire bills, both general and local, applicable to their operation so that each person knows the appropriate action to take if a fire emergency develops.

(a) Inspections. Fire-fighting equipment and prevention measures shall be inspected regularly for serviceability. Immediately replace any unserviceable fire-fighting equipment. Fire response procedures shall be inspected frequently to ensure adequate response and response time.

(c) Smoking. Smoking, electronic cigarettes, or any spark producing devices are prohibited in the MCB Quantico ASP. Personnel shall only smoke in the designated smoking area when ammunition laden vehicles are not within 50 feet.

(d) Housekeeping. An essential element of any fire prevention effort is good housekeeping. Accumulations of combustible scrap, flammable residue, and explosive dust are primary sources of fires. Working and storage areas shall be kept clean and orderly to minimize fire hazards.

(e) Firebreaks. Vegetation, trees, grass, leaves, undergrowth, and weeds can become a fire hazard to structures and facilities. Therefore, vegetation within 50 feet of any explosive site shall be maintained at a height of no more than 18 inches to create a firebreak.

(f) Heat or spark producing equipment. Work or maintenance requiring soldering, melting of asphalt, or use of blow torches or other heat or spark producing devices that develop temperatures higher than 288 °F shall not be performed without written consent from the installation Explosive Safety Office.

(g) Storage by compatibility. By its very nature, ammunition is designed to be lethal. Storing and transporting ammunition by hazard class and division designators reduces inadvertent ignition.

(h) Explosive limitations. Each storage site is limited to the number of explosives it may contain by the Explosive Site Approval. At no time will the Net Explosive Weight (NEW) or Maximum Credible Event (MCE) exceed authorized limits.

(i) Personnel limitations. Inside magazines, personnel shall be kept to the absolute minimum to provide uninterrupted operations and reduce exposure to explosive hazards. No more than 8 individuals are authorized in a magazine at a time during ammunition operations.

(j) Lightning Protection Systems. Magazines are protected with lightning protection systems (LPS) designed to accept and ground potential lightning strikes into the earth. All explosive operations are prohibited during L10 (lightning within 10 miles) conditions.

(3) Emergency action upon exposure to fire or explosion.

(a) Sound the alarm. Notify all personnel in the immediate vicinity by voice and then transmit the alarm over handheld radios or telephones. Clearly and calmly report the location and description of fire. An example of the report is:

**“Fire in the ASP. Magazine two. Brush Fire. I say again, fire in the ASP, Magazine two, brush fire.”**

1. Upon notification of a fire, personnel located in 27067 will sound the fire alarm.

2. Upon notification of a fire, the ASP Officer in Charge (OIC) or Operations Chief will initiate the notification process outlined in the Emergency Action Plan. Notifications will be made to the fire department (EMS), Camp Operations, and Company Commander.

(b) Close all magazine hatches.

(c) Evacuate all non-essential personnel to the closest safe fire assembly area. Maintain two person teams.

(d) Fight the fire to the level of ability with all available means and without awaiting specific instructions.

1. If the fire involves explosive material and cannot be extinguished with on hand equipment, evacuate to the nearest safe fire assembly area. Only continue to fight fires involving

explosive material to remove an individual from the immediate threat of the fire who has become incapacitated or non-ambulatory.

2. If the fire does not involve explosive material, use all means to prevent the fire from spreading to the vicinity of explosive material.

(e) Once evacuated to the fire assembly areas, the senior MCB Quantico Ammunition Supply Point 2340/2311 will take accountability and report by fire assembly area to ACP in the below prescribed sequence:

1. Number of ASP Marines
2. Number of Supported Unit Personnel
3. Number of Contractors/Visitors

(f) ACP will then request, by fire assembly area, an alphabetized by name accountability of all personnel present in the below prescribed sequence:

1. Names of ASP Marines
2. Names of Supported Unit Personnel
3. Names of Contractors/Visitors

(g) ACP will clear “fire free” routes and direct each fire assembly area to evacuate the MCB Quantico ASP.

c. Vehicle use and traffic.

(1) Discussion. The MCB Quantico ASP has several interconnecting hardball roads that are primarily used by tactical vehicles, commercial vehicles, utility transport vehicles and material handling equipment as well as foot traffic. The potential for collisions and vehicular accidents is increased during times of high operational tempo and increased traffic flow.

(2) Controls.

(a) Speed Reduction. Speed limits shall be strictly maintained. Speeding more than posted speed limits reduces reaction time and increases collision severity. The speed limits are as follows:

1. MHE 5 MPH when loaded.
2. MHE 10 MPH when unloaded
3. All other vehicles 15 MPH

(b) Training/Licensing. Only authorized operators who have received the requisite training and have been licensed to operate the vehicle will operate the vehicles.

(c) Traffic signs. Operators shall adhere to traffic signs posted throughout the MCB Quantico ASP.

(d) Ground guides. Ground guides will be used for all tactical vehicle types during reduced visibility or as required by orders and directives, such as when loads limit visibility, or when operating in reverse.

(3) Emergency action upon exposure to vehicle accident.

(a) CEASE all operations in the immediate vicinity of the accident, if possible, turn off the vehicle and cordon the area to prevent sympathetic vehicular collisions.

**NOTE**

**Unless required for the application of medical treatment, do not move any vehicle(s) or any involved equipment until directed by the ASP OIC.**

(c) Notify the ASP Safety Representative for spill containment (if applicable) and collection of information for the compilation of a WESS report (if applicable).

(d) Notify the ASP OIC/SNCOIC

d. Environmental Hazards.

(1) Discussion. Quantico has numerous poisonous/venomous plants, insects, and wildlife. Threats include but are not limited to poison ivy, poison oak, poison sumac, bees, ticks, spiders, and snakes.

(2) Controls.

(a) Avoidance. Personnel should avoid contact with areas that may contain poisonous/venomous plants, insects and/and animals.

(3) Emergency action upon exposure to poisonous/venomous plants and animals.

(a) If an individual has made contact, ingested, or been bitten or stung by any plant or animal, seek help from the MCB Quantico Medical Clinic immediately.

e. Hazardous Weather Conditions.

(1) Discussion. Destructive weather (i.e., lightning, thunderstorms, tornadoes, and tropical storms) can cause damage to facilities storing ammunition, which may result in damage to active



and passive protection measures, degraded material storage capabilities and/or may initiate explosions, fatally injuring personnel, and damaging property.

(2) Control:

(a) Pre-Strike warning systems. The MCB Quantico Weather establishes weather warnings and readiness conditions for all MCB Quantico based units. Real-Time updates can be obtained at <https://weather.navy.mil/Lightning/display.jsp?lat=34.7084&lng=-77.4542&zoom=8&defaultRings=true&defaultAlerts=true&icao=KNCA>. ACP personnel shall monitor the weather website for pre-strike warnings or notification of L10 (lightning within 10 miles) conditions.

(b) Weather Watchers. Personnel working in the MCB Quantico ASP shall remain cognizant of current weather conditions. If lightning is seen or thunder is heard, **CEASE** operations call ECP, and verify distance of strike from the pre-strike warning system.

(3) Emergency action upon exposure to hazardous weather conditions.

(a) Evacuation. Upon notification of L10 conditions or destructive weather, all personnel will **CEASE** explosive operations, secure magazine hatches, and evacuate to buildings 27067 (Operations), 27170 (RSSI) or outside of the MCB Quantico ASP until the "all clear" has been issued.

f. Electrostatic Discharge (ESD).

(1) Hazard: Static Electricity is not a hazard. The generation of static electricity cannot be prevented entirely. The hazard arises when an accumulated electrical charge is subsequently discharged as a spark in the presence of hazardous atmospheres, dusts, or exposed explosive. This spark is also a potential ignition source for flammable or explosives materials and Electro-Explosive Devices (EEDs). Static electricity on insulated conductive objects, such as metal stands with rubber casters, or static electricity on a person, can discharge through the air to other objects that are at sufficiently different potentials. Such a discharge or spark, even though it might be too small to be felt, might contain enough energy to cause an EED, such as a primer or a detonator, to fire. Static discharges might also be strong enough to break down the insulation within the EED and cause it to fire.

(2) Control: Grounding and bonding is used to provide an electrically continuous path to ground to allow static discharges to dissipate as fast as they are generated.

**4. Specific Hazards and Controls.** Personnel who have been granted access may be exposed to the following hazards regarding the specific nature of their task(s) or operation to be performed:

a. Ammunition and Explosives.

(1) Discussion. By its very nature, ammunition is designed to be lethal. Storing and transporting ammunition by hazard class and division designators reduces inadvertent ignition. The following identifies specific hazards associated with each Hazard Class/Division (C/D).

(2) Mass Detonating Hazard Materials C/D 1.1.

(a) Hazard: Ammunition and explosives that are considered mass-detonating hazards are designated C/D 1.1. Damage from mass detonating hazard materials is caused by concussion, blast, or by sympathetic detonation.

(b) Control: Specified distances between piles of these materials and between magazines that contain these materials shall be maintained to minimize the possibility of sympathetic detonation or propagation. Handling of these materials shall be limited to areas specifically sited and approved for handling or storing C/D 1.1. Strict adherence to net explosive weight and personnel limits is required. Minimum separation distances for varying quantities of mass detonating explosives based on the degree of protection needed must be maintained. Personnel involved in operations with C/D 1.1 material shall be thoroughly familiar with the location and use of fire-fighting apparatus, exits from buildings or areas, and emergency procedures.

(3) Non-Mass-Detonating Fragment Producing Materials C/D 1.2.

(a) Hazard: The quantity distances specified for C/D 1.2 ammunition achieve the desired degree of protection against immediate hazards from an incident. Events involving C/D 1.2 items project substantial amounts of unexploded rounds, components, and subassemblies, which will remain hazardous after impact. Such items are likely to be more hazardous than in their original state because of possible damage to fuze safety devices or other features by heat and impact. Many types of ammunition containing sub munitions, such as cluster bombs, can be expected to be projected out to distances as great as the relevant inhabited building distances. Furthermore, it is impractical to specify quantity distances, which allow for the maximum possible flight ranges of propulsive items.

(b) Control: Handling of these materials shall be limited to areas specifically sited and approved for handling or storing C/D 1.2. Strict adherence to separation distances, net explosives weights, and personnel limits is required. Personnel involved in operations with C/D 1.2 material shall be thoroughly familiar with the location and use of fire-fighting apparatus, exits from buildings or areas, and emergency procedures.

(4) Mass Fire Hazard Materials C/D 1.3.

