



Department of the Army

**WORLDWIDE
AMMUNITION LOGISTICS AND
EXPLOSIVES SAFETY REVIEW
AND
TECHNICAL ASSISTANCE
PROGRAM
(AR 700-13)**

**ANNUAL
DIGEST**

FY 2015 PROGRAM

**U.S. ARMY DEFENSE AMMUNITION CENTER
LOGISTICS REVIEW AND TECHNICAL ASSISTANCE OFFICE
MCALESTER, OK 74501-9053**

TABLE OF CONTENTS

TITLE PAGE COVER
TABLE OF CONTENTS ii
EXECUTIVE SUMMARY iii
PREFACE vi
AMMUNITION REVIEW AND TECHNICAL ASSISTANCE PROGRAM x
 BACKGROUND x
 TECHNICAL ASSISTANCE, DAC PUBLICATIONS & AMMO HELP xi
THE U.S. ARMY DEFENSE AMMUNITION CENTER xiii

SECTION I - AMMUNITION LOGISTICS

- A - ADMINISTRATION 1
- B. EXTERNAL/INTERNAL STANDARD OPERATING PROCEDURES 2
- C. DEMILITARIZATION AND DISPOSAL 6
- D. FACILITIES AND EQUIPMENT 8
- E. MATERIAL MANAGEMENT 11
- F. PHYSICAL SECURITY 20
- G. STORAGE 28
- H. TRANSPORTATION 30

SECTION II - AMMUNITION SURVEILLANCE

- A. AMMUNITION STOCKPILE RELIABILITY 32
- B. RECORDS AND REPORTS 33
- C. SURVEILLANCE INSPECTIONS 35
- D. SURVEILLANCE SAFETY AND LOGISTICS 38
- E. AMMUNITION SURVEILLANCE STANDARD OPERATING PROCEDURES 46
- F. TECHNICAL ASSISTANCE 47

SECTION III - EXPLOSIVES SAFETY

- A. EXPLOSIVES SAFETY MANAGEMENT PROGRAM (ESMP) 49
- B. EXPLOSIVES SAFETY SIGHT PLANS, EXPLOSIVES LICENSE AND MAPS 50
- C. AMMUNITION AND EXPLOSIVES OPERATIONS 52
- D. AMMUNITION AND EXPLOSIVES AMNESTY PROGRAM 55
- E. ELECTRICAL EXPLOSIVES SAFETY 55
- F. FIRE PREVENTION PROTECTION AND SUPPRESSION 58
- G. RISK MANAGEMENT 60

APPENDICES

- A. GLOSSARY OF ACRONYMS AND ABBREVIATIONS A-1
- B. REFERENCES B-1
- C. COMMONLY USED INTERNET WEBSITES C-1

Executive Summary

This digest is a summary of significant observations and trends reported during twenty-six ammunition reviews conducted at twenty-six sites from 1 October 2014 through 30 September 2015. This digest is prepared and published as an aid in identifying potential problem areas that could affect an installation's capability to accomplish its mission in an accountable, efficient, environmentally responsible, safe and secure manner. The following spreadsheet outlines explosives safety/ammunition logistics/surveillance areas represent deficient conditions noted during Fiscal Year 2015 (FY-15) that were either not noted during previous review periods, showed no improvement (but need improvement) or generated an increase in negative observations.

Annually, HQDA G4 directs review of special interest items. Listed below are the FY-15 HQDA special interest items:

- Defense Transportation Tracking System (DTTS) closure of CL V deliveries involving SRC I shipments (CONUS only).
- Support agreements contain required information and documentation.
- QASAS Area Support to Off Post Customers.
- QASAS will provide military munitions surveillance support as specified in SB 742-1 to ACOMs, ASCCs, DRUs, and commanders of Installation Management Command regions publications during peacetime and mobilization. Support areas and intervals for QASAS assigned to the National Guard Bureau (NGB) in Memorandum of Instruction (MOI).
- Support agreements will document specific support requirements, including funding for travel and per diem expenses of the support provider.
- Support visits are to occur at intervals not to exceed 12-15 months or upon request of the supported installation.
- Does the garrison have an established Continuity of Support Operations Plan (COOP) Program to ensure the effective execution of critical Army missions and the continuation of mission essential functions (MEFs) under all circumstances?
- Installation implemented procedures to ensure the ESS database remains current: ESS database is updated on a routine basis to ensure it has the latest GIS, real property, and PES data and explosives arcs updated with the master planner on a routine basis.
- CP12 Safety Professionals with explosives safety responsibilities completed all training and possess ANSI Accredited CP12 Explosives Safety Profession Certificate Level 1.
- Commanders with A&E mission familiar with the Commander's Guide to Explosives Safety and the Commander's Guide to Explosives Safety Management Program.
- Safety Office supports requiring activities with risk assessments and contract requirements for contracted ammunition & explosives (A&E) operations and supports the Contracting Officer with safety oversight of contracted A&E operations.

- Installation has implemented a process for routing of explosives safety site plans (ESSP) and certificate of risk acceptance (CoRA) through senior command and garrison offices to ensure that proper review has been conducted for master planning purposes.
- Installation has implemented a process for identification, handling and disposal of munitions and explosives of concern (MEC) to include procedures for storage and transportation of commercial explosives within the installation for disposal operations.
- Units possessing reduced quantity-distance explosives storage magazines understand and comply with the requirements specified within the DDESB approval documentation.
- Senior command or designee developed and maintains a comprehensive listing of all existing explosives facilities.

FY15 Review Results:

Section I, Ammunition Logistics:

- The following areas were rated as Compliant **(Green)**: Demilitarization/Disposal, Transportation and Special Interest
- The following areas were rated as requiring corrective actions **(Amber)**: Administration, Facilities and Equipment and Storage
- The following areas were rated as Critical Non-Compliant **(Red)**: External/Internal SOP's, Materiel Management, and Physical Security

Section II, Ammunition Surveillance:

- The following areas were rated as Compliant **(Green)**: Surveillance Inspections, and Special Interest
- The following area were rated as requiring corrective actions **(Amber)**: Technical Assistance
- The following areas were rated as Critical Non-Compliant **(Red)**: Ammunition Stockpile Reliability Program, Records and Reports, Surveillance Safety and Logistics, and Surveillance SOP's

Section III, Explosives Safety:

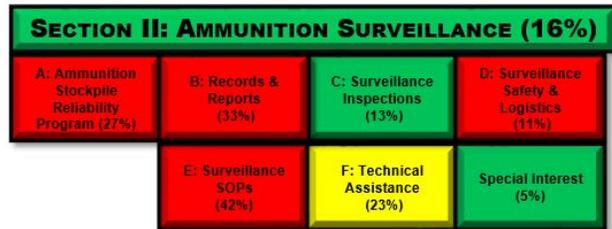
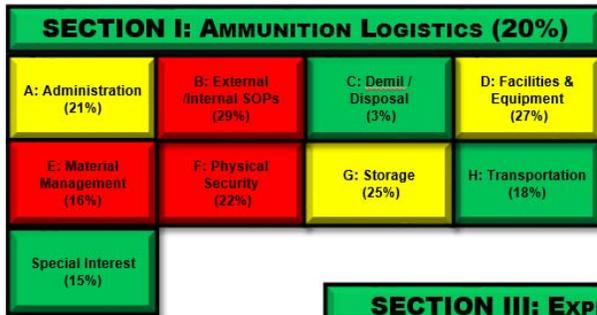
- The following areas were rated as Compliant **(Green)**: Explosives Safety Site Plans License, Maps, Ammunition and Explosives Operations, A&E Amnesty Program, Fire Prevention, Protection & Suppression, Risk Management, and Special Interest.

- The following areas were rated as requiring corrective actions (Amber): None
- The following areas were rated as Critical Non-Compliant (Red): Explosives Safety Management Program, and Electrical Explosives Safety.



FY15 Review Matrix

Breakdown of 209 Primary Elements for FY 2015



Red	Critical Non-Compliance (Requires Immediate Attention)	Amber	Requires Corrective Actions	Green	Complies with Standards	White	N/A
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Overview/Rollups/Non-Critical Rollup Criteria:
Green: ≤ 20% Findings
Amber: >20 - ≤ 30% Findings
Red: > 30% Findings
Critical Item Rating Criteria:
Green: ≤ 20% Findings
Red: > 20% Findings
Note: Critical "Red" within subcategory makes subcategory "Red"

PREFACE

The DA G4 Worldwide Ammunition Review and Technical Assistance Program is accomplished through ammunition logistics reviews performed by the Logistics Review and Technical Assistance Office (LRTAO) of the U.S. Army Defense Ammunition Center (DAC) under the provisions of Army Regulation (AR) 700-13. In addition to periodically scheduled ammunition reviews, AR 700-13 also provides for a technical assistance program. A brief background of these programs starts on page x of this digest.

This digest is a summary of significant observations and trends reported during twenty-six ammunition reviews conducted at twenty-six sites from 1 October 2014 through 30 September 2015. This digest is prepared and published as an aid in identifying potential problem areas that could affect the Army's ability to accomplish its mission in an effective accountable, efficient, environmentally responsible, safe and secure manner. The following locations were reviewed during fiscal year (FY) 2015:

Location	Dates
Arizona ARNG, AZ	27-31 October 2014
Holston Army Ammunition Plant (AAP), TN	3-7 November 2014
Fort Jackson, SC	17-21 November 2014
Fort Rucker, AL	1-5 December 2014
Pelham Range, AL (Alabama ARNG)	8-12 December 2014
Missouri ARNG, MO (Baseline)	5-9 January 2015
Lake City AAP, MO	12-16 January 2015
Fort Stewart-Hunter AAF, GA	12-16 January 2015
Afghanistan (Bagram)	2-6 February 2015
Afghanistan (Kandahar)	9-13 February 2015
Joint Base Lewis-McChord, WA	6-10 April 2015
Yakima Training Center, WA	13-17 April 2015
Camp Roberts, CA	4-8 May 2015
Fort Hunter Liggett, CA	11-15 May 2015
WRSA-I	1-5 June 2015
Tooele Army Depot, UT	1-12 June 2015
8 th Army, Korea (84 th Ordnance Company)	13-31 July 2015
8 th Army, Korea (52 nd Ordnance Company)	13-31 July 2015
8 th Army, Korea (17 th Ordnance Company)	13-31 July 2015
Honduras	17-21 August 2015
Iowa AAP, IA	17-21 August 2015
Rock Island Arsenal, IL	24-28 August 2015
Fort Wainwright, AK	8-11 September 2015
Joint Base Elmendorf/Richardson, AK	14-18 September 2015
Camp Grayling, MI (Michigan ARNG)	14-18 September 2015
Fort Custer, MI (Michigan ARNG)	21-25 September 2015

These following areas were found to be in an acceptable level of compliance:

Accountable Officer Appointment
Statement of Transfer
Open Burning/Open Detonation (OB/OD)
Disposal of Excess Propelling Charges
Inter-Service and/or Intra-Governmental Support Agreements
Aviation and Missile Command (AMCOM) Missile Information Notices (MIN)
Military Munitions Rule (MMR)
Ammunition Information Notices (AIN)
Ammunition Condition Reports (ACR)
Ammunition Data Cards (ADC)
Ammunition Surveillance Desk Procedures
Control of Suspended Stocks
Ammunition and Missile Malfunction Investigations
Propellant Stability Program (PSP)
Storage Monitoring Inspections (SMI)
Condition Code (CC)-K Stocks
Explosives Safety Organizational Staffing
Installation Master Plan
Fire Prevention, Protection, and Suppression
Explosives Safety Responsibility Assignment
Storage Structure Ventilators
Storage Structures
Signature Cards
Vegetation and Erosion Control
Category I Inventory
Light Boxes/Light Box Cards
Amnesty Program
Access/Entry Control
Intrusion Detection System (IDS)
Residue Operations
Inert Certification
Catalog Data
Locks
Hasps
Key Container Combination Change
Magazine Inspection
AR 702-12, QASAS Support
Explosives Safety Training
Establishment of Secure Holding Areas and Update of Transportation Facilities Guide
Transportation Operations

The following explosives safety/ammunition logistics/surveillance areas represent deficient conditions noted during FY 2015 that were either not noted during previous review periods,

showed no improvement (but need improvement) or generated an increase in negative observations.

- A&E Training and Certification Program
- Hazardous Material (HAZMAT) Training/Certification
- Fire Extinguisher Training
- Internal / External Standing Operating Procedures (SOP)
- Material Handling Equipment
- Calibration of Scales
- Inventory Procedures/Accuracy
- Receipt Processing
- Turn In Documentation
- Hazmat Certification (CBL)
- Safety Data Sheets
- Magazine Data Cards (MDC)
- Storage Practices/Conditions
- Restricted Area Signage
- Key and Lock Custodian (On Unescorted Roster)
- Key and Lock Inventories
- Personnel Security Screening
- Security Fencing/Lighting
- Security Construction Statements
- Primary/Alternate Communications
- Physical Security Inspection
- Periodic Inspection (PI) Program
- Ammunition Suspension and Restriction Program
- Basic Load Inspections
- Depot Surveillance Record (DSR)-Munitions History Program (MHP) Entries
- Ammunition Surveillance Standing Operating Procedures (SOP)
- Document Clearance
- Area Inspections
- Explosives Safety Management Program
- Explosives Safety Site Planning
- Explosives Storage License
- Electrical Explosives Safety

All Army commanders with an A&E mission should place an increased emphasis on the above listed areas.

Activities without a Quality Assurance Specialist (Ammunition Surveillance) (QASAS), Ammunition Manager, or Safety Specialist assigned are encouraged to request a technical assistance visit or explosive safety assistance visit to review all aspects of ammunition logistics and surveillance functions prior to a HQDA scheduled review. Reviews are conducted on a four-year cycle.

Comments regarding this digest or any aspect of the ammunition logistics review or technical assistance programs are encouraged. Address comments or questions to:

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McAlester, OK 74501-9053

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AMMUNITION REVIEW AND TECHNICAL ASSISTANCE PROGRAM

BACKGROUND

In April 1972, Headquarters, Army Materiel Command (AMC) established the AMC Ammunition Review and Technical Assistance Program. This program directed the review of all AMC installations and activities whose mission included the receipt, storage, shipment, surveillance, maintenance, demilitarization, transportation, management, or research, development, test and evaluation of Class V materiel and related items. AMC Regulation 700-9 governed the program and the LRTAO at DAC was assigned the mission to conduct the program.

In February 1976, due to the success of the AMC wholesale review program, Headquarters, Department of the Army (HQDA) established the Worldwide Ammunition Support and Review Program, the precursor to the current Worldwide Ammunition Review and Technical Assistance Program. This program directed the review of all active Army, U.S. Army Reserve, and Army National Guard activities worldwide. The LRTAO at DAC was assigned the mission to conduct this “retail” review program. The proponent of the program is HQDA, Deputy Chief of Staff, Army G-4, DALO-SUM.

Through FY 2000 the two programs were conducted concurrently under two separate regulations and with two proponents. Separate digests were also prepared at the end of each FY. The AMC regulation was rescinded and the programs were consolidated under AR 700-13 beginning in FY 2001.

As established by AR 700-13, the primary objective of the Worldwide Ammunition Logistics and Explosives Safety Review and Technical Assistance Program is to improve the overall ammunition logistics system by:

- a. Providing independent assessments to evaluate the operational effectiveness of commands, activities, and other organizations having an ammunition mission.
- b. Identifying local and systemic problem areas and providing recommendations for corrective actions.
- c. Advising commanders and installation personnel on developments that may affect the accountability, security, safety, and/or environmental integrity of their Class V mission.
- d. Providing commanders a source for technical assistance.

Reviews include, but are not limited to, the following:

- a. Compliance with directives.
- b. Adequacy of directives and guidance from higher headquarters.

c. Methods and procedures for accountability/inventory, receipt, storage, issue, surveillance, inspection, testing, maintenance, demilitarization/disposal, transportation, materiel management, and reporting.

d. Explosives safety and physical security.

e. Plans for construction or modification of ammunition facilities.

f. Special interest items directed by HQDA.

In FY10 the LRTAO incorporated explosives safety surveys concurrently with AR 700-13 ammunition logistics reviews. The implementation of explosives safety reviews focuses emphasis on installation-level efforts and Explosives Safety Management Programs (ESMP) previously accomplished by the Department of Defense Explosives Safety Board (DDESB).

TECHNICAL ASSISTANCE, DAC PUBLICATIONS & AMMO HELP

A source of technical assistance is an integral element of the Worldwide Ammunition Explosives Safety Review and Technical Assistance Program. Commands, activities and installations can, as specified in AR 700-13, request technical assistance from the LRTAO on matters pertaining to accountability, supply, explosives safety, surveillance, maintenance, transportation, security, storage, demilitarization, testing and use of A&E, facility layout and construction programs, or any subject applicable to the ammunition mission of a specific command, activity or installation. Services of Ammunition Logistics Management Specialists, QASAS, and Explosives Safety Specialists are available on a temporary duty basis or for telephonic consultation or email. Included in the Preface of this digest are addresses and phone numbers of the LRTAO.

DAC LRTAO Publications can be found on-line at <https://acc.dau.mil/ammo> (Ammunition Community of Practice)

The Yellow Book (this guide is not a regulation. It is not intended to supersede, contravene, or modify any regulatory publications or any other DOD or service criteria).

This invaluable guide, which is titled "Hazard Classification of United States Military Explosives and Munitions," Revision 16, August 2014. This guide is a field reference for the most commonly used ammunition such as classification data, net explosives weights, controlled inventory item codes, hazard classification and division, storage compatibility, etc.

List of Common Supplies, Tools and Equipment for Ammunition and Explosives Operations

Selected supplies, tools and equipment routinely used in ammunition and explosives operations are presented in this cross-reference. (National Stock Number, nomenclature and specification)

Technical Bulletin (TB) 43-0250, Ammunition Handling, Storage and Safety

This TB provides the soldier in garrison or the field a common sense approach and basics of ammunition handling, storage and safety. The TB is a pocket-size publication designed in PS Magazine fashion. It can be viewed or downloaded online through Army Knowledge Online (AKO) or through the U.S. Army Materiel Command Logistics Supply Activity (LOGSA) at www.logsa.army.mil.

DAC Ammo Help

Ammo Help is DAC's most accessible means to better serve the Army and associated personnel. Ammo Help allows any customer to ask any sort of question about ammunition and explosives: logistics, safety, surveillance, training, demilitarization technology or engineering. The DAC directorate having the expertise to provide definitive guidance will answer the question.

Submit an Ammo Help question via email at DAC.AMMOHELP@us.army.mil or the web at https://mhp.redstone.army.mil/modules/AMMO_Help/AskQuestion.aspx. You must include a .mil address in your request.

THE U.S. ARMY DEFENSE AMMUNITION CENTER

The mission of DAC is to provide worldwide support with technical expertise and training for munitions, explosives safety, and hazardous materials. Execute Army authority for munitions and explosives safety, developing solutions for Army, Joint, and Multinational forces in order to enable successful military operations and theater security cooperation.

