

MCO P8020.10A SD 3 Apr 02

MARINE CORPS ORDER P8020.10A

- From: Commandant of the Marine Corps
- To: Distribution List
- Subj: MARINE CORPS AMMUNITION MANAGEMENT AND EXPLOSIVES SAFETY POLICY MANUAL
- Ref: (a) OPNAVINST 8020.14/MCO P8020.11
 - (b) MCO P5102.1A
 - (c) MCO 8025.1D
 - (d) OPNAVINST 5102.1

Encl: (1) LOCATOR SHEET

1. <u>Purpose</u>. To establish the Marine Corps ammunition management and safety policy; to define its objectives, and provide Marine Corps-specific procedural guidance for Class V materiel in accordance with reference (a).

2. Cancellation. MCO 8020.10.

3. Action. Commanders at all levels shall ensure compliance with this Manual at all Marine Corps activities where DoD-titled ammunition and explosives (A&E) are present. When DoD-titled A&E is located in overseas areas, the provisions of this Manual shall apply except when compliance with more restrictive local standards is made mandatory by an appropriate, international agreement. Operations conducted at installations under the command of another Service shall be in accordance with the policy and regulations of the host service, with the exception of requesting munitions disposition instructions and malfunction and mishap reporting. All malfunctions and mishaps shall be reported in accordance with instructions contained in this Manual and those set forth in references (b) through (d). In case of conflicting policies or regulations, the most stringent policy/regulation shall apply. Report conflicting policies, by the most expeditious means possible, to the Commander, Marine Corps Systems Command (COMMARCORSYSCOM)(AM).

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4. <u>Summary of Revision</u>. Significant revisions have been made to this Manual and it should be reviewed in its entirety.

5. <u>Recommendations</u>. Recommendations concerning the contents of the Marine Corps Ammunition Management and Explosives Safety Manual are invited. Such recommendations will be forwarded to COMMARCORSYSCOM(AM) via the chain of command.

6. <u>Reserve Applicability</u>. This Order is applicable to the Marine Corps Reserve.

7. Certification. Reviewed and approved this date.

WUUUMA Μ. J.

Assistant Commandant of the Marine Corps

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Log complete change action as indicated.

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Change	Date of	Date	Signature of Person
Number	Change	Entered	Incorporating Change

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CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

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CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

1000. <u>BACKGROUND</u>. The Marine Corps continuously trains and deploys with ammunition and explosives (A&E). The storage, handling, transportation and employment of these items are inherently hazardous. Therefore, it is imperative that a safety program designed to minimize the potential hazards associated with A&E operations be aggressively pursued at all levels. The chapters within this Manual provide specific guidance to ensure that these hazards are addressed and minimized. Refer to Appendix A for a glossary of terms used in this Manual. Appendix B contains a listing of the abbreviations and acronyms used in this Manual. The following agencies have been established within the DoD and DON to assist in this effort:

Department of Defense Explosives Safety Board (DDESB). The 1. 70th Congress established the DDESB, formerly called the Armed Forces Explosives Safety Board, in 1928 after a major disaster occurred at the Naval Ammunition Depot, Lake Denmark, New Jersey in 1926. The accident virtually destroyed the depot, causing heavy damage to adjacent Picatinny Arsenal and the surrounding communities, killing 21 people, and seriously injuring 51 The monetary loss to the Navy alone was \$46 million. others. As a result of a full-scale congressional investigation, Congress directed the establishment of the Board to provide oversight of the development, manufacture, testing, maintenance, demilitarization, handling, transportation and storage of explosives, including chemical agents on DoD facilities worldwide. The DDESB mission is to provide objective advice to the SECDEF and Service Secretaries on matters concerning explosives safety and to prevent hazardous conditions to life and property on and off DoD installations from the explosives and environmental effects of DoD-titled munitions. The DDESB provides storage site approval for all DoD facilities.

2. Department of the Navy

a. <u>Chief of Naval Operations (CNO)</u>. Per OPNAVINST 8020.14/MCO P8020.11, Marine Corps activities operate under the criteria established in CNO instructions addressing explosives safety unless otherwise specified by CMC. The CNO approves or

disapproves requests for deviations from established safety standards, with the exception of the event waivers, for which approval authority is delegated to the Commander, Marine Corps Systems Command (COMMARCORSYSCOM) (AM).

b. <u>Naval Ordnance Safety and Security Activity (NOSSA)</u>. The NOSSA, as delegated by CNO and Naval Sea Systems Command (NAVSEASYSCOM), provides explosives safety support by conducting the Weapon System Explosives Safety Review Board (WSESRB), the Ammunition and Hazardous Materials (AMHAZ) Handling Review Board, and Explosives Safety Inspections (ESI). In addition, it provides technical assistance on explosives safety matters to all DON components.

c. <u>Naval Ordnance Safety and Security Activity Pacific and Atlantic Divisions</u>. The NOSSA established the Explosives Safety Support Offices (ESSO), Pacific and Atlantic Divisions, to provide timely explosives safety support to Naval units by geographic area. These Divisions serve as the command location of the East and West Coast ESI teams and as intermediary review authorities for site approvals and deviations. These organizations also provide ESI technical assistance visits upon request.

d. <u>Recognized DON Engineering Activities</u>. Recognized DON engineering activities provide engineering support to the Marine Corps for the range certification and re-certification process. These activities are the Naval Facilities Engineering Command (NAVFACENGCOM), Norfolk, VA, and the U.S. Army Corps of Engineers (Huntsville Division), Huntsville, AL. Both activities assist the Marine Corps Combat Development Command (MCCDC) in the certification process for all ranges, in the basic design and engineering of new ranges, and in the reengineering of modified ranges.

e. <u>Naval Safety Center (NAVSAFECEN)</u>. The NAVSAFECEN collects, evaluates, and disseminates information relative to both Class V(W) and Class V(A) malfunctions and mishaps. The NAVSAFECEN maintains and publishes statistical data based on Explosives Mishap Reports (EMR) and Conventional Ordnance Deficiency Reports (CODR) which can be used in the conduct of safety training programs. The NAVSAFECEN provides a mobile team that provides safety evaluations to DON activities upon request.

1001. MARINE CORPS POLICY FOR BASIC EXPLOSIVES SAFETY. The SECDEF has established basic explosives safety policies to be observed by DoD components in the performance of operations involving A&E. It is the policy of the SECNAV that the DON follows the instructions of SECDEF in these matters to the maximum practicable extent. It is the policy of the CMC that the Marine Corps follow the instructions of the CNO in these matters to the maximum extent possible, unless otherwise specified. This document serves as amplification to those pertinent Navy regulations and, in some cases, either establishes more stringent regulation, or exempts the Marine Corps, as specified. A listing of publications that address explosives safety and support a sound explosives safety program is contained in Appendix C. In the event established explosives safety standards cannot be strictly adhered to, several options are available to commanders to ensure the maximum allowable safety standards are maintained, within the confines of operational necessity. Detailed information regarding deviations from explosives safety criteria is contained in NAVSEA OP 5, Volume 1; OPNAVINST 8020.8 series; and NAVFACINST 11010.44 series. All deviations from safety policies and procedures established therein must be approved in accordance with this Manual and NAVSEA OP 5. Options include the following:

1. <u>Exemptions</u>. An exemption is a deviation from mandatory explosives safety requirements approved for the purpose of longterm satisfaction of recurring readiness or operational requirements. Exemptions are generally issued for a maximum of 5 years, but will not be granted for a period in excess of that estimated for correction of the deficiency. All requests for exemptions will be submitted to the CNO via the chain of submission depicted in figure 1-1.

2. <u>Waiver</u>. A waiver is a deviation from mandatory explosives safety requirements approved for the purpose of temporary satisfaction of recurring readiness or operational requirements, issued pending the completion of corrective measures to eliminate the need for a waiver. Waivers are generally issued for a maximum of 2 years. All requests for waivers will be submitted to the CNO via the chain of submission depicted in figure 1-1.

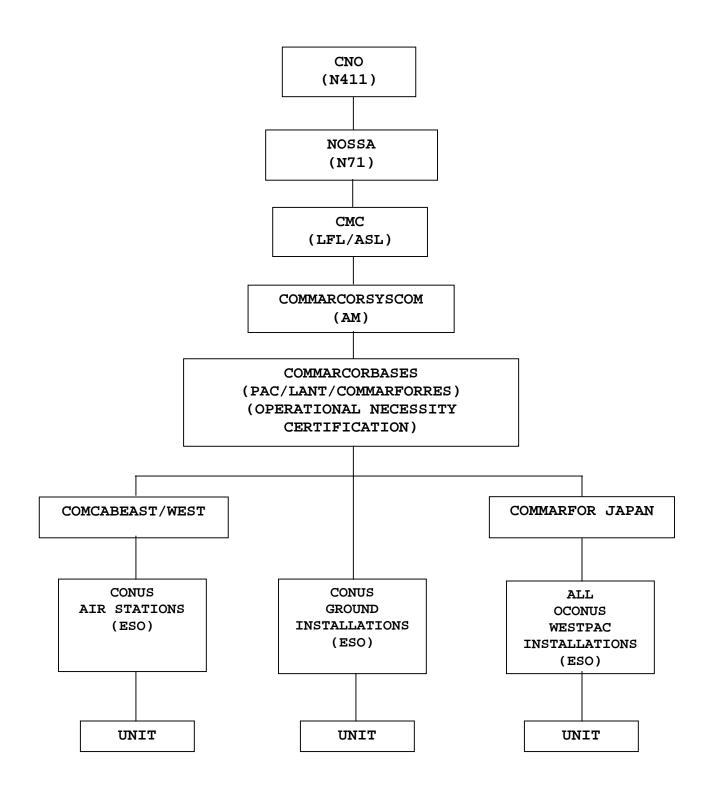


Figure 1-1.--Exemption and Waiver Chain of Submission.

3. <u>Event Waiver</u>. An event waiver is a deviation approved on a case-by-case basis for a particular evolution, issued for a limited period to meet a specific, nonrecurring readiness or operational requirement which cannot otherwise be satisfied. The following policies apply to all requests for event waivers:

a. All requests for event waivers shall be submitted via the chain of submission depicted in figure 1-2 for the following events:

(1) Event waivers for exercises and operations occurring on Marine Corps installations shall be submitted to COMMARCORSYSCOM via the installation commander (COMMARFORRES for Marine Corps reserve commands), and the respective Marine Corps installation commander (COMMARCORBASES LANT/PAC) for certification of operational necessity.

(2) Deployed units shall submit event waiver requests through the chain of command to the appropriate command level exercising operational control (OPCON) authority. This authority typically resides with the CINC of the Unified Command, but is, at times, delegated to the Numbered Fleet CINC.

b. All requests for event waivers shall contain applicable information required by NAVSEA OP 5, Volume 1 and will include a statement of operational necessity. Requests for event waivers for deployed units shall be submitted via Standard Naval Message only. All other requests for event waivers may be submitted via Standard Naval Message or electronic mail. Electronic mail routing is the same as Standard Naval Message with information addressees provided an electronic courtesy copy. Electronic mail address is <u>EES@MCSC.USMC.MIL</u>. Information addressees will include CNO (N41), CMC (ASL-30 for aviation ordnance and airfield operations, LPP for Maritime Prepositioning Force (MPF) operations, and LFL for all requests), and NAVORDSAFSECACT (N7).

c. Marine activities assigned as tenant commands and activities on other Service bases shall comply with the requirements of that Service. COMMARCORSYSCOM (AM) shall be included as an information addressee on all messages.

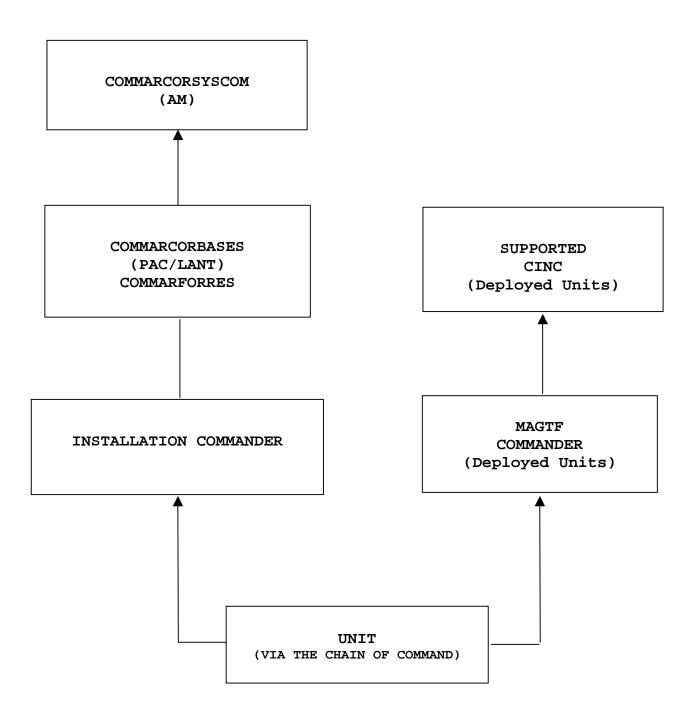


Figure 1-2.--Event Waiver Chain of Submission.

1002. REVIEW BOARDS AND INSPECTIONS

1. DDESB

a. Jurisdiction and Responsibilities. The jurisdiction of the DDESB extends to facilities wherever A&E are manufactured, tested, handled, reworked, transported, stored, or disposed of by the Uniformed Services within the United States, its territories and possessions, and within areas where the United States has long-term rights or as specifically designated by the Secretaries of the military departments in areas occupied by the armed forces. A complete listing of DDESB responsibilities is contained in DoD Directive 6055.9. An abbreviated listing is contained in NAVSEA OP 5, Volume 1.

b. <u>Board Composition</u>. The DDESB consists of one primary member in the grade of O-6/GS-15, and an alternate member of the same grade from each of the military Services. The Board is chaired by an officer of equivalent seniority on a rotating basis among the military departments. The Board is technically supported by a permanent secretariat of senior civilian explosives safety engineers and liaison officers from each of the Services. The composition of the DDESB and secretariat is discussed in more detail in DoD 6055.9-STD.

c. <u>DDESB Surveys</u>. The DDESB surveys, on a biennial basis, all DoD shore activities involved in any way with handling, processing, or storing A&E. The installation commander to be surveyed is normally notified 2 to 4 weeks prior to the scheduled time of survey. Specific actions to be taken by installation commanders in assisting the DDESB, correcting deficiencies, and preparing briefings are contained in NAVSEA OP 5, Volume 1.

d. <u>Correspondence with DDESB</u>. Marine Corps installations and commands shall not initiate direct communication with the DDESB. Required correspondence shall be forwarded via the activity's chain of command. COMMARCORSYSCOM (AM) shall be included as a via addressee on all correspondence forwarded via the chain of command to the DDESB.

2. Weapon System Explosives Safety Review Board (WSESRB)

a. <u>Jurisdiction and Responsibilities</u>. The WSESRB is designated by the CNO to review safety aspects of weapon or explosive systems and to make recommendations to the responsible naval command or Program Manager (PM). This responsibility includes all mechanical, chemical, biological, Hazards of Electromagnetic Radiation to Ordnance (HERO), and other electrical hazards associated with a weapon system. Equipment and systems whose malfunction would imperil the safe handling, maintenance, storage, transfer, release, delivery, firing, demilitarization, or disposal of a weapon system are also included. Additionally, in the areas of safety, the WSESRB recommends for approval for full production all systems and materials considered for use by the DON.

b. <u>Board Composition</u>. The WSESRB is headed by a representative of the NOSSA and consists of representatives from COMMARCORSYSCOM (AM) and other commands as necessary.

c. <u>Responsibilities</u>. Every PM, weapon system designer, producer, processor, packager, handler, or user of a weapon system is responsible for safety within their activity. The WSESRB reviews all DON weapon system acquisition programs to ensure that all safety requirements are met. WSESRB reviews must be conducted before weapon systems advance to the next stage of development and recommendations provided to the respective PM before test, prototype, or production units are introduced to the Marine Forces. Detailed instructions for preparing for WSESRB Reviews are contained in NAVSEAINST 8020.6 series.

3. Explosives Safety Inspection (ESI) Program

a. <u>Jurisdiction and Responsibilities</u>. The jurisdiction of the NOSSA to conduct shore station ESIs applies to all Navy and Marine Corps installations, including tenant, or other commands (Federal, State, etc.), engaged in the storage, handling, renovation, production, processing, development, testing, or transporting A&E.

NOTE

The inspection of Marine Corps activities conducted in accordance with Program 09 of NAVSEAINST 8020.14 series is restricted to small arms and grenade ranges only. Additionally,

only the following areas within those eligible ranges may be inspected: off-range ammunition supply points, equipment and operations (including motor vehicles), and ready service lockers and magazines which serve to support range operations. Inspection of on-range ammunition handling, transport, facilities design and construction, and standard operating procedures in support of range operations or field exercises will be the responsibility of MCCDC not subject to the ESI Program.

b. <u>ESI Team Composition</u>. ESI team membership will consist of appropriate NOSSA, ESSO Atlantic or Pacific Division inspector personnel, augmented, as needed, by experts in specific fields selected from various Marine Corps activities, Navy weapons stations and Navy weapons laboratories. A Marine aviation ordnance officer or ammunition officer (MOS 6502 or 2340) will be assigned to serve as chief inspector for the Marine Corps installations per NAVSEAINST 8020.14 series. The team leader may be assigned to serve as the chief inspector for all other Marine Corps installations. Additional details relative to ESI team membership and qualifications are contained in NAVSEAINST 8020.14 series.

c. <u>Procedures</u>. The procedures required for each activity to be visited by an ESI team are set forth in NAVSEAINST 8020.14 series. These procedures require specific actions to be taken in providing adequate command attention and support to the ESI teams. Commanders of Marine Corps activities under the cognizance of the ESI teams shall provide a copy of all correspondence to the COMMARCORSYSCOM (AM).

4. Ammunition Hazard (AMHAZ) Handling Review Board

a. <u>Jurisdiction and Responsibilities</u>. The AMHAZ Handling Review Board was established by CNO to be convened biennially at major Navy and Marine Corps installations. The purpose of the AMHAZ review is to provide a joint review by senior DON headquarters personnel of all factors pertinent to proper safety in the handling, storage, and transportation of A&E at each major installation and all nearby activities. A secondary purpose is to review explosives safety conditions as reflected in, or impacted by, planned construction projects. Unlike the ESI process, AMHAZ Handling Review Boards are not investigative or inspection organizations. They are advisory groups,

dedicated to working jointly with local commands and others to achieve proper balance between operational readiness and acceptable levels of safety. The AMHAZ Handling Review Boards do have the authority to recommend to DDESB or CNO the cancellation, modification, or continuance of any waivers or exemptions in effect.

b. <u>Board Composition</u>. The AMHAZ Handling Board will consist of senior military officers or civilians, knowledgeable in explosives safety, from the following commands:

(1) The cognizant Fleet CINC.

(2) NOSSA: Chairperson, safety engineer, and appropriate Atlantic or Pacific ESSO representatives.

(3) Regional commander.

(4) NAVFACENGCOM Installation Planning Division.

(5) CNO (N411)(ex-officio member).

(6) COMMARCORSYSCOM (AM) (ex-officio member).

(7) Additional personnel as desired by CNO in order to obtain specific experience or background.

c. <u>Procedures</u>. The procedures required of each activity to be visited by the AMHAZ Handling Review Board are set forth in NAVSEA OP 5, Volume 1. These procedures require specific actions to be taken in providing adequate command attention and support to the AMHAZ Review. Commanders of Marine Corps activities under the cognizance of the AMHAZ Handling Review Boards shall provide a copy of all correspondence to COMMARCORSYSCOM (AM).

5. Technical Assistance Visit (TAV) Program

a. <u>Jurisdiction and Responsibilities</u>. Each TAV will be conducted on an as-requested basis. The TAV program is established for the sole purpose of providing technical expertise and assistance in the management and safe storage of A&E on Marine Corps installations. TAVs are designed to assist in the validation of A&E programs associated with the

installation and do not serve as a pre-inspection review. ESI TAVs should be requested through the appropriate NOSSA ESSO, and TAVs for assistance in the management of the Ground Range Safety Program should be requested through MCCDC.

b. <u>TAV Team Composition</u>. The TAV team will consist of qualified personnel designated by the COMMARCORSYSCOM (AM). Marine Corps aviation ordnance personnel will be designated by CMC (ASL-30) for visits to Marine Corps air stations. Personnel from various field activities as well as personnel from appropriate training facilities, or ESOs from other installations may be included on these teams.

c. <u>Procedures</u>. Requests for TAVs will be submitted electronically to MARCORSYSCOM-AM-EES at least 60 days prior to the date of the intended visit. Request will include a preferred TAV date and a fall back date. Request will indicate the primary area(s) of program concern. TAVs will not be scheduled within 120 days of a scheduled ESI or other external inspection. The results of the latest DDESB, AMHAZ Review Board, and ESI should be made available as well as all current waivers and exemptions. Copies of all current site plans and proposed military construction (MILCON) projects within the A&E storage area will also be available. Copies of current SOPs, documentation of magazine and other regular inspections, and ESSAs will also be available.

6. ENVIRONMENTAL COMPLIANCE EVALUATION (ECE)

a. Jurisdiction and Responsibilities. The 12 August 1997 Munitions Rule (MR) amended the Resource Conservation and Recovery Act (RCRA) by stating under what condition munitions would become a hazardous waste, therefore subject to regulation. Those areas impacted by the MR amendment will be examined by the Marine Corps ECE Program on a recurring basis under the cognizance of the DC I&L, augmented by COMMARCORSYSCOM (AM).

b. <u>ECE Team Composition</u>. For the purpose of this Manual, the MR portion of the ECEs, are to be conducted by qualified personnel designated by DC I&L in coordination with COMMARCORSYSCOM (AM).

c. <u>Procedures</u>. Protocol for conducting ECEs will be accomplished in accordance with MCO P5090.2A.

7. <u>Inspections</u>. Representatives from CMC, COMMARCORSYSCOM (AM), MCCDC, DDESB, and NOSSA will make periodic inspections and assistance visits to A&E storage areas at Marine Corps installations to ascertain compliance with prescribed safety regulations. All inspections, surveys, and assistance visits to Marine Corps activities by agencies external to CMC and CG MCCDC will be coordinated through COMMARCORSYSCOM (AM). Direct liaison from Marine Corps activities to or from these external agencies is not authorized.

1003. RESPONSIBILITIES

1. <u>Director, Safety Division (SD), Headquarters, U.S. Marine</u> <u>Corps</u>. The Director, SD, is responsible for the overall administration of the Marine Corps A&E Safety Program as outlined in SECNAVINST 8023.3. The overall program is divided into three general titles: Ground Range Safety, Aviation Operations Explosives Safety, and Ground Operations/Marine Corps Installations Explosives Safety. CMC (SD) has delegated oversight and functional area responsibilities for these three general categories as follows:

a. <u>Commanding General, Marine Corps Combat Development</u> <u>Command (MCCDC)</u>. The CG, MCCDC is responsible for Ground Range Safety Program as delegated by CMC (SD). The CG, MCCDC serves as the single point of contact for ground range operations involving the use of Class V(W) within the Marine Corps. Responsibilities include providing range certification/recertification and range TAVs.

b. <u>Deputy Commandant Aviation (DC AVN), Aviation Logistics</u> <u>Support Branch (ASL)</u>. The DC AVN, (ASL) serves as the single point of contact for Aviation Operations Explosives Safety as delegated by CMC (SD). Responsibilities include Class V(A) aviation ordnance safety, aviation range operations, and A&E safety involving operational use of Class V(A) in aircraft operating areas (AOA). Specific responsibilities include the following:

(1) Provide amplifying instructions to policies involving the safe use of Class V(A) in the AOA and the qualification and certification of Marine Corps aviation ordnance personnel.

(2) Provide recommendations to COMMARFORSYSCOM (AM) for approval and disapproval of event waivers involving the use of Class V(A) by Marine Corps units.

(3) Coordinate with COMMARCORSYSCOM (AM) in providing aviation ordnance personnel to assist in executing the Marine Corps Installations Explosives Safety Program.

(4) Act as approval authority for all exemption and waiver requests for deviations from current aviation range procedures.

(5) Provide aviation ordnance review of OPNAVINST 5102.1 series.

c. <u>Commander, Marine Corps Systems Command (COMMARCORSYSCOM)</u>. The Program Manager for Ammunition, COMMARCORSYSCOM (AM), is responsible for all explosives safety matters involving the use of Class V(W) and the non-operational use of Class V(A) within the Marine Corps. Specific responsibilities include the following:

(1) Provide amplifying instructions necessary to implement policies for the safe management and disposition of Class V(W), the non-operational use of Class V(A), and the Marine Corps qualification and certification program.

(2) Provide review and recommendations of approval or disapproval for exemptions to transportation regulations involving the movement of A&E by Marine Corps units, tenants, or other entities (federal or other) physically located on Marine Corps installations.

(3) Provide recommendations for site approval requests for Marine Corps installations and activities.

(4) Provide recommendations for non-DoD storage authority on all requests submitted by Marine Corps installations and activities.

(5) Provide recommendations on requests for deviation from explosives safety criteria (exemptions and waivers) involving the use of A&E by Marine Corps commands.

(6) Provide approval or disapproval of applicable requests for event waivers from Marine Corps activities.

(7) Establish a TAV program to assist Marine Corps units involved in the storage of Class V(W) and the non-operational use of Class V(A).

(8) Provide munitions disposition instructions for all excess, obsolete, unserviceable, and waste Class V(W) munitions within 60 days of receipt.

2. Deputy Commandant Installations And Logistics (DC I&L). The DC I&L has overall responsibility for Marine Corps installations. The DC I&L will coordinate operational and policy matters relating to A&E with COMMARCORSYSCOM (AM) to ensure that specific functional area considerations and requirements are addressed. Additional DC I&L requirements are contained through out this Manual.

3. <u>Installation Commanders</u>. Installation commanders shall ensure compliance with the instructions contained in this Manual. Specific responsibilities include the following:

a. Publish standard operating procedures (SOP) that govern explosives operations aboard their installation. For those aviation operations for which technical manuals, Naval Air Systems Command (NAVAIRSYSCOM) conventional weapons loading manuals and checklists are published, a separate SOP is not required. However, SOPs are required for all common functions to include storage, handling, transportation, and the end of life cycle management. The SOPs shall be prepared in accordance with NAVSEA OP 5, Volume 1, and NAVSEAINST 8023.11, and shall implement the policies and procedures set forth in this Manual.

b. Establish an explosives safety program that ensures compliance with this Manual and its references.

c. Process all requests for deviations from explosives safety criteria in accordance with the provisions of this Manual and those of NAVSEA OP 5, Volume 1. When discrepancies exist between these references, this Manual will take precedence.

d. Designate an individual in writing, civilian or military, as the explosives safety officer (ESO) for the

installation. The installation ESO shall be organizationally placed in the installation safety office. This individual's assignment as ESO, will be their primary duty. Due to the complex issues and catastrophic consequences that may arise direct access to the installation commander is essential. As such, the ESO shall report directly to the installation commander, and should be assigned to the commanding officer's advisory staff. Due to the multitude of program requirements and specialized knowledge required to perform these duties, all commands should recognize that full time dedication is essential, and that any additional assignments be kept to a minimum. Furthermore, it is highly recommended that a civil servant be appointed as ESO to ensure stability and continuity of explosives safety program. Civil servant ESOs shall meet the Office of Personnel Management Handbook of Occupational Groups and Families qualifications for the Safety and Occupational Health Management series (0018). Additionally, the civil servant ESO shall be qualified for the explosives safety specialty within the 0018 series.

e. Ensure that all material potentially containing range residue or Ammunition, Explosives, and other Dangerous Articles (AEDA) is certified in accordance with DoD and Marine Corps AEDA certification requirements as "AEDA-FREE" prior to public release.

f. Ensure that personnel certifying material as "AEDA-FREE" are trained in accordance with DoD and Marine Corps AEDA training requirements.

