Department of the Army

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

ANNUAL
DIGEST

FY 2019 PROGRAM

U.S. ARMY DEFENSE AMMUNITION CENTER
LOGISTICS/EXPLOSIVES SAFETY REVIEW AND TECHNICAL ASSISTANCE OFFICE
MCALESTER, OK 74501-9053
# Table of Contents

EXECUTIVE SUMMARY .................................................................................................................. III
PREFACE........................................................................................................................................ V
AMMUNITION REVIEW AND TECHNICAL ASSISTANCE PROGRAM BACKGROUND .......... VII
TECHNICAL ASSISTANCE, DAC PUBLICATIONS & AMMO HELP ...................................... VIII
THE U.S. ARMY DEFENSE AMMUNITION CENTER ............................................................... X

SECTION I – AMMUNITION LOGISTICS ..................................................................................... 1
A - ADMINISTRATION .................................................................................................................... 1
B - EXTERNAL/INTERNAL STANDARD OPERATING PROCEDURES ......................................... 3
C - DEMILITARIZATION/DISPOSAL ............................................................................................... 7
D - EQUIPMENT ............................................................................................................................ 8
E - MATERIEL MANAGEMENT ..................................................................................................... 9
F - PHYSICAL SECURITY .............................................................................................................. 19
G - STORAGE ............................................................................................................................... 28
H - TRANSPORTATION ............................................................................................................... 30

SECTION II - AMMUNITION SURVEILLANCE ........................................................................ 33
A - AMMUNITION STOCKPILE AND RELIABILITY .................................................................... 33
B - RECORDS AND REPORTS ..................................................................................................... 35
C - SURVEILLANCE INSPECTIONS .............................................................................................. 36
D - SURVEILLANCE SAFETY AND LOGISTICS ....................................................................... 40
E - AMMUNITION SURVEILLANCE SOPS ............................................................................... 47
F - A&E AMNESTY PROGRAM ................................................................................................... 47
G - DEMILITARIZATION .............................................................................................................. 48
H - TECHNICAL ASSISTANCE ................................................................................................... 48

SECTION III - EXPLOSIVES SAFETY .......................................................................................... 50
A - EXPLOSIVES SAFETY MANAGEMENT PROGRAM (ESMP) .................................................. 50
B - EXPLOSIVES SAFETY SITE PLANS, EXPLOSIVES LICENSES AND A&E MAPS ........... 52
C - AMMUNITION & EXPLOSIVES OPERATIONS ................................................................... 56
D - ELECTRICAL EXPLOSIVES SAFETY ............................................................................... 60
E - FIRE PREVENTION, PROTECTION, AND SUPPRESSION ..................................................... 63
F - RANGE SAFETY AND UNEXPLDED ORDNANCE ............................................................... 67
G - DEVIATIONS ......................................................................................................................... 69
H - INDUSTRIAL AE OPERATIONS ........................................................................................... 71

APPENDICES ............................................................................................................................... A-1
GLOSSARY OF ACRONYMS AND ABBREVIATIONS ................................................................. A-1
REFERENCES ............................................................................................................................... B-1
COMMONLY USED INTERNET WEB SITES .............................................................................. C-1
EXECUTIVE SUMMARY:

This digest is a summary of significant observations and trends reported during twenty-four ammunition reviews conducted from 1 October 2018 through 30 September 2019. 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 ammunition logistics/surveillance/ explosives safety areas and represent deficient conditions noted during Fiscal Year 2019 (FY-19) that were either not noted during previous review periods, showed no improvement (but need improvement) or generated an increase in negative observations.

FY19 Review Results:

Section I, Ammunition Logistics:

- The following areas were rated as Compliant (Green): Administration, Demilitarization, Material Management and Transportation.

- The following areas were rated as requiring corrective actions (Amber): External/Internal Standard Operating Procedures, Equipment and Physical Security.

- The following areas were rated as Critical Non-Compliant (Red): Storage.

Section II, Ammunition Surveillance:

- The following areas were rated as Compliant (Green): Records and Reports, Surveillance Inspections, Surveillance Safety and Logistics, Demilitarization and Technical Assistance.

- The following area were rated as requiring corrective actions (Amber): Ammunition Stockpile Reliability Program.

- The following areas were rated as Critical Non-Compliant (Red): Ammunition Surveillance SOPs and A&E Amnesty Program.

Section III, Explosives Safety:

- The following areas were rated as Compliant (Green): Explosives Safety Management Program (ESMP), Explosives Safety Site Plans, Ammunition & Explosives Operations, Electrical Explosives Safety, Fire Prevention, Protection & Suppression, Range Safety and Unexploded Ordnance (UXO), Deviations and Industrial AE Operations.

- The following areas were rated as requiring corrective actions (Amber): None.

- The following areas were rated as Critical Non-Compliant (Red): None.
FY19 REVIEW MATRIX

Breakdown of 205 Primary Elements for FY 2019

FY19 ELEMENT BREAKDOWN
205 ELEMENTS / 47 CRITICAL

SECTION I: AMMUNITION LOGISTICS (19%)
- Administration (18%)
- External/Internal Standard Operating Procedures (24%)
- Demilitarization / Disposal (0%)
- Equipment (27%)
- Material Management (15%)
- Physical Security (20%)
- Storage (37%)
- Transportation (7%)

SECTION II: AMMUNITION SURVEILLANCE (19%)
- Ammunition Stocks & Reliability (24%)
- Records & Reports (18%)
- Surveillance Inspections (17%)
- Surveillance Safety & Logistics (12%)
- Surveillance SOPs (51%)
- A&E Amnesty Program (43%)
- Demilitarization (0%)
- Technical Assistance (13%)

SECTION III: EXPLOSIVES SAFETY (10%)
- Explosives Safety Management Program (16%)
- Explosives Safety Site Planning (10%)
- Ammunition & Explosives Operations (10%)
- Electrical Explosives Safety (14%)
- Fire Prevention, Protection & Suppression (8%)
- Range Safety and Unexploded Ordnance (5%)
- Deviations (0%)
- Industrial AE Operations (10%)

Critical Non-Compliance (Requires Immediate Attention)
Amber
Green
White
Requires Corrective Actions
Complies with Standards
N/A

FY19 Overall Rating Overview/Red/yellow/Non-Critical Rollup Criteria:
Green: ≤ 20% Non-Compliant
Amber: > 20 ≤ 30% Non-Compliant
Red: > 30% Non-Compliant

Critical Item Rating Criteria:
Green: ≤ 20% Non-Compliant
Amber: > 20 ≤ 30% Non-Compliant
Red: > 30% Non-Compliant

Note: Critical - "Red" element within subcategory makes subcategory "Red", despite percentage of Non-Compliant elements (e.g., "Red" AE element within Logistics makes A. Administration "Red", even if percentage is below 20%).
The DA G4 Worldwide Ammunition Review and Technical Assistance Program is accomplished through ammunition logistics reviews performed by the Logistics/Explosives Safety 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 viii of this digest.

This digest is a summary of significant observations and trends reported during twenty-two ammunition reviews conducted from 1 October 2018 through 30 September 2019. 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) 2019:

<table>
<thead>
<tr>
<th>Location</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona ARNG, AZ</td>
<td>29 October – 2 November 2018</td>
</tr>
<tr>
<td>Holston AAP, TN</td>
<td>5 – 9 November 2018</td>
</tr>
<tr>
<td>Fort Jackson, SC</td>
<td>12 – 16 November 2018</td>
</tr>
<tr>
<td>Fort Rucker, AL</td>
<td>3 – 7 December 2018</td>
</tr>
<tr>
<td>Alabama ARNG (Pelham Range)</td>
<td>10 – 14 December 2018</td>
</tr>
<tr>
<td>Lake City AAP, MO</td>
<td>7 - 11 January 2019</td>
</tr>
<tr>
<td>Fort Stewart/HAAF, GA</td>
<td>14 – 18 January 2019</td>
</tr>
<tr>
<td>Bagram, Afghanistan</td>
<td>4 – 8 March 2019</td>
</tr>
<tr>
<td>Kandahar, Afghanistan</td>
<td>11 – 15 March 2019</td>
</tr>
<tr>
<td>JB Lewis-McChord, WA</td>
<td>25 – 29 March 2019</td>
</tr>
<tr>
<td>Yakima Training Area, WA</td>
<td>1 – 5 April 2019</td>
</tr>
<tr>
<td>Fort Pickett, VA</td>
<td>22 – 26 April 2019</td>
</tr>
<tr>
<td>California ARNG (Camp Roberts)</td>
<td>6 – 10 May 2019</td>
</tr>
<tr>
<td>Hunter-Liggett, CA</td>
<td>13 – 17 May 2019</td>
</tr>
<tr>
<td>Fort Gordon, GA</td>
<td>6 – 10 May 2019</td>
</tr>
<tr>
<td>Fort Benning, GA</td>
<td>13 – 17 May 2019</td>
</tr>
<tr>
<td>WRSA-I</td>
<td>3 – 7 June 2019</td>
</tr>
<tr>
<td>Tooele AD, UT</td>
<td>10 – 21 June 2019</td>
</tr>
<tr>
<td>Fort Wainwright, AK</td>
<td>9 – 13 July 2019</td>
</tr>
<tr>
<td>JB Richardson-Elmendorf, AK</td>
<td>16 – 20 July 2019</td>
</tr>
<tr>
<td>Iowa AAP, IA</td>
<td>29 July – 2 August 2019</td>
</tr>
<tr>
<td>Rock Island Arsenal, IL</td>
<td>5 – 9 August 2019</td>
</tr>
<tr>
<td>Michigan ARNG (Camp Grayling)</td>
<td>9 – 13 September 2019</td>
</tr>
<tr>
<td>Michigan ARNG (Fort Custer)</td>
<td>16 – 20 September 2019</td>
</tr>
</tbody>
</table>
The following areas were found in FY 2019 to be in an acceptable level of compliance (Green):

Section I: Logistics:
- Administration
- Demilitarization/Disposal
- Material Management
- Transportation

Section II: Ammunition Surveillance
- Records & Reports
- Surveillance Inspections
- Surveillance Safety & Logistics
- Demilitarization
- Technical Assistance

Section III: Explosives Safety
- Explosives Safety Management Plan
- Explosives Safety Site Plans, Explosives Licenses, and A&E Maps
- Ammunition and Explosives Operations
- Electrical Explosives Safety
- Fire Prevention, Protection, and Suppression
- Range Safety and Unexploded Ordnance (UXO)
- Deviations
- Industrial AE Operations

The following ammunition logistics/surveillance/explosives safety areas represent deficient conditions noted during FY 2019 that were either not noted during previous review periods, showed no improvement (but need improvement) or generated an increase in negative observations (Amber) and (Red):

Section I: Logistics:
- External/Internal SOPs
- Equipment
- Physical Security
- Storage

Section II: Ammunition Surveillance
- Ammunition Stockpile Reliability Program
- Ammunition Surveillance SOPs
- AE Amnesty Program

Section III: Explosives Safety
- None

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 (TAV) or Explosives Safety Assistance Visit (ESAV) 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:

U.S. Army Defense Ammunition Center
Logistics/Explosives Safety Review and Technical Assistance Office
ATCL-ACE (LOG)
1 C Tree Road, Building 35
McAlester, OK 74501-9053

Telephone: Commercial (918) 420-8935, DSN 956-8935
E-Mail Address: usarmy.mcalester.usamc.list.dac-lrtao@mail.mil

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-SPM.

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 review concurrently with AR 700-13 ammunition logistics reviews. The implementation of explosives safety reviews focuses emphasis on installation-level efforts and Explosives Safety Management Plans (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:

Access to publications at https://www.dau.edu/cop/ammo/Pages/Default.aspx (Munitions and Explosives Safety)

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. The latest version of the Hazard Classification of United States Military Explosives and Munitions is Revision 18, dated February 2019

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 may be downloaded online 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 usarmy.mcalester.usamc.list.dac-ammohelp@mail.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. DAC executes 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 956-8007 or (918) 420-8007.