(a) Hazard: Items in this division are those that burn vigorously in storage situations and are exceedingly difficult if not impossible to extinguish. Normally, explosions will be confined to pressure ruptures of containers and propagating shock waves. Damaging blast overpressures will not occur beyond the magazine distances specified in NAVSEA OP 5 Volume 1. The spread of fire might result from sprays of burning container materials, propellant, or other flaming debris. Toxic effects, such as those occurring from burning pyrotechnic items, normally will not exist beyond the inhabited building distances specified for this division.

(b) Control: Handling of these materials shall be limited to areas specifically sited and approved for handling or storing C/D 1.3 or greater hazard. Strict adherence to separation distances, net explosives weights, and personnel limits is required. Personnel involved in operations with C/D 1.3 material shall be thoroughly familiar with the location and use of fire-fighting apparatus, exits from buildings or areas, and emergency procedures.

(5) Moderate Fire Hazard Materials C/D 1.4.

(a) Hazard: Items in this division are those that present a fire hazard without a blast hazard and have no fragmentation or toxic hazard beyond the fire hazard clearance distance ordinarily specified for high-risk materials. Separate facilities for storing and handling materials in this division shall not be less than 100 feet from other facilities.

(b) Control: Handling of these materials shall be limited to areas specifically sited and approved for handling or storing C/D 1.4 or greater hazard. Strict adherence to separation distances, net explosives weights, and personnel limits is required. Personnel involved in operations with C/D 1.4 material shall be thoroughly familiar with the location and use of fire-fighting apparatus, exits from buildings or areas, and emergency procedures.

(6) Commercial dynamite, blasting agents, and gels. Commercial dynamite, blasting agents, and gels are explosives obtained from commercial sources. Their sensitivities and keeping qualities are usually different than those of standard military explosives. Commercial dynamite is considered more hazardous in storage than other high explosives because it may exude (ooze) nitroglycerine (NG).

(a) Hazard. Exposure to NG. NG gives dynamite a heavy, pungent, sweet odor. NG liquid and vapors are quickly absorbed, are toxic, and will cause very severe and persistent headaches in a brief period.

(b) Controls

1. Inspection. Commercial dynamite shall be inspected and rotated every 30 days in accordance with this SOP and applicable orders and directives to reduce NG exudation.

2. PPE. Inspection personnel shall wear rubber or plastic gloves when managing commercial dynamite.

(c) Emergency action upon exposure to NG.

1. Seek medical attention. Aspirin and other pain relievers are not effective for NG headaches; however, black coffee or caffeine citrate may provide some relief. Personnel displaying symptoms of NG exposure should seek medical attention from the Camp Schwab Medical Clinic as soon as possible.

(7) Phosphorus burns

(a) Hazard. Phosphorus is spontaneously flammable when exposed to air. Phosphoric burns cannot be extinguished in the same means as traditional burns.

(b) Controls

1. Handling. Maximum care should be applied when handling phosphorus to prevent exposure of phosphorus to oxygen.

(c) Emergency action upon exposure to phosphorus burns.

1. Application of neutralization solution. Phosphorus burns involving the eyes must be treated immediately. The most effective treatment is neutralization of any phosphoric acid present by irrigating with a 5% bicarbonate solution. Eyes should be continuously irrigated with copious amounts of normal saline or room temperature water for 10 to 15 minutes.

2. Oxygen deprivation. All burning particles must be removed immediately (not by hand). A wet dressing, for example, cloth or mud, must be applied to stop the burning of WP by depriving it of oxygen.

b. Hazards of Electromagnetic Radiation to Ordnance (HERO).

(1) Discussion. Electromagnetic Radiation may cause ammunition items to inadvertently detonate or render them useless.

(2) Control: Do not transmit portable (hand-held) radios within 25' or mobile (vehicle-mounted) radios within 50' of magazine doors or exposed ammunition. Set the appropriate HERO condition for the specific item and location. Render the appropriate attention to HERO Warning Labels and HERO Warning Signs.

c. Hazard Areas.

(1) Discussion. Areas throughout the MCB Quantico ASP have been designated as specific hazard areas. While operating in hazard areas, personnel shall don appropriate prescribed PPE.

(a) Head injury areas.

1. The following is a list of areas or conditions where head injuries may be sustained:

a. While conducting any explosive operation.

b. When operating any MHE.

c. When inside any magazine storage area.

2. Control: PPE. While working in head injury areas, personnel will wear serviceable hard hats.

(b) Eye hazard areas.

1. The following is a list of areas or conditions where eye injuries may be sustained.

- a. In the immediate area of banding operations.
- b. During the servicing of batteries.
- c. When operating any power equipment.
- d. When blocking or bracing.
- e. When operating or riding as a passenger on any vehicle not equipped with a windshield.

2. Control.

a. PPE. While working in eye hazard areas, personnel will wear serviceable eye protection such as shatter resistant glasses, goggles, or face shields.

3. Emergency response to eye injury.

a. Eye wash stations. If personnel receive debris or chemicals in their eye, they may use eye wash stations to flush foreign objects. Individuals who receive eye injuries shall report to the MCB Quantico Medical Clinic for further evaluation.

(c) Noise hazard areas.

1. The following is a list of areas or conditions where hearing injuries may be sustained.

- a. When operating MHE.
- b. When operating power tools and equipment with noise hazard symbols.
- c. When blocking and bracing inside ISO/MILVAN containers.

2. Control. While working in noise hazard areas, personnel will wear hearing protection such as ear plugs, earmuffs, or a combination of both.

3. Emergency response to hearing injury.

a. Individuals exposed to unacceptable levels of noise shall seek medical attention.

(d) Toe hazard areas.

1. Foot/toe injuries may be sustained while performing explosive operations and maintenance operations.

2. Control. While conducting explosive operations and maintenance operations, personnel shall wear steel toed/composite toed safety boots.

3. Emergency response to toe injury.

a. Individuals exposed to toe injuries shall apply first aid and seek medical attention.

(2) Controls. Specific controls addressed per hazard areas.

d. Pentachlorophenol (PCP)

(1) Hazard: PCP exposure. PCP is a hazardous chemical previously used to treat and preserve wooden boxes common to ammunition. Wooden boxes treated with PCP are marked with a "P." Acceptable alternative preservatives that do not present the same hazards as PCP are copper-8-quinolinolate, zinc naphthenate, and copper naphthenate.

(2) Controls.

(a) Identification. Acceptable PCP treated boxes have a clear, waxy appearance. PCP treated items showing evidence of crystallization, surface wetness, or tackiness represent potential safety/health hazards.

(b) PPE. When PCP treated items showing evidence of crystallization, surface wetness, or tackiness, handlers shall don respirators, leather gloves, eye protection, and long sleeves to minimize exposure to PCP.

3. Emergency response to PCP exposure.

a. Individuals exposed to PCP shall remove and contain all clothing, shower, and wash all exposed areas thoroughly using soap and water. Individuals presenting skin irritation shall seek medical attention.

e. Fuel

(1) Hazards

(a) Flammability. The highly volatile and extremely flammable nature of fuel means that potentially explosive air/vapor mixtures are likely to form easily at ambient temperatures. Fuel ignites easily, burns vigorously and fuel vapors may explode in certain conditions.

(b) Inhalation: In normal use, the main route of exposure to fuel is likely to be by inhalation. Exposure to vapor during normal refueling is not a significant health concern. However, significant spills can result in short-term exposure to high concentrations of vapor (greater than 500 ppm) may cause irritation of the eyes, nose and respiratory tract and signs of central nervous system depression (headache, dizziness, mental confusion).

(c) Skin contact: During refueling, minor accidental skin contact may occur, and is not a significant health concern. Prolonged skin exposure is only likely to occur in accident situations (drenching of clothing during pump malfunction, for example). Fuels are unlikely to cause systemic toxicity following accidental skin exposure. Skin contact may cause local irritation, and, if contact is frequent or prolonged, skin reactions may be severe. Fuels also can result in drying, cracking skin or dermatitis.

(d) Eye contact: Accidental splashes entering the eye may cause irritation and discomfort. Such effects are usually temporary, and permanent damage is considered unlikely.

(e) Ingestion: Fuels are unlikely to cause systemic toxicity following accidental ingestion. The main potential health hazard, however, is the possibility of severe, **potentially fatal**, damage to lung tissue, which can occur following aspiration of even lesser amounts of fuel into the lungs. Never siphon fuel by mouth nor put fuel in your mouth for any reason.

(2) Controls.

(a) Keep fuel and vapors away from sources of ignition.

(b) Ensure fuel/refueling operations are performed in a well-ventilated area.

(3) Emergency response to fuel exposure.

(a) Drench any fuel saturated clothing with water prior to removal to prevent ignition by static electricity. Remove fuel saturated clothing. Wash affected areas with soap and water.

(b) Irrigate eyes for 10-15 minutes after exposure to fuels. If irritation persists, seek medical attention.

(c) If ingested, do not induce vomiting. Seek medical attention.

f. Aerosol Paint

(1) Hazard: Aerosol paint fumes are toxic if inhaled.

(2) Control: Only use aerosol paint in a well-ventilated area.

(3) Emergency response to aerosol paint fumes.

(a) Individuals exposed to paint fumes shall be moved to a well-ventilated area.

g. Power Tools/Equipment

(1) Hazard: Rotating power tools and machinery may catch loose clothing, hair, and jewelry.

(2) Controls:

(a) Wear only snug fitting clothing such as the MCCUU when operating rotating power tools or machinery

(b) Secure all hair that may become entangled and wear appropriate head gear (hard hat or cover) when operating rotating power tools or machinery.

(c) Remove all jewelry (watches, rings, necklaces, bracelets, dog tags, etc.) when operating rotating power tools or machinery.

(d) Tools and equipment shall be operated by authorized personnel who have been instructed in the methods of operation and applicable safety procedures.

(e) Tools and equipment shall be inspected at the start of each working day/operation. When defects are found, operations shall be stopped, and steps taken to correct/replace any defects or abnormality. The operator, to ensure safe operation, shall exercise extreme care when any tools are in use.

f. All tools and equipment shall be operated within their designed limits and capacity.

(f) Mechanical guards or safety appliances of any kind shall not be removed, tampered with, or rendered inoperative except when authorized for repairs, maintenance, or cleaning. Machinery or equipment shall not be used until safety equipment has been replaced.

(g) All equipment operators shall know and obey the safety rules and regulations applicable to their equipment.

(3) Emergency response to industrial tool injury.

(a) Apply first aid concurrent with the injury and seek medical attention.