4. Installation Explosives Safety Officer (ESO). The ESO is the single point of contact for all A&E safety matters at the installation, base, post, or station to which assigned, including all tenant activities. The installation commander shall designate the ESO in writing. The role of the ESO is to develop, implement, and manage a robust explosives safety program that complies with the provisions of this Manual and applicable references. ESO training and certification requirements are found in chapter 10. Specific responsibilities include the following and are amplified in chapter 11:

a. Ensure that site approval packages are maintained for all locations where A&E is stored and handled.

b. Ensure that overall installation operations involving the transportation, storage, handling, and execution of munitions disposition instructions of A&E are conducted in compliance with applicable directives, and executed in a safe manner.

5. <u>Support Activities</u>. Commanders of activities rendering A&E support are responsible for the following:

a. Inspect all A&E returned by using units to determine serviceability in accordance with applicable technical manuals.

b. Formally request an investigation, on those items reclassified to an unserviceable condition due to misuse, by the organization returning the A&E. A copy of the request, as well as the results will be provided to COMMARCORSYSCOM (AM).

c. Request munitions disposition instructions for all excess, unserviceable, obsolete, and waste military munitions (WMM) per chapter 7 of this Manual.

d. Ensure the munitions disposition instructions provided by the designated disposition authority (DDA) are carried out as directed.

e. Ensure all operations involving the storage, handling, transport, security, accountability, and repair of A&E are conducted in accordance with provisions of this Manual and applicable references.

6. <u>Deployed Unit Commanding Officers</u>. COs of deployed units returning Class V via naval shipping (Landing Force Operational Reserve Material (LFORM), or training stocks), are responsible for the following:

a. Ensure items are properly prepared for turn-in to naval storage activities prior to returning to port.

b. Ensure packaging materials, banding, pallets, and appropriate markings and shipping documents are available throughout the deployment.

c. Ensure that the necessary manpower and expertise are devoted for adequate preparation and turn-in.

CHAPTER 2

TRANSPORTATION

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CHAPTER 2

TRANSPORTATION

2000. <u>BACKGROUND</u>. The Marine Corps continuously trains and deploys with ammunition and explosives (A&E), the transportation of which is inherently hazardous. Therefore, it is imperative that a safety program designed to minimize the potential hazards associated with the transport of A&E, in all modes, be aggressively pursued at all levels. Accidents occurring during movement can kill and injure personnel, possibly destroying essential supplies, damaging valuable equipment, and reducing the speed and efficiency of the overall operation. Most accidents are avoidable provided the proper safety precautions are taken.

2001. <u>TRANSPORTATION MODES</u>. Transportation includes movement by any mode (surface or air), whether transported by commercial carrier, Defense Transportation System (DTS), or organic equipment.

2002. <u>TRANSPORTATION REGULATIONS</u>. Regulations pertaining to the motor vehicle transportation of A&E, authorized vehicles, licensing requirements, and the waiver of these requirements are contained in the following directives: DoD 4500.9-R, Defense Transportation Regulation (DTR), Part II, Cargo Movement; 49 Code of Federal Regulations (CFR) Parts 100-199 (BOE-6000-E); DoD 4500.32-R; MCO P4600.14; NAVSEA OP 5, Volume 1; NAVSEA SW020-AC-SAF-010/020/030/040; NAVSEA SW020-AF-ABK-010; and NAVSEA SW020-AG-SAF-010.

2003. <u>RAIL TRANSPORTATION</u>. Transportation of A&E by rail shall be conducted in accordance with DoD 4500.9-R (DTR), Part II, Cargo Movement; 49 CFR Parts 100-199; NAVSEA SW023-AG-WHM-010 (formerly OP 4461); NAVSEA SW020-AC-SAF-010/020/030/040; and NAVSEA SW020-AF-ABK-010.

2004. <u>AIR TRANSPORTATION</u>. Air shipments of A&E shall be in accordance with 49 CFR Parts 100-199; MCO P4030.19 series; and

NAVSEA SW020-AC-SAF-010/020/030/040. Class V munitions shall not be air-dropped during training operations. Operational Commanders should coordinate with ammunition support activity personnel to simulate the air delivery of Class V munitions utilizing inert loads (i.e., ballasted sand-filled containers).

2005. <u>HELICOPTER TRAINING OPERATIONS</u>. Limited quantities of small arms, pyrotechnics and smoke grenades may be transported with Marines during helicopter training operations. These items shall be limited to the rounds physically carried by the Marines as part of the training operation. In addition, all items carried by the Marines must be HERO-safe per NAVSEA OP 3565. Bulk ammunition (e.g., 40mm, mortars, demolition material, or grenades) shall not be transported internally or externally with passengers aboard the helicopter during training operations.

2006. <u>WATER TRANSPORTATION</u>. Shipments of A&E by water, including Landing Force Operational Reserve Material (LFORM), Mission Load Allowance (MLA), and Maritime Prepositioning Force (MPF) ships, shall be in accordance with 49 CFR Parts 100-199, NAVSEA OP 4, and OP 5.

2007. <u>ON-STATION TRANSPORTATION</u>. The on-station transportation of A&E shall be conducted in accordance with NAVSEA SW023-AG-WHM-010. Additionally, assistant military driver ((A) Driver) is authorized to occupy the cargo compartment of military vehicles used to transport limited quantities of mission essential ordnance and explosives materials along designated onstation routes in support of flight-line and combat aircraft loading area (CALA) operations. Reference CO, NOSSA ltr Ser N714/199 of 20 Nov 00.

2008. TRANSPORTATION OVER PUBLIC HIGHWAYS. Transportation of A&E over public highways shall be conducted in accordance with DoD 4500.9-R (DTR), Part II, Cargo Movement; 49 CFR Parts 100-199; NAVSEA SW020-AG-SAF-010; SW020-AF-ABK-010; and NAVSEA SW020-AC-SAF-010/020/030/040. It is the policy of the Marine Corps to minimize the movement of A&E on public highways by Marine Corps personnel.

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2009. <u>USE OF COMMERCIAL CARRIERS</u>. Commercial carriers will be used for the transportation of A&E to the maximum extent possible.

2010. USE OF GOVERNMENT-OWNED AND -OPERATED VEHICLES. Government owned and operated vehicles may only be used to transport A&E up to 100 miles from a Marine Corps installation. All such movements require prior authorization from the respective Installation Commanders. Prior authorization and coordination with local law enforcement agencies is also required.

1. Infrequent movements of A&E from an installation to destinations in excess of 100 miles may be approved by the Installation Commander.

2. Repeated use of Government owned and operated motor vehicles for scheduled trips exceeding 100 miles require the approval of COMMARCORSYSCOM (AM).

2011. TRANSPORTATION BY TACTICAL VEHICLE. Requirements contained in NAVSEA OP 5, Volume 1, relative to transport by tactical military vehicles may be waived by the installation commander provided that the movement will be over Marine Corpsowned property or public roads of foreign governments where such waivers are not otherwise prohibited by local laws or regulations. Waivers may be granted as follows:

1. The use of combinations of Marine Corps tactical vehicles and cargo trailers may be authorized to carry A&E. When transported in this manner, the vehicles shall be routed from storage areas directly to training areas. This authorization applies, provided not more than one truck and one trailer comprise a combination.

2. The use of the high mobility multipurpose wheeled vehicle (HMMWV), assault amphibious vehicle (AAV), 5-ton series vehicles, and logistics vehicle system (LVS) may be authorized to carry ammunition during training. However, all such authorizations must include the provision that the A&E transported is in the original packaging (wooden or fiber container only) and secured to prevent movement while in

transit. Ammunition packed in metal containers must be placed on wooden planking. Compliance with all current regulations pertaining to fire extinguisher requirements and inspection of vehicles prior to and during such use is mandatory.

3. The use of ferrous beds may be authorized for movement of A&E. However, all A&E transported in this manner must be packed in original wooden or fiber containers or, if packed in metal containers, must be placed on wooden pallets or planking covering the ferrous bed of trucks or trailers. All A&E must be secured so as to prevent movement while in transit. Compliance with all current regulations pertaining to fire extinguisher requirements and inspection of vehicles prior to and during such use is mandatory.

4. Plastic bed liners can generate static electricity and are not authorized for use in the transport of scrap or bulk explosives. All other types of A&E may be transported in vehicles with plastic bed liners provided that it is in its authorized shipping configuration.

5. Tactical vehicles are authorized for off-station transport of A&E. When transport by tactical vehicle is necessary, loads will be loaded, blocked and braced, and tied down in accordance with U.S. Army drawings. Specific drawings include: Class 19 Division 48 identified as 4900 (CA17Q1), 4901 (CA17Q2), and 4901/5 (CA17Q2). Reference CO, NOSSA ltr Ser N714/0132 of 27 Oct 00. Army drawings may be obtained through the Defense Ammunition Center (DAC) website: www.dac.army.mil/DET/

6. The use of Marine Corps-owned compressed natural gas (CNG) fueled pick-up trucks for the transport of A&E both on and off station is authorized in accordance with safety instructions provided in enclosure (1) of CO, NOSSA ltr Ser N714/917 of 15 Aug 00.

2012. COMBAT LOADING

1. Installation commanders are authorized to approve the transportation of live ammunition and crews in the same combat vehicle, subject to the following:

a. Authorization is limited to live fire-training areas only. Transportation of ammunition and personnel in the same vehicle en route to the training area is prohibited, as is the transportation of personnel who are not directly assigned responsibilities that require their presence.

b. Where applicable, ammunition must be transported in original containers. Special attention must be given to securing separately loaded projectiles and propelling charges.

c. No smoking restrictions must be strictly enforced.

d. All other pertinent safety precautions (e.g., availability of fire extinguishers) must be emphasized to all concerned prior to each evolution.

Operators of vehicles that are an integral part of a 2. tactical weapon system receive explosives training and qualification through completion of MOS-producing schools, and thus may be exempted from the explosives driver's certification process. If implemented, this exemption only applies to operators of the M1A1 Main Battle Tank, light armored vehicle (LAV) variants, AAV, and M-923 series 5-ton truck only when in a tactical configuration with the 155MM Howitzer. This is known as combat loading and only applies when the vehicle is tactically configured on a designated range. This does not extend to such vehicles used to transport A&E off-range such as when drawing A&E from or making turn-ins to the ASP. These operations require full compliance with the remaining requirements of this chapter. The decision to exercise the combat loading exemption is at the discretion of the installation commander of the training site.

2013. <u>SERVICE FOCAL POINT (SFP)</u>. CMC (LPP-2) is the Marine Corps SFP for joint transportation publications. The SFP is responsible for establishing joint procedures and preparing the necessary documentation to implement joint manuals, including MCO P4030.19.

2014. EXPLOSIVES DRIVER/OPERATOR LICENSING REQUIREMENTS. All drivers and operators will be licensed as follows:

1. Explosives Loaded Vehicles. In accordance with NAVSEA OP 5, Volume 1 and SWO20-AF-ABK-010, military vehicles transporting A&E on and off military installations shall be driven by operators who have satisfactorily demonstrated the standards and procedures for transportation of A&E with the following exceptions:

a. Installation commanders may authorize waiver of these licensing requirements within Marine Corps installations for which they are responsible, or over public roads of foreign governments provided that no local civilian or military laws or regulations prohibit such a waiver. Additionally, when personnel over the age of 21 are not available, mature individuals ages 18-20 may be authorized for on-installation explosives driver qualification.

b. Commanding officers may authorize the transportation of small arms and associated ammunition for marksmanship training, competition, or other requirements on a case by case basis without the usual transportation restrictions. The ammunition must be in the custody of a designated individual. Use of privately-owned vehicles may be authorized for on/off station use.

c. Personnel to be licensed for tactical 5-ton series vehicles must be a minimum of 64 inches in height for physical safety standards addressed in MCO P1200.7 series.

d. Due to the transitory and multitasked nature of military personnel, it is not practical to license these operators at the same internals as the more stable civilian workforce. Therefore, military explosives driver and explosives operators of MHE will be licensed for a period not to exceed 3 years, vice the 2 year requirement for civilian operators.

2. Material Handling Equipment (MHE) Operators

a. Operators of powered MHE shall be licensed on each type of MHE for which qualified. In addition, each MHE operator shall complete a valid explosives operator's certification course and possess a current medical examiner's certificate. Appendix C of SW023-AH-WHM-010, provides the curriculum for the MHE explosives operators training course. This course was designed to provide training in the operation of the equipment

and development of proficiency skills as well as explosives training. It is recognized that the Marine Corps is not organized in this manner. Operators who have successfully completed the individual equipment-training course need not repeat this training. Therefore, modification to this curriculum is authorized to omit the operational proficiency training and demonstration, thereby reducing the duration to 12 hours.

b. NAVSEA OP 5, Volume 1, appendix D defines DON explosives safety training requirements. Table D-1 requires that explosives MHE operators attend the Basic Explosives Safety Course within 6 months of being assigned duties involving the handling and movement of A&E. As noted in NAVSEA OP 5, Volume 1, paragraph D-3.b, Marine Corps personnel within MOSs 2305, 2311, 2336, 2340, 6502, 6531, 6541, and 6591 have satisfied this requirement through completion of MOS schools. MHE operations often require personnel from other occupational fields to perform A&E evolutions. It is not possible to extend training opportunities to all individuals whose contact with A&E is incidental and who should already be under the supervision of qualified personnel. Accordingly, the requirement for Marine Corps explosives MHE operators to attend the Basic Explosives Safety Course is recommended, vice mandatory. This supersedes the mandatory requirement in table D-1.

2015. <u>SECOND DESTINATION TRANSPORTATION</u>. COMMARCORSYSCOM (AM) is designated by DC I&L (LFT) as the executive agent for Class V(W) second destination transportation (SDT) funds. SDT funds are used in support of Marine Corps training, Apportioned War Reserve (AWR), Marine Ammunition Requirements Support Order (MARSO), and War Reserve Materiel Requirements (WRMR) positioning strategies.

2016. RESPONSIBILITIES

1. <u>Commanding Officer (CO) Responsibilities For Transportation</u> <u>Of A&E</u>. The responsible party for all authorizing actions relative to the transportation of A&E is the CO. The CO may delegate this authority to the lowest level commensurate with assigned responsibilities and organic capabilities.

2. Installation Transportation Office Responsibilities For Transportation Of A&E. The installation transportation office is responsible for certifying that hazardous materials are properly classified, described, packaged, marked, and labeled, and in proper condition for transportation in accordance with DOT and Service regulations.

3. Originating Shipping Activity Responsibilities. The activity which offers hazardous materials for shipment is responsible for establishing a quality control program to ensure packing, marking, labeling, and certifying of hazardous materials by properly trained personnel is in accordance with DOT, RCRA, and Service regulations. The following rules shall be adhered to:

a. The shipping activity shall conduct a visual inspection of exterior packaging and review shipping documents for accuracy and completeness.

b. Exterior containers shall only be opened when there is physical evidence to support suspected damage to the contents, or if external markings do not correspond to documentation.

c. Opened containers shall be resealed in accordance with the applicable test report or special packaging instructions.

d. Inspect each package to ensure the container is correctly labeled and in good condition.

e. Check the shippers' certification for overall accuracy.

f. Immediately removing damaged or improperly prepared packages from being offered for transportation by any mode.

g. Ensure hazardous materials are packaged in United Nations specification performance oriented packaging containers when required.

CHAPTER 3

STORAGE AND HANDLING

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CHAPTER 3

STORAGE AND HANDLING

3000. BACKGROUND. The Marine Corps has extremely limited ammunition and explosives (A&E) storage capability. Therefore, most of the inventory is stored and maintained in Army and Navy A&E storage facilities that provide extensive logistics support. This support includes, but is not limited to, those operations associated with receipt, storage, surveillance, issue, demilitarization, material recovery, destruction, and disposal. A&E is also stored at various NATO depots, aboard amphibious ships as Landing Force Operational Reserve Material (LFORM) for Class V(W), as Mission Load Allowance (MLA) for Class V(A), and aboard Maritime Prepositioning Ships (MPS). For Marine Corps activities, the storage of A&E ashore is generally divided into three broad categories; permanent storage, field storage, and other storage. Regardless of category, proper authority at designated levels must be obtained prior to commencing A&E operations or storing Class V. These categories and the rules that govern them are discussed in this chapter.

STORAGE FACILITIES. Marine Corps A&E will be stored in 3001. permanent magazine storage facilities. Outdoor storage is not authorized except in conjunction with training and field exercises or temporary (overnight) operational circumstances. Permanent magazine storage facilities are those built to Naval Facilities Engineering Command (NAVFACENGCOM) specifications, approved by the Department of Defense Explosives Safety Board (DDESB), identified in the Installation Master Plan, and maintained and supported by host maintenance departments. Earth covered magazines (ECMs) are designated, based on headwall and blast door hardness, as "7-bar", "3-bar", or "undefined". Detailed discussions of the types of ECMs and the various types of existing magazines that may be found at storage facilities are contained in chapter 8 of NAVSEA OP 5, Volume 1. Storage in these facilities shall be in accordance with NAVSEA OP 5, Volume 1, and this Manual.

3002. <u>STORAGE OF NON-DOD A&E</u>. Non-DoD (including captured enemy A&E) and foreign A&E items shall be properly segregated and separated from U.S. A&E as described in NAVSEA OP 5, Volume

1. The following additional regulations shall be adhered to:

1. Only those Class V(W) items authorized in MCO 8011.4, the current edition of Marine Corps Bulletin 8011, and items stored for another U. S. Military Service may be stored on Marine Corps installations or in a Marine Corps ammunition supply point (ASP) during peacetime.

2. In the case of Class V(A), only those items based on formally established requirements will be stored.

3. Storage of non-DoD and foreign A&E, with the exceptions of safe haven and combat operations, requires storage authority from COMMARCORSYSCOM (AM) and the Naval Ordnance Safety and Security Activity (NAVORDSAFSECACT) (N71). Requests may be submitted in either naval message, letter, or electronic mail (ees@mcsc.usmc.mil) formats and must include the following:

a. Item description and national stock number (NSN) or other identifying information, if known.

- b. Item quantity.
- c. Hazard classification/division (HC/D).
- d. Net explosive weight (NEW).
- e. Justification for and type of storage required.
- f. Expected duration of storage.

g. A pre-approved post exercise munitions retrograde plan for unexpended ammunition.

4. Confiscated small arms ammunition items in non-DoD configuration may be stored on Marine Corps installations with the approval of the installation commander. These items are not authorized for subsequent issue or use. Disposition requests will be submitted to the Marine Corps designated disposition authority (DDA) as soon as the investigative authority releases these items.

5. The temporary storage or disposal of explosives is available in order to protect the public or to assist agencies responsible

for Federal, State, or local law enforcement in storing or disposing of explosives when no alternate solution exists. Such storage or disposal shall be established in accordance with an agreement between the Secretary of Defense and the head of the Federal, State, or local agency concerned. These requests will be forwarded to MARCORSYSCOM (AM) who will in turn coordinate with NAVORDCEN, OPNAV, and SECNAV for approval.

3003. <u>MARINE CORPS TENANT UNITS ON NAVY INSTALLATIONS</u>. For Marine Corps units located as tenant units aboard Navy installations, storage authority must be requested through the installation commander and forwarded through the Navy chain of command with an information copy to COMMARCORSYSCOM (AM).

3004. FLEET SENTENCING. All Marine Corps ammunition support activities (Ashore) that perform receipt, storage, segregation, or issue of Navy and Marine Corps procured conventional ammunition, will utilize the Navy and Marine Corps Conventional Ammunition Sentencing manuals NAVSUP P-805 and P-806 for reference, and NAVSUP P-807 for sentencing.

1. Marine Corps logistics squadrons (MALS) and their squadron elements are exempt from fleet sentencing while in garrison. However, when operating deployed from an advance base MALS units shall perform sentencing utilizing NAVSUP P-807.

2. A field return inspection guide is available on CD-ROM for OT cog ammunition to assist and train in the sentencing process. Guides may be requested through COMMARCORSYSCOM (AM).

3005. USE OF MATERIAL CONDITION CODE TAGS. Material Condition Code (MCC) tags may be used at the discretion of Marine Corps facilities storing Class V(W) ammunition. This pertains to storage only. Preparation for shipment will be per chapter 2 of this Manual and applicable Department of Transportation (DoT) regulations.

3006. USE OF LEAD SEALS

1. The use of lead seals has been discontinued within the DoD. This change prohibits the procurement of lead seals for ammunition containers, but allows their use until current stocks are depleted. A comparable non-lead seal has been tested by the DoD Lock Program and approved for use. This seal provides good tamper indicating capabilities and is suitable replacement for lead seals currently in use. This seal is issued in two parts (a wire and a seal) under the following nomenclature and NSN:

	NOMENCLATURE	NSN
Wire,	Steel	9505-00-006-5050
Seal,	Anti-pilferage	5340-00-522-2514

Use of other non-lead, anti-pilferage seals may be used provided they are approved for use under the DoD Lock Program and meet the following criteria. Assistance may be requested through COMMARCORSYSCOM (AM).

2. Crimped seals shall be embossed on one side with the sixdigit alpha-numeric unit identification code (UIC) or manufacturers code (factory seal). The opposite side of the crimped seal shall be embossed with an identification number assigned to individual sealing container, or traceable serial number. A list of authorized personnel and their corresponding identification number, or serial number logbook will be maintained by the unit and shall be updated as needed to reflect current status.

3007. <u>USE OF WOODEN PALLETS</u>. Marine Corps installations storing Class V(W) ammunition may utilize standard, serviceable wooden pallets to the fullest extent possible. The use of wooden pallets for dunnage is authorized for storage.

3008. <u>USE OF METAL PALLETS</u>. Metal pallets are not required for shipping or storing Marine Corps Class V(W). The re-palletization of Marine Corps Class V(W) scheduled for loading aboard amphibious ships is not required.

3009. <u>SUPERVISION OF HANDLING PERSONNEL</u>. Close supervision of personnel involved in A&E evolutions must be maintained at all times in accordance with MCO 8023.3 series.

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3010. INSTRUCTION OF HANDLING PERSONNEL. All personnel physically handling A&E, including those who utilize A&E in accomplishment of their mission (e.g., tank, artillery, mortar crewman, and engineers), shall be properly instructed prior to each handling evolution. This shall include instructions on the employment and safety precautions associated with the specific items being used. Personnel involved in the actual firing or employment of ammunition should refer to MCO 3570.2 series or appropriate technical and field manuals for associated safety regulations.

3011. PROTECTION FROM HAZARDS OF ELECTROMAGNETIC RADIATION TO ORDNANCE (HERO). A&E must be protected from the adverse effects of HERO; i.e., transmitting equipment capable of generating electromagnetic radiation of sufficient magnitude to initiate electro-explosive devices (EED). Details regarding electromagnetic radiation are contained in NAVSEA OP 3565.

3012. <u>HANDLING OPERATIONS IN AVIATION AREAS</u>. All explosive operations and handling evolutions conducted in combat aircraft loading areas (CALA); hazardous cargo areas; flight lines; weapons assembly areas; flight line ready service storage areas; and arm/de-arm areas shall be conducted in accordance with NAVSEA OP 5, Volume 1; NAVSEAINST 8020.7; published SOPs; and applicable aircraft weapons/stores loading manuals and checklists.

3013. RESPONSIBILITIES

1. Installation Commander's Responsibilities For Storage And <u>Handling Of A&E</u>. The installation commander is responsible for the following actions as they relate to the implementation of the policies set forth in this Manual:

a. Develop SOPs for all ammunition operations, including storage and handling evolutions specified in NAVSEAINST 8023.11 series.

b. Periodically review and update existing SOPs.

c. Ensure personnel engaged in ammunition handling and storage operations are properly trained, qualified and certified to perform the required functions assigned per MCO 8023.3 series.

2. Ammunition Handling And Storage Personnel Responsibilities. Personnel assigned to ammunition handling and storage operations are responsible for the following actions as they relate to the implementation of the policies set forth in this Manual:

a. Implement, and observe the SOPs governing the specific operation in which they are engaged.

b. Immediately note and report any unsafe conditions or deviations from SOPs to the individual's supervisor.

c. Perform only those operations for which they are qualified and certified.

d. Ensure that RCRA training requirements identified in MCO P5090.2A are adhered to.

e. Ensure that waste military munitions (WMM) stored in ammunition storage facilities are inspected not less than quarterly and inventoried not less than annually.

f. Ensure that all applicable training requirements are adhered to for personnel handling and storing ammunition containing depleted uranium (DU).

3. <u>Installation Environmental Office Responsibilities</u>. The installation environmental office is responsible for the following:

a. Coordinate reporting and reinstatement procedures with DC I&L (LFL), COMMARCORSYSCOM (AM), and environmental regulatory officials if conditional exemption (CE) storage is lost. Refer to MCO P5090.2A and chapter 7 of this Manual for more detail.

b. Coordinate RCRA training for A&E personnel per MCO P5090.2A.

c. Coordinate with ammunition handling and storage personnel to maintain an inventory of WMM and inspections of storage facilities.

CHAPTER 4

SECURITY AND ACCOUNTABILITY

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CHAPTER 4

SECURITY AND ACCOUNTABILITY

4000. <u>BACKGROUND</u>. The Marine Corps continuously trains and deploys with ammunition and explosives (A&E), which by their very design are inherently hazardous. Careless losses, improper disposition, theft, and unauthorized use expose the public to unnecessary hazards. Therefore, it is imperative that the provisions of this chapter and all cited references be closely examined and adhered to. The terms A&E and arms, ammunition and explosives (AA&E) are used interchangeably throughout this chapter.

4001. <u>CMC-MANDATED CHANGES</u>. OPNAVINST 5530.13 provides the current guidelines and policies for the security of AA&E. Recent procedural reviews have resulted in several AA&E security and accountability policy changes, which have been incorporated into MCO P4400.150 series. As a result of these policy changes, the following procedures shall be implemented immediately:

Expenditure Reporting. A&E is most susceptible to theft or 1. loss during field exercises. To ensure that proper accountability is afforded to all A&E, commanding officers and officers in charge shall ensure that the Class V(W) Expenditure Report (NAVMC Form 11381), depicted in figure 4-1, is used to document all expenditures of A&E assets. NAVMC 11381 is available in the Marine Corps Electronic Forms System (MCEFS). This form will be completed at the range by the range safety officer (RSO) and the ammunition technician to include signatures of both parties prior to any ammunition leaving the range for transport to the ammunition supply point (ASP) or armory. Local commanders are authorized to add additional fields to NAVMC 11381 to support other local requirements as deemed appropriate. However, the standard fields contained on this form shall not be changed. Expenditure reports shall be maintained by fiscal year (FY) and retained for the current year plus 2 FYs as of the closing date of expenditure. For those expenditures maintained on NAVMC 10774s, the retention period shall be 3 years from placement of the NAVMC 10774 in the inactive file.

CLASS V (W) EXPENDITURE REPORT NAVMC 11381 (X-XX) (XX) SN: XXXX-LF-XXX-XXXX

FROM: (RSO/EOD)	PRINT NAME	RANK	SSN		UNIT/RUC/PHONE NU	MBER		
Ref: (a) MCO P4400.150 series								
1. Per the reference, the following C Range (s) and date (s)		-				 		
RECEIPT DOC#	DODIC	NOMENCLATU	URE		REQUIPED	QTY RECEIVED (NOTE 1)	QTY EXPENDED	QTY TURNED IN (NOTE 2)
I certify the receipt/expenditure data list	ed ab	nde liste	ove was	I country that I have	completed the turn-in	documents for a	ny unexpended (Class V (W) per
consumed on the range/training area as of and all expended ammunition retrograde (If applicable) (Number) unused	material wave checked of feedback	ger aza zas iten	ns.		ed the unexpended ass and/or Authorized Ind		ed storage activi	ty.
Training Standards, under the supervisio	n of the Position Lenning	(Print Name, Rank, S		(Print Name, Rank))			
RSO/EOD (Signature)	Date							

NOTE 1: All serial numbers for serialized ammunitions will be annotated on a separate sheet and attached to this expenditure report with a copy of the expenditure msg. NOTE 2: Unexpended Class V (W) will be turned in using the same document number as the initial issue document using a suffix (Example M00001-8001-0001.<u>A</u>) Retention: Expenditure reports are filed by fiscal year (FY) and retained for current year plus two FY's.