A multi-faceted, interdependent organization, the Center's major missions are:

1. Provide ammunition-related training for military and civilian personnel through instructor led training (ILT), web-based training (WBT), Regional Training Centers (RTC), or Mobile Training Teams (MTT). For information call the Directorate for Training at DSN 956-8956 or (918) 420-8956.
2. The United States Army Technical Center for Explosives Safety (USATCES) executes the technical aspects of the Army Explosives Safety Management Program for the Director of Army Safety. Functions include Explosives and Chemical Agent Safety Site Plans, Hazard Classification for Ammunition and Explosives, Technical Assistance and Guidance, Accident Investigation Support, Explosives Safety Risk Assessments, Policy and Regulatory Development and publication of the Explosives Safety Bulletin (ESB). For information call the Directorate for Explosives Safety at DSN 956-8080 or (918) 420-8080.
3. Provide web-based accessible logistical documents and databases; perform engineering design and; and support ammunition storage, transportation and test engineering. For information call the Directorate for Engineering at DSN 956-8072 or (918) 420-8072.
4. Assist all DA commands, installations, activities, and units in all aspects of ammunition logistics and surveillance through the LRTAO. For information call the Directorate for Operations at DSN 956-8961 or (918) 420-8961.

SECTION I – AMMUNITION LOGISTICS

A – ADMINISTRATION (Amber)

AMMUNITION ACCOUNTABLE OFFICER

A.1. The appointment of the Accountable Officer in writing and the appointing authority is the commander or the head of the activity. **Critical** Reference: AR 735-5 paragraph 2-10.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: The appointment of the Accountable Office establishes the official “Government Agent” reasonable for the all aspects of the Class V materials and equipment maintained in the Ammunition Storage Area, (ASA).

Solution: Commanders or responsible party will appoint in writing an Accountable Officer as required by regulation.

A.2. A statement of transfer of accountability required when a transfer of property occurs and no shipment is involved. The individual being relieved of accountability will prepare a statement similar to the one shown in figure 5-1. The individual assuming the accountability will prepare a statement similar to the one shown in figure 5-2. Reference: AR 735-5 paragraph 5-2.a.

Of 26 reviews conducted; there were 2 documented non-compliances of this requirement. **(Green)**

Analysis: The statement of transfer documents the out-going and incoming transfer of the ammunition account.

Solution: Incoming accountable officers need to ensure the transfer of accountability is documented and filed IAW AR 735-5.

A.3. Individuals other than Accountable Officer signing accountable documentation require delegation authority. Reference: AR 735-5 paragraph 2-8b (2).

Of 26 reviews conducted; 4 locations (15.3%) had either no delegation of authority for individuals signing accountable documentation or the documentation was incorrect. **(Green)**

Analysis: Other individuals may sign for the “Accountable Officer” in his absence, only those delegated signature authority may do so.

Solution: Accountable Officer must prepare delegation for signature authority to sign ASP documentation (e.g. block 22 of DD Form 1348)

HAZARDOUS MATERIAL (HAZMAT) TRAINING

A.4. Personnel involved with the preparation and shipment of HAZMAT for commercial or surface military transportation trained. Training required for employees who load, unload, or handle hazardous material; mark packages; or prepare hazardous materials for transportation. Reference: Defense Transportation Regulation (DTR) 4500.9-R, chapter 204; 49 Code of Federal Regulations (CFR), part 172, subpart H; AFMAN 24-204(Inter-Service)/TM 38-250/MCO P4030.19I/NAVSUP Pub 505/DLAI 4145.3.

Of 26 reviews conducted; 3 locations (11.5%) had personnel who had not completed mandatory training or the refresher training required for ASP personnel. **Green**

Analysis: All individuals responsible for shipping, packing, and transportation of Hazardous Materials (Class V) will be trained and certified as required by regulation.

Solution: Identify required training and review all training records to ensure required mandatory training is accomplished.

A.5. Hazmat employees must be trained in Basic HAZMAT (not certification) training consists of five categories: (1) general awareness/familiarization training, (2) function-specific training, (3) safety training, (4) security awareness training, and (5) in-depth security training. Refresher training required every two years. Reference: 49 CFR, part 172, subpart H - §172.704 Training requirements

Of 26 reviews conducted; 8 locations (30.7%) had ASP personnel that had not completed Basic HAZMAT training. **Red**

Analysis: All personnel involved in HAZMAT operations will be trained in Basic fundamentals of safety, familiarization, security, and general awareness for the proper execution of support and mission utilization.

Solution: ASA personnel should schedule and complete training requirements by title and duty position to include any follow on or refresher training.

EXPLOSIVES OPERATOR TRAINING AND CERTIFICATION

A.6. Personnel working with ammunition and explosives (A&E) trained in the tasks performed. Reference: DA Pam 385-64 paragraph 2-3 and figure 1-1; The Federal Facilities Compliance Act (FFCA) of 1992, which amended the Resource Conservation and Recovery Act (RCRA); Occupational Safety and Health Administration (OSHA).

Of 26 reviews conducted; 15 locations (57.6%) had not completed training or had no documentation to validate training as part of the Explosives Operator Training Certification Program. **Red**

Analysis: The individuals involved in a task, must be trained in all aspects of the procedures required to be completed before they undertake the process. This will ensure the decreased risk of an accident or administrative mistake.

Solution: Establish validation to document certification of individuals working with ammunition and explosives (A&E) and include in the Explosives Operator Training Certification Program.

B - EXTERNAL/INTERNAL STANDARD OPERATING PROCEDURES (Red)

EXTERNAL STANDARD OPERATING PROCEDURE (SOP)

B.1. Ammunition support activity (ASA) developed an External SOP to provide to customers that outlines the ASA's operations and procedures to be followed in requesting, receiving, and returning ammunition and residue. Reference: AR 710-2 paragraph 3-39.a.

Of 26 reviews conducted; 6 locations (23%) had either no external SOP or some operational and procedural requirements were not included in the external SOP. **Amber**

Analysis: The External SOP will ensure that the process is defined for all personnel who enter the ASA to conduct operations, outlining administrative requirements for the customers and safety requirements. This will ensure the diminished possibility of loss of accountability, training failure, or accident.

Solution: Include all elements of operations and requirements in external SOP.

B.2. Review-concurrence: A process will be developed to have component personnel with specialized knowledge (e.g. safety, environmental, logistics, quality assurance, fire and emergency services, engineering) review the External SOP for clarity, compliance with standards and regulation and conformity with accepted practices in specialty area. Reference: DA Pam 385-10, paragraph 9-7.

Of 26 reviews conducted; 10 locations (38.4%) had SOPs that did not have the proper personnel in the review and/or approval process for the external SOP. **Red**

Analysis: The process of having various specialized individuals, ensure that the utmost effort has been exercised to reduce the likelihood of incident/accident in the operation.

Solution: Include and document subject matter experts as part of the review concurrence and approval process for the external SOP.

B.3. Review Date: a method for reviewing and revising SOPs based upon the complexity and hazardous-nature of the process. At a minimum, SOPs will be reviewed/updated annually, or updated as changes occur or at change of command. Reference: AR 385-10 paragraph 18-5a

Of 26 reviews conducted; 5 locations (19.2%) had SOPs that did not have a review date or had not been reviewed at the required interval. **(Green)**

Analysis: Regulations for A&E operations are ever changing requiring all SOPs to be reviewed and updated to keep up with regulations and the operational requirements.

Solution: Ensure SOPs are staffed, with signatures and the date is affixed to External SOP IAW AR 385.10 paragraph 18-5a (3).

INTERNAL SOPS FOR HAZARDOUS OPERATIONS

B.4. SOPs based on the results of a complete risk assessment of all phases of the task or operation and resulting recommended controls. SOPs for Hazardous Operations reviewed and concurred with by subject matter experts (SMEs) within the executing organization and supporting organizations. At a minimum, SOPs will be reviewed annually or at change of command. **Critical** Reference: AR 385-10 paragraph 18-5.a, 18-5.b, DA Pam 385-10 chapter 9.

Of 26 reviews conducted; 16 locations (61.5%) did not have a risk assessment or the risk assessments were not available for each task or step of the operation SOP. **Red**

Analysis: The process of risk assessments and SOP review is needed due to the changing environment of Class V. Changing procedures, new items, new personnel and new storage locations are just a few reasons to conduct reviews. SOP's and Risk assessments must be current and relevant insuring the highest possible safety for all.

Solution: When creating operational SOPs, ensure risk assessment for each task or step of the operation is developed and attached to respective SOPs.

B.5. Written SOPs developed per and used for all explosives operations to ensure workers have the information necessary to perform assigned tasks safely. Internal SOPs for hazardous operations must meet the criteria specified in DA Pam 385-10 to be considered acceptable. Internal SOP steps documented in logical sequence; identify work space and equipment requirements; specifically identify safety procedures and equipment required to protect worker throughout processes. **Critical** Reference: AR 385-10; DA Pam 385-10 paragraph 9-4; DA Pam 385-64 paragraph 2-4.

Of 26 reviews conducted; 8 locations (30.7%) had information in the SOP that was irrelevant or incorrect based on the operation. **Red**

Analysis: SOP's are a key functional element to all operations, outlining the task to be performed, location of operation, the tools required, safety equipment, safety precautions, and the process/procedures.

Solution: Review internal SOP steps to ensure only required information pertaining to the specific processes are identified.

B.6. Fire prevention requirements incorporated in SOPs as appropriate. Reference: DA Pam 385-10 paragraph 6-8.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: SOP's contain the step by step process for each operation and are tailored to the task performance, inclusion of fire prevention in this process, is the very front line in of fire prevention process.

Solution: All SOP's will contain fire prevention requirements IAW regulation.

B.7. Review-concurrence: A process developed to have component personnel with specialized knowledge (e.g. safety, environmental, logistics, quality assurance, fire and emergency services, engineering) review the External SOP for clarity; compliance with standards and regulation, and conformity with accepted practices in their specialty area. The cover sheet with the draft and final version of the SOP will contain the following information: Activity name; name of process; unique SOP number; date of SOP; name of preparer, title, and phone number; signatures of individuals and their office titles responsible for reviewing and concurring with SOP (e.g. safety, environmental, quality assurance, fire and emergency services, engineering); name and title of approving authority and date of approval. Reference: DA Pam 385-10 paragraph 9-7.

Of 26 reviews conducted; 9 Locations (34.6%) had SOPs that did not have a review by specialized component personnel needed to ensure knowledge in key areas are evaluated for completeness and clarity. **Red**

Analysis: The review of External SOP by key personnel with specialized knowledge allow for in-depth look at the SOP, making the document a vital tool in the control, of safe daily operations.

Solution: SOPs should be staffed through component personnel for each specialized area of knowledge based on the type and scope of the operation.

B.8. Method established for reviewing and revising Internal SOPs based upon complexity and hazardous nature of the process. Reference: DA Pam 385-10 paragraph 9-8

Of 26 reviews conducted; 2 locations (7.6%) had no method in place for reviewing or revising internal SOPs to ensure processes are identified and reevaluated based on its complexity and hazardous nature. **(Green)**

Analysis: Commands must establish and maintain a method for reviewing SOP, so that changes can be put in place on a regular basis, and personnel know how the process works.

Solution: Establish a method for the review of internal SOPs.

B.9. Supervisors or persons-in-charge statement indicates he or she has read; understands operations involved; verified personnel are trained and understand SOP; and task can be accomplished in a safe and efficient manner. Reference: DA Pam 385-10 paragraph 9-9.

Of 26 reviews conducted; 8 locations (30.7%) either had no supervisor statements or the supervisor statement was not signed as required. **Red**

Analysis: Written verification, by means of a statement, and signature. This provides the command an acknowledgement, that SOPs are clearly understood.

Solution: Review each SOP to ensure there is a supervisor statement and that it is signed at the frequency required.

B.10. Employees/Operator/Task Performer read and indicated they understand all the requirements of the SOP relative to their job and can execute it in an efficient, effective, and safe manner by following the SOP. Statement provided and provisions made for the operator to sign under the statement. The statement will attest to the fact that they have read or have had read to them and understand the SOP. Reference: DA Pam 385-10 paragraph 9-10.

Of 26 reviews conducted; 8 locations (30.7%) either had no employee/operator statements or the statement was not signed as required. **Red**

Analysis: Include written verification as part of the SOP, by means of a statement, and signature. This provides the command an acknowledgement, that SOPs are clearly understood.

Solution: Review each SOP to ensure there is an employee/operator statement and that it is signed at the frequency required.

B.11. SOPs for the task readily available to supervisors and operators. For explosives and chemical operations the SOP will be posted in the work area. Reference: DA Pam 385-10, paragraph 9-11.

Of 26 reviews conducted; 8 locations (30.7%) either had no/ or insufficient SOP's posted in the work area. **Red**

Analysis: Easy access to the SOP's by employees in the work area is crucial to safe and correct procedures.

Solution: Post current copies of step by step SOP's in the functional work areas.

B.12. Index maintained for all approved SOPs and contains the following information: SOP number; title of SOP; name of office submitting SOP; date of approval, and next review date. Reference: DA Pam 385-10, paragraph 9-12.

Of 26 reviews conducted; 9 Locations (34.6%) had did not have or had an incomplete or incorrect index of operational SOPs. **Red**

Analysis: The index is a necessary element, for expedient location and SOP management.

Solution: Develop an index/outline of approved SOPs with all required information.

C - DEMILITARIZATION/DISPOSAL (Green)

DEMILITARIZATION

C.1. Installation surveillance organization monitors A&E demilitarization operations and sites. Reference: SB 742-1 paragraph 10-6b.

Of 26 reviews conducted; 1 Location (3.8%) where there were A&E demilitarization operations and sites are not monitored by the QASAS. **(Green)**

Analysis: All demilitarization operations will be monitored by surveillance personnel insuring regulatory compliance, and compliance with safety requirements.

Solution: Surveillance personnel should monitor demilitarization operations and sites.

C.2. The surveillance organization developed an Internal SOP to support demilitarization operations. Reference: SB 742-1 paragraph 10-6.c.

Of 26 reviews conducted; 1 Location (3.8%) had no surveillance organization Internal SOP to support demilitarization operations. **(Green)**

Analysis: Develop and provide approved demilitarization SOPs to provide detailed instruction on proper operation following all regulatory guidelines.

Solution: Develop Internal SOP to support local demilitarization operation.

C.3. The installation demilitarization SOP submitted to the ammunition surveillance organization for review, concurrence and approval prior to start of operation. Reference: SB 742-1 paragraph 10-6.a.

Of 26 reviews conducted; 2 locations (7.6%) where there was no ammunition surveillance involved in the review, concurrence or approval of demilitarization SOP. **(Green)**

Analysis: The review by the surveillance section will ensure correct compliance with guidelines.

Solution: Include ammunition surveillance in the review, concurrence or approval of demilitarization SOPs.

OPEN BURNING/OPEN DETONATION (OB/OD)

C.4. Resource Conservation and Recovery Act (RCRA) permits required for OB/OD. Reference: 42 USC Section 6901, 40 CFR Part 264, and applicable State Statutes

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: The mission of the installation is to ensure all training conducted meets the required standard for safe and compliant Open Burning or Open Detonations.

Solution: Installations will comply with all regulatory gridlines for OB/OD.

C.5. OB/OD limits and procedures in agreement with RCRA permit. Reference: 42 USC Section 6901, 40 CFR Part 264 and applicable State Statutes.

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: Installations will review all SOP's for ranges that conduct OB/OD for compliance with limits/procedural requirements. Additionally there should unannounced Range inspection to ensure user compliance.

Solution: OB/OD limits and procedures must meet the requirements of regulations and Permits.

DISPOSAL OF EXCESS PROPELLING CHARGES (During training events only)

C.6. Excess propelling charges burned during training events. Reference: 40 CFR Part 266, Section 266.202(a) (1) (i) and TM 9-2350-311-10, paragraph 5-4(b).

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: Installations will review all SOP's for ranges that burn excess propellant charges for compliance with limits/procedural requirements. Additionally there should be unannounced range inspections to ensure user compliance.

Solution: Units conducting training on ranges and open burning excess propelling charges will comply with regulatory guidelines.

D - FACILITIES AND EQUIPMENT (Amber)

MATERIALS HANDLING EQUIPMENT (MHE) AND LIFTING DEVICES

D.1. Lifting devices rated load test and written certification provided to using activities and load rating; periodic inspection and function test conducted at least annually and prior to use if idle for six months; forklifts stenciled on the side of the mast to the operators left with the load rating and the date of the next periodic inspection in letters one inch or larger. Reference: DA Pam 385-64 paragraph 2-17 and TB 43-0142.

Of 26 reviews conducted; 15 locations (57.6%) had forklift or other lifting devices where load ratings were not completed or current markings not IAW TB 43-0142. **Red**

Analysis: The periodic test of lifting devices will ensure the safety of personnel performing operations where movement is required. Marking ensure the equipment is maintained correctly within tolerance.

Solution: Ensure the process of safety inspection and testing of forklifts and lifting devices includes proper stenciling of forklifts on the side of the mast to the operators left with load rating and the date of the next periodic inspection in letters one inch or larger and stenciling of lifting devices. Ensure periodic inspections and function tests are conducted at the proper interval.

SCALES

D.2. Calibration of test, measurement, and diagnostic equipment (TMDE) at completed at appropriate interval. Reference: TB 43-180.

Of 26 reviews conducted; 8 locations (30.7%) had scales or other devices in residue areas or other operations were observed without current calibration. **Red**

Analysis: Calibrated Scales provide data to personal, loading trucks, and on the turn-in process that verifies the weights and measurements are accurate. Each A&E process requires precise and valid data.

Solution: Coordinate for the calibration of scales and other measuring devices or remove and replace equipment. When calibrated, affix DA Label 80 (US Army Calibrated Instrument) which reflects calibration expiration date.

FIRE EXTINGUISHERS

D.3. A minimum of two fire extinguishers, suitable for the hazards involved, available for immediate use when A&E handled. Reference: DA Pam 385-64 paragraph 6-10.

Of 26 reviews conducted; 3 locations (11.5%) did not have the minimum of two fire extinguishers as required for all structures or facilities where A&E was present and during A&E operations. **(Green)**

Analysis: By having two fire extinguishers on hand, the possibility for extinguishing fires in structures or on and around equipment is greatly increased.

Solution: Periodically conduct spot checks of A&E operations in all areas to ensure all elements are abiding by the rules and regulations during A&E operations.

D.4. Personnel with responsibilities for using fire extinguishers trained on general principles of fire extinguisher use and the hazards involved with incipient stage firefighting upon initial assignment and at least annually thereafter. Reference: DA Pam 385-64 paragraph 6-10.

Of 26 reviews conducted; 10 locations (38.4%) had ASP personnel that had completed or had fire extinguisher training that was not current. **Red**

Analysis: Training of designated firefighting personnel ensures that proper fire engagement principles are followed for correct utilization of equipment. Recurring training will be ongoing for all required personnel.