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

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 24 reviews conducted, there was 1 location (4.1%) without an appointed Accountable Officer. (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 head of the activity will appoint in writing an Accountable Officer as required by regulation.

A.2. A statement of transfer of accountability is 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) and DA Pam 700-16, paragraph 13-1d.

Of 24 reviews conducted there were 5 locations (21.7%) with documented non-compliances of this requirement. (Amber)

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 2-8.b(2).

Of 24 reviews conducted; 7 locations (30.4%) had no delegation of authority for individuals signing accountable documentation. (Red)

Analysis: Other individuals may sign for the “Accountable Officer” in his absence; however, only those delegated signature authority may do so.
Solution: Accountable Officer must prepare delegation for signature authority to sign accountable documentation (e.g. block 22 of DD Form 1348)

HAZARDOUS MATERIAL (HAZMAT) TRAINING

A.4. All personnel involved with the preparation and shipment of HAZMAT for commercial or surface military transportation must receive training in accordance with the Defense Transportation Regulation (DTR) training requirements and Department of Defense (DOD) Component regulations. Training for military air shipments will be in accordance with AFMAN 24-204 (Inter-service)/TM 38-250/MCO P4030.19I/NAVSUP Pub 505/DLAI 4145.3. Those requiring training include such employees who load, unload, or handle hazardous material; mark packages; or prepare hazardous materials for transportation. Individuals who certify HAZMAT on shipping documentation by any mode of transportation (military or commercial) must successfully complete an initial 80-hour HAZMAT certification course.


During the 24 reviews conducted; 1 location (4.1%) where required mandatory HAZMAT certification training had not been accomplished. (Green)

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

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

A.5. Basic HAZMAT (not certification) training consists of five categories: general awareness/familiarization training, function-specific training, safety training, security awareness training, and in-depth security training. Refresher training is required every two years. HAZMAT Familiarization and Safety in Transportation Course 9E-F69/920-F37 (DL) is designed to fulfill the need for general awareness/familiarization, safety and security awareness training for HAZMAT employees as required by 49 CFR available online at www.dactces.org. Reference: 49 CFR, part 172, subpart H - §172.704 Training requirements.

Of 24 reviews conducted; 1 location (4.1%) failed to accomplish basic HAZMAT training. (Green)

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. All five areas must be addressed and trained. (AMMO 67 does not fulfill all these areas)

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) will be trained in the tasks they are to perform. Such personnel must understand the risks, standards, procedures, and precautions that apply to their tasks.

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 24 reviews conducted; 10 locations (41.6%) 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.

INTER-SERVICE/GOVERNMENT AGREEMENTS

A.7. Inter-service and intra-government support agreements in place and reviewed as required.

Reference: DODI 4000.19 (Support Agreements), Enclosure 4, paragraph F (22)

Of 24 reviews conducted; 3 locations (12.5%) did not have or review support agreements as required. (Green)

Analysis: Establish a Support Agreement (Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU)) between the ASA and supported unit. Ensure MOA/MOU is developed IAW with guidelines outlined in DODI 4000.19.

Solution: Establish, review and update Support Agreements as required by regulatory guidelines.

B - EXTERNAL/INTERNAL STANDARD OPERATING PROCEDURES (Amber)

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.


Of 24 reviews conducted; 10 locations (41.6%) SOPs required review and revision. (Red)
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.

OPERATIONS SOP

B.2. An SOP has been developed for every hazardous operation. Critical
Reference: AR 385-10 paragraph 18-5a, 18-5b; DA Pam 385-10 chapter 9, DA Pam 385-30

Of 24 reviews conducted; 2 locations (8.3%) SOP required review and revision. (Green)

Analysis: The Internal SOP must have a hazardous operations SOP for every hazardous operation.

Solution: Develop a hazardous operations SOP for every hazardous operation.

B.3. 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 18-5a, 18-5b; DA Pam 385-10 chapter 9, DA Pam 385-30.

Of 24 reviews conducted; 6 locations (25%) did not have a risk assessment or the risk assessments were not available for each task or step of the operation SOP. (Amber)

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 a risk assessment for each task or step of the operation is developed and attached to respective SOPs.

B.4. 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 24 reviews conducted; 7 locations (29.1%) SOPs required review and revision of explosives operations/logical sequence. (Amber)

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 required information pertaining to the specific processes is identified.

B.5. Fire prevention requirements incorporated in SOPs as appropriate.
Reference: DA Pam 385-10 paragraph 6-8.

Of 24 reviews conducted; 2 locations (8.3%) had no fire prevention requirements included in their SOP. (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.6. 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 24 reviews conducted; 11 locations (45.8%) 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.7. Activity established a method for reviewing and revising Internal SOPs based upon complexity and hazardous nature of the process.
Of 24 reviews conducted 3 locations (12.5%) 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.8. 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 is a safe and efficient manner.

Of 24 reviews conducted; 4 locations (16.6%) had no supervisor statements or the supervisor statement was not signed as required. (Green)

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.9. 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 24 reviews conducted; 6 locations (25%) either had no employee/operator statements or the statement was not signed as required. (Amber)

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.10. 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 24 reviews conducted; 5 locations (20.8%) had no SOPs posted in the work area or SOPs were insufficient. (Amber)

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

Solution: Post current copies of step by step SOPs in the functional work areas.

B.11. An index maintained for all approved SOPs and will contain 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 24 reviews conducted; 5 locations (20.8%) did not have or had an incomplete or incorrect index of operational SOPs. (Amber)

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)

OPEN BURNING/OPEN DETONATION (OB/OD)

C.1. Resource Conservation and Recovery Act (RCRA) permits are required for OB/OD. All demilitarization destruction (e.g. incineration, static detonation chambers, and thermal treatments) requires RCRA permit.
Reference: 42 USC Section 6901, 40 CFR Part 264 and applicable State Statutes.

Of 24 reviews conducted; 0 locations (0%) 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 guidelines for OB/OD.

C.2. OB/OD limits and procedures (SOP) must be in agreement with RCRA permit.
Reference: 42 USC Section 6901, 40 CFR Part 264, and applicable State Statutes.

Of 24 reviews conducted; 0 locations (0%) 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.

**D - EQUIPMENT (Amber)**

MATERIALS HANDLING EQUIPMENT (MHE) AND LIFTING DEVICES

D.1. By TB definition a lifting device is any device or component used to raise, lower, hold, or position a load from one location or elevation to another. Examples of lifting devices include: forklift trucks, cranes, manual or motorized pallet jacks, hoists, wreckers, A-frames, slings, ropes, wire ropes, hooks, O-rings, pear rings, spreader bars or lifting clamps, beams, jacks, safety stands, and jack stands.

Reference: DA Pam 385-64 paragraph 2-17 and TB 43-0142.

Of 24 reviews conducted; 11 locations (45.8%) had forklifts 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 intervals. DA Label 80 (U. S. Army Calibrated Instrument) reflects new calibration expiration date.


Of 24 reviews conducted; 2 locations (8.3%) scales or other devices in residue areas or other operations were observed without current calibration. (Green)

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.
E - MATERIEL MANAGEMENT (Green)

INVENTORY FREQUENCY AND PROCEDURES

E.1. Inventories conducted at appropriate intervals. Critical
Reference: AR 710-2, paragraph 3-37. DA Pam 710-2-1, paragraph 9-10b and Appendix I, paragraph I-3, and DA Pam 700-16, paragraph 13-21d.

Of 24 reviews conducted; 5 location (20.8%) did not meet the Army standard for inventory intervals. (Amber)

Analysis: Class V inventory intervals are dependent on the type of facility. (Wholesale locations must inventory CAT I semi-annually and remaining categories annually. Retail locations inventory all assets quarterly. Unit storage requires monthly inventory.)

Solution: Perform inventories in a systematic and thorough manner at the regulatory required interval.

E.2. Inventory procedures comply with regulatory guidelines. Critical
Reference: AR 710-2, DA Pam 710-2-1 paragraph 9-9 and 9-10b and DA Pam 700-16, paragraph 12-18.

Of 24 reviews conducted; 9 locations (37.5%) not in compliance with regulatory guidelines. (Red)

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

Solution: Conduct inventories, following proper procedures.

E.3. First Count Inventory accuracy of A&E is 95 percent.
Reference: AR 710-2, paragraphs 2-44 and 3-30.

Of 24 reviews conducted; 5 locations (20.8%) not in compliance with 95 percent first count inventory accuracy. (Amber)

Analysis: Installations 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.4. Class V items with serial numbers (S/N) required to be on record by S/N and lot number. **Critical**

Of 24 reviews conducted; 2 locations (8.3%) were not complying with serial number and lot number inventory requirements. (Green)

Analysis: Serial numbered items are high cost and a security risk. Items must be inventoried and recorded as such due to this sensitive nature.

Solution: Perform and maintain 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.

E.5. Discrepancies in stock record balances found during inventory researched and adjusted (when required).
Reference: DLM 4000.25-2, Table C6.T.3 and AR 735-5, paragraph 14-34 and DA Pam 700-16, paragraph 13-21.k.

Of 24 reviews conducted; 2 locations (8.3%) failed to research and adjust inventory discrepancies. (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.6. 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 and AR 735-5, paragraph 14-34 and DA Pam 700-16, paragraph 13-21.k.

Of 24 reviews conducted; 1 location (4.1%) had not conducted causative research or DA Form 444. (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.

E.7. Retail level receipts processed by the receiving section within 24 hours from the time received. National level installations, i.e., Depots, Plants or Arsenals, refer to AR 725-50,
paragraph 5.14b.(1) 7 days for new production, and (2) 10 calendar days for all receipts. CAT I/II items will be receipted within 24 hours, per AR 190-11, paragraph 7-3f.

Reference: Retail Level: AR 710-2 Table 1-3, Depot/Wholesale level: AR 725-50, para 5-14 b. (1); DA Pam 700-16, paragraph 13-19f.

Of 24 reviews conducted; 3 locations (12.5%) 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.8. 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 700-16, paragraph 13-19.c(2).

Of 24 reviews conducted; 2 locations (8.3%) had DA Form 3151-Rs not being prepared by stock control section prior to munitions being off-loaded and stored. (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 forwards to the storage section crew for processing.

E.9. Storage section inventories receipted items sends the completed DA Form 3151 to stock control; stock control compares DODIC, NSN, lot number, condition code and quantity received between the DD Form 1348s and DA 3151. If there is a discrepancy, storage section rechecks the actual receipts. If rechecking does not resolve the discrepancy, prepare SF 364 (Report of Discrepancy).

Reference: DA Pam 700-16, paragraph 13-19.c(3).

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: This process is 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.10. All documents supporting the receipt are completed, assembled, and filed in document number sequence.  
Reference: DA Pam 700-16, paragraph 13-8; and paragraph 13-19.c(6).

Of 24 reviews conducted; 3 locations (12.5%) did not maintain receipt files appropriately. (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 and financial auditability.

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

SHIPMENTS

E.11. Directive received for shipment; stock control section selects the stocks and obligates them on the due-out record for shipment.  
Reference: DA Pam 700-16, paragraph 13-18.c(1).

Of 24 reviews conducted; 0 locations (0%) 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.12. Stock control prepares DA Forms 3151–R and sends 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 700-16, paragraph 13-18c(2-6).

Of 24 reviews conducted; 3 locations (12.5%) surveillance had not verified condition and suitability of stocks selected or DA Form 3151-R had not been completed per regulatory guidelines. (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.13. All documents supporting the shipment are completed, assembled, and filed in document number sequence section. Reference: DA Pam 700-16, paragraph 13-18.c(7).