(AA&E Audit & Verification Officer Only): I certify I have audited this expenditure report against all issue and turn-in documents (DD1348s) and corrective action (Circle one) is or is not required.
AA&E Officer (Signature) ______ Date ______

Figure 4-1.--Class V(W) Expenditure Report (NAVMC 11381).

2. Certification Screening

a. Commanding officers and officers in charge shall ensure that all personnel who account for, maintain, and distribute AA&E in performance of their primary duties are screened in accordance with this paragraph and OPNAVINST 5530.13 series. This includes explosive ordnance disposal (EOD) and aviation ordnance personnel, engineers, military police, AA&E officers, armorers/custodians, and ammunition technicians.

b. Screening will be conducted annually and will include a review of the Marine's medical records, service record book or officer qualification record, and provost marshal office (PMO) incident reports.

c. Personnel who are required to be qualified and certified in their primary duties involving AA&E shall document screening in accordance with MCO 8023.3 series.

d. Letters of designation referencing this Manual and signed by the commanding officer or officer in charge may serve as screening documentation.

e. All other screening documentation shall be done utilizing the Personnel Screening for AA&E Form (NAVMC Form 11386), depicted at figure 4-2.

f. This certification will be maintained as long as that individual is handling AA&E as their primary duties or upon their transfer to another duty station.

g. If the individual is assigned primary duties of handling AA&E at the new duty station, re-certification is required.

h. Commanders will coordinate with CMC (MMEA/MMOA) when requesting retraining or reassignment of any Marines who do not meet the requirements of this screening process. The Assignment, Classification, and Travel Systems (ACTS) Manual (MCO P1000.6F) contains specific guidance which must be followed in order to complete these retraining and reassignment requests.

3. Unit-Level Inventories

a. Commanding officers and officers in charge shall appoint in writing an A&E audit and verification officer to conduct and document monthly inventories of A&E that is stored in a local magazine controlled by a unit. The A&E audit and verification officer must be a disinterested Marine who has no responsibilities concerning ammunition security or accountability. This requirement applies to aviation squadrons, EOD units, engineer school, PMO, rifle ranges, armories, Marine support battalion detachments, Marine security guard detachments and Marine Corps security force detachments.

b. Based on inventory results, investigations shall be conducted and missing, lost, stolen, or recovered (MLSR) reports shall be submitted, where appropriate.

c. The reports or investigations, if required, shall be submitted in accordance with MCO 4340.1 and JAGINST 5800.7.

PERSONNEL SCREENING FORM FOR ARMS, AMMUNITION, AND EXPLOSIVES

Screening (check one):

annual

initial

Ref: (a) OPNAVINST 5530.13 series (b) MCO P4400.150 series (c) MCO P8020.10 series

Individual being screened	Individual conducting screening					
Rank/Name:	Rank/Name:					
SSN/MOS:	SSN/MOS:					
Billet:	Billet:					
Date of screening:	Date of screening					
Signature:	Signature					
SUBJECT YE						
Subject Marine's medical record has been screened by a competent medical authority There are no prefer condition that yound prevent the Marine from houlding the KI Subject Marine's scrvice from d broken officer multication record has been screened. There is an der compry information has been from handling A.						
Subject the last of pending legal action and/or convictions by court-martial, civilian courts, or the public public public public public that would prohibit this Marine from handling AA&E.						
Subject Marine demonstrates the requisite maturity, judgment, and leadership required to handle AA&E.						

Based on the above information, I have determined that the subject Marine (check one):

does meet the personnel screening requirements to handle AA&E in performance of their regular duties.

_____ currently does not meet the personnel screening requirements to handle AA&E in performance of their regular duties. Subject Marine will be re-evaluated in ____ days.

can not meet the personnel screening requirements to handle AA&E in performance of their regular duties. A summary of the findings for non-qualification are attached. If appropriate, the command will request via CMC (Code MM) that action be taken to re-train and/or reassign subject individual to an occupational field not requiring routine handling of AA&E.

Retention: This Record will be maintained for one year after termination of the individual's assignment, or one year after final interview if the individual is disqualified during the screening or re-screening process.

Figure 4-2.--Personnel Screening Form For AA&E (NAVMC 11386).

4. <u>Storage Activity Inventories</u>. All A&E that is being stored in approved magazines will be inventoried in accordance with OPNAVINST 5530.13 series. Record keeping personnel shall not be permitted to conduct inventories. In addition, storage personnel will accompany these personnel when access to the A&E storage area is required. Storage personnel will be denied access to A&E record keeping files. Based on inventory results, investigations shall be conducted and MLSR reports shall be submitted, where appropriate. The reports or investigations, if required, shall be submitted in accordance with MCO 4340.1 and JAGINST 5800.7.

4002. <u>SCOPE OF ACCOUNTABILITY</u>. All Class V, to include inert, practice, service (live), or any component thereof, is considered non-expendable and will be accounted for in accordance with NAVSEA OP 5, Volume 1, UM-4400.15, and MCO P4400.150 series.

4003. INERTING AND DISPLAY OF A&E ITEMS

1. Only qualified EOD personnel are authorized to conduct inerting and stripping operations of Class V in accordance with NAVSEA OP 5, Volume 1; MCO 1510.78; and MCO 3571.2. Inspection and marking of inert-filled and empty ordnance items shall be in accordance with MCO 3570.2; NAVSEA OP 5, Volume 1; and the current edition of Marine Corps Bulletin 8011.

2. Inert ammunition does not contain any explosive material. Only inert ammunition and components shall be used for classroom training, all displays (public, museum, or otherwise), public functions and patriotic occasions. MCO 8011.4 series authorizes the respective COMMARFOR and commanders of supporting establishments to approve the inerting of ammunition for training purposes by EOD personnel and the displaying of that inert ammunition by any approved unit. Additionally, aviation ordnance items used for public display shall be in accordance with NAVAIR 00-80T-103 and NAVSEA OP 5, Volume 1. No ammunition, other than inert, shall be used for displays unless specifically approved by the Naval Ordnance Safety and Security Activity (NOSSA) via the chain of command. COMMARCORSYSCOM (AM) will coordinate all requests with NOSSA. Request for approvals shall be submitted using the event waiver process outlined in chapter 1.

3. Commanders at all echelons shall take immediate action to ensure compliance with this Manual for all A&E items not properly inspected and marked by EOD.

4004. <u>AUTHORIZED QUANTITIES</u>. A&E requisitioned or maintained on hand shall be limited to those authorized quantities listed as part of an Apportioned War Reserve (AWR) Marine Ammunition Requirement Support Order (MARSO), War Reserve Material Requirement (WRMR) stock held for safety or security purposes, or the annual training requirement. The types and quantities must not exceed that which can be properly stored, accounted for, and safeguarded.

4005. <u>REMOVAL OF A&E FROM THE INSTALLATION</u>. A&E shall not be removed from any military activity, except as duly authorized by proper authority.

4006. <u>SALE OR EXCHANGE OF A&E</u>. Government-owned A&E shall not be provided gratuitously, offered for sale, sold, exchanged or bartered for privately-owned or Government-owned property. This does not apply to ammunition provided by morale, welfare, and recreation (MWR) activities or stocked within the Marine Corps exchange system. In addition, military owned ammunition shall not be authorized to be fired from privately or personally-owned weapons.

4007. RESPONSIBILITIES

1. <u>Personnel Responsibilities</u>. Commanders at all echelons and all personnel, civilian or military, involved in operations relative to A&E are responsible for proper ammunition accounting, physical control, security, transportation, use, storage, handling, and disposition. Particular care must be exercised when A&E is physically in the hands of personnel and when unused A&E is being returned to a storage site. The accountability of A&E is paramount at all times and at all levels.

2. <u>Commanders Responsibilities</u>. Commanding officers and officers in charge are responsible for the following:

a. Establish written procedures to appoint or relieve responsible officers (RO) of ASP, station ordnance, or individual units which are responsible for maintaining and retaining A&E items. Commanders will maintain all appointment, acceptance, and revocation letters on hand for 5 years, and ensure that units have current letters on file. A copy of all appointment/revocation letters shall be sent to installation ESO for their records.

b. Appoint unit AA&E officers and RSOs.

c. Appoint in writing an A&E audit and verification officer to conduct and document monthly inventories of A&E that is stored in local unit controlled magazines.

d. Ensure that all personnel who account for, maintain, and distribute AA&E in performance of their primary duties are screened in accordance with paragraph 4001.2 of this chapter.

e. Ensure that expenditure reports are maintained by fiscal year (FY) and retained for the current year plus two FY's as of the closing date of expenditure. For those expenditures maintained on NAVMC 10774's, the retention period is 3 years from placement of the NAVMC 10774 in the inactive file.

3. <u>Unit AA&E Officer Responsibilities</u>. Unit AA&E officers are responsible for the following:

a. Conduct AA&E awareness training.

b. Validate AA&E accountability procedures.

c. Audit the AA&E chain of custody for issue, receipt, expenditure, and turn-in.

d. Validate recordkeeping procedures.

4. <u>Range Safety Officer (RSO) Responsibilities</u>. The RSO is responsible for the following:

a. Inventory of all AA&E delivered to the range.

b. Supervise the distribution of AA&E at the range.

c. Ensure that AA&E expenditure reports/turn-in documents are completed prior to departing the range.

d. Submit expenditure reports and turn-in documents to the unit's S-4 or designated record holder.

CHAPTER 5

SITE PLANNING

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CHAPTER 5

SITE PLANNING

BACKGROUND. Construction features and locations are 5000. important considerations in planning ammunition and explosives (A&E) facilities, or facilities that are exposed to the damaging effects of potential explosions. The effects of potential explosions may be reduced significantly by construction features that limit the amount of explosives involved, reduce the intensity of blast overpressure or thermal radiation, or lower the quantity and range of hazardous fragments and debris. Proper location of exposed sites reduces the risk of unacceptable damage and injuries in the event of an incident. The A&E safety standards contained in DoD 6055.9-STD, and implemented by NAVSEA OP 5, Volume 1, apply to all DoD A&E facilities whenever U.S.-titled ammunition is in the custody of DoD civilian or military employees, and to U.S.-titled ammunition in host nation facilities. These standards shall be considered the minimum with greater protection provided when practical; and shall govern the siting and construction of all such facilities, unless specifically exempted. Storage of A&E in unauthorized locations exposes both the DoD and the public to unnecessary hazards. Therefore, it is imperative that the provisions outlined in this chapter and all cited references be closely examined and strictly adhered to.

5001. LOCATIONS REQUIRING SITE APPROVAL/PLANS. Site approval is required by DoD 6055.9-STD and NAVSEA OP 5, Volume 1, for all shore activities at which A&E is handled, manufactured, modified, or stored. This includes permanently sited containers used in conjunction with an amnesty program, as well as those areas used for the storage and permitted treatment of waste military munitions (WMM). COs shall request explosives safety site approvals for new construction or modification to existing structures that are encumbered by an inhabited building explosives safety quantity-distance (ESQD) arc, unless they are minor in nature and do not introduce an additional hazard. This applies to all permanent storage facilities, regardless of the date of first construction, and supersedes NAVSEA OP 5, Volume 1, paragraph 8-1.2.6.a. In the event that a record of site approval is not on file or if the re-designation or modification

of an existing site is required, submit site approval requests to the DDESB via COMMARCORSYSCOM (AM) and DC I&L (LFL). The chain of submission for site approval requests is depicted in figure 5-1. Site approval must be obtained prior to handling or storing Class V A&E.

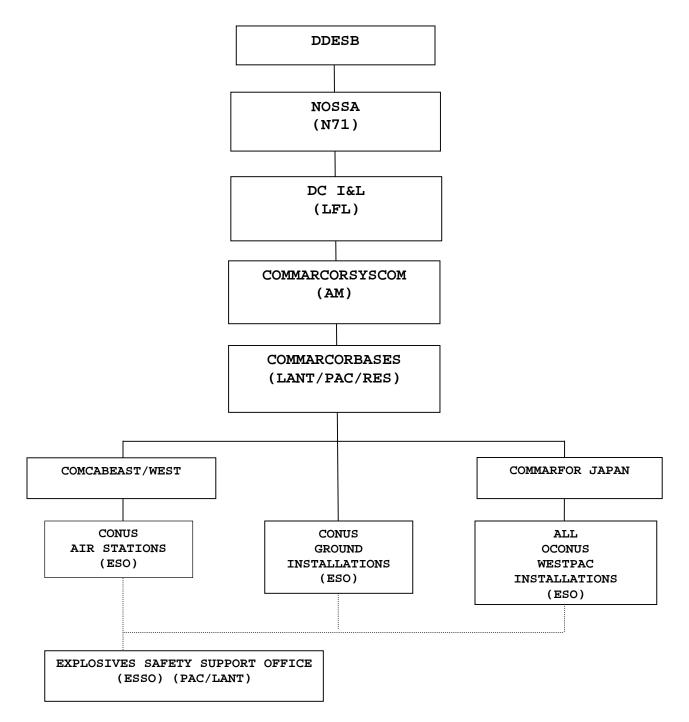


Figure 5-1.--Chain Of Submission For Site Approval Requests. 5-4

5002. SITE APPROVAL FOR SITES STORING LESS THAN 300 POUNDS NET EXPLOSIVE WEIGHT (NEW). Site approval for locations storing less than 300 lbs. NEW of Hazard Class/Division (HC/D) 1.2.2, 1.3, or 1.4 may be obtained from the cognizant explosives safety support office (ESSO) or as specified in paragraphs 5007 and 5008, below. Copies of all site approvals will be forwarded to COMMARCORSYSCOM (AM) and CMC (LFL) upon approval.

5003. <u>SITE APPROVAL FOR SITES STORING MORE THAN 300 POUNDS NET</u> <u>EXPLOSIVE WEIGHT (NEW)</u>. Site approval for sites storing more than 300 lbs NEW or for HC/D greater than those listed in Paragraph 5002, above, must be forwarded via the chain of submission identified in figure 5-1.

5004. <u>NEW CONSTRUCTION ENCUMBERED BY EXISTING ARCS</u>. New construction adjacent to explosive storage/operating areas that are encumbered by previously approved explosive arcs require resiting.

5005. <u>SITE APPROVAL FOR DEPLOYED UNITS</u>. Deployed units will request site approval for all explosive operations conducted ashore. These requests shall be coordinated through the chain of command to the appropriate command authority exercising operational control (OPCON), specified in initiating directives. During exercises and contingency operations when prior site approval is not possible, an event waiver is required in accordance with instructions set forth in chapter 1 of this Manual. Information copies of all documentation will be provided to COMMARCORSYSCOM (AM).

5006. FIELD STORAGE. Field storage is primarily intended for situations which require A&E to be stored away from the standard storage environment, such as during combat or field training, and is considered temporary in nature. A review and approval of the ammunition storage plan are required from the supporting installation commander prior to beginning any field/combat operation. Installation commanders may authorize temporary field storage on approved ranges/training areas up to 90 days, using the criteria of NAVSEA OP 5, Volume 1, without prior approval. Temporary storage facilities/sites will be governed

by the provisions of NAVSEA OP 5, Volumes 1 and 3 with the following guidelines:

1. Field storage sites for training operations not located on approved ranges/training areas shall be formally sited prior to any explosives operation. The installation commander will submit a site plan via the chain of submission previously depicted in figure 5-1. Site plans shall be submitted for approval for all A&E storage or handling locations for all vehicle staging areas, and for all secure explosives holding areas. Once site approval is granted, the installation commander may authorize and conduct temporary field storage for up to 90 days (per exercise or storage evolution) at these sites utilizing the ESQD criteria of NAVSEA OP 5, Volume 1.

2. NAVSEA OP 5, Volume 3 is intended for use at advanced bases during combat operations. The field storage unit (FSU) concept of this reference may be used in training provided the location is on an approved range/training area, or formally sited. However, the ESQD between potential explosives sites (PES) and exposed sites (ES) shall not be reduced to that less than the criteria of chapter 7 of NAVSEA OP 5, Volume 1. In addition, proper storage compatibility group integrity shall be maintained at all time in accordance with SW020-AC-SAF-010.

3. If any training field storage exceeds 90 days a request for approval will be submitted to COMMARCORSYSCOM (AM). The request will be submitted via naval message or electronic mail (EES@MCSC.USMC.MIL) and outline the following data elements at a minimum:

a. The exercise being supported.

b. The units participating and the size of the units (i.e., battalion, regiment, MEF).

c. The quantity and HC/D of the A&E intended to be stored.

d. The combat service support (CSS) unit establishing the field ammunition supply point (FASP).

4. For training exercises and activities unable to comply with the ESQD criteria of NAVSEA OP 5, Volume 1, due to strategic or

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other compelling reasons addressing operational necessity, installation commanders shall request an event waiver prior to the execution of the explosives operation. Event waivers shall be prepared and submitted in accordance with chapter 1 of this Manual.

5007. OTHER STORAGE

1. Installation commanders and the Commander, Marine Forces, Reserve (COMMARFORRES) may grant storage authority for the types and quantities of HC/D 1.2.2, 1.3, and 1.4 A&E identified below in facilities such as hangers, troop buildings, armories, and manufacturing or operating buildings without regard to the ESQD requirements of NAVSEA OP 5, Volume 1. However, all storage must comply with fire protection regulations, safety and physical security requirements outlined in OPNAVINST 5530.13; NAVSEA OP 5,Volume 1; and NAVSEA SWO20-AC-SAF-010, 020, 030, and 040. Examples include small arms ammunition, riot control ammunition and pyrotechnics for alert, safety or security purposes. Copies of storage approvals shall be submitted via the chain of submission depicted in figure 5-2.

2. The following storage authority limitations apply to all Marine Corps commands less MARFORRES. These limitations shall be strictly adhered to:

a. No more that 25 pounds NEW of HC/D 1.4 shall be stored.

b. No more than 10 pounds NEW of HC/D 1.3 shall be stored.

c. The only HC/D 1.2 materiel permitted to be stored under this provision is a maximum of eight MK141 Mod 0 Diversionary Charges (DWBS) (0.32 lbs. total NEW HC/D 1.2.2).

d. When combining HC/D 1.2.2, 1.3, and 1.4, no more than 35 pounds total NEW shall be stored, of which no more than 10 pounds NEW shall be HC/D 1.3.

e. No HC/D 1.1 or other 1.2 materiel shall be stored.

f. Items hazard classified as $\rm HC/D$ 1.4S may be stored without regard to limits posted above and may be excluded from the total NEW.

g. Installation commanders may grant EOD units authorization to store up to 50 pounds NEW of HC/D 1.3 and 1.4 in EOD operating buildings. This authorization is only to be granted in situations where the items are part of the unit's immediate response tool kit and the total NEW does not exceed 50 lbs. per site. However, all storage must comply with fire protection regulations and safety/physical security requirements outlined in OPNAVINST 5530.13; NAVSEA OP 5, Volume 1; and NAVSEA SWO20-AC-SAF-010, 020, and 030. For existing facilities without sprinkler systems, the total NEW is limited to 25 pounds for overnight storage. The storage of A&E to support EOD training is prohibited per MCO P4400.150E.

h. Installation commanders shall review all storage authority requests on a case-by-case basis at least annually. Approval shall be granted only for those types and quantities of A&E required to meet security force, safety, or operational requirements (i.e. burial detail, CAD or PAD arriving via UPS after working hours). Commanders may also approve storage of privately-owned small arms ammunition in unit armories. Privately-owned ammunition will be kept segregated from DoD stocks and will be subject to locally written accountability procedures.

i. Installation commanders shall consolidate all approved storage authorizations and provide this consolidated listing to COMMARCORSYSCOM (AM) by 30 June, annually.

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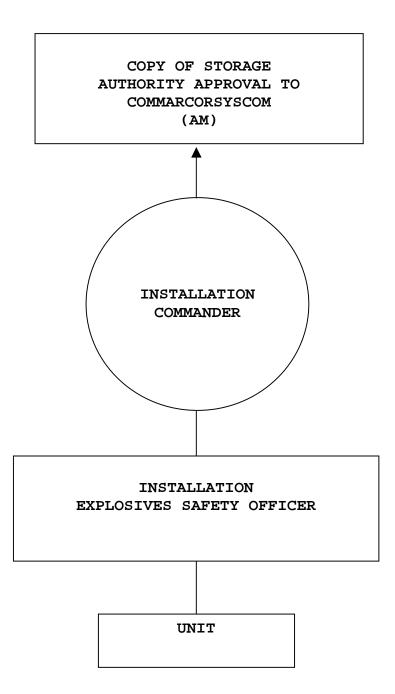


Figure 5-2.--Chain Of Submission For Storage Authority Requests.

5008. <u>SPECIAL STORAGE AUTHORITY FOR MARINE CORPS RESERVE UNITS</u>. Due to unique training and facility restrictions faced by Marine Corps reserve units, COMMARFORRES may authorize storage of A&E to satisfy local individual unit training requirements, in addition to security-related munitions, with the following restrictions:

1. Such authority is granted in response to support of local training events that necessitate the temporary short-term storage of training assets until such time as they can be transported to an approved storage facility. Such authority shall be reviewed and reissued annually.

2. Storage of small arms cartridges is authorized in local police facilities only when organic service storage facilities do not afford adequate support.

3. No HC/D 1.1 or 1.2 munitions are stored.

4. The total NEW of HC/D 1.3 and 1.4 combined, to include HD/C 1.4S, does not exceed 300 lbs., including security and blank funeral ammunition.

5. Blank funeral ammunition is limited to 80 rounds per detail based on the number of details conducted annually.

6. One-time instances that require storage of munitions in excess of the requirements outlined above require an event waiver approval by COMMARCORSYSCOM (AM).

7. An information copy of all storage authorizations shall be provided to COMMARCORSYSCOM (AM).

5009. <u>SITE APPROVAL DOCUMENTATION</u>. The following information shall be submitted for site plan approval:

1. The installation commander's endorsement of the request, along with changes, modifications, or specific precautionary measures considered necessary.

2. Drawings and maps of site plans at a scale such that 1-inch equals not more than 400 feet. When drawings at a smaller scale are necessary to properly reflect certain distance and structure

relationships within the arc surrounding a given project, a reduction in scale is permitted. This shall be in addition to, not as a replacement for, properly scaled 1:400 maps/drawings. Each map or drawing shall include at a minimum:

a. Inhabited building distance (IBD) arcs highlighted in yellow.

b. Intermagazine (IM), intraline (IL), and public traffic route (PTR) distance arcs highlighted in red.

c. All new arcs or any arcs which will change as a result of the proposed project highlighted in green.

d. Each arc shall show the point of origin, length of radius, quantity of explosives (expressed in terms of HC/D and NEW), and K-factor.

e. Each individual map or drawing shall reflect the scale and North arrow.

f. Identification of all other facilities, describing their occupancy and use, within IBD of an explosive facility or PES.

3. A completed NAVFAC 11010/31. The use of the Naval Facilities Engineering Command (NAVFACENGCOM) E-1 Installation Planning, Design and Management Guide CD-ROM is an excellent tool that automates the planning process and form generation. Its use is authorized and encouraged. Regardless of the process selected, the NAVFAC 11010/31, Part II, Division A, must have the signature of the installation ESO in block 8.

5010. NON MASS-DETONATING FRAGMENT PRODUCING (HAZARD <u>CLASS/DIVISION (HC/D) 1.2) MATERIAL</u>. HC/D 1.2 includes items configured for storage and transportation that do not mass detonate when a single item in a stack is initiated. If an explosion occurs, these items will burn and explode progressively with no more than a few at a time reacting. These reactions will project fragments, firebrands and unexploded items away from the explosion site. Blast effects are limited to the immediate vicinity and are not the primary hazard.

1. The previous HC/D 1.2 criteria provided maximum fragment throw distances (i.e., 400, 800, 1,200, and 1,800 feet) and were ammunition item specific and quantity independent.

2. The recently approved criteria, however, are based on extensive testing and take into account the NEW of individual ammunition items, total NEW at a structure or site, the maximum credible event (MCE) per ammunition item, and the type of structure (if any) involved in an event.

3. The result is that the new HC/D 1.2 criteria are more consistent with HC/D 1.1 hazardous fragment criteria and more accurately represent the fragment hazard that would be expected from an event involving HC/D 1.2 ammunition.

4. The Joint Hazard Classification System (JHCS); NAVSEA OP 5, Volume 1; and SW020-AC-SAF-010/020/030/040 have been updated to reflect the new criteria and shall be used in the site planning process.

5. Effective immediately, all requests for safety review and site approval for new construction or modification shall reflect the revised HC/D 1.2 criteria. All Marine Corps installations shall convert to the revised criteria by October 2003.

5011. <u>SAFETY ASSESSMENT FOR EXPLOSIVES RISK (SAFER)</u>. In order to minimize the need for waivers in situations where the siting requirements of IBD cannot be met, the DDESB in cooperation with all the Services has approved the use of the quantitative risk management computer model SAFER. SAFER provides both acceptable risk criteria, and the statistical methodology necessary to calculate the probability of fatality through simple data input by the user. Site plans that meet the criteria of SAFER will be approved without waiver. The use of SAFER in preparation of explosives safety site plans is subject to the following criteria:

1. The user must have completed training in the use of the SAFER model.

2. All available options to meet required siting criteria must have been exhausted.

3. The installation commander must accept the risk, as calculated by SAFER, in writing.

4. Site plan packages utilizing SAFER will contain the following:

a. All the elements of a standard site plan submission, to include maps showing the required IBD arcs and all optional locations considered as well as the arc indicated by the SAFER model. All ES/PES locations will also be shown.

b. A detailed written explanation of the situation which created the need to deviate from standard QD criteria, options considered, reasons for rejection of options, all locations that are effected by the deviation (including building number, usage, sited NEW, etc.).

c. Copies of the SAFER printouts, signed by the preparer.

d. Statement of risk acceptance by the installation commander.

e. Site plan packages utilizing SAFER will be submitted via the normal submission chain.

f. Once approved, SAFER site plans are valid for 5 years provided no changes to original submission have occurred. Expiration, or changes to original plan must be resubmitted for approval following the previously stated format.

5012. FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS. All FARPs, in which explosives operations are conducted, must have site approval from the appropriate level of command, as outlined below prior to conducting operations.

1. Training evolutions involving explosive FARP operations, conducted on U.S. controlled training areas/ranges approved for the type munitions may be approved by the cognizant installation commander. When an explosive FARP operation is to be established at CONUS locations other than on approved training areas/ranges, or explosives operations other than approved training use, then formal DDESB site approval is required prior to the conduct of operations. The only exception is when a

temporary explosive FARP operation is to be conducted at an OCONUS location, outside a U.S. controlled training area/range. This type operation can only be authorized by the fleet commanders-in-chief (CINCLANFLT, CINCPACFLT, CINCUSNAVEUR, COMUSNAVCENT) via event waiver in accordance with NAVSEA OP 5, All explosive FARP training operations shall be Volume 1. established in accordance with the separation distances specified in figure 5-3. Units conducting non-contingent FARP operations shall prepare a SOP addressing the conduct of all operations not covered by a current Naval Air Training and Operational Procedures Standardization (NATOPS) Manual. A copy of the SOP shall be provided to the cognizant range control officer prior to the operation. For range SOP and other operational requirements refer to the range safety officer.

2. Contingency explosive FARP operations conducted as part of contingency operations that are either not expected to last for extended periods of time (12 months or less) or are of such short-notice that advance approval is not possible shall be approved by the unified commander or designated Component Commander, as appropriate. Contingency FARPs shall be established in accordance with the separation distances specified in Figure 5-4. When contingency FARP operations are expected to last more than 12 months, such locations require site approval from the cognizant fleet commanders-in-chief. The separation distances shown are the minimum required to prevent prompt propagation of explosives sites. However, subsequent reactions are probable with death to exposed personnel and substantial damage to assets expected. Aircraft and equipment will not be usable following such an incident. In order to prevent propagation or reaction between explosives sites, greater separation (asset preservation) distances should be provided. PTR separation distances will afford this level of protection.

