

National Guard Regulation 385-64

Safety

# **Army National Guard Ammunition and Explosives Safety Standards**

Departments of the Army and the Air Force  
National Guard Bureau  
Arlington, VA 22202-3231  
14 December 2007

**UNCLASSIFIED**

# *SUMMARY of CHANGE*

NGR 385-64

Army National Guard Ammunition and Explosives Safety Standards  
dated 14 December 2007

This is a new Army National Guard regulation

- Establishes ammunition and explosives safety policy and guidance for executing the Army ammunition and explosives safety program.
- Incorporates the use of composite risk management for ammunition and explosives operations (para 1-1).
- Establishes policy for ammunition and explosives exposure to the fewest essential personnel, awareness training and the application of composite risk management verses laws and Army regulations (para 1-4).
- Outlines applicability of ammunition and explosives operations for all Army National Guard operations and facilities (para 1-5).
- Specifies responsibility for the Chief, National Guard Bureau, to authorize and/or approve the execution of Department of Defense Explosive Safety Standards (para 1-6).
- Specifies responsibility for the Director, Army National Guard, to implement the Army National Guard ammunition and explosives (para 1-7).
- Specifies responsibility for the Chief, Aviation and Safety Division, to execute for the Army National Guard ammunition and explosives safety program with a written policy (para 1-8).
- Specifies responsibility for the Chief Safety and Standardization Branch, for evaluating and coordinating ammunition and explosives staff actions and personnel. Evaluates recommended actions regarding State ammunition and explosives programs and initiatives (para 1-9).
- Specifies responsibility for the Chief Safety and Occupational Health Manager, to manage the Army National Guard ammunition and explosives program (para 1-10).
- Specifies responsibility for the Quality Assurance Specialist – Ammunition Surveillance, to establish Army National Guard ammunition and explosives specific policies and initiatives to implement the Army ammunition and explosives program and polices. Senior Quality Assurance Specialist – Ammunition Surveillance will supervise and manage Quality Assurance Specialist – Ammunition Surveillance assigned to the National Guard Bureau (para 1-11).
- Specifies responsibility for the Adjutant General, to establish an ammunition and explosives program within the state (para 1-12).
- Specifies responsibility for the State Safety and Occupational Health Manger, to manage the State's ammunition and explosives program to ensure compliance with Army policies to ensure competent and qualified personnel regularly review all ammunition and explosives operations, to initiate, review, and approve explosives storage licenses, site plans, certificates of risk acceptance, and/or certificates of compelling reasons (para 1-13).
- Specifies responsibility at the Installation, Garrison and/or Unit Safety Managers (para 1-14).
- Specifies responsibility for Army National Guard Personnel who are involved with ammunition and explosives operations to become familiar with hazards of these operations (para 1-15).
- Establishes the Army National Guard Central Register to track and maintain historical records of all ammunition and explosives documents, deviations, site plans and certificates of risk acceptance and certificates of compelling reasons (para 2-1).

- Outlines the requirement for the State Adjutant General to approve and distribute ammunition and explosives policy and guidance on State implementation of the Army explosive safety program (para 3-1).
- Establishes the procedures for ammunition and explosives program evaluation (para 3-2).
- Outlines procedures for ammunition and explosives program assessments (para 3-3).
- Outlines procedures for ammunition and explosives program development (para 3-4).
- Establishes the requirement that individuals who are involved with ammunition and explosives in any capacity receive appropriate training and certifications (para 4-1).
- Outlines the different levels of ammunition and explosives training required (para 4-2).
- Outlines the Army National Guard ammunition and explosives function specific training and certification program (para 4-3).
- Outlines the resources for ammunition and explosives training (para 4-4).
- Establishes training prerequisites for instructors who provide ammunition and explosives training (para 4-5).
- Outlines the requirement for a standing operating procedures to be prepared for all ammunition and explosives operations (para 5-4).
- Establishes procedure for ammunition and explosives storage site licensing program (para 5-5).
- Outlines requirement for explosive safety site plans (para 5-6).
- Outlines requirements for ammunition and explosives Certificate of Risk Acceptance and certificates of compelling reason (para 5-7).
- Outlines the explosive safety submittal process (para 5-8).
- Establishes the requirements for ammunition and explosives awareness (para 5-9).

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Safety

Army National Guard Ammunition and Explosives Safety Standards

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By Order of the Secretaries of the Army and the Air Force:

**H STEVEN BLUM**  
Lieutenant General, USA  
Chief, National Guard Bureau

Official:

**GEORGE R. BROCK**  
Chief, Plans and Policy Division

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**History.** This is a new regulation.

**Summary.** This regulation provides policy and responsibilities for the Army National Guard (ARNG) Ammunition and Explosives (AE) Safety Standards. It prescribes standards and procedures for the use of ammunition and explosives. Provides force protection guidance for Commanders with an ammunition or explosives mission. It sets explosives safety standards to protect Army National Guard Personnel, the public, and the environment. It also sets forth procedures for transporting ammunition or explosives over the public highway.

**Applicability.** This guidance applies to all Army National Guard Personnel within the ARNG with responsibilities or involvement with any part of ammunition or explosives operations.

**Proponent and exception authority.** The proponent of this regulation is Chief, NGB-AVS-S. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation.

**Management control process.** This regulation is subject to the requirements of Army Regulation (AR) 11-2 and identifies key management controls that must be evaluated.

**Supplementation.** Supplementation of this regulation is prohibited without prior written approval of the Chief, National Guard Bureau (NGB-AVS-S).

**Suggested improvements.** Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to NGB-AVS-S (NGR 385-64), ARNG Readiness Center, 111 South George Mason Drive, Arlington, VA 22204-1382.

**Distribution:** A

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## **Chapter 1 General Provisions**

### **Section I Introduction**

#### **1-1. Purpose**

- a. Establish Army National Guard (ARNG) Ammunition and Explosive (AE) Safety policy and guidance for executing the Army AE Safety Program at the National Guard Bureau (NGB), State Joint Force Headquarters, ARNG Facilities, and ARNG units throughout the command.
- b. Identify procedures and formats for managing AE Storage Licenses, Site Plans, Safety Submittals, unexploded ordnance (UXO) Awareness & Avoidance Plans, Amnesty Programs, Handlers Training Certification Boards, and Safety Councils.
- c. Apply composite risk management (CRM) to AE operations.
- d. Sustain mission capability and validate Command assessment and management of AE Safety throughout the ARNG.
- e. This regulation incorporates and updates the ARNG AE policy in all previous All State Memorandums in this subject matter. Documents are archived as historical documentation of the ARNG Explosive Safety Program.

#### **1-2. References**

Required and related publications and referenced and prescribed forms are listed in Appendix A.

#### **1-3. Explanation of abbreviations and terms**

Abbreviations and terms used in this regulation are explained in the Glossary.

#### **1-4. Explosive Safety Policy**

It is ARNG policy to implement DoD 6055.9-STD, AR 385-10, DA Pam 385-64, DA Pam 385-30 and to:

- a. Manage and control AE exposures to the fewest essential personnel, to only necessary amounts of AE, and for limited periods of time that are consistent with practical efficient operations and accomplishing mission objectives.
- b. Ensure Soldiers are supported with appropriate AE awareness training, materials, instruction and AE Surveillance expertise.
- c. Perform CRM to reduce the injury, loss of life, and damage associated with the hazards of AE.
  - (1) CRM does not convey authority to violate (deliberate or not) local, state, national, or host nation laws.
  - (2) CRM does not justify disregarding regulatory restrictions and applicable standards.
  - (3) CRM does not justify bypassing risk controls required by law, such as life safety and fire protection codes, physical security, transport and disposal of hazardous material and waste, or storage of classified material. Commanders may not use mishap risk management to alter or bypass legislative intent.
  - (4) When restrictions imposed by other agencies adversely affect the mission, planners may negotiate a satisfactory course of action if the result conforms to the legislative intent.
- d. This regulation contains management control provisions and identifies key management controls that must be evaluated (see appendix B).

#### **1-5. Applicability**

The ARNG AE Safety Program, Policy and Guidance is for NGB, State Joint Force Headquarters, Mobilization Sites, Training Areas, Battalions, ARNG Soldiers mobilized and still under the control of the ARNG (not Title 10), United States Property and Fiscal Office (USPFO) facilities, armories, and Army Aviation Support Facilities. Policy applies to:

- a. All types of AE materials used, stored, handled and/or maintained at ARNG facilities.
- b. ARNG facilities and activities involving AE use, storage, issue, receipt, surveillance, test, disposal and/or maintenance.
- c. ARNG facilities and activities with exposure to other AE storage and work sites.
- d. ARNG units storing or using AE at locations other than those administered by the ARNG, if the regulation and policy standards of those installations are less stringent than those of the ARNG.
- e. Non-DoD Federal, State and Local Government agencies conducting operations and/or business with ARNG units or at ARNG sites and facilities.

- f. Non-DoD commercial activities conducting operations and/or business with ARNG units or at ARNG sites and facilities.
- g. General public conducting operations and/or business with ARNG units or at ARNG sites and facilities.

## **Section II**

### **Responsibilities**

Public law and military regulations assign various degrees of authority, responsibility and accountability at various levels with regard to the appropriate use, handling, transportation and/or storage of AE. The responsibilities identified here are not all inclusive but represent the principle responsibilities for ensuring a functional AE Safety Program.

#### **1-6. Chief, National Guard Bureau (CNGB)**

Authorizes and/or approves the execution of DoD Explosive Safety Standards in accordance with (IAW) DoD 6055.9-STD and applicable safety, environmental, transportation, and occupational health laws and regulations.

#### **1-7. Director, Army National Guard (DARNG)**

- a. Directs and approves ARNG AE Safety Program policy assuring compliance with applicable safety, environmental, and occupational health laws and regulations.
- b. Establishes ARNG policy and provides resources necessary to implement the ARNG AE Safety Program per AR 385-10, AR and DA Pam 385-64.
- c. Is the approval authority per this regulation or when DoD and Headquarters, Department of the Army (HQDA) explosive safety regulations require NGB commander approval.
- d. With regard to AE and use by non-DoD entities of real property under the jurisdiction of the NGB:
  - (1) IAW Title 10 U.S.C. 2692 and when NGB is delegated authority by the Assistant Secretary of the Army for Installations and Environment (ASA(I&E)); the DARNG determines the propriety of non-DoD storage, disposal and/or use of non-DoD AE when supported by an approved memorandum of agreement (MOA) that fulfills the requirements of Title 10 U.S.C. 2692.
  - (2) When ASA(I&E) has not delegated authority to make determinations IAW Title 10 U.S.C. 2692 (or delegated authority has expired) the DARNG (or his/her delegated authority) requests a determination from the Office of the ASA(I&E) regarding the propriety of non-DoD storage, disposal and/or use of non-DoD AE when deemed appropriate and supported by an approved MOA that fulfills the requirements of Title 10 U.S.C. 2692.

#### **1-8. Chief, Aviation and Safety Division (NGB-AVS)**

- a. Is the approval authority where DoD and HQDA request and/or require Army Service Component Commands/Direct Reporting Units/NGB review and/or approval.
- b. Executes the requirements of the DoD and HQDA AE Safety Program, developing written program policy and guidance. Has staff responsibility for the ARNG AE Safety Program, identifying and/or requiring:
  - (1) Resources necessary to effect policy and standards throughout the ARNG IAW AR 385-10 and DA Pam 385-64.
  - (2) Technically competent personnel (including requirements for Quality Assurance Specialist – Ammunition Surveillance (QASAS).
  - (3) Coordination with other HQDA staff agencies and the State Adjutant General on DoD and HQDA AE Safety Standards and the ARNG AE Safety Program.
- c. Chairs the ARNG AE Safety Council, identifying key issues and directing ARNG corrective actions.