Solution: Schedule initial fire extinguisher training for ASP personnel, document training upon completion. Develop method to track/monitor annual fire extinguisher training completion dates for ASP personnel and required annual refresher training.

VEGETATION AND EROSION CONTROL

D.5. Fire prevention requirements IAW regulatory guidelines. Reference: DA Pam 385-64 paragraph 6-8.

Of 26 reviews conducted; 3 locations (11.5%) had excess vegetation on top of the magazines. **(Green)**

Analysis: Vegetation control is the major concern for fire prevention due to the large areas utilized for storage and the response time required for firefighting personnel.

Solution: Monitor vegetation throughout the storage area and perform mowing based on fire prevention measures.

D.6. Firebreaks kept clear of all readily combustible material, such as dry grass, dead wood, or brush. Reference: DA Pam 385-64 paragraph 6-9.

Of 26 reviews conducted; 6 locations (23%) had heavy vegetation in firebreaks. **Amber**

Analysis: Firebreaks represent the last defense to many storage areas and it is an imperative that vegetation in firebreaks be maintained at all times.

Solution: Perform mowing in firebreaks based on fire prevention measures.

HAZARDOUS MATERIAL STORAGE

D.7. Authorized storage of limited quantities of paints, lubricants, adhesives IAW regulatory requirements. Reference: 29 CFR 1910.106, DA Pam 385-64 paragraph 6-8.f.

Of 26 reviews conducted; 4 locations (15.3%) had an authorized storage container for paints, lubricants, and adhesives; however, several canisters of paint were unidentifiable and/or empty. Paint was not stored in storage cabinet or paint was left in an inspection bays. **(Green)**

Analysis: Flammable materials are required for marking and labeling A&E and may be kept in small quantities in work areas.

Solution: Periodically perform checks to ensure all unserviceable and unidentifiable canisters are not being stored in cabinet.

D.8. Safety Data Sheets (SDS), formally known as Material Safety Data Sheets (MSDS) available for all items on-hand and accessible to all employees to assure proper handling, storage, and emergency response preparedness. Reference: AR 710-2, paragraph 1-30.

Of 26 reviews conducted; 8 locations (30.7%) had SDSs that were not available or not stored with paints, lubricants, and adhesives in the authorized storage cabinet. **Red**

Analysis: SDSs are required for all hazardous materials used in a work area. SDSs provide instructions should emergency incidents occurs As well as proper personal Protection requirements.

Solution: Associated SDSs should be stored with the items or in an area well known and accessible to all employees.

E - MATERIEL MANAGEMENT (Red)

SAMPLE INVENTORY (CATEGORY I AND NON-CATEGORY I)

E.1. Inventory accuracy of A&E is 95 percent or more. Reference: AR 710-2 paragraph 3-37.a.

Of 26 reviews conducted; 13 locations (50%) did not meet the Army standard for inventory accuracy. **Red**

Analysis: Commands must monitor their munitions transactions for accuracy, conducting more frequent off line inventories will assist in identifying inventory differences.

Solution: Brief personnel to conduct more frequent offline inventories which will identify deficiencies as they occur.

E.2. Class V items with serial numbers (S/N) on record by S/N and lot number. **Critical** Reference: AR 710-2 paragraphs 2-44 and 3-30.

Of 26 reviews conducted; 1 Location (3.8%) was not complying with serial number inventory requirements. **(Green)**

Analysis: Serial numbered item are high cost and a security risk. Items must be inventoried and recorded more than other items due to this sensitive nature.

Solution: Perform and maintain an inventory results for all Class V items with serial numbers and lot numbers. On hand inventory should be the same as the stock record accounting system.

INVENTORY FREQUENCY AND PROCEDURES

E.3. Location survey accuracy of A&E is 98 percent. Location surveys conducted before a closed inventory to verify of the recorded location data with the physical location of assets. Reference: AR 710-2 table 1-3.

Of 26 reviews conducted; 16 locations (61.5%) had no record of location survey being conducted prior to inventory. **Red**

Analysis: Location surveys assist with the inventory preparations. Location Surveys let you know if a lot of munitions is actually stored within the warehouse. It can also identify location differences on your accountable records.

Solution: Conduct location surveys prior to inventories, correct deficiencies identified during the location survey process.

E.4. Inventories conducted at appropriate intervals. **Critical** Reference: AR 710-2 paragraph 3-37.

Of 26 reviews conducted; 2 locations (7.6%) had not conducted inventories at the correct intervals listed in AR 710-2. **(Green)**

Analysis: Inventories must be performed to maintain/correct the stock record account, discovering posting errors and operational gains and losses, thus resulting a true and accurate stock record and availability.

Solution: Perform inventories in a systematic and thorough manner using an open scheduled cyclic (limited customer transactions) or special inventory. A Closed inventory is a wall-to-wall 100% inventory with no customer transactions.

E.5. Procedures for inventories of A&E conducted IAW regulatory guidelines. **Critical** Reference: AR 710-2, DA Pam 710-2-1, DA Pam 710-2-2.

Of 26 reviews conducted; 12 locations (46.1%) did not follow correct procedures. **Red**

Analysis: Inventories are listed as two types; scheduled wall-to-wall, the location is closed (3-5 days) and every warehouse location is inventoried. Scheduled cyclic, a selected number of item are inventoried all items on-hand will be inventoried at least once annually. During cyclic inventories customer service operations will continue. Other inventories may be performed in special cases for a specific reason.

Solution: Conduct inventories, following proper procedures.

E.6. Discrepancies in stock record balances found during inventory researched and adjusted. Reference: DLM 4000.25-2, Table C6.T.3, AR 735-5 paragraph 14-34.

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: Discrepancies found during an inventory will be researched corrected and reported to command. The main objective is to determine the discrepancy was due to theft or accounting error.

Solution: All discrepancies will be corrected and reported as required by regulation.

E.7. When processing inventory adjustments, no A&E loss shall be attributed to an accountability or inventory discrepancy unless determined through investigation that the loss was not the result of theft. DA Form 444 (Inventory Adjustment Report) includes causative research (when required). Reference: DLM 4000.25-2 Table C6.T.3, AR 735-5 paragraph 14-34.

Of 26 reviews conducted; 4 locations (15.3%) had not completed DA Form 444 correctly.

(Green)

Analysis: The Inventory adjustment will determine if the loss was the result of accounting error or loss due to theft.

Solution: Conduct causative research and review documents and determine results/conclusion. Prepare DA Form 444 as needed, inform command channels if further action required.

RECEIPTS

E.8. The Accountable Officer signs the DD Form 1348 (Issue Release/Receipt Document) name, rank, and the Julian date in block 22. Only the Accountable Officer or persons authorized by delegation authority will sign for supplies. Reference: DA Pam 710-2-1 paragraph 2-32.e and AR 735-5, paragraph 2-8.a.(3).

Of 26 reviews conducted; 8 locations (30.7%) the accountable officer had not signed DD Form 1348. **Red**

Analysis: Regulatory requirements state that an accountable stock record officer be appointed by the responsible Commander as the accountable officer. The accountable officer is the "Government Agent" responsible for Class V in the stock record inventory signing for and releasing items under their control.

Solution: Accountable Office will sign all DA Form 1348 assuming responsibility for all item in the Stock Record Account.

E.9. Receipts processed by the receiving section within 24 hours from the time the supplies are received. Reference: DA Pam 710-2-2 paragraph 8-2.

Of 26 reviews conducted; 2 locations (7.6%) had failed to post the receipt transactions within 24 hours. **(Green)**

Analysis: The prompt posting of receipts allows the WARS and TAMIS systems to have a timely and higher accuracy inventory visibility for commands planning training or operations.

Solution: Perform all receipt posting to the stock record within 24 hours.

E.10. Stock control prepares a DA Form 3151–R before the ammunition is off-loaded and stored. Warehouse locations selected from the storage plan. The DA Form 3151–R is forwarded to the storage section. Reference: DA Pam 710-2-2 paragraph 24-25.

Of 26 reviews conducted; 3 locations (11.5%) had failed to forward DA Form 3151 before taking material to storage location. **(Green)**

Analysis: The DA Form 3151 is prepared by the stock control section, this allows for the location and storage compatibility to be verified against explosive licenses and storage plan.

Solution: Stock Control prepares DA Form 3151 and forwarded to the storage section crew for processing.

E.11. Storage section inventories receipted items and sends the completed DA Form 3151 to stock control; stock control. If there is a discrepancy, storage section rechecks the actual receipts. If rechecking does not resolve the discrepancy, a SF 364 (Report of Discrepancy) is prepared. Reference: DA Pam 710-2-2 paragraph 24-25

Of 26 reviews conducted; 3 locations (11.5%) had failed to inventory receipts. **(Green)**

Analysis: This process uses a system of checks and balances, storage section completes the DA Form 3151 and inventory the items placing them in the proper location. Storage Section personal will report any discrepancy for resolution by stock control personal and accountable officer.

Solution: Storage section completes DA Form 3151 and returns it to stock control reporting any discrepancy.

E.12. All documents supporting the receipt are completed, assembled, and filed in document number sequence. Reference: DA Pam 710-2-2 paragraph 24-25.

Of 26 reviews conducted; 3 locations (11.5%) had not assembled documents correctly, or not filed by document number. **(Green)**

Analysis: Receipts documents, (DD 1348-1, DD 2890, TCMD, and MRO) will be filed by document number this is a supporting document as a gain to stock record. Records are maintained for future reference such as causative research.

Solution: All supporting documents are maintained on file IAW regulations.

SHIPMENTS

E.13. Directive received for shipment; stock control section selects the stocks and obligates them on the due-out record for shipment. Reference: DA Pam 710-2-2 paragraph 24-26.

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: Directives for shipments contain information concerning movement of items such as funding, document numbers, DODAC, and DODICS they will be maintained for reference.

Solution: Maintain a file for all shipment Directives.

E.14. Stock control prepared DA Forms 3151-R and sent to the surveillance section to verify the condition and suitability of the stocks selected. Inventory and inspect the shipment before and after loading. Completed DA Form 3151-R provided to stock control for final processing. Stock control verifies the returned DA Form 3151-R against suspense copies and prepares the Transportation Control and Movement Document (DD Form 1384). Post the stock records using the completed DA Form 3151-R. Reference: DA Pam 710-2-2.

Of 26 reviews conducted; 5 locations (19.2%) had not verified condition and suitability. **(Green)**

Analysis: The processing of DA Form 3151-R and forwarding from stock control through surveillance ensures quality check for correct quantities, item and condition code. Additionally insuring the TCMD contains the correct information.

Solution: Prepare all documents required to execute out bound shipments of A&E.

E.15. Hazmat certifier reviews/signs the shipping papers. Certifier successfully completed the 80-hour HAZMAT certification course. **Critical** Reference: Defense Transportation Regulation (DTR) 4500.9-R, chapter 204; 49 Code of Federal Regulations (CFR), part 172, subpart H; AFMAN 24-204(Inter-service)/TM 38-250/MCO P4030.19I/NAVSUP Pub 505/DLAI 4145.3.

Of 26 reviews conducted; 8 locations (30.7%) had not signed shipping papers or had been signed by personnel not certified or trained. **Red**

Analysis: Hazmat certifiers must be trained and have in depth knowledge of transportation requirements, packaging, loading, and documentation requirements.

Solution: All HAZMAT certifiers will be trained as required by regulation.

E.16. Customs clearance (if required). Reference: 19 CFR Subpart A, § 161.2

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

Analysis: ASA personnel will have shipments transiting borders cleared by customs as required by regulatory guidelines.

Solution: All shipments must be cleared when required by regulation. (Green)

E.17. Report of Shipment (REPSHIP) message prepared (Transportation Office).
Reference: DTR 4500.9-R, Part ii, Chapter 205, paragraph L

Of 26 reviews conducted; there were no documented non-compliances of this requirement. (Green)

Analysis: Installations/commands ensure transportation personal as required for shipments prepares and transmits reship reports.

Solution: Ensure Transportation Officers prepares reship message IAW regulatory guidelines.

E.18. All documents supporting the shipment are completed, assembled, and filed in document number sequence section. Reference: DA Pam 710-2-2 paragraph 24-26.

Of 26 reviews conducted; 3 locations (11.5%) did not properly file documents in document number sequence. (Green)

Analysis: Supporting documents must be completed and assembled and filed in sequence. The supporting documents are a required element in the audit trail and history of action taken to execute the shipment.

Solution: Shipment documents will be filed IAW DA Pam 710-2-2.

SIGNATURE CARDS

E.19. Signature cards (DA Form 1687) required to be on file. Assumption of command and/or battalion S4/Property Book Officer (PBO) orders accompany each signature card for supported units. Reference: AR 710-2, DA Pam 710-2-1, DA Pam 710-2-2.

Of 26 reviews conducted; 4 locations (15.3%) did not have required documents. (Green)

Analysis: The DA Form 1687 and the assumption of command orders/PBO orders are the basis for the Class V account at the ASA and is required for the legal transfer from one individual to another.

Solution: Maintain file copy DA Form 1687 and assumption of command orders for each customer.

E.20. DA Forms 1687 for Class V completed IAW regulatory guidelines. Reference: DA Pam 710-2-1, DA Pam 710-2-2.

Of 26 reviews conducted; 12 locations (46.1%) were not completed correctly. Red

Analysis: The DA Form 1687 is the document that Commanders give their personnel authority to sign for government property and thus become responsible/accountable for the property. Only a correct/valid DA 1687 will be used for this process at ASA.

Solution: All DA Form 1687 must be completed IAW DA regulatory guidelines.

ISSUE/TURN-IN DOCUMENTATION AND PROCEDURES

E.21. Issue and turn-in documentation requires in compliance with regulatory requirements. Reference: A Pam 710-2-2, DA Pam 710-2-1.

Of 26 reviews conducted; 9 Locations (34.6%) were not completed correctly. Specifically blocks 13a and 14a were not signed for unit turn-ins. **Red**

Analysis: Issue and Turn-In documents are the instrument used to transfer accountability or responsibility from the Accountable Officer to the individual listed on the DA Form 1687.

Solution: Complete all Issue and Turn-In documents IAW regulatory guidelines.

E.22. DA Form 5811 (Certificate - Lost or Damaged Class V Ammunition Items) required by using unit to account for shortages between the quantity of ammunition turned in and the quantity issued (less expended). The first LTC (O-5) or equivalent (GS-13 or above) in the chain of command, or MAJ appointed on orders to a LTC or above command position, will determine appropriate action and sign the form. Reference: AR 710-2 and DA PAM 710-2-1.

Of 26 reviews conducted; 2 locations (7.6%) were not completed correctly. **Green**

Analysis: The DA Form 5811 is critical to the determination is the explanation provided by using unit and justifies damage or loss and if further investigation is needed to report a loss.

Solution: All DA Form 5811 will reviewed by the first LTC or equivalent in the chain command and returned to the ASA for document reconciliation.

E.23. DA Form 5692 (Ammunition Consumption Certificate) on file for items requiring a signed statement for items consumed. DA Form 5692 consumption documents requires Unit Range Safety Officer (SSG or above) to certify quantity drawn, quantity to be returned, and quantity consumed in training at the range. Reference: DA PAM 710-2-1 paragraph 11-14a (2).

Of 26 reviews conducted; 2 locations (7.6%) form was not present for consumed controlled munitions. **Green**

Analysis: The DA 5692 is a document that range safety officer certifies the all the items listed on the DA 5692 were consumed on the range and that range safety witnessed the consumption. This document is the supporting document for the turn-in document.

Solution: DA Form 5692 maintained on file with turn-in document for controlled items IAW regulations.

E.24. Escort services for A&E shipments moving on and off an installation include in compliance with regulatory guidelines. Reference: DODM 5100-76, Enclosure 10 and AR 190-11 paragraph 7-10.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: Commanders and Accountable Officers will ensure that security requirements for A&E are enforced on and off the Installation.

Solution: All movements of A&E on or off post must meet the security requirements as stated in regulations.

INERT CERTIFICATION

E.25. Required inert certification statement included on DA Forms 581 (Request for Turn-In: Residue). Reference: AR 710-2, DA Pam 710-2-1 figure 11-10.

Of 26 reviews conducted; 2 locations (7.6%) did not have statement on turn-in documents. **(Green)**

Analysis: The statement on the DA Form 581 validates the units screening the expended brass and there are no live rounds in the expended brass.

Solution: All Turn-In DA Form 581s should contain statement in remarks block; see reference in DA Pam 710-2-1, fig 11-10.

E.26. Personnel who inspect, process, or document material as safe or hazardous according to certified, in writing, by the DOD Component directly responsible for controlling the transfer or release of material potentially presenting an explosives hazard (MPPEH), material documented as an explosive hazard (MDEH), or material documented as safe (MDAS), as being technically qualified according to the standards provided in the Instruction and in DOD Component procedures for management of MPPEH to perform such functions and, in the case of contractor personnel, be certified in conformance with contract requirements. Reference: DODI 4140.62 (Management and Disposition of Material Potentially Presenting an Explosive Hazard), enclosure 3, paragraph 2f.

Of 26 reviews conducted; 3 locations (11.5%) did not have appointment orders. **(Green)**

Analysis: Personnel authorized to sign the disposal DD 1348-1 document are required to be appointed in writing by the commander.

Solution: The responsible individual must appoint all personnel who inspect, process, or document material as safe (Certifier/Verifier).

E.27. Documents transferring residue to DLA-DS and/or qualified recycling program (QRP) contain prescribed inert certification/verification statement signed by qualified personnel. **Critical** Reference: DOD 4160.28-M V3 (Defense Demilitarization: Procedural Guidance).

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: All documents transferring residue from ASA to DLA-DS must be inspected. The inspection will be recorded by annotating transfer documents with a certification/verification state and signing and dating by inspecting official.

Solution: Complete all transfer documents for residue IAW regulations.

RESIDUE OPERATIONS

E.28. Installations possession of an automatic returns listing (ARL) for non-consumable residue items requiring return for reuse. Reference: AR 725-50 and SB 755-1.

Of 26 reviews conducted; 1 Location (3.8%) did not have a copy of the ARIL on file. **(Green)**

Analysis: Review the list on a regular basis to determine if item are present at the ASA and which should be returned.

Solution: Obtain and maintain ARL.

E.29. Residue containing hazardous constituents stored protected from the elements to preclude possible environmental contamination. Reference: Waste Profile Notices (WPN).

Of 26 reviews conducted; 6 locations (23%) had residue items subject to inclement elements. **Amber**

Analysis: Residue is required to be protected from the environment in such a way that it is protected from the elements by covering or storing indoors.

Solution: All residue items must be protected from environment, as required.

E.30. Installations may operate a QRP and direct sell residue not identified on the ARL. Reference: 10 USC Section 2577, 32 CFR 172, DODI 4715.4.

Of 26 reviews conducted; 1 Location (3.8%) was not compliant regulatory requirement. **(Green)**

Analysis: The sale of items through QRP will save resources for everyone.