From:	To:	Rearm Point	Ordnance Staging Area	Ordnance Buildup Area	Ordnance Storage Area	Red Label Area	Sling Out Area	Refueling Point	Bulk Fuel Storage	Bivouac/Billeting Area	Runway/Taxiway (DoD Use)	Runway/Taxiway (Joint Use)	Inhabited Building	Public Traffic Route
Rearm Point		IM	None	IL	IM	IM	IM	IL	IBD	IBD	Note 1	IBD	IBD	Note 3
Ordnance Staging Area		IM	IM	IL	IM	IM	IM	IL	IBD	IBD	PTR	IBD	IBD	Note 3
Ordnance Buildup Area		Note 2	IM	IL	IM	IM	IL	IL	IBD	IBD	PTR	IBD	IBD	Note 3
Ordnance Storage Area		Note 2	IM	IL	IM	IM	IM	IL	IBD	IBD	PTR	IBD	IBD	Note 3
Red Label Area		IM	IM	IL	IM	IM	IM	IL	IBD	IBD	Note 1	IBD	IBD	Note 3
Sling Out Area		IBD	IBD	IBD	IBD	IBD	IBD	IBD	IBD	IBD	Note 1	IBD	IBD	Note 3
Notes:	1. No ESQD applies, however, applicable NAVAIR airfield safety criteria shall be met. 2. K30 used for HC/D 1.1 items only. Use applicable PTR distance for													
	non-mass detonating explosives. </td <td></td>													

Figure 5-3.--Training Forward Arming And Refueling Point (FARP) Matrix.

From:	To:	Rearm Point	Ordnance Staging Area	Ordnance Buildup Area	Ordnance Storage Area	Red Label Area	Sling Out Area	Refueling Point	Bulk Fuel Storage	Bivouac/Billeting Area	Runway/Taxiway (DoD Use)	Runway/Taxiway (Joint Use)	Inhabited Building	Public Traffic Route
Rearm Point		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Ordnance Staging Area		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Ordnance Buildup Area		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Ordnance Storage Area		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Red Label Area		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Sling Out Area		IM	IM	IL	IM	IM	IM	100'	IBD	IBD	K4.5	IBD	IBD	Note 2
Notes:	1. Where asset preservation is a primary concern, use K24/K30 separation for H/D 1.1, and PTR separation distance for H/D 1.2,1.3, or 1.4. Applies wherever IBD is not specified. 2. PTR distance based on traffic density (low, medium, high). Refer to NAVSEA OP 5, Vol 1, Chapter 7.													

Figure 5-4.--Contingency Forward Arming And Refueling Point (FARP) Matrix.

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5013. RESPONSIBILITIES

1. <u>Commanding Officer (CO) Responsibilities For Site Planning</u>. The following requirements shall be observed for all PES and ES relationships encumbered by ESQD arcs:

a. Maintain a file copy of each site map, showing the locations of all magazines and magazine areas. In addition, the file will list the type and construction of magazines, the distances to inhabited buildings on and off the activity, public passenger railways, public highways, navigable channels, and intraline distances to explosive operations. The NAVFACENGCOM building numbers shall be indicated for each magazine. The site map shall be revised as often as necessary to maintain accuracy of the data. All site maps will be in 1:400 scale and of sufficient quality to be useable.

b. Maintain a file of the appropriate approval documents for all current A&E storage sites.

c. Obtain approval for any new ammunition or explosives storage sites, or modification to existing sites, prior to their construction.

d. Obtain approval for construction of any facilities that are unrelated to ammunition and explosives storage and operations, but may be affected by these storage and operations (i.e., within an IBD arc).

2. Facilities Planning/Public Works Responsibilities For Site Planning. Facility planners are responsible for routing all planned construction projects which may encumber explosive operations, or which violate existing ESQD arcs, through the installation Explosives Safety Office for ESO review, recommendations, and concurrence. Planners are responsible for providing all maps, blueprints, and construction details required by ESO, higher headquarters, and DDESB review authorities.

3. Explosives Safety Officer (ESO) Responsibilities For Site Planning. The ESO is responsible for the following site planning activities:

a. Review and recommend approval or disapproval of all facility construction, modification, or changes in usage impacting base explosives operations.

b. Sign block 8 of NAVMC Form 11010/31, Part II, Division A, upon concurrence of site plan.

c. Prepare and forward through the appropriate channels all site plans and approval requests.

d. Coordinate with facility planners to develop alternative site plans should original plans be found out of compliance with regulatory requirements.

e. Maintain accurate and up-to-date files of all approved site plans.

4. <u>Ammunition Officer Responsibilities For Site Planning</u>. Ammunition Officers are responsible for developing preliminary requirements for construction, modification, or changes in use of facilities to meet mission goals, and submitting these requirements through the appropriate channels for formal development. Ammunition Officers will work with ESOs and installation Environmental Offices to ensure that all requirements of these offices are included.

NOTE

The installation Environmental Office should be consulted early in the process to ensure sufficient time for preparation of required environmental documents.

5. <u>Installation Environmental Office Responsibilities For Site</u> <u>Planning</u>. The environmental office is responsible for coordinating with the ESO and ammunition personnel to ensure that all proposed construction, modification, or change in usage of explosives facilities comply with applicable Federal, DON, Marine Corps, State, and local environmental regulatory requirements. The environmental office will prepare all required regulatory documentation, studies, and reports relative to these requirements.

CHAPTER 6

AMMUNITION AND EXPLOSIVES (A&E) AMNESTY PROGRAM

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CHAPTER 6

AMMUNITION AND EXPLOSIVES (A&E) AMNESTY PROGRAM

6000. <u>BACKGROUND</u>. The physical security and accountability of A&E is of paramount importance to an effective explosives safety program. It is understood that many factors contribute to the loss of accountability; that acts of inattentiveness and distraction can lead to the same results as those of intentional theft and gross negligence. While strict adherence to the provisions of chapter 4 will safeguard against the intentional acts, measures are necessary to supplement the process, thereby ensuring maximum recovery of A&E items outside the supply system. An A&E amnesty program can satisfy this requirement. This chapter sets forth the guidelines and procedures for the Marine Corps A&E Amnesty Program.

6001. <u>AMNESTY PROGRAM GUIDELINES</u>. The A&E amnesty program is neither intended to circumvent normal turn-in and accountability procedures, nor as a substitute for sound leadership. Implementation of such a program is not mandatory, but subject to the discretion of the installation commander. If implemented, the program is to be established to provide an opportunity for individuals to return A&E that has been stolen, misplaced or inadvertently left in the possession of an individual. For this program to work, returns must be able to be made without fear of prosecution, therefore, amnesty turn-ins will not be the subject of an investigation of individuals making the turn-in. If implemented, each A&E amnesty program is subject to the following guidelines:

1. All A&E found on installation, excluding small arms ammunition (up to and including .50 caliber), will be considered extremely hazardous and will not be handled or moved by unauthorized personnel. Supporting explosive ordnance disposal (EOD) personnel shall be contacted immediately and will respond upon request to recover this category of A&E. Small arms ammunition may be delivered directly to the ASP. In the event that the ASP cannot respond in a timely manner, the provost marshal office (PMO), or EOD shall be contacted through the command duty officers. Regardless of the turn-in method,

neither documentation nor verification of identity is required. Using units discovering A&E after having completed their turnins and having their accounts reconciled are not authorized to use the amnesty procedures outlined herein. These units shall make amended turn-ins using the procedures set forth in chapter 4 of this Manual and those of chapter 7 of MCO P4400.150E.

2. Civilian law enforcement agencies shall be contacted when any A&E is discovered outside of the installation boundaries. EOD may be contacted in the event that the situation dictates.

3. To ensure proper control and safety, an A&E amnesty program can be supplemented by any of the following methods, or combinations thereof:

a. A&E amnesty days may be scheduled as often as deemed necessary for the collection of unauthorized A&E. Collection points shall only be established at locations that afford inhabited building distance (IBD) levels of protection. To ensure that proper care is exercised, properly qualified and certified ammunition or EOD personnel must be available and onhand to supervise amnesty turn-ins. The installation medical and fire departments shall be notified and be available on call should the need arise.

b. Installation commanders may establish dates and sites which explosives vehicles may be dispatched to receive amnesty turn-ins. The location of the amnesty vehicle must be selected so that it does not create a hazard to personnel and structures. At a minimum, locations shall afford IBD protection (i.e., minimum of 1,250 feet from inhabited areas or those frequented by personnel unrelated to explosives operations). Vehicles loaded with explosives shall use established explosive routes.

c. Due to the hazardous nature of A&E, the use of amnesty containers is the least desirable method of supporting an A&E amnesty program. If implemented, extreme care must be exercised to the physical location and construction.

(1) Permanent off-range locations shall be sited in accordance with NAVSEA OP 5, Volume 1. Containers placed on USMC ranges approved for the type of ammunition involved do not require a separate site approval as long as its location does not extend an IBD ESQD arc beyond established range borders.

(2) If used, amnesty containers are to be constructed of 10-gauge steel and secured with a lock in accordance with OPNAVINST 5530.13. Slots will be sized to accept no larger than a .50 caliber cartridge. Containers shall be limited to less than 100 lbs. total net explosive weight (NEW) of HC/D 1.3 and 1.4 munitions.

d. Personnel qualified and certified in accordance with MCO 8023.3 shall check containers on a daily basis. All A&E recovered shall be immediately returned to the installation ASP. Items that appear to be damaged or unsafe to move shall be left in place until examined by EOD personnel and conditional assessment made by senior EOD member.

6002. RESPONSIBILITIES

1. <u>Commanding Officers Responsibilities For An A&E Amnesty</u> <u>Program</u>. If an A&E Amnesty Program is implemented, unit commanders shall be responsible for the following:

a. Periodically brief assigned personnel on the existence and guidelines for the use of the A&E amnesty program.

b. Monitor the execution of the A&E amnesty program to ensure the guidelines are being properly followed.

c. Establish Standard Operating Procedures (SOPs) addressing details on the implementation of the installation's A&E amnesty program.

2. Ammunition Personnel Responsibilities For An A&E Amnesty <u>Program</u>. Ammunition personnel responsible for storage, inspection, and packaging of ammunition are responsible for the following:

a. Monitor amnesty containers daily, and remove any turned-in materiel.

b. Inspect turned-in materiel for serviceability and suitability for training.

c. Amend required accountability documentation if material is suitable for continued use.

d. Mark and package material for storage and transportation.

e. Request disposition instructions from the appropriate Service DDA for excess, obsolete, unserviceable and WMM materiel.

3. <u>Responsibilities Of All Personnel Utilizing A&E</u>. All personnel utilizing A&E are responsible for the following:

a. Follow established accountability and turn-in procedures for all A&E in their possession.

b. Take special precautions to ensure A&E is not inadvertently removed from training sites, discarded, or otherwise misdirected to circumvent established A&E turn-in and accountability procedures.

c. Understand installation amnesty program in the event A&E is inadvertently removed from an authorized training area.

CHAPTER 7

UNSERVICEABLE AND WASTE MILITARY MUNITIONS MANAGEMENT

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CHAPTER 7

UNSERVICEABLE AND WASTE MILITARY MUNITIONS MANAGEMENT

7000. BACKGROUND

1. The 12 February 1997, Military Munitions Rule (MR) amended the Resource Recovery and Conservation Act (RCRA) by defining the conditions under which munitions can become hazardous waste, therefore subject to regulation. The Environmental Protection Agency (EPA), in consultation with the DoD and appropriate State officials, developed and promulgated amendments to several sections within Title 40 Code of Federal Regulations (CFR), Environmental Protection that established standards for the identification, storage, transportation, and emergency responses for waste military munitions.

2. Largely as a result of DoD's effective management practices for the storage, transportation, and emergency responses, EPA incorporated several existing DoD practices into the MR.

3. In response to EPA's promulgation of the MR amendments to RCRA, in January 1998, the DDESB amended DoD 6055.9-STD to reflect several of the changes found in the MR.

4. Also in response to EPA's promulgation of the MR amendments to RCRA, the military Services developed and promulgated the DoD policy to implement the EPA's MR, effective 1 July 1998. This policy commonly referred to as the Munitions Rule Implementation Policy (MRIP), established the military Services' policy for the implementation and management of the MR. Chapter 6 of the MRIP created the designated disposition authority (DDA) as well as the process Services are to use to request disposition instructions for excess, obsolete, unusable (or unserviceable) and waste military munitions.

5. The DDA concept was created within DoD to ensure excess, obsolete, and unserviceable munitions that could potentially become hazardous waste are provided visibility and opportunity to be used beneficially consistent with RCRA and Service standards. The DDA is the only person within each service authorized to designate unused munitions (other than those that automatically become waste per the MR) as hazardous waste.

6. In addition to the MR and the MRIP, related issues included in this chapter include: explosives safety submissions, physical security & accountability, the reuse of ammunition and explosives (A&E) materials and ocean dumping of ammunition.

7001. POLICY

1. Maximize the use of valuable and limited Marine Corps owned and managed A&E resources through:

a. Intended use.

b. Legitimate emergency destruct and combat disposal (ED/CD) training.

- c. Maintenance and renovation.
- d. Recycling and recovery of chemicals and components.
- e. Foreign military sale.
- f. Demilitarization.

2. Ensure that unused A&E is NEVER buried, abandoned, destroyed, fired indiscriminately, or otherwise disposed of, in order to circumvent return to an ammunition support facility.

3. Comply with Federal, DoD, DoN, and USMC explosives safety and environmental regulations while seeking to reduce or minimize the generation of hazardous wastes and hazardous waste military munitions.

4. Direct the treatment of waste munitions at RCRA permitted and authorized treatment locations.

5. Ensure coordination with D/C I&L for matters involving waste military munitions.

7002. <u>MUNITIONS DISPOSITION PROCESS</u>. The DDA is responsible for and provides disposition instructions for unserviceable and waste military munitions (WMM). Usually ammunition in condition code "H" and condition code "V". Condition code "H" are those

ammunition items that are restricted from being used in their primary delivery form. However, these items are not immediately considered WMM since they may have further use as training ammunition in support of individual training standards (ITS) or may be transported to an authorized facility for the purpose of reuse, recovery, or for recycling. Condition code "V" is a waste designation code normally used by the DDA only. The two exceptions are when EOD has conducted an emergency response and for munitions that have been recovered when intent was abandonment. (Note: In the case of abandoned or buried munitions that have been recovered, personnel will contact the DDA for clarification and disposition instructions.) The munitions disposition process is a two-step process consisting of a request and a subsequent instruction.

1. <u>Ammunition Support Activity Initiated Requests for Munitions</u> <u>Disposition Instructions</u>. The installation or ammunition support facility storing and accounting for the unserviceable, or waste munitions will usually initiate the munitions disposition process by requesting munitions disposition instructions from the appropriate DDA.

a. Requests for disposition instructions for Class V(W) materiel in condition code "H" and condition code "V" will be sent to the Marine Corps DDA at <u>DDA@MCSC.USMC.MIL</u>. If email is not available a standard naval message will be sent to COMMARCORSYSCOM QUANTICO VA//AM-EES//.

b. Requests for Class V(W) materiel in all other condition codes will be sent to the Inventory Management and Systems Division (IMSD), Marine Corps Systems Command (COMMARCORSYSCOM (IMSD)).

c. Class V(A) requests will be sent to the Navy DDA at NAVSURFWARCENDIV CRANE IN//PM-42// via standard naval message.

2. DDA Initiated Munitions Disposition Instructions. On a recurring basis, the DDA will query the Marine Corps Ammunition Accounting and Reporting System (MAARS II) by ammunition support activity to determine quantities of on-hand unserviceable and waste Class V(W) assets. Queries will be sent electronically by the DDA to the CO or other designated point of contact to validate the MAARS II query. Ammunition support activity personnel will validate the query and return to the DDA within

30 days of receipt. The DDA will provide munitions disposition instructions based on the DODIC and quantity validated as well as required materiel to support ITS.

3. <u>Coordination</u>. The DDA will coordinate with IMSD, who will then issue munitions disposition documents providing instructions to the requesting unit within 60 days of receiving the request. The DDA's munitions disposition instructions to the requesting ammunition support activity will provide direction for the effective and compliant management of Class V materiel.

4. Munitions disposition instructions will be maintained at the ammunition support facility for 3 years.

7003. <u>MUNITIONS DISPOSITION REQUEST</u>. The ammunition support activity's request for munitions disposition instructions will contain the following information:

- 1. DODIC and nomenclature for each item.
- 2. Quantity and unit of issue.
- 3. Material condition code.

4. Applicable notice of ammunition reclassification (NAR), ammunition information notice (AIN), or reason for local condition code change.

5. Potential for local use by ammunition and/or explosive ordnance disposal (EOD) technicians in support of MCO 1510.78A requirements. If the ammunition support activity's request for munitions disposition instructions also contains a request to conduct ED/CD training, the request will state the approximate date of the training and the anticipated number of personnel to be trained. Additionally, in a separate paragraph, this request will identify the type and quantity of donor materiel required. If donor materiel is required, ensure the request includes CG MCCDC QUANTICO VA (C465RA2) as an information addressee. The DDA will provide a coordinated response. If the request is sent via email, the DDA will coordinate the special allowance for Donor Material with MCCDC.

6. Additional information pertinent to the request or situation surrounding the request.

7. Reason each munition on request became unserviceable.

8. Local point of contact.

9. Figure 7-1 provides a sample request for munitions disposition instructions.

7004. MUNITIONS DISPOSITION INSTRUCTIONS

1. <u>DDA Disposition Options</u>. The DDA's options in response to requests for munitions disposition instructions include:

a. Transportation to a depot level facility capable of performing resource recovery and recycling, further evaluation to determine final condition code, or waste treatment.

b. Authorization for local ED/CD training if requested.

c. Designation as waste munitions.

2. <u>Required Information</u>. The DDA's munitions disposition instructions will include the following specific guidance for each DODIC requested:

a. <u>Shipment to Designated Depot or Other Capable Activity</u>. The DDA/IMSD will provide document numbers for the shipment of Class V materiel in the munitions disposition instructions.

b. <u>Authorization to Conduct ED/CD Training</u>. The authorization to conduct local training will list DODIC and quantities and any other pertinent information.

c. <u>Management as Waste Munitions</u>. In the event Class V materiel is designated as waste munitions, the DDA will include specific guidance in the munitions disposition instructions.

d. <u>Types of instructions</u>. Past munitions disposition instructions have included several separate actions such as authorization for ED/CD training with a specified quantity, with

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balance shipped to a depot for further determination of classification or resource recovery and recycling.

e. <u>Appropriate Change of Condition Code</u>. The DDA will state the applicable condition code for materiel authorized for ED/CD training as well as for waste military munitions.

f. <u>Coordinating Instructions</u>. Although many munitions disposition requests and subsequent instructions are routine, unique situations regularly arise requiring additional case-bycase specific coordination with various organizations both internal and external to the Marine Corps. The DDA will provide amplification and coordinating instructions as required.

3. Figure 7-2 provides a sample of munitions dispositions instructions.

7005. MISFIRES

1. Misfires considered both safe to transport off-range and to store in designated ammunition storage units (ASU's) will be evaluated for repair, reuse, or additional evaluation (e.g., malfunction or misfire investigations, failure analysis, testing for RDT&E purposes, and evaluation for possible repair or reuse). These munitions are not classified as WMM, but will be reclassified into the appropriate condition code after the required evaluation is completed. Depending on the reclassification action taken upon completion of evaluation, the ASU in physical possession of the munition may have to request munitions disposition instructions per this chapter.

2. The MR recognizes range management is necessary for the safe use of DoD ranges and that range clearance activities are a necessary part of range management. When military munitions are used as intended, a small percentage may fail to function properly (malfunction, misfire, and hangfire). Range clearance, conducted to destroy military munitions that may pose an explosive safety hazard, can include destruction in place or collection and destruction elsewhere on the range. This <u>DOES</u> <u>NOT</u> extend to malfunctioned or misfired munitions items removed from the range that require a request for disposition instructions per the procedures specified in paragraph 7002 of this chapter.

3. "Hangfires" in most weapon systems differ from "misfires" in that in a hangfire, the round fully functions after an initial delay. However, hangfires in missiles are defined as an event in which the prefiring sequence has been initiated but the missile does not launch from the missile tube. A missile misfire is defined as an instance when no prefire event occurs. Proper operator procedures for distinguishing hangfires are contained in the operator's manual for each particular missile. All missiles that are determined to be hangfires are not safe for return to storage and shall be destroyed on the launch position and shall not be transported off-range nor returned to the ASU. Misfired missiles, except for Stinger, shall be handled in the same manner as all other misfires. Stinger misfires shall be destroyed on the launch

7006. <u>RECOVERED MILITARY MUNITIONS</u>. Military munitions recovered during exercises on Marine Corps installations are divided into two categories:

1. Abandoned and Subsequently Recovered Unused Waste Military Munitions. Unused military munitions that have been buried or abandoned with intent to dispose will be managed as WMM.

a. Recovered WMM will be placed in authorized waste munitions storage magazines and the cognizant ammunition support activity will request munitions disposition instructions from the DDA within 96 hours from the time the waste military munitions have been turned-in.

b. No disposal or destruction action shall take place without DDA instructions unless declared an emergency by EOD.

c. <u>Example</u>. An unused 40mm grenade found in a dumpster. This example is a waste since the intent is clearly disposal.

2. <u>Recovered Unused Military Munitions</u>. Those military munitions that have been recovered when the intent to abandon is not clearly evident will be turned into the installation ammunition support activity for further evaluation provided subject munitions are determined to be safe for transportation and storage.

a. Qualified ammunition personnel will determine the applicable condition code in accordance with applicable Class V technical manuals.

b. If the recovered Class V materiel is deemed unserviceable, subject munitions will be managed per the munitions disposition process.

c. <u>Example</u>. An unused TOW missile is left on a range and the next unit discovers. This example is not automatically a waste since the <u>intent</u> does not clearly indicate intent to dispose. Further investigation will determine whether the TOW should be classified as a waste or reclassified back into serviceable status.

3. <u>Recovered Munitions Coordination</u>. Any time munitions are recovered, the DDA, installation environmental office, and EOD should be notified as soon as possible.

7007. EMERGENCY DESTRUCT AND COMBAT DISPOSAL (ED/CD) TRAINING

1. MCO 1510.78A lists specific quantities of Class V(W) required to support ammunition and explosives technician ITS proficiency for ED/CD.

2. Excess, obsolete, and unserviceable Class V materiel will be considered for ED/CD training when submitted in the request for munitions disposition instructions. The DDA will examine DODICs and quantities to ensure compliance with MCO 1510.78A requirements.

3. Ammunition support activities requesting authorization to conduct ED/CD training will ensure that ED/CD training is preplanned and documented in local Standard Operating Procedures (SOPs) and that Marines participating in ED/CD have training documented in centrally-managed training files. These files are subject to inspection and evaluation.

7008. SPECIAL ALLOWANCES OF CLASS V(W) MATERIEL IN SUPPORT OF ITS MAINTENANCE. In the event ED/CD training is requested donor materiel will be included and separately annotated. The Marine

Corps DDA will coordinate the request for special allowance of donor materiel with CG MCCDC.

7009. FOREIGN MILITARY MUNITIONS MANAGEMENT

1. Increased training opportunities with foreign countries has made it imperative that foreign military munitions used by or in support of the DoD on Marine Corps installations have a preapproved plan for the retrograde of any excess and or unserviceable foreign military munitions.

2. The hosting command will ensure that users of foreign military munitions on Marine Corps installations have a preapproved plan for retrograde of any excess or unserviceable material that provides for the removal of all unused material within 30 days of the completion of the exercise. All foreign agents shall make every effort to retrograde foreign military munitions to their point of origin.

3. Foreign military munitions remaining after the execution of the established retrograde plan fall under the cognizance of the Marine Corps installation and meet the definition of military munitions per the MR.

4. In the event that foreign military munitions remain under the control of the Marine Corps, munitions disposition instructions will be requested through the DDA's within 30 days. Disposition for Class V(W)-type materiel will be provided by Marine Corps Class V(W) DDA. Disposition for Class V(A) type materiel will be provided by the Navy DDA. Additionally, it might be necessary to request for the storage of non-DoD munitions. See chapter 3 for requesting non-DoD munitions storage authorization.

7010. <u>STANDARD OPERATING PROCEDURES (SOP)</u>. Ammunition support facilities will establish and maintain current SOPs as specified in this Manual; NAVSEA OP 5, Volume 1; and NAVSEAINST 8023.11. SOPs associated with WMM will be reviewed by the installation environmental office in addition to the installation ESO to ensure proper procedures are addressed. In addition to the requirements found in the references, the local SOP will contain the following information:

1. Procedures for requesting, executing, and maintaining munitions disposition instructions.

2. Procedures for conducting ED/CD training in support of MOS 2300 ITS.

3. Storage plans for WMM based on the type storage available (i.e., CE for storage, RCRA permitted storage of hazardous WMM, or less than 90-day hazardous waste storage). (Note: Those activities storing waste military munitions using an other than CE approach, must comply with MCO P5090.2A hazardous waste requirements, this Manual, and NAVSEA OP 5, Volume 1.) Those activities storing waste military munitions in CE status will comply with the tenants of this Manual; NAVSEA OP 5, Volume 1; and MCO P5090.2A.

4. Inspection and inventory criteria for waste military munitions. WMM will be inventoried annually and inspected quarterly.

5. Contingency plan of action to address potential hazardous situations involving A&E to comply with NAVSEA OP 5, Volume 1, and MCO P5090.2A requirements.

6. Training requirements per MCO P5090.2A ensure ammunition personnel involved with waste munitions handling or management receive the initial Hazardous Waste training and the required annual refresher training. This training will be fully documented in the individuals qualification/certification training jacket.

NOTE

Most Marine Corps environmental offices provide hazardous waste training and should be contacted for scheduling and quotas.

7011. <u>RECORDKEEPING</u>. To comply with Marine Corps and Federal explosives safety and environmental regulations pertaining to Class V materiel, the following records will be maintained for 3 years:

1. Disposition instructions involving Condition codes ``H'' or condition code ``V'' .

2. Quarterly inspections and annual inventories for WMM.

3. Explosives safety and environmental compliance evaluations and inspections.

4. Personnel training records for WMM handling and management.

5. Hazardous waste manifests will be used in the event WMM is shipped if the conditional exemption for transportation cannot be used.

6. Records of all WMM stored under CE.

7012. <u>PHYSICAL SECURITY AND ACCOUNTABILITY</u>. Unserviceable A&E and WMM shall be provided the same degree of security and accountability that is afforded other categories of A&E material.

7013. TRANSPORTATION OF WASTE MILITARY MUNITIONS (WMM). WMM will be transported in accordance with the MR, MCO P4600.14B, MCO P4450.12, and MCO P5090.2A.

1. <u>Conditionally Exempt (CE) WMM Transportation</u>. WMM will be transported (i.e., without a hazardous waste manifest) when all States along a planned shipment route have either implemented the Federal MR or adopted CE, and when the following conditions are met:

a. The WMM are not chemical agents or chemical munitions.

b. The WMM must be transported from a military owned or operated installation or activity to a military owned or operated treatment, storage, or disposal facility with applicable shipping documents.

NOTE

Shipments to a commercial facility are not eligible for CE.

c. In the event of loss or theft, the transporter notifies the installation environmental office and the ammunition storage activity.

2. CE applies to WMM transported by either military personnel or commercial carriers, who have signed a contractual agreement with the Military Traffic Management Command and who operate under the DoD and Department of Transportation (DoT) system of shipping controls.

3. If a receiving activity (i.e., Marine Corps installation;, ammunition depot;, or Government-owned, contractor-operated (GOCO) facility does not receive the WMM shipped under CE within 45 days of the day it was shipped, the environmental office will make notifications required per MCO P5090.2A.

a. Loss of CE. Failure to comply with any of the conditions listed above will result in the immediate loss of CE. The loss of CE will subject the WMM to RCRA hazardous waste regulation as specified in MCO P5090.2A and could result in an enforcement action (e.g., fine or penalty, from the date of the violation).

b. <u>Reinstatement of CE</u>. When CE is lost for any WMM, the installation environmental office will coordinate in conjunction with the ammunition supply activity, and the traffic management office, after meeting all requirements for CE. After internal coordination, the installation environmental office shall apply to the appropriate Federal or State environmental regulatory authority for reinstatement.

4. Transportation of WMM within the boundary of an installation are not subject to RCRA transporter requirements. Additionally, if the shipment occurs on a public or private right-of-way that is within or along the border of the installation, a RCRA hazardous waste manifest is not required. The installation environmental office should be notified of any movement of WMM on the installation.