Of 24 reviews conducted; 1 location (4.1%) did not maintain shipping files as required. (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.14. Signature cards (DA Form 1687) on hand accompanied by Assumption of command and/or battalion S4/Property Book Officer (PBO) orders for supported units. Reference: AR 710-2, DA Pam 710-2-1, paragraph 2-28.b, DA Pam 700-16, paragraph 12-2.d(1), 12-11g(3), and 13-16b(1).

Of 24 reviews conducted; 2 locations (8.3%) did not have Assumption of Command orders for supported command. (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.15. DA Forms 1687 for Class V comply with established standards. Reference: DA Pam 710-2-1, paragraph 2-28.b, DA Pam 700-16, paragraph 12-2.d(3). Note: Still showing requirement for handwritten and digital signatures and 12.11g.

Of 24 reviews conducted; 2 locations (8.3%) DA Form 1687s were not in compliance with regulatory guidelines. (Green)

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.16. Issue and turn-in documentation complies with established requirements. Reference: DA Pam 710-2-1, paragraph 3-4f. DA Pam 700-16, Chapter 12 Section IV.
Of 24 reviews conducted 2 location (8.3%) Issue/Turn-in documentation not in compliance with established requirements. (Green)

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.17. 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. Critical
Reference: AR 710-2 and DA Pam 700-16, paragraph 12-13b, and figure 12-6.

Of 24 reviews conducted; 4 locations (16.6%) did not have DA Form 5811 completed when required. (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.18. 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 IAW DA Pam 710-2-1paragraph 11-14.a (2). Critical
Reference: DA Pam 700-16, paragraph 12-10.

Of 24 reviews conducted; 2 locations (8.3%) did not require DA Form 5692 (Ammunition Consumption Certificate) for reconciliation. (Green)

Analysis: The DA 5692 is a document that range safety officer use that certifies the all the items listed on the DA 5692 were consumed on the range and that range safety officer 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.19. Escort services for A&E shipments moving on an installation include –
Reference: DODM 5100-76, Enclosure 10, AR 190-11 paragraph 7-10 and DA Pam 700-16, paragraph 12-16.

Of 24 reviews conducted; 0 locations (0%) 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.

E.20. Processing changes to stock records utilizing the SAAS Ammunition Maintenance process:

Of 24 reviews conducted; 6 locations (25%) did not process/document stock record changes IAW regulatory requirements. (Amber)

Analysis: SAAS Ammunition Maintenance processes must be documented and followed to ensure accurate stock records.

Solution: Utilize documented SAAS Ammunition Maintenance processes when updated stock records.

INERT CERTIFICATION

E.21. DA Forms 581 (Request for Turn-In: Residue) requires a prescribed inert certification statement.

Of 24 reviews conducted; 3 location (12.5%) failed to complete inert certification statements properly. (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.22. Personnel who inspect, process, or document material as safe or hazardous must be technically qualified according to the standards provided in the Instruction and in DOD and 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). Contractor personnel must be certified in conformance with contract requirements.
Reference: DODI 4140.62 (Management and Disposition of Material Potentially Presenting an Explosive Hazard), enclosure 3, paragraph 2.f.

Of 24 reviews conducted; 3 locations (12.5%) were not utilizing trained/certified and appointed personnel for inert certification/verification. (Green)
Analysis: Personnel authorized to sign the disposal DD 1348-1 documents are required to be trained, certified IAW appropriate regulation and appointed in writing by the commander.

Solution: Require personnel conducting hazardous operations for MPPEH, MDEH and MDAS to be technically qualified to certify/verify and must be appointed in writing by the responsible individual in charge.

E.23. Documents transferring residue to DLA-DS and/or qualified recycling program (QRP) contain prescribed inert certification/verification statement signed by qualified personnel. Critical

Of 24 reviews conducted; 3 locations (12.5%) were in non-compliance as the location was not utilizing the current MDAS certification/verification form. (Green)

Analysis: All residue transferred from an ASA to DLA-DS or QRP must be inspected. The inspection will be recorded by annotating transfer documents with a certification/verification statement signed and dated by inspecting/verifying officials.

Solution: Complete all transfer documents for residue IAW regulations.

RESIDUE OPERATIONS

E.24. Installations possession of an automatic returns listing (ARL) for non-consumable residue items requiring return for reuse. The ARL for Class V is issued by Joint Munitions Command.
Reference: AR 725-50 and SB 755-1.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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

Solution: Obtain and utilize ARL.

E.25. All residue containing hazardous constituents must be protected from the elements to preclude possible environmental contamination.
Reference: DODI 4140.62, paragraph 3.3.h and Waste Profile Notices (WPN).

Of 24 reviews conducted; 8 locations (34.3%) had residue items subjected to inclement elements. (Red)

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

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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

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

E.27. Expended cartridge cases sold through a QRP must be deformed to prevent reloading. Installations operating a brass deformer and/or safety certification unit must have a SOP for its operation and maintain records of brass processed and sold. Reference: 10 USC Section 2577, 32 CFR 172, and DOD 4160.21 M.

Of 24 reviews conducted; 3 locations (12.5%) failed to ensure deformation of cartridge cases sold through QRP. (Green)

Analysis: The QRP sales 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.28. Catalog data must match the information found within the Army Master Data File (AMDF). The AMDF is located within FEDLOG. Hazard classification data is obtained through Joint Hazard Classification System (JHCS). The JHCS is located on the Munitions History Program (MHP) at: https://mhp.redstone.army.mil, (registration required). Reference: AR 710-2, paragraph 3-4. DA Pam 700-16, paragraph 13-21d, paragraph 13-3c, and paragraph 13-12.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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.29. Operational Load Ammunition (OPL) maintained on property books. Reference: AR 710-2, paragraph 2-44.c. and DA Pam 700-16, paragraph 12-2b and 12-2e.

Of 24 reviews conducted; 15 locations (62.5%) failed to maintain OPL on Installation Property Book. (Red)

Analysis: Operational load ammunition is not expected to be used/consumed and must be properly accounted for at all times.

Solution: Maintain operational load ammunition on property book as required by regulatory guidance.

E.30. Ammunition on property books inventoried. Reference: DA Pam 710-2-1, paragraph 9-9 and 9-10.b. and DA Pam 700-16, paragraph 12-2.e(4) and 12-18.i Note: All references point to DA Pam 710-2-1.

Of 24 reviews conducted; 9 locations (37.5%) failed to inventory OPL at required intervals or inventory was conducted by the same individual/s in consecutive months. (Red)

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.

WHOLESALE ACTIVITIES

E.31. Count 5 Program (AMC Wholesale locations only). The installation Commander or Commander’s representative and key personnel will schedule and participate in counting 5 line items from the planographs in 5 locations on a quarterly basis and report these findings to Joint Munitions Command (JMC).

Reference: AR 740-26 paragraph 1-4. b. (8) and 1-5. a. (13); AMC-R 740-27 paragraph 1-3. f. and 1-4. h.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Count 5 Program is a valuable check and balance tool to verify the accuracy of location records.

Solution: Perform, document, and provide Count 5 reports to JMC, as required. Maintain operational load ammunition on property book as required by regulatory guidance.

E.32. Quality Control (QC) (AMC Wholesale locations only). Develop quality control program to effectively measure error rates in the inventory and location process, and to provide
feedback information on errors to enable management to take corrective action. Provide monthly QC report to JMC.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Quality Control Program provides a mechanism to detect errors and their root cause.

Solution: Utilize Quality Control Program reporting findings as prescribed.

E.33. Receipt Control Number (RCN) (AMC Wholesale locations only). Assign RCN and cross-reference number upon conveyance’s arrival.
Reference: AMC-R 740-27 paragraph 4-2. g. (1) d.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Prompt assignment of RCN/cross-reference number allows for accurate metrics of offloading and stock record gain timelines.

Solution: Ensure RCN and cross-reference number assignment upon conveyance’s arrival.

**F - PHYSICAL SECURITY (Amber)**

LOCKS AND HASPS

F.1. Proper use and types of high security locks/hasps and secondary locks for the storage of A&E.
Reference: Department of Defense Lock Program and AR 190-11 paragraph 5-6.

Of 24 reviews conducted; 11 locations (45.8%) failed to use correct locks or hasps. (Red)

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

Solution: Utilize locks required by the regulation.

F.2. Padlocks 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 24 reviews conducted; 1 location (4.1%) failed to secure locks to staple/hasp when opening storage locations. (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 location is open.

RESTRICTED AREA SIGNAGE

F.3. Areas that have been designated as restricted require signage.
Reference: AR 190-11 paragraph 4-15.e. Note: This paragraph provides specific wording for restricted area signs, but allows for continued use of signs containing essentially the same wording until replacement is warranted.

Of 24 reviews conducted; 1 location (4.1%) failed to install required signage on “Restricted Areas” or signs could not be read (Faded). (Green)

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

Solution: Mark all restricted areas as required.

INTRUSION DETECTION SYSTEM (IDS)

F.4. Category I and II storage facilities and structures will be 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(2)(a).

Of 24 reviews conducted; 1 location (4.1%) failed to post armed guards when required IDS was not functional. (Green)

Analysis: CAT I & II require IDS at ALL times, if the IDS fails or is not available armed guards will be utilized following 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 24 reviews conducted; 3 locations (12.5%) had no IDS signs or signs that were not legible (faded or painted over). (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 must be checked/tested monthly.
Of 24 reviews conducted; 5 locations (20.8%) failed to conduct IDS test and record results. (Amber)

Analysis: The IDS system checks ensure the system is functioning, as designed, and alerts maintenance personnel to problems that occur.

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

KEY AND LOCK CONTROL

F.7. Commanders or their designees (e.g. individual unit commanders with A&E resources directly within their control) who are storing or securing A&E appoint in writing; 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.

Of 24 reviews conducted; 8 locations (33.3%) either failed to appoint Key and lock custodians in writing, deny custodians unaccompanied access to A&E storage locations or to develop and provide key control training. (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 be appointed in writing and will not be listed on unaccompanied access rosters to A&E storage areas. Develop Key Control Training Program and provide annual training.

F.8. Storage of A&E keys, seals and combinations must be stored in an authorized container.

Of 24 reviews conducted; 1 location (4.1%) failed to store A&E Keys and combinations in an authorized container or store secondary/alternate at next higher command or trusted agent. (Green)

Analysis: A&E Keys and Combinations will be secured in containers that meet pilferage constraints to ensure resistance to theft. Alternate keys will be stored in separate location.

Solution: Store all A&E keys and Combinations only in approved and authorized containers as required by regulation. Secondary/Alternate keys will be stored at next higher command or trusted agent.
F.9. Procedures established to preclude access of stored A&E keys that require two-person control.
Reference: AR 190-11, paragraph 3-8.h.

Of 24 reviews conducted; 6 locations (25%) failed to follow proper procedures for two-person rule for keys requiring dual control for CAT I ‘A’ & ‘B” keys. (Amber)

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.

Of 24 reviews conducted; 7 locations (29.1%) most either failed to change combinations as required or person who changed combination was not appointed in writing. (Amber)

Analysis: Changing the combinations at required times can pose a security risk if not accomplished. Changing combinations reduces the compromise of combinations and prevents unauthorized 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. Development/use of roster 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 24 reviews conducted; 3 locations (12.5%) failed to have a roster listing names for key control or failed to use DA Form 5513 for issue/turn-in of keys. (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 for one year.
Reference: AR 190-11, paragraph 3-8.e.

Of 24 reviews conducted; 4 locations (16.6%) did not to use or maintain DA Form 5513 for the prescribed period. (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: Use and Retain the completed DA Form 5513 on file as required by regulatory guidelines.

F.13. Inventories of keys, combinations and locks conducted semi-annually by a disinterested party or person not responsible or authorized unaccompanied access. Inventory will contain a record of keys, locks, key serial numbers, location, and the number of keys maintained for each lock. This record will be secured in the key depository/safe. Inventory of seals conducted monthly. Critical
Reference: DODM 5100.76, Enclosure 4, Section 10, AR 190-11, paragraph 3-8.n. and AR 190-51, Appendix D, paragraph D-10.a(6).