Solution: Conduct a QRP for all non ARL items if applicable. You are not required to operate a QRP if you utilize the Defense Logistics Agency (DLA) for residue disposal.

E.31. Expended cartridge case sold through a QRP deformed to prevent reloading. Installations operating a brass deformer and/or safety certification unit have a SOP for its operation and maintain records of brass processed and sold. Reference: 10 USC Section 2577, 32 CFR 172, DOD 4160.21 M.

Of 26 reviews conducted; 3 locations (11.5%) were not compliant with regulatory requirement. **(Green)**

Analysis: The QRP sell of deformed expended brass will save resources for the installation.

Solution: Install brass deformer and maintain safety certification. Prepare and approve and SOP for the operation and maintain records of brass processed and records of sales. Ammunition Peculiar Equipment (APE) can be found at https://apps.jmc.army.mil/apems3_catalog/index.aspx?area=resources

CATALOG DATA

E.32. Catalog data matches information found within the Army Master Data File. Reference: AR 710-2, paragraph 3-4

Of 26 reviews conducted; 5 locations (19.2%) failed to review their catalog data against the AMDF. **(Green)**

Analysis: Establish a regular update process in SAAS-MOD; the file will reflect accurate catalog data.

Solution: Maintain current catalog data.

ACCOUNTABILITY OF OPERATIONAL LOAD AMMUNITION (OPL)

E.33. Operational Load Ammunition (OPL) not expended in training. Reference: AR 710-2 paragraph 2-44.

Of 26 reviews conducted; 2 locations (7.6%) used OPL ammunition for training. **(Green)**

Analysis: OPL must be accounted for separately from training ammunition (TNG). OPL and TNG should be separated in storage unless it cannot be due to space or funding.

Solution: Maintain proper operational load accountability.

E.34. Operational load ammunition maintained on property books. Reference: ALARACT 145/2013 Accountability of Operational Load Ammunition, DTG 101841Z Jun 13.

Of 26 reviews conducted; 5 locations (19.2%) failed to maintain OPL on Installation Property Book. (Green)

Analysis: The requirement is due to the separate account system any deviation or miss use will result in Investigation.

Solution: Maintain all OPL Class V on the local Property Book.

E.35. Ammunition on property books inventoried at appropriate intervals. Reference: DA Pam 710-2-1 paragraph 9-9 and 9-10b.

Of 26 reviews conducted; 4 locations (15.3%) failed to inventory OPL at required intervals. (Green)

Analysis: The property book officer is responsible for the accountability of the OPL ammunition maintained by unit.

Solution: Inventories are conducted with scheduled inventories of property book cycles.

F - PHYSICAL SECURITY (Red)

LOCKS AND HASPS

F.1. High security locks/hasps and secondary locks are required for the storage of A&E. Reference: AR 190-11 paragraph 5-6.

Of 26 reviews conducted; 7 locations (26.9%) failed to use correct locks and hasps. Amber

Analysis: Ammunition structures require special locks to provide additional security measures.

Solution: Maintain all locks as required by the regulation.

F.2. Padlocks are locked to the staple or hasp when the area of container is open to preclude theft, loss, or substitution of the lock. Reference: AR 190-11 paragraph 3-8.m.

Of 26 reviews conducted; 5 locations (19.2%) failed to secure lock when container is open. (Green)

Analysis: Locking the lock to the staple or hasp will secure the lock and prevent the magazine from being locked while occupied.

Solution: Place the lock on the staple or hasp when the storage container is open.

RESTRICTED AREA SIGNAGE

F.3. Areas designated as restricted identified with require signage. Reference: AR 190-11 paragraph 4-15.e.

Of 26 reviews conducted; 9 Locations (34.6%) failed to install required signage on “Restricted Areas” or signs could not be read (Faded). **Red**

Analysis: Restricted area signs give notice persons entering “Restricted Areas” and the consequences to their action.

Solution: Mark all restricted areas as required.

INTRUSION DETECTION SYSTEM (IDS)

F.4. Category (CAT) I and II storage facilities and structures protected by IDS Facilities without operational IDS will have armed guards posted 24 hours a day to maintain constant, unobstructed observation of the storage structures, prevent any unauthorized access to the protected structure, and make known any unauthorized access to the structure. **Critical**
Reference: AR 190-11 paragraph 5-2.a.

Of 26 reviews conducted; 1 Location (3.8%) failed to have CAT I & II, protected by armed guards during periods when IDS is non-operational or not in place. **(Green)**

Analysis: CAT I & II require IDS at ALL times, if the IDS fails or is not available armed guards will be utilized follow the guidelines for their placement.

Solution: Maintain armed guards on all CAT I & II without IDS 24 hours a day with direct constant observation of the storage location.

F.5. Signs clearly announcing the presence of an IDS system displayed on ammunition storage rooms, magazines, or perimeter barriers. Reference: AR 190-11 paragraph 5-10.

Of 26 reviews conducted; 4 locations (15.3%) failed to post signage on facilities with IDS. **(Green)**

Analysis: Signs give notice to person entering “IDS” and the consequences to their action.

Solution: Post signs for IDS as required.

F.6. IDS checked/ tested at prescribed intervals. Reference: AR 190-11 paragraph 3-6.

Of 26 reviews conducted; 5 locations (19.2%) failed to conduct IDS test and record results. **(Green)**

Analysis: The IDS system checks ensure the system is functioning, as designed, and alerts maintenance personnel to problem that occur. Recording these checks is required for compliance by security forces.

Solution: Check and record IDS system checks at required intervals.

KEY AND LOCK CONTROL

F.7. Commanders or their designees who are storing or securing A&E locks are appointed in writing as A&E lock, combination, and key custodians. Key and lock custodians shall not be persons who are authorized unaccompanied access to A&E storage areas. Reference: AR 190-11 paragraph 3-8l.

Of 26 reviews conducted; 11 locations (42.3%) failed to appoint key and lock custodian or deny unaccompanied access to A&E storage locations. **Red**

Analysis: A person who is responsible for and has access to Keys and Locks will never be allowed unaccompanied access to A&E storage locations; this prevents them from having single person access.

Solution: Key and Lock custodians will not be listed on unaccompanied access rosters to A&E storage areas.

F.8. Storage of A&E keys and combinations for A&E storage locations must be stored in an authorized container. Reference: DoDM 5100.76, AR 190-11 paragraph 3-8.h.

Of 26 reviews conducted; 3 locations (11.5%) failed to store A&E Keys and combinations in an authorized container. **Green**

Analysis: A&E Keys and Combinations will be secured in containers that meets pilferage constraints to ensure resistance to theft.

Solution: Store all A&E keys and Combinations only in approved and authorized containers as required by regulation.

F.9. Procedures established to preclude access of stored A&E keys which require two-person control. Reference: AR 190-11 paragraph 3-8.h.

Of 26 reviews conducted; 5 locations (19.2%) failed to follow two-person rule for keys requiring dual control due to CAT I missile and rocket storage. **Green**

Analysis: Two-person controlled A&E Keys must be stored in a container requiring two combinations to enter and store keys. The keys for storage locations storing category I missiles and rockets will be under two-person control at all times.

Solution: Establish policies and SOPs that preclude access of stored A&E Keys which require two-person Control.

F.10. Combinations changed when the lock is placed into use, annually, whenever a person knowing the combination no longer requires access, or when the combination is compromised. Reference: DoDM 5100.76, AR 190-11 paragraph 3-8.p., AR 380-5.

Of 26 reviews conducted; There were no documented non-compliances of this requirement. **(Green)**

Analysis: Changing the combinations at required times can pose a security risk if not accomplished. Changing combinations reduces the compromise of combinations and prevents un-authorized access to keys and ultimately storage locations access.

Solution: Change combinations annually or when a person no longer is required to have the combination thus preventing compromise.

F.11. Roster developed to determine authorization to draw/issue of A&E keys on a DA Form 5513 (Key Control Register and Inventory). Reference: AR 190-11 paragraph 3-8.b.

Of 26 reviews conducted; 4 locations (15.3%) failed to have a roster listing names for key control. **(Green)**

Analysis: The DA Form 5513 (Key Control Register and Inventory) is the authorized form required to control and inventory keys for A&E storage locations. The form will be kept in a container in which the access is controlled.

Solution: Utilize a DA Form 5513 IAW regulations.

F.12. Retention of completed DA Form 5513's within regulatory guidelines. Reference: AR 190-11 paragraph 3-8.e.

Of 26 reviews conducted; 1 Location (3.8%) failed to keep DA Form 5513 on file as required. **(Green)**

Analysis: The DA Form 5513 is a complete history of when and to whom each storage location keys was signed out and to whom.

Solution: Retain the completed DA Form 5513 on file as required by regulatory guidelines.

F.13. Inventories of keys, combinations and locks conducted semi-annually. This record will be secured in the key depository/safe. **Critical** Reference: AR 190-11 paragraph 3-8.n.

Of 26 reviews conducted; 13 locations (50%) failed to inventory their keys semi-annually. **Red**

Analysis: The inventory of keys, locks and combinations maintains secure control measures for security of these items.

Solution: Inventory keys, combinations, locks and maintain record of inventory IAW regulatory guidelines.

F.14. A&E locks and keys inventory records retained in unit files for a minimum of one year. This record will be secured in the key depository/safe. Reference: AR 190-11 paragraph 3-8.n.

Of 26 reviews conducted; 5 locations (19.2%) failed to retain records on file. **(Green)**

Analysis: Keeping this inventory in a secure container is necessary to maintaining a record of who has access to the storage locations.

Solution: Maintain inventory records as required by regulations.

ACCESS/ENTRY CONTROL

F.15. A pass/badge/access roster, plus a registration system used to admit properly identified authorized personnel to storage areas. **Critical** Reference: AR 190-11 paragraph 5-9.c.

Of 26 reviews conducted; 4 locations (15.3%) failed to maintain correct access procedures to storage areas. **(Green)**

Analysis: The entry control point must have policies that only admit authorized persons access to storage areas or restricted areas using a pass, badge, access roster, and registration system. The system must track personnel who enter and exit.

Solution: Establish pass, badge or access roster, plus registration system used to admit authorized personnel following all guide lines.

F.16. Vehicles and personnel searched and random inspections upon entry to and exit from A&E areas. Reference: DoDM 5100.76, Enclosure 6.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: All personnel entering and exiting A&E storage areas will be subject to random search for force protection and theft of materials.

Solution: Conduct searches of personnel and vehicles entering A&E areas as required by security regulation.

F.17. Access to areas storing A&E for all personnel recorded (manually or electronically). Records of access retained for one year. Reference: DoDM 5100.76, Enclosure 4, paragraph 9.(a).

Of 26 reviews conducted; 5 locations (19.2%) failed to maintain records of personnel who entered A&E areas as required. **Green**

Analysis: All individuals entering areas storing A&E will be recorded and maintained for one year to provide a history/audit trail, should an incident occur.

Solution: Record access to A&E storage areas and maintain records IAW regulatory guidelines.

SECURITY FENCING

F.18. Fence fabric shall be chain link (e.g. galvanized, aluminized, or plastic-coated woven steel, 2-inch square mesh made from 9-gauge diameter wire, excluding coating that meets Federal Specification RR-F-191K. In Europe, fencing may be North Atlantic Treaty Organization (NATO) Standard Design Fencing). Reference: DoDM 5100.76, Enclosure 6.

Of 26 reviews conducted; 1 Location (3.8%) failed to meet the fence requirements regarding specification. **Green**

Analysis: Proper type and size fencing is a deterrent to unauthorized entrance by personnel or wildlife.

Solution: Install fencing to standards listed in regulations.

F.19. The minimum height of the fence fabric will be six feet excluding top guard/outrigger; bottom of the fence fabric will extend to within two inches of firm ground. Surfaces will be stabilized in areas where loose sand, shifting soils, or surface waters may cause erosion and thereby assist an intruder in penetrating the area. Reference: AR 190-11 paragraph 5-3d. and e.

Of 26 reviews conducted; 11 locations (42.3%) failed to meet the standards for correct installation of perimeter fence of storage area. **Red**

Analysis: Proper type, footing, top guards, and size fencing is a deterrent to unauthorized entrance by personnel or wildlife. Additional, it will prevent erosion.

Solution: Install fencing to standards listed in regulations

F.20. Gates, unless manned 24-hours a day, provided with an approved lock. Hinge pins and hardware will be welded or otherwise modified to prevent easy removal. Reference: AR 190-11 paragraph 5-3.g.

Of 26 reviews conducted; 7 locations (26.9%) failed to modify hardware on gates. **Amber**

Analysis: Gates not manned for 24 hours continually will have hardware modified to prevent removal which allows unauthorized access.

Solution: Install locks or other hardware or weld/modify hardware on unmanned gates IAW regulations.

F.21. Clear zones established to extend a minimum of 12 feet on the outside and 30 feet on the inside (or to the maximum extent within available land space if minimum requirements cannot be met). Clear zones for A&E free of all obstacles, topographical features, and vegetation exceeding eight inches in height. Reference: AR 190-11 paragraph 5-3.j.

Of 26 reviews conducted; 7 locations (26.9%) failed to maintain clear zones as required by regulation. **Amber**

Analysis: The clear zone allows for a clear field of observation to aid in the detection of intruders to the storage area.

Solution: Establish clear zones inside and outside as required by regulations.

SECURITY LIGHTING

F.22. Exterior building and door lighting shall be provided for all structures storing CAT I and II items. The lighting shall be sufficient to allow detection of unauthorized activity. Reference: AR 190-11 paragraph 5-4.a.

Of 26 reviews conducted; 8 locations (30.7%) failed to have proper lighting. **Red**

Analysis: The lighting of exterior doors and buildings, must be sufficient to allow security personnel to detect intruders during hours of limited visibility.

Solution: Install exterior lighting on storage locations required by regulation.

COMMUNICATIONS

F.23. Storage areas shall have a primary and backup means of communications that permit notification of emergency conditions. The backup system shall be a different mode than the primary. Radio may be one of the modes of communication. The communication systems shall be tested with results documented daily. **Critical** Reference: DoDM 5100.76, Enclosure 6.

Of 26 reviews conducted; 6 locations (23%) failed to utilize two different types of communication in storage area for operations, emergency, and security response. **Red**

Analysis: Two different modes of communication must be maintained and tested throughout the storage areas. This will enhance operations and emergency response requirements. Testing of the different modes must be documented daily.

Solution: Maintain two means of communication in storage area as required by regulation.

SECURITY CONSTRUCTION STATEMENTS (SCS)

F.24. A qualified engineer personnel verified the structure composition of A&E storage facilities. Statements prepared on DA Form 4604 (Security Construction Statement). Reference: AR 190-11 paragraph 2-2d

Of 26 reviews conducted; 11 locations (42.3%) failed to prepare DA Form 4604 for storage facilities. **Red**

Analysis: The DA 4604, list the Security Category that the structure can store providing adequate security constraints by category.

Solution: Prepare DA 4604 (Security Construction Statement) for storage facilities IAW regulatory guidelines.

F.25. A blanket statement on DA Form 4604 issued at installation for all facilities, such as ammunition magazines, constructed according to the same specifications. Reference: AR 190-11 paragraph 2-2.d.

Of 26 reviews conducted; 4 locations (15.3%) failed to prepare blanket statement DA Form 4604 for storage facilities. **Green**

Analysis: Large storage areas may prepare a blanket statement listing all locations used for storing A&E providing the same details as DA 4604.

Solution: Prepare a blanket statement that covers all location within a storage area, IAW regulations (If required).

F.26. The DA Form 4604(s) revalidated by engineer personnel every five years. Reference: AR 190-11.

Of 26 reviews conducted; 4 locations (15.3%) failed to maintain current/valid DA Form 4604. **Green**

Analysis: The establishment of a review system will be in place insuring that all locations used for storage of A&E will have the DA Form 4604 reviewed and verified for each structure.

Solution: Review and update DA Form 4604 as required by regulation.

PHYSICAL SECURITY INSPECTIONS

F.27. Physical security inspection of A&E storage facilities shall be conducted at intervals not to exceed 18 months. Reference: DoDM 5100.76.

Of 26 reviews conducted; 9 Locations (34.6%) failed to produce records of a physical security inspection within the last 18 months. **Red**

Analysis: The security manager will conduct physical security inspections for all A&E storage locations.

Solution: Conduct physical security within correct time frame IAW regulations.

COMMAND ORIENTED AA&E SECURITY SCREENING AND EVALUATION

F.28. Security screening and evaluation of personnel involved in the control, accountability, and shipment of A&E completed and document on DA Form 7281 (Command Oriented Arms Ammunition & Explosives Security Screening and Evaluation Report). Reference: AR 190-11 paragraph 2-11.

Of 26 reviews conducted; 11 locations (42.3%) failed to maintain current/valid DA Form 7281 personnel screening reports. **Red**

Analysis: The DA 7281 will be completed on all individuals allowed access to AA&E. The screening process will be used for personnel with duties involving AA&E. Only persons who are mature stable and dependable will be assigned these duties.

Solution: DA Form 7281 Command Oriented AA&E Security Screening and Evaluation Report will be completed on all individuals with access to AA&E as required by regulation.

F.29. Security screening and evaluation repeated every three years. Reference: AR 190-11 paragraph 2-11.

Of 26 reviews conducted; 3 locations (11.5%) failed to maintain current DA Form 7281 personnel screening reports. **Green**

Analysis: DA Form 7281 will be reviewed every three years to ensure reliable personnel are assigned to AA&E duties.

Solution: Review all DA Form 7281 with regulatory guidelines.

G - STORAGE

STORAGE PRACTICES/CONDITIONS

G.1. General and specific A&E storage requirements comply with regulatory guidelines. Reference: DOD 4145.26-M, Chapter 9 and in DA Pam 385-64, Chapter 3.

Of 26 reviews conducted; 9 Locations (34.6%) failed to comply with general and specific A&E storage regulatory guidelines. **Red**

Analysis: Maintain storage operations following the practices, process, safety precautions, and principles of A&E storage.

Solution: Store all A&E material IAW regulatory guidelines.

G.2. A&E stored in containers, banded, and/or sealed to reflect the integrity of the contents. Reference: DODI 5100-76M, enclosure 6, paragraph 2.d.

Of 26 reviews conducted; 11 locations (42.3%) failed to follow correct storage practices. **Red**

Analysis: The proper packing, marking, sealing and banding ensures the A&E Material will maintain its integrity and be serviceable for use to the end user.

Solution: Package, mark, seal and band all A&E containers following regulatory guidelines.

MAGAZINE DATA CARDS (MDC)

G.3. DA Form 3020-R, MDC on all A&E in a storage location for more than 24-hours. Reference: AR 710-2 paragraph 2-41.

Of 26 reviews conducted; 9 Locations (34.6%) failed to place MDCs on stored A&E correctly. **Red**

Analysis: A&E in storage over 24 hours will have a completed DA Form 3020-R MDC, correctly completed and placed on the items. The information listed on the MDC will aid in the utilization of the A&E when in field training environment.