5. Off-site transportation of WMM not shipped under CE must comply with RCRA transporter requirements as specified in MCO P5090.2A, MCO P4400.16B, and MCO P4450.12.

7014. STORAGE OF WASTE MILITARY MUNITIONS

1. Requirements for Storing WMM. Waste military munitions will be stored in accordance with this Manual; MCO P5090.2A; DoD 6055.9-STD; and NAVSEA OP 5, Volume 1. This section addresses the storage of WMM using the conditionally exempt storage concept. Note CE storage is not the only storage available for WMM. An ammunition storage activity in consultation with the installation environmental and installation explosives safety office may determine that other WMM storage is better suited for that particular activity. Other storage options for WMM may include permitted storage, less than 90-day storage, and satellite accumulation point storage. All WMM storage to include CE falls under RCRA and as such must be coordinated with the installation environmental office prior to storing any WMM. The installation explosives safety office must also be involved prior to storage of any WMM to ensure compliance with explosives safety requirements and regulations.

2. <u>Conditionally Exempt (CE) WMM Storage</u>. For conventional WMM stored under the jurisdiction of the DDESB, a conditional exemption from certain RCRA requirements may be granted if the following conditions are met:

- a. Administrative Requirements.
 - (1) The State allows the use of CE for the storage of WMM.
 - (2) The WMM is not a chemical munition.

(3) There are no waivers or exemptions to DoD 6055.9-STD for the specific storage unit where the WMM will be stored.

(4) The installation's environmental office notifies the appropriate Federal or State environmental regulatory authority of the location of any storage facility used to store WMM within 90 days of the date the unit was first used to store WMM under CE.

(5) The installation ASU keeps written records of all WMM stored under CE. These records, which will be maintained for 3 years from the date WMM were last stored under CE, will contain the following information:

(a) The type of WMM stored by standard nomenclature, lot number, Federal supply class (FSC), national stock number (NSN), Department of Defense identification code (DODIC), and condition code.

(b) The quantity of each type of WMM stored.

(c) The date that each military munitions, by type, was identified as waste.

(d) The last storage date for each, by type, WMM.

(e) The storage location or locations (e.g., building number or storage pad, and grid coordinates) used to store WMM.

(f) The disposition (e.g., destroyed, demilitarized, shipped) and date of action, by type, of the WMM.

(g) When applicable, the sending and receiving sites for those WMM received from or shipped to off-site sources.

(6) The ammunition storage facility inventories any WMM stored under CE, at least annually and maintains these records for 3 years.

(7) The ammunition storage facility inspects any WMM stored under CE, at least quarterly, for compliance with the conditions of CE and maintains records of the findings of these inspections for 3 years.

(8) All storage units, including those that store conditionally exempt WMM, will be subject to installation environmental, or responsible activity-specific SOPs or plans designed to provide safety, security, and environmental protection. At a minimum the following information shall be provided to the appropriate installation office for inclusion in required SOPs or plans:

(a) Ammunition specific section that includes the type, quantities, and location of munitions stored.

(b) Provisions limiting access to trained and authorized personnel.

(c) Procedures minimizing the possibility of an unpermitted or uncontrolled detonation, release, discharge, or migration of military munitions or explosives out of any storage unit when such release, discharge, or migration may endanger human health or the environment.

(d) Provisions for prompt notification to installation emergency response and environmental office in the event of an actual or potential detonation or uncontrolled release, discharge, or migration (that may endanger human health or the environment).

b. Design and Operational Requirements

(1) The installation will ensure it implements procedures and measures to prevent loss or theft of WMM.

(2) Access to units used to store WMM will be limited to appropriately trained, specifically authorized personnel. Installation, Federal and State environmental regulatory personnel, who require access to determine whether WMM are stored who have been briefed on explosives safety concerns and cleared for access, are considered trained and authorized. ASU and environmental personnel will escort these personnel.

(3) Storage of WMM under CE will comply fully, without waiver or exemption, with DoD 6055.9-STD.

(4) Physically separate (e.g., on a separate pallet or shelf, etc.) WMM from non-WMM when both are stored in the same storage unit or area.

(5) Clearly mark the separated WMM as such to ensure proper identification. (Note: Marking of the area {e.g., shelf, pallet, or storage facility} in which WMM are physically separated is sufficient to meet this requirement. Therefore, it is not necessary to unpackage WMM to mark each round or box.)

(6) ASU will manage WMM and any WMM residues to ensure there is no migration of contaminants out of storage units.

(7) For non-chemical agent WMM that contain liquids (e.g., munitions or missiles that use liquid propellants), the ASU used to store the WMM must have either a secondary containment

system, which ensures that any released liquids are promptly detected and detained until properly removed from the area, or a vapor detection system, which ensures that any released liquids or vapors are promptly detected so that an appropriate response is taken. For these WMM, the storage of non-leaking weapons in their shipping or storage container is considered a means of secondary containment. Ensure that all spill residues are managed in accordance with explosives safety and environmental requirements.

c. <u>Reporting Requirements for CE</u>. In addition to other applicable MR reporting requirements, the installation environmental office will notify their chain of command, DC I&L (LFL), MARCORSYSCOM (PM AM), and the appropriate Federal or State environmental regulatory authority, telephonically or electronically (by email, message or facsimile) and using the format specified in chapter 13, DoD 6055.9-STD within 24 hours from the time the installation becomes aware of any unpermitted or uncontrolled detonation, release, discharge, or migration of WMM out of any storage unit that may endanger human health or the environment. If the initial report was made telephonically, a written report must be submitted within 5 days of the incident.

d. Loss of CE. The unpermitted or uncontrolled detonation, release, discharge, or migration of WMM out of any storage unit that might endanger human health or the environment will result in the immediate loss of CE for those WMM. The loss of CE will subject the WMM to RCRA HW regulations as specified in MCO P5090.2A and could result in an enforcement action with potential fines or penalties from the date of violation.

e. <u>Reinstatement of CE</u>. When CE is lost for WMM storage, the installation environmental office will coordinate with the ammunition storage facility to prepare the application to request the reinstatement of CE. The request for reinstatement shall include a written report that details the incident or violation that caused the loss of CE. After internal coordination, the installation environmental office shall apply the appropriate Federal or State environmental regulatory authority for reinstatement.

f. <u>Termination of Use and Closure Requirements for Storage</u> Units. When storage units that have stored WMM are to be closed

coordinate all actions with the installation environmental office, COMMARCORSYSCOM (AM) and DC I&L (LFL).

7015. <u>RETURN OF REUSABLE A&E MATERIEL</u>. Except under conditions where it will hinder combat operations, original packaging material shall not be destroyed or discarded until after the A&E is expended. Reusable containers shall be returned to the ASP for disposition. A list of reusable containers for Class V(A) material is contained in the current edition of NAVSUP P-724. A list of reusable containers for Class V(W) material will be published periodically by COMMARCORSYSCOM via AIN as conditions warrant.

7016. <u>OCEAN DUMPING</u>. Class V materiel and WMM will not be dumped or discarded in National or International waters. Disposition of this material will follow the munitions disposition process outlined in this chapter. The only exception is in the event of an emergency. When, in the opinion of the ship's commanding officer, munitions or WMM present a danger to the safety of the ship or personnel, ocean dumping may be directed.

7017. EXPLOSIVES SAFETY SUBMISSION. DoD 6055.9-STD requires that a response action plan be submitted to the DDESB for review and approval of explosives safety aspects when real property known or suspected to contain military munitions is considered for lease, transfer, excess, or disposal from DoD ownership or control. Additionally, an after action report is required to be submitted at the end of the project. All emergency response actions will be included in this report, which will remain indefinitely in an explosives safety repository.

7018. RESPONSIBILITIES

1. Commander, Marine Corps Systems Command (COMMARCORSYSCOM)

a. Designate an individual as the Marine Corps DDA for Class $\mathsf{V}(\mathsf{W})$ ammunition.

b. Coordinate all WMM issues, plans and reports for response actions with DC I&L.

c. Develop and maintain a repository of military munitions response action notification.

d. Provide guidance for the preparation of explosives safety submissions (ESSs) for response actions involving military munitions.

e. Provide guidance for addressing the explosives safety concerns in health and safety plan development/execution, personnel qualification, and quality assurance.

f. Review/approve ESSs and forward them to the DDESB or other entities, as appropriate.

g. Provide an oversight and verification process addressing the implementation of explosives safety principles in response actions involving munitions.

h. Using the process described above, provide explosives safety oversight of ongoing response actions to include, at a minimum, ESS compliance, health and safety plan execution, personnel qualification, and quality assurance.

i. Review and approve ESS amendments and forward them to the DDESB or other entities, as appropriate.

j. Review and approve after action reports (AARs) to verify that appropriate explosives safety actions have been completed in accordance with selected response actions and associated ESSs.

k. Provide formal verification of the final response action.

2. Class V(W) DDA Responsibilities

a. Manage unserviceable and waste munitions to achieve maximum utility while reducing or minimizing the generation of hazardous waste from WMM consistent with explosives safety and environmental policies, regulations, and requirements.

b. Ensure excess, obsolete, and unserviceable munitions that could potentially become hazardous waste are provided visibility and opportunity to be used beneficially consistent with explosives safety and environmental policies, regulations, and requirements.

c. Designate unused munitions as WMM as required.

d. Coordinate disposition instructions for excess and obsolete munitions.

e. Provide munitions disposition instructions for unserviceable and WMM to Marine Corps ammunition support activities or wherever Marine Corps Class V(W) materiel is stored:

(1) Within 60 days of receipt of the request for disposition instructions.

(2) Ensure that the installation environmental office is provided a copy of munitions disposition instructions involving WMM.

f. Represent CMC, as required, for matters involving unserviceable and waste military munitions.

g. Coordinate policy for the management for unserviceable, and WMM with appropriate Marine Corps activities and CMC as appropriate.

h. Retain copies of munitions disposition instructions for 3 years.

3. Marine Corps Ammunition Storage Units or Facilities

a. Request munitions disposition instructions from the appropriate authority for excess, obsolete, unserviceable, waste Class V, foreign, and non-DoD munitions.

b. Execute the munitions disposition instructions as directed.

c. Ensure that the items designated as WMM by the DDA are prepared for shipment.

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d. Complete appropriate shipping control documents if transporting under CE.

e. Maintain the following records for 3 years:

(1) Munitions disposition records to include:

(a) Munitions disposition requests.

(b) Munitions disposition instructions.

(c) When required, the installation environmental office will prepare and sign the HW manifest.

(2) Record of ED/CD training to include:

(a) Names of the individuals trained.

(b) Training date.

(c) Purpose of the training supported by lesson plans, local SOPs, and ITS.

(d) Types and quantities of munitions used.

(e) Location or ranges where training was conducted.

(3) All shipping documentation for non-waste and waste Class V materiel.

(a) For non-waste Class V materiel, retain copies of shipping control documents per MCO P4600.14B and MCO P4450.12.

(b) For waste Class V materiel, retain copies of hazardous waste manifest and/or appropriate shipping documentation if transported in conditionally exempt status, per MCO P5090.2 and MCO P4450.12.

f. Maintain a current and updated notice of ammunition reclassification (NAR) manual.

g. Maintain copies of results from the two most recent inspections, surveys, and evaluations (e.g., ECE, ESI, AMHAZ, DDESB).

h. Maintain local waste munitions inspections and inventory records.

i. Ensure that users of foreign military munitions on Marine Corps installations have an approved plan for retrograde of any excess or unserviceable materiel prior to requesting approval to store non-DoD munitions.

j. Maintain copies of results from the two most recent inspections, surveys, and evaluations (e.g., ESI, DDESB, AMHAZ, and ECE).

k. Provide copies of WMM inspections and inventories to the installation environmental office.

1. Conduct local WMM inspections.

4. <u>Installation Environmental Office Responsibilities</u>. The installation environmental office is responsible for the following:

a. Prepare and sign the HW manifest.

b. Coordinate the shipment with the receiving activity if the shipment is designated for waste treatment.

c. Notify the Federal/State environmental agencies in the event that a shipment of WMM is lost.

d. Coordinate the reinstatement of CE for transportation when required.

e. Provide/coordinate hazardous waste training (initial and recurring).

f. Incorporate WMM storage and handling training records into existing environmental compliance evaluations.

g. Update the installation's emergency preparedness and contingency plan to reflect ammunition and explosives.

h. Provide written notification of all response actions involving military munitions to COMMARCORSYSCOM and DC I&L (LFL).

i. Develop ESSs for COMMARCORSYSCOM approval and DC I&L (LFL) review and concurrence.

j. Develop (for ESS preparation/submission), safety and health plans, qualification of personnel documentation and quality assurance and procedures that address explosives safety.

k. Provide (for ESS preparation/submission), as appropriate, additional supporting documentation, such as legal documents, to COMMARCORSYSCOM and DC I&L (LFL).

1. Coordinate (for ESS) response actions with COMMARCORSYSCOM (AM), DC I&L (LFL), and the appropriate installation ESO and EOD personnel.

m. Conduct the response action in accordance with the approved ESS.

n. Amend, as appropriate, approved ESSs to reflect changes in the selected response action and submit the amendments to COMMARCORSYSCOM.

o. Develop proposed language for ESS for deeds, activity master plans, or other land use controls in collaboration with DC I&L (LFL) and COMMARCORSYSCOM.

5. <u>Installation Explosives Safety Officer Responsibilities</u>. The installation ESO will exercise management oversight in those areas of procedure, practices, and record keeping which relate or overlap with explosives safety requirements.

6. Foreign Military Agent Responsibilities

a. Develop and provide a pre-approved retrograde plan to the installation ammunition support activity prior to storing foreign military munitions in Marine Corps ammunition support activities.

b. Retrograde foreign military munitions to their point of origin within 30 days after completion of an exercise per the pre-approved retrograde plan.

From: Requesting Activity Ammunition Storage Facility
To: Designated Disposition Authority (E-mail)
Date:

Subj: REQUEST FOR CLASS V(W) MUNITIONS DISPOSITION INSTRUCTIONS

1. The below-listed items are unserviceable; request disposition instructions be provided.

2. There are no applicable NARs for the below-listed items.

3. Items are unserviceable returns from using units and are in C/C H due to loss of lot identity. Items can be utilized for local ammunition and EOD emergency destruction/combat destruction (ED/CD) training.

4. Training dates are scheduled for late March 2001. Approximately 18 personnel are to attend this training.

5. Following items are requested for ED/CD training:

DODIC	NOMEN	QTY	C/C
A011	CTG 12 GA #00 BUCK	3	Н
A023	CTG 12 GA SLUG	2	Н
C869	CTG 81MM HE	3	Н

6. If paragraph 5 is approved, request the following donor material be provided:

DODIC	NOMEN	QTY
M030	CHG ¼ LB TNT	20
M171	NON-ELC CAPS	70
М766	IGNITORS	70
M670	TIME FUSE	800′

Figure 7-1.--Sample Request For Munitions Disposition Instructions.

From: FM COMMARCORSYSCOM QUANTICO VA//AM/EES-DDA// To: REQUESTING ACTIVITY AMMUNITION STORAGE FACILITY Date:

Subj: INSTRUCTIONS FOR CLASS V(W) MUNITIONS DISPOSITION

REF /A/ EMAIL

REF /B/ DOC/CFR/40/900812

REF /C/ DOC/MRIP/980701

REF /D/ RMG/ R/ 151237Z NOV 99 ZYB/SUBJ/MUNITIONS MANAGEMENT POLICY FOR UNSERVICEABLE AND WASTE CLASS V (W) MATERIEL NARRATIVE. REFERENCE A IS THE REQUEST FOR DISPOSITION FOR MILITARY MUNITIONS. REFERENCE B IS TITLE 40 PROTECTION OF THE ENVIRONMENT, SUBPART M WHEN MILITARY MUNITIONS BECOME A SOLID AND HAZARDOUS WASTE SUBJECT TO REGULATION. REFERENCE C, THE DOD MUNITIONS RULE IMPLEMENATION POLICY, ESTABLISHED THE DESIGNATED DISPOSITION AUTHORITY PROCESS FOR EXCESS, UNSERVICEABLE AND WASTE MILITARY MUNITIONS (MRIP). REFERENCE D IS THE POLICY MESSAGE CONTAINING SPECIFIC INFORMATION FOR REQUESTING MUNITIONS DISPOSITION INSTRUCTIONS.

1. In response to reference (a) and in accordance with references (b), (c), and (d), the below listed munitions are authorized for use in ED/CD training.

2. Retain subject Munitions Disposition Instructions and training records for a minimum of three years.

DODIC	C/C	QTY	DISPO
A011	Н	3	ED/CD
A023	Н	2	ED/CD
C869	Н	3	ED/CD

3. The following donor material is approved.

DODIC	NOMEN	QTY
M030	CHG ¼ LB TNT	20
M171	NON-ELC CAPS	70
M766	IGNITORS	70
M670	TIME FUSE	800′

Figure 7-2.--Sample Munitions Disposition Instructions.

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MALFUNCTION AND MISHAP REPORTING

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CHAPTER 8

MALFUNCTION AND MISHAP REPORTING

8000. <u>BACKGROUND</u>. It is essential to the safety of personnel that all malfunctions, mishaps and accidents involving A&E be immediately reported. Therefore, it is imperative that the provisions outlined in this chapter and all cited references be closely examined and adhered to.

8001. <u>MALFUNCTIONS</u>. Malfunction is the term applied to an explosive material or system when it fails to function in a manner for which it was designed.

8002. <u>RESPONSIBILITTIES</u>. Unit commanders are responsible for the following:

1. Report all malfunctions involving the use of Class V(W) in accordance with MCO 8025.1D.

2. Report all malfunctions involving the use of Class V(A) in accordance with OPNAVINST 8000.16A.

3. Report non-aircraft related explosive mishaps as a separate safety investigation report (SAFEREP) or hazard report (HR) in accordance with MCO P5102.1A.

4. The CO/OIC shall not attempt to distinguish the cause of the incident as weapons related or explosives related. Rather, report and permit qualified technical investigators to determine cause.

5. Maintain the integrity of mishap sites and physical exhibits pending determination of a need for investigation.

6. Maintain a record of all malfunctions and mishaps including recommendations for preventive measures.

7. Notify the installation explosives safety officer (ESO) and provide the ESO copies of any explosives malfunction/mishap reports.

CHAPTER 9

RECLASSIFICATION (CHANGE IN CONDITION CODE)

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CHAPTER 9

RECLASSIFICATION (CHANGE IN CONDITION CODE)

9000. <u>BACKGROUND</u>. Certain actions to include but not limited to, malfunctions or surveillance testing, may require that munitions be reclassified into unserviceable condition codes. Once an item has been determined to be in excess or is no longer in a serviceable condition code, the supporting ammunition activity must request disposition from the Marine Corps designated disposition authority (DDA). Chapter 7 of this Manual provides details for requesting munitions disposition instructions. Therefore, it is imperative that the provisions outlined in this Chapter and all cited references be closely examined and adhered to.

9001. LOSS OF LOT IDENTITY. Small arms ammunition without lot number identity, which is otherwise serviceable, will be returned to a serviceable condition code provided that it meets the following restrictions:

1. If it can be determined that returned small arms ammunition were issued from a specific lot and the lot has not since been reclassified by a notice of ammunition reclassification (NAR), assign the lot number from which the ammunition was originally drawn. Issue subject ammunition on the next requisition from the major subordinate command (MSC) from which the turn-in was received.

2. If multiple lots were drawn, and no single lot number can be isolated for assignment, storage activities may consolidate the items into a "grand lot" and assign a local lot number. These assets will then be issued on the next requisition from the MSC from which the turn-in was received. However, if a NAR affecting any lot within the grand lot is received, the entire grand lot must be relegated to the applicable NAR-prescribed condition code.

9002. NOTICE OF AMMUNITION RECLASSIFICATION (NAR) MANAGEMENT. NAVSUP P-801/TW024-AA-ORD-010, "The NAR Manual", is the source for identifying suspended, limited use, and unserviceable

ammunition. Ammunition storage activities must manage their inventory per this reference to ensure that all munitions distributed are safe and serviceable. Failure to identify pertinent NARs may cause malfunction, injury, death, destruction to property, and potentially generate waste military munitions.

9003. <u>RESPONSIBILITIES</u>

1. <u>Command Responsibilities for Reclassifiaction of A&E</u>. Commanders at all levels are responsible for reviewing all NAR and ammunition information notice (AIN) messages released upon receipt to determine if on-hand assets are appropriately classified. NAVSUP P-801/TWO24-AA-ORD-010 provides a compilation of previously released NARs. This information is also readily available from the Navy Ammunition Logistics Center web page, www.nalc.navy.mil.

2. <u>Issuing Unit Responsibilities for Reclassification of A&E</u>. Prior to issuing A&E, each issuing unit shall cross-reference NARs and AINs with on-hand stock to ensure only serviceable assets are used.

3. <u>Responsibilities for Reclassification of A&E by Marine Corps</u> <u>Units Supported by Army Activities</u>. Marine Corps units directly supported by an Army activity shall utilize the current edition of NAVSUP P-801/TW024-AA-ORD-010 for NAR and AIN information. When clarification is necessary, contact COMMARCORSYSCOM (AM).

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CHAPTER 10

EXPLOSIVES SAFETY OFFICER (ESO) TRAINING/QUALIFICATION AND CERTIFICATION REQUIREMENTS

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CHAPTER 10

EXPLOSIVES SAFETY OFFICER (ESO) TRAINING/QUALIFICATION AND CERTIFICATION REQUIREMENTS

10000. BACKGROUND. In order to conduct an effective explosives safety program, Marine Corps military and civilian ESO must fully understand not only explosives safety regulatory requirements, but also the interaction between those requirements and the requirements of ammunition life-cycle management. Formal training in a variety of disciplines is necessary to achieve this understanding. Marine Corps ESOs must also have full knowledge of the distinctions among explosives safety requirements/policies of the various Services in order to function effectively in the increasingly joint operational To this end the Commander, Marine Corps Systems Command arena. (MARCORSYSCOM), as delegated by Commandant, U.S. Marine Corps/Safety Division (CMC/SD) through MCO 5100.29, is responsible for establishing training/qualification requirements for personnel involved in the conduct of the Marine Corps Class V(W) and non-operational aspects of Class V(A) explosives safety program. In view of the complex mix of experience, training, and the broad variety of disciplines involved, explosives safety within the Marine Corps, is recognized as a unique and inherently governmental function not subject to contracting/ This chapter defines the Marine Corps explosives privatization. safety training/qualification requirements.

10001. LETTER OF ASSIGNMENT. Installation commanders will appoint, in writing, qualified individuals to serve as the ESO. All Marine Corps installations that routinely store, handle, transport, use, maintain, assemble/disassemble, or train with Class V (A) or (W) materials will have an ESO and a formal explosives safety program. Management and execution of the installations explosives safety program will be the appointee's primary duty. Due to the multitude of program requirements and specialized knowledge required to perform these duties, all commands should recognize that full-time dedication is essential, and that any additional assignments be kept to a minimum. Due to the complex issues and catastrophic consequences that may arise direct access to the installation commander is essential. As such, the ESO shall report directly

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to the installation commander, and should be assigned to the commanding officer's advisory staff. The ESO will be included on all installation facility planning teams/panels/boards to provide input as necessary.

10002. <u>GENERAL REQUIREMENTS</u>. It is recognized that previous training and experience are valuable assets to the Marine Corps explosives safety program and should be considered in the initial appointment of ESO. The following general guidance is provided for consideration in evaluating personnel qualifications for the position.

1. Personnel with previous or current experience and formal training in the military occupational specialties (MOS) of ammunition technician/officer, aviation ordnance technician/officer, explosives ordnance disposal (EOD) technician/EOD officer in the grade of staff sergeant and above will be considered qualified to fill the position of ESO/ESS. They will be considered fully qualified upon completion of the additional training requirements called out later in this chapter.

Civilian personnel, considered for appointment as an ESO 2. will be selected from Occupational Codes 0018- Safety Specialist, 1910- Quality Assurance Specialist (Ammunition Surveillance), 0346 Logistics Management Specialist (with experience in ammunition storage, transportation, or maintenance) at the grade level of GS-09 or above. Civilians with experience in career fields directly associated with ammunition life-cycle management may also be considered. The civilian position of ESO/explosives safety specialists will be full-time, permanent, career or career-conditional status. То promote stability and continuity of the explosives safety program, career civil servants are preferred for the position of ESO.

3. Due to the complexity of the field and inherent danger of the commodity involved, personnel without background or training in the ammunition or safety career fields should not be considered for appointment as an ESO. Should an installation commander find it necessary to select an individual without the proper background or training, that individual will be

identified immediately to COMMARCORSYSCOM (AM-EES) in order to expeditiously schedule the required training and assistance.

4. Should the installation commander be unable to locate qualified personnel locally for appointment to the position of ESO/ESS, interim assistance in program management may be requested through COMMARCORSYSCOM (AM-EES).

5. In the event that the size of installation, diversity of mission, operations tempo, or other circumstances dictate the appointment of more than one individual, all general and specific requirements apply to all appointee's.

a. The senior appointee will be designated as ESO, as determined by these ordered criteria, (1) grade/rank, (2) experience, and (3) training.

b. The junior appointee's will be designated as explosives safety specialists.

c. ESOs are responsible for establishing and carrying out the installation explosives safety program in accordance with provisions of this publication and providing supervision, direction, and guidance to junior personnel.

d. ESOs will be at least one grade senior to explosives safety specialists. In the case of civilians, position descriptions will be amended to reflect the additional supervisory and management duties, and to provide justification for non-competitive promotion should this be necessary.

10003. <u>TRAINING REQUIREMENTS</u>. After consideration of the general requirements outlined above, the following specific requirements will apply.

1. USMC ESO and explosives safety specialists training will consist of both mandatory core training courses and mandatory refresher training. This approach is necessary to provide all ESO/explosives safety specialists with a core foundation of basic knowledge, and provide a means to update and remain current with changes in requirements.

2. Core training courses will be provided in formal classroom setting/format.

3. Refresher training may include formal classroom, CBT, or other formats consistent with personnel requirements.

10004. <u>MANDATORY TRAINING COURSES</u>. The following training will be completed by all personnel appointed to the position of ESO/ explosives safety specialists. Courses designated "Core" will be completed within 18 months of appointment. Length and availability are described below. Course locations are available as follows: Defense Ammunition Center (DAC) McAlester, OK (formerly U.S. Army Defense Ammunition Center and School); DAC on-site, at local activity; DAC Computer Based Training (CBT); Naval Aviation School's Command, NAS Pensacola, FL; U.S. Army Ordnance Missile and Munitions Center and School, Marine Element, Redstone Arsenal, AL.

1. Mandatory Core

Explosives Safety Officer Course (Sub-Course AMM0-74). a. 80 hours. Availability: DAC on-site. Provides a Length: course of training and professional foundation in conduct and management of a comprehensive Explosives Safety program. Course content includes Department of the Navy (DON) Explosives Safety and Weapons System Strategic Plan, duties/responsibilities/and inter-relationships among DON explosives safety organizations, site approval process and preparation, standard operating procedures (SOPs) development, hazard analysis, emergency response/contingency planning, hazards of electromagnetic radiation to ordnance (HERO), lightning protection systems, inspection of ordnance facilities, mishap reporting/investigation, ordnance material safety and stability, inspections and surveys, ordnance environmental risk management, inventory management/accountability, receipt/storage/issue, storage load planning, transportation management, handling equipment, and explosives safety quantity-distance.

b. <u>SAFETY ASSESSMENT FOR EXPLOSIVES RISK (SAFER)</u>. Length: 16 hours. Availability: Provided by MARCORSYSCOM through APT Research Inc. Course provides an introduction to risk-based explosives safety site plan assessment and software. Content includes history of statistical analysis as it applies to

assessing risk, explanation of risk-based analysis and criteria, application of risk analysis software to site planning, hands on application of SAFER software to site planning problems. Students will receive a personal licensed copy of SAFER for application at their home installations. Refresher training will be provided in conjunction with changes to the SAFER program.

c. <u>Explosives Safety for Naval Facility Planning (AMMO-36)</u>. Length: 36 hours. Availability: DAC on-site. Provides emphasis on the preparation and review of site plans for a variety of explosives facilities. Content includes an in-depth review of quantity-distance standards, and application of these standards in the form of a Facility Design Problems Workshop.

d. <u>Electrical Explosives Safety for Naval Facilities (AMMO-29)</u>. Length: 28 hours. Availability: DAC on-site. Provides basic regulatory guidance and procedures to inspect, test, document and manage safety aspects applicable to facilities housing explosives. Content includes identification of lightning protection system components, design criteria, requirements for grounding/bonding, control of static electricity and electrical equipment in hazardous locations, overview of HERO, and field exercise involving visual inspection and testing of lightning protection systems.