#### **1-9 Chief Safety and Standardizations Branch (NGB-AVS-S)**

- a. Be responsible for evaluating and coordinating ARNG AE Safety staff actions and personnel.
- b. Coordinate issues and actions with DoD, HQDA, Federal and State Activities, Commands, Agencies, and Organizations.
- c. Briefs NGB, ARNG Command and staff, as necessary, to keep the leadership informed of explosive safety requirements and issues and the status of the ARNG AE safety program.
- d. Coordinate participation in the HQDA Explosive Safety Council meetings and actions submitted to the ARNG.
- e. Evaluate ARNG recommended actions regarding State Explosive Safety Programs and initiatives.

**1-10. Chief, Safety and Occupational Health Manager (NGB-AVS-SG)**

- a. Is the point of contact for all aspects of the Army Safety Program, including management of the ARNG AE safety program.
- b. Ensures that State Safety and Occupational Health Managers (SOHM) maintain effective explosives safety programs. Administrates the ARNG AE Safety Program resources, organization and staff.
- c. Ensures competent and qualified personnel initiate and review installation master plans, environmental assessments, Explosive Safety Submittals (ESS), Explosive Safety Site Plan (ESSP), AE safety certificates of risk acceptance for facilities and equipment. Provides the Chief AVS with essential risk assessment data regarding the deficient situation.
- d. Ensures that plans and budgets provide resources adequate to comply with AE safety requirements and to abate AE safety hazards, per AR 385-10. Assesses and evaluates to ensure the effectiveness of State AE Safety Programs.
- e. Coordinates QASAS support to States.

**1-11. Quality Assurance Specialist – Ammunition Surveillance (QASAS) (NGB-AVS-SG)**

- a. Senior QASAS assigned to the ARNG Readiness Center.
  - (1) Supervises and directs other QASAS, assigned to the ARNG.
  - (2) Develops ARNG specific policies and initiatives necessary to implement DoD and HQDA AE Safety Standards. Manages an AE safety program in accordance with DoD 6055.9-STD, AR 385-10, DA Pam 385-64, NGR 385-10, NGR 385-63, and this regulation.
  - (3) Staffs and coordinates key issues. Coordinates key issues incident to explosive safety, ammunition surveillance and inspection of AE located at Army National Guard installations IAW AR 702-6, AR 702-12 and SB 742-1.
  - (4) Provides technical expertise for explosives safety, ammunition surveillance and quality assurance to the ARNG staff.
  - (5) Reviews and/or initiates appropriate actions and/or recommends approvals for DoD, HQDA, Federal, State, and Commercial AE site plans, explosive safety submittals, certificates of risk acceptance, and initiatives affecting the ARNG.
  - (6) Prepares and coordinates ARNG responses and recommendations.
- b. QASAS at the ARNG Readiness Center and/or regionally at ARNG State Headquarters or Major Training Areas.
  - (1) Provides technical assistance to Safety Directors and Safety Managers as follows:
    - (a) Reviews and/or assists with preparation of AE storage licenses, safety site plans and safety submissions.
    - (b) Reviews and/or assists with preparation AE safety certificates of risk acceptance and certificates of compelling reasons.
    - (c) Reviews military construction designs for explosives facilities and compliance with AE safety standards.
    - (d) Conducts Safety inspections of AE handling, storage, use, maintenance, and disposal areas at least annually.
    - (e) Assists with the preparation and reviews of standing operating procedures (SOPs) and directives for compliance with AE safety requirements. Monitors AE uploads and other activities that involve transportation.
    - (f) Determines compliance of existing and planned facilities, both during and after construction.
    - (g) Reviews installation master planning process to ensure construction is not planned inside AE safety arcs.
  - (2) Serves as AE Safety and Ammunition Surveillance Manager and technical expert for AE safety, ammunition surveillance and quality assurance for the ARNG in the division or geographical region to which assigned. Directly supports the ARNG major training sites in region to which assigned.
  - (3) Indirectly supports other ARNG Installations (State Adjutant General Offices, State Military Departments, Aviation Flight Facilities, Armories, etc) facilities, organizations, and units in the region. Indirectly supports DoD components, non-defense federal agencies and activities, contractors, state, and local authorities that transport, store, handle and or use AE on ARNG managed installations and facilities. Monitors operations to ensure that Army units understand and comply with AE safety standards.
  - (4) Conducts AE safety training for unit personnel and monitors operations to ensure that Soldiers understand and comply with AE safety standards.
- c. QASAS Offices providing regional support IAW AR 5-9 are responsible for coordinating with States an MOA identifying specific support to be provided per AR 702-6, AR 702-12 and SB 742-1, frequency of support, and method of reimbursement.
- d. Monitor actions from DoD Explosive Safety Board (DDESB) surveys, findings, and recommendations.

**1-12. The State Adjutant General**

- a. Implements DoD 6055.9-STD, DA Pam 385-64, and this regulation.
- b. Publishes an AE Safety Program policy that addresses:
  - (1) Appointment of the SOHM as the individual of primary responsibility for the State AE Safety Program and to coordinate with NGB, HQDA, and DoD.
  - (2) AE Safety Councils, Committees or Certification Boards to provide command oversight and program review.
  - (3) Risk assessments, management controls, and risk acceptance authority.
  - (4) UXO Strategic Plans that identify hazards, safety awareness, and appropriate outreach programs.
  - (5) Application of AE Safety Standards.
  - (6) Non-DoD storage and use of AE IAW Title 10 USC 2692 and this regulation.
  - (7) AE storage licenses, site plans, construction requirements, explosive safety submissions, and hazards abatement.
  - (8) QASAS support.
  - (9) AE Handler Training Certification Boards to assess capabilities of AE Handlers, Drivers, and Supervisors.
  - (10) AE Safety Training and Certification Program to train and certify AE Handlers, Drivers, and Supervisors.
  - (11) AE amnesty program and restrictions on use of amnesty boxes or containers.
  - (12) Procedures for AE program throughout the command.

**1-13. State Safety and Occupational Health Manager (SOHM)**

- a. Be single point of contact for all aspects of the Army Safety Program, including management of the ARNG AE safety program.
- b. Ensures that competent and qualified personnel regularly review all AE operations, initiate, review, approve AE safety licenses, site plans, certificate of risk acceptance, and/or certificates of compelling reasons.
- c. Ensures that plans and budgets provide adequate resources and commit resources to execute the AE Safety Program.
- d. Assesses, evaluate and communicate effectiveness of their State AE Safety Programs.
- e. Convenes and coordinates Safety Councils, Committees, or Certification Boards as necessary to involve Commanders.

**1-14. Installation, Garrison, and/or Unit Safety Managers**

- a. Initiate, review, issue and/or submit AE storage licenses, safety site plans, safety submittals, certificates of risk acceptance and certificates of compelling reasons and coordinate with appropriate NGB, state and/or local staff elements (i.e.; Engineering, Logistics, Environmental, Training, Operations, and QASAS).
- b. Review garrison or installation master plans to determine compliance of facilities relative to AE sites.
- c. Perform, coordinate and document an annual safety inspection of all AE reload, production, handling, storage, use, maintenance, demilitarization, and disposal areas. Activities to monitor include:
  - (1) UXO safety awareness and education classes.
  - (2) AE storage, handling, and operating sites.
  - (3) AE transportation activities.
  - (4) AE ordnance disposal responses and training.
  - (5) Inspection of packing, packaging, and related inert materials for AE and residue.
  - (6) Weapon systems modifications, special exercises, and test programs.
  - (7) Planning for contingencies.
  - (8) Combat load and reload operations.
  - (9) AE safety training records for unit personnel.
  - (10) Public demonstrations to include "Boss Lift", "Organization Day", "Open House", and "4th of July" type activities.
- d. Investigate and report AE accidents, IAW DoD 6055.9-STD and AR 385-10.
- e. Coordinate AE safety program requirements with tenant unit Commanders. Provide concurrence on explosives safety programs of tenant units.

**1-15. Army National Guard Personnel**

- a. Stop unsafe acts detrimental to Army operations.
- b. Read, sign, and follow Commander approved SOPs for their AE operations.
- c. Comply with DoD guidelines, HQDA requirements, ARNG regulations, Commander approved SOPs and this regulation.
- d. Use all personal protective equipment and protective clothing provided IAW training, hazard analyses, work instructions, and as required by the task at hand. This includes seat belts during vehicle use.
- e. Report AE accidents, near misses, and hazards in the workplace as soon as possible to supervisors or leaders. Supervisor or leader will report the accident through the chain-of-command to the SOHM. SOHM will report accident to NGB-AVS-SG.
- f. Retain documentation of required training, licensure, qualification, experience and forward to official record.

## Chapter 2 Standards and Documentation

### 2-1. The ARNG AE Standards and Documentation

The ARNG Program is based upon the following standards and documentation:

- a. DoD 6055.9-STD, Ammunition and Explosive Safety Standards:
  - (1) Establishes uniform safety standards applicable to AE, to associated personnel and property and to unrelated personnel and property exposed to the potential damaging effects of an incident involving AE during development, manufacturing, testing, transportation, handling, storage, maintenance, demilitarization, and disposal.
  - (2) Mandates use by all DoD components.
  - (3) Prescribes calculated damage, casualty, and hazard assessment associated with blast, fragmentation, and fire for known quantities and separations of AE.
- b. AR 385-10, The Army Safety Program:
  - (1) Implements Army AE Safety Program, standards and management controls.
  - (2) Establishes and delegates authority for management of and deviations from Army standards.
- c. DA Pam 385-64, Ammunition and Explosives Safety Standards:
  - (1) Identifies and classifies the properties, hazards and risks associated with AE.
  - (2) Identifies approved management procedures and controls for mitigating hazards.
- d. FM 5-19, Composite Risk Management:
  - (1) Provides instructions, worksheet and format for preparing DA Form 7566, Composite Risk Management Worksheet.
  - (2) Identifies theory and basics for applying CRM to every military decision making process.
- e. DA Pam 385-30, Mishap Risk Management:
  - (1) Provides guidance and examples for implementing mishap risk management.
  - (2) Complements information provided in FM 5-19.
- f. DA Pam 385-65 Explosives/Toxic Chemical Safety Site Planning:
  - (1) Prescribes Army policy on AE Safety Site Planning, Chemical Site Submissions, and AE Site Submissions.
  - (2) Implements the site plan safety requirements of DoD 6055.9-STD.

### 2-2. The ARNG AE Central Register

- a. Documents the historical records of the ARNG AE Safety Program.
  - (1) ARNG AE Central Register is available through Guard Knowledge Online (GKO). Access to State documents are limited to SOHM and others designated by the State Adjutant General.
  - (2) Records should mirror those maintained by each State.
- b. Each State Central Register includes (as required):
  - (1) State AE Safety Program Policy and Guidance.
  - (2) State AE Safety Program Documents.
    - (a) Certificates of Risk Acceptance and Certificates of Compelling Reasons.
    - (b) Range deviations and approvals.
    - (c) AE Safety Site Plans and approvals.
    - (d) AE Safety Submittals.
    - (e) Fire and Emergency Response Plans associated with AE incidents.