Of 24 reviews conducted; 11 locations (45.8%) either failed to inventory their keys semi-annually or inventory was not conducted by a disinterested party. (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 lock and key 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 24 reviews conducted; 4 locations (16.6%) failed to maintain records of inventory or secure inventories in safe. (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 key/lock inventory records as required by regulations.

ACCESS/ENTRY CONTROL

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

Of 24 reviews conducted; 4 locations (16.6%) 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 shall be subject to searches and random inspections upon entry to and exit from A&E areas. 
Reference: AR 190-11, paragraph 5-9.a(3).

Of 24 reviews conducted; 6 locations (25%) failed to perform random inspections as required. (Amber)

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 shall be recorded (manually or electronically). The records of access retained for one year. 
Reference: DODM 5100.76, Enclosure 4, paragraph 9(a).

Of 24 reviews conducted; 1 location (4.1%) failed to use/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 Standard Design Fencing).
Reference: DODM 5100.76, Enclosure 6, paragraph 3.a. and AR 190-11, paragraph 5-3.b.

Of 24 reviews conducted; 1 location (4.1%) 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: DODM 5100.76, Enclosure 6, paragraph 3.b. and AR 190-11 paragraph 5-3.d. and e.

Of 24 reviews conducted; 9 locations (37.5%) 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.

Solution: Install/maintain fencing to standards listed in regulations.

F.20. Gates, unless manned 24-hours a day, will be 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 24 reviews conducted; 11 locations (45.8%) failed to modify hardware on gates. (Red)

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 shall be 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 will be free of all obstacles, topographical features, and vegetation exceeding eight inches in height, which reduces the effectiveness of the physical barrier, impedes observation, or provides cover and concealment of an intruder. Reference: DODM 5100.76, Enclosure 6 and AR 190-11 paragraph 5-3.j.

Of 24 reviews conducted; 7 locations (29.1%) failed to maintain clear zones as required by regulation. (Amber)

Analysis: The clear zone allows for a clear field of observation to aide 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 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. New security lighting systems will not be programmed for Category III and IV facilities unless determined necessary based on an assessment of the local threats and vulnerabilities. Reference: DODM 5100.76, Enclosure 6 and AR 190-11 paragraph 5-4.a.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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: AR 190-11, paragraph 5-7.

Of 24 reviews conducted; 3 locations (12.5%) failed to utilize two different types of communication in storage area for operations, emergency, and security response. (Green)

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. Qualified engineer personnel will verify the structure composition of A&E storage facilities (for example, walls, ceilings, roofs, floors, and doors). Reference: AR 190-11, paragraph 2-2d

Of 24 reviews conducted; 4 locations (16.6%) failed to have qualified engineer personnel document composition on DA Form 4604 for storage facilities. (Green)

Analysis: The DA 4604, list the Security Category that the structure can store providing adequate security constraints by category.
Solution: Utilize DA 4604 (Security Construction Statement) for storage facilities IAW regulatory guidelines.

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

Of 24 reviews conducted; 1 location (4.1%) did not utilize blanket statement on DA Form 4604 correctly. (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: Revise blanket statement that covers all locations within a storage area, IAW regulations (If required).

F.26. The DA Form 4604 will be revalidated by engineer personnel every five-years, AR 190-11.
Reference: AR 190-11, paragraph 2-2.

Of 24 reviews conducted; 1 location (4.1%) 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.

Of 24 reviews conducted; 6 locations (25%) failed to produce records of a physical security inspection within the last 18 months. (Amber)

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


Of 24 reviews conducted; 10 locations (41.6%) 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 will be repeated every three years. Reference: AR 190-11, paragraph 2-11.

Of 24 reviews conducted; 5 locations (20.8%) observed with overdue security screening and evaluation. (Amber)

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

Solution: Review all DA Forms 7281 IAW regulatory guidelines.

G – STORAGE (Red)

STORAGE PRACTICES/CONDITIONS

G.1. General and specific A&E storage requirements comply with regulatory guidelines. Reference: DODM 4145.26, Chapter 9, DA Pam 385-64, Chapter 3 and AR 700-37, paragraph 5-2.

Of 24 reviews conducted; 13 locations (54.1%) failed to properly orient forward/aft end on missile/rocket containers, remove excess dunnage, maintain proper separation between lots of ammunition, or maintain ammunition containers as required. (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. Storage of non-DoD A&E is in compliance with Army requirements. Reference: DA Pam 385-64, Chapter 21.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Non-DoD ammunition storage must be in compliance with Army requirements. Depending on the situation, storage of non-DoD ammunition should be separated to a minimum of inhabited building distance from DoD ammunition.

Solution: Re-warehouse all commercial (Non DOD) A&E so it is separated from all DOD A&E.

G.3. A&E stored in containers, banded, and/or sealed to reflect the integrity of the contents. Reference: DODI 5100-76, Enclosure 6, paragraph 2.d.

Of 24 reviews conducted; 7 locations (29.1%) were found with open and/or unsealed containers in storage. (Amber)

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

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

MAGAZINE DATA CARDS (MDC)

G.4. 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 24 reviews conducted; 10 locations (41.6%) failed to use 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.

Solution: All A&E in storage will have a DA Form 3020-R MDC as required by regulation.
LIGHT (LITE) BOX MANAGEMENT

G.5. Incomplete boxes of ammunition and explosives may be stored in magazines containing items which are packed in accordance with approved drawings; the boxes must be marked conspicuously to identify the contents and quantities and placed in designated locations. Reference: DA Pam 385-64, paragraph 3-2.h.

Of 24 reviews conducted; 1 location (4.1%) 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.


Of 24 reviews conducted; 19 locations (79.1%) did not follow regulations for the proper marking of light boxes. (Red)

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.

H – TRANSPORTATION (Green)

TRANSPORTATION OPERATIONS

H.1. All personnel signing certification statements on shipping papers must be appointed in writing by the activity or unit CDR or designated representative. Certifier must be current in HAZMAT certification training, no more than two years since date of last qualifying course. The appointment must include the scope of authority and expiration date. A copy of appointment orders will be provided to the Transportation Office (TO). Reference: Defense Transportation Regulation (DTR) 4500.9-R, Chapter 204

Of 24 reviews conducted; 3 location (12.5%) had individuals signing documents who were not on commander’s appointment orders or appointment orders had not been provided to the TO. (Green)

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 and a copy furnished to the TO.

H.2. In all cases, the individual who signs the certification statement on shipping papers (e.g., Form DD Form 2890, DOT mandated forms, GBL, CBL, and Shipper’s Declaration for Dangerous Goods) by any mode of transportation, military or commercial, must personally inspect the HAZMAT item certified.
Reference: DTR 4500.9-R, Chapter 204, paragraph D.5.

Of 24 reviews conducted; 5 locations (20.8%) had personnel signing certification statement that had not personally inspected load. (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 so IAW regulation requirements.

H.3. Customs clearance completed (if required).

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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.

Reference: DTR 4500.9-R, Part ii, Chapter 205, paragraph L. and DA Pam 700-16, paragraph 13-18.c(8) and paragraph 10-37.a.

Of 24 reviews conducted; 0 locations (0%) 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 REPSHIP message IAW regulatory guidelines.

H.5. “The following certification included in the Descriptions of Articles space, when hazardous materials are shipped by conveyances other than air Transportation Service Providers (TSP)”. 

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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.6. 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 secure holding areas (SHA) in the interest of public safety and national security.

Reference: The DTR 4500.9-R, chapter 205 paragraph Q.

Of 24 reviews conducted; 1 location (4.1%) did not have an accurate listing in the TFG. (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.7. Transportation Officers (TO) updates the 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 Q.

Of 24 reviews conducted; 2 location (8.3%) had not updated TFG as required. (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 (Amber)

AMMUNITION SUSPENSION, RESTRICTION AND RELEASE PROGRAM

A.1 The ammunition surveillance organization is responsible for the installation suspension control. The program requires centralized maintenance and application of ammunition and explosives (A&E) suspensions, restrictions, and releases, located in Munitions History Program (MHP). Critical
Reference: DA Pam 742-1, paragraph 11-2b; Technical Bulletin (TB) 9-1300-385; Air Force Conventional Munitions - Restricted or Suspended (CMRS), NAVSUP P801.

Of 24 reviews conducted; 1 location (4.1%) did not have an adequate suspension restriction program or failed to receive notices from all services. (Green)

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.


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. The surveillance organization is responsible for reviewing Suspension/Restriction actions from all services and applying to stocks on hand. A temporary suspension issued by the Army, Navy/USMC or Air Force applies to all stocks regardless of owner. Critical
Reference: DA Pam 742-1, paragraph 11-2.b.(2); Single Manager of Conventional Ammunition (SMCA); TB 9-1300-385, paragraph 1-3.b.

Of 24 reviews conducted; 5 locations (20.8%) 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 is to be attached to the affected stock with the other attached to the associated magazine data card (MDC).
Reference: Da Pam 742-1, paragraph 11-2.b.2(d).

Of 24 reviews conducted; 12 locations (50.0%) did not apply proper CC tagging procedures or did not apply CC tags to required stocks. (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 all 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. An annual review required for all stored propellant stocks. The database containing propellant stability information is available in the MHP under the ASRP module. See the Propellant Management Guide (PMG) in MHP at https://mhp.redstone.army.mil/. Critical
Reference: DA Pam 742-1, paragraph 9-16, Propellant Management Guide (PMG) and appropriate AIN.

Of 24 reviews conducted 2 locations (8.3%) 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.

B - RECORDS AND REPORTS (Green)

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. All organizations are required to use MHP to maintain DSR information. DSR cards used to record the technical history of each lot, serial number (S/N), or group of ammunition, and generally maintained by the surveillance organization. [https://mhp.redstone.army.mil/](https://mhp.redstone.army.mil/) Critical
Reference: DA Pam 742-1, paragraph 11-2.a and Appendix B.

Of 24 reviews conducted; 6 locations (25%) had errors or omissions in MHP. (Amber)

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 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.
Reference: DA Pam 700-19 paragraph 3-2.i, DA Pam 742-1, paragraph 11-2.a. and AIN 011-17.

Of 24 reviews conducted; 6 locations (25%) had not properly annotated defect codes on DSR. (Amber)

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. Automated DA Form 2415 (ACRs) submitted for Army, Air Force, Marine Corps, Navy, and AMCOM owned assets.
Reference: DA Pam 750-8, paragraph 8-4 and DA Pam 742-1, paragraph 11-3.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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 PIs of A&E assets. The inspections, at intervals range from two to 10-years, ensure serviceability and/or identify deterioration trends or other specific defects that may affect the asset’s safety and usability. PI posted to the DSR card and becomes part of the permanent lot history. The conventional ammunition inspection interval listing is located at https://jmc.aep.army.mil/mlrc/QA/QAS/QAsurveillance/default.aspx .
Reference: DA Pam 742-1 paragraph 2-5.e and 7-9.b, applicable AIN and applicable Missile SBs.

Of 24 reviews conducted; 7 locations (29.1%) did not have a PI program in place to ensure stock serviceability. (Red)

Analysis: Class V stocks, as defined by DA Pam 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 dynamos 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. Perform safety-in-storage (SIS) inspections on all CCs F, G, H, P, and all stocks in the resource recovery and disposition accounts regardless of owner to ensure stocks are safe for continued storage and handling.

Reference: Da Pam 742-1 paragraph 2-5.m.

Of 24 reviews conducted; 4 locations (16.6%) did not have an SIS program to ensure continued safe storage for unserviceable stocks. (Amber)

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. Typically, A&E shipments are accompanied with current inspection results annotated on DSRs by a Quality Assurance Specialist Ammunition Surveillance (QASAS) from the shipping installation. If installations receive A&E without proper documentation and none can be obtained, assets are placed into CC-K pending inspection and condition classification. All ammunition received from a using unit and not inspected for safety and serviceability will be assigned CC-K until a proper inspection is performed. Conduct receipt inspection within 45 days.