**5. Visitor Hazard Control Brief.** The following brief shall be provided to all personnel prior to being granted access to the Magazine Storage Area on an annual basis. Visitors shall make appropriate logbook entries documenting they have received a Hazard Control Briefing.

a. You are being granted access to the Marine Corps Base Quantico Ammunition Supply Point and may be exposed to Ammunition and Explosives and associated equipment which present potentially fatal hazards. The following controls are in place for the protection of personnel and assets:



- (1) Personnel in white helmets and are the supervisors and safety observers in the Ammunition Supply Point.
- (2) If you identify a hazard, report it to the supervisor or ASP personnel immediately
- (3) ASP personnel are in command during all procedures. If you disagree with something, ask to see a supervisor. In the event you are unsafe or uncooperative, the issue/receipt transaction will stop, you will be brought out of the ASP and the ASP OIC/SNCOIC will be notified.
- (4) Do not touch anything unless directed to or authorized by ASP personnel. Only individuals qualified/certified will handle ammunition. Do not drag, throw, toss, drop or otherwise rough handle munitions.
- (5) Be aware of your surroundings and the activity always going on around you while handling/transporting ammunition and explosives are in progress.
- (6) Observe and adhere to posted maximum personnel limits inside of storage magazines.
- (7) Matches, lighters, or other spark producing items are prohibited within the ASP. If there is a fire, sound the alarm. When the alarm is sounded, follow directions given by ASP personnel. They have been instructed on actions required in the event of a fire or explosion.
- (8) Smoking and the use of vapor emitting devices is prohibited within the ASP. The designated smoking area is behind building 27067.
- (9) During Thunderstorm Condition 1, lightning within 10 miles, or by the direction of ASP personnel, all operations must cease, ammunition laden vehicles will be directed to stage in the designated Vehicle Staging Area.
- (10) Only approved hand-held radios may be used inside the ASP. Vehicle mounted radios (emergency or tactical), CB's, cell phones, tablets, or any other electronic device capable of transmitting or receiving signals may not be used inside the ASP. Doing so may detonate explosives.
- (11) The maximum speed limit in the ASP is 15 MPH. Explosive laden vehicles and MHE always have the right of way. Always remain on the hardball road, unless otherwise directed by ASP personnel.
- (12) Explosive laden vehicles shall not be left unattended unless staged in the designated vehicle staging area.
- (13) Repairing or jump-starting explosive laden vehicles within the ASP is prohibited.
- (14) Weapons, security ammunition, and/or pyrotechnics are prohibited within the ASP.
- (15) If there are no questions, sign the Hazard Control Logbook, and stand by for your escort.





**7. Risk Management Worksheet.** Figure 17 indicates the Operational Risks, controls, and Implementation steps.

RISK MANAGEMENT WORKSHEET							
UNIT: MCBQ G4 ASP				EXERCISE: SOP RM Worksheet			
EVENT: SOP RM WORKSHEET				ASSIGNED ROIC/RSO: N/A			
PREPARED BY: CWO3 WILLIAMS, FRANKLIN				DATE/TIME START:		DATE/TIME END:	
Mission Statement:							
IDENTIFY HAZARDS			ASSESS HAZARDS	MAKE RISK DECISIONS		IMPLEMENT CONTROLS	SUPERVISE
TASKS	SUB-TASKS	LIST HAZARDS	INITIAL RAC	DEVELOP CONTROLS	RESIDUAL RAC	HOW TO IMPLEMENT	HOW TO SUPERVISE
Storage	Storage	Exposure	III/C/4	Keep all explosives inside RSL unless to remove for use.	III/D/5	Brief all personnel to ensure explosives are maintained in the RSL or covered when not in the RSL.	Direct supervision by Team Leader
Storage	Storage	Fire	III/C/4	No smoking, fire or open flame within 50 feet of RSL.	III/D/5	Place smoking area more than 50 feet from RSL.	Personnel will hold each other accountable.
Storage	Storage	EMR	III/C/4	Use only approved radios. Observe required HERO Distances and precautions.	III/D/5	Ensure personnel are familiar with EMR hazards and procedures. RSL equipped with grounding cable and rod.	Entry Control Point personnel will ensure no electronics are in the Operation Areas.
Handling	Handling	Explosive	II/C/3	Ensure all personnel are qualified and certified IAW MCO 8023.3D	II/D/4	Personnel assigned in writing as Qual /Cert board Chair or Board Member	The Board Chair and Members are ultimately responsible for the certification of personnel.
Handling	Handling	Improper Handling	II/C/3	Explosives will not be carried in pockets or on the body.	II/D/4	Explosives will only be transported in specifically designed and approved containers.	All personnel will supervise each other while transporting explosives.
Handling	Handling	Improper handling and procedures not being followed.	II/C/3	Ensure personnel understand and demonstrate proper handling and storage procedures.	II/D/4	Annual Training	Personnel will supervise each other and a QA/SO or TL will Conduct Technical Training for all Family Groups associated with the ammunition that is handled daily.
Transportation	Transportation	Material Handling Equipment	II/C/3	Ensure personnel are certified and licensed to operate MHE.	II/D/4	Post Speed limit signs	Verify personnel operating MHE are certified, licensed, obey all posted speed limit and wear approved PPE.

					Serial Number MMQQ50-_____													
OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE)					RISK ASSESSMENT MATRIX													
EXTREMELY HIGH		HIGH		MEDIUM		LOW			MISHAP PROBABILITY									
NOTE: ANY E NOTE: ANY EVENT WITH A RESIDUAL RAC OF 1 OR 2 WILL REQUIRE THE APPROVAL OF THE BASE COMMANDER					A		B		C		D		E					
APPLICABLE REFERENCES: (a) MCO 5100.29C Volume 2 Risk Management (b) MCO 8023.3D Personnel Qualification and Certification Program for Class V Ammunition and Explosives (c) NAVSEA OP5 Vol I					I		EH		EH		H		H		M			
					II		EH		H		H		M		L			
					III		H		M		M		L		L			
					IV		M		L		L		L		L			
					MISHAP PROBABILITY					EFFECT OF HAZARD								
					A Frequent					1 Catastrophic								
					B Likely					2 Critical								
					C Occasional					3 Moderate								
					D Seldom					4 Negligible								
					E - Unlikely													
					RISK ASSESSMENT LEVELS													
					EH- EXTREMELY HIGH		H = HI C H		M= MEDI UM		L = LOW							
Approving Signature:																		

Figure 17- Operational Risk Management

<b>Appendix B</b>
<b>DIAGRAMS</b>

1. **Marine Corps Base Quantico Vicinity Map.** The below diagram is a map of the Marine Corps Base Quantico.

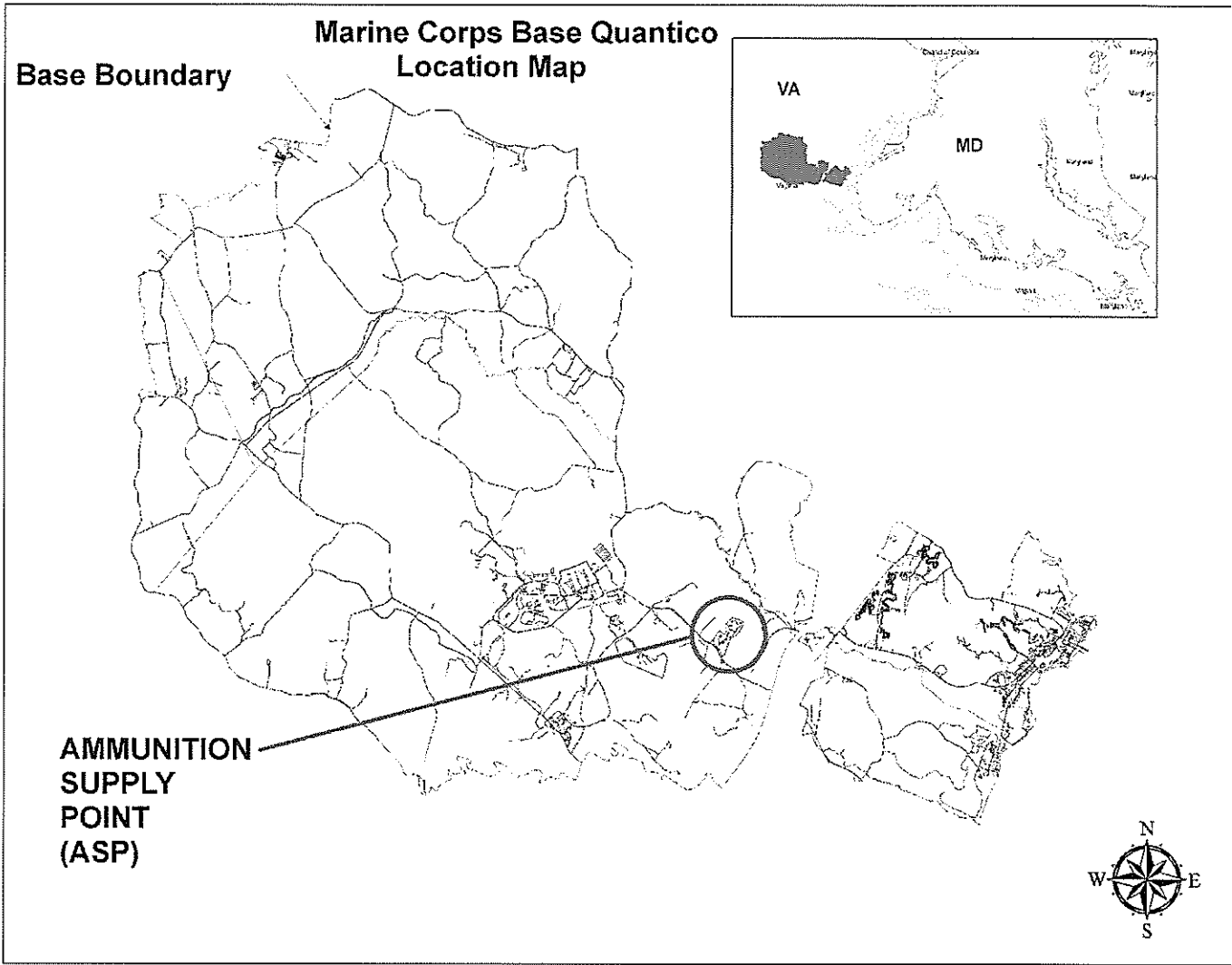
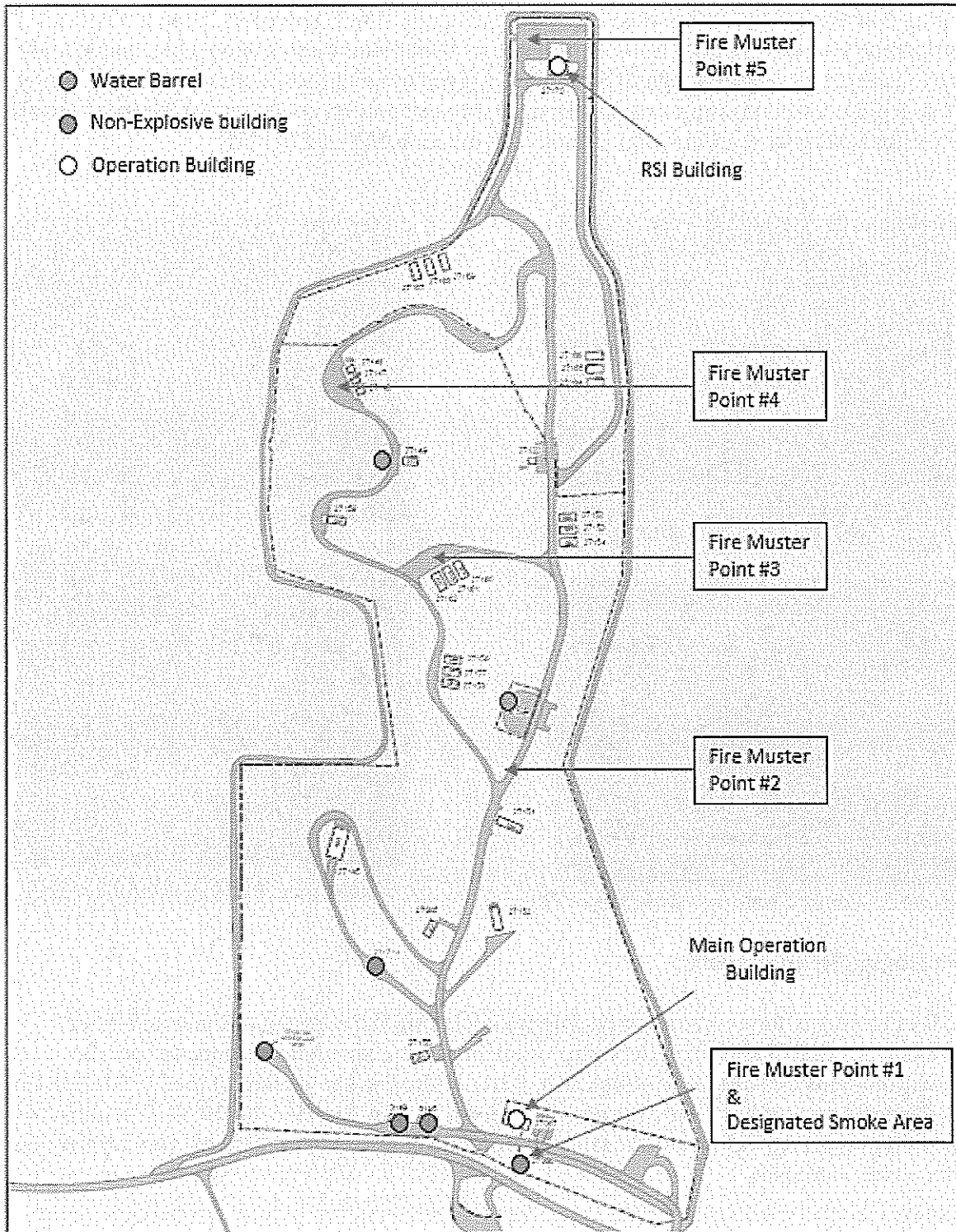