- (f) AE Safety Council Charters and Minutes.
- (g) AE Certification Board Appointments and Certification Documents.
- (h) Approved AE SOPs.
- (3) Point of contact listing for SOHM, QASAS, Explosive Ordnance Disposal (EOD), Industrial Hygiene, and Occupational Health.
- (4) Real Property Inventory Listings for AE storage structures, operating sites, and ranges.
- (5) Global information system (GIS) Map(s) depicting:
  - (a) Training ranges.
  - (b) Impact areas.
  - (c) UXO restricted areas.
  - (d) Explosive safety quantity-distance (QD) arcs.
- c. It is ARNG intent to use the AE Central Register to distribute and coordinate ARNG standards, minimize duplication of effort and facilitate execution of the Army AE Safety Program throughout the ARNG.

### Chapter 3

#### ARNG AE Safety Program Executive Process

##### 3-1. ARNG AE Safety Program Execution.

- a. Each State Adjutant General shall approve and distribute its AE policy and guidance on implementing the Army Explosive Safety Program throughout the command in writing. As a minimum:
  - (1) Endorse and adopt an Explosive Safety Program that implements the policy, guidance, and standards contained in DoD 6055.9-STD, AR 385-10, DA Pam 385-64 and this regulation.
  - (2) Prepare additional State policies and guidance as attachments.
  - (3) Forward completed document to NGB-AVS-SG for inclusion in the ARNG AE State Register.
- b. A change in the State Adjutant General will require renewal of command endorsement and adoption of Army AE Program.

##### 3-2. ARNG AE Program Evaluation

- a. Regular evaluations determining compliance with AE standards are a function of DoD, HQDA, NGB and ARNG Safety and Logistics Supply Discipline.
- b. The specific surveys and technical assistance visits that identify findings and observations that form the basis for assessing the ARNG AE Program are:
  - (1) DDESB surveys and consultations.
    - (a) Periodic visits to Army installations at 3-4 year intervals.
    - (b) Performed by DDESB under the provisions of AR 385-10.
    - (c) Findings are returned through Director of Army Safety, U.S. Army Technical Center for Explosive Safety (USATCES), NGB-AVS, State Adjutant General, and SOHM to the Installation Commander.
    - (d) An annual Corrective Action Report, Plan, Annual Status Report is required to NGB-AVS.
  - (2) HQDA Explosive Safety Assistance Visits.
    - (a) Periodic technical assistance visits at 3-4 year intervals.
    - (b) Performed by USATCES under the provisions of AR 385-10.
    - (c) Findings & recommendations are returned to Installation Commander.
  - (3) Worldwide Ammunition Review and Technical Assistance Program.
    - (a) Conduct visits to ammunition supply points (ASPs) at the major training areas every 2-3 years or upon request for technical assistance visits.
    - (b) Are performed by the Logistics Review and Technical Assistance Office (LRTAO) of the U.S. Army Defense Ammunition Center (USADAC) under the provisions of AR 700-13.
    - (c) Findings and recommendations are returned through HQDA and NGB-ARL, State Adjutant General to the Installation Commander. Information copies will be provided to NGB-AVS-SG.
    - (d) Requires a Corrective Action Report, Plan, Annual Status Report to NGB-ARL, LRTAO, and HQDA.
    - (e) Review includes survey of explosive safety requirements of DA Pam 385-64.
  - (4) State Safety Office AE Inspections and AE License Review.
    - (a) Visit annually each ammunition storage/operating locations.
    - (b) Performed by SOHM or designated authority under the provisions of DA Pam 385-64.

(c) Findings and recommendations may be recorded in RCAS SOH report and provided to commanders. Copy of Explosive Storage Licenses are provided to NGB-AVS for inclusion in AE Central Register IAW paragraph 2-2 above.

(5) NGB Command Logistics Review Team will:

(a) Visit ammunition storage and operating locations.

(b) Be performed by NGB-ARL under the provisions of AR 710-2 and DA Pam 710-2-1.

(c) Review explosive safety requirements of DA Pam 385-64 and ammunition surveillance procedures of SB 742-1.

(d) Document findings and recommendations to NGB-ARL and provide information copies NGB-AVS-SG.

(e) Require corrective Action Report, Plan, Annual Status Report is required to NGB-ARL and provide copy to NGB-AVS-SG.

(6) QASAS Program will:

(a) Visit all ammunition storage/operating locations.

(b) Provide technical assistance under the provisions of DA Pam 385-64, SB 742-1, AR 5-9, and this regulation.

(c) Document findings & recommendations to Installation Commander and provide a copy to the SOHM.

(d) Follow up recurring findings with SOHM, State Adjutant General, NGB-AVS, and NGB-ARL.

### 3-3. ARNG AE Program Assessment

a. Assessing AE Program performance, findings, observations and deviations from standards is a function of the Safety Council and NGB-AVS-S.

(1) Safety Chairpersons will appoint an AE Standards committee to assess their AE Safety Program.

(2) The State SOHM (or their delegated authority) as the single point of contact for all aspects of the Army Safety Program, including management of the AE safety program will:

(a) Chair committee coordinating necessary interactions.

(b) Document accomplishments, corrective actions, plans, and milestones regarding DDESB and/or HQDA observations and findings in Safety Council minutes.

(c) Document status of DDESB, HQDA, NGB AE observations, findings and recommendations on the Safety Council agenda until their resolution and/or closure as determined by NGB and HQDA.

(d) As a minimum, review and document assessment of the AE Safety Program using the ARNG AE Safety Assistance Visit Checklist (Available on GKO in AE Central Register/Document Library/State/Annual Assessment).

(e) Forward AE Safety Assistance Visit checklist results to Regional Safety Councils for discussion and coordinating strategies.

b. ARNG AE program initiatives and process improvements are functions of the ARNG Regional Safety Councils and NGB-AVS-SG.

(1) Safety Councils with key issues regarding DoD, HQDA, and NGB AE standards shall submit initiatives, recommendations, comments to their Regional Safety Council chairperson.

(2) Regional Safety Council chairpersons may appoint an AE Standards Committee to review AE assessments and AE safety assistance visit checklists, identifying key issues requiring action/guidance from NGB and/or HQDA levels.

c. Issues not requiring Regional Safety Council involvement may be forward directly to NGB-AVS-S Safety and Occupational Health Manager or QASAS as appropriate.

d. NGB-AVS-S may work directly with SOHM, Committee and Council chairs as necessary to obtain resolution and closure for all DDESB, HQDA, and NGB findings of non-compliance with AE Safety Standards.

### 3-4. ARNG AE Program Development

a. The program development process is a function of the NGB-AVS-SG SOHM and QASAS.

(1) NGB-AVS SOHM (or their delegated authority) as the single point of contact for all aspects of the ARNG Safety Program, including management of the AE safety program will:

(a) Resource and coordinate an AE Safety Register Server, with redundancy and availability on GKO.

(b) Present to the NGB and ARNG Safety Council the status and well being of the AE Safety Program.

(c) Administer QASAS to support NGB Regional AE Committees issues.

(2) The ARNG Senior QASAS will manage data entered into the AE Safety Register.

(a) Identify systemic issues that warrant NGB and ARNG Safety Council action.

(b) Assist AE Safety Committees with resolving DDESB and HQDA findings and deficiencies.

- (c) Coordinate with USADAC, HQDA, and DDESB to identify ARNG initiatives and requirements.
- b. The ARNG Safety Council as necessary shall appoint an AE Safety Committee to identify key issues, coordinate interaction with appropriate ARNG-RC leadership and develop alternatives and initiatives that effectively implement the Army AE Safety Program.

## Chapter 4

### ARNG AE Safety Training Program and Strategy

Ammunition is a complex commodity that is unique from any other. Due to its inherent hazards and its critical importance to our National Defense, all persons living, working in or around ammunition stockpile and explosives operations must be knowledgeable of hazards, characteristics, and capable of properly responding to emergencies and communicating hazards to others. Most importantly, there must be a strategy for sustaining this knowledge and awareness over time and as personnel change.

#### 4-1. Function Specific Training Purpose and Scope

- a. Purpose:
  - (1) Ensure that only trained, knowledgeable, and authorized personnel handle, transport, and/or store AE.
  - (2) Identify for Army National Guard Personnel living and working in and around AE operations:
    - (a) The available training appropriate for their specific responsibilities, activities, purposes, and/or job functions that comply with DoD regulatory requirements and adhere to safety guidelines prescribed by the Department of Transportation (DOT).
    - (b) The training, certification, and documentation process necessary to sustain and demonstrate appropriate safety awareness, accountability and operational competence.
    - (3) An effective training program that offers ARNG Soldiers documented training acknowledged and recognized by all of DoD and HQDA.
    - (4) All personnel who transport AE in a vehicle will be licensed for that vehicle and will have completed all training requirements outlined in this regulation for the transportation of AE and hazardous material.
- b. The scope of this training program extends to:
  - (1) The public, military community, installation staff, contractors, and families.
  - (2) Specific Army National Guard Personnel staff that as a function of their work are involved with AE or support AE operations.
  - (3) Occupational specialists (Army National Guard Personnel) that have management or supervisory oversight for AE operations.

#### 4-2. Function Specific Training Certification

- a. Certification levels are established to facilitate training, identify requirements, document compliance and provide commanders and managers a basis for assigning responsibilities and mitigating hazards and risk.
  - (1) Table 4-1 identifies appropriate courses, descriptions, and a web address for enrollment information.
  - (2) Table 4-2 identifies for each certification level the recommended course, frequency and timing of training.
- b. The ARNG AE Safety Program certification levels and those persons / positions to which they may apply are as follows:
  - (1) LEVEL I - Commander, Installation Personnel, Soldier, Family, Civic Leader, Public Stakeholder (Schools), Environmental Officer/Technician/First Responder (Fire/Health), Security Manager (Physical Security and Law Enforcement).
  - (2) LEVEL II-AH - Armorer (w/Ammo Storage and/or Transportation Responsibilities) and Supply Technician (w/Ammo Storage and/or Transportation Responsibilities).
  - (3) LEVEL II-D - Vehicle Operator (w/Ammo Storage and/or Transportation Responsibility).
  - (4) LEVEL III-HAZ - Ammunition HAZMAT Shipper Certification Responsibility.
  - (5) LEVEL III-TS-P - Ammunition Technical Specialists – “*PRIMARY INSTRUCTOR*” for NGB AE (16 hour) Safety Course (Presentation, Testing, Documentation, Certification of Ammunition Handlers, and Drivers).
  - (6) LEVEL IV-SPV - Ammunition Supply Point Managers and/or Supervisors.
  - (7) LEVEL IV-AHD - Ammunition Supply Point Handlers, Technicians, Ammunition Vehicle Operators (with Inventory, Requisition, Receipt, Issue, Turn-In, and Storage Responsibilities).
  - (8) LEVEL V-I - Ammunition Supply Point Inspectors.
  - (9) LEVEL V-R - Range Control Officer or Technician.



- (10) LEVEL V-S - Safety Managers and Specialists.
- (11) LEVEL V-Q - NGB-AVS QASAS (w Ammunition Specific Training Responsibilities).
- (12) LEVEL V-A - CERTIFICATION LEVEL V-(A) – Class V Manager.