Solution: All A&E in storage will have a DA Form 3020-R MDC as required by regulation.

LIGHT (LITE) BOX MANAGEMENT

G.4. Incomplete boxes of ammunition and explosives stored in magazines containing items which are packed in accordance with approved drawings and boxes marked conspicuously to identify the contents and quantities and placed in designated locations. Reference: DA Pam 385-64 paragraph 3-2.h.

Of 26 reviews conducted; 3 locations (11.5%) failed to follow guideline for light boxes storage. **(Green)**

Analysis: The proper packing and marking of Light Boxes is vital to identification of the less than standard box quantity so that accountability and inventories are accurate and so the items in the light boxes can be issued first.

Solution: All Light Boxes must be packaged and marked IAW regulatory guidelines.

G.5. Marking instructions for light boxes comply with regulatory guidance. Reference: MIL-STD 129R paragraph 5.14.4.2.f.

Of 26 reviews conducted; 7 locations (26.9%) did not follow regulations for the proper marking of light boxes. **Amber**

Analysis: The proper packing and marking of light boxes is vital to identification of the less than standard box quantity so that inventories are accurate and items in the light boxes can be issued first.

Solution: Mark light boxes IAW regulations.

G.6. Only one light box per lot, per condition code is recommended. Reference: MIL-STD 129R paragraph 5.14.4.2.f.(4).

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: Store A&E with only one light box per lot and per condition code.

Solution: Store light boxes as required by regulation.

H – TRANSPORTATION (Green)

TRANSPORTATION OPERATIONS

H.1. All personnel signing certification statements on shipping papers appointed in writing by the activity or unit CDR or designated representative. The appointment includes the scope of authority and expiration date. A copy of appointment orders provided to the Transportation Office (TO). Reference: Defense Transportation Regulation (DTR) 4500.9-R chapter 204

Of 26 reviews conducted; 7 locations (26.9%) individuals signing documents were not on commander appointment orders. **Amber**

Analysis: Commanders will appoint in writing designated representatives including the scope of authority and expiration date to sign transportation documents.

Solution: All personnel signing certification statements on shipping papers will be appointed in writing as required by regulations.

H.2. In all cases, the individual who signs the certification statement on shipping papers by any mode of transportation, military or commercial personally inspected the HAZMAT item certified. Reference: DTR 4500.9-R chapter 204 paragraph D.5.

Of 26 reviews conducted; 6 locations (23%) individuals signing documents were not certified to do so. **Amber**

Analysis: The person that inspects the items being shipped and signs all shipping documents is certifying the HAZMAT is safe to ship.

Solution: Individuals signing certification statements on shipping papers for any mode of transportation will do IAW regulation requirements.

H.3. “The following certification included in the Descriptions of Articles space, when hazardous materials are shipped by conveyances other than air Transportation Service Providers (TSP)”. Reference: 49 CFR 172.204. The US Government Freight and Transportation Handbook, Chapter 3, section 20 (Hazardous Materials).

Of 26 reviews conducted; 6 locations (23%) did not have certification included on documents for shipment. **Amber**

Analysis: The above certification statement must be included in the Descriptions of Articles space when hazardous materials are shipped by conveyances other than air TSP.

Solution: Certification Statement will be included as required by 49 CFR 172.204.

TRANSPORTATION FACILITIES GUIDE (TFG) & SECURE HOLDING AREA (SHA)

H.4. DOD facilities meet the A&E shipping and receiving criteria as published in the Transportation Facilities Guide (TFG) are required to assist commercial Transportation Service Providers (TSP) transporting DOD shipments of A&E, classified materials, and CCI by providing safe holding areas in the interest of public safety and national security. Reference: The DTR 4500.9-R, chapter 205 paragraph Q.

Of 26 reviews conducted; 1 Location (3.8%) did not meet safe holding area requirements. **(Green)**

Analysis: Garrison and other DOD facilities will maintain current information on their facility and information about shipping, receiving, and holding for use by common carriers.

Solution: Maintain A&E shipping and receiving information in the TFG as required regulation.

H.5. Transportation Officers (TO) update TFG on a semi-annual basis (1 March and 1 September) for installations with SHAs or on an annual basis for installations not participating in the secure holding area program. Reference: The DTR, chapter 201 paragraph P.

Of 26 reviews conducted; 4 locations (15.3%) had not updated TFG semiannually. **(Green)**

Analysis: This process will ensure common carriers have current information on secure holding areas.

Solution: Maintain TFG updates as required by regulation.

SECTION II - AMMUNITION SURVEILLANCE

A - AMMUNITION STOCKPILE AND RELIABILITY (Red)

AMMUNITION SUSPENSION, RESTRICTION AND RELEASE PROGRAM

A.1 Installation master suspension record control is the responsibility of the ammunition surveillance organization. The program requires centralized maintenance and application of ammunition and explosives (A&E) suspensions, restrictions, and releases distributed. **Critical**
Reference: Supply Bulletin (SB) 742-1 paragraph 11-2b; Technical Bulletin (TB) 9-1300-385.

Of 26 reviews conducted; 10 locations (38.4%) did not have an adequate suspension restriction program. **Red**

Analysis: Installations need to recognize the importance of maintaining and posting current ammunition suspension and restriction records, including suspensions and restrictions from the other services. Up-to-date information will assure that restriction information is given to using units and that potentially hazardous ammunition is not issued for troop use. A unit without the appropriate clearance procedures raises serious questions and creates genuine safety issues.

Solution: Enroll in distribution of Air Force restrictions and suspension notices and check for Air Force suspensions and restrictions at <https://www.my.af.mil/ammoprod/wm/>. Enroll in distribution of Navy suspensions and restrictions at MECH_NOLSC_NARDESK@NAVY.MIL and check for applicable Navy suspensions and restrictions at [HTTPS://NLL.AHF.NMCI.NAVY.MIL/](https://NLL.AHF.NMCI.NAVY.MIL/). Check suspensions and restrictions for all services and apply as applicable. Upon receipt of suspension and restriction notices, utilize the up to date stock listing to check for applicable stock and expeditiously initiate condition code changes as necessary.

CONTROL OF SUSPENDED STOCKS

A.2. Management of suspended stocks is intended to assist in the prevention of issue and use of unsuitable A&E. Control of suspended stocks in storage is the responsibility of the ammunition surveillance organization. A temporary suspension issued by the Army, Navy/USMC or Air Force applies to all stocks regardless of owner. One control feature requires the ammunition surveillance organization to maintain a master suspension record. Reference: SB 742-1 paragraph 11-2.b.(4); Single Manager of Conventional Ammunition (SMCA); TB 9-1300-385 paragraph 1-3.b.

Of 26 reviews conducted; 7 locations (26.9%) failed to meet the requirements for control of suspended stocks. **Amber**

Analysis: Controlling suspended stock in storage is a vital component of the suspension and restriction program. Having access to current publications, maintaining up-to-date files and properly identifying items on accountable records are essential. Desk or administrative procedures are key components to assist, control and standardize control of suspended stocks.

Solution: Check suspensions and restrictions issued by all services and apply as applicable. Maintain a master suspension record, including suspension tagging application and removal information. Utilize On-Record/TB Compare on a recurring basis as a tool to assure ammunition condition codes reflects applicable Army suspensions and restrictions.

A.3. Suspended material in storage is required to be identified by using two suspended tag-materials/suspended label-materials (DD Form 1575/1575-1) to identify an affected item. One tag attached to the affected stock with the other attached to the associated magazine data card (MDC). **Critical** Reference: SB 742-1 paragraph 11-2.b.(4).

Of 26 reviews conducted; 6 locations (23%) did not apply proper CC tagging procedures. **Red**

Analysis: Properly affixing suspended tags/labels in storage is the installation's "last chance" to prevent issue of suspended and/or restricted ammunition. Desk or administrative procedures are key components to assist, control and standardize control of suspended stocks.

Solution: Surveillance office prepares two (2) suspension tags/labels for all suspended munitions. Annotate application/ removal of suspension tags on Master Suspension Record. Verify presence and accuracy of DD Form 1575/1575-1 during magazine inspection and correct as necessary. Verify condition code changes have been processed and transmitted.

PROPELLANT STABILITY PROGRAM (PSP)

A.4. Management and maintenance of a local PSP is necessary at installations that store propellant and propelling charges. Program compliance and proper execution is critical in the management of the PSP due to inherent auto-ignition hazards requires an annual review of all stored propellant stocks. **Critical** Reference: SB 742-1 chapter 13, AIN 036-12, AIN 058-14

Of 26 reviews conducted; 5 locations (19.2%) did not comply with the requirements of the PSP. **(Green)**

Analysis: The maintenance of a local Propellant Stability Program (PSP) is necessary at all installations storing propellant and propelling charges. The potential for catastrophic accidents as a result of unstable propellant requires full implementation of and adherence to the PSP to prevent an auto-ignition event.

Solution: Annotate inspection records with Propellant Stability test results upon lot receipt at the installation and upon new test. Utilize the Propellant Stability Report by NSN, available in MHP, to determine status of propellant stocks at the installation. Perform annual review of all propellant/ propelling charge lots and document with memo to HQ Joint Munitions Command. Arrange for destruction of all propellant and propelling charge lots with lost lot identity. Develop/revise Desk Procedures for management of propellant/ propelling charges. Chapter 6 of Joint Munitions Command Propellant Management Guide 6th Edition provides a good source of information for propellant management at the installation.

B - RECORDS AND REPORTS (Red)

MUNITIONS HISTORY PROGRAM (MHP)

B.1. The purpose of the MHP application is to collect and store inspection and test data and track ammunition technical history quality assurance data. This system replaces the Depot Surveillance Record (DSR) Card, the SDS system, and other systems now being used to collect field data. All organizations required to use MHP to maintain DSR information. Reference: SB 742-1 paragraph 11-2a and Appendix B

Of 26 reviews conducted; 9 locations (34.6%) had errors or omissions in MHP. **Red**

Analysis: Implementation of the MHP creates worldwide visibility of lot history and classification of A&E assets. Maintaining the technical history of A&E in MHP is essential. Use of the MHP improves ammunition readiness and enhances the ability to manage quality assurance data for the ammunition stockpile.

Solution: Initiate inspection history in MHP upon installation receipt of the lot, linking the shipping installation's inspection history. Update inspection history with application of suspensions, restrictions, and release from suspensions, deficiencies, defect codes, Ammunition Condition Reports, date and type of next inspection. Establish inspection history for items on record but without inspection history in MHP. Enter and approve inspections in an expeditious manner.

B.2. Defect/remark codes required for all condition codes except A and K. Condition codes (CC) A and K should reflect remarks codes when appropriate, such as shelf life items with less than 12 months remaining shelf life. Reference: DA Pam 700-19 paragraph 3-2.i, SB 742-1 paragraph 11-2.a.(3) and Appendix AB.

Of 26 reviews conducted; 10 locations (38.4%) did not use defect codes properly. **Red**

Analysis: Utilization of defect codes enhances the world-wide management of ammunition, allowing engineers and item managers to project maintenance operation requirements, procurement of new items, and required engineering changes, improving ammunition readiness.

Solution: Review inspection histories of ammunition in other than condition code A and K to assure defect codes accurately reflect lot deficiencies. Assure items with less than 12 month remaining shelf life are identified with defect codes.

AMMUNITION CONDITION REPORTS (ACR)

B.3. A DA Form 2415 (ACRs) used to report permanent suspensions, discrepancies, and other materiel conditions affecting A&E to the owning service item manager for evaluation and disposition resolution. Reference: DA PAM 750-8 paragraph 8-4, SB 742-1 paragraph 11-3.a.

Of 26 reviews conducted; 7 locations (26.9%) had the following findings (26.9%) did not properly use the ACR as required. **Amber**

Analysis: ACRs enable installations to report unserviceable ammunition and recommend viable solutions. ACR submissions will prevent the accumulation of excessive unserviceable A&E in limited storage areas. Installations should make every effort to obtain disposition before the accumulation of potential “waste munitions” per the MMR and other RCRA requirements. Submission of Army ACRs in conjunction with MHP inspections enhances tracking of disposition instructions. Disposition instructions from non-Army owning services require tracking.

Solution: Establish desk procedures for submission, tracking, and closure of ACRs. Confirm and validate recommendations prior to submitting ACR. Submit and track ACR submissions and receipt of disposition instructions. Annotate disposition instructions in inspection history. Submit ACRs for unserviceable stocks as required.

C - SURVEILLANCE INSPECTIONS (Green)

PERIODIC INSPECTION (PI) PROGRAM

C.1. Conduct of A&E assets PIs at intervals that range from 2 to 10 years, ensure serviceability and/or identify deterioration trends or other specific defects that may affect the asset’s safety and usability. Reference: SB 742-1 paragraph 2-4.d; AIN 085-12 and 085-12A.

Of 26 reviews conducted; 12 locations (46.1) had improper procedures for periodic inspections.

Red

Analysis: Class V stocks, as defined by SB 742-1, must be inspected on a periodic basis to detect non-standard conditions and levels of deterioration to ensure they are safe for continued storage and handling. These periodic inspections are conducted according to standardized cyclic intervals to classify the condition of A&E. One of the elements of the MHP includes a method for tracking dates of next inspection and should be used as a tool to project workload requirements for the accomplishment of Periodic Inspections. Lots scheduled for incorrect type of inspections and or at incorrect inspection intervals impede the timely shipment and issue of ammunition and adversely affect projection of workload requirements. Failure to conduct periodic inspections of propellant/propelling charges and commercial dynamites in a timely manner affects safety.

Solution: Assure all items in storage are scheduled for inspection. Review Get Well Plan for required serviceable, unserviceable/ repairable ammunition and unserviceable propellant/propelling charges for date and type of next inspection. Assure all stocks of propellant items are scheduled for PIs and at normal inspection intervals Review DSR comments as required. Adjust date and type of next inspection as required. Prioritize and conduct inspections.

C.2. Non-required stocks, Navy owned/SMCA managed stocks, unserviceable/ non-repairable ammunition and stocks in the Resource Recovery and Disposition Accounts (RRDA),

whether serviceable or unserviceable, an SIS conducted to ensure stocks are safe for continued storage and handling. Reference: SB 742-1 paragraph 2-4.e.

Of 26 reviews conducted; 5 locations (19.2%) were not conducting or documenting the SIS. **(Green)**

Analysis: SIS inspections at doubled PI intervals help ensure stocks are safe for continued storage and handling while saving resources to accomplish the PI program. Incorrect inspection type and/or intervals waste resources.

Solution: Review date and type of next inspection for items on record and correct date and type of next inspection in MHP. Prioritize and conduct inspections.

CONDITION CODE K (CC-K) STOCKS

C.3. CC-K assigned to all ammunition lots received without a valid inspection. Reference: SB 742-1 paragraph 2-4.b.(1).

Of 26 reviews conducted; 2 locations (7.6%) were not conducting inspections in a timely manner. **(Green)**

Analysis: Items received without inspection records require a Receipt Inspection (RI). Pending completion of an RI, items should be assigned CC K, rather than a serviceable condition code. Items in CC K cannot be issued, so scheduling and execution of RIs needs to be accomplished to preclude accumulation of non-issuable ammunition.

Solution: Obtain inspection history from consignee when possible. Upon receipt of ammunition, perform RI on items received without a valid, current inspection. Schedule and inspect items assigned CC K within 45 days of receipt.

STORAGE MONITORING INSPECTIONS (SMI)

C.4. Most guided missile systems and high-value conventional ammunition items are desiccated to control humidity. Monitoring of the humidity level is accomplished by observation of humidity indicator cards installed on the munitions container during SMIs. SMIs conducted per the requirements and intervals of the individual system identified in SB, TB, or Technical Manual. SMI intervals vary (usually three to 18 months), but may be shortened at the discretion of the assigned QASAS, based on storage conditions. Reference: SB 742-1 paragraph 2-4.f.

Of 26 reviews conducted; 6 locations (23%) did not follow procedures for SMI inspections. **Amber**

Analysis: Lack of a SMI program or not including all items with humidity indicators may lead to degradation of high cost items due to extended periods of time items are exposed to high humidity. Document the rationale for shortened SMI intervals to preclude loss of institutional knowledge.

Solution: Establish SMI program to include all items (conventional and missile) with humidity indicators. Schedule SMIs in MHP to assure inspections are conducted on time.

C.5. MHP used to document SMI results and scheduling of next inspection. Reference: SB 742-1 paragraphs 11-2a and 11-2.f.

Of 26 reviews conducted; 3 locations (11.5%) were conducting or documenting SMIs. **(Green)**

Analysis: Many items require both periodic and storage monitoring inspections, making date of next inspection tracking difficult. Documentation of SMI results in MHP enables installation to track workload for both types of inspections.

Solution: Document and schedule all inspections in MHP.

CARTRIDGE ACTIVATED DEVICES/PROPELLANT ACTIVATED DEVICES (CAD/PAD)

C.6. Surveillance of CAD/PAD items complies with regulatory guidelines. **Critical**
Reference: SB 742-1 Appendix D, paragraph D-8.

Of 26 reviews conducted; 1 location (3.8%) was not inspecting CAD/PAD items. **(Green)**

Analysis: Surveillance of CAD/PAD items helps assure safety of personnel dependent upon the items.

Solution: Schedule inspection of CAD/PAD items and conduct inspections.

C.7. Surveillance of aviation unit management, storage, and lot visibility of CAD/PAD items performed during Operational Load Inspections. Reference: SB 742-1, Chapter 8.

Of 26 reviews conducted; 4 locations (15.3%) were not conducting OPL inspections. **(Green)**

Analysis: Surveillance of CAD/PAD items helps assure safety of personnel dependent upon the items.

Solution: Schedule and conduct Operational Load inspections of aviation units annually.

COMMERCIAL DYNAMITE

C.8. Straight dynamite, 60 percent and over in strength, will be turned at regular intervals. Rotation documented and attached to the stack. **Critical** Reference: DA Pam 385-64 paragraph 21-4, table 21-1, SB 742-1 Appendix D paragraph D-14.a.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: Monitoring commercial dynamite allows the inspector to document deficiencies as they are found. This allows for a safer storage environment.

Solution: Monitor/rotate as required.

C.9. Other types of dynamite, ammonia, ammonia-gelatin, and gelatin dynamites will not be turned in storage. However, yearly, at the conclusion of the hottest portion of the year, a representative sample will be selected and the containers examined for evidence of nitroglycerin exudation on the exterior of the cartridge. **Critical** Reference: SB 742-1 Appendix D paragraph D-14.a.

Of 26 reviews conducted; 1 location (3.8%) was not conducting annual inspections. **(Green)**

Analysis: Dynamite, ammonia, ammonia-gelatin, and gelatin dynamites require annual inspection to detect possible nitroglycerin exudation, a safety hazard.

Solution: Schedule and conduct inspections of dynamite, ammonia, ammonia-gelatin, and gelatin dynamites at the conclusion of the hottest portion of the year.