2. <u>Mandatory Refresher</u>

a. Explosives Safety for Officers/Managers/ Supervisors (AMMO-49). Length: 36 hours. Availability: DAC CBT. Complete at 3 year intervals following completion of Core courses: Provides an overview of general ammunition and explosives (A&E) safety training for Navy and Marine Corps Shore activity explosives safety officers, managers, and supervisors. Content includes introduction to the different classes of A&E, safe handling practices, safety requirements, use of publications for extracting information, and use of reference information to solve problems.

b. <u>Explosives Safety Program Management (AMMO-32-1)</u>. Complete at 3 year intervals following completion of Core course.

c. <u>Explosives Safety for Naval Facility Planning (AMMO-</u><u>36)</u>. Complete at 5 year intervals following completion of Core course.

10005. <u>USMC ESO/EXPLOSIVES SAFETY SPECIALISTS CERTIFICATION</u>. Upon completion of mandatory core courses, COMMARCORSYSCOM (AM-EES) will issue a "Letter of Certification" stating that the individual has completed the basic requirements for performance of duties as a USMC Explosives Safety Officer.

1. Certification will remain valid for as long as the individual maintains the schedule of mandatory refresher training and satisfactorily performs the duties of ESO/ explosives safety specialists.

2. Certification will not be revoked in situations where the individual is clearly not responsible for failure to maintain refresher-training requirements, as determined by COMMARCORSYSCOM (AM-EES), and the individual has made every attempt to complete the requirement.

3. Certification will be revoked if an individual fails to maintain currency in training requirements without cause, as determined by COMMARCORSYSCOM (AM-EES).

4. Certification will be revoked for failure to satisfactorily perform the duties and responsibilities of ESO/explosives safety specialists. In this instance revocation may be made (1) by the installation commander, or (2) by the ESO/ESS immediate supervisor in consultation and with the concurrence of COMMARCORSYSCOM (AM-EES).

5. Certification is mandatory for holding the position of ESO/ explosives safety specialists. This requirement may be held in abeyance in cases of newly appointed ESO/explosives safety specialists until the new appointee has the opportunity to complete requirements for certification. However, in no case will certification take more than 18 months to complete.

10006. <u>SCHEDULING</u>. All core and refresher training will be scheduled by COMMARCORSYSCOM (AM-EES). Training may be scheduled in conjunction with conferences/seminars via DAC

mobile training teams, or in regional area format, or at locations predetermined by DAC training schedule. In any instance, the following general sequence of events will occur:

1. COMMARCORSYSCOM (AM-EES) will maintain a file of ESO/explosives safety specialists by name, installation, and training history. File will be screened annually to determine specific training requirements.

2. Requirements will be evaluated relative to the most effective format for delivery of training.

3. ESO/explosives safety specialists will be contacted, individually, and apprised of training requirements and options. Reasonable accommodations with individual schedules will be made if possible, at the discretion of COMMARCORSYSCOM (AM-EES).

4. COMMARCORSYSCOM (AM-EES) will obtain the required quotas through appropriate commands.

5. COMMARCORSYSCOM (AM-EES), upon receipt of notification that training quotas have been scheduled, will forward the necessary list of attendee's to DAC no later than 60 days prior to the class start date.

10007. RESPONSIBLITIES

1. <u>Commander, Marine Corps Systems Command (COMMARCORSYSCOM)</u>. COMMARCORSYSCOM (AM-EES) will closely manage and monitor the training, and qualification/certification requirements and perform the following:

a. Review and make recommendations to all training curriculum listed in this chapter, and associated with ESO/ESS training.

b. Issue a Letter of Certification to USMC ESOs and explosives safety specialists upon completion of the mandatory training courses stating in this chapter.

c. Issue a Letter of De-Certification to USMC ESOs or explosives safety specialists who fail to maintain currency in training requirements without cause.

d. Serve as scheduling liaison between ESO/explosives safety specialists and instruction provider for all core and refresher training courses.

e. Maintain a file of ESO/explosives safety specialists by name, installation, and training history, and screen file annually to determine specific training requirements.

2. Installation Commander

a. Appoint, in writing, qualified individuals to serve as ESO and/or explosives safety specialists.

b. Revoke certification of ESO or explosives safety specialists who fail to satisfactorily perform their duties upon concurrence of COMMARCORSYSCOM (AM-EES).

3. <u>Installation Safety Directors</u>. Ensure that newly appointed ESOs and explosives safety specialists have completed the requirements for certification within 18 months of assignment.

4. Installation ESO/Explosives Safety Specialists.

a. Forward copies of all training records and course completion certificates addressed in this chapter to COMMARCORSYSCOM (AM-EES) via the chain of command.

b. Maintain certification requirements and notify COMMARCORSYSCOM (AM-EES) and Safety Director of training necessities.

CHAPTER 11

INSTALLATION EXPLOSIVES SAFETY PROGRAM REQUIREMENTS

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CHAPTER 11

INSTALLATION EXPLOSIVES SAFETY PROGRAM REQUIREMENTS

11000. <u>BACKGROUND.</u> Explosives safety is an integral part of each phase of ammunition life-cycle management. Effective program management requires that data be collected and analyzed at key points during this cycle. This data is useful in trend analysis, allocation of available resources, establishing resource requirements, identifying/correcting deficiencies, improving the overall process, and providing management with a snapshot in time of the effectiveness of the program. Data is collected and made available to management through a systematic cycle of inspections, reports, and records. This cycle of required inspections and reports, and their regulatory basis are described in this chapter.

11001. INSPECTION PROGRAM. Periodic and random inspections will be established to assess the effectiveness of the Explosives Safety Program, and monitor status of installation organizations. The following are the minimum standards for an installation explosives safety program. Unless stated otherwise, inspections are performed and primarily documented by unit personnel. ESOs are responsible for reviewing all checklists and inspection documentation, providing follow-up reports as necessary, training personnel in the use of checklists as necessary, and ensuring ESO actions are documented for ESI review. All inspections will be performed utilizing an approved or locally developed checklist. Examples of checklists may be found in appendix D. Their use, and the use of electronic filing, is encouraged. These checklists may be modified to meet the needs of the installation provided all inspection requirements are met.

1. <u>Magazine Storage/Facility Inspection</u>. All locations/ facilities used for long or short-term storage or handling of ammunition and explosives (A&E) will be inspected at least annually by the ESO to ensure compliance with explosives safety standards. For inspection purposes, the term "magazine" includes all such areas (for example, aboveground magazines, earth covered magazines, and ready service lockers). The inspection shall include an examination of the facility or

location, the surrounding area, and the material being stored. A SOP written in accordance with NAVSEAINST 8023.11 series shall be developed for this inspection process. Magazines, magazine areas, and A&E in storage shall be inspected as described in Chapter 11, Paragraph 9 of NAVSEA OP 5 Volume 1.

a. Storage inspections are inspections of specific characteristics of ammunition, performed on ammunition in storage; it is not an inspection of the characteristics of storage areas or facilities. Storage inspections verify that ammunition in storage is safe, and is not adversely affected by environmental conditions, handling, or ineffective inventory control.

(1) Storage inspections shall be performed annually (or more frequently if activity quality history indicates that adverse storage conditions exist) to each ammunition storage area (magazine, building, warehouse, "shop-stores," etc.). These inspections should be performed concurrently with magazine and magazine area inspections and/or local inventory audits/reviews whenever practical.

(2) A SOP shall be developed for storage inspection, and include those requirements listed in magazine and magazine areas that are appropriate for the storage activity. Storage, magazine and magazine area inspection requirements may be contained in a single SOP. Storage inspections shall include specific requirements found in chapter 11 of NAVSEA OP 5, Volume 1, and chapter 5 of NAVSEA TW010-AC-ORD-010.

b. The ESO shall inspect explosives operating buildings and facilities, to include ammunition handling areas, shipping & receiving facilities, holding yards, maintenance facilities, egress and flight equipment shops; etc., where A&E operations are regularly conducted as often as necessary, depending on the hazard associated with the operation, but at least annually. Explosive operating buildings that are being used for nonexplosive operations need not be inspected. If the buildings are to be reused for explosives operations, an inspection will be performed and the site approval reviewed for compliance with proposed operation.

c. Contingent on available manpower, A&E storage and handling locations with high rates of activity and those located

remotely from the main ammunition storage area should be inspected on a more frequent basis as specified above. The ESO, in conjunction with unit personnel, shall determine the inspection frequency requirements for all locations. Unit personnel may perform these inspections utilizing the required inspection SOP and checklist.

d. The purpose of magazine, magazine area, and storage inspections is to ensure safe storage conditions. ESOs will ensure that organizations responsible for the inspected facilities are informed of all unsafe conditions and that any work orders/repairs, which may be necessary, are generated by the responsible organization.

(1) A record of work order follow-ups will be maintained and monitored by the ESO.

(2) Any uncompleted work orders, not involving major construction/renovation, in excess of 90 days old will be reported by the ESO, in writing, to the installation commander with copies furnished to the unit commander and to the organization responsible for performing the repair.

e. Results will be documented and a summary report generated for the installation commander via the chain of command. Report will include the following elements:

(1) Identify any adverse trends.

(2) Recommendations for corrective action.

(3) Identify repeat findings from previous inspection.

(4) List any recommended/required work orders.

(5) List all outstanding/uncompleted work orders.

(6) Overall rating for storage facilities (Sat/Unsat).

f. Records of the inspections and actions taken to correct any identified deficiencies should be maintained in the safety office.

2. <u>Physical/Visual Inspection of Lightning Protection,</u> <u>Electrical Bonding/Grounding Systems</u>. All facilities, locations, and equipment used to store, maintain, handle, or transport A&E will require an inspection of all lightning protection, electrical bonding/grounding systems.

a. Systems will be tested upon installation; on new primary and secondary ground girdles, measurements of resistance to earth shall be made every month for the 1st year and at 24-month intervals as prescribed by NAVSEA OP 5, Volume 1. Tests will be recorded, and maintained by the installation facilities support organization.

b. Visual inspections of lightning protection, grounding systems, and grounded components will be preformed at 6-month intervals and may be conducted concurrently with magazine inspections and results noted on inspection report or documented separately. Visual inspection criteria may be found in chapters 5, 6, 8, and appendix F of NAVSEA OP 5, Volume 1. Visual inspection requirements do not apply to permanent aircraft static grounds.

3. Minor Operational Site Inspection

a. Facilities such as unit arms rooms, security force armories, storage of inert or display A&E areas, installation fire departments, shall be inspected at least annually by the ESO. Contingent on available manpower, these locations may be inspected on a more frequent basis as specified above.

b. The ESO, in conjunction with unit personnel, shall determine the inspection frequency requirements for all locations. Unit personnel may perform these inspections utilizing an approved inspection checklist.

c. Units will maintain a copy of the inspection checklist on file for 2 years. ESOs will review the unit inspection records and make appropriate written report via the chain of command.

4. Fire Safety/Fire Protection Equipment Inspection

a. All locations/facilities involved in the storage, issue/receipt, transport, maintenance, and handling of A&E will

conduct regularly scheduled inspections for compliance with fire safety and fire protection equipment requirements. Guidance and inspection criteria may be found in chapter 4 of NAVSEA OP 5, Volume 1. ESOs will monitor units and fire departments to ensure regular inspections are conducted.

b. This monitoring may be performed in conjunction with other inspections, and will be documented with the inspection checklist or documented separately. Failure of units or fire departments to conduct regular inspections will be reported by the ESO, in writing, to the installation commander with copies furnished to the unit commander and to the organization responsible for performing the inspection.

5. <u>Review of Qualification/Certification (Qual/Cert) Program</u>. ESOs will, on an annual basis, review the installations Qual/Cert program.

a. ESOs will meet with representatives of units having personnel in the program, review records for completeness, and accuracy,

b. Ensure that the annual review by the certifying official is current,

c. Document reviews by inspection checklist with copies furnished to the unit and installation commander.

6. <u>Conduct Annual Explosives Safety Awareness Training</u>. ESOs will provide course curriculum and ensure that annual explosives safety awareness training and refresher training for all installation personnel involved in the storage, transport, handling, maintenance, receipt/issue, and use of A&E is conducted.

a. Training will be documented via entries in individual training records.

b. The course will have a written syllabus. Use of training aids, visual aids, guest expert speakers (EOD, fire chief), and inert display items is encouraged. The following topics are recommended, but not all inclusive, for incorporation into the training syllabus:

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(1) Statement/explanation of the explosives safety program goals.

(2) Explanation of hazard class/divisions.

(3) Storage compatibility groups.

(4) Fire/chemical hazard symbols, firefighting procedures, and evacuation distances.

(5) Review of storage, handling, and transport requirements.

(6) Review of sources of information on explosives safety, and requirements.

(7) Discussion of SOPs relative to safety warnings, cautions, equipment.

(8) Discussion of Qual/Cert Program.

(9) Discussion of procedures for handling UXO or other A&E found on the installation.

7. Explosives Safety Self-Audit (ESSA). ESOs will conduct an ESSA on a annual schedule and in accordance with NAVSEAINST 8020.14 series. The ESSA is a formal program for installations to conduct periodic appraisals of its ongoing A&E operations to determine the current program status. ESSAs emphasize the importance of a proactive approach to explosives safety issues.

a. ESSA will be a formal written program, checklist format and content is optional, however it is highly encouraged that ESOs utilize the checklist found in NAVSEAINST 8020.14 series and adapt it to meet installation specific requirements. The ESSA program will include the following minimum elements:

(1) Establishing periodic reviews of all elements of the A&E mission.

(2) Establishing procedures to address functional areas, audit methodology, audit team staffing, auditor duties and responsibilities, documentation and recordkeeping, process quality control, reporting requirements, corrective action

recommendations, and follow-up measures.

(3) At the conclusion of the ESSA, a final report of findings will be prepared and provided to each unit audited and the installation commander.

b. ESSAs may require more time to complete than a normal ESI due to availability of personnel, mission requirements, etc. Additional guidance on ESSA requirements is available in enclosure 5 of NAVSEAINST 8020.14 series.

11002. FILES, RECORDS, AND REPORTS

1. Files, records, and reports are as important to a strong program as good inspections. They document program effectiveness, and are useful in trend analysis, justification for manpower and training requirements, as well as tracking follow-up and long term corrective actions. Some records are mandatory, as they directly relate to ESI or other outside scrutiny. Others, although not mandatory, provide significant assistance in program management. It is the ESOs responsibility to establish a means of maintaining associated documentation that will allow for rapid information retrieval and aid them in program management.

2. The following reports/records and retention intervals are minimum mandatory records to be maintained by all ESO's:

a. <u>Annual Magazine/Storage Facility Inspection Reports</u>. Retain for 3 years. These reports are required for ESI review and contain elements to support other areas such as, SOPs, site plans, and accountability.

b. <u>Visual Inspection/Test of Lightning Protection and</u> <u>Electrical Grounding Systems</u>. Visual inspection data shall be stored in a data file for retrieval for use as required for trend analysis or for use by inspection personnel. Retain copies of test reports for 3 years. Required for ESI review.

c. <u>Minor Operational Site Inspections</u>. Retain for 2 years. These inspections contain elements for review by ESI,

such as, storage authorization letters, Qual/Cert review, SOP review.

d. <u>Fire Safety/Fire Protection Equipment Inspection</u>. Retain for 2 years. This inspection contains elements subject to ESI review, such as, training, fire drills, response maps, and SOPs.

e. <u>Hazards of Electromagnetic Radiation to Ordnance (HERO)</u> <u>Survey</u>. Maintain current and last surveys. Subject to ESI review.

f. Log of Inert Training/Display A&E. Log should contain nomenclature of the item, owning organization, location, and certification label number. Maintain perpetually, update quarterly. Subject to ESI review.

g. <u>Department of Defense Explosives Safety Board (DDESB)</u> <u>Inspection Reports and Corrective Action Plans</u>. Maintain current and last reports and responses.

h. <u>ESI Inspection Reports and Corrective Action Plans</u>. Maintain current and last reports and plans.

i. <u>ESSA Inspection</u>. At a minimum, maintain a copy of the current and previous ESSA reports. Subject to ESI review.

j. <u>Ammunition Hazard (AMHAZ) Board Survey Results</u>. Maintain the current and last survey reports and any corrective actions undertaken.

k. <u>Explosives Safety Site Approvals</u>. Site approvals will be maintained for each facility, as required by NAVSEA OP 5, Volume 1, for as long as the facility is used for storage, handling, manufacture, maintenance, or modification of A&E. Should the facility be removed from service as an A&E site, a site approval request to remove the explosives safety quantity distance (ESQD) arcs must be submitted. This final site approval will be archived not destroyed. Subject to ESI review.

1. <u>Commanders Letters of Storage Authority</u>. Storage authority, as permitted by NAVSEA OP 5, Volume 1 and this Manual, which the installation commander has granted will be

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maintained on file for each facility. Current copy will be maintained. Subject to ESI review.

m. <u>Inventory of Storage Facilities Constructed prior to</u> <u>May 1967</u>. NAVSEA OP 5, Volume 1, permits A&E storage in these facilities without explosives safety site approval. It also requires that a written listing of these facilities and details be maintained. Subject to ESI review.

NOTE

This Mauual requires a more stringent approach mandating that site plans be submitted for all required facilities regardless of construction date.

Comprehensive Installation Maps. Comprehensive n. installation maps, or set of maps, showing the location and ESQD arcs, storage/operating facilities and locations, explosives vehicle traffic routes, any easements and environmentally sensitive areas, and emergency evacuation routes. Maps will be reviewed annually for correctness and review documented by memorandum for record (MFR). Retain current and last MFRs. Physical area encompassed by ESOD arcs will be surveyed annually for encroachment by non-ammunition related activities. Any encroachment will be reported to the installation civil engineers, installation commander, and the encroaching organization. All organizations involved will meet within 10 working days to resolve the encroachment problem. Upon resolution, ESOs will submit any necessary changes to the explosives site plans. Survey will be documented via the same MFR prepared for map review.

o. <u>Annual Qual/Cert Program Review Report</u>. Maintain for 2 years. Subject to ESI review.

p. <u>Explosives Safety Awareness Training</u>. Maintain and update syllabus as required. Maintain record of attendance rosters for 2 years.

11003. <u>PUBLICATIONS AND REFERENCES</u>. Installation ESOs must maintain a current library of reference publications sufficient to conduct research, determine requirements, and provide information upon request. Publications and references may be

maintained electronically provided that personnel can access information when called upon to do so.

1. Additionally, these publications will be maintained in an up-to-date status with the latest changes/revisions.

2. Reviews will be conducted semi-annually to ensure latest changes/revisions have been incorporated.

3. Records of basic publication or change/revision orders/requests will be maintained until material is received.

4. A list of pertinent publications to maintain an effective explosives safety program is located in appendix C.

11004. RESPONSIBILITIES

1. <u>Installation Commander</u>. Installation commanders will ensure that the ESO has direct access to brief/address issues involving explosives safety or A&E operations on board or affecting the installation.

2. <u>Installation Safety Directors</u>. Ensure that The ESOs primary duty is the management installations Explosives Safety Program. Assigning additional collateral duties to ESOs is highly discouraged, however, should additional duties be assigned, they shall not interfere with the ESO performing their primary duty.

3. Installation ESO

a. Manage and execute a robust explosives safety program in compliance with this order and current directives.

b. Conduct/ensure that all required inspections are preformed in accordance with this order and applicable directives, and that the results properly documented.

c. Prepare/review SOPs, briefs, training plans, and all work requests that relate to explosives safety and A&E operations.

d. Conduct explosives safety awareness training, and briefings as required or requested.

e. Ensure that all files, records, and reports are maintained, retained as required, and readily accessible.

f. Maintain a current publication and reference library of all directives associated with explosives safety and all A&E operations performed aboard the installation.

APPENDIX A

GLOSSARY OF TERMS

Ammunition	A contrivance charged with explosives, propellants, pyrotechnics, initiating composition or chemical for use in connection with defense or offense including demolitions, training, ceremonial or non-operational purposes.
Class V	The military class of supply that consists of ammunition and explosives. Class V(W) is ground ammunition accounted for by COMMARCORSYSCOM (AM). Class V(A) is aviation ammunition accounted for by the Naval Ammunition Logistics Center (NALC).
Deviation	A departure from an established explosives safety standard or rule.
Event Waiver	Deviation approved on a case-by-case basis for a particular evolution, issued for a limited period to meet a specific, nonrecurring readiness or operational requirement that cannot otherwise be satisfied.
Exemptions	Deviations from mandatory explosives safety requirements approved for the purpose of long-term satisfaction of recurring readiness or operational requirements.

Explosive Accident An unplanned explosive or fire involving an explosive material or system. This includes inadvertent actuation, jettisoning, release, or launching resulting in a fatality or injury to personnel, fire, explosion or damage to property.

- Explosives The term "explosive" or "explosives" includes any chemical compound or mechanical mixture which, when subjected to heat, impact, friction, detonation or other suitable initiation, undergoes a very rapid chemical change with the evolution of large volumes of highly heated gases which exert pressures in the surrounding medium. The term applies to materials that either detonate or deflagrate.
- Major Malfunction A malfunction that results in, or is potential capable of resulting in, personal injury or material damage.
- Malfunction Term applied to an explosive materiel or system when it fails to function in a manner for which it was designed. Malfunctions are categorized as either major or minor.
- Military Munitions All ammunition products and components produced or used by or for the DoD or the U.S. Armed Forces for national defense or security, including military munitions under the control of the DoD, Coast Guard, Department of Energy and National Guard personnel. Refer to 40 CFR 260.10 for additional details of what items are included and excluded.
- Minor Malfunction A malfunction that does not result in injury or materiel damage and for which the potential for injury or materiel damage is remote. This includes duds and misfires.
- Misfire Failure of a component to initiate following an intentional attempt to do so.

Mishap	An unplanned event, or sequence of events, that results in injury to personnel or damage to property as defined in MCO 5102.1.
Non-DoD Ammunition	A&E that is not procured by the DoD and that is not in support of a DoD mission.
Waiver	Deviation from mandatory explosive safety requirements approved for the purpose of temporary satisfaction of recurring readiness or operational requirements, issued pending the completion of corrective measures to eliminate the need for the waiver.

APPENDIX B

ABBREVIATIONS AND ACRONYMS

TERM	LONG TITLE
A&E	Ammunition and Explosives
AA&E	Arms, Ammunition, and Explosives
AAA	Army Ammunition Activity
AAV	Assault Amphibious Vehicle
ACAT	Acquisition Category
ACTS	Assignment, Classification, and Travel System
AEDA	Ammunition, Explosives, and Other Dangerous Articles
AIN	Ammunition Information Notice
AMHAZ	Ammunition and Hazardous Materials
AOA	Aircraft Operating Area
ASF	Ammunition Storage Facility
ASL	Aviation Logistics Support
ASP	Ammunition Supply Point
ASU	Ammunition Storage Unit
AWR	Apportioned War Reserve
BOE	Bureau of Explosives
CALA	Combat Aircraft Loading Area
CE	Conditional Exemption
CFR	Code of Federal Regulations
CLF	Combat Logistics Force
CMC	Commandant of the Marine Corps
CNO	Chief of Naval Operations
CODR	Conventional Ordnance Deficiency Report
COG	Cognizance Code
COMCAB	Commander, Marine Corps Air Bases
COMMARCORSYSCOM	Commander, Marine Corps Systems Command
COMMARFORLANT	Commander, U.S. Marine Forces, Atlantic
COMMARFORPAC	Commander, U.S. Marine Forces, Pacific
COMMARFORRES	Commander, Marine Corps Forces, Reserve
COMNAVAIRSYSCOM	Commander, Naval Air Systems Command
COMNAVSEASYSCOM	Commander, Naval Sea Systems Command
COMNAVSUPSYSCOM	Commander, Naval Supply Systems Command
CSS	Combat Service Support
DC	Deputy Commandant
DDA	Designated Disposition Authority
DDESB	Department of Defense Explosives Safety Board
DoD	Department of Defense

DODTO	
DODIC	Department of Defense Identification Code
DON	Department of the Navy
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DTR	Defense Transportation Regulation
DTS	Defense Transportation System
ECE	Environmental Compliance Evaluation
ED/CD	Emergency Destruct/Combat Disposal
EED	Electro-Explosive Device
EMR	Electromagnetic Radiation; Explosives Mishap Report
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
EFA	Exposed Site
ESI	Explosed Site Explosives Safety Inspection
ESO	Explosives Safety Officer
ESQD	Explosives Safety Quantity-Distance
ESSO	Explosives Safety Support Office
FARP	Forward Arming and Refueling Point
FASP	Field Ammunition Supply Point
FSSG	Force Service Support Group
FSU	Field Storage Unit
FY	Fiscal Year
HC/D	Hazard Class/Division
HERO	Hazards of Electromagnetic Radiation
	to Ordnance
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HQMC	Headquarters, U. S. Marine Corps
HR	Health Record
IBD	Inhabited Building Distance
ICP	Inventory Control Point
IL	Intraline
IM	Intermagazine
ITS	Individual Training Standard
JHCS	Joint Hazard Classification System
LAV	Light Armored Vehicle
LEPC	Local Emergency Planning Committee
LFORM	Landing Force Operational Reserve Material
LVS	Logistics Vehicle Support
MAARS-II	Marine Ammunition Accounting and Reporting
	System-II
MARSO	Marine Ammunition Requirement Support Order
MCC	Material Condition Code
MCCDC	Marine Corps Combat Development Command

MCE	Maximum Credible Event
MCO	Marine Corps Order
MHE	Material Handling Equipment
MILCON	Military Construction
MLA	Mission Load Allowance
MLSR	Missing, Lost, Stolen or Recovered
MPF	Maritime Prepositioning Force
MPS	Maritime Prepositioning Ship(s)
MR	[Military] Munitions Rule
MRIP	Munitions Rule Implementation Policy
MSC	Major Subordinate Command
MWR	Morale, Welfare and Recreation
NALC	Naval Ammunition Logistics Center
NAR	Notice of Ammunition Reclassification
NAVFACENGCOM	Naval Facilities Engineering Command
NAVORDSAFSECACT	Naval Ordnance Safety and Security Activity
NAVSAFCEN	Naval Safety Center
NAVSEAINST	Naval Sea Command Instruction
NAVSEASYSCOM	Naval Sea Systems Command
NEW	Net Explosive Weight
NSN	National Stock Number
OPCON	Operational Control
OPNAVINST	Chief of Naval Operations Instruction
OSC	Operations Support Command
PES	Potential Explosion Site
PM	Program Manager
PMO	Provost Marshall Office
PTR	Public Traffic Route
RCRA	Resource Conservation and Recovery Act
RO	Responsible Officer
RSO	Range Safety Officer
SD	Safety Division
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SIR	Serious Incident Report
SMCA	Single Manager for Conventional
SHCA	Ammunition
SOP	Standard Operating Procedures
SRC	Security Risk Code
TAV	Technical Assistance Visit
TIR	Transaction Item Reporting
TTC	
	Type Transaction Code
WMM	Waste Military Munitions
WRMR	War Reserve Materiel Requirement

WSESRB Weapon System Explosives Safety Review Board

APPENDIX C

RECOMMENDED PUBLICATIONS

The following is a list of explosives safety publications and instructions recommended to support a sound explosives safety program at Marine Corps installations. This list is not intended to replace the requirement for Technical Manuals or Marine Corps Orders. To obtain the latest series of the listed publications contact the cognizant releasing authority.