#### 4-3. ARNG AE Function Specific Training and Certification Program

##### a. General:

- (1) State Adjutant General must ensure that only certified personnel have authority to perform operations involving munitions and explosives.
- (2) Certification training is required for munitions safety awareness, technical expertise, and operational proficiency.
- (3) A comprehensive program for personnel involved in handling AE includes accountable officers, supply technicians, weapons technicians, aviation life support equipment technicians, ammunition vehicle drivers, forklift operators, ammunition inspectors, inventory specialists, warehouse persons, ASP Supervisors, facilities engineers, fire fighters, emergency response technicians, range control technicians, etc.
- (4) A certification board shall periodically review training accomplished and performance records of employees to ensure that those working with AE are adequately trained to perform their jobs safely. Suspension and/or decertification of employees shall occur when employees repeatedly fail training and/or violate approved operating procedures such that the health and safety of others is compromised.
- (5) Certification required by this regulation does not negate basic job requirements established by civilian personnel regulations or the military occupational specialty.
- (6) This policy applies to contractor personnel who use ARNG ranges for development and/or testing of military weapons and munitions or are performing range maintenance or clearance work.
- (7) This program does not circumvent or replace local training programs required by other regulations in areas of job orientation, safety, standing operating procedures, or basic work principles provided to all employees.
- (8) Military personnel assigned to a specific short term project and working under close supervision of certified personnel, shall have interim certification training.

##### b. Explanation of terms:

- (1) Certification is a process to identify and control hazardous exposures. Used appropriately certification of personnel ensures that those employees at these exposures have the required training and/or background to work safely.
- (2) Certification Board:
  - (a) Will be established IAW Safety and Occupational Health Council/AE Committee guidelines.
  - (b) Certification boards will be established where most appropriate and manageable. (State installation, military department, facility, organization, training site, throughout the command).
  - (c) Board membership will be by official appointment. (See example at Figure 4-1)
  - (d) The Certifying Official may be the local training site or activity Commander or other designated representative. This official shall not be a certification board member.
  - (e) Interim Certification is certification for employees in an on the job training status who have been assigned to a covered position and is in the process of receiving mandatory and required training IAW Table 4-1 consistent with the requirements of their position description. This certification shall not be valid for a period greater than 6 months. An interim certification shall only be granted to a specific individual once. Individual must receive on the job training under close supervision by an AE certified person. Job duties must be per a command approved SOP to which individual and supervisor have read and signed.

##### c. Responsibilities.

- (1) Commanders of training sites or facilities with explosives and/or with munitions missions shall:
  - (a) Ensure the provisions of this regulation are applied to all covered employees.
  - (b) Serve as the certifying official (or appoint an appropriate designee). The certifying official must be in the military grade of O-4, CW4, or civilian equivalent or above.
  - (c) Encourage an atmosphere in which formal training is desirable for both supervisory and non-supervisory personnel.
  - (d) Provide for presentation of Certificates of Training to certified employees. The Commander should personally present certificates to individuals certified under this program.
- (2) Each certification board is responsible for:
  - (a) Determining which course (s) must be attended by individuals involved in AE planning and operations.
  - (b) Recommending appropriate action regarding personnel to the certifying official for approval.

(c) Ensuring that copies of all applicable actions are maintained in appropriate personnel and supply support activity records.

(d) The board can add requirements to the certification program; however, it may not reduce requirements contained in this policy.

(3) Training site or facility management and supervisory personnel shall:

(a) Ensure all covered employees are kept knowledgeable of current procedures and standards applicable to the safe and proper performance of their duty.

(b) Review records of certified employees and, if circumstances warrant, recommend retraining or additional training in order for employees to maintain current certification and/or perform duties IAW an approved SOP.

(c) Ensure that employees are responsible for the accuracy and status of their training. Should an employee not have required training for a position to which assigned, they shall immediately notify in writing thru their supervisor the certification board for appropriate action.

d. Policy.

(1) The AE Function Specific Training and Certification Program is mandatory for all Army National Guard organizations and personnel who work with AE in the course of their daily work.

(a) All employees in positions working with AE must be certified based on successful completion of some or all of the training courses listed in table 4-1.

(b) Number and type of courses attended shall be consistent with duties and responsibilities of job, as outlined by the local certification board.

(c) Mandatory training is identified for mission essential positions that require sufficient knowledge of AE without which safety and mission objectives are compromised.

(d) Personnel must have either interim certification or certification prior to unaccompanied assignment to AE operations

(2) Safety and Ammunition career employees who are certified through career program training may be certified by local Commander without duplication of training required by this regulation. (Note: This does not apply to recurring training required by law or for specific certifications.)

(3) Covered personnel are required to receive training as directed by the local certification board. Specific courses and combinations of courses are identified in Table 4-1.

(4) Attainment of certification, within specified time frames, shall be a condition for employment and shall be clearly stated on all applicable job announcements and descriptions as well as applicable training agreements.

(5) Personnel assigned exclusively to inert ammunition operations must be Level I certified. They shall also be trained in the performance of their jobs per a command approved SOP to which each operator and supervisor have read and signed.

(6) Permanent personnel assigned to an ASP without an assigned local QASAS are strongly encouraged to request on the job training with the QASAS organizations at McAlester AAP, OK or Hawthorne AAD, NV. Personnel will request coordination assistance through Senior QASAS at NGB-AVS-S.

(7) Training and certification directed by this regulation implements CFR requirements (e.g. Title 29 CFR, Occupational Safety and Health Act, Title 40 CFR, Protection of the Environment, Title 49 CFR, Transportation).

e. ARNG AE Function Specific Training and Certification Program Formats.

(1) Certification Boards will document their actions using appropriate forms and documents.

(2) Acceptable formats are provided at Figure 4-2.

#### **4-4. ARNG Function Specific Training Resources**

a. Most of Table 4-1 courses are available as WWW based, computer based training and can be accomplished at home station. A few resident courses must be completed at the U.S. Army Defense Ammunition Center, McAlester OK. Most will eventually be available at the LaVern Weber Professional Educational Center, Little Rock, AR.

b. NGB-AVS-SG is currently proponent of the ARNG Ammunition and Explosive Safety Handlers and Transporters HAZMAT Safety Certification Course.

(1) Classes are tailored to the ARNG traditional Soldier's schedule.

(2) Course is designed to sustain AE awareness and operational readiness at the unit level, to qualify and certify unit ammunition handlers, drivers, and safety personnel on the Army specific requirements associated with possessing, securing, handling, storage, expenditure, inventory and reconciliation of ammunition, explosives, packaging residue, UXO, and any related inert items.

(3) Army QASAS (assigned to NGB-AVS) schedule, train, test, and document qualifications by issuing DD Form 1902 "Qualification of Training – Ammunition Driver/Handler" to those authorized and completing training.

(4) ARNG organizations and major training sites may request qualification of their Ammunition Technical Specialists to become “*PRIMARY INSTRUCTOR*” of this course.

#### 4-5. Primary Instructors

Primary Instructors Pre-Requisite, Table 4-1 LEVEL III-TS-P Certification.

a. Regional NGB-AVS QASAS are the responsible *Chief Instructors* for the conduct of the A&E Handlers/Transporters HAZMAT Safety Certification Course.

b. As proponent for the NGB-AVS course, they validate the course material to ensure that the course content remains current and all inclusive of changing requirements. Course “SmartBook” with agenda and required training lessons is available for download (20 Meg PDF file) on the GKO in the AE Central Register.

c. Each *CHIEF INSTRUCTORS* may certify additional primary instructors of the A&E Handlers/Transporters HAZMAT Safety Certification Course. Primary Instructors may not certify additional primary instructors.

d. “*PRIMARY INSTRUCTOR*” of the NGB-AVS-S A&E Handlers/Transporters HAZMAT Safety Certification Course shall be Soldiers selected by their respective States to acquire the necessary pre-requisites to teach this course. These instructors must successfully complete the following requirements before receiving certification from a Chief Instructor.

(1) Must possess a related military occupation specialty or have successfully completed Intro to Ammunition (AMMO-45) and Technical Ammunition (AMMO-60) and carry the rank of at least a staff sergeant (E-6).

(2) Must successfully complete the following A&E related courses: Naval Motor Vehicle & Rail Car Inspection Course (AMMO -51) in residence; Technical Transport of HAZMAT (AMMO-62) in residence; Ammunition Storage (AMMO-12) in residence; Class V Issue, Turn-in, and Residue Process Procedures (AMMO-64) distance learning and Military Munitions Rule (AMMO-68) distance learning.

(3) Must attend and complete a NGB A&E Handlers/Transporters HAZMAT Safety Certification Course conducted by a NGB-AVS-S QASAS (Chief Instructor).

(4) Receive certification by a QASAS (Chief Instructor) during the conduct of their first iteration of instructing the NGB A&E Handlers/Transporters HAZMAT Safety Certification Course. “*PRIMARY INSTRUCTOR*” will provide the Chief Instructor with a binder that contains copies of all course certificates, a training schedule for the conduct of the 2-day course, and a copy of certification issued by the respective state’s certification board. During this final step, the Chief Instructor will also validate the course materials (to include presentation slides, student hand-outs, video presentations, and examination materials).

(5) “*PRIMARY INSTRUCTOR*” is provided:

(a) Certification as a primary instructor.

(b) Regular updates to the presentation slides, student hand-outs, video presentations, and examination materials.

(c) Authority to request printing/shipping of the course “SmartBook” to training locations from NGB-AVS-S.

**Table 4-1**  
**Recommended DoD/Army/ARNG AE Training**

| <u>COURSES</u> | <u>DESCRIPTIONS</u>  | <u>Course Enrollment Information</u>  |
|----------------|--|---|
| UXO            | UXO Safety Awareness Training (Unit/Installation/Public Versions)  | <a href="https://www.denix.osd.mil/">https://www.denix.osd.mil/</a>   |
| GEN HZMT       | Appropriate HAZMAT Communications and Safety Awareness   | Commercial Videos and Unit Training Materials   |
| AMMO 45        | Introduction to Ammunition   | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 67        | Hazmat Familiarization and Safety in Transportation  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 64-1      | Class V – Issue, Turn-In Procedures for Using Units  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 64-2      | Class V – Issue, Turn-In Procedures for ASPs   | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 62*       | Technical Transportation of Hazardous Materials (Re-certification every two years)   | <a href="https://www3.dac.army.mil/AS/">https://www3.dac.army.mil/AS/</a>   |
| AMMO 43-DL     | Inter-modal Dry Cargo Container (Re-certification every four years )   | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 63-DL     | U.S. Army Explosives Safety  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 68        | Military Munitions Rule  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 54        | Risk Management and Preparation of Standing Operating Procedures for AE Operations   | <a href="https://www3.dac.army.mil/AS">https://www3.dac.army.mil/AS</a>   |
| AMMO 60        | Technical Ammunition   | <a href="https://www3.dac.army.mil/AS/">https://www3.dac.army.mil/AS/</a>   |
| AMMO 12        | Ammunition Storage   | <a href="https://www3.dac.army.mil/AS/">https://www3.dac.army.mil/AS/</a>   |
| AMMO 13        | Ammunition Supply and Inventory  | <a href="https://www3.dac.army.mil/AS">https://www3.dac.army.mil/AS</a>   |
| AMMO 31        | Environmental Considerations for Ammunition Personnel  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| AMMO 28        | Electrical Explosives Safety for Army Facilities   | <a href="https://www3.dac.army.mil/AS/">https://www3.dac.army.mil/AS/</a>   |
| AMMO 51**      | Naval Motor Vehicle & Rail Car Inspection  | <a href="http://ammo.okstate.edu/">http://ammo.okstate.edu/</a>   |
| SAAS MOD       | Standard Army Ammunition System – Modified   | <a href="http://www.pec.ngb.army.mil">http://www.pec.ngb.army.mil</a>   |
| TAMIS R        | Training Ammunition Management Information System  | <a href="https://tamis.army.mil/PublicSite/mainframe.asp">https://tamis.army.mil/PublicSite/mainframe.asp</a>             |
| RNG SFT II     | Range Safety Level II  | <a href="http://www.pec.ngb.army.mil">http://www.pec.ngb.army.mil</a>   |
| RNG OPS        | Range Operations Course  | <a href="http://www.pec.ngb.army.mil">http://www.pec.ngb.army.mil</a>   |
| GIS            | GIS for Range Staff and/or GIS for Explosive Site Plan   | <a href="http://www.pec.ngb.army.mil">http://www.pec.ngb.army.mil</a>   |
| ARNG AE        | ARNG Explosive Safety Program Smartbook Training – Handlers/Drivers Specific or equivalent training that meets the requirements of AR 600-55, AR 190-11, DA Pam 385-64, CFR 49 Transportation and Defense Transportation Regulation Part II. | <a href="https://gkoportal.ngb.army.mil/C6/AVS-SG/default.aspx">https://gkoportal.ngb.army.mil/C6/AVS-SG/default.aspx</a> |

\* Recommend AMMO-67 as a pre-requisite to AMMO-62

\*\* This course is available as instructor led-(classroom) training or online.