Figure 18- Marine Corps Base Quantico Vicinity Map

**2. Quantico Ammunition Supply Point Detail Map.** The below diagram illustrates the detailed layout of the Marine Corps Base Quantico ASP. Boxes represent fire assembly areas.



*Figure 19- ASP Detail Map*

**3. Marking Requirements.** Identification Marking on Exterior Containers Markings must include NSN/NATO Stock Number, Quantity/Unit of Issue (UI), Item Description, Proper Shipping Name (PSN), Performance Oriented Packaging (POP) markings, United Nations (UN) Identification Number, DODIC/NALC, Lot and/or Serial Numbers as applicable, and Weight. These markings are required regardless of the assigned ammunition condition code. Markings must be legible. Hand printing is not authorized for ammunition containers. Additional details on ammunition container marking requirements are found in MIL-STD-129R.

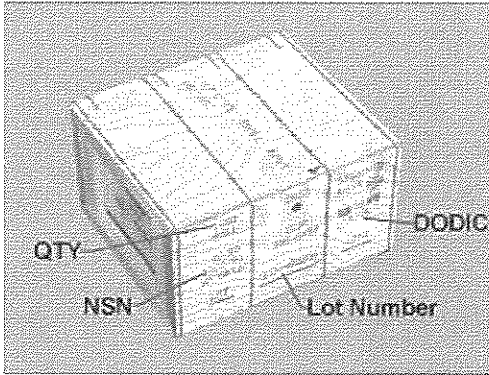


Figure 20-Outer Container Markings

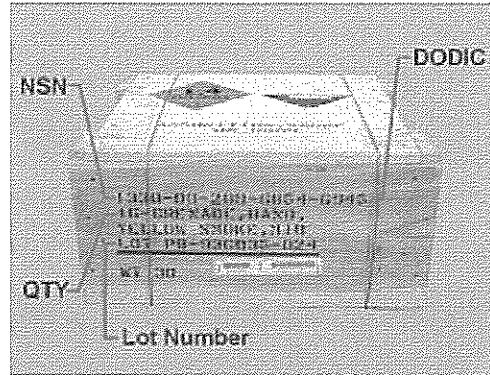


Figure 22- Outer Container Markings (3)

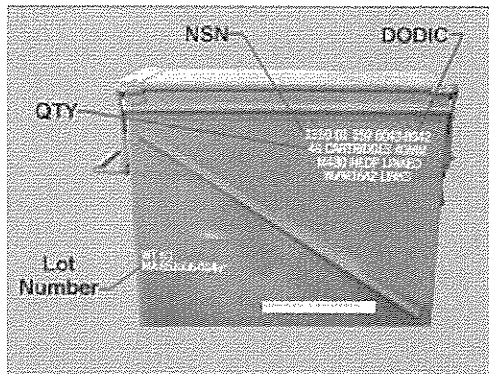


Figure 21-Outer Container Markings (2)

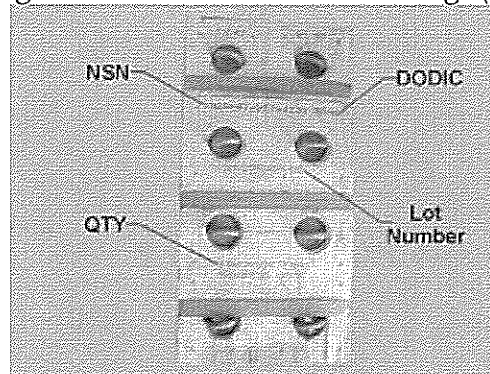


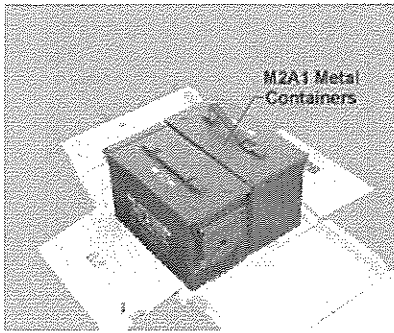
Figure 23- Artillery Skid Markings

**5. Packaging Requirements:**

a. Requirements for ammunition packaging, including the marking of inner and outer containers, are specified by various forms of technical documentation unique to specific ammunition items and approved containers. Refer to the current version of the US Marine Corps Field Return Ammunition Guide for detailed information of specific DODICS. Care must be taken while preparing light cans to ensure appropriate cushioning, separation, immobilization, etc. for safety purposes.

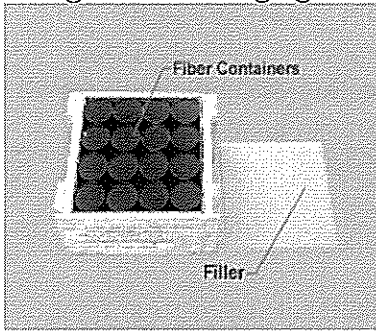


*Figure 26- Packaging (3)*



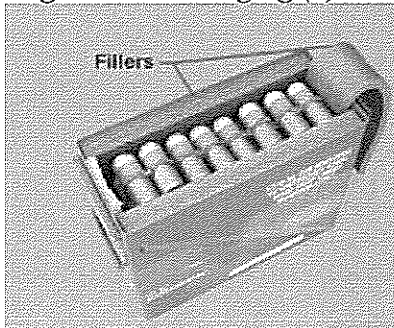
**Opened Outer Container  
(DODIC A059)**

*Figure 24-Packaging*

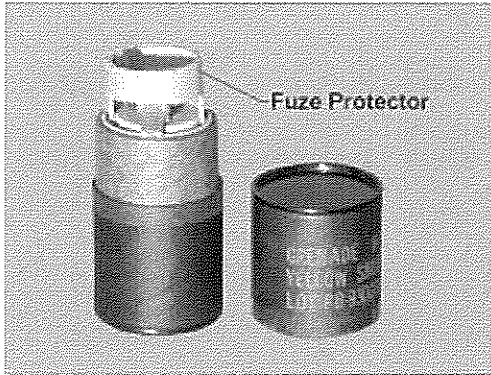


**Opened Outer Container  
(DODIC G945)**

*Figure 25- Packaging (2)*

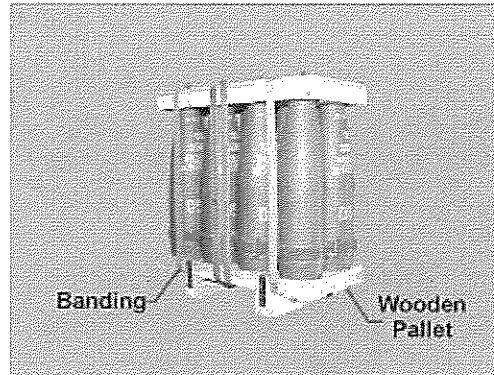


**Opened Outer Container  
(DODIC B542)**



**Opened Inner Container  
(DODIC G945)**

*Figure 27- Packaging (4)*



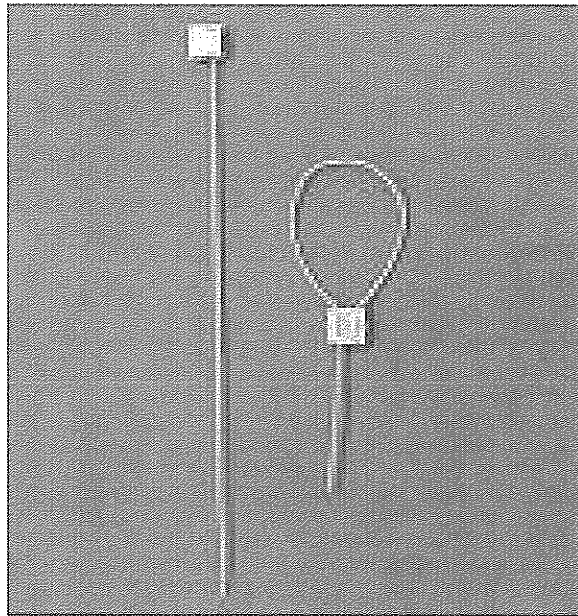
**Palletized Load  
(DODIC D544)**

*Figure 28- Packaging (5)*

b. **PALLET STRAPPING/BANDING.** Except when WR/MIL-STD/drawings specify otherwise, unit load strapping/banding must be non-coated galvanized steel. The galvanized (zinc coating) on the steel strapping/banding absorbs corrosion, protecting the underlying metal. Pallets will be squared off with wood, empty containers, or other means to create a stackable pallet. Do not apply banding straps so tightly that the integrity of the pallet is compromised.