Reference: AR 725-50, paragraph 5-44.c(2)(a) and DA Pam 742-1, paragraph 2-5.b.3 and 2-5.b.7.

Of 24 reviews conducted; 3 locations (12.5%) did not utilize CC-K when condition of lot could not be determined or inspected at time of receipt. (Amber)

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 accomplished by observation of humidity indicator cards installed on the munitions container during SMIs. SMIs must be conducted per requirements and intervals of the individual system. SMI intervals vary (usually three to 18 months), but may be shortened at the discretion of the assigned QASAS, based on storage conditions. Reference: DA Pam 742-1, paragraph 2-5.g., 7-9.c. and applicable TBs, TMs, and SBs.

Of 24 reviews conducted; 1 location (4.1%) were not performing SMI inspections. (Green)

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: DA Pam 742-1, paragraphs 2-5.g.4 and 7-9.a.

Of 24 reviews conducted; 1 location (4.1%) did not utilize MHP to document SMI reports and schedule next inspection. (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 established guidelines, to include applicable AINs. Critical
Reference: TB 9-1300-385, Appendix D.
Of 24 reviews conducted; 1 location (4.1%) had no process in place for tracking shelf life. (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. Always check for shelf life compliance and assign applicable condition codes according to remaining life cycle.

C.7. Surveillance of aviation unit management, storage, and lot visibility of CAD/PAD items performed during Operational Load Inspections.
Reference: DA Pam 742-1, Chapter 6.

Of 24 reviews conducted; 1 location (4.1%) has no program in place to conduct Operational Load Inspections on CADs/PADs being stored within aviation units. (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 on a locally devised form attached to the stack. Critical
Reference: DA Pam 385-64, paragraph 21-4.b and Table 21-1.

Of 24 reviews conducted; 0 locations (0%) 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. If exudation is found, the lot or lots involved will have an ACR submitted through MHP with a recommendation for destruction. Critical
Reference: DA Pam 385-64, paragraph 21-4.c.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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: AR 190-12, Appendix E and DA Pam 385-64, paragraph 21-4.

Of 24 reviews conducted; 1 location (4.1%) did not inspect dynamite after the hottest portion of the year. (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 (Green)

AMMUNITION AND MISSILE INFORMATION NOTICES

D.1. Army AIN messages provide updated technical information to organizations with Army A&E responsibilities. The Joint Munitions Command (JMC) Ammunition Surveillance Division authors the AINs distributed throughout the Army. Army AINs typically valid for one-year, if not otherwise superseded, rescinded, or canceled. Army AIN messages available online through the MHP. To request direct email distribution email: usarmy.RIA.jmc.mbx.amsjm-qas@mail.mil.
Reference: DA Pam 742-1 paragraph 5-10.a.

Of 24 reviews conducted; 0 locations (0%) 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. NOLSC distributes the Navy and Marine Corps AINs as necessary, and the AINs normally do not have an expiration date. A Navy and Marine Corps AIN update file must be maintained only for “new issue” AINs distributed after the latest publication
printing. With each reprint of the publication, the “new issue” AINs are incorporated into appendix A.
Reference: NAVSUP P-801, Ammunition Unserviceable, Suspended and Limited Use, appendix A via website www.ois.disa.mil or https://nll2.ahf.nmci.navy.mil/com.cfm; Distribution by email: anna.lucas@navy.mil or MECH_NOLSC_NARDESK@NAVY.MIL.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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 uses MIN messages to provide timely update information to organizations with Army missile responsibilities. AMCOM originates and distributes MINs as necessary and sequentially numbered through the year, without an expiration date. AMCOM maintains all current MINs in MHP.
Reference: DA Pam 742-1 chapter 5 & chapter 7. Direct email distribution of MINs can be requested by mail to: usarmy.redstone.peo-ms.mbx.msl-hq-qasas@mail.mil.

Of 24 reviews conducted; 0 locations (0%) 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: Request email distribution of MINs by email to: usarmy.redstone.peo-ms.mbx.msl-hq-qasas@mail.mil. Review/process AMCOM MIN’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. Procedures for completing investigations and Ammunition Malfunction Reports (DA Form 4379), and Missile and Rocket Malfunction Reports (DA Form 4379-1), are contained in AR 75-1. Reports have been automated in the MHP program. Reporting Army ammunition malfunctions guidance can also be found in subject AIN in MHP.
Reference: AR 75-1, AR 702-12, paragraph 3-1.c(3) & DA Pam 742-1, paragraph 5-11.a.-c.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)
Analysis: QASAS are normally responsible for investigating and reporting malfunctions.

Solution: Document for record the malfunction reporting process. Include malfunction reporting process in range procedures and ensure it is provided to ASP, unit ammunition, and range personnel. QASAS should be available to assist range safety officers to ensure units are properly briefed on malfunction reporting requirements. Such requirements should be included in ASP external SOP.

AREA INSPECTION PROGRAM

D.5. QASAS personnel will conduct periodic on-site reviews of ammunition operations to ensure that ammunition operations are being conducted satisfactorily from both a safety and a quality perspective. As required, QASAS personnel will review handling, storage and shipping operations for compliance with applicable safety and operational regulations (SOPs, observance of explosives limits, proper handling of ammunition, minimum amounts of ammunition packages opened, etc.). Reports of deficiencies will be forwarded through appropriate channels to obtain corrective actions. Follow-up will be made to assure deficiencies are corrected.
Reference: DA Pam 742-1, paragraph 5-1.d and 5-5.a.

Of 24 reviews conducted 2 locations (8.3%) did not document and/or conduct area inspections. (Green)

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

Solution: Establish an Area Inspection log or complete and file an Area Inspection checklist that should include date, time, operation, location visited, SOP, discrepancies and action taken (if any). Include documentation procedures and reporting procedures in Area Inspection SOP or administrative procedures.

D.6. An internal reporting medium for all visits by QASAS personnel to operations is established.
Reference: DA Pam 742-1, paragraph 5-1.d and 5-5.a.

Of 24 reviews conducted 7 locations (29.1%) no reporting mechanism was in place to document inspections. (Red)

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.
MAGAZINE INSPECTION PROGRAM

D.7. Magazines and other buildings, where ammunition and explosives are stored will be given a formal inspection annually. Inspections will be 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: DA Pam 742-1, Chapter 5, paragraph 5-2.a., DA Pam 385-64 Chapter 8, paragraph 8-16 and 16-25.d and Joint Publication DLAI 4145.11/TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO 4450.12A, paragraph 10.23 and 8.1.

Of 24 reviews conducted; 4 locations (16.6%) did not perform follow-up on resolutions or corrective actions. (Green)

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.

SURVEILLANCE INSPECTION OF A&E MATERIAL IN OUTSIDE STORAGE

D.8. A formal examination will be made quarterly of each outside site in which ammunition is stored. This inspection will consist of a general exterior examination of the ammunition items and packages for evidence of deterioration or damage and for the presence of any conditions indicating the possibility of future deterioration.

Reference: DA Pam 742-1, paragraph 5-4.b.

Of 24 reviews conducted; 1 location (4.1%) no quarterly inspections were being made for deterioration. (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.9. Examine stocks stored under adverse conditions more frequently as determined necessary by the QASAS in charge. Additionally, examine each outside site immediately following any unusual weather condition such as severe rain, snow, or wind storms, which might damage or affect the ammunition.
Reference: DA Pam 742-1, paragraph 2-5.e.5 and paragraph 5-4.b(2).

Of 24 reviews conducted; 1 location (4.1%) no quarterly inspections were being made for deterioration after unusual weather condition such as severe rain, snow, or wind storms. (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.

RECEIPT/SHIPMENT/ISSUE DOCUMENT CLEARANCE

D.10. QASAS or Surveillance personnel properly trained will approve all lots of ammunition, components, and related materiel designated for receipt/shipment/issue. Critical
Reference: DA Pam 742-1, paragraph 5-5.b.

Of 24 reviews conducted; 7 locations (29.1%) DIT inspection results were not indicated and/or signed by inspector on applicable shipping documents. DA Form 3151 not signed by Surveillance personnel clearing lots for issue/shipment. (Red)

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

Solution: Assign QASAS, or properly trained 89A, 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.11. Required remaining PI intervals for shipments.
Reference: DA Pam 742-1, paragraph 2-5.e.8.

Of 24 reviews conducted; 1 location (4.1%) not being cleared properly verifying date of next inspection. (Green)

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

Solution: Ensure PI program is in place utilizing current PI interval listing.

SHIPPING AND RECEIVING CONVEYANCE INSPECTIONS

D.12. QASAS or Surveillance personnel will review handling, storage and shipping operations for compliance with applicable safety and operational regulations.
Reference: DA Pam 742-1, paragraph 5-5.a.

Of 24 reviews conducted; 2 locations (8.3%) Surveillance is not conducting oversight of shipping operations. (Green)
Analysis: QASAS review handing, storage and shipping operations for compliance with SOPs and regulations.

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

D.13. Outbound motor vehicles intended/loaded for the transportation of AE and Inbound motor vehicles loaded with explosives, ammunition, or other hazardous material must be inspected by a competent person at a designated inspection station using DD Form 626. Inspection station will be far from hazardous and populated areas. Reference: DA Pam 385-64, paragraph 20-7, 20-8 and Table 8-5, DTR 4500.9-R Chapter 204 and DA Pam, 742-1, paragraph 5-6.

Of 24 reviews conducted; 3 locations (12.5%) the DD Form 626 was not properly filled out prior to transport vehicle entering Ammunition Supply Point. (Green)

Analysis: Inbound motor vehicles need to be inspected at a designated point prior to entry into ammunition areas. Complete all required blocks on DD form 626 (QASAS should provide training to personnel inspecting incoming vehicles).

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

D.14. Ammunition blocked and braced or secured with suitable tie-down straps to prevent movement. Critical
Reference: DA Pam 385-64, paragraph 20-10.c.

Of 24 reviews conducted; 1 location (4.1%) not using the proper outload drawings for proper blocking and bracing. (Green)

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

Solution: Conduct and document periodic checks of vehicles transporting A&E for proper blocking and bracing to prevent movement in transit.

MAJOR TRAINING AREA (MTA) OPERATIONS

D.15. QASAS assigned to live fire-training areas are 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: DA Pam 742-1 paragraph 5-11.a.

Of 24 reviews conducted; 4 locations (16.6%) QASAS have not conducted area inspections periodically supporting range operations. (Amber)

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 and provide recommendations if any discrepancies are identified during visits.

WATER PORT OPERATIONS

D.16. QASAS assigned to water ports act as advisor to the senior Department of Defense official operating the port and its support facilities (Military Traffic Management Command Detachment, Transportation Terminal Unit, Port Supply Activity, etc.). 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: DA Pam 742-1, paragraph 5-14.

Of 24 reviews conducted; 0 locations (0%) 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.17. QASAS monitor pier and ship operations.

Reference: DA Pam 742-1, paragraph 5-14.c.

Of 24 reviews conducted; 0 locations (0%) 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 all port operations while munitions operations are ongoing.

D.18. QASAS ensure water port operating locations, to include supporting marshalling areas, explosive weight limits not exceeded and that pier and shipboard personnel observe common precautions for personnel handling or operating in the vicinity of ammunition and explosives; and conduct appropriate coordination with U.S. Coast Guard elements is essential for effective implementation of guidance. Critical

Reference: DA Pam 742-1, paragraph 5-14.e and 5-14.f.

Of 24 reviews conducted; 0 locations (0%) 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. Each SOP reviewed and approved by the performing organization. Reference: AR 385-10 paragraph 18-5.a, DA Pam 385-10, Chapter 9; DA Pam 385-64, paragraph 2-4 and DA Pam 742-1, paragraph 5-1.c.