**Table 4-2**  
**Army National Guard Ammunition & Explosive Function Specific Training Matrix**

|   | UXO | GEN        | AMMO | AMMO | AMMO                                       | AMMO | AMMO  | AMMO  | AMMO | AMMO | AMMO |
|---|-----|------------|------|------|--|------|-------|-------|------|------|------|
| LEVEL   | GEN | HAZ<br>COM | 45   | 67   | 64<br>(Both)                               | 62   | 43-DL | 63-DL | 68   | 54   | 60   |
| I   | R1* | M*         | D    |      |  |      |       |       |      |      |      |
| II-AH   | R1* | M*         | M    | M    | M*   |      |       |       |      |      |      |
| II-D  | R1* | M*         | M    | M    | R-1*                                       |      |       |       |      |      |      |
| III-HAZ   | R1* | M*         | M    | M    | R-1*                                       | M    | R-2*  |       |      |      |      |
| III-TS-P  | R1* | M*         | D    |      | M  | M    |       |       | M    |      |      |
| IV-SPV  | R1* | M*         | M    | M    | M  | R-1  | D     | D     | R-1  | R-1  | R-1  |
| IV-AHD  | R1* | M*         | M    |      | M  | R-3  | D     | D     | R-2  | D    | R-2  |
| V-I   | R1* | M*         | M    |      | M  | M    | D     | D     | R-2  | R-3  | R-1  |
| V-R   | R1* | M*         | D    |      |  |      |       |       |      | R-3  |      |
| V-S   | D*  | D*         | D*   | D*   | D*   |      |       | D*    |      | D    |      |
| V-Q   | R1* | M*         | D    |      | M  | R-1* | R-2*  | D*    | M    | D    |      |
| V-A   | R1* | M*         | M    |      | M  | D    |       |       | R-1  | R-2  |      |
| M = Complete within 90 days                       |     |            |      |      | R-3 = Complete within 3 <sup>rd</sup> year |      |       |       |      |      |      |
| R-1 = Complete within 1 year                      |     |            |      |      | D = Professional Development               |      |       |       |      |      |      |
| R-2 = Complete within 2 <sup>nd</sup> year.       |     |            |      |      |  |      |       |       |      |      |      |
| (*) = Periodic Refresher/Recertification Required |     |            |      |      |  |      |       |       |      |      |      |

**Table 4-2**  
**Army National Guard Ammunition & Explosive Function Specific Training Matrix (Cont)**

| LEVEL   | AMMO | AMMO | AMMO | AMMO | AMMO                                       | SAAS | TAMIS | RNG    | RNG | ARNG | ARNG |
|---|------|------|------|------|--|------|-------|--------|-----|------|------|
|   | 12   | 13   | 31   | 28   | 51   | MOD  | R     | SFT II | OPS | GIS  | AE   |
| I   |      |      |      |      |  |      |       |        |     |      |      |
| II-AH   |      |      |      |      | D  |      |       |        |     |      | R-1* |
| II-D  |      |      |      |      |  |      |       |        |     |      | R-1* |
| III-HAZ   |      |      |      |      |  |      | R-1   |        |     |      | R-1* |
| III-TS-P  | M    |      |      |      | M  |      | M     |        |     |      | M    |
| IV-SPV  | R-2  | R-2  | D    | R-2  | D  | R-1  | M     |        |     |      | R-3  |
| IV-AHD  | R-2  |      | D    | D    | R-3  |      | D     |        |     | D    | R-1  |
| V-I   | R-2  |      | D    | D    | R-3  | R-2  |       |        |     |      |      |
| V-R   |      |      |      |      |  |      |       | R-1    | M   | R-2  | D    |
| V-S   |      |      |      |      |  |      |       |        |     | D    | D    |
| V-Q   |      |      | D    |      |  | R-3  | R-1   | R-3    | R-3 | R-2  |      |
| V-A   |      | D    |      |      |  | R-1  | M     |        |     |      | D    |
| M = Complete within 90 days                       |      |      |      |      | R-3 = Complete within 3 <sup>rd</sup> year |      |       |        |     |      |      |
| R-1 = Complete within 1 year                      |      |      |      |      | D = Professional Development               |      |       |        |     |      |      |
| R-2 = Complete within 2 <sup>nd</sup> year.       |      |      |      |      |  |      |       |        |     |      |      |
| (*) = Periodic Refresher/Recertification Required |      |      |      |      |  |      |       |        |     |      |      |

|  |      |                                    |
|--|------|------------------------------------|
| (STATE) ARMY NATIONAL GUARD<br>JOINT FORCE HEADQUARTERS<br>XXXXXX TRAINING SITE<br>1234 Honorary Drive<br>The City, State, Zip Code  |      |                                    |
| XXXXX-XXX (385)  |      | Date:                              |
| MEMORANDUM FOR : SEE DISTRIBUTION  |      |                                    |
| SUBJECT: Appointment for Ammunition and Explosive Safety Certification Board   |      |                                    |
| 1. Effective <<Date>> the following personnel are appointed to the Ammunition and Explosive Safety Certification Board:  |      |                                    |
| NAME   | RANK | APPOINTMENT AS                     |
|  |      | <b>Chairperson</b>                 |
|  |      | <b>Vice Chairperson</b>            |
|  |      | <b>Safety Manager</b>              |
|  |      | <b>Environmental Manager</b>       |
|  |      | <b>Director of Logistics</b>       |
|  |      | <b>Supply &amp; Services Chief</b> |
|  |      | <b>ASP Manager</b>                 |
|  |      | <b>Supporting QASAS</b>            |
|  |      | <b>Range Control Officer</b>       |
|  |      | <b>Command Sergeant Major</b>      |
|  |      | <b>Executive Officer</b>           |
|  |      | <b>Tenant Representative</b>       |
|  |      | <b>USPFO Representative</b>        |
|  |      | <b>Other Representative</b>        |
| 2. Authority: Code of Federal Regulations, Title 49 (49 CFR) Transportation; DoD Regulation 4500.9-R Defense Transportation Regulation (Part II – Cargo Movement & Part III – Mobility); DA Pam 385-64 Ammunition and Explosive Standards; NGR-386-64 ARNG Ammunition & Explosive Safety Program Policy and Implementation Guidance. |      |                                    |
| 3. Purpose: To ensure that only trained, knowledgeable, and authorized personnel are permitted to perform operations involving munitions and explosives  |      |                                    |
| 4. Duration of Appointment: Until rescinded  |      |                                    |
| 5. Special Instructions:   |      |                                    |
| FOR THE ADJUTANT:  |      |                                    |
|  |      | //SIGNED//                         |
| DISTRIBUTION:  |      |                                    |

Figure 4- 1. Training Certification Board Appointment Format

| <b>ARNG Explosive Safety Program Function Specific Training</b> |                    |                                  |                              |                                  |       |
|---|--------------------|----------------------------------|------------------------------|----------------------------------|-------|
| Position Title:   |                    |                                  | Position Description Number: |                                  |       |
|   |                    |                                  | Target Certification Level:  |                                  |       |
| Grade/Rank/ & Duties:   |                    |                                  |                              |                                  |       |
| Employee:   |                    | LAST:                            | FIRST:                       | MI:                              |       |
| Training Plan   |                    |                                  |                              |                                  |       |
| Course #  | Required Frequency | Training Dates                   |                              |                                  |       |
|   |                    | Required                         | Completed                    | Next Due                         |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
|   |                    |                                  |                              |                                  |       |
| <input type="checkbox"/> Continued on page 3                    |                    |                                  |                              |                                  |       |
| Recommendation  |                    | <input type="checkbox"/> Certify |                              | <input type="checkbox"/> Rescind |       |
| <input type="checkbox"/> 90 day                                 |                    | <input type="checkbox"/> 180 day |                              | <input type="checkbox"/> 1 year  |       |
|   |                    |                                  |                              | <input type="checkbox"/> 2 year  |       |
|   |                    |                                  |                              | <input type="checkbox"/> 3 year  |       |
| NAME  | SIGNATURE          | TITLE                            | CONCUR                       | NONCONCUR                        | DATE  |
| <b>SUPERVISOR</b>   |                    |                                  | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
|   |                    | <b>QASAS</b>                     | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
| <b>SAFETY MANAGER</b>   |                    |                                  | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
|   |                    | <b>DOL</b>                       | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
| <b>CSM</b>  |                    |                                  | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
|   |                    | <b>XO</b>                        | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
|   |                    |                                  | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
| <b>ENCUMBENT</b>  |                    |                                  | <input type="checkbox"/>     | <input type="checkbox"/>         |       |
| <b>Certifying Official</b>                                      |                    |                                  |                              |                                  |       |
| _____   | _____              | _____                            | <input type="checkbox"/>     | <input type="checkbox"/>         | _____ |
| TITLE   | NAME               | SIGNATURE                        | CONCUR                       | NONCONCUR                        | DATE  |

Figure 4- 2. Training Certification Format (Front)









## Chapter 5

### AE Safety Program Process Awareness

#### 5-1. AE Safety Program Controls and Process Management

- a. AE materials are classified as Hazardous Materials Class 1–Explosives and are divided into six divisions according to the severity and nature of their hazards.
- b. Mitigating the risks associated with the different hazards are primarily done by:
  - (1) Limiting AE exposure (what is exposed, who is exposed, and for how long).
  - (2) Managing and controlling the processes.
- c. ARNG guidance and function specific controls used to mitigate AE risks and hazards are as follows.

#### 5-2. Hazardous Materials, Regulation and Composite Risk Management

- a. AE are regulated by law and classified as Hazardous Materials Class 1–Explosives, divided into six divisions according to the severity and nature of their hazards.
- b. AE hazard identification, assessment, mitigation, and program management are integral to AE Safety.
  - (1) CRM has been used extensively to establish existing DoD and HQDA Explosive Safety Standards.
  - (2) CRM enhances decision making, although haphazard use may actually increase risks and amplify hazards.
  - (3) This chapter explains current AE Safety Program Controls and Procedures.