C.10. Dynamite contained in Canine Explosive Scent Kit (Dynamite, Exgel 40 and Exgel 75) has a shelf of 18 months. This dynamite need not be turned in storage. However, at the conclusion of the hottest portion of the year, a representative sample of the nitroglycerin based dynamite will be selected and examined for evidence of nitroglycerin exudation. **Critical** Reference: SB 742-1 Appendix D paragraph D-14a and AIN 036-14

Of 26 reviews conducted; 1 location (3.8%) was not conducting required inspection. **(Green)**

Analysis: Dynamite, Exgel 40 and Exgel 75 require annual inspection to detect possible nitroglycerin exudation, a safety hazard.

Solution: Schedule and inspect annually as required; schedule OP Load inspections of units with Dog Scent kits/components following the hottest time of the year.

D - SURVEILLANCE SAFETY AND LOGISTICS (Red)

AMMUNITION AND MISSILE INFORMATION NOTICES

D.1. Army AIN messages provide updated advisory/guidance/restriction technical information and changes to organizations with Army A&E responsibilities. Reference: SB 742-1 paragraph 10-10.a.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: Reviewing Army AIN messages allows the inspector to react to ammunition suspension and restrictions as they are reported.

Solution: Review/process Army AIN's as they are received.

D.2. Navy and Marine Corps (NOLSC) AIN messages provided with Navy and Marine Corps A&E responsibilities. Reference: NAVSUP P-801.

Of 26 reviews conducted; 3 locations (11.5%) were not on distribution for AINs. (Green)

Analysis: Navy AINs have application to Navy and U.S. Marine Corps (USMC) ammunition. Navy AINs are accessible through the Naval Operational Logistics Support Center (NOLSC) web site.

Solution: Enroll in distribution of Navy AINs at MECH_NOLSC_NARDESK@NAVY.MIL and check for AINs at HTTPS://NLL.AHF.NMCI.NAVY.MIL/. Provide copies of applicable Navy AINs to Navy and Marine Corps units issued ammunition.

D.3. The Army MIN messages on-hand to provide timely update information to organizations with Army missile responsibilities. Reference: SB 742-11 paragraph 10-10.b.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. (Green)

Analysis: Reviewing Army MIN messages allows the inspector to react to ammunition suspension and restrictions as they are reported.

Solution: Review/process Army AIN's as they are received.

AMMUNITION AND MISSILE MALFUNCTION INVESTIGATIONS

D.4. QASAS responsibilities include investigating and reporting malfunctions involving conventional ammunition, rockets and guided missiles. Reference: AR 75-1, SB 742-1 paragraph 10-11.b and applicable AINs.

Of 26 reviews conducted; 2 locations (7.6%) had malfunctions not investigated by QASAS. (Green)

Analysis: QASAS are normally responsible for investigating and reporting malfunctions. Some locations rely upon the LAR/QASAS to investigate and report them.

Solution: Document for record the malfunction reporting process. Include malfunction reporting process in range procedures and assure it is provided to ASP, unit ammunition, and range personnel.

AREA INSPECTION PROGRAM

D.5. QASAS conduct area inspections periodically (daily when possible) of ammunition operations to ensure ammunition is properly handled, stored, and transported. Reference: SB 742-1, paragraphs 10-1, 10-4.a, 10-9, and 10-11.c.

Of 26 reviews conducted; 13 locations (50%) not performing or not documenting area inspections. **Red**

Analysis: The Area Inspection program helps ensure safety and that ammunition operations are in accordance with approved procedures.

Solution: Establish an area inspection program and document inspections.

D.6. Problems brought to the attention of the QASAS investigated and reported through command channels to the appropriate commodity command. Reference: SB 742-1 paragraph 10-11.c.

Of 26 reviews conducted; 6 locations (23.1) did not have a written internal reporting mechanism. **(Green)**

Analysis: QASAS interact with personnel and observe ammunition operations throughout the installation.

Solution: Ensure discrepancies discovered during area inspection are reported to proper organization. Include reporting procedures in the written procedures.

D.7. An internal reporting medium for all visits by QASAS personnel to operations will be established. Reference: SB 742-1 paragraph 10-9.a.

Of 26 reviews conducted; 9 locations (34.6%) had no inspection program or inspections were not documented. **Red**

Analysis: Area inspection program includes documentation of operations visited and actions taken.

Solution: Assure area inspection program includes documentation and reporting processes.

MAGAZINE INSPECTION PROGRAM

D.8. Inspections of buildings and sites used for storage of A&E planned, conducted and documented. Reference: SB 742-1, paragraph 10-2 and chapter 1, paragraph 1-3.h.

Of 26 reviews conducted; 6 locations (23%) had no documented plan, SOP for magazine inspections. **Amber**

Analysis: Magazine Inspections are a priority of the surveillance workload and are required to be conducted annually for magazines and other buildings, which store A&E. This annual

inspection is to be conducted by a QASAS, or the inspection monitored and reviewed by a QASAS. The annual inspection interval may be increased or reduced, within limits, by the assigned or supporting QASAS. Interval extensions must be documented; a lack of funding or personnel is not valid reasons for interval extension justification.

Solution: Develop and implement Magazine Inspection program. Prepare Magazine Inspection SOP. Include magazine inspection interval, report distribution requirements, and follow-up procedures for discrepancies in the SOP or in a written desk procedure. Inspect and document inspections.

D.9. Magazines and other buildings in which ammunition and explosives are stored will be given a formal inspection annually. Reference: SB 742-1 paragraph 10-2.a.

Of 26 reviews conducted; 6 locations (23%) were not conducting, documenting or completing inspections within the required annually. **Amber**

Analysis: Magazine Inspections are a priority of the surveillance workload and are required to be conducted annually for magazines and other buildings, which store A&E. This annual inspection is to be conducted by a QASAS, or the inspection monitored and reviewed by a QASAS. The annual inspection interval may be increased or reduced, within limits, by the assigned or supporting QASAS. Interval extensions must be documented; a lack of funding or personnel is not valid reasons for interval extension justification.

Solution: Develop and implement Magazine Inspection program. Prepare Magazine Inspection SOP. Include magazine inspection interval, report distribution requirements, and follow-up procedures for discrepancies in the SOP or in a written desk procedure. Inspect and document inspections.

D.10. Inspections performed by QASAS who will record and report the results. A formal record of the inspection results will be maintained to include discrepancy reports forwarded to responsible installation activities (to include copy furnished installation safety office) and the resolution or corrective actions resulting from these reports. Reference: SB 742-1 paragraph 10-2.a.

Of 26 reviews conducted; 7 locations (26.9%) had not documented/conducted inspections or records were not available. **Amber**

Analysis: Magazine Inspections are a priority of the surveillance workload and are required to be conducted annually for magazines and other buildings, which store A&E. This annual inspection is to be conducted by a QASAS, or the inspection monitored and reviewed by a QASAS. The annual inspection interval may be increased or reduced, within limits, by the assigned or supporting QASAS. Interval extensions must be documented; a lack of funding or personnel is not valid reasons for interval extension justification.

Solution: Develop and implement Magazine Inspection program. Prepare Magazine Inspection SOP. Include magazine inspection interval, report distribution requirements, and follow-up

procedures for discrepancies in the SOP or in a written desk procedure. Inspect and document inspections.

D.11. At the discretion of the QASAS in charge, the magazine inspection interval may be increased to a maximum of 24 months or reduced to a minimum of quarterly depending on activity or local conditions which would increase or decrease the possibility for deficiencies to occur. Reasons for changing intervals (lack of funding or personnel does not constitute justification) must be documented. Reference: SB 742-1 paragraph 10-2.c.

Of 26 reviews conducted; 1 location (3.8%) had no records for 3 consecutive inspection cycles. (Green)

Analysis: Magazine Inspections are a priority of the surveillance workload. The annual inspection interval may be increased or reduced, within limits, depending upon magazine inspection history results. Reports are required to assure correction of identified deficiencies.

Solution: Maintain magazine inspection reports; track and verify correction of deficiencies.

D.12. Material for earth-cover over magazines and for barricades will comply with regulatory guidelines. Reference: DA Pam 385-64 paragraph 8-16 and 16-25.d.

Of 26 reviews conducted; 4 locations (15.3%) had earth cover or barricades that that did not meet the minimum depth or had large rocks or debris as part of the cover. (Green)

Analysis: Earth cover and barricade fill must be of the appropriate depth and type to act as a barricade and not contribute to further damage in the event of an explosion.

Solution: Replace missing and incorrect fill dirt.

D.13. Magazine ventilators are operational and screened. Reference: SB 742-1 paragraph 10-2.

Of 26 reviews conducted; 1 location (3.8%) had ventilators that required maintenance to be operational. (Green)

Analysis: Ventilators on A&E storage locations are intended to provide ventilation within a storage location and protect A&E from external heat, spark or fire. The ventilator flap must remain in an open position for normal air circulation. The flap will be kept in the open position by use of a fusible link. Ventilator flaps must be kept in working order which allows them to open and close when the closure mechanism functions. Ventilators must be checked during magazine inspections and other operations at storage locations, and inoperable or malfunctioning vents reported for repair.

Solution: Report ventilator deficiencies. Submit work orders for ventilators requiring repair/maintenance and re-inspect following repairs.

D.14. Approved types of fusible links on ventilators and maintenance performed. Reference: Joint Publication DLAI 4145.11/TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO 4450.12A paragraph 10.23 and 8.13; SB 742-1 paragraph 10-2.a.

Of 26 reviews conducted; 1 location (3.8%) had ventilators requiring maintenance. (Green)

Analysis: Fusible links used on A&E magazine vents will have a melting point of between 155° Fahrenheit and 165° Fahrenheit with a minimum rated breaking strength of 20 pounds for the door/headwall ventilator and eight pounds for the rear ventilator IAW TM 38-410. Fusible links must remain unpainted to ensure they will melt at the required temperature.

Solution: Report ventilator deficiencies. Submit work orders for ventilators requiring repair/maintenance and re-inspect following repairs.

SURVEILLANCE INSPECTION OF A&E MATERIAL IN OUTSIDE STORAGE

D.15. Ammunition placed in outside storage given adequate continuing inspection to ensure that packaging is not damaged or deteriorated to the extent that ammunition contents are exposed in any manner not intended by the original design of the package. Reference: SB 742-1 paragraph 10-3b

Of 26 reviews conducted; 2 locations (7.6%) did not have an inspection program for outside storage. (Green)

Analysis: Ammunition in outdoor storage is exposed to the elements and deteriorates at a much faster rate than when stored indoors.

Solution: Establish outside storage inspection process and document inspection.

D.16. A formal examination made quarterly of each outside site in which ammunition is stored. Reference: SB 742-1 paragraph 10-3.b.

Of 26 reviews conducted; 2 locations (7.6%) did not an inspection program for outside storage. (Green)

Analysis: Ammunition in outdoor storage is exposed to the elements and deteriorates at a much faster rate than when stored indoors.

Solution: Establish outside storage inspection process, schedule and document inspection.

D.17. PI's will be accomplished on required stocks in outside storage at one-half the interval set by the Conventional Ammunition inspection Interval Listing. The one-half interval will be shortened as determined by the QASAS in charge if packaging deterioration is found during performance of outside storage site quarterly inspection. Reference: SB 742-1 paragraph 10-3.c.

Of 26 reviews conducted; 2 locations (7.6%) had no PI process or documentation of inspections.
(Green)

Analysis: Ammunition in outdoor storage is exposed to the elements and deteriorates at a much faster rate than when stored indoors.

Solution: Establish PI process, schedule and document inspections.

RECEIPT/SHIPMENT/ISSUE DOCUMENT CLEARANCE

D.18. Quality Assurance Specialist Ammunition Surveillance (QASAS) or properly trained designated personnel clear all lots of ammunition, components and related materiel designated for shipment or issue. **Critical** Reference: SB 742-1 paragraph 10-4.a.

Of 26 reviews conducted; 6 locations (23%) were identified that used improper or incomplete process for clearance of documents. **Red**

Analysis: Qualified, knowledgeable personnel need to clear ammunition issues and shipments.

Solution: Assign QASAS, or properly trained 890A, 89B QA/QC or civilian to clear all lots of Class V items for shipment or issue and to check suspensions and restrictions and DSRs for receipts.

D.19. Shipments to post, camp and station locations have a minimum of six months remaining on inspection cycle. Reference: SB 742-1, paragraph 10-4.c.

Of 26 reviews conducted; 1 location (3.8%) did not verify time remaining on inspection cycle.
(Green)

Analysis: Ammunition cleared for shipment must have adequate time remaining in the inspection.

Solution: Review inspection records to assure materiel has adequate time remaining on inspection.

D.20. Ammunition lots issued to OCONUS locations and to users/installations without a QASAS have at least 18 months remaining on the inspection cycle. Reference: SB 742-1, paragraph 10-4.c.

Of 26 reviews conducted; there were no documented non-compliances of this requirement.
(Green)

Analysis: Issuing ammunition with at least 18 months remaining on their inspection cycle provides plenty of time for the unit to expend the munitions before the inspection cycle expires.

Solution: Ensure munitions being issued OCONUS have at least 18 months remaining on their inspection cycle prior to issue.

D.21. Ammunition lots transferred between two OCONUS theaters or ammunition lots retrograded back to CONUS have 18 months remaining on the inspection cycle. Reference: SB 742-1, paragraph 10-4.c.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **(Green)**

Analysis: Ensuring ammunition has at least 18 months remaining on their inspection cycle provides plenty of time for the gaining activity to receive/store and inspect before munitions are required to be issued to units.

Solution: Ensure munitions have at least 18 months remaining on their inspection cycle prior to transferring between two OCONUS theaters or ammunition retrograding back to CONUS.

SHIPPING AND RECEIVING CONVEYANCE INSPECTIONS

D.22. QASAS personnel review handling, storage and shipping operations for compliance with applicable safety and operational regulations. Reference: SB 742-1 paragraph 10-4.a.

Of 26 reviews conducted; 4 locations (15.3%) had documents and processes not reviewed by QASAS or did not use PPE identified in SOPs. **(Green)**

Analysis: QASAS review handling, storage and shipping operations for compliance with SOPs and regulations.

Solution: Incorporate handling, storage and shipping operations in Area Inspection program.

D.23. Inbound motor vehicles loaded with explosives, ammunition or other hazardous material inspected by a competent person at a designated inspection station using DD Form 626. **Critical** Reference: DA Pam 385-64 paragraph 20-7, DTR 4500.9-R Chapter 204.

Of 26 reviews conducted; 2 locations (7.6%) were not retaining copies of vehicle inspection forms as required. **(Green)**

Analysis: Inbound motor vehicles need to be inspected.

Solution: Inspect incoming vehicles using DD Form 626. Retain completed copy of DD Form 626.

MAJOR TRAINING AREA (MTA) OPERATIONS

D.24. QASAS assigned to live fire training areas responsible for providing technical assistance and support on ammunition quality and explosive safety matters to locally assigned personnel and to troops training at the facility. Reference: SB 742-1 paragraph 10-11.a.

Of 26 reviews conducted; 3 locations (11.5%) were not conducting or maintaining inspection records. (Green)

Analysis: QASAS should provide technical assistance and support at live fire ranges.

Solution: Prepare written procedures and checklists for live fire training range visits. Document visits.

WATER PORT OPERATIONS

D.25. QASAS assigned to water ports will act as advisor to the senior Department of Defense official operating the port and its support facilities (e.g. Military Traffic Management Command Detachment, Transportation Terminal Unit, Port Supply Activity). Advice and planning support will be provided in the areas of explosives safety (e.g. site planning in accordance with quantity distance requirements, compatibility of ammunition and other cargo), ammunition handling procedures and techniques, preparation of hazardous cargo documents and repair/evaluation of damaged ammunition items/packages. Reference: SB 742-1, paragraph 10-13.a.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. (Green)

Analysis: Having QASAS assigned to port operations provides for a safe and secure munitions environment. Technical guidance is on site when required.

Solution: Ensure QASAS are assigned to port operations while munitions operations are ongoing.

D.26. Pier and ship operations monitored as delineated in regulatory guidelines. Reference: SB 742-1, paragraph 10-13.c.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. (Green)

Analysis: Having QASAS assigned to port operations provides for a safe and secure munitions environment. Technical guidance is on site when required.

Solution: Ensure QASAS are assigned to port operations while munitions operations are ongoing.

D.27. QASAS assure procedures for water port operating locations, to include supporting marshalling areas, explosive weight limits are adhered to. **Critical** Reference: SB 742-1 paragraph 10-13.

Of 26 reviews conducted; there were no documented non-compliances of this requirement. **Green**

Analysis: Having QASAS assigned to port operations provides for a safe and secure munitions environment. Technical guidance is on site when required.

Solution: Ensure QASAS are assigned to port operations while munitions operations are ongoing.

E - AMMUNITION SURVEILLANCE SOPs (Red)

E.1. Written standards for each A&E operation in place. SOP reviewed and approved by the performing organization. Reference: AR 385-10 paragraph 18-5a, DA Pam 385-10, chapter 9; DA Pam 385-64 paragraph 2-4, SB 742-1 paragraph 10-1.c.

Of 26 reviews conducted; 12 locations (46.1%) had either no SOPs or SOPs were not current with references or current reviews. **Red**

Analysis: Greater emphasis is required to ensure availability of SOPs to cover surveillance operations involving A&E. SOPs should be formatted with logical, step-by-step instructions for performing tasks in a safe and efficient manner.

Solution: Develop SOPs for all Surveillance operations. Conduct reviews and staff for approval annually.

E.2. A documented risk assessment/hazard analysis included as part of the SOP. **Critical** Reference: DA Pam 385-10 paragraph 9-6.

Of 26 reviews conducted; 14 locations (53.8%) had incomplete, improper, unapproved or no documented risk assessment/hazard analysis. **Red**

Analysis: A written, approved risk assessment is part of the SOP.

Solution: Assure a risk assessment is prepared and accepted at the correct level for all ammunition SOPs.

E.3. Procedures are in place in lieu of SOPs for operations that do not include explosives handling. As a minimum, procedures reviewed biennially by the QASAS in charge to ensure compliance with safety, operational, and quality requirements. Reference: SB 742-1 paragraph 10-1.c.

Of 26 reviews conducted; 7 locations (26.9%) had inappropriate, incomplete or no written procedures in place. **Amber**

Analysis: Written desk procedures may be used for ammunition operations which do not include explosives handling- i.e. Suspension checks, review of Propellant Stability tests, shipping and issue clearance procedures.

Solution: Develop written desk procedures based upon regulatory and technical requirements; review and staff desk procedures when new, at least biennially, and upon changes; comply with approved desk procedures.

F - TECHNICAL ASSISTANCE (Amber)

AMMUNITION OPERATIONAL AND BASIC LOAD INSPECTIONS (BLI)

F.1. Inspections performed on stocks of munitions (to include ceremonial, security/operational and contingency stocks) maintained by military units to ensure the ammunition is serviceable and maintained IAW regulatory requirements. Every 12 to 15 months all stocks issued to the soldiers, excluding training ammunition issued for immediate use, are to be inspected under the program. Reference: AR 700-12 and SB 742-1 chapter 8, AIN 030-14.