## 6. Traceable Seal Requirements

a. All Type 1 Traceable Seals applied to ammunition containers shall consist of Aluminum disks or pellets and wire combinations.



*Figure 29- Type I Traceable Seal*

b. Type 1 Traceable Seals applied to ammunition containers shall be crimped with die-sets that produce the activity Unit Identification Code (UIC) and a numeric or alpha numeric

identifier on the other side traceable to the individual assigned to the die-set. The numeric/alpha numeric identifier shall be treated as an Inspection Indicator. Only Marines with QASO status will be assigned the crimper tool and die serial number in writing. The crimper tool will remain in the Access Control Point (ACP) until signed out by assigned personnel. The crimper tool will not leave the assigned Marine's possession for any reason, including allowing other Marines to seal containers in their presence.

c. Traceable Seals must be applied so that the container cannot be opened without destruction or positive indication of violation of the seal(s). Empty containers WILL BE sealed when used during shipment. When required Traceable Seals are missing or broken the containers must be opened, the ammunition must be inspected to determine or verify its identity, quantity and quality, the ammunition must be repackaged, and Traceable Seals applied. If these actions cannot be immediately accomplished or if they are beyond the capability of the holding activity, the ammunition must be sentenced to a suspended or unserviceable condition.

## 7. Materiel Condition Tags

a. Material Condition Tags and Labels shall be applied to ammunition in support of installation-to-installation transfers, disposition, and Depot level transactions to provide physical evidence of inspection and sentencing, for material control, and to preclude duplicate inspections. Each tag/label measures 3 1/8 inches by 6 1/4 inches. Minor variations, up to 20 percent, in the dimensions of the tag/label are authorized to support the multiple sources for procurement/production.

b. All manual entries and stamped entries must be legible and should be made with black, indelible ink.

(1) "FSN, PART NO. AND ITEM DESCRIPTION." MANDATORY. Enter either the DODIC or NALC, and the NSN, as a minimum.

(2) SERIAL NUMBER/LOT NUMBER." MANDATORY. Enter either the serial number(s) (S/N), Ammunition Lot Number(s) (ALN), or S/N and ALN of the quantity of items being identified by the tag/label.

(3) "UNIT OF ISSUE." Either leave blank or enter "EA" (or "EACH") or other unit of issue (if known), e.g., "FT" (foot).

(4) "QUANTITY." MANDATORY. Enter the quantity of items being identified by the tag/label.

(5) "INSPECTION ACTIVITY." MANDATORY. Enter the name or other identifier, e.g., Unit Identification Code (UIC), ship's hull number, etc., of the activity, ship, or station where the sentencing of the ammunition is being performed.

(6) "CONDITION CODE." MANDATORY. Enter the C/C specified by the applicable sentencing criteria.

(7) "INSPECTOR'S NAME OR STAMP AND DATE." MANDATORY. The material condition and status of ammunition being identified shall be certified as correct and in accordance with the applicable sentencing criteria.

(Yellow/Orange)

<b>DD FORM 1574</b>	FEN, PART NO. AND ITEM DESCRIPTION		<b>SERVICEABLE TAG - MATERIAL</b>	
			NEXT INSPECTION DUE/RE-AGE DATE	CONDITION CODE
			INSPECTION ACTIVITY	
	SERIAL NUMBER/LOT NUMBER	UNIT OF ISSUE	INSPECTOR'S NAME OR STAMP AND DATE	
	CONTRACT OR PURCHASE ORDER NO.	QUANTITY		
REMARKS				

Figure 30- Serviceable Condition Tag

"SERVICEABLE" material Condition Tag, DD Form 1574 used to identify ammunition in C/C "A," "B," or "C" only.

(Blue)

<b>DD FORM 1576</b>	FEN, PART NO. AND ITEM DESCRIPTION		<b>TEST/MODIFICATION TAG - MATERIAL</b>	
			TEST/MODIFICATION AUTHORITY	CONDITION CODE
			TEST/MODIFICATION DATE	
	SERIAL NUMBER/LOT NUMBER			
	UNIT OF ISSUE			
	QUANTITY			
	CONTRACT OR PURCHASE ORDER NO.		INSPECTOR'S NAME OR STAMP AND DATE	
INSPECTION ACTIVITY				

Figure 31- Test/Modification Condition Tag

“TEST/MODIFICATION” Material Condition Tag, DD Form 1576 used to identify ammunition in C/C “D” only.

*(Green)*

DD FORM 1577-2	FSN, PART NO. AND ITEM DESCRIPTION		UNSERVICEABLE (REPAIRABLE) TAG - MATERIAL	
			INSPECTION ACTIVITY	CONDITION CODE
			REASON FOR REPAIRABLE CONDITION	
	SERIAL NUMBER/LOT NUMBER	UNIT OF ISSUE	REMOVED FROM	
	CONTRACT OR PURCHASE ORDER NO.	QUANTITY	INSPECTOR'S NAME OR STAMP AND DATE	
REMARKS				

*Figure 32- Unserviceable (Repairable) Condition Tag*

“UNSERVICEABLE (REPAIRABLE)” MC Tag, DD Form 1577-2 used to identify ammunition in C/C “E,” “F,” or “G” only.

*(Red)*

DD FORM 1577	FSN, PART NO. AND ITEM DESCRIPTION		UNSERVICEABLE (CONDEMNED) TAG - MATERIAL	
			INSPECTION ACTIVITY	CONDITION CODE
			REASON OR AUTHORITY	
	SERIAL NUMBER/LOT NUMBER		INSPECTOR'S NAME OR STAMP AND DATE	
	UNIT OF ISSUE	QUANTITY		
REMARKS				

*Figure 33- Unserviceable (Condemned) Condition Tag*

“UNSERVICEABLE (CONDEMNED)” Material Condition Tag, DD Form used to identify ammunition in C/C “H,” “P,” or “V” only.

(Brown)

DD FORM 1575	FSN, PART NO. AND ITEM DESCRIPTION		SUSPENDED TAG - MATERIAL	
			NEXT INSPECTION DUE	CONDITION CODE
			INSPECTION ACTIVITY	
			REASON OR AUTHORITY	
	SERIAL NUMBER/LOT NUMBER	UNIT OF ISSUE		
CONTRACT OR PURCHASE ORDER NO.	QUANTITY	INSPECTOR'S NAME OR STAMP AND DATE		
REMARKS				

Figure 34- Suspended Condition Tag

“SUSPENDED” Material Condition Tag, DD Form used to identify ammunition in C/C “J,” “K,” “L,” and “N” only.

(c) The minimum requirement is for one Material Condition Tag for each full or partial unit load (palletized containers or unitized containers/cradles. Each unit load consisting of ammunition assigned different C/Cs requires a Material Condition Tag/Label for each C/C. Each tag/label shall identify the specific ammunition (S/N and/or ALN and quantity) to which it applies.

(d) Material Condition Tags/Labels shall be attached where markings or fixtures shall not be covered, the location should be visible and accessible, and where the tag/label cannot be damaged, pulled or scraped off or otherwise mutilated during normal handling.

(e) Attachment Methods:

(1) Packaged Items. The preferred method for containers that do not have hasps, latches, handles or clamps (such as fiberboard, Styrofoam, or wood boxes) is to place the Material Condition Tags in adhesive-backed, water-resistant envelopes (NSN 8105-00-756-2710) and affix the envelopes to the containers. This method may also be used for other containers and is recommended for any container that is stored in the open or exposed to adverse environmental conditions.

(2) Unit Loads. The preferred method is to affix the Material Condition Tag to a pallet adapter or to an individual container or item in a top-corner position. Material Condition Tags

should not be attached to banding except when other methods are not practical. The tags should be attached using plastic tie-locks (preferred), light wire, or string/twine of suitable strength.

f. Changes to Tag/Label Entries. Mandatory entries on Material Condition Tags/Labels may be changed once. Each change shall be made by drawing a single, heavy line through the entry/entries to be changed, the new/corrected entry/entries shall be made, and the tag/label shall be recertified. If any subsequent changes are necessary to a recertified tag/label a new tag/label shall be prepared and certified.

g. Removal and Destruction. All Material Condition Tags/Labels removed from ammunition for whatever reason shall be destroyed by the person removing the tag/label. Reuse of a removed tag/label shall be considered the same as an unauthorized certification of ammunition material condition and status.

**NOTE: For more detailed instructions for filling out specific Material Condition Tags/Labels, refer to APPENDIX A of NAVSUP P-805/807.**

<b>Appendix C</b>
<b>Equipment List</b>

**1. General Equipment List.** Tools/Equipment prescribed by reference g. All tools and equipment requiring calibration/operational certification will be inspected prior to use to ensure serviceability and current certification requirements are in effect. Use non-sparking tools as required.