#### 5-3. Identification and Assessment of AE Hazards

- a. Chapter 2 above states the DoD and HQDA specific references that identify and assess the various hazards associated with AE. These references also include specific controls and procedures for managing AE hazards and risks at levels determined acceptable.
- b. Specific ARNG policy and guidance on implementing DoD and HQDA standards, controls and management processes follow.

#### 5-4. Standing Operating Procedures (SOP)

- a. SOP's will be prepared for all AE operations including transportation, receipt, storage, issue, maintenance, preservation and packaging, demilitarization, disposal, stockpile reliability testing, inspection, and surveillance, involving conventional AE, large rockets, and guided missiles.
- b. Installations and activities must have a uniform process for approval of SOPs. Offices of review include, but are not limited to: AE Operations, QASAS, Safety Office, Environmental Office, and Industrial Hygiene. Approval authority is the commander.
- c. Hazard analysis is an integral part of preparing AE SOPs. The analysis will be use to develop the SOP, and a copy of the hazard analysis and DA Form 7566 will be filed with the SOP.
- d. SOPs must identify when residual risks exceed DoD or HQDA standards. Risk acceptance requires documentation and approval using DA Form 7632 and must be included with SOP.
- e. The USADAC resident course AMMO-54, Risk Management and Preparation of Standing Operating Procedures, for AE Operations is required training for those preparing AE SOPs.
- f. AE SOP's are different from other types and formats. The recommended and preferred format is described in Headquarters, U.S. Army Materiel Command Regulation (AMCR-R 700-107). A copy is available on GKO in the ARNG AE Central Register.

#### 5-5. ARNG and State AE Storage Site Licensing Program

- a. The AE storage site license process:
  - (1) Is initiated by the storage facility.
  - (2) Commander or site manager approves an SOP (with completed DA Form 7566 and required DA Form 7632) and forwards to the State SOHM.
  - (3) State SOHM coordinates review of SOP, risk assessment/acceptance, and site inspection with supporting staff officers.
  - (4) State SOHM coordinates the preparation and review of license returning affirmed copy for approval and use.
  - (5) Commander approves and issues license and verifies compliance during each monthly sensitive item inventory of AE.
  - (6) State SOHM (or designee) verifies same and documents during annual on site inspection.

- (7) State SOHM forwards to NGB-AVS electronic copy of each AE storage site license and annual inspection.
- (8) NGB-AVS-S files same in the ARNG AE Central Register under the appropriate State Register.
- b. Each State AE Storage Site Licensing program shall be in IAW requirements of DA Pam 385-64.
- c. AE site licenses provide a visible document that acknowledges a specific site meets QD criteria of DA Pam 385-64 and is authorized by the command to store a specific quantity of explosives materials for a specified time and mission.
- d. All storage structures are individually licensed and registered using an ARNG AE Site License and IAW the State AE Safety Program Policy, Guidance and/or SOP.
- (1) A HQDA compliant AE Storage Site License format (NGB Format 385-64-2 (electronic)), is provided on GKO in the ARNG AE Central Register.
- (2) NGB Form 385 prepared IAW ASL P00-0025 and provided electronic 385-64-1 (T):
- (a) Are hereby superseded by NGB Format 385-64-2.
- (b) Use of either form is permitted provided content of AE Site License is IAW NG Format 385-64-2 and DA Pam 385-64.
- (c) Shall be updated (as required) during annual review and/or change of command.
- e. Wholesale or retail supply storage (magazines) and using unit storage (arms rooms) are two type of structures requiring license.
- (1) The first type:
- (a) Usage is training ammunition supply support oriented.
- (b) Includes structures such as; earth covered magazines, above ground magazines, and loading docks/pads such as are located at the ASP or an ammunition transfer points (ATPs) or ammunition holding areas (AHA). Also included are configuration platforms at Multi-Purpose Range Complexes or demolition ranges and field storage sites (fixed concrete pads).
- (c) Requires licensing each structure individually and license premised on a DDESB approved AE limits.
- (2) The second type:
- (a) Usage is end user storage oriented, such as unit arms rooms and Aviation Life Support Equipment Shops.
- (b) Is permitted, but not encouraged, only for limited quantities of operational or security loads (hazard class/division (HD) 1.4, 1.3, 1.2.2) or for the temporary storage of immediate qualification training requirements (HD 1.4) of the unit owning the facility.
- (c) Requires licensing of each individual storage location (room, vault, safe, etc) per DA Pam 385-64 and HQDA policy.
- f. AE storage is only authorized at locations and facilities indicated on the license and in net explosive weight (NEW) quantities not to exceed the licensed allowance. This includes all facilities used for storage of AE, in AHA, Basic Load Storage Areas, Truck Holding Areas, loading docks and open (outdoor) storage pads.

#### **5-6. Explosive Safety Site Plan (ESSP)**

- a. An ESSP requirement is not just for storage locations. Certain AE range operations and activities involving Munitions of Explosive Concern require an ESSP. See paragraph 5-8 below.
- b. The AE storage site plan process:
- (1) Commander appoints working group responsible for preparing AE site plan.
- (2) SOHM coordinates review and approval of completed site plan.
- (3) Approved AE site plan is forward to NGB for review and approval.
- (4) NGB-AVS-S reviews site plan, coordinates changes, forwards approved site plan to USADAC for review and HQDA approval.
- (5) USADAC reviews site plan, coordinates changes, forwards approved site plan to DDESB for review and approval.
- (6) DDESB reviews, changes, approves site plan and returns to USADAC.
- (7) USADAC returns approved site plan to NGB.
- (8) NGB forwards DDESB and HQDA approved site plan to State and places the plan in ARNG AE Central Register.
- c. Estimated time standard for preparation, review, and DDESB approval.
- (1) Facility preparation / State Safety Review Approval – Minimum 3-9 months.
- (2) NGB-AVS review and approval:
- (a) 60 days minimum if no changes required.
- (b) Between 90 and 120 days when changes are required.

- (3) USADAC review between 90 and 180 days.
- (4) DDESB review between 90 and 180 days.
- d. Actual time for NGB, USADAC, and DDESB approval may be longer. Plan accordingly.
- e. DA Pam 385-65 is the Army policy on AE Safety Site Planning.
- f. DDESB and HQDA require electronically submitted site plans by 2011.
- g. NGB currently uses of Ammunition and ESSP Program software for preparation, review, and submittal of site plans.
- h. ESSP software and support is available. Contact the Explosive Safety Software Helpdesk POC or an NGB-AVS QASAS.
- i. In general, facilities that store or handle AE must have a DDESB-approved site plan.
- j. Specifically the following guidance applies:
  - (1) Proposed new construction or planned facilities must have a DDESB *preliminary* approval of the AE site plan prior to construction. This applies to all sources of funding (i.e. training support funds, military construction funds, State or local funding).
  - (2) A DDESB *final* safety approval of the AE site plan is required to prior to use of facilities for AE operations.
  - (3) AE storage areas require a DDESB approved site plan at training sites or other facilities that provide or operate the following activities: ASPs, Explosives Truck Holding Areas, ATPs, AHAs, and Arms Rooms (when quantities of ammunition exceed those permitted by this regulation, DoD, HQDA Policy and DA Pam 385-64).
  - (4) AE Training Range (per DA Pam 415-28) site plan requirements.
    - (a) That do not require a site plan are: Light Demolition Area (17885), Engineer Qualification Range Non-Std (17888), Engineer Qualification Range Std (17889), range impact area duded (17730), range impact area non-duded (17731) Furthermore the fore mentioned range impact areas could also be used by EOD for treatment or training for treatment when sited IAW AR 385-63 and the NEWQD arcs for the treatment operation remain within the controlled area of the range. This does not apply to non-DoD materials unless DARNG determines and approves disposal IAW 10 USC Sec. 2692 and this regulation.
    - (b) Requires a site plan, Heavy Demolition Area (17886).
  - (5) AE Training Range Support Facilities.
    - (a) That do not require a site plan are ranges support facilities that are only used to store and handle HD 1.4 ammunition do not require explosives safety site plans. Tactical positions (e.g., field ASPs and ATPs) within sited areas that are an inherent part of a training scenario do not require an explosives safety site plan. However, units training within these tactical areas will perform a risk analysis of their ammunition operations to ensure they do not present an explosives safety risk to other units or assets.
    - (b) Does require a site plan are areas used repeatedly for tactical field training in ammunition support operations (e.g., a grid square within a range used for training units in the establishment of field ASPs or ATPs). These areas will be sited as an external footprint for anticipated ammunition operations.
    - (c) Does require a site plan; AHAs, storage pads, re-supply points, ATPs, loading docks, burn pans, and handling areas that are designed, constructed, and utilized for recurring ammunition operations and that are located on or near ranges to support training or range operations.
    - (d) Intentional detonations conducted during training on training ranges must ensure that the surface danger zones arcs (calculated for the weight of explosives) remain within the boundaries of the range. Otherwise a site plan approval IAW requirements of DoD 6055.9-STD, DA Pam 385-64 and this regulation is required.
  - (6) The training site Commander, the State SOHM and State Construction and Facilities Management Officer must all ensure that locations being used/sited do not impact projects planned or under development. (NOTE: Once approved, the explosives safety site plan map, with approved quantity-distance arcs, must be recorded on the facility master plan. Any proposed and approved development within the inhabited building distance arcs shall be cause for complete review of NEW limits and subsequent approval by the DDESB of a new explosives safety site plan).

#### **5-7. AE Safety Mishap Risk Management, Certificates of Risk Acceptance and Certificates of Compelling Reasons(CCR).**

- a. It is Army policy to assess, communicate, eliminate, control and/or accept hazards through the process of mishap risk management, a component of composite risk management.
- b. It is Army policy to apply the requirements of the mishap risk management process IAW DA Pam 385-30 to explosives safety management.

(1) When deviations from the Explosive Safety Standards of DA Pam 385-64 are necessary, the proper authority must weigh the added risk to personnel and property against the strategic and other compelling reasons. Authority levels for AE risk acceptance are per DA Pam 385-30 and as specified in table 5-1 below:

**Table 5-1  
ARNG AE Risk Acceptance Authority**

| ARNG AE Risk Acceptance authority |                            |                            |                            |                          |                     |
|-----------------------------------|----------------------------|----------------------------|----------------------------|--------------------------|---------------------|
| Risk Acceptance matrix            |                            |                            |                            |                          |                     |
| Category of Risk                  | Duration of Risk           |                            |                            |                          |                     |
|                                   | 24 Hrs or less             | 1 mo or less               | 1 yr or less               | 1 yr – 5 yr              | 5yrs + or-permanent |
| Extreme                           | General Officer            | DARNG or DDARNG            | CNGB or DARNG              | CNGB or DARNG            | ASA (I&E)           |
| High                              | Installation / Brigade Cdr | Adjutant General           | DARNG or DDARNG            | CNGB or DARNG            | CNGB or DARNG       |
| Medium                            | Installation / Brigade Cdr | Installation / Brigade Cdr | Installation / Brigade Cdr | DARNG or DDARNG          | CNGB or DARNG       |
| Low                               | Facility / Battalion Cdr   | Facility / Battalion Cdr   | Facility / Battalion Cdr   | Facility / Battalion Cdr | DARNG or DDARNG     |
| Tolerable                         | None required              | None required              | None required              | None required            | None required       |

- (2) A certificate of risk acceptance or System Safety Assessment:
  - (a) Will be completed for all risk accepted for greater than a week.
  - (b) Copies of risk acceptance for periods greater than 60 days will be provided to NGB-AVS and the US Army Technical Center for Explosive Safety.
  - (c) Copies of risk acceptance for periods greater than 1 year will be provided to Director of Army Safety.
  - (d) Instructions for DA Form 7632, Certificate of Risk Acceptance are in Appendix D of DA Pam 385-30.
- c. A Certificate of Compelling Reasons is written approval, granted by the Assistant Secretary of the Army (Installations and Environment) ASA(I&E), to build new structures or perform a major modification on a structure (greater than 15 percent of current value) that violates or will violate the standards of AR 385-10 or DA Pam 385-64
  - (1) Instructions for completing and submitting request for Certificates of Compelling Reasons are in DA Pam 385-30.
  - (2) State Safety Managers must coordinate review at each level of staffing and Commanders at each level must approve request prior to forwarding to next approval level.
  - (3) Disapproval requires immediate action to terminate request.