Of 26 reviews conducted; 8 locations (30.7%) had no inspections, exceeded intervals, inspections not documented or not performed by QASAS. **Red**

Analysis: The primary intent of AR 702-12 is to ensure that adequate ammunition surveillance support is available when needed. It is not the intent of the regulation to mandate the source of support or any changes to existing support arrangements unless specifically designated.

Solution: Document process for record if not performed by assigned QASAS. Process must be known by ASP and unit ammunition personnel. This process is essential to ensure serviceability of user ammunition. Aggressively schedule inspections, emphasize ammunition accountability and serviceability, and maintain unit POC listing.

F.2. Ammunition surveillance support (BLI and technical support) in CONUS implemented by scheduling support on a periodic basis as established in a letter of agreement between the command providing QASAS support and the recipient activity. Reference: AR 702-12, SB 742-1 Chapter 8.

Of 26 reviews conducted; 4 locations (15.3%) did not follow proper procedures for providing QASAS support. **Green**

Analysis: QASAS will provide ammunition surveillance services as specified in SB 742-1, AR 702-12 and Command publications during peacetime and mobilization. Use of Memorandum of Agreements (MOA) to document specific support provided, frequency of support, and method of reimbursement is encouraged.

Solution: Scheduling Surveillance support on a periodic basis as established in a memorandum of agreement between the command providing QASAS support and the recipient activity.

SECTION III - EXPLOSIVES SAFETY

A - EXPLOSIVES SAFETY MANAGEMENT PROGRAM (ESMP) (Red)

A.1. Commanders of installations and activities with an ammunition or explosives mission will have an established ESMP. **Critical** Reference: AR 385-10 1-4.al, DA Pam 385-64 paragraph 1-5.

Of 26 reviews conducted; 12 locations (46.1%) did not have a developed, staffed and approved ESMP. **Red**

Analysis: The ESMP is a documented top down management approach that specifies the explosives safety roles and responsibilities within the organization.

Solution: Develop, staff and approve an ESMP that incorporates the 16 elements identified in the reference to include those that are not applicable. The ESMP can be a stand-alone document or be incorporated into safety regulations or SOPs.

A.2. ESMPs prescribe requirements, responsibilities, and procedures for complying with regulatory requirements. Reference: AR 385-10, DA Pam 385-30, DA Pam 385-64 paragraph 1-5, DA Pam 385-65.

Of 26 reviews conducted; 8 locations (30.7%) had a combination of no ESMP or an ESMP that did not articulate the requirements of the 16 elements of the ESMP for the roles and responsibilities and execution of the ESMP. **Red**

Analysis: The Army Explosives Safety Management Program consists of 16 elements grouped into 5 major functional areas. Installation/command specific requirements for execution of the program should be included in the ESMP.

Solution: Detail the roles and responsibilities for the implementation and execution of the ESMP for A&E operations.

A.3. Safety Directors of organizations with an A&E mission comply with requirements detailed in applicable regulations. Reference: AR 385-10 paragraph 5-4b and DA Pam 385-64 paragraph 1-6b.

Of 26 reviews conducted; 5 locations (19.2%) had either no ESMP or an incomplete ESMP to guide them in identifying, establishing and executing regulatory requirements at the DOD, Army or installation level. **Green**

Analysis: The Explosives Safety Management Program is a regulatory driven locally developed document based on the A&E mission. All 16 elements of the ESMP should be included and identify those not applicable. The ESMP should be developed in a realistic manner and be executable.

Solution: Establish and manage the ESMP to include serving as the commanders POC for explosives safety matters. Monitor and document deviations to standards and identify corrective actions to be taken. Participate in the master planning process and any encroachment of explosives arcs is identified.

A.4. Commands with operational ranges established a range safety program. **Critical**
Reference: AR 385-63, DA Pam 385-63 IAW DA Pam 385-64, paragraph 1-12.

Of 26 reviews conducted; 1 location (3.8%) failed to document range safety qualifications at the unit level. **(Green)**

Analysis: Installations with operational ranges shall develop a range regulation that details the policy and procedures as set forth in regulatory guidance.

Solution: The range regulation shall include requirements for a range safety certification program to qualify personnel in the duties of Range Officer in Charge and Range Safety Officer for firing exercises and maneuver exercises. The range safety program should be identified in the Ranges section of the ESMP.

B - EXPLOSIVES SAFETY SITE PLANS, EXPLOSIVES LICENSES AND A&E MAPS (Green)

B.1. ES site plans (ESSPs) requirements, preparation and submission IAW regulatory requirements. **Critical** Reference: AR 385-10 paragraph 5-6, DA Pam 385-64 chapter 4, DA Pam 385-65.

OF 26 Reviews conducted; 3 locations (11.5%) had no approved site plans for A&E facilities. **(Green)**

Analysis: An explosives safety site plan describes in text and graphics the relationships between potential explosives sites, exposed sites, facilities, the environment and personnel.

Solution: Explosives Safety Site Plans (ESSP) should be developed and fully staffed at the installation level for all A&E facilities and operations. ESSPs are submitted to the U.S. Army Technical Center for Explosives Safety (USATCES) for Department of Defense Explosives Safety Board (DDESB) approval as required by DOD regulations. If a modifications, construction, or changes in operations occur, a site plan must be submitted or resubmitted for approval prior to construction and or use.

B.2. Approved ESSPs, including the approval correspondence from Department of Defense Explosives Safety Board (DDESB) and United States Army Technical Center for Explosives Safety (USATCES) maintained by the installation safety office and using organization. Reference: AR 385-10 paragraph 5-6, DA Pam 385-64 chapter 4, DA Pam 385-65.

Of 26 reviews conducted; 4 installation (15.4%) safety offices did not have copies of approved site plans for facilities with A&E storage or operations on the installation. **(Green)**

Analysis: After a site plan has been submitted and approved, the site plan will be maintained at the installation level for reference and accessibility as needed. The site plan information is used to develop the installations explosives license.

Solution: The commanders designated safety office with responsibility for management of the explosives safety program will maintain a copy of all submitted and approved site plans for A&E operations on the installation. The file will include all of the submittal and approval documentation.

B.3. Explosives license requirements inclusive for submission and preparation. **Critical**
Reference: AR 385-10 paragraph 5-7, DA Pam 385-64, chapter 5.

Of 26 reviews conducted; 4 installations (15.4%) did not have explosives licenses for A&E facilities that met the established licensing requirements. **Green**

Analysis: Explosives license are a locally developed set of guidelines to identify the explosives limits of each A&E facility based on a USATCES/DDESB approved site plan or operational necessity.

Solution: The explosives license will be developed staffed and approved by the commander or their designated official and the process should be defined in the ESMP.

B.4. Installation Explosives Storage License Program developed and managed by the Garrison/Installation Commander's designated Safety Office. Reference: DA Pam 385-64 paragraph 5-2.b.

Of 26 reviews conducted; 4 locations (15.4%) had a program that was not managed by or had the support of the designated safety office. **Green**

Analysis: The explosives license will be developed staffed and approved by the commander or their designated official and the process should be defined in the ESMP. The explosives safety site plan is a safety office responsibility. The explosives license is generated based on the approved site plan.

Solution: The development, management and enforcement of explosives limits identified in the explosives license is the responsibility of the commanders designated safety office with explosives safety responsibility.

B.5. Explosives licenses reviewed and validated at 12 month intervals for compliance and encroachment issues. Reference: DA Pam 385-65 paragraph 2-17, DA Pam 385-64 paragraph 5-1 and 5-2.

Of 26 reviews conducted; 12 locations (46.1%) were identified where the explosives license was not reviewed annually for compliance with the ESSP and encroachment (new construction) into the explosives arcs was not verified. **Red**

Analysis: Explosives license require an annual verification that explosives limits are not exceeded, there are no new ongoing A&E operations and there is no construction projects that do or will encroach the explosives arcs.

Solution: The commanders designated safety office with explosives safety responsibility will conduct and document an annual review of the explosives license, site plans, current net explosives weights and compatibility for violations. Annual review will include a physical review of any new construction for encroachment of the explosives arcs.

B.6. Garrisons/installations maintains a map showing locations of A&E. Reference: DA Pam 385-64, paragraph 1-11.

Of 26 reviews conducted; 2 locations (7.6%) had no A&E location maps available or had maps that were not current based on the current A&E operations. **(Green)**

Analysis: Current maps of the installation and relationships of A&E facilities or operations should be maintained by appropriate engineering personnel.

Solution: The safety office with explosives safety responsibilities should have access to current installation maps with A&E locations. Mapping requirements should be detailed in the commanders ESMP.

B.7. Explosives licenses and maps of the explosives locations available at prescribed locations. Reference: DA Pam 385-64 paragraphs 5-2 e-g.

Of 26 reviews; 6 locations (23%) had a combination of no license and or maps at prescribed locations. **Amber**

Analysis: A&E maps should be available that show all real property to include A&E locations with explosives arcs. Maps should be readily accessible to the safety office and fire department at a minimum.

Solution: The safety office with explosives safety responsibility will have maps detailing A&E locations and explosives arcs and maintain a copy of the explosives license for all A&E storage and operating facilities.

C - AMMUNITION & EXPLOSIVES OPERATIONS (Green)

C.1. Personnel use required personal protective equipment (PPE). **Critical** Reference: AR 385-10 paragraph 18-11

Of 26 reviews conducted; 1 location (3.8%) had A&E operations ongoing where static, bonding or grounding controls were not in place when required. **(Green)**

Analysis: The use of the proper static bonding and grounding of personnel and equipment is to reduce the potential for uncontrolled discharge in A&E operations.

Solution: When required by operational SOPs, mandated static and bonding grounding will be available and inspected.

C.2. Licensed, trained personnel operate machinery, motor vehicles and MHE. Reference: AR 385-10 paragraph 18-7, DA Pam 385-64 paragraph 2-17.a.(2).

Of 26 reviews conducted; there were no documented non-compliances of this requirement.

(Green)

Analysis: The operator will inspect MHE before use for unsafe conditions and current load test. Unsafe MHE and associated equipment (such as, lifting devices) will not be used until repairs are made.

Solution: Perform pre-operational inspections and checks of vehicles and equipment prior to use.

C.3. Warning signage posted of UXO hazard around the installation to warn/prohibit entry by unauthorized persons and to alert authorized personnel entering a hazard area. **Critical**
Reference: DA Pam 385-63 paragraphs 2-1b, 2-2b, 2-2c, and 2-2d.

Of 26 reviews conducted; 4 locations (15.4%) where UXO awareness signs were either not present or were illegible due to weathering. **(Green)**

Analysis: UXO awareness signs are posted to identify locations where UXO is known or suspected to be present. The signs are to prevent access to the area by personnel.

Solution: Signs should be posted that identify UXO areas. The signs should be of the appropriate size and multi lingual when required.

C.4. Training aid/static display marked as inert (EOD training aids also require serial numbers). Reference: DA Pam 385-64 paragraphs 2-9 and 3-5.

Of 26 reviews conducted; 2 locations (7.7%) that had incomplete or no documentation or markings on inert training aids or display items. **(Green)**

Analysis: Inert ammunition and explosives include practice and service AE, including AE components (such as, projectile bodies) manufactured or made empty or inert for use in training, on desk nameplates or stands, on display boards, in demonstrations or public functions, in offices or work areas of personnel, or similar purposes.

Solution: All inert ammunition and explosives items should be properly marked inert, serialized and inventoried annually.

C.5. Use of “Z” storage for mixed compatibility grouping approval in writing at a level consistent with the risk acceptance authority criteria. Reference: DA Pam 385-30 table 4-2, DA Pam 385-64 table 7-2 note 1.

Of 26 reviews conducted; 5 locations (19.2%) were storing A&E under the “Z” waiver authority without proper approval documentation. (Green)

Analysis: When warranted by operational considerations or magazine non-availability, and when safety is not sacrificed, mixed storage of limited quantities of certain compatibility groups may be approved in writing. Approval of such storage will be at a level consistent with the risk acceptance authority criteria of DA Pam 385–30, table 4–2.

Solution: Either re-warehouse non compatible items that violate explosives safety standards or receive written approval at the appropriate level based on the level of risk.

C.6. Explosives and personnel limits posted as required. Reference: DA Pam 385-64 paragraph 2-5.a.

Of 26 reviews conducted; 2 locations (7.7%) were identified that did not have explosives and personnel limits posted as required. (Green)

Analysis: Operations must be conducted in a manner that exposes the minimum number of people for the minimum period of time to the minimum amount of explosives required to perform a safe and efficient operations.

Solution: Personnel and explosives limits must be clearly posted in operating bays and readily available for all other operations and must not be exceeded during the operation. Explosives limits for A&E operations will be included in the SOP.

C.7. Ammunition blocked and braced or secured to prevent movement (IAW approved storage and outload drawings). **Critical** Reference: DA Pam 385-64 paragraph 20-10.c.

Of 26 reviews conducted; there were documented non-compliances of this requirement. (Green)

Analysis: When A&E is transported it will be secured to the transportation vehicle to prevent movement or shirting during transit.

Solution: Vehicles loaded with A&E will be inspected prior to movement and DD Form 626 will be signed to verify who performed the inspection of the loaded vehicle.

C.8. A&E storage, handling, and operating facilities and areas maintained free of debris and rubbish, particularly the accumulation of oily rags or other material subject to spontaneous ignition. Reference: DA Pam 385-64 paragraph 2-7.

Of 26 reviews conducted; 3 locations (11.5%) had combustible material stored in an unauthorized location or non- mission essential flammable material stored in a magazine.

(Green)

Analysis: Waste materials (for example, oily rags) and hazardous materials (such as, explosives scrap) will not be mixed with wood, paper, and combustible packing materials. Each of these categories of waste will be carefully controlled and placed in separate approved, properly marked containers when required to be in the facility.

Solution: Remove all unauthorized or excessive combustible materials not deemed operationally necessary.

D - A&E AMNESTY PROGRAM (Green)

D.1. Installation Commanders established, implemented and publicized an A&E Amnesty Program. Reference: DA Pam 385-64 paragraph 2-18.

Of 26 reviews conducted; 4 installations (15.3%) had no documented or an incomplete amnesty program. **(Green)**

Analysis: Garrisons, installations, and forward operating bases having elements that use military munitions will establish an A&E Amnesty Program. Commanders should establish their amnesty program and an SOP using guidelines in keeping with their installation's mission. The A&E amnesty program must address procedures for assisting and protecting the anonymity of personnel who turn-in A&E under the amnesty program.

Solution: Develop an amnesty program or SOP that details the roles and responsibilities of personnel and identifies amnesty box locations.

E - ELECTRICAL EXPLOSIVES SAFETY (Red)

E.1. Hazardous locations are classified depending on the properties of the flammable vapors, liquids or gases, or combustible dusts or fibers, which may be present and the likelihood that a flammable or combustible concentration or quantity present. Reference: DA Pam 385-64 paragraph 17-2.

Of 26 reviews conducted; 1 location (3.9%) had unauthorized electrical equipment plugged into explosion proof outlets in a hazardous location. **(Green)**

Analysis: Locations are classified depending on the properties of the flammable vapors, liquids or gases, or combustible dusts or fibers which may be present and the likelihood that a flammable or combustible concentration or quantity is present. Where pyrophoric (spontaneously igniting in air) materials are used or handled, these locations will not be classified.

Solution: When authorized electrical powered tools and equipment are used in a hazardous location the items used must meet the requirements for class I, II or III.

E.2. Service lines run underground from a point at least 50 feet away from the building. Reference: DA Pam 385-64 paragraph 17-5.

Of 26 reviews conducted; 4 locations (15.3%) had service lines that were not buried when within 50 feet of A&E operating buildings or storage locations. **Green**

Analysis: Surge protection, even for lines that run underground, will be provided to shield against any severe electrical surges from a nearby lightning strike or from excessive power through the line from other outside sources, such as broken power lines. Surge suppression for incoming conductors must include suppression at the entrance to the building from each wire to ground.

Solution: Bury each service line underground from a point at least 50 feet away from the building. Local telephone service and similar low voltage intercom or alarm systems must also comply with the same underground routing for the last 50 feet.

E.3. Controls for static electricity meet regulatory requirements. **Critical** Reference: DA Pam 385-64 paragraphs 17-10 – 17-12.

Of 26 reviews conducted; 6 locations (23%) either had inadequate or no static controls in place or there were no records of the static dissipation system being tested. **Red**

Analysis: Static electricity is produced when two unlike materials are brought into contact and then separated. During contact, there is a redistribution of the charge across the area of contact and an attractive force is established. When the materials are separated, work is done in overcoming these attractive forces. This work is stored as an electrostatic field which develops between the two surfaces when they are separated.

Solution: Provide a low impedance path to the ground system for conductive items to reduce the potential for spark or shock. Bond connections should be inspected and tested at the required frequency.

E.4. Requirements for explosives facility grounding meet regulatory requirements. **Critical** Reference: DA Pam 385-64 paragraphs 17-13 and 17-14.

Of 26 reviews conducted; 7 locations (26.9%) had either no system or the system that was installed had deficiencies such as unapproved (UL) materials dissimilar metals. **Red**

Analysis: Explosives facilities will be provided with a ground system to provide personnel, equipment, and facility protection. Personnel safety is provided by low impedance grounding and bonding for personnel, equipment, metallic objects, and piping so as to prevent voltages sufficient to cause a shock hazard or initiate explosives within the facility. The explosives

facility grounding system at all Army installations will be visually inspected and electrically tested at the required intervals for values specified in DA Pam 385-64 table 17-1.

Solution: Install, maintain and test the grounding system to include but not limited to the static electricity charge dissipation subsystem, ordnance ground subsystem, instrument ground subsystem, lightning protection subsystem, structural ground subsystem and power service grounds subsystem.

E.5. Lightning protection system (LPS) and bond requirements meet regulatory requirements. Reference: DA Pam 385-64 paragraphs 17-16 and 17-26.

Of 26 reviews conducted; 5 locations (19.2%) had either no bonding where required or painted bond connections. **Green**

Analysis: An LPS consists of three basic parts that provide the low impedance metal path a system of air terminals or overhead wires on the roof and other elevated locations, a system of earth electrodes, and, a conductor system (down conductor) connecting the air terminals to the earth electrode system. Properly located and installed, these basic components improve the probability that the lightning discharge will be conducted harmlessly between the air terminals and the ground terminals.

Solution: the lightning protection system and any conductive object should be provided a low impedance path to ground and be free of paint or other coatings.

E.6. LPS inspection and test reports and/or records maintained in the garrison or installation safety office unless an alternate office is specifically designated by the garrison or installation commander. Records of LPS tests and inspections kept on file for the last six inspection cycles; reviewed for deficiencies and indicated repairs must be made. Reference: DA Pam 385-64 paragraphs 17-27 and 17-29.