<b>GENERAL EQUIPMENT LIST</b>			
Description		<b>U/I</b>	<b>QTY</b>
<b>1. Tools</b>			
Shovel		EA	A/R
Stretcher STL Strap 1-1/4"		EA	A/R
Sealer STL Strap 1-1/4"		EA	A/R
L Square		EA	A/R
Cutter STL Strap		EA	A/R
Pliers 8"		EA	A/R
Hammer Claw Non-Spark		EA	A/R
Screwdriver Flat Tip		EA	A/R
Flashlight Spark Resist		EA	A/R
Saw Crosscut Hand		EA	A/R
Saw Rip Hand		EA	A/R
Crowbar Non-Spark		EA	A/R
Forklift 4K Diesel	Available Transportation	EA	1
Pallet Jack		EA	A/R
Tape Measure		EA	A/R
<b>2. Equipment</b>			
N/A			
<b>3. Consumable List</b>			
Traceable Seals		HD	A/R
Strapping STL 1-1/4"		CL	A/R
Wood Screws		BX	A/R
Seal STL 1-1/4"		BX	A/R
Stencil Board		BX	A/R
Nail 3-D 1-1/4" U/C		BX	A/R
Nail 8-D 2-1/2" U/C		BX	A/R
Nail 16-D 3-1/2" U/C		LB	A/R
Ink Stencil Black Spray		PT	A/R

**Table C-1. General Equipment List**



**2. General Safety Equipment list.** Safety equipment will be inspected prior to use.

<b>GENERAL SAFETY EQUIPMENT LIST</b>			
<b>1.</b>	<b>Eye Protection</b>	<b>4.</b>	<b>Hearing Protection</b>
	Goggles-Chem. ___ Dust ___		Ear protectors, muff
	Safety glasses		Ear protectors, plugs
	Face shield (secondary protection)		
		<b>5.</b>	<b>Safety Systems and Fixtures</b>
<b>2.</b>	<b>Respiratory Protection</b>		Fire extinguisher
	Respirator, dust/mist		Ventilation system
	Pre-filter- Dust Paint		Eyewash
	Respirator, airline		Safety shower
	Respirator, self-contained breathing		Fire protection
	Apparatus (SCBA)		Telephone
			Shadow board (tooling board)
<b>3.</b>	<b>Protective Clothes</b>		Red flags
	Gloves, nitrile buna rubber (NBR)		Red lights
	Gloves, cotton clothe		Safety shields
	Gloves, cloth, leather-palm		Grounding wires
	Gloves, chemical-resistant (impervious)		
	4-8 mil (light wt.)	<b>6.</b>	<b>Environmental Protection</b>
	9-16 mil (medium wt.)		Spill containment kit
	Over 16 mil (heavy wt.)		
	Gloves, solvent, gauntlet	<b>7.</b>	<b>Special Items</b>
	Hair protector (soft cap)		First Aid Kit
	Helmet, construction (hardhat)		Flashlight, Explosion Proof
	Shoes, Safety, steel toe		Safety Triangles
	Coveralls, cotton, flame-resistant		

**Table C-2. General Safety List**

<b>Appendix D</b>
<b>Emergency Response and Contingency Plans</b>

**1. Emergency Response and Contingency Plans**

a. Prior to starting any work process or operation, all personnel shall familiarize themselves with the local accident/incident/injury reporting procedures.

b. All personnel should know the location of the fire extinguishers. Everyone shall be thoroughly instructed on procedures to be followed for fires, evacuation plans and specific muster areas.

c. All personnel shall report to their immediate supervisor any unusual or abnormal conditions associated with their ordnance operations. All operations CEASE until further notice.

**2. Emergency Base Phone Numbers (Emergency call 911)**

TBS/FBI Fire Station 533	703-784-5228
Main Side Fire Station 531	703-784-1324
MCB Quantico Provost Marshall's Office Desk Sergeant	703-784-2251/52/53
Naval Health Clinic Quantico	703-784-1725

**3. Miscellaneous (Emergency) Contact Personnel**

ASP OIC	703-784-5774
ASP SNCOIC	703-784-5711
MCB Quantico Explosive Safety Officer	703-432-1092

**4. Personnel Injury**

a. Notify the ASP OIC of the situation at 703-784-5744 or over hand-held radio.

b. First responder will initiate the following actions:

(1) Call for help.

(2) Execute life-saving steps using the acronym MARCH. The use of "MARCH" prioritizes inspection criteria for patients to increase life sustainability during injuries. 90% of trauma patients die from severe blood loss.

(a) Massive hemorrhaging. Stop massive blood loss immediately. Use tourniquets, HemCon dressing, pressure dressings and/or direct pressure to stop the bleeding. If a tourniquet is applied, mark the patients' forehead with a "T" and the time the tourniquet was applied.

(b) Airway. If possible, allow the injured to sit up and assume the most comfortable position. Often this promotes controlled respiration. Open the air way using the chin lift method when applicable. If the airway is obstructed, attempt to remove any obstruction.

(c) Respiration. Allow the injured the ability to breathe. If the injured is not breathing, clear the airway and begin assisted breathing (mouth to mouth/nose).

(d) Circulation. Check the injured individual's pulse. If there is no pulse, begin chest compressions.

(e) Head to toe inspection. Inspect the injured from head to toe for additional injuries. Inspection should include both front and back sides of the patient. Verify the correct placement of dressings and tourniquet(s) to ensure they have not slipped or become loose.

(3) Remove the injured personnel from the source of injury (only if required).

c. Second responders and assisters.

(1) Call the MCB Quantico Fire Department and request Emergency Medical Services (EMS).

(2) Notify the ASP OIC.

(3) Direct Access Control Point personnel to open the Magazine Storage Areas and stand by to escort EMS to the injured personnel. There is no badging requirement for Police, Fire/EMS personnel who are responding to emergency.

## **5. Fire/Explosion**

a. Sound the alarm. Notify all personnel in the immediate vicinity by voice and then transmit the alarm over handheld radios or telephones. Clearly and calmly report the location and description of fire or explosion. An example of the report is

“Fire in the ASP. Magazine Two. Brush Fire. I say again, fire in the ASP, Magazine Two, brush fire.”

1. Upon notification of a fire, personnel located in 27067 will sound the fire alarm located on the bulkhead outside of the records office and call 9-1-1.

2. Upon notification of a fire, the ASP OIC or SNCOIC will initiate the notification process outlined in the Emergency Action Plan. Notifications will be made to the fire department, Base Operations, and Base G4.

b. Close all magazine hatches whenever possible.

c. Evacuate all non-essential personnel to the closest safe fire assembly area. Maintain two-man teams.

d. Fight the fire to the level of ability with all available means and without awaiting specific instructions.

(1) If the fire involves explosive material and cannot be extinguished with on hand equipment, evacuate to the nearest safe fire assembly area. Only continue to fight fires involving explosive material to remove an individual from the immediate threat of the fire who has become incapacitated or non-ambulatory.

(2) If the fire does not involve explosive material, use all means to prevent the fire from spreading to the vicinity of explosive material.

e. Once evacuated to the fire assembly areas, the senior organic Quantico ASP 2340/2311 will take accountability and report by fire assembly area to ACP in the below prescribed sequence:

(1) Number of MCB Quantico ASP Marines

(2) Number of Supported Unit Personnel

(3) Number of Contractors/Visitors

f. ACP will then request, by fire assembly area, an alphabetized by name accountability of all personnel present in the below prescribed sequence:

(1) Number of MCB Quantico ASP Marines

(2) Number of Supported Unit Personnel

(3) Number of Contractors/Visitors

g. ACP will clear "fire free" routes and direct each fire assembly area to evacuate the ASP.

h. ACP personnel will open the main gate of the ASP fully to allow emergency response personnel access. ACP personnel will brief emergency response personnel as required.

## **6. Emergency Evacuation**

a. The senior 2340/2311 present will determine the need for emergency evacuation.

b. All personnel will immediately exit the area via the posted egress routes to the distances shown on Table D-1.

Fire Symbol	Hazard Class/Division	Unknown Quantity	Known Quantity
Unknown	Facilities, Trucks and/or Tractor-trailers	4,000 Ft.	4,000 Ft.
1	1.1 and 1.5	4,000 Ft.	<u>Transportation</u> : 2,500 Ft. for quantities below 500 Lbs. NEW. 4,000 Ft. for 500 Lbs. NEW and greater. Use 4,000 Ft. minimum distance for bombs or projectiles with caliber 5 inch or greater. <u>Magazine Stowage</u> : 2,500 Ft. for quantities below 15,000 Lbs. NEW. Use 4,000 Ft. for quantities greater than 15,000 Lbs. NEW.
2	1.2 and 1.6	2,500 Ft.	2,500 Ft.
3	1.3	600 Ft.	600 Ft.
4	1.4	300 Ft.	300Ft.

*Table D-1. EMERGENCY WITHDRAWAL DISTANCES FOR NONESSENTIAL PERSONNEL FROM FIRES INVOLVING EXPLOSIVES*

c. The senior 2340/2311 will conduct a head count of assigned personnel and report unaccounted personnel to the ASP OIC/SNOIC.

d. DO NOT re-enter the area until officially directed by the ASP OIC/SNCOIC.

**7. Mass Evacuation Procedures.** Follow the instructions outlined in the Local Fire Bill for fires in the ASP. In the event a mass evacuation is mandated, follow the steps below:

a. Evacuating the ASP. If the danger of an explosion in the ASP exists, ASP personnel will evacuate to a safe distance. The safe distance for an unknown quantity of 1.1 is 4,000 feet.

(1) ASP personnel and visitors will evacuate to the Pondarosa Gate/Gate 5 (intersection of MCB1/Russell Rd) depicted on Figure 35.

b. Injured personnel. All injuries to personnel will be reported via 911 for evaluation or evacuation.

c. In the event the ASP must evacuate, the OIC, SNCOIC must notify the fire department at 911 or **703-784-5228/16** then take the following actions:

(1) For ASP Evacuation. Notify PMO via **911** or the 911-radio channel and direct them block traffic towards the ASP at the following locations:

(a) West-bound traffic entering MCB Quantico from the Russel Road/MCB1 Gate.

(b) East-bound traffic east of the Marine Corps Information Operations Center (east of TBS/FBI Fire Station).



Figure 35- Mass Evacuation Map

**8. Equipment Failure**

- a. Discontinue all operations.
- b. Turn off power to equipment.
- c. Secure work site.
- d. Contact supervisor.

**9. Adverse Weather Conditions.** Upon notification of lightning within a 10-mile radius (L10) all explosive operations will be suspended and personnel will evacuate to building 27067 (ASP Operations Building), 27066 (ACP Building), 27070 (RSSI Building), or outside the Magazine Storage Area.

**10. Explosive Ordnance Disposal.** If an unsafe condition arises that cannot be mitigated by the references or procedures outlined in this SOP, or when directed by the same, Explosive Ordnance Disposal shall be contacted to render material safe for storage or dispose of the material.