**5-8. Explosive Safety Submittals (ESS)**

- a. An ESS ensures AE safety visibility and management throughout non-emergency AE responses.
- b. An ESS addresses all explosives safety aspects of a munitions of explosive concern (MEC) activity (e.g., QD siting, detection and removal technologies, Quality Assurance, Quality Control, MEC migration, site access control, residual CRM).
- c. Some MEC activities require an ESS. some only an Explosive Safety QD site plan, and some both.
- d. DoD requirements for ESS are contained in the DoD 6055.9-STD.
- e. HQDA requirements and guidance for ESS submittals are in DA Pam 385-64, under guidance for “Real Property Know or Suspected to Contain MEC” and DA Pam 385-65.
- f. USATCES publishes an “outline” for preparing ESS for non-Time-Critical Munitions Response Actions for conventional MEC.
- g. DoD takes precedence over HQDA standards.
- h. ARNG installations will forward ESS and Explosive Safety QD site plans (electronic submittals only) to NGB-AVS, who will coordinate review and approval with NGB-ARE and NGB-ARI and forward to USATCES. USATCES reviews, coordinates DA approval and forwards to DDESB. DDESB will provide final approval. Allow 120-180 days for DDESB final approval.

## 5-9. AE Awareness

### a. Military Munitions.

(1) Military Munitions Rule (MR). All National Guard facilities and organizations must achieve, maintain and monitor compliance with Federal and State Waste Military Munitions statutory and regulatory requirements.

(a) AE Emergency Response policy and guidance is provided in DoD Policy to Implement the EPA Military Munitions Rule, 1 July 1998.

(b) Army policy and guidance on AE fire prevention, AE hazard effects, and AE safe separation distances are in DA Pam 385-64.

(c) Army Policy and guidance on non-Time Critical AE and munitions response actions are in DA Pam 385-65.

(2) Military munitions are:

(a) All ammunition products and components produced or used by or for DoD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DoD, the U.S. Coast Guard, the U.S. Department of Energy, and ARNG personnel.

(b) The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof.

(c) Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices and nuclear components thereof.

(3) Waste Military Munitions are hazardous to health and safety and must be managed IAW the MR and applicable Federal, State, or local regulations.

(a) A military munitions is a "waste" if it is either a solid or hazardous waste under regulations implementing RCRA, (42 U.S.C. Section 9601 et seq.) or defined as a waste under a DoD Component's formal written policies and procedures. In general an unused military munitions is a solid waste when any of the following occurs:

(i) The munitions is abandoned by being disposed of, burned, detonated (except during intended use), incinerated, or treated prior to disposal; or

(ii) The munitions is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal, or

(iii) The munitions is deteriorated or damaged (e.g., the integrity of the munitions is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or

(iv) An authorized military official has declared the munitions a solid waste.

(b) A used or fired military munitions are a solid waste:

(i) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or

(ii) If recovered, collected, and then disposed of by burial or land filling either on or off a range.

(iii) For purposes of RCRA section 1004(27), a used or fired military munitions is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under Section 3004(u) and (v), and Section 3008(h), or imminent and substantial endangerment authorities under Section 7003, if the munitions lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is not feasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munitions and its location (to the extent the location is known). For further clarification see 40 CFR 266.202 under Definition of Solid Waste.

(4) If the state legislature does not adopt the MR into law, the National Guard within the State must still implement and comply with the federal MR.

(5) The MR:

(a) Contains legal definitions and conditions that regulate DoD AE.

(b) All supervisors and employees in positions working with AE must receive awareness training on MR.

(c) DoD and HQDA specific guidance and training are found in:

(i) Policy to implement the EPA's Military MR located at <https://www.denix.osd.mil/denix>.

(ii) AMMO-68 Web Based Training (see table 4-1).

(d) ARNG provides essential MR background materials in the AE Central Register.

- (i) AE Handler/Driver Certification (SmartBook).
  - (ii) HQDA (Radian International LLC , Mr. D. L. Murray) 2002 Training Brief.
  - (iii) HQDA Military Munitions Manager’s Guide (DRAFT) March 2002 Volumes I, II, and III.
  - b. AE training and certification requirements (Chapter 4).
  - c. AE transportation.
    - (1) All DoD personnel (military, civilians and contractors) participating in the shipment or movement of AE (HAZMAT) must comply with the rules of regulatory bodies governing the safe transportation of HAZMAT.
    - (2) Exceptions are noted in the 49 CFR (173.7(b)), U.S. Government Material, for shipments for national security. All DoD personnel will comply with 49 CFR unless otherwise authorized by the Defense Transportation Regulation (DoD 4500.9 R Part II Chapter 204).
    - (3) Shipments of Army AE and other dangerous articles by military conveyances are also governed by DoD 4500.9R, DA Pam 385-64, AR 600-55, and the training requirements for ammunition drivers in Chapter 4 of this regulation.
  - d. AE storage.
    - (1) AE Storage Technical Assistance is available from USADAC.
      - (a) The LRTAO conducts:
        - (i) Technical Assistance Visits (Contact NGB-ARL-E or LRTAO directly).
        - (ii) Logistic Reviews (LRTAO reports to HQDA who forward to NGB with suspense for corrective action).
- Logistics Review includes all areas of AE safety.
- (b) The USATCES conducts Explosive Safety Assistance Visits. The Explosive Safety Assistance Visits teams out brief only the facility command staff and do not otherwise report findings. Submit requests for Explosive Safety Assistance Visits to NGB-AVS-SG by end of 1<sup>st</sup> quarter of fiscal year.
  - (c) QASAS are in the HQDA Career Program 20 civilians that provide AE storage and serviceability technical assistance. QASAS are assigned at various posts, camps and stations. Every state has a QASAS with regional responsibility to provide ammunition surveillance support IAW AR 5-9. NGB-AVS employs a number of QASAS at NGB and major training areas to provide the ARNG with subject matter expertise in ammunition surveillance and explosive safety. Currently not all QASAS providing AR 5-9 support to the ARNG work for NGB-AVS.
    - (2) AE Operations Guides
      - (a) LRTAO makes available a variety of AE guides. Foremost is the “Ammunition Logistics – Guide to Operations in a Retail Environment” that is updated every 3-4 years. They also release their Annual Digest that highlights common issues and recommendations.
      - (b) USATCES offers:
        - (i) Quarterly “Explosive Safety Bulletin”
        - (ii) Site Plan Developers Guide”
      - (c) NGB-AVS-SG provides:
        - (i) Function specific training materials and QASAS instructors for Explosive Safety Training and technical assistance for storage in arms rooms and in the field.
        - (ii) Briefings and presentation on current issues during the annual ARNG Safety & Standardization Conference and/or biannual regional Safety Councils.
    - (3) AE Facility Construction Projects:
      - (a) No entity within the State nor any tenant organization (including the Active Army and other DoD components) shall start any project work without the prior written project approval of the Construction and Facilities Management Officer, the USPFO, NGB-ARI, and any other entity required by this regulation for a specific type project. The project programming, project approval, design and contract management processes are the same whether NGB-ARI, a tenant, or some other entity funds a project on an ARNG installation.
      - (b) Federal funding prerequisites include:
        - (i) DDESB “preliminary” ESSP approval prior to design authority.
        - (ii) DDESB “final” ESSP approval prior to proceeding with final design.
      - (c) NGB-ARI will provide guidance on the specific sequence and timing of events.
      - (d) Submit ESSP IAW Paragraph 5-6 above.
    - (4) Organization (Home Station) Storage - Storing AE at the organization or facility requires applying different perspectives.
      - (a) Limited Quantities of Operational Supply Class V loads.



(i) Limited quantities of HD 1.2.2 items, not to exceed 50 pounds NEW, may be stored in facilities such as hangars, troop buildings, and manufacturing or operating buildings without regard to QD. Fragmentation shielding will be provided. The items will be stored in their original DOT approved packaging.

(ii) Limited quantities of HD 1.3 items, not to exceed 100 pounds NEW, may be stored in facilities such as hangars, troop buildings, and manufacturing or operating buildings without regard to QD. The items will be stored in their original DOT approved packaging.

(iii) Compliance with QD and compatibility criteria is not required for mission essential or operationally necessary quantities of AE in HD 1.4 or 6.1 (excluding toxic chemical munitions).

(iv) For document destroyers of HD 1.3, quantities in excess of 100 pounds may be positioned for use without complying with QD and compatibility if their command finds this necessary for security reasons.

(b) Arms Room Storage of specific hazard classes and compatibility groups of AE in arms rooms.

(i) Compliance with QD and compatibility criteria is not required for storing mission essential or operational required quantities of AE (HD 1.4 or 6.1 (excluding toxic chemical munitions)) in arms rooms.

(ii) Storage of HD 1.4 ammunition is preferred in AHA or ASP unless such use would adversely impact operations or result in an unnecessary commitment of resources (e.g., require unit personnel, to provide 24-hour security or extended travel).

(iii) Up to 100 pounds NEW HD 1.3 and up to 50 pounds NEW HD 1.2.2 may be stored.

(iv) When HD 1.2.2 is stored inside or at less than inhabited building distance from inhabited buildings such as barracks or office buildings, fragment barriers will be provided. Minimum acceptable fragment barriers are: 1/4 inch of mild steel plate, or one layer of sand bags, or 12 inches of loose sand or dirt, or equivalent protection.

(v) Storage of ceremonial ammunition is not considered an operational necessity. However, a limited quantity of HD 1.3 and HD 1.4 ceremonial ammunition (e.g., 75 mm blank, 105 mm blank) may be stored in an arms room provided no other practical alternative exists. The amount of HD 1.3 and HD 1.4 ceremonial ammunition stored will not exceed 100 pounds net explosive weight and will be considered during calculation of HD 1.3 quantities.

(c) Storage of limited quantities of Security Contingency Loads.

(i) Before unit arms rooms are allowed to contain HD 1.4 items they will be approved by battalion or higher commanders prior to contacting the SOHM to obtain a State Explosives Storage Site License.

(ii) Before unit arms rooms are allowed to contain HC 1.2.1 thru HC 1.3 items they will be approved in writing by the State Adjutant General prior to contacting the SOHM to obtain a State Explosives Storage Site License.

(d) Storage in arms rooms requires operational necessity, limiting quantities, and proper packaging as follows:

(i) Storage of ceremonial ammunition is not considered an operational necessity. However, a limited quantity of HD 1.3 and HD 1.4 ceremonial ammunition (e.g., 75 mm blank, 105 mm blank) may be stored in an arms room provided no other practical alternative exists. The amount of HD 1.3 and HD 1.4 ceremonial ammunition stored will not exceed 100 pounds net explosive weight and will be considered during calculation of HD 1.3 quantities.