Of 24 reviews conducted; 13 locations (54.1%) SOPs had outdated references and/or SOPs were not reviewed/concurred with by all required organizations. (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. Supervisor/Operator signatures are required every 90 days for intermittent operations and at least annually during continuous operations.

Solution: Develop SOPs for all Surveillance operations. Conduct and staff for approval annually. Update SOP’s to reflect current regulatory requirements.

E.2. A documented risk assessment/hazard analysis included as part of the SOP. Critical Reference: DA Pam 742-1, paragraph 5-1.b.1.c.2.

Of 24 reviews conducted; 10 locations (41.6%) had no hazard analysis in place for each operation not annotated on the appropriate form. (Red)

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

Solution: Develop a risk assessment (DA Form 2977) for all explosive operations. This assessment must be properly staffed, accepted at appropriate level of risk, and included with each SOP.

F – A&E AMNESTY PROGRAM (Red)


Of 24 reviews conducted; 9 locations (37.5%) had not established and/or conducted an annual amnesty day. (Red)
Analysis: All Installation/Garrison and forward operating bases having elements that use military munitions will establish an A&E Program and conduct an annual amnesty day IAW applicable regulations.

Solution: Ensure that A&E Amnesty Programs are established at each Installation/Garrison and forward operation base IAW regulations.


Of 24 reviews conducted; 8 locations (33.3%) had an Amnesty SOP, risk assessment/hazard analysis either not properly staffed or accepted at appropriate level of risk. (Red)

Analysis: A&E Programs shall be documented with an SOP.

Solution: Conduct and staff for approval annually. Update SOP to reflect current regulatory requirements.

G - DEMILITARIZATION (Green)

G.1. Installation surveillance organization monitors A&E demilitarization operations and sites. Reference: DA Pam 742-1, paragraph 5-7.a.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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.

H - TECHNICAL ASSISTANCE (Green)

AMMUNITION OPERATIONAL AND BASIC LOAD INSPECTIONS (BLI)

H.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: DA Pam 742-1, paragraph 6-2.a and 6-2.b.

Of 24 reviews conducted; 5 locations (20.8%) had no documentation for follow-up corrective actions. (Amber)
Analysis: The primary intent of DA Pam 742-1 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. ENSURE all unserviceable ammunition assets identified are properly removed from Basic/Operational Load.

H.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: DA Pam 742-1, paragraph 5-1.b.

Of 24 reviews conducted; 1 location (4.1%) had no written agreements in place to ensure surveillance support. (Green)

Analysis: QASAS will provide ammunition surveillance services as specified in DA Pam 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.

AR 702-12, QASAS AREA SUPPORT TO OFF-POST CUSTOMERS

H.3. QASAS will provide military munitions surveillance support to ACOMs, SCCs, DRUs and Installation Management Command publications during peacetime and mobilization. Support visits occur at intervals not to exceed 12-15 months or upon request of the supported installation. Reference: AR 702-12, paragraph 3-1(a) and Table 3-1.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: QASAS will provide ammunition surveillance services as specified in 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.
A - EXPLOSIVES SAFETY MANAGEMENT PROGRAM (ESMP) (Green)

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

Of 24 reviews conducted; 6 locations (25%) did not have a current/signed installation ESMP acknowledging roles and responsibilities of Garrisons and/or did not address all sixteen ESMP elements. (Amber)

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.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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 (or the individual identified in the ESMP as the primary POC for all ESMP-related actions) comply with requirements detailed in applicable regulations.
Reference: AR 385-10, paragraph 5-4.b and DA Pam 385-64. paragraph 1-6.b.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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 shall have an established range safety program which is referenced in the ESMP.

Of 24 reviews conducted; 2 locations (8.3%) did not address Ranges/UXO in the ESMP. (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.

A.5. Safety Occupational Health (SOH) professionals will be trained and competent in A&E safety and explosives safety management appropriate for their explosives safety responsibilities.
Reference: AR 385–10, paragraph 5-10.

Of 24 reviews conducted; 9 locations (37.5%) Safety professionals with explosives safety roles and responsibilities have not completed required training. (Red)

Analysis: Explosives Safety is one of the more complex elements of the 26 required program elements within the duty description of a Safety professional. Ensure a well foundation of knowledge is established in order to effectively provide risk mitigations in A&E operations.

Solution: Safety professionals with explosives safety responsibilities must complete all required training. Once training is completed, submit packages to CP-12 career program office for Explosives Safety Professional Certificate Level 1 or 2.

A.6. The ESMP addresses the development and approval of SOPs. Include review, concur and approval process and subject matter experts such as safety, environmental, security and fire).
Reference: DA Pam 385-10 9-7a

Of 24 reviews conducted; 11 locations (45.8%) did not mention staffing, subject matter experts in the review, concur and approval process of SOP development within the ESMP. (Red)

Analysis: Standard Operation Procedures are the bases for all A&E operations. In order to ensure maximum mitigation methods, development, staffing, review, concurrences, and approvals of SOPs must be incorporated with-in the ESMP.
Solution: Include in the ESMP, responsibilities and procedures for the development, staffing, review, concurrences and approval of SOPs for A&E operations.

A.7. A safety inspection is conducted at least annually for all areas where AE-related activities (for example, production, handling, storage, use, maintenance, munition response, demilitarization, and disposal) routinely occur.
Reference: AR 385–10, paragraph 17-6.a and DA Pam 385-64, paragraph 1-6.b.(5).

Of 24 reviews conducted; 3 locations (12.5%) had no documentation for the inspection of AE storage or operating buildings. (Green)

Analysis: Explosives Safety inspections are critical for success in A&E safety operations. With continued visibility and documentation issues are made aware, documented and provided visibility for organizations to correct any deficiencies.

Solution: Develop written procedures for and conduct and document annual inspection of A&E facilities.

A.8. Explosives safety posture reviews.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: A safety program belongs to the Commander. Therefore, a commander should be provided an initial and annual briefing on the posture of the explosives safety Program.

Solution: Provide an annual briefing to the commander on the posture of the explosives safety program.

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

B.1. ESSP requirements, preparation and submission IAW regulatory requirements. Have a detailed procedure for the routing process. Critical
Reference: AR 385-10, paragraph 5-6, DA Pam 385-64 Chapter 4 and DA Pam 385-65.

Of 24 reviews conducted; 1 location (4.1%) did not have detailed procedures addressing ESSP preparation and/or submission requirements. (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: Develop a process consistent with the ESMP for the development, staffing, review, and approval for A&E facility site plans. 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 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: DA Pam 385-65, paragraph 2-17.

Of 24 reviews conducted; 4 locations (16.6%) had no approved ESSPs for numerous buildings/facilities storing ammunition and/or explosives. (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. All AE areas are licensed. Critical Reference: AR 385-10, paragraph 5-7 and DA Pam 385-64, Chapter 5.

Of 24 reviews conducted; 3 locations (12.5%) required explosive license review and update to reflect NEW approved by DDESB. (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. Explosives storage license program developed and managed by the Installation Commander’s or their designated Safety Office. Reference: DA Pam 385-64, paragraph 5-2.b.

Of 24 reviews conducted; 1 location (4.1%) had licenses which did not include all required elements or required ESL documentation process defined in ESMP. (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 and DA Pam 385-64, paragraph 5-1 and 5-2.

Of 24 reviews conducted; 3 locations (12.5%) were not reviewed/validated within last 12 months or verification of encroachment was not documented. (Green)

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. Installation/Garrisons maintains map showing all locations of A&E to include storage/operating facilities, amnesty boxes, arms rooms, and explosives truck routes.
Reference: DA Pam 385-64, paragraph 1-11.

Of 24 reviews conducted; 3 locations (12.5%) required updates of A&E locations on area maps. (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. Develop and maintain maps that identify at a minimum the A&E locations, explosives truck routes and amnesty box locations. Mapping requirements should be detailed in the commanders ESMP.

B.7. Explosives licenses and maps of the explosives location and surrounding area available at both the using unit safety office and the garrison safety office. Arms room licenses posted in the arms room. Copies of explosives licenses maintained at the A&E operations controlling office.
Reference: DA Pam 385-64, paragraphs 5-2.e-g.

Of 24 reviews conducted; 2 locations (8.3%) were observed as having arms rooms without posted Explosives Licenses. (Green)
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.

B.8. The designated ES POC; Participates in the Real Property Management Planning process and reviews the master plan annually to ensure no construction is planned within ESQD arcs.
Reference: DA Pam 385-64, paragraph 1-6.b(12).

Of 24 reviews conducted 1 location (4.1%) did not participate in real property management meetings. (Green)

Analysis: Master planning is a central location for all new constructions, remodeling projects, and future request for development. To ensure explosives safety standards are maintained, a safety professional with explosives safety responsibilities shall be required to review master planning.

Solution: Identify the safety professional with explosives safety responsibility and their role and responsibility in the real property management process. Designate this professional in writing and ensure responsibilities to review the master plan are documented within the ESMP.

B.9. All safe haven locations are properly sited and licensed.
Reference: DA Pam 385-64 paragraphs 4-1 and 5-1.

Of 24 reviews conducted; 2 locations (8.3%) (Green) Without final ESSP documentation approval from DDESB.

Analysis: DDESB approval of safety submissions are required for all safe haven locations intended for storing ammunition.

Solution: Submit and obtain prior DDESB approval for all safe haven locations. Update explosives storage licenses as required.

B.10. Army Installations or activities that have a military munitions mission (e.g., live fire training, testing, munitions storage, or demilitarization) will submit complete construction project proposals through proponent command channels to the USATCES for review and approval prior to obtaining construction approval. The review and approval requirement applies to all projects regardless of dollar amount or the intended use of a facility. This review process applies (a) to installation and tenant activates, regardless of service or agency, on army installations or activates; (b) Army tenants on other service installations or activities; and (c) other locations for which Army has explosives safety responsibilities and where DoD military munitions may be present.

Of 24 reviews conducted; 3 locations (12.5%) Non-compliance with DOD explosives safety criteria during modification, new construction activities or temporary structures (Green)

Analysis: To improve the Army’s Explosives Safety Management Program and avoid wasting limited resources by construction/major modification of a structure that cannot be used as intended, or by construction of a facility or structure that adversely impacts the use of another facility.

Solution: Submit completed construction project proposal through command channels to the US Army Technical Center for Explosives Safety (USATCES) for review and approval prior to obtaining approval for the construction.

C.1 AMMUNITION & EXPLOSIVES OPERATIONS (Green)


Of 24 reviews conducted; 5 locations (20.8%) had personnel being observed without wearing PPE during operations or had SOPs without required PPE listed. (Amber)

Analysis: The use of the proper PPE of personnel is to reduce the potential for incidental injury during A&E operations.

Solution: Develop a process for periodic checks of personnel involved in A&E operations to ensure PPE is available and they are using PPE required by local SOPs.

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

Of 24 reviews conducted; 3 locations (12.5%) Documents not kept for required MHE training or no noted licensing program in place. (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: Conduct and document periodic checks on personnel operating equipment and machinery for a valid license. Perform pre-operational inspections and checks of vehicles and equipment prior to use.

C.3. Training aid/static display marked as inert, serial numbered and annual serial number inventory conducted. Reference: DA Pam 385-64, paragraphs 2-9 and 3-5.
Of 24 reviews conducted; 0 location (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Inert A&E include practice and service A&E, including A&E 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 A&E items should be properly marked inert, serialized and inventoried annually. Develop a procedure to verify and mark "INERT" training aids and display items.

C.4. 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 and DA Pam 385-64, Table 7-2 note 1.

Of 24 reviews conducted; 2 locations (8.3%) did not have Z compatibility waivers reviewed annually or Z compatibility waivers not drafted for intended customer storage. (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.5. Explosives and personnel limits posted as required.
Reference: DA Pam 385-64, paragraph 2-5.a.