**11. Emergency Response for Chemical Munitions.** Emergency Procedures/Immediate Action for leaking munitions is outlined in reference f.

**12. Unauthorized Access.**

- a. Supported personnel conducting ammunition transactions within the ASP will be issued a visitors badge and must be always escorted by unrestricted ASP personnel. Personnel identified within the ASP without a badge and/or an escort shall be immediately reported to the ASP OIC/SNCOIC for verification of identity and correction.
- b. Individuals who have been identified as intruders (i.e., civilians or anyone considered to be a threat) shall be reported immediately to the OIC/SNCOIC by the most available means of communication.

## MHE INSPECTION FORM

DATE	REGISTRATION NO. (USN)	MHE CLASS (see table 4-1)
------	------------------------	---------------------------

### POWERED MHE TO BE CHECKED DAILY BY OPERATOR

**NOTES**

1. USE THIS FORM WHEN INSPECTING MHE BEFORE AND AFTER OPERATION. MARK APPROPRIATE COLUMNS TO INDICATE SATISFACTORY OR UNSATISFACTORY CONDITIONS.
2. NOT APPLICABLE INSPECTION PROCEDURES MAY BE OBLITERATED FOR THAT PARTICULAR MHE CLASS.
3. IF DEFECTS ARE FOUND, REMOVE MHE FROM SERVICE, NOTIFY IMMEDIATE SUPERVISOR AND RETAIN FORM UNTIL REPAIRS ARE MADE.
4. IF NO DEFECTS ARE FOUND:
  - (A) INITIAL OPERATOR: SIGN AND DATE FORM. ATTACH TO MHE.
  - (B) LAST OPERATOR: MAINTAIN FORM IN ACCORDANCE WITH LOCAL PROCEDURES.
5. THIS FORM IS NOT AVAILABLE IN THE SUPPLY SYSTEM. REPRODUCTION OF THIS FORM FROM THIS MANUAL IS AUTHORIZED.

SHIFT HOUR-METER READING	
END	
START	
DIFF.	

	START		FINISH		
	SAT	UNSAT	SAT	UNSAT	
1 Tires and Rims					1
2 Engine Oil, Fluid Levels and Belts					2
3 Radiator Coolant Level (check when cool only)					3
4 Battery					4
5 Access Covers					5
6 Fuel System					6
7 Unusual Engine Noises					7
8 Lights					8
9 Horn					9
10 Hoist					10
11 Tilt and Side Shift					11
12 Transmission/Clutch					12
13 Directional Controls					13
14 Brake System					14
15 Gauges/Meters					15
16 Fire Extinguisher (if applicable)					16
17 Operator Restraint System (e.g., Seat Belts)					17
18 Forks					18
19 Fork Positioning Locks and Stops					19
20 Fork Safety Chains					20
21 Overhead Guard and Load Backrest					21
22 Ground Straps/Static Conductive Tires/Wheels					22
23 Structural Cracks/Broken Weldments					23
24 Mandatory Markings					24

ADDITIONAL OPTIONAL (NON-MANDATORY) INSPECTION REQUIREMENTS MAY BE INCLUDED HERE:

AREA	INITIAL OPERATOR'S SIGNATURE	LAST OPERATOR'S SIGNATURE
------	------------------------------	---------------------------

SEE REVERSE SIDE FOR INSPECTION CRITERIA PROCEDURES

### MHE Inspection Form



## MHE Inspection Form - Inspection Criteria

1. Tires and Rims. Inspect tires for excessive wear and damage. Remove foreign material from tire treads. Reject tires for illegible or missing markings or labels. Reject pneumatic tires when the tire tread has worn down to the tread wear mark or if fabric is exposed through the sidewall. Inspect the rims for dents, bends, and cracks. Refer to figure 8-7 for examples of solid rubber tire defects and the probable causes.
2. Engine Oil, Fluid Levels and Belts. Check engine oil, hydraulic, transmission and brake fluid levels. If low, add oil fluid to raise the level to the full mark. Inspect engine belts for cracks, wear, damage, nicks or cuts, and proper tension. Always inspect floor deck under MHE for any fluid puddles.
3. Radiator Coolant Levels. CAUTION: Do not check radiator coolant level when engine is hot. Check the radiator coolant level, if low, add coolant to the full mark.
4. Battery. Inspect battery cables for damage, cuts and abrasions. Verify cables are securely fastened to connector lugs and are free of corrosion, verdigris, arcing, pitting, exposed conductor material, and loose connections. Electric trucks have color coded battery indicator power band indicating remaining charge level. Charge battery when indicator drops into yellow zone (when under load, e.g., by tilting mast back against stop and check indicator). WARNING: For internal combustion start batteries, do not jump start battery with an eye cell indicator that appears yellow or clear (low fluid level) which may result in rupture.
5. Access Covers. Inspect all access covers (e.g., battery or engine) for loose, missing, broken, or corroded covers. Ensure latches snugly secure covers when fastened.
6. Fuel System. Visually inspect the entire fuel system assembly for any leaks or any abnormal odors. Where accessible, inspect the fuel tank or gas cylinder for leakage, denting, bulging, corrosion, pitting, gouges not exposed to fire, or evidence of rough usage. Valves are protected from physical damage.
7. Unusual Engine Noises. Start engine. Should any unusual noises be noted with the engine running, turn off MHE, reject and discontinue this check.
8. Lights. Check that the headlights, brake lights, and any other installed lights are working. All lights must operate properly for night work.
9. Horn. Depress the horn push button to verify that the horn is operating properly.
10. Hoist and Lowering Control. Raise and lower the lifting assembly to verify the lifting assembly controls operate smoothly. Inspect all hoses for cracked coverings, wear, bulges or leaks. Verify all fittings are free of cracks or leaks. Inspect for loose or binding (i.e., dry/no lubricated, frozen or rusted) chains. Inspect hose and cable reel guards, as applicable, for breaks, bends or chafing.
11. Tilt and Side Shift. Tilt forward and backward to verify the tilt operates smoothly. Operate side shift to verify the carriage moves immediately and smoothly to the left and the right. Verify all hoses are serviceable and that these fittings are free of cracks or leaks. For any additional accessory controls installed on the MHE, verify proper operation with the manufacturer's recommendations.
12. Transmission/Clutch. Verify that the transmission/clutch operates smoothly with no unusual noises. Where applicable, test the neutral start switch on most fuel-powered MHE. Verify that the parking brake is set and that no one is in front of or behind the MHE. A periodic check can be made by attempting to start the engine with the directional control lever in either the forward or reverse position. If the engine starts, the MHE shall be rejected.
13. Directional Controls. Shift directional controls into forward, neutral and reverse directions to verify the MHE operates properly and smoothly. Figure 8-8 shows a typical example of the directional controls. Ensure steering operation functions smoothly.
14. Brake System Check. With the parking brake engaged, attempt to drive MHE forward by applying a moderate amount of power to the MHE and verify that it does not move. Visually inspect that no fluid is leaking from the brake system. Check the service brakes to verify they stop the MHE smoothly and evenly without pulling or binding. Where applicable, check the dead-man brake or travel control disconnect device for proper operation.
15. Gauges/Meters. Where applicable, inspect the following:
  - a. Warning Indicators. With the engine running at normal operating temperature, check the oil pressure gauge (figure 3-9) for normal operating pressure. If any warning indicator lights signal a malfunction, the MHE shall be rejected until repaired.
  - b. Coolant Temperature Gauge. With the engine running at normal operating temperature, check that the gauge is indicating within the proper indicating range.
  - c. Fuel Gauge. Check the fuel gauge for proper reading. On types LP and CN MHE, the mechanical-type fuel gauge may be mounted directly on the gas tank. Dual-fueled MHE shall not be operated unless the gasoline fuel tank is at least 3/4 full. Electric powered types should be in "green" power range.
  - d. Voltmeter/Ammeter. With the engine running, check the voltmeter/ammeter to verify that its in the green range when the engine is running at least 550 rpm.
  - e. Hourmeter. Verify that the hourmeter (figure 8-10) is registering while the engine is running.
  - f. Weight Scales. With forks elevated, and no load, verify that the weight scales read zero. Adjust accordingly.
16. Fire Extinguisher. When equipped, visually inspect the extinguisher cylinder for dents. Check that the gauge is registering in the green (if so equipped) and check that the wire seal has not been broken. Verify periodic checks are current. Check nozzle and hose for defects. Reject extinguisher if not serviceable. Replace rejected extinguishers.
17. Operator Restraint System. If MHE is equipped with an operator restraint system (e.g., seat belt) it shall be inspected to verify that they fully extend out, can be properly secured, and fully retract back. Additionally, they shall not exhibit any evidence of the following discrepancies: (a) nicks or cuts (figure 8-11, view A), (b) frayed webbing (figure 8-11, view B), (c) holes (figure 8-11, view C), and (d) broken or worn retractor (figure 8-11, view D).
18. Forks. Visually examine the forks for surface cracks, including under the heel of the forks. Verify that blade and shank are straight, properly installed, and fork tips are even. Verify that load ratings of forks match MHE load rating. Surface cracks appearing on the forks shall be cause for rejection until forks are repaired or replaced.
19. Fork Positioning Locks/Stops. Verify the fork positioning locks/stops secure each fork in position. Verify forks are securely engaged to the carriage.
20. Fork Safety Chains. Verify the presence and operation of fork safety chains (equipped on units with folding forks) and associated locking pins.
21. Overhead Guards and Load Backrest. Inspect all welds and hardware. Verify that overhead guard, load backrest and hardware is in place and all structural members are secured.
22. Ground Straps or Static Conductive Tires/Wheels. For EE type MHE, verify the presence of two ground straps and that they touch the floor deck or two conductive tires/wheels. For EX type MHE, verify the presence of two conductive tires/wheels.
23. Structural Cracks/Broken Weldments. Inspect all external weldments for structural cracks or defects. Reject MHE until repaired or replaced.
24. Mandatory Markings. Verify the following is clearly and properly marked: (a) safe working load (SWL) and vehicle weight (VW) on both sides, and except for pallet trucks, in view of operator, (b) operator controls, (c) manufacturer's nameplate label, (d) accredited laboratory (UL, FM) certification, (e) for tow tractors, the drawbar pull rating (DBRP) on both sides and rear, and coupler height on rear, and (f) for ammunition and explosives handling only, the MHE Safety Certification marking (figure 5-9). Reject if the above markings are missing, illegible, expired or incorrect. All other required markings that are rejected shall be recorded on the MHE Inspection Form, but is not a cause for removal from service.