- 1. 40 CFR Code of Federal Regulations (CFR), Parts 264 Subpart EE and Part 266 of Subpart M
- 2. 49 CFR Code of Federal Regulations (CFR), Titles 172, 174, & 177
- 3. BOE 6000 Bureau of Explosives (BOE) Tariff Service, Hazardous Materials Regulations of the Department of Transportation
- 4. DoD Regulation Defense Transportation Regulation (DTR), P4500.9-R Part II, Cargo Movement
- 5. MCO 1510.78 Individual Training Standards (ITS), for Ammunition and Explosive Ordnance Disposal Occupational Field, 23XX
- 6. MCO 3570.1 Policies and Procedures for Firing Ammunition for Training, Target, Practice, and Combat
- 7. MCO 3571.2 Explosive Ordnance Disposal (EOD) Program
- 8. MCO 4340.1 Reporting of Missing, Lost, Stolen or Recovered (MLSR) Government Property
- 9. MCO 5100.29 Marine Corps Safety Program
- 10. MCO 8010.1 Class V(W) Planning Factors for Fleet Marine Force Combat Operations

11. MCO 8023.3

Handling, Qualification, and Certification Program for Class V Munitions and Explosive Devices 12. MCO 8025.1 Class V(W) Malfunction and Deficiency Reporting 13. MCO P4030.19 Preparing Hazardous Materials for Military Air Shipments 14. MCO P4400.150 Consumer Level Policy Manual 15. MCO P5090.2 Environmental Compliance and Protection Manual U.S. Marine Corps Ground Mishap Inventory 16. MCO P5102.1 Reporting Manual 17. MCO P8011.4 Table of Allowances for Class V (W) Material Peacetime 18. NAVAIR 00-80T-NATOPS Conventional Weapons Handling Procedures Manual Ashore 103 19. NAVFAC P-300 Management of Transportation Equipment 20. NAVFAC P-306 Operators of Construction Equipment; Testing and Licensing of 21. NAVFAC P-307 Management of Weight Handling Equipment; Maintenance Certification 22. NAVFACINST Shore Facilities Planning Manual 11010.44 23. NAVSEA OP 1014 Origin and Necessity Ordnance Safety Precautions 24. NAVSEA OP 2173 Approved Handling Equipment for Vol 1 Weapons and Explosives 25. NAVSEA OP 2173 Approved Handling Equipment for Vol 2 Weapons and Explosives

26.	NAVSEA OP 3347	U.S. Navy Ordnance Safety Precautions
27.	NAVSEA OP 3565 Vol 1	Electromagnetic Radiation Hazards
28.	NAVSEA OP 3565 Vol 2 Pt 1	Electromagnetic Radiation Hazards
29.	NAVSEA OP 3565 Vol 2 Pt 2	Electromagnetic Radiation Hazards
30.	NAVSEA OP 4	Ammunition Afloat
31.	NAVSEA OP 5 Vol 3	Ammunition and Explosives Ashore: Advanced Bases
32.	NAVSEA OP 5, Vol 1	Ammunition and Explosives Ashore Safety Regulations for Handling, Storing, Production, Renovation and Shipping
33.	NAVSEA SG-420- Ap-MMA-010	Periodic Testing Arrangements for Ordnance Handling Equipment
34.	NAVSEA SW010- AF-ORD-010	Identification of Ammunition
35.	NAVSEA SW020- AC-SAF-010	Transportation and Storage Data for Ammunition, Explosives and Related Hazardous Materials, Volume 1
36.	NAVSEA SW020- AC-SAF-020	Transportation and Storage Data for Ammunition, Explosives and Related Hazardous Materials, Volume 2
37.	NAVSEA SW020-	Transportation and Storage Data for
	AC-SAF-030	Ammunition, Explosives and Related Hazardous Materials, Volume 3
38.		Ammunition, Explosives and Related

- 40. NAVSEA SW023-
AG-WHM-010On-Station Movement of Ammunition and
Explosives by Truck and Rail Car
- 41. NAVSEA SW023-
AH-WHM-010Handling Ammunition, Explosives and
Hazardous Materials with Industrial
Materials Handling Equipment (MHE)
- 42. NAVSEA TW024- Ammunition Unserviceable, Suspended and AA-ORD-010 Limited Use
- 43. NAVSEAINST Small Arms Service Ammunition Allowance 8011.3 for Civilian and Military Security and Police Guards, Couriers and Agents
 44. NAVSEAINST Emergency Response Procedures for 8020.13 Transportation Accidents or Incidents

Involving Conventional Naval Ordnance

- 45. NAVSEAINST Shore Station Explosives Safety 8020.14 Inspections
- 46. NAVSEAINST Naval Explosives Safety Program 8020.6
- 47. NAVSEAINST Hazards of Electromagnetic Radiation to
 8020.7 Ordnance; Policies for Conduct of a Safety
 Program
- 48. NAVSEAINST Non-Nuclear Ordnance and Explosives
 8020.9 Handling Qualification and Certification
 Program

49. NAVSEAINSTStandard Operating Procedures for the
8023.118023.11Processing of Expendable Ordnance at Navy
and Marine Activities

- 50. NAVSUP Manual, Naval Supply Manual, Volume V, Volume V Transportation of Property
- 51. NAVSUP P-724 Conventional Ordnance Management Policy and Procedures
- 52. NAVSUP P-805 Navy and Marine Corps Conventional Ammunition Sentencing Receipt, Storage and Issue Sentencing, Vol 1

53. NAVSUP P-806 Navy and Marine Corps Conventional Ammunition Sentencing - OT/2E/2T Cog. Ammunition Segregation Sentencing, Vol 2 54. NAVSUP P-807 Navy and Marine Corps Conventional Ammunition Sentencing - Fleet Sentencing, Vol 3 55. NAVSUP P-808 Navy and Marine Corps Conventional Ammunition Sentencing - Visual Aids Vol 4 56. OPNAVINST Mishap Investigation and Reporting 5102.1 57. OPNAVINST Department of the Navy Physical Security 5530.13 Instruction for Conventional Arms, Ammunition, and Explosives (AA&E) 58. OPNAVINST Department of the Navy Physical Security 5530.14 and Loss Prevention 59. OPNAVINST Military Working Dogs Program 5585.2 60. OPNAVINST Department of the Navy Explosives Safety 8020.14/ Policy MCO P8020.11 61. OPNAVINST Naval Ordnance Maintenance Management 8000.16 Program (NOMMP) 62. SECNAVINST Responsibilities for Issuance and 8020.3 Administration of (Waivers and Exemptions from DoD) Explosives Safety Standards SASSY Users Manual 63. UM4400-124 64. UM4400-15 Organic Procedures for Supply

APPENDIX D

INSPECTION CHECKLISTS

Date:

Type

Magazine Location: Ordnance Stowed:

Inspected By: Representative: Unit

SECTION A

Detailed magazine inspection procedures are contained in NAVSEA OP 5, Vol. I, specifically Chapter 11, paragraphs 11-.9.1 through 11-9.3.12.

Stowage compatibility requirements are contained in NAVSEA SW020-AC-SAF-010/020/030/040.

A check mark in the "UNSAT" column of Section C requires a detailed description of the deficiency in the remarks section citing the specific paragraph number (i.e. 1.d(1)).

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.

Corrective action on discrepancies will be on a separate page of paper, citing specific paragraphs. If a work request is to be submitted, it will be attached with the completed inspection log.

SECTION B

1. EXTERIOR	SAT	UNSAT
a. Are the fire and chemical hazard symbol or symbols that represent the most hazardous material in the magazine posted outside the magazine? (par 4-4.2.9)		
b. Entrance roadway in good repair?(par 8-7)		
c. Adequate firebreak, 50 ft. radius surrounding magazine is free of trash, debris,		

and other fire hazards? (par 4-1.10)		
d. Vegetation maintained does not exceed 18"? (par 4-1.10)		
e. Earth covering magazine intact? (par 8-2.5.5)		
f. Earth covering barricade intact, blast wall undamaged? (par 8-2.5.3, 8-2.5.5)		
<pre>g. Primary lighting protection systems intact? (par 6-8, 6-8.2.2, 6-8.3)</pre>		
h. Fences and other metal masses grounded as required? (par 6-6.3, 6-6.3.2)		
i. Ventilator in proper working condition? (par 8-2.3.5, 11-2.5.2		
j. Are wire screens installed? (par 8-2.3.5)		
<pre>k. Fire fighting equipment undamaged, filled, inspected and ready for use? (par 4-3.6, 4-3.6.1)</pre>		
1. Are the fire and chemical hazard symbols appropriate as to the contents of the magazine? (par 4-4.2.1, 4-4.2.2, 4-4.2.5)		
<pre>m. Red flag at entrance to magazine area? (par 11-3.3)</pre>		
n. Loading platform in excess of 4 ft provided with guard railing or properly painted? (par 8- 4.4)		
o. Loading platform clear of dunnage?		
(par 12-9.4)		
2. DOORS	SAT	UNSAT
a. Padlock and door open and close freely? (par 2-1.5.2, 8-2.3.2)		
b. Makes a tight seal when closed to protect against dust, rain, rodents, etc ?		

(par 8-2.3.2)		
c. Metal doors connected to the secondary grounding system? (par 8-2.3.2)		
3. INTERIOR	SAT	UNSAT
a. Clean and free of dust, gravel, dirt, rodents, and other foreign matter to include all fire hazards? (par 2-1.5, 4-1.2.2, 11-2.8)		
b. Excess dunnage, handling equipment, empty container, tools, and other similar material removed? (par 2-1.5, 4-1.7, 11-2.8)		
c. Deck free of stains caused by exudation of explosives? (par 2-1.5.6)		
d. Deck free of oil, grease, or other material which may make it slippery? (par 2-1.5.6)		
e. Decks and bulkheads are free of major cracks and break and or drips or low spots that collect		
water? (par 2-1.5.6)		
<pre>water? (par 2-1.5.6) 4. STOWAGE</pre>	SAT	UNSAT
4. STOWAGEa. Is the fire bill posted throughout the	SAT	UNSAT
 4. STOWAGE a. Is the fire bill posted throughout the magazine area? (par 4-3.1.1) b. Safety placards, precautions instructions, 	SAT	UNSAT
<pre>4. STOWAGE a. Is the fire bill posted throughout the magazine area? (par 4-3.1.1) b. Safety placards, precautions instructions, up to date concerning material stowed? (par 11-</pre>	SAT	UNSAT
<pre>4. STOWAGE a. Is the fire bill posted throughout the magazine area? (par 4-3.1.1) b. Safety placards, precautions instructions, up to date concerning material stowed? (par 11- 2.7.2) c. Explosives stowage limits and type</pre>	SAT	
<pre>4. STOWAGE a. Is the fire bill posted throughout the magazine area? (par 4-3.1.1) b. Safety placards, precautions instructions, up to date concerning material stowed? (par 11- 2.7.2) c. Explosives stowage limits and type explosives legibly posted? (par 7-4.4) d. Personnel and safety limits legibly posted?</pre>	SAT	UNSAT
<pre>4. STOWAGE a. Is the fire bill posted throughout the magazine area? (par 4-3.1.1) b. Safety placards, precautions instructions, up to date concerning material stowed? (par 11- 2.7.2) c. Explosives stowage limits and type explosives legibly posted? (par 7-4.4) d. Personnel and safety limits legibly posted? (par 7-7.2.a.,b)</pre>	SAT	

11-2.6.2.a)

(3) Inspection aisles clear and free of obstructions? (par 2-1.5.2, 11-2.6.3)		
<pre>(4) Minimum of 6" between the overhead, side and rear walls, and the stack. A front wall clearance of 2 feet shall be maintained 18" will be maintained between stacks (isles)? (if smokeless powder see par 11-2.6.3)</pre>		
(5) Palletized loaded projectiles are to be stacked no higher than 72 inches and no wider than 2 boxes except for 8 inch projectiles? (par 11-8.4.1.e.2)		
<pre>(6) All potential hazards removed i.e nails, cut or loose banding straps, etc.? (par 2-1.5, 11-2.8)</pre>		
<pre>(7) Containers/Items markingsNSN, type, lot number, etc. are legible? (par 11-1.4.1)</pre>		
(8) Previously opened containers properly repackaged so that contents are not exposed?(par 9-7)		
(9) Partly filled boxes marked conspicuously "light box" (par 11-2.6.4)		
<pre>(10) Container/Pallet serviceable, free of dents or other physical damage (par 10-2.2)</pre>		
<pre>(11) Any spilled explosive material shall be cleaned up as soon as possible (par 4-1.7.4, 11-2.8)</pre>		
f. {Stowage} Explosive compatibility IAW SWO20-AC-SAF-010, 020, 030, 040		
5. SAFETY EQUIPMENT	SAT	UNSAT
a. Water filled container is available for individual package immersion (par 11-8.13.6.a)		
b. Personnel protective equipmentrubber gloves and ankle length rubber aprons (par 11- 8.13.6.b)		

c. Gas mask available and in good condition

(par Table 4-2 notes 1,2,3)		
d. One gallon bottle of water mixed with 5% sodium bicarbonate solution with bottle labeled to show contents and date mixed and changed every 3 months(date expires) (par 11-8.13.6.c)		
e. Is a set of band cutters available for removal of individual leakers from a pallet (par 11-8.13.6.d)		
f. Is there an adequate supply of water available, 5 gallon pail or equivalent and two sponges for treating affected body areas and flushing of the eyes (par 11-8.13.6.f)		
6. SPECIAL CONSIDERATIONS	SAT	UNSAT
6. SPECIAL CONSIDERATIONS a. Verify lightning protection system has a current test documented and is within required parameters. Ensure test is scheduled if needed.	SAT	UNSAT
a. Verify lightning protection system has a current test documented and is within required parameters. Ensure test is scheduled if	SAT	UNSAT
a. Verify lightning protection system has a current test documented and is within required parameters. Ensure test is scheduled if needed.b. Review any waivers, deviations, or exemptions for continued applicability and	SAT	UNSAT
 a. Verify lightning protection system has a current test documented and is within required parameters. Ensure test is scheduled if needed. b. Review any waivers, deviations, or exemptions for continued applicability and renewal status. c. Verification of Explosives Safety Site Approval, if none exists institutes the 	SAT	UNSAT

REMARKS:

READY SERVICE LOCKER INSPECTION

Date:

RSL Location:

Type Ordnance Stowed:

Inspected By: Unit Representative:

SECTION A

Detailed RSL inspection procedures are contained in NAVSEA OP 5, Vol. I, specifically chapter 11, paragraphs 11-9 through 11-9.1.2.

Stowage compatibility requirements are contained in NAVSEA SW020-AC-SAF-010/020/030/040.

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Corrective action on discrepancies will be on a separate page of paper, citing specific paragraphs. If a work request is to be submitted, it will be attached with the completed inspection log.

SECTION B

1. EXTERIOR	SAT	UNSAT
a. Are the fire and chemical hazard symbol or symbols that represent the most hazardous material in the magazine posted outside the magazine (par 4-4.2.9)		
b. Entrance roadway in good repair (par 8-7)		
c. Adequate firebreak, 50 ft. radius surrounding RSL is free of trash, debris, and other fire hazards (par 4-1.10)		
d. Vegetation maintained does not exceed 18" (par 4-1.10)		
e. Ventilators in proper working condition. (par		

8-2.3.5, 11-2.5.2)		
f. Are wire screens installed? (par 8-2.3.5)		
g. Primary lighting protection systems intact (par 6-8, 6-8.2.2)		
(1) A minimum of 2 ground rods installed (25 ohms or less) (5-4.1)		
(2) Ground rods placed in separate corners or at opposite ends for small groups less than 250 feet in perimeter. (6-8.2.2.2.a.b.c)		
<pre>j. Fire fighting equipment undamaged, filled, inspected and ready for use (par 4-3.6.1)</pre>		
k. Is the firefighting direction symbol appropriate to the contents of the RSL. (ie. Apply no water) (4-4.2.1, 4-4.2.2, 4-4.2.5)		
2. DOORS	SAT	UNSAT
a. Padlock and door open and close freely (par 2-1.5.2, 8-2.3.2)		
b. Makes a tight seal when closed to protect against dust, rain, rodents, etc (par 8-2.3.2)		
c. Metal doors connected to the secondary grounding system (par 8-2.3.2)		
3. INTERIOR	SAT	UNSAT

fire nazards (par 2-1.5, 4-1.2.2, 11-2.8)	
b. Excess dunnage, handling equipment, empty container, tools, and other similar material removed (par 2-1.5, 4-1.7, 11-2.8)	
c. Deck free of stains caused by exudation of explosives (par 2-1.5.6)	
d. Deck free of oil, grease, or other material which may make it slippery (par 2-1.5.6)	

of abnormal odors such as alcohol and other chemicals. (par 11.8.1.2.d)	
f. Decks and bulkheads are free of major cracks and break and or drips or low spots that collect water (par 2-1.5.6, 8-2.3.4)	

4. STOWAGE

SAT UNSAT

a. Is the fire bill posted within the ready service locker. (par 4-3.1.1)	
<pre>b. Safety placards, precautions instructions, up to date concerning material stowed (par 11- 2.7.2)</pre>	
c. Explosives stowage limits and type explosives legibly posted (par 7-4.4)	
d. Personnel and safety limits legibly posted (par 7-7.2.a.b)	

e. Are explosives stored compatible IAW $\,$ SWO20-AC-SAF-010 $\,$

f. Stowage Stacks	
(1) Raised from the deck by metal dunnage. (par 11-2.6.2.a., d, 4-1.26)	
(2) Dunnage/Stack is level and stable (par 11-2.6.2.a)	
(3) No visible corrosion on containers. (par 11-1.4.1.)	
(4) Containers are not subject to moisture or dampness. (par 11-1.4.1)	
<pre>(5) All potential hazards removed i.e nails, cut or loose banding straps, etc (par 2- 1.5, 11-2.8)</pre>	
(6) Containers/Items markingsNSN, type, lot number, etc. are legible (par 11-1.4.1)	
(7) Previously opened containers properly repackaged so that contents are not exposed (par	

9-7)(8) Partly filled boxes marked conspicuously
"light box" (par 11-2.6.4)(9) Container/Pallet serviceable, free of
dents or other physical damage (par 10-2.2)(10) Any spilled explosive material shall be
cleaned up as soon as possible (par 4-1.7.4, 11-
2.8)(11) Free of dust, dirt, corrosion, and other
foreign material. (par 2-1.5.1, 11-2.8)

5. SAFETY EQUIPMENT

SAT UNSAT

a. Fire fighting equipment undamaged, filled, inspected and ready for use (par 4-3.6, 4-3.6.1)	
b. Is Personnel protective equipment required available. (par 2-4, 11-8.13.6)	

REMARKS:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES INVENTORY MANAGEMENT

Ref: (a) NAVSUP P-724
 (b) NAVSUP P-805/TW010-AC-ORD-010
 (c) NAVSUP P-806/TW010-AC-ORD-020
 (d) NAVSUP P-807/TW010-AC-ORD-030
 (e) NAVSEA OP 5, Volume 1
 (f) NAVSUP P-801 (TW024-AA-ORD-010)
 (g) OPNAVINST 8015.2
 (h) MCO P4400.150E
 (i) MCO P4400.151B
 (j) MCO P8011.4H
 (k) MCO 8020.10A
 (l) MCO 4340.1
 (m) UM 4400.15
 (n) UM 4400.124

(o) OPNAVINST 5530.13B

ELEMENT .01 - UNSERVICEABLE MATERIAL	YES	NO	N/A
A. Has segregation of fleet return material placed in Condition Code (CC) K been completed within 45 days after receipt?(a) par 3.3.4.n			
B. Is serviceable and unserviceable material stored on the same pallet? (b) par 5-1.9 (c) par 3-8 (d) par 3-7			
C. Is unserviceable/unstable ammunition held without disposal actions taken? (a) pars 5.6.1, and 5.6.6 (e) pars 2-1.4.10 and 11-2.2.1a			
D. Has material annotated with lot/serial number "unknown" been identified within 30 days of receipt? (a) par 2.5.7			
E. If material has lost its identification			

<pre>does the holding activity handle the unidentified material in the proper manner? (b) pars 3-7.2 and 5-1.11 (d) pars 3-6.4 and 3-6.5 (e) pars 2-1.4.9, 11-1.1.1, 11-2.2.1.a.3, and 11-10 F. Does ammunition found to be unsafe, hazardous or potentially hazardous due to non-conforming conditions get recorded and reported? (b) pars 3-7, 4-1.13 and 5-1.11</pre>		
ELEMENT .02 - PROGRAM MANAGMENT		
 A. Is all received ammunition subjected to a receipt inspection prior to any subsequent processing? (a) par 3.3.4 (b) par 4-1.3 		
 B. Are NSN/NALCs, quantities, units of issue and serial/lot numbers clearly marked on all unit packs, intermediate containers, and unpacked items. (e) pars 11-1.5.1.b, MIL-STD-129N, par 4.2.1 		
C. Does the physical location, condition code, lot/serial number, NIIN and quantity of items match the official record? (a) par 4.1.5.c (g) par 6.d		
D. Does each pallet, container, box, etc. have a correct and complete MCC tag? (b) pars 3-5 and 5-1.8 (c) par 3-7.5 (d) par 3-5		
E. Are all storage containers/boxes, etc. properly secured and sealed? (b) pars 3-6 and 5-1.12		

	1	1
(c) par 3-6		
(d) par 3-9		
(e) par 11-1.5.1 and 11-7.8.4.d		
F. On material other than Condition Code (CC) A are reasons and defect codes indicated on the Material Condition Code (MCC) tag? (b) par 5-1.8 (d) par 3-5		
<pre>G. Are barcode labels applied to ammunition as required? (b) par 5-1.8</pre>		
H. If storage plans are used, do they provide correct asset visibility in all magazines? (e) par 11-2.6.1		
<pre>I. Are requirements for ammunition and explosives stored in containers being observed? (e) pars 11-1.5.1, 11-2.6.4, and 11-7.8.4</pre>		
<pre>J. Are requirements for empty containers being met? (b) pars 3-6.3.1 and 5-4 (e) par 11-1.6</pre>		
K. Do ordnance procedures assure identification and control of all energetic materiel, ordnance, and explosives at the activity? (a) par 4.1.5.c		
L. Does the inventory management program identify and prioritize older stocks of ordnance and energetic materials for issue or use? (e) par 11-1.2		
M. If commercial explosives are being stored in magazines do inventory records		

indicate the date of manufacture of the		
materials?		
(e) par 11-7.12.8		
N. Are physical inventories scheduled,		
performed and documented by the station		
records?		
(a) par 6.2.2		
ELEMENT .03 - NOTICE OF AMMUNITION		
RECLASSIFICATION (NAR)		
A. Is the latest edition of NAVSUP P-801		
(TWO24-AA-ORD-010) on hand?		
(a) par 5.9.1		
_		
(e) par 2-1.4.10		
B. Have NAR, AIN, and OHF files in		
numerical sequence, and cross-references		
been established addressing each DODIC/NALC?		
(a) pars 5.9.6.g, 5.9.7.b and 5.9.10		
(f) par $2-1.1.2$		
(1) par 1 1.1.1		
C. Are NARS processed within three working		
days of receipt and documented (to include		
readdressing, assets reviewed, updating		
stock records, re-tagging material, filing		
NARS, etc.)?		
(a) pars 5.9.6, 5.9.7, and 5.9.10		
(f) par 2-1		
D. Is a surveillance program similar to the		
Navy NAR Program in use at activities		
storing ammunition not covered by the		
Navy NAR program.		
(f) page i		
ELEMENT .04 - INVENTORY ACCURACY		
A. Does each stratum of station inventory		
conform to the sampling plan accuracy goals		
established by OPNAV?		
(g) par 9.c		

B. Are Periodic Lot Reports (PLR) submitted as required?(a) par 2.5.11		
C. Has the command designated an Inventory Accuracy Officer to validate quality in ordnance processes such as receiving and issuing material, monitoring physical inventories and/or conducting samples as required? (a) par 6.2.2.a		
Part II- MARINE CORPS GROUND ACTIVITIES ONLY (CHECK LIST FOR MARINE CORPS CLASS V(W))		
ELEMENT .05 - AMMUNITION ACCOUNTING		
A. Are ammunition/NSN Lot Number Records (NAVMC 10774s) properly prepared and maintained for all ammunition assets when required? (h) par 7002.5.e (m) pars 09010.1, 09011, 25010.1, 25011 and Figures 9-7, 25-6, and 25-7 (n) Part III, Section 10 pars 10.2, 10.2.1, 10.1.1.C and Figure 3-65		
 B. Is the ammunition lot number recorded on all accounting documents; e.g., issues, receipts, and adjustment transactions? (m) pars 09010.2 and 25010.2 (n) Part III, Section 10, par 10.2 		
<pre>C. Is a physical inventory conducted at least annually and recorded on the NAVMC 10774/ mechanized record for all ammunition held? (h) par 7002.4(i), and (j) (m) pars 09010.3 and 25010.3 (n) Part III, Section 10, par 10.2(c)</pre>		
D. Are unaccountable quantities of ammunition made the subject of a missing,		

<pre>lost, stolen or recovered (M-L-S-R) report to the Commandant of the Marine Corps? (a) par 2.4.10 (h) par 7002.6.c and 7006 (l) Enclosure (2) and par 5.b.1-6 (n) Part III, Section 6, par 6.11b</pre>		
<pre>E. Is the latest edition of, NAVSUP P-801 (FORMERLY TW024-AA-ORD-010) (NAR Manual)) on hand? (a) pars 5.9.7b, and 5.9.10 (e) par 2-1.4.10</pre>		
F. Have NAR, AIN, OHF and cross reference files been established in numerical sequence for each DODIC/NALC? (a) pars 5.9.7.b, and 5.9.10 (f) par 2-1.1.2		
G. Are NARS processed within three working days of receipt (to include readdressing, assets reviewed, updating stock records, retagging material, filing NARS, etc.)? (f) par 2-1		
H. Are inactive or filled NAVMC 10774/ Mechanized records and supporting documentation maintained in a completed history file for three years? (j) par 1001.2		
<pre>I. Is security ammunition properly recorded as on hand on appropriate NAVMC 10774s/ mechanized listings and a subcustody given using Equipment Custody Receipts (NAVMC 10359)? (k) par 5.c.1 (m) pars 09001.2g and 25001.2g (n) Part III, Section 10, pars 10.1.1b(7), 10.2b and 10.1.1.c</pre>		
J. Is the correct condition code posted to the Master Asset Listing?		