Of 24 reviews conducted; 3 locations (12.5%) the explosives and personnel limits were either missing or not clearly posted in operating bays. (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.6. 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 24 reviews conducted; 2 locations (8.3%) had observations of poor housekeeping. (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.

C.7. For contracted A&E activities, ES personnel have completed contract ES training per guidance from the Army Safety and the requiring activity, Contracting Officer, and safety personnel ensure that the risks of the contracted activities are assessed and appropriate clauses and safety requirements are included in contracts.

Reference: AR 385-10, Chapter 4 and DA Pam 385-10, Chapter 4.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Contractors are vital member to many A&E operations. Ensure to document requirements for contractors in the ESMP.

Solution: The installation ESMP should identify training requirements for contractors conducting A&E operations or functions.


Reference: 20 CFR 1910.119

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: The 20 CFR 1910.119 identifies requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. These releases may result in toxic, fire or explosion hazards

Solution: A&E operations that involve the manufacture of A&E where hazardous materials/chemicals are used will have a Process Safety Management Program in place.

C.9. 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 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Having access to fire extinguishers is the first line a defense in fire prevention. Know the hazards of the A&E and take appropriate action.
Solution: Have fire extinguishers available anytime A&E is being handled. Personnel are required to be trained in the use of fire extinguishers.

C.10. Storage of limited quantities of paint, lubricants, adhesives meet established standards. Flammable storage located at least 50-feet from explosives locations. At least one fire extinguisher, suitable for the type of materials involved, will be readily available for use. Reference: DA Pam 385-64, paragraph 6-8.f and 29 CFR 1910.106.

Of 24 reviews conducted; 3 locations (12.5%) had storage of bulk quantities of paint/lubricants within 50ft of explosives operations. Flammable materials not stored in approved flammable storage locker. (Green)

Analysis: Hazardous materials are a daily requirement that is used as part of all A&E operations.

Solution: Keep all hazardous materials in an approved storage container at least 50 feet from operations. Keep only small amounts of hazardous material out of the storage container and only when in use. Fire extinguishers should be available and the location easily accessible in the event of a fire.

C.11. Safety Data Sheets (SDS), formerly known as Material Safety Data Sheets (MSDS), must be available for all items on-hand and accessible to all employees to assure proper handling, storage, and emergency response preparedness IAW AR 710-2. Reference: AR 710-2, paragraph 1-30 and https://www.osha.gov/Publications/OSHA3514.html

Of 24 reviews conducted; 2 locations (8.3%) had several chemical products which did not have SDS on hand or accessible to employees. (Green)

Analysis: Safety Data Sheets provide critical information for emergency response and preparedness when hazardous materials are present. The goals of the Army’s Hazardous Materials Management Program (HMMP) are to reduce the cost for acquiring and disposing of HAZMAT, enhance mission accomplishment, promote the safe storage, handling, and use of HAZMAT, and reduce risk to public health and the environment.

Solution: SDS should available for each hazardous material that is stored and used by employees. SDS are available from the source of supply or from the manufacturer of the product. SDS, transportation, and disposal data are also available in the DOD Hazardous Materials Information Resource System (HMIRS), maintained by the Defense Logistics Information Service, Battle Creek, MI. HMIRS may be accessed through Web site: https://www.dlis.dla.mil/hmirs
D.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 24 reviews conducted; 1 location (4.1%) operating building had no approved hazardous classified electrical equipment. (plug, outlets, switches, or lights) (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.

D.2. Each service line run underground from a point at least 50 feet away from the building. Reference: DA Pam 385-64, paragraph 17-5.

Of 24 reviews conducted; 0 location (0%) there were no documented non-compliances of this requirement. (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.

D.3. Controls for static electricity meet regulatory requirements. Critical

Reference: DA Pam 385-64, paragraphs 17-10 and 17-12.

Of 24 reviews conducted; 3 locations (12.5%) had no permanent static ground system and/or did not have conductive matting/flooring. (Green)

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: Develop written requirements and procedures for the inspection and testing of static control devices in A&E facilities. 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.


Of 24 reviews conducted; 5 locations (20.8%) had LPS which did not meet regulatory requirements and/or magazine doors were not grounded. (Amber)

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: Develop and implement procedures for the electrical testing and visual inspection of grounding systems. 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.

D.5. Lightning protection system (LPS), bonding, grounding, and surge protection requirements in compliance with prescribed criteria (design, installation, maintenance and testing). Reference: DA Pam 385-64, paragraphs 17-16, 17-26 and NFPA 780, Chapters 4 and 8.

Of 24 reviews conducted; 4 locations (16.6%) had outdated and/or no LPS testing, missing air terminal supports when exceeding 24 inches and/or having no follow-up actions for submitted work orders. (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: Identify locations requiring LPS, design, install, test, inspect and maintain systems as required. The LPS and any conductive object should be provided a low impedance path to
ground and be free of paint or other coatings.

D.6. LPS inspection and test reports (records) maintained in the garrison or installation safety office unless the garrison or installation commander designates an alternate office. 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 24 reviews conducted; 7 locations (29.1%) had either no trend analysis conducted, outdated inspection cycles and/or missing elements on inspection reports. (Amber)

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. Develop a process to track open work orders on LPS to closure.


Of 24 reviews conducted; 4 locations (16.6%) had Qualified Facilities Engineers not in compliance with Ammo-28 certification. (Green)

Analysis: A qualified Facilities Engineer is required to review all LPS test plans, test reports and systems to ensure construction/installation is in compliance with regulatory requirements.

Solution: Have all LPS installation, modification, Test Plans and results reviewed by a qualified Facility Engineer.

D.8. Army installation Senior Commander or their designated representative has reviewed, approved and accepted the risk for waiving or exempting LPS requirements for AE facilities without verified adequate LPS. DA Form 7632, Deviation Approval and Risk Acceptance Document (DARAD) utilized for waiving or exempting LPS requirements and identifying measures taken to mitigate the risk. Reference: Memorandum, DA Office of the Assistant Secretary of the Army Installations, Energy and Environment, SAIE-ESO, 3 May 2017, subject: Defining Adequate Lightning
Protection Systems (LPS) for U.S. Army Ammunition and Explosives (AE) Facilities (Munitions Operating Facilities).

Of 24 reviews conducted; 1 location (4.1%) No documentation for waiving or excepting LPS requirements. (Green)

Analysis: A properly designed and installed LPS is intended to provide a low impedance path for dissipation of lightning strikes to the ground. LPS can be waived or exempted by the Commander or his designated representative.

Solution: If there is no LPS on structures where required, complete a DA Form 7632 and approved at the appropriate level based on the risk.

D.9. HERO plans and procedures comply with delineated criteria. Critical
Reference: DA Pam 385-64, paragraph 17-15 and AR 385-10, paragraph 5-11.

Of 24 reviews conducted; 2 location (8.3%) is operating without a HERO program. Also, no signage is posted in HERO sensitive areas. (Green)

Analysis: HERO plans are designed to provide specific guidance for the use of radio frequency (RF) emitters in the presence of electrically fired or initiated A&E.

Solution: Identify and implement controls to limit the presence and use of RF emitters while in the presence of electrically fired or initiated A&E.

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

E.1. Pre-fire plans have been developed. Plans cover all explosives and chemical agent areas and possible exposures of explosives and chemical agent safety to fire, specify responsible individuals and alternates, their organizations and training, and include a description of the emergency function of each department or outside agency. Critical
Reference: AR 420–1, paragraph 25-16.b and DA Pam 385-64, paragraphs 6-1.c and 6-2.

Of 24 reviews conducted; 1 location (4.1%) had fire plans which did not list hazard classes of areas or did not contain fire plans for A&E facilities. (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 with the Fire Department that identifies the roles and responsibilities and training requirements of all organizations including contractors and tenants.
E.2. Army fire station central communications center have an area map showing all explosives areas or locations. (Locations with less than 1,000 rounds of hazard division1.4 small arms ammunition (.50 caliber or less) are exempt. Reference: DA Pam 385-64, paragraph 6-1.d.

Of 24 reviews conducted; 1 location (4.1%) did not provide a map of A&E locations to supporting Fire Department, did not have updated maps and/or did not list all A&E locations. **(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.

E.3. Explosives and chemical agent safety operations notify the fire department with any change of fire or chemical hazard symbols for explosives and chemical agent safety A&E facilities as changes occur.

Reference: DA Pam 385-64, paragraph 6-1.e.

Of 24 reviews conducted; 2 locations (8.3%) had no notification process to alert fire departments of changes. **(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.

E.4. Restrictions on flammable sources and smoking restrictions documented.

Reference: DA Pam 385-64, paragraph 6-3.

Of 24 reviews conducted; 1 location (4.1%) Authorized smoking areas not posted. **(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.

E.5. Operating personnel and firefighting forces involved with explosives and chemical agent safety are trained in precautions to be taken and how to fight fires, including 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 have received training, upon initial assignment and at least annually thereafter, on general principles of fire extinguisher use and the hazards involved with incipient stage firefighting.

Reference: DA Pam 385-64, paragraphs 6-4 and 6-10.b.

Of 24 reviews conducted; 2 locations (8.3%) where familiarization training was not conducted with supporting 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.

E.6. Fire drills are held within explosives and chemical agent safety 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 24 reviews conducted; 3 locations (12.5%) did not conduct fire drills semi-annually with supporting fire department. (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.

E.7. Fire and chemical hazard symbols posted with visibility from all approach roads.

Reference: DA Pam 385-64, paragraph 6-14.

Of 24 reviews conducted; 5 locations (20.8%) had either missing or incorrect fire/chemical symbols on A&E storage location. (Amber)

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.

E.8.  Risk assessment available for A&E operations where a potential fire or thermal threat exists.  
Reference: DA Pam 385-64, paragraph 2-2 and 6-19.d.

Of 24 reviews conducted; 3 locations (12.5%) utilized outdated risk assessment form and lack commanders signature. (Green)

Analysis: A risk assessment will be used to identify any potential fire or thermal hazards that can be expected and the actions to be taken to mitigate or reduce the hazards.

Solution: Include all fire or thermal hazards as part of the risk assessment. Risk assessments should be signed at the appropriate level based on the residual risk level.

Reference: DA Pam 385-64, paragraph 6-8.

Of 24 reviews conducted; 2 locations (8.3%) No vegetation control management program in place for ammunition holding areas (Earth covered magazine). (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.

E.10.  Firebreaks clear of all readily combustible material, such as dry grass, dead wood, or brush.  
Reference: DA Pam 385-64, paragraph 6-9

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

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.
F – RANGE SAFETY and UNEXPLODED ORDNANCE (Green)

UNEXPLODED ORDNANCE (UXO) SAFETY

F.1. Areas known or suspected to contain unexploded ordnance (UXO) present on Army installations provide UXO safety education training or information to people living on the installation or Formerly Used Defense Sites (FUDS) or that work on or use the property. Such training is based on and incorporates the Army’s 3Rs (Recognize, Retreat, Report) message. Reference: DA Pam 385-64, paragraph 2-16.

Of 24 reviews conducted; 2 locations (8.3%) did not provide UXO training or provided training to limited number of operational personnel. (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.

F.2. Operational Range Clearance may be necessary to prevent accumulation of used military munitions and other range-related debris. Reference: AR 350-19 paragraph 4-2 DA Pam 385-63 paragraphs 2-1, 2-10, 2-12 and DODI 3200.16 DA Pam 385-64 paragraph 19-8.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (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.

F.3. 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 24 reviews conducted; 2 locations (8.3%) did not provide UXO safety education training to surrounding schools. (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.

F.4. Ensure that appropriate explosives safety site plans are submitted for permanent ammunition and explosive storage and issue facilities.
Reference: AR 385-63 paragraph 1-9 and DA Pam 385-63 paragraph 2-10, and TC 25-8 paragraphs B-7, B-27, B-28 DA Pam 385-64 paragraph 4-1.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Permanent ammunition and explosive storage facilities (except for 1.4 small caliber ammunition) on ranges require explosives safety site plans.