(ii) Prior to a unit storing ammunition in an arms room, the Commander will approve the risk assessment that justifies the storage based on operational necessity and safety considerations.

(iii) The Commander will consider the need to expose personnel to the proposed amount of explosives for the length of time proposed.

(iv) The risk assessment will be coordinated with garrison or installation safety, logistics, security, fire protection, and ammunition surveillance personnel.

(v) The risk assessment will be posted in the arms room and all arms room personnel will be briefed, at least annually, on its contents.

(vi) The Unit Commander, or equivalent-level individual, will ensure that munitions are stored in their original container with original packaging (otherwise an explosives safety site plan is required) because containerization and packing are considerations in determining a munitions HD. However, arms rooms that support guard forces or military police may have one outer pack of each caliber of small arms ammunition open for use.

(vii) Storage will be consistent with the safety requirements of DA Pam 385-64 and the security requirements of AR 190-11. The use of metal storage containers or cabinets is required and ammunition must be stored under the same criteria as it would in an approved ammunition storage facility, (e.g., no combustibles, solvents, petroleum products, or radioactive items in the vicinity of the ammunition).

(viii) The appropriate fire and/or chemical hazard symbols are properly posted on the door to the storage area. Appropriate symbols need not be posted on the exterior of the building if only storing HD 1.4 ammunition.

(ix) When storage in an AHA or ASP would adversely impact operations or result in an unnecessary commitment of resources (e.g., require unit personnel to provide 24-hour security or extended travel) and storage in an

arms room is necessary, the acceptable duration of storage will be determined by (Garrison) Commander based on a documented risk assessment considering the risks of storage versus the risks of transportation.

(x) Training ammunition will be separated spatially from operational ammunition and listed separately on the arms room inventory. Type and quantity of training ammunition will be identified on the storage license.

(xi) Munitions are stored in accordance with storage compatibility requirements.

(xii) Quantities in excess of the above must comply with all QD requirements of this chapter, including submission of a site plan.

(xiii) Arms rooms will have their explosive licenses verified and documented on monthly sensitive item inventory.

(xiv) The annual storage inspection by Safety and/or the QASAS will document that licenses and procedures are in compliance.

(xv) An appropriate AE storage checklist is provided on GKO in the AE Central Registry for facilitating and documenting the above tasks.

(5) AE storage compatibility groups.

(a) AE are assigned to one of thirteen storage compatibility groups that determine what groups to combine together for purposes of transportation and storage.

(b) Title 49 CFR, Part 173, DoD 6055.9-STD, and DA Pam 385-64 use same criteria and logic for combining groups.

(c) Proficiency with use of compatibility groups and combining AE for storage/transportation is a requirement for all AE drivers and AE handlers and is an essential part of certification training requirements in Chapter 4.

(d) DOT, DoD, and HQDA storage compatibility mixing tables all show what can and cannot be mixed. DoD and HQDA also allow for operational necessity and accepting greater risk under controlled conditions. This is referred to as Z compatibility storage and applies when letter "Z" is at the intersection of the two storage groups in the mixing table/chart.

(6) Z compatibility storage.

(a) Z storage approval authority is NGB-AVS.

(b) Approval is for 12 months; for specific types of AE at specific locations.

(c) Commander's request in memorandum through SOHM with QASAS endorsement.

(d) Attach DA Form 7566, SOP, and an action plan to eliminate condition.

(e) Z compatibility storage will appear on Safety Council agenda for AE committee action until resolved.

e. AE accountability.

(1) Accountability for AE is a constant process that begins during manufacture and ends with certification of ammunition expenditure, being inert, being non-hazardous and/or recycling of all components, constituents, and packing materials.

(2) Loss of accountability for AE leads to avoidable injury and death of service members, dependents and the public. Commanders will establish a training program for personnel responsible for accountability and control of AE. Training programs will include the following key elements, information and accountability controls for managing AE

(3) Ammunition amnesty or ammunition found on Post.

(a) Other than small arms ammunition, consider amnesty AE as hazardous until EOD or AE trained personnel determine items are safe to handle and transport.

(b) Amnesty program is intended to ensure the maximum recovery of standard military AE.

(c) Do not discard/dispose of AE received through amnesty without proper disposition instructions.

(d) An effective amnesty program reduces potential safety hazards and illegal munitions disposal.

(e) Ammunition found on Post is a common occurrence regardless of audit and accountability procedures.

(f) Command emphasis is essential to ensure that military personnel comply with the established turn-in procedures and understand the potential liabilities associated with unauthorized expenditure, disposal or discard of military munitions.

(4) It is imperative that installations develop standard ammunition found on post procedures consistent with the MR and/or state-specific hazardous waste management regulations.

(5) The AE amnesty program encourages responsible individuals to act by providing a means to expedite the safe recovery of military AE. It is not a process to circumvent normal supply turn-in procedures.

(6) Each Commander, Officer-in-Charge, Non-Commissioned-Officer-in-Charge will establish and implement an AE amnesty program that is appropriate for the mission, addresses the hazards of discarded and/or abandoned AE, and does not intimidate the individual or prevent the individual from freely turning in AE.

(a) Will ensure each assigned person receives appropriate information and/or briefing on AE amnesty program policies and procedures. As a minimum:

(b) Before issue and after turn-in of ammunition: Instruct Soldiers that they are responsible to return all unexpended ammunition and residue material and that failure to do so is punishable by Uniform Code of Military Justice.

(c) Will make available to all personnel an amnesty turn-in opportunity before departure from training centers and facilities after exercises and/or training events that require the use of AE.

(d) Will provide telephone numbers of the nearest military EOD Company, QASAS and ASP and facilitate coordination with anyone (military or civilian) who wants to turn-in military AE under the Amnesty Program.

(e) Will implement a local SOP, assign specific functional responsibilities and identify AE safety and HAZMAT requirements regarding amnesty items.

(f) Amnesty AE requiring temporary storage will follow manual hand receipt procedures and document AE to record (sensitive item inventory) as found on post. Ammunition will be properly packaged, marked, handled, stored and transported IAW HQDA and DOT requirements. Quantity and time limits for storing amnesty ammunition at the unit will be IAW an approved Explosive Storage License.

(g) Otherwise return Amnesty AE directly to ASP (Requires no documentation on property book). Ammunition will be properly packaged, marked, handled, stored and transported to ASP IAW HQDA and DOT requirements.

(7) Installations, facilities, and organizations that transport, handle, store, and/or expend ammunition or explosives will also establish an AE amnesty program that:

(a) Includes technical supervision of amnesty operations and to coordinate EOD support as needed.

(b) Provides appropriate notice of amnesty program and local procedures.

(c) Establishes amnesty opportunities, points of contact and/or collection points.

(d) Safeguards AE and provides handling and transportation IAW DOT and DoD HAZMAT requirements.

(e) Ensures EOD personnel, QASAS, or qualified Soldiers in MOS 89 are available to supervise accountability process.

(8) Commercial, non-military munitions acquired through amnesty or found on post.

(a) Serviceable non-military munitions that are similar to standard issue military munitions, items may generally be incorporated into the military supply chain using the Dedicated Disposition Authority process. Installation munitions managers' request disposition instructions for munitions using an Ammunition Condition Report. The installation provides an assessment of the condition of the munitions, recommends a specific use for or disposition of the munitions, and describes the installation's munitions disposal capabilities. Where appropriate, non-military munitions may be transferred to local law enforcement agencies for their use.

(b) Unserviceable non-military munitions that are waste (i.e. damaged or deteriorated) must be managed in accordance with federal, state, and local regulations, including RCRA and are not eligible for management under the MR.

(9) Amnesty boxes and/or containers.

(a) Turn in locations accessible 24/7 for amnesty turn-in – The recommended locations for AE Amnesty turn-ins (in order of preference) are:

(i) Suitable location in the training area.

(ii) AE Holding Area, AE transfer point, ASPs, equipment wash racks

(b) Turn-in locations accessible by announcement and limited to specific dates and hours. Portable amnesty collection containers designed to collect individual small arms ammunition rounds may be used for brief periods in cantonment areas, armories, and operating facilities provided that:

(i) Containers when not in use are closed, empty, sealed and secured to prevent unauthorized access.

(ii) Authorized personnel will identify, inspect, package, mark, seal, and store ammunition.

(iii) Ammunition is brought to record as found on post, accounted for, and prepared for turn-in.

(iv) EOD and/or QASAS are contacted as necessary to inspect and certify as required.

(c) Amnesty container maintenance, use and design specifications:

(i) Inspect containers that have unrestricted 24-hour access daily, at the beginning and end of each shift.

(ii) Inspect containers with restricted/scheduled access no less than every 4 hours.

(iii) Any amnesty items found in the container will be removed, properly identified, inspected, accounted for as found on post, packaged, marked, and secured IAW Special Packaging Instruction. For small arms ammunition use (AM) P1305 DEMIL Special Packaging Instruction. Any questions about amnesty items contact your QASAS for information.

(d) Design of container will:

(i) Prevent retrieval of deposited items by unauthorized persons.

- (ii) Prevent the removal of the container itself.
- (iii) Provide for viewing of container contents.
- (iv) Be of durable materials that minimize fragmentation hazards.
- (v) Be marked with contact information for EOD, QASAS, and ASP.
- (e) The Installation or Facility Commander, SOHM, supporting QASAS will approve the design, identification, location, and operating SOP for all amnesty containers. Submit risk assessment and amnesty box design to NGB-AVS-SG for review.
- (f) NGB does not recommend the use of permanent amnesty boxes and/or containers that are bolted or affixed to floors, walls, or other fixtures in inhabited buildings such as Armories, Flight Facilities, and Maintenance Shops.
- (10) Amnesty returns that are not otherwise recyclable, returnable through the supply system or transferable to appropriate law enforcement agencies will be disposed of IAW solid waste disposal procedures.
- f. AE Surveillance Program.
  - (1) Ammunition Stockpile Reliability Program is defined in AR 702-6.
    - (a) Provides responsibilities, for monitoring the performance, reliability, and safety characteristics of AE.
    - (b) The Ammunition Surveillance Program is an integral part of the Ammunition Stockpile Reliability Program and it includes functions that affect AE safety during handling, storage, transportation, maintenance, use, and disposal.
  - (2) QASAS Program is defined in AR 702-12.
    - (a) QASAS develop, manage, or execute AE surveillance programs.
    - (b) Inspect and monitor AE operations for regulatory compliance and develop or approve procedures and apply controls so that munitions storage or issue operations comply with AE Safety regulations.
    - (c) Provide ammunition logistics and explosives safety technical assistance during mobilizations and deployments.
    - (d) Perform multifunctional duties in support of storage, inventory, transportation, maintenance, and disposal of AE consistent with experience.
  - (3) Ammunition Malfunctions (AR 75-1).
    - (a) An AE malfunction is a failure of an ammunition item to function as expected when fired or launched or when explosive items function when not intended or not by design.
    - (b) Malfunctions include hang-fires, misfires, duds, abnormal functioning, and premature functioning of explosive ammunition items under normal handling, maintenance, storage, transportation, and tactical deployment.
    - (c) Malfunctions do not include accidents or incidents that result solely from negligence, malpractice, or situations such as vehicle accidents or fires.
    - (d) Malfunctions are divided into three classes, Class A, Class B, and Class C.
      - (i) Class A. Malfunctions that result in death or lost-time