(i) par 4002.1 (m) par 09010.2 Figure 9-7		
 K. Do on hand quantities agree with the balance records reflected on the Master Asset list of Class V? (i) par 4002.1 (n) Part III, Section 10, par 10.1.1b(7) 		
<pre>L. Are transactions which affect the ammunition accounting records processed in a timely manner? (i) pars 3002.1</pre>		
M. Is initial and annual screening of personnel who account for, maintain, receive, and distribute AA&E conducted and accompanied by a Unit diary entry? (h) par 7002.4.f (o) 0206 b and c		
N. Is the unit storing ammunition that is in excess of authorized quantities? (k) par 5.c.1		
<pre>O. Is serviceable and unserviceable material being stowed on the same pallet? (b) par 5-1.9 (c) par 3-7.2 (d) par 3-7</pre>		
P. Are stocks of small arms ammunition held by the unit stored in accordance with current regulations? (e) par 7.4.5 table 7-22 (k) Enclosure (2), par 4 (m) pars 09001.2f and 25001.2f (n) Part III, section 10, par 10.1.1b(6) (o) Chap 2		

Q. Are NSN/NALCs, quantities, units of issue and serial/lot numbers clearly marked on all unit packs, intermediate containers, and unpacked items. (e) pars 11-1.5.1.b, ll-8.1.1.j and MIL-STD-129N, para 4.2.1		
R. Are all storage containers/boxes, etc, properly secured and sealed? (b) pars 3-6 and 5-1.12 (c) par 3-6 (d) par 3-9 (e) pars 11-1.5.1, and 11.7.8.4.d		
S. Are all transactions that affect the accountable balance vouchered? (m) pars 09010.2 and 25010.2 (n) Part III, Section 10, par 10.2		
T. Are issues and receiving procedures adequate to ensure checks of documentation, stock identity, quantity, condition, units of issue, markings on outgoing shipments, and verification of input to location system? (i) par 3002.6b		
<pre>U. Are monthly inventories of Ammunition and Explosives conducted and documented at the consumer-level? (h) par 7002.4.D (o) par 2-A.(6)</pre>		
V. Is the unit using NAVMAC form 11381 to document all expenditures of ammunition? (h) par 7002.4.0		
<pre>W. Does the unit have a designated AA&E Officer? (h) par 7002.4.d (o) par 0602.f.2</pre>		

X. Has the command designated an Inventory Accuracy Officer to validate quality in the ordnance processes such as receiving and issuing material, monitoring physical inventories and/or conducting samples as required? (a) par 6.2.2.a		
Y. Are expenditure reports and turn-in documents for unexpended assets submitted to the unit S-4 or designated record holder? (h) par 7002.6.c.3 (o) par 0602.f.2		
Z. Does the physical location and quantities of items match the official record? (a) par 4.1.5.c		
AA. Are Unit A&E Audit and Verification Officer auditing/validating Unit Class V(W) Expenditure Reports, NAVMC 11381? (h) par 7002.5.a		
BB. Are Unit AA&E Officers conducting annual AA&E Awareness Training for Unit Personnel? (h) par 7002.4.H (o) par 0204 and 0602.f.(1)		

Command Inspected: _____

Building No._____

Type of Ready Service/Handling Location:

Adequacy of Qualification/Certification Program:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES LIGHTNING PROTECTION

Reference:(a) NAVSEA OP 5, Volume 1, Seventh Revision

- (b) DODINST 4145.26-M
- (c) NFPA 780

REQUIREMENTS REFERENCE	SAT	UNSAT	FINDINGS COMMENTS
1. Has a grounding system test plan been established for visual inspection and electrical testing of primary and secondary grounding system components? (a) par 5-8.3, 5-8.3.2.a.b.c			
<pre>2. Are the proper test procedures used for lightning/grounding systems? (a) pars 5-8-2</pre>			
<pre>3. Is test equipment specifically designed for earth ground system testing? (a) pars 5-8-2.4</pre>			
4. Does the overall grounding system test plan identify the responsibilities for maintaining and updating specific test plans, conducting the tests, recording the test results, reviewing the test results, and scheduling corrective actions? (a) par 5-8.3.2.a.b.c			
5. Are lightning protection/ ground systems tested, inspected, and records maintained as required? (a) pars 6-9			
6. Is the installed			

<pre>lightning protection/ground system tested for electrical resistance and continuity upon installation (and monthly during first year) and at least every 24 months? (a) pars 5-5.1,.2,.3,and .4 5-5.4.1(b), 6-9.1.2</pre>	
7. Are ordnance ground systems visually inspected at least every six months to ensure connections are secure and free from paint, corrosion, or foreign materials? (a) par 5-5.4.5.1	
8. Are portable/installed ground cables visually inspected prior to each use? (a) par 5-5.4.5.1	
9. Are portable/installed ground cables tested for electrical continuity 12 months prior to each use? (a) par 5-7.1.1(c) and 2(b)	
<pre>10. Are conductive floors inspected and tested? Are records maintained? (a) par 5-5.3.1.2 (b) Chap 12, pars F5, 6 and 7</pre>	
<pre>11. Are conductive shoes tested as required (a) par 5-5.3.2.2 (b) Chap 3, par L</pre>	
12. Is all metallic equipment properly bonded/grounded and grounding facilities well maintained?	

(a) par 6-6.2	
(a) Chap 12, par F2	
13. Are repairs made as	
necessary to obtain proper	
resistance within the system?	
(a) par 6-9	
14. Are ordnance handling,	
operating, and storage	
facilities/areas provided	
with lightning protection	
as required?	
(a) pars 6-4	
(b) Chap 12, par E	
15. Has specific criteria been	
established for terminating	
ammunition and explosives	
operations at the approach of a	
thunderstorm?	
(a) par 6-10	

Command Inspected:

Building No._____

Adequacy of Lightning Protection Program:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES MWD CANINE EXPLOSIVE SCENT KIT

Reference: (a) NAVSEA OP 5, Volume 1, Seventh Revision (b) T.O. 11A20-16-7

REQUIREMENTS REFERENCE	SAT	UNSAT	FINDINGS COMMENTS
<pre>1. Are personnel involved in explosive handling operations qualified and certified. (MCO 8023.3)</pre>			
<pre>2. Is Explosive Scent Kit stored separately from all other types of explosive materials Storage with 1.4S materials permissible if necessary. (OP 5 Vol I par 11.8.15.8.d)</pre>			
3. Is there an activity surveillance program established. Is the program conducted on a monthly basis. (OP 5 Vol I)			
<pre>4. Are inspections performed as required. (OP 5 Vol I and T.O. 11A20-16-7)</pre>			
a. Receipt Inspections			
b. Periodic Inspections			
c. Pre-Use/Preassembly Inspections			
d. Returned Munitions			

Ingpostions		
Inspections		
5. Do Inventory records and the explosive containers indicate the date of manufacture for the dynamite and water gel explosives. (OP 5 Vol I and T.O. 11A20-16-7)		
6. Do markings on outer container include NSN, DODIC, Nomen, and DOT marking. (OP 5 Vol I and T.O. 11A20-16-7)		
7. Are individual metal containers identified by a number and labels which include nomen, DODIC, Qty, and N.E.W. (OP 5 Vol I and T.O. 11A20-16-7)		
8. Are all explosive materials stored within the M19A1 container designated for items. (OP 5 Vol I and T.O. 11A20-16-7)		
<pre>9. Are stored items protected from adverse climatic conditions; moisture, humidity, heat, direct rays of sun, etc (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
10. Are all explosive fragments generated from		

handling turned over to EOD for disposal. (OP 5 Vol I and T.O. 11A20-16-7) 11. Does dunnage provide for stacking of kit a minimum of two inches from the floor. (OP 5 Vol I and T.O. 11A20-16-7)		
<pre>12. Are stacks arranged to permit free circulation of air. (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
<pre>13. Are damaged containers repaired/replaced as soon as possible. (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
<pre>14. Do wooden boxes display any signs of contamination and if so are they disposed of by burning. (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
<pre>15. Does sawdust packing show any signs of leaking explosives, dampness or wetness. (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
16. Does commercial dynamite or TNT display any evidence of		

deterioration, exudation or crystallization . (OP 5 Vol I and T.O. 11A20-16-7)		
<pre>17. Does commercial dynamite in storage exceed 180 days since manufacture date. (OP 5 Vol I)</pre>		
<pre>18. Does M19A1 can containing smokeless powder have one half inch holes drilled in opposite corners of the lid to allow for ventilation. (OP 5 Vol I and T.O. 11A20-16-7)</pre>		
19. Do personnel wear rubber or plastic gloves when handling or inspecting dynamite. (OP 5 Vol I and T.O. 11A20-16-7)		

REMARKS_____

Command Inspected: _____

Building	No
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Tvne	of	Readv	Service	/Handling	Location:
TAPE	ΟL	Reauy	DELATCE	manuting	LUCal LUII.

Adequacy of Program:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES AMMUNITION / EXPLOSIVES ASSOCIATED EQUIPMENT

Reference: (a) NAVSEA OP 5, Volume 1 (b) DODINST 4145.26-M (c) SWO23-AH-WHM-010 (d) MCO P11262.2	L, Sev	enth Rev	vision
REQUIREMENTS	SAT	UNSAT	FINDINGS
REFERENCE			COMMENTS
 A. Is only authorized/approved equipment used for all operations Involving weapons, ammunition and explosives? (a) pars 10-3.1 and .3, and 10-4 (b) Chap 3, par M (c) par 1-1 			
B. Have modifications to ordnance handling equipment been approved by NAVAIRSYSCOM, DIRSSP and/or WPNSTA Earle? (a) par 10-3.2 (c) par 1-3			
<pre>C. Is material handling equipment (MHE), i.e., forklift trucks, transporters, etc., of the proper type for the hazard involved? (a) par 10-4 (c) Chap 5, Table 5-2</pre>			
D. Is the MHE properly painted? (c) pars 2-1.3 and .4			
E. Are fire extinguishers readily available during MHE operations? (a) par 4-2.2.1 (c) par 4-7.3			
F. Are hooks used in handling ammunition "moused" or equipped with safety latches to prevent			

	
accidental unhooking? (a) par 10-1.1.6	
G. Are all mechanical guards being used? (c) par 4-5	
H. Is maintenance and repair conducted only by authorized personnel utilizing applicable instructions, maintenance requirements cards, and/or NAVFAC P-307 (depending on type of handling equipment? (a) pars 10-5.3.1, and .3, and 10-6.2b (c) pars 6-4 and 6-7a	
<pre>I. Are operators of lifting equipment performing daily inspections of their assigned equipment? (d) par 1001.2</pre>	
J. Is the annual condition inspection of lifting equipment being conducted? (a) par 1001.7	
K. Has the certifying officer for safety and reliability of all load lifting equipment been designated in writing? (d) par 1001.8	
L. Are all load lifting equipment marked properly? (d) par 1001.11	
M. Are lifting equipment hooks inspected annually for ware of swivels and pins? (c) par 2002	

N. Are operation checks, and an annual certification, being conducted on hoists, winches and structural metal components of load lifting equipment? Are these checks/certifications recorded properly? (d) par 2004 and 2005	
<pre>0. Is all handling/associated equipment being inspected/tested as required? (a) pars 10-5.3, 10-6.5, and 12- 2.2.5d (c) par 6-3 WPNSTA Earle ltr 8021 Ser C11- RAR/C0073 of 22 May 90</pre>	
P. Is such equipment (MHE, attachments, lifting equipment, etc.) properly identified to indicate name of testing facility, test date, and safe working load? (a) par 10-5.3.4 (b)par 6-8.1 and .2	
Q. Do operators inspect MHE and complete NAVSUP Form 1280 prior to starting equipment? (c) par 6-5	
R. Is MHE used for ammunition handling identified as to safe working load (SWL), UL type, weight test date, and vehicle weight? (a) par 10-5.2 (c) par 2-1.2 and 6-8.2	
S. Are cranes, hoists, and lifting equipment, used for explosives handling, load tested	

and certified annually? (a) par 10-6.5a		
T. Are the proper ordnance handling equipment allowance levels being maintained at stations/facilities? NAVSEAINST 10490 (series)		
<pre>U. Are inspection requirements for ammunition lifting equipment (applicable Maintenance Requirements Card (MRCs)) being performed? (a) par 10-5.3.2</pre>		
V. Do type EX MHE have a six- inch blue diagonal stripe painted in a 45-degree angle (top right to bottom left) along both sides and on the rear? (c) par 2-1.3		
W. Is battery charging only done in areas designated specifically for that purpose (forbidden in magazines or other spaces where ammunition and explosives are present)? (a) par 10-4 (c) par 4-8		
X. Are there operational showers and eyewash fountains in battery charging areas? (c) Appendix C par 6		
Y. Are smoking or other extraneous sources of ignition prohibited in battery charging areas? (c) Appendix C par 6		

Command Inspected:

Building No._____

Type of Ready Service/Handling Location:

Adequacy of Qualification/Certification Program:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES QUALIFICATION/CERTIFICATION

eterence: (a) NAVSEA OP 5, Volume 1, (b) MCO 8023.3 series	Sever	ILII KEVI:	51011
REQUIREMENTS REFERENCE	SAT	UNSAT	FINDINGS COMMENTS
1. Has the Commanding Officer or Officer in Charge designated a Board Chairman for the Qualification and Certification Board?			
2. Are the Certification Board Members designated in writing by the Commanding Officer or Officer in Charge?			
3. Are members of the Certification Board E-6 or above certified and qualified?			
4. Do the Certification Board Members individual certification level cover all tasks under consideration?			
5. If sufficient technical expertise in any given area is not available from within the command, has outside assistance been requested/obtained?			
6. Does the Certification Board understand the requirements of the certification levels QA, I, SO, TL, and TM?			
7. Is training received to support the certification documented in the individuals training record?			
8. Does documented training substantiate certification levels			

Reference: (a) NAVSEA OP 5, Volume 1, Seventh Revision

by work task code and family type of explosives?		
9. Are certifications documented using the format shown in enclosure (2) and the definitions/guidelines contained in enclosure (3) of MCO 8023.3.		
a. Are applicable certification levels/work task indicated?		
b. Did the individual being certified sign the form where indicated to acknowledge his certification level?		
c. Did the Chairman of the Board sign where indicated?		
d. Is the date of certification or review valid (within 12 months)?		
e. If re-certification has been accomplished, did the individual being re-certified and the Chairman (certifying authority) sign and date the form?		
f. Are transferred personnel's certification validated by the board chairman if not recertified.		
10. Has no more than 180 days elapsed between certification and actual performance in the work task for which certified.		
11. Have any certifications been revoked? If so, was the revocation documented as a page 13 service record entry?		

12. Are operators of power		
operated handling equipment		
(cranes, winches, hoists,		
forklifts) certified as explosive		
drivers and qualified/certified in		
the movement of explosives families		
concerned?		

Command Inspected:

Building No._____

Adequacy of Qualification/Certification Program:

UNIT:	AMMO TECH:	
INSPECTED BY:	DRIVER:	

AMMUNITION AND EXPLOSIVES SAFETY CHECKLIST FOR TRANSPORTATION Reference: (a) NAVSEA SW020-AF-ABK-010

Date:

Vehicle Number: _____ Trailer Number: _____

INSPECTION CHECKLIST	YES	NO	N/A
1. Is Medical certificate valid/current?			
(para 2-2.3)			
2. Is civilian license/ID card valid/current?			
(para 2-2.1)			
3. Is the driver of right age and experience?			
(para 2-2.4)			
4. Is motor vehicle identification card (SF-46)			
notated Explosive Driver? (para 3-2.1)			
5. Is the DD 626 valid? (para 3-3, appex C)			
6. Is DD 836 provided in case of breakdown (fire,			
accident, etc.) for off-station moves? (para 3-4.2)			
7. Does vehicle have proper fire extinguisher?			
(para 4-2.4(a))			
8. Is DD 836 correct as to content being			
transported? (para 3-4.2)			
9. Is ammunition compatible for transportation?			
(para 4-5.8)			
10. Is ammunition secured as not to slide, fall or			
shift during movement? (para 4-5.9)			
11. Is weight properly distributed, but is not			
overweight? (para 4-6.1.b)			
12. Are appropriate placards applied to vehicle?			
(para 4-7)			
13. Are placards legible, visible or obscured by			
dirt or other matter (para 4-7.2.c)			
14. Is Explosive driver observing and obeying all			
road signs? (para 5-2.6.a)			
15. Are armed guard(s) provided for ammunition being			
transported on or off station?			

EXPLOSIVES SAFETY INSPECTION OF FACILITIES STANDARD OPERATING PROCEDURES

Reference (a) NAVSEAINST 8023.11

(b) NAVSEA OP 5, Volume 1, Seventh Revision

(D) NAVSEA OP 5, VOLUME 1,			
REQUIREMENTS	SAT	UNSAT	FINDINGS
REFERENCE			COMMENTS
1. Has the activity issued an			
instruction which documents the			
activity's process for executing			
reference (a)?			
2. As of 13 March 1992, are all			
new SOPs and major changes to			
SOPs for ongoing ordnance			
processes at the activity been			
developed, approved and			
maintained IAW reference (a)?			
2 λq of 12 Monch 1004 d_{2} -11			
3. As of 13 March 1994, do all			
active processes at the activity			
have SOPs in accordance with			
reference (a)?			
4. Has the SOP been validated?			
All validations will be			
documented. If possible, inert			
materials will be used for			
validations.			
5. Does the SOP contain a Record			
of Approval, listing personnel			
who developed and reviewed the			
SOP? Is there a space for the			
Commanding Officer's approval?			
Communicating Officer B approval:			
6. Does the SOP contain the			
Process Supervisor's Statement?			
TIOCESS SUPERVISOL & Statement:			
7. Does the SOP contain a			
Building or Site Diagram? It			
5			
must show the location of all			
safety-related items with respect			
to the work station.	ļ		

 8. Does the SOP contain Equipment Lists? a. Processing Equipment List. Including approved tools, equipment and supplies. b. Safety Equipment List. 9. Are Hazard Control Briefings included in the SOP? Are records of hazard control briefings 		
maintained? 10. Does the SOP contain Emergency Response and Contingency Plans?		
<pre>11. Does the SOP address Security? a. Maintain physical security, accountability and disposition control for expendable ordnance, hazardous materials, etc. b. Prevent unauthorized disclosure of classified information.</pre>		
12. Have SOP Development and Change Procedures, as specified in reference (a), and paragraph 2-1.1.1 of reference (b) been complied with?		
13. Has Hazard Analysis and Control, IAW with paragraph 2-1.2 of reference (b) been used in preparation of the SOP?		

Command Inspected:

Building No._____

Type of Ready Service/Handling Location:

Adequacy of SOP Program:

EXPLOSIVES SAFETY INSPECTION OF FACILITIES F/E AND EGRESS

Reference: (a) NAVSEA OP 5, Volume 1, Seventh Revision

REQUIREMENTS REFERENCE	F/E	S/S	FINDINGS COMMENTS
 Are sprinklers in place and operational where explosives are stored overnight? (Para 7-12.12) 			
2. Are correct fire symbols displayed outside storage site? (Para 4-4.2)			
3. Are personnel limits posted? (Para 7-6.2)			
4. Are explosive limits posted? (Para 7-4.4)			
5. Are facilities where explosives are handled or stored properly site approved? (Para 8-1.2.1)			
6. Do explosives stored exceed approved NEW? (Para 7-4.4)			
7. Is static ground connected properly? Structural steel or ground rods! Not to gas, steam, or air lines! (Para 5-5.3)			
8. Does primary door			

exit open outward and is it provided with panic hardware? (Para 7-12.12)		
9. Is access to door unobstructed and is the door in good working order? (Para 2-1.5.2)		
10. Are appropriate fire extinguishers available and are they properly maintained? (Para 4-3.6.b)		
11. Is an approved fire bill posted? (Para 4-3.1.1)		
12. Are work spaces kept scrupulously clean and orderly at all times? (Para 2-1.5.1)		
<pre>13. Is food or drink, except for water coolers or dispensers, present in the area where explosives are handled or stored? (Para 2-4.11)</pre>		

REMARKS_____

Command Inspected: _____ Building No._____

Туре	of	Ready	Service/Handling	Location:	
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Adequacy of	of	Program:	DATE

Inspected By_____

EXPLOSIVES SAFETY INSPECTION OF FACILITIES EOD

Reference: (a) NAVSEA OP 5, Volume 1, Seventh Revision (b) DODINST 4145.26-M

REQUIREMENTS REFERENCE	SAT	UNSAT	FINDINGS COMMENTS
<pre>1. Are crew/personnel shelter windows secured and made of LEXAN 500 material or equivalent? (a) Pars 13-2.2.3b and 13- 3.2.4(b)</pre>			
<pre>2. Are there no direct viewing ports in crew shelter? (a) Pars 13-2.2.3b and 13- 3.2.4(b)</pre>			
<pre>3. Do demolition demonstration and routine EOD operation areas meet the requirements for detonation sites? (a) Par 13-3.2.1</pre>			
4. Does the ground within the immediate vicinity of the burning pad not exceed a 10 degree grade? Is burning done on a dirt surface only (concrete, gravel, or cinder surface plots shall not be used)? (a) Par 13-2.2.1b			
5. Are burning grounds a minimum of 1,250 feet away from administrative, housing areas, and non-ammunition related operations?			

	1	r
(a) Par 13-2.2.la(2)		
(c) Chap 15, Par Dl		
6. Is an area 300 feet		
square free of all long		
grass and undergrowth and		
cleared so that a flatbed of		
sand or dirt remains? Is		
vegetation and other		
combustible material removed		
within a radius of 200 feet		
from burning pad?		
(a) Par 13-2.2.1(d)		
(a) Par 15-2.2.1(d)		
7. Has crew shelter been		
approved by NAVORDCEN?		
(a) Par 13-3.2.4(b)		
8. Is the crew shelter		
separated from the point of		
detonation in accordance with		
Table 13-3 of NAVSEA OP 5, Vol.		
1?		
(a) Par 13-3.2.4(b)		
8. Do detonating sites conform		
to Table 13-3 NAVSEA OP 5, Vol.		
1? (a) Par $13-3.2$		
1: (a) Pai 13-3.2		
10. Is all vegetation,		
including dry grass, leaves,		
and other combustible		
materials, removed within a		
radius of 500 ft. or		
firebrand distance,		
whichever is greater?		
(a) Par $13-3.2.1(c)$		
11. Is an emergency area or		
shelter, e.g., 4-ft. hole or		
4-ft. earthen embankment		
available to provide personnel		
protection from high velocity		
fragmentation?		
		-

(a) Para 13-3.2.4(b)	
(a) Para 15-5.2.4(b)	
12. Are demolition training	
ranges properly sited?	
(a) Par 13-3.2.2 and Table 13-4	
13. Are the demolition range	
restrictions complied with?	
(a) Table 13-4	
14. Has a barricade been	
constructed ten feet from	
the detonation point for 0	
to 1.25 pound training	
ranges?	
(a) Table 13-4, Note d, and Fig.	
13-1	
15. Has a barricade been	
constructed ten feet from the	
detonation point for 2.5 to 5.0 pound training ranges? If not,	
has as exception to this	
requirement been authorized by	
the activity Commanding Officer?	
(a) Table 13-4.	
16. Are rendered safe	
procedures used for	
emergency	
destruction developed by	
NAVEODTECHDIV?	
(a) Par 13-1.5	
17. Are SOPs developed/used	
for routine disposal	
operations?	
(a) Par 13-1.2.1	
18. Are waivers for	
demolition/disposal approved and	
granted by NAVORDCEN (may not be	
granted by Commanding Officer)?	

(a) Par 13-1.6	
(a) Fat 15-1.0	
<pre>19. Are established station orders or regulations for the operation of the burning/detonation site posted? (a) Pars 13-2.2.2 and 13-3.2.3</pre>	
20. Are prescribed procedures specific to the disposal of materials or items by burning/detonation posted at the burning/detonation site? (a) Pars 13-2.2.2 and 13-3-2.3	
21. Are SOPs covering the specific procedures for disposition of items to be disposed of by burning available to personnel conducting operations? (a) Par 13-2.3.1	
<pre>22. Is a wind velocity instrument at the burning ground? (a) Pars 13-2.2.7</pre>	
23. Are materials to be disposed of specifically identified and characteristics known? (a) Pars 13-2.1 and 13-3.1	
24. Are materials awaiting destruction stockpiled closer than 500 feet from an active burning pad or intraline distance from detonation site? (a) Pars 13-2.2.9 and 13-3.2.10	
25. Is the material restricted to that which will be disposed of that	

day?		
(a) Par 13-2.2.9		
26. Are disposal operations		
secured during electrical		
storms?		
(a) Pars 13-2.2.7 and 13-		
3.2.8		
(b) Chap 15, Par D2b(8)		
27. Is burning/detonation		
done during daylight hours		
only? Are operations		
completed 30 minutes before		
personnel leave the burning		
point?		
(a) Pars $13-2.3.1(m)$ and (n) and		
13-3.3.1(c) and (f)		
28. Has NAVSEASYSCOM		
authorized destruction of		
unserviceable ammo/		
explosives and other		
dangerous articles? Note:		
Marine Corps activities are		
specifically prohibited from		
conducting disposal		
operations of hazardous		
waste, of any condition		
code, unless specifically		
directed by MARCORSYSCOM		
(AM). Routine EOD training,		
demilitarization, inerting or		
emergency destruction do not		
require prior authorization,		
unless authorized allowances		
are exceeded.		
Refer to MCO P8011.4H for special		
allowance request procedures.		
(a) Par 13-1.1		
29. Is sufficient and		
suitable protection for		

personnel		
provided (clothing and shelter)?		
Is a minimum of two fire blankets		
provided?		
(a) Pars 13-2.2.3b and 13-		
3.2.4(b)		
(b) Chap 15, Par B		
30. Is firefighting		
equipment standing by or		
available within 5 minutes?		
(a) Pars 13-2.2.4 and 13-3.2.5		
(b) Chap 15, Par D		
31. Is telephone or two-way		
radio (with station network,		
emergency and firefighting)		
communication available?		
(a) Pars 13-2.2.5 and 13-3.2.6		
32. Are guards, safety		
signals, road blocks, and		
warning signs used to keep		
unauthorized personnel away?		
Is a red (BRAVO) flag		
prominently displayed and/or		
siren sounded		
during burning operations?		
(a) Pars 13-2.2.6 and 13-3.2.7		
(b) Chap 15, Par B2		
33. Are operators (of the		
burning operation) equipped		
with conductive safety-toe shoes,		
fire retardant outer garments,		
and head gear?		
(a) Par 13-2.3.1(e)		
	•	

Command Inspected: _____

Building No._____

Adequacy of Program:_____

INSPECTION OF FIRE STATION

Reference: (a) NAVSEA OP 5, Volume 1, Seventh Revision

REQUIREMENTS/QUESTIONS	YES	NO
1. Is a fire map showing buildings, magazines and other hazardous storage areas posted in a conspicuous place in the Fire Station? (Par 4-3.2)		
2. Does the fire map show buildings, magazines, outside storage areas (i.e., truck or railcar holding areas, container pads, loaded barges) where hazardous materials (ammunition /explosives) are stored? (Par 4-3.2)		
3. Are the Class/Divisions of ammunition/explosives in storage accurately depicted on the fire map? Use data from ammunition storage report or observations made during inspection. (Par 4-3.2)		
4. Is the information on the fire map kept up- to-date by information supplied by the Ordnance Department at regular intervals or when ever conditions change? (Par 4-3.2)		
5. Can the Fire Department determine by glancing at the fire map, the type of fire it will have to fight and the types of protective equipment required? (Par 4-2.1.2)		
6. Can Fire Department personnel explain what the Class/Divisions represent and how to respond to fires involving each? (Par 4-3, Figure 4-2 and Table 4-1)		
7. Can Fire Department personnel explain the purpose of the Bravo (red) flag? (Personnel		

and explosives are present.) (Par 10-1.1.12)
8. Are sprinkler system wet tests conducted annually? A 30 day tolerance period taking into account production requirements is allowed. (Par 4-3.9.15)
9. Are Fire Department personnel aware of required emergency withdrawal distances from fires involving ammunition/explosives? (Par 4-4.1.1 and Table 4-4)
10. Are Fire Department personnel aware of HERO restrictions associated with their mobile and portable radio transmitters. (NAVSEA OP 3565, Volume 2, Part 1)

AMMUNITION AND EXPLOSIVES SAFETY CHECKLIST FOR ARMORIES AND GUARD FORCES

UNIT:	BUILDING NUMBER:	
INSPECTED BY:	UNIT REPRESENTATIVE:	

INSPECTION CHECKLIST	YES	NO	N/A
1. Does unit maintain security ammunition? (MCO 8011.4H Par 1001.3.)			
2. Is the unit authorized to store limited quantities of Class 1.3 and 1.4 ammunition by the Installation Commander? (MCO P8020.10A Par 5007)			
3. Does the quantity of Class 1.3 and 1.4 service ammunition held by the unit exceed the NET Explosive Weight (NEW) authorized to be stored locally? (MCO P8020.10A Par 5007)			
<pre>4. Is/are the lot number(s) of locally stored ammunition being checked against incoming NAR's? (MCO P8020.10A Par 5007), NAVSEA OP 5 VOL 2-1.4.11)</pre>			
5. Is the ammunition stored in accordance with current directives? (NAVSEA OP 5 VOL 1)			
6. Are building spaces kept clean at all times? (NAVSEA OP 5 VOL 12-1.5.1)			
7. Are flammable materials properly stored? (NAVSEA OP 5 VOL 1)			
8. Is smoking allowed in armory, if so are areas designated in writing by Commanding Officers, at specified times and under specific conditions? (NAVSEA OP 5 VOL 1 4-1.6)			

9. Is approved fire fighting equipment available for use? (NAVSEA OP 5 VOL 1)		
10. Are armorers familiar with the fire hazards, fire fighting equipment and appropriate action to take if a fire emergency develops? (NAVSEA OP 5 VOL 1 4-1.1)		
11. Are operations and equipment so arranged that all persons have unobstructed exit paths? (NAVSEA OP 5 VOL 1)		