Solution: Submit required paperwork to US Army Technical Center for Explosives Safety for final approval at Department of Defense Explosives Safety Board.

F.5. Unit Commanders will ensure ammunition and explosives are properly handled, transported, stored, and accounted for within the RTC from the time of receipt to the time of expenditure and turn in.
Reference: AR 385-63 paragraph 1-9, DA Pam 385-63 paragraph 2-10 and DA Pam 385-64 paragraphs 2-6, 9-12.

Of 24 reviews conducted; 2 locations (8.3%) did not post signs in suspected UXO areas. (Green)

Analysis: Personnel who handle AE will be trained to understand the potential hazards and risks associated with each operation.

Solution: Ensure required training is documented and leadership oversight of ammunition operations.

F.6. Unit Commanders will ensure all UXO, ammunition malfunctions, and accidents are reported to Range Operations.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Report all accidents and ammunition malfunctions. Ensure UXO procedures are documented and catalog finding in central location.
Solution: UXO’s. Accidents and ammunition malfunctions will be reported to Range operations for an archive database and lessons learned.

F.7. Senior/Mission/Garrison Commanders will appoint and ensure that range operations personnel are trained, qualified, and resourced to supervise use of training lands, enforce safety requirements, and monitor the effectiveness of each program.

Reference: AR 350-19 paragraphs 3-4, 4-3, 4-8, AR 385-63 paragraphs 1-9, 2-3, 2-4, 2-8 DA Pam 385-63 paragraph 2-1 and TC 25-8 paragraph 5-28.

Of 24 reviews conducted; 2 locations (8.3%) Range Management Authority (RMA) were not appointed in writing by the Senior Commander. (Green)

Analysis: RMA needs appointment orders from Senior Commander. Ensure all training is updated and documented.

Solution: Obtain a memorandum from Senior Commander appointing a RMA. Enforce all safety regulations of Range Operations.

F.8. The RMA will maintain a working register of all known facts, circumstances, and information concerning UXO within the RTC. This data must be maintained as a critical historical record and be made available to installation staff.


Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: All found UXO will need to be documented for situational and public awareness and must be maintained as a critical historical record and be made available to those installation staff elements that may employ the information to reduce the risk of UXO-related incidents.

Solution: Develop a UXO central database and location for archive data on all UXO related findings within the RTC. Lessons learned and training briefs can be established with information.

G – DEVIATIONS (Green)

G.1. When an existing facility or operations violate the provisions of DA Pam 385–64 or DA Pam 385-61, a deviation has been executed IAW DA Pamphlet 385-30, documented on DA Form 7632, and the risk accepted at the appropriate level of command. Critical

Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, Table 4-1.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Deviations to explosives safety standards must be documented and accepted at the appropriate level based on the level of risk.
Solution: Develop a Deviation Approval Risk Acceptance Document (DARAD) using DA Form 7632 for all operations where operations are not in compliance with explosives safety standards.

G.2. Copies of waivers, exemptions, Secretarial Certifications and reviews involving A&E or chemical agent are routed through the chain of command to the organization’s ACOM, ASCC, and/or DRU safety office and USATCES for data collection and analysis. Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, 4-6.d.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Proper authority must weigh the added risk to personnel and property against strategic and other compelling reasons that necessitate such deviations.

Solution: DA Form 7632 will be routed through the appropriate chain of command and copies provided to safety and USATCES.

G.3. Risks are accepted only by the commander with the resources and/or authority necessary to control, eliminate, or correct the hazard in appropriate timeframe and at the level of authority prescribed in DA PAM 385-30. Critical Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, 4-4.f.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Documents of risks are accepted by the commanding level of authority and corrections of hazards in appropriate timeframe.

Solution: Refer to DA Pam 385-30, Table 4-1 Risk Acceptance Matrix to determine the appropriate duration and levels of risk acceptance.

G.4. Coordination is made with all units exposed to the hazards. When unrelated personnel, facilities, or equipment are exposed to a hazard, the appropriate authority in the exposed organization has acknowledge the hazard and accepted the risk to their personnel, facilities, or equipment. Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, 4-4.f.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: The risk to unrelated personnel, facilities, or equipment must be accepted by the appropriate approval authority of the exposed organization.

Solution: Prior to risk acceptance by the organization creating the risk, obtain acknowledgment of the hazard and acceptance of risk to applicable unrelated personnel, facilities, or equipment.
from the appropriate approval authority of the exposed organization IAW DA Pam 385-30, paragraph 4-4.f.

G.5. If waivers are reissued they require approval at the next higher approval authority. Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, 4-6.c.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: When exceptional situation require a waiver to be reissued to allow either completion of the operation requiring the waiver or time for the completion of the corrective action, the next higher approval authority will reissue the waiver.

Solution: Redevelop a Deviation Approval Risk Acceptance Document (DARAD) using DA Form 7632 and reissue the waiver from the next higher approval authority.

G.6. Prior to the expenditure of funds for new construction that will violate A&E or chemical agent safety criteria of DA Pam 385-64 and DA PAM 385-61, a Secretarial Certification is requested and approved. Critical Reference: AR 385-10, paragraph 5-5 and DA Pam 385–30, 4-6.e.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: New construction that violates explosives safety standards must be certified by the commander as essential due to operational necessity or other compelling reasons and written approval obtained from the appropriate authority.

Solution: Prior to expenditure of funds for the project, complete a Secretarial Certification package IAW DA Pam 385-30 4-6.e and submit through the chain of command for approval by the Assistant Secretary of the Army for Installations, Energy and Environment (ASA (IE&E)).

H – Industrial AE Operations (Green)


Of 24 reviews conducted; 1 location (4.1%) there were no documented non-compliances of this requirement. (Amber)

Analysis: Ensure Safety requirements are adhered to during Maintenance operations-Renovation, allowable limits, and explosives handling.

Solution: Follow established SOP’s and approved explosives safety site plans.
H.2. Explosives dust collecting systems are being used to aid cleaning, to lessen explosion risks, and to minimize occupational diseases and dermatitis.
Reference: DA PAM 385-64, paragraph 14-21-14-24 and 16-23.

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Explosives dust collecting systems will be used in ammunition renovation operations.
Solution: Ensure explosives dust collecting systems are serviceable and complaint. Ensure system is free of excessive explosive dust accumulation on outer pipes or tubes.

H.3. Machining of high explosives will be drilled, faced, milled, sawed, or otherwise machined within rooms or cubicles having reinforced concrete walls unless permitted by the reference. Critical

Of 24 reviews conducted; 0 locations (0%) there were no documented non-compliances of this requirement. (Green)

Analysis: Drilling of explosives operations need suitable protection for operations. Proper safety procedures will be in place for all type of drilling operations.
Solution: Follow established SOP’s for operations. Ensure safety procedure are adhered to for the different type of drilling operations. Ensure cleaning program is in place.
APPENDICES

APPENDIX A

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>A&amp;E</td>
<td>Ammunition and Explosives</td>
</tr>
<tr>
<td>AA&amp;E</td>
<td>Arms, Ammunition and Explosives</td>
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<tr>
<td>ACCMO</td>
<td>Ammunition Civilian Career Management Office</td>
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<tr>
<td>ACOM</td>
<td>Army Command</td>
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<tr>
<td>ACR</td>
<td>Ammunition Condition Report</td>
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<tr>
<td>ADC</td>
<td>Ammunition Data Card</td>
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<tr>
<td>AEC</td>
<td>Army Environmental Center</td>
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<tr>
<td>AEDA</td>
<td>Ammunition, Explosives and Dangerous Articles</td>
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<td>AEPS</td>
<td>Army Electronic Product Support</td>
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<tr>
<td>AIN</td>
<td>Ammunition Information Notice</td>
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<td>AKO</td>
<td>Army Knowledge Online</td>
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<tr>
<td>AMC</td>
<td>Army Materiel Command</td>
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<tr>
<td>AMCP</td>
<td>Ammunition Manager Career Program</td>
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<tr>
<td>AMC-R</td>
<td>AMC Regulation</td>
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<tr>
<td>AMCOM</td>
<td>U.S. Army Aviation and Missile Command</td>
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<td>AOCl</td>
<td>Accredited Off Campus Instruction</td>
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<td>AR</td>
<td>Army Regulation</td>
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<td>ARNG</td>
<td>Army National Guard</td>
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<tr>
<td>ASA</td>
<td>Ammunition Support Activity</td>
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<tr>
<td>ASC</td>
<td>Army Sustainment Command</td>
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<tr>
<td>ATEC</td>
<td>U.S. Army Test and Evaluation Command</td>
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<tr>
<td>ASP</td>
<td>Ammunition Supply Point</td>
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<td>CAC</td>
<td>Common Access Card</td>
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<td>CASCOM</td>
<td>Combined Arms Support Command</td>
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<tr>
<td>CAT</td>
<td>Category</td>
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<tr>
<td>CC</td>
<td>Condition Code</td>
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<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CIIC</td>
<td>Controlled Item Inventory Code</td>
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<tr>
<td>CMRS</td>
<td>Conventional Munitions – Restricted or Suspended</td>
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<tr>
<td>CONUS</td>
<td>Continental United States</td>
</tr>
<tr>
<td>DA</td>
<td>Department of the Army</td>
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<tr>
<td>DA Pam</td>
<td>DA Pamphlet</td>
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<tr>
<td>DAC</td>
<td>U.S. Army Defense Ammunition Center</td>
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<tr>
<td>DDESIB</td>
<td>Department of Defense Explosives Safety Board</td>
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<tr>
<td>DENIX</td>
<td>Defense Environmental Network and Information Exchange</td>
</tr>
<tr>
<td>DLA</td>
<td>Defense Logistics Agency</td>
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<tr>
<td>DoD/DOD/DD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DRMO</td>
<td>Defense Reutilization and Marketing Office</td>
</tr>
</tbody>
</table>
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 700-16
The Army Ammunition Management System
DA Pam 710-2-1
Using Unit Supply System (Manual Procedures)

DA Pam 742-1
Ammunition Surveillance 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

DESR 6055.09-Edition 1
Defense Explosives Safety Regulation (DESR)

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

DA Pam 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
APPENDIX C

COMMONLY USED INTERNET WEB SITES

U.S. Army Defense Ammunition Center
Munitions and Explosives Safety Community of Practice (COP) Website

U.S. Army Defense Ammunition Center Training
http://www.dactces.org

Ammo Help

TRADOC publications
https://www.tradoc.army.mil/Publications-Resources/

U.S. Army Publishing Directorate, Army publications and forms
http://www.apd.army.mil/

JMC Ammunition Surveillance Division

Munitions History Program
https://mhp.redstone.army.mil

Defense Acquisition University (formerly known as Acquisition Community Connection)
https://www.dau.mil/community-hub#All|title_asc

Naval Supply Systems Command, Naval Operational Logistics Support Center (NOLSC);
Navy and Marine Corps NARs/AIN/OHF message retrieval. Registration required.
https://nll.navsup.navy.mil/default.cfm

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

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.publications.usace.army.mil/

Department of Transportation Office of Hazardous Materials Safety
http://www.phmsa.dot.gov/

Environmental Protection Agency Toxic Release Inventory guidance and EPA database
https://www.epa.gov/toxics-release-inventory-tri-program

Search Engine Linked to Federal Web Sites
http://www.usa.gov/

Army Materiel Command Publications and Forms
https://hqamc.aep.army.mil/gstaff/amcio/ia/r/p/Publications/Forms/AllItems.aspx

National Guard Bureau Publications and Forms

Code of Federal Regulations
https://www.ecfr.gov/cgi-bin/ECFR?page=browse

Army Knowledge Online
https://www.ako1.us.army.mil/

DoD Lock Program Web page
https://www.navfac.navy.mil/navfac_worldwide/specialty_centers/exwc/products_and_services/capital_improvements/dod_lock.html