Of 26 reviews conducted; 8 locations (30.7%) did not have test results in the safety office or the LPS results had not been reviewed by the safety office. Testing had not been conducted when required or the proper method for testing and documenting results was either incomplete or missing. **Red**

Analysis: Lightning protection systems to include bonding will be visually inspected and electrically tested at the intervals identified in the DA Pam 385-64 table 17-1. The inspection and test reports and/or records will be maintained in the garrison or installation safety office; unless an alternate office is specifically designated by the garrison or installation commander. Records of tests and inspections will be kept on file for the last six inspection cycles. These records will be reviewed for deficiencies and trend analysis. Significant variances will be analyzed to determine the cause and indicated repairs must be made.

Solution: Conduct the required electrically testing and visual inspection documenting the results. Records of testing should be available in the safety office.

E.7. Hazards of Electromagnetic Radiation (HERO) procedures in compliance with regulatory guidance. **Critical** Reference: DA Pam 385-64 paragraph 17-15.

Of 26 reviews conducted; 1 location (3.8%) had no documented HERO requirements or procedures in place. **(Green)**

Analysis: Electro explosive devices (EEDs) are electrically initiated explosive devices. An aspect of possible hazards is the accidental firing of EEDs by stray electromagnetic energy. These devices are initiated by low levels of electrical energy and are susceptible to unintentional ignition by many forms of direct or induced stray electrical energy, such as lightning discharges, static electricity, or turboelectric (friction-generated) effects, the operation of electrical and electronic subsystems onboard weapon systems, and radio frequency (RF) energy from ground portable and airborne emitters (transmitters).

Solution: Provide adequate protection and restrict the use of handheld emitters (e.g. communications equipment, etc.) in facilities where HERO susceptible A&E is stored and maintained.

F - FIRE PREVENTION, PROTECTION, AND SUPPRESSION (Green)

F.1. Garrison/installation involved in explosives operations develops pre-fire plans. Reference: AR 420-1 paragraph 25-16b, DA Pam 385-64 paragraph 6-1c and 6-2.

Of 26 reviews conducted; 2 locations (7.7%) did not have pre fire plans or pre fire plans that were consistent with what was documented in the ESMP. **(Green)**

Analysis: Each garrison or installation involved in explosives operations will develop pre-fire plans. Plans will cover all explosives areas and possible exposures of explosives to fire. In addition the overall plan will specify responsible individuals and alternates, their organizations and training, and include a description of the emergency function of each department or outside agency with duties of personnel spelled out in the plan.

Solution: Develop a pre-fire plan that identifies the roles and responsibilities and training requirements of all organizations including contractors and tenants.

F.2. Army fire station central communications center have an area map showing all explosives areas or locations. Reference: DA Pam 385-64 paragraph 6-1.d.

Of 26 reviews conducted; 1 location (3.8%) had no maps for the fire department and the fire department relies on the posted fire symbols. **(Green)**

Analysis: Maps identifying the A&E locations on the installation should be developed to a level of detail and that can be understood. Maps should be updated as new construction, or demolition of explosives and other facilities change.

Solution: The fire department will have a current map available in the fire station and in emergency response vehicles as needed.

F.3. Explosives operations notify the fire department with any change of fire or chemical hazard symbols for A&E facilities. Reference: DA Pam 385-64 paragraph 6-1.e.

Of 26 reviews conducted; 2 locations (7.7%) had no process for providing the fire department with fire or chemical hazards or information provided was inaccurate. (Green)

Analysis: Personnel in charge of explosive operations will notify the fire department when there is a change in the type of explosives being worked which would require a change of fire or chemical hazard symbols.

Solution: Develop a current listing of A&E facilities and current hazards associated that can easily be read and understood by the fire department in the event a response is necessary.

F.4. Restrictions on flammable sources and smoking restrictions documented. Reference: DA Pam 385-64 paragraph 6-3.

Of 26 reviews conducted; there were documented non-compliances of this requirement. (Green)

Analysis: Smoking is prohibited in any explosives storage or operating area or location, except. Smoking may be allowed within an explosives area or location in specially designated and posted "authorized smoking areas." A certification of approval by the garrison or installation commander or his or her designated representative (fire chief, fire marshal, or fire warden), in coordination with the safety office, will be displayed in each designated smoking location.

Solution: If an authorized smoking areas is designated and approve the applicable requirements of the reference.

F.5. Operating personnel and firefighting forces involved with explosives trained in precautions to be taken and how to fight fires. Reference: DA Pam 385-64 paragraph 6-4 and 6-10.b.

Of 26 reviews conducted; 1 location (3.8%) was not coordinating or conducting fire extinguisher training with the fire department. (Green)

Analysis: All operating personnel and firefighting forces involved with explosives must be trained in the precautions to be taken and how to fight fires. This training will include the application and meaning of each type fire hazard symbol, reporting fires, sounding alarms, area evacuations, and type and use of appropriate firefighting equipment. Personnel with responsibilities for using fire extinguishers will receive training on general principles of fire extinguisher use and the hazards involved with incipient stage firefighting upon initial assignment and at least annually thereafter.

Solution: Develop a training plan for firefighters and building occupants to include but not limited to fire extinguisher training.

F.6. Fire drills held within A&E areas at intervals of six months or less to train firefighting forces and ensure other personnel involved understand individual responsibilities; evaluate fire alarm systems and firefighting equipment. Reference: DA Pam 385-64 paragraph 6-5.

Of 26 reviews conducted; 2 locations (7.7%) were not conducting fire drills or training as required. (Green)

Analysis: Frequent fire exit drills should be held when warranted by the size of the building and the number of occupants. If emergency exits other than the usual doors and stairways are provided, these drills will cover their use. All emergency exits will have exit signs which are clearly visible.

Solution: Develop and execute a training plan for a semiannual fire drill to be conducted for training of A&E operating and fire department personnel.

F.7. Fire and chemical hazard symbols posted with visibility from all approach roads. Reference: DA Pam 385-64 paragraph 6-14.

Of 26 reviews conducted; 3 locations (11.5%) had fire and/or chemical hazard symbols that were not posted or were incorrect based on the contents of the magazine. 1 location had multiple symbols posted between buildings with different hazards. (Green)

Analysis: The fire symbol that applies to the most hazardous material present will be posted on or near all nonnuclear explosives locations. It will be visible from all approach roads. One symbol posted on or near the door end of an earth-covered magazine is normally enough. One or more symbols may be needed on other buildings. When all munitions within a storage area are covered by one fire symbol, it may be posted at the entry control point.

Solution: Post the applicable fire symbol for each facility or area based on the highest hazard. Chemical hazard symbols must be posted on each facility based on the current hazard.

F.8. Deluge systems for explosives operations and locations where A&E fire hazard exists. Reference: DA Pam 385-64 paragraph 6-19.

Of 26 reviews conducted; there were documented non-compliances of this requirement. (Green)

Analysis: An ultra-high-speed deluge system is an instantaneous response (milliseconds) system. It is used primarily to protect personnel, process equipment, and buildings from the fire and thermal hazard presented by energetic material involved in high hazard explosive operations, such as, melting, mixing, blending, screening, sawing, granulating, drying, pressing, extrusion, and pouring.

Solution: In addition to sprinklers, deluge systems will be provided to protect operating personnel in high hazard occupations and locations where A&E fire hazard exists.

G - RISK MANAGEMENT (Green)

UNEXPLODED ORDNANCE (UXO) SAFETY EDUCATION

G.1. Areas known or suspected to contain unexploded ordnance (UXO) present on Army installations provide UXO safety education training or information to people living and working on the installation or FUDS or that work on or use the property. Such training will be based on and incorporate the Army's 3Rs (Recognize, Retreat, Report) message. Reference: DA Pam 385-64 paragraph 2-16.

Of 26 reviews conducted; 2 locations (7.7%) were identified that are not conducting UXO awareness on the installation or the training is not documented. (Green)

Analysis: When areas that are known or suspected to contain UXO are present on Army installations, including installations affected by base realignment and closure (BRAC) or formerly used defense sites (FUDS), the installation, garrison or district commander will provide UXO safety education training or information. The local command will determine how this training will be provided.

Solution: UXO training should be provided and be based on and incorporate the Army's 3Rs (Recognize, Retreat, Report) message and safety education material (available at <https://www.denix.osd.mil/uxosafety>). Such training will also be offered to schools on or in close proximity to the installation or FUDS on a periodic basis.

G.2. Safety education material offered to schools on or in close proximity to the installation or FUDS on a periodic basis. Reference: DA Pam 385-64 paragraph 2-16.

Of 26 reviews conducted; 5 locations (19.2%) were not offering the required UXO awareness training material as required or the training was not documented. (Green)

Analysis: Provide UXO safety education training or information to schools on or in close proximity to the installation or FUDS on a periodic basis.

Solution: UXO training should be provided and be based on and incorporate the Army's 3Rs (Recognize, Retreat, Report) message and safety education material (available at <https://www.denix.osd.mil/uxosafety>). Such training will also be offered to schools on or in close proximity to the installation or FUDS on a periodic basis.

DEVIATIONS

G.3. Deviations of ES policy and standards, the proper authority must weigh the added risk to personnel and property against the strategic and other compelling reasons that necessitate such

deviations. AR 385-10, paragraph 5-5 and prepare a request for deviation. Reference: DA Pam 385-30, paragraph 1-7.b.

Of 26 reviews conducted; 4 locations (15.3%) had either a second deviation approval signed at the same level as the original or no documentation of a known explosive safety deviation. **(Green)**

Analysis: The appropriate risk acceptance authority is typically determined by three factors: the duration of the risk, the level of risk, and the ownership of the resources necessary to control, eliminate, or correct the hazard in an appropriate time frame. The exposure of unrelated personnel to risk and the resultant level of required coordination may also affect the required level of risk acceptance (for example, the exposure of host nation facilities to risk from an Army operation).

Solution: Develop staff and approve deviations to explosives safety standards for approval. Anytime a deviation is extended beyond the expiration of the deviation a new deviation must be staffed and approved with approval to the next higher approval authority.

APPENDIX A

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

A&E	Ammunition and Explosives
AA&E	Arms, Ammunition and Explosives
ACCMO	Ammunition Civilian Career Management Office
ACOM	Army Command
ACR	Ammunition Condition Report
ADC	Ammunition Data Card
AEC	Army Environmental Center
AEDA	Ammunition, Explosives and Dangerous Articles
AEPS	Army Electronic Product Support
AIN	Ammunition Information Notice
AKO	Army Knowledge Online
AMC	Army Materiel Command
AMCP	Ammunition Manager Career Program
AMC-R	AMC Regulation
AMCOM	U.S. Army Aviation and Missile Command
AOCI	Accredited Off Campus Instruction
AR	Army Regulation
ARNG	Army National Guard
ASA	Ammunition Support Activity
ASC	Army Sustainment Command
ATEC	U.S. Army Test and Evaluation Command
ASP	Ammunition Supply Point
CAC	Common Access Card
CASCOM	Combined Arms Support Command
CAT	Category
CC	Condition Code
CFR	Code of Federal Regulations
CIIC	Controlled Item Inventory Code
CMRS	Conventional Munitions – Restricted or Suspended
CONUS	Continental United States
DA	Department of the Army
DA Pam	DA Pamphlet
DAC	U.S. Army Defense Ammunition Center
DDESB	Department of Defense Explosives Safety Board
DENIX	Defense Environmental Network and Information Exchange
DLA	Defense Logistics Agency
DoD/DOD/DD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
DSN	Defense Switched Network
DSR	Depot Surveillance Record
DTR	Defense Transportation Regulation

EL.....	Explosives Storage License
EOD.....	Explosives Ordnance Disposal
EPA.....	Environmental Protection Agency
ESB.....	Explosive Safety Bulletin
ESMP.....	Explosive Safety Management Program
ESSP.....	Explosives Safety Site Plan
FM.....	Field Manual
FORSCOM.....	U.S. Army Forces Command
FY.....	Fiscal Year
GFM-ETA.....	Global Freight Management - Electronic Transportation Acquisition
HAZMAT.....	Hazardous Material
HD.....	Hazard Division
HQDA.....	Headquarters, Department of the Army
HW.....	Hazardous Waste
IDS.....	Intrusion Detection System
ILD.....	Internal Locking Device
ILT.....	Instructor Led Training
IMCOM.....	Installation Management Command
IMMC.....	Integrated Materiel Management Center
JMC.....	Joint Munitions Command
LPS.....	Lightning Protection System
LRTAO.....	Logistics Review and Technical Assistance Office
LOGSA.....	Logistics Support Activity
MDC.....	Magazine Data Card
MHE.....	Materials Handling Equipment
MHP.....	Munitions History Program
MIDAS.....	Munitions Actions Disposition Action System
MIL-P.....	Military Pamphlet
MIL-STD.....	Military Standard
MIN.....	Missile Information Notice
MMR.....	Military Munitions Rule
MSDS.....	Material Safety Data Sheet
MTT.....	Mobile Training Teams
NAPEC.....	Naval Ammunition Production Engineering Center
NAR.....	Notice of Ammunition Classifications
NAVSUP Pub.....	Navy Supplemental Publication
NEW.....	Net Explosives Weight
NGB.....	National Guard Bureau
NOLSC.....	Naval Operational Logistics Support Center
NSN.....	National Stock Number
OB/OD.....	Open Burning/Open Detonation
OSD.....	Office of the Secretary of Defense
PI.....	Periodic Inspection
PMG.....	Propellant Management Guide
PSP.....	Propellant Stability Program
QASAS.....	Quality Assurance Specialist (Ammunition Surveillance)

RCRA.....	Resource Conservation and Recovery Act
R&D.....	Research and Development
RTC.....	Regional Training Center
SAAS.....	Standard Army Ammunition System
SB.....	Supply Bulletin
SCS.....	Security Construction Statement
SDS.....	Standard Depot System
SERO.....	South East Region Office
SMI.....	Storage Monitoring Inspection
SOP.....	Standing Operating Procedure
SRA.....	Stock Records Account
STD.....	Standard
TFG.....	Transportation Facilities Guide
TB.....	Technical Bulletin
TM.....	Technical Manual
TRADOC.....	U.S. Army Training and Doctrine Command
TSA.....	Theater Support Activity
USAPA.....	United States Army Publishing Agency
USC.....	United States Code
USPFO.....	United States Property and Fiscal Office
USATCES.....	U.S. Army Technical Center for Explosives Safety
WARP.....	Worldwide Ammunition-Data Repository Program
WBT.....	Web-based Training

APPENDIX B

REFERENCES

**AMC Regulation 700-9
AMC Ammunition Review and Technical Assistance Program**

**AMC Regulation 740-25
Ammunition Stock Location System**

**AR 190-11
Physical Security of Arms, Ammunition, and Explosives**

**AR 190-13
Army Physical Security Program**

**AR 702-12
Area Support Responsibilities**

**AR 75-1
Malfunctions Involving Ammunition and Explosives**

**AR 385-10
Army Safety Program**

**AR 700-13
Worldwide Ammunition Review and Technical Assistance Program**

**AR 710-2
Supply Policy Below the Wholesale Level**

**AR 735-5
Policies and Procedures for Property Accountability**

**ATEC Regulation 385-1
ATEC Safety Program**

**CMRS
Conventional Munitions – Restricted or Suspended (Air Force)**

**DA Pam 385-64
Ammunition and Explosives Safety Standards**

**DA Pam 710-2-1
Using Unit Supply System (Manual Procedures)**

DA Pam 750-8
Army Maintenance Management System (TAMMS) User Manual

DoD 4500.9-R
Defense Transportation Regulation

DoD 5100.76M
Physical Security of Sensitive Conventional Arms, Ammunition and Explosives

DoD 6055.9-STD
DoD Ammunition and Explosives Safety Standards

FM 3-19.30
Physical Security

MIL-STD-129
Military Marking for Shipment and Storage

MIL-P-43607
Padlock, Key Operated, High Security, Shrouded Shackle

NAVSUP Pub 801
Ammunition - Unserviceable, Suspended and Limited Use

SB 742-1
Ammunition Surveillance Procedures

TB 9-1300-385
Munitions Restricted or Suspended

TB 43-0142
Safety Inspection and Testing of Lifting Devices

TB 43-0250
Ammunition Handling, Storage and Safety

TM 38-410
Storage and Handling of Hazardous Materials

Title 49, CFR
Hazardous Materials Regulations of the Department of Transportation

United States Code (USC) 32 National Guard (cited in Section I-E)

APPENDIX C

COMMONLY USED INTERNET WEB SITES

U.S. Army Defense Ammunition Center

<https://www3.dac.army.mil/>

Ammo Help

<https://dac.jmc.mil/AmmoHelp>

TRADOC publications

<http://www.tradoc.army.mil/publications.htm>

U.S. Army Publishing Directorate, Army publications and forms

<http://www.apd.army.mil/>

JMC Ammunition Surveillance Division

<https://jmcsp.osc.army.mil/sites/mlrc/qa/qas/qasurveillance/default.aspx>

Munitions History Program

<https://mhp.redstone.army.mil>

Acquisition Community Connection

<https://acc.dau.mil/CommunityBrowser.aspx>

Naval Supply Systems Command, Naval Operational Logistics Support Center (NOLSC); Navy and Marine Corps NARs/AIN/OHF message retrieval. Registration required.

<https://www.ois.disa.mil/Portal/nolsc.jsp?body=welcome>

U.S. Air Force Munitions Sustainment Group Conventional Munitions Restricted or Suspended System (CMRS), Technical Orders, Interim Hazard Classification Letters, Ammunition Disposition requests, Ammunition Condition Reports

<https://www.my.af.mil/>

US Army TACOM-Unique Logistics Support Applications (TULSA)

<https://tulsa.tacom.army.mil/>

Defense Environmental Network and Information Exchange, EPCRA Munitions Reporting Handbook for the U.S. Army, Range Rule/Munitions Rule. Registration is required; use the search option

<https://www.denix.osd.mil/>

Interim Hazard Classification List

<https://mhp.redstone.army.mil>

U.S. Army Corps of Engineers publications

<http://www.usace.army.mil/publications>

Department of Transportation Office of Hazardous Materials Safety

<http://www.phmsa.dot.gov/>

Environmental Protection Agency Toxic Release Inventory guidance and EPA database

<http://www.epa.gov/tri/>

Search Engine Linked to Federal Web Sites

<http://www.usa.gov/>

Army Materiel Command Publications and Forms

<http://www.amc.army.mil/pa/officialcommandpubs.asp>

National Guard Bureau Publications and Forms

<http://www.ngbpdc.ngb.army.mil>

Code of Federal Regulations

<http://www.gpo.gov/fdsys/>

Army Knowledge Online

<https://www.us.army.mil>

DoD Lock Program Web page (cut and paste website for the direct link)

https://portal.navfac.navy.mil/portal/page/portal/navfac/navfac_ww_pp/navfac_nfesc_pp/locks