**Records Section Issue Document Control Logbook**

<b>DODIC</b>	<b>DOC #</b>	<b>LOT #</b>	<b>PRI</b>	<b>C/C</b>	<b>LOC</b>	<b>QTY</b>	<b>DOC ID</b>
A011	MMJ1325139J012	WCC09L081- 009	05	A	9701	5147	7271/06

**Left Page.**

<b>STORAGE OUT</b>	<b>STORAGE IN</b>	<b>ISSUES OUT</b>	<b>ISSUES IN</b>	<b>RECORDS</b>	<b>BBOH</b>	<b>ABOH</b>
GREEN	GREEN	SMITH	SMITH	PYLE	5815	5715

**Right Page.**

**Records Section Turn in Document Control Logbook**

<b>DODIC</b>	<b>DOC #</b>	<b>LOT #</b>	<b>LOC</b>	<b>C/C</b>	<b>QTY</b>	<b>COPY 2</b>
M023	M2910051792317A	MA-101C039-017	H80	A	100	COLVIN

**Left Page.**

<b>COPY 3</b>	<b>RECORDS</b>	<b>BBOH</b>	<b>ABOH</b>	<b>CDC</b>
COLVIN	PYLE	2174	2706	FAAZZZ, ZZZZZZ

**Right Page.**









**Issues/Segregations Section Turn in Document Control Logbook**

<b>Julian Date</b>	<b>DODIC</b>	<b>DOC #</b>	<b>LOT #</b>	<b>C/C</b>	<b>QTY</b>	<b>Mag Loc</b>

**Left Page**

<b>Doc Date</b>	<b>Issue Print</b>	<b>Issue Sign</b>	<b>Records Print</b>	<b>Records Sign</b>	<b>CDC</b>

**Right Page**



**Marine Corps Base Quantico ASP  
Site Approval Explosive Limits**

2023 MCINCR-MCB Quantico Sited Facilities										
Bldg #	Building Type	Sited NEW							IBD	Approval Authority Ltr
		1.1	1.2.1	1.2.2	1.2.3	1.3	1.4	1.4S		
27155 Mag 1	Earth Covered sing Arch 25'x50'					50,000	MEQ		241	DDESB-PE Jun 16 2006
27145 Mag 2	Above Ground Masonry 50'x100'		3,000	5,000		50,000	MEQ		927	DDESB-PE Aug 13 2014
27065 Mag 3	Earth Covered sing Arch 25'x50'					80,000	MEQ		279	DDESB-PE Jun 16 2006
27150 Mag 4	Earth Covered sing Arch 25'x80'					80,000	MEQ		279	DDESB-PE Aug 13 2014
27151 Mag 5	Earth Covered sing Arch 25'x80'		8,000	200,000		50,000	MEQ		1250	DDESB-PE Aug 13 2014
27156 Mag 6A	Earth Covered Triple Arch 25'x50'	35,000 combined	50,000	450,000		95,000	MEQ		1335	DDESB-PE Jun 16 2006
27157 Mag 6B	Earth Covered Triple Arch 25'x50'	35,000 combined	50,000	450,000		95,000	MEQ		1335	DDESB-PE Jun 16 2006
27158 Mag 6C	Earth Covered Triple Arch 25'x50'	35,000 combined	50,000	450,000		95,000	MEQ		1335	DDESB-PE Jun 16 2006
27160 Mag 7A	Earth Covered Triple Arch 25'x50'	95,000 Combined	50,000	450,000		130,000	MEQ		1825	DDESB-PE Aug 13 2014
27161 Mag 7B	Earth Covered Triple Arch 25'x50'	95,000 Combined	50,000	450,000		130,000	MEQ		1825	DDESB-PE Aug 13 2014
27162 Mag 7C	Earth Covered Triple Arch 25'x50'	95,000 Combined	50,000	450,000		130,000	MEQ		1825	DDESB-PE Aug 13 2014
27159 Mag 8	Earth Covered Single Arch 25'x50'	100,000	100,000	450,000		65,000	MEQ		1857	DDESB-PE Jun 16 2006
27152 Mag 9A	Earth Covered Triple Arch 25'x50'	28,000 combined	100,000	450,000		65,000	MEQ		1434	DDESB-PE Jun 16 2006
27153 Mag 9B	Earth Covered Triple Arch 25'x50'	28,000 combined	100,000	450,000		65,000	MEQ		1434	DDESB-PE Jun 16 2006
27154 Mag 9C	Earth Covered Triple Arch 25'x50'	28,000 combined	100,000	450,000		65,000	MEQ		1434	DDESB-PE Jun 16 2006
27149 Mag 10	Earth Covered Single Arch 25'x50'	100,000	100,000	450,000		65,000	MEQ		1857	DDESB-PE Jun 16 2006
27122 Mag 11	Earth Covered sing Arch 25'x20'	10,000	10,000	10,000		10,000	MEQ		1250	DDESB-PE Jun 16 2006
27146 Mag 12A	Earth Covered Triple Arch 25'x50'	50,000 combined	50,000	13,500		175,000	MEQ		1475	DDESB-PE Jun 16 2006
27147 Mag 12B	Earth Covered Triple Arch 25'x50'	50,000 combined	50,000	13,500		175,000	MEQ		1475	DDESB-PE Jun 16 2006
27148 Mag 12C	Earth Covered Triple Arch 25'x50'	50,000 combined	50,000	13,500		175,000	MEQ		1475	DDESB-PE Jun 16 2006
27164 Mag 13A	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27165 Mag 13B	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27166 Mag 13C	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27167 Mag 14A	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27168 Mag 14B	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27169 Mag 14C	Earth Covered Mag 25'x 80' 7 Bar	100,000	100,000	100,000	100,000	100,000	MEQ		1625	DDESB-PE 18 July 2019
27170	Issue Segregation Building	50,000	50,000	50,000	50,000	50,000	MEQ		1475	DDESB-PE 13 Mar 2017
VSA	Vehicle Staging area 150'x75'	20,000	20,000	20,000		20,000	MEQ		1250	DDESB-PE Jun 16 2006

*Figure 37- MCB Quantico ASP Explosive Limits*

**RAIL CAR and PUBLIC HIGHWAY COMPATIBILITY TABLE**  
**for HAZARD CLASS 1 (EXPLOSIVE) MATERIALS**  
 from 49 CFR, 1 October 2011, Parts 174 and 177 respectively

Class 1 (explosive) materials may not (rail car)/shall not (public highway) be loaded, transported, or stored together, except as provided in this section, and IAW the following Compatibility Groups (CGs) table:

COMPATIBILITY TABLE FOR CLASS 1 (EXPLOSIVE) MATERIALS

CGs	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
B	X		X	4/X <sub>(4)</sub> *	X	X	X	X	X	X	X	X	4/5
C	X	X		2	2	X	6	X	X	X	X	3	4/5
D	X	4/X <sub>(4)</sub> *	2		2	X	6	X	X	X	X	3	4/5
E	X	X	2	2		X	6	X	X	X	X	3	4/5
F	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	4/5
H	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	4/5
K	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		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	

\* At the intersections of B and D "4/X<sub>(4)</sub>" appears - "4" applies for Rail Car and "X<sub>(4)</sub>" applies for Public Highway.

NOTE: Except for "4/X<sub>(4)</sub>" when neither Note 4 nor Note 5 apply, consider the space blank.

	BBOH	ABOH
#Pallets		
BXS/PLTS		
LS BXS		
RDS /BX		
LS RDS		
TOTAL		

**BOH STAMP**

**MAGAZINE INSPECTION CHECKLIST**

SECTION A		For Storage Officer/Safety Office use only
MAGAZINE LOCATION: _____	INSPECTION DATE: _____	Reviewed by: _____
TUBE OF AMMUNITION STORED: _____		Signature: _____
INSPECTED BY: _____	SIGN: _____	Date: _____
SUPERVISED BY: _____	SIGN: _____	
(Sign Reader or Reader)		
SECTION A		Remarks:
Detailed magazine inspection procedures are contained in NAVSEA OP 5, Vol. 7, specifically Chapter 11, paragraphs 11-9.1 through 11-9.3.12. (Paragraphs cited in section B reference the current OP 5)		
Storage compatibility requirements are contained in NAVSEA SWO11-AC-545-111/020/120/041.		
Inspectors initials in the "UNSAT" column require a detailed description of the deficiency in the remarks section.		
Do not leave a line entry blank. If a line entry does not apply, write N/A in the "SAT" column.		
This log is to be filled in with ink only.		
Upon completion of inspection, a work request for all discrepancies will be submitted through ACP and a copy will be filed in the magazine folder. The inspection log will be filled out complete with work request numbers to verify submission and to track status.		

SECTION B				
1. EXTERIOR	SAT	UNSAT	N/A	REMARKS
a. Are the correct chemical hazard symbols and fire symbols that represent the most hazardous material posted? (para 4-4.1.1/2/3/4)				
b. Is the section fire box complete does it contain serviceable fire-fighting equipment and PPE?				
b.1. For magazines storing WP: Are unmixed elements of sodium bicarbonate solution composed of 3/4 c. of dry sodium bicarbonate and one gallon of water available?				
b.2. For magazines storing WP: Is a 5 gallon pail/bucket or equivalent container and two sponges available?				
b.3. For magazines storing WP: Are a set of hand cutters serviceable and present in the fire box?				
c. Entrance roadway in good repair? (para 6-7)				
d. Adequate firebreak, 50 ft. radius surrounding magazine is free of trash, debris, and other fire hazards? (para 4-2.10)				
e. Vegetation maintained does not exceed 18" within 50' fire break (para 4-1.10)				
e.1. Minimum of 2" of earth covering on EMD intact? (para 3-2.5.6)				
e.2. Is earth covering free of "hard spots" which do not provide adequate erosion control (larger than 2' patches)?				
f. Earth covering barricade intact, blast wall undamaged? (para 3-2.5.3, 3-2.5.5)				
g. Primary lighting protection systems intact? see NOTE 1 (par 6-1, 6-2.2.3, 6-3.2)				
g.1. Are all IBS Air Terminals intact?				
g.2. Are all grounding and bonding scraps attached and free from wear or fraying?				
h. Are exterior vents serviceable?				
h.1. Are vents present and free of debris, rust and/or corrosion?				
h.2. Are vent screens present and free of damage, rust, and/or corrosion?				
h.3. Are vent screens properly bonded and grounded?				
i. Are magazine drainage tube screens present and free of damage?				
j. Are loading docks/platforms over 4 ft equipped with properly painted guard rails and free from deterioration? (para 3-4.4)				
j.1. Loading platform clear of damage? (para 11-9.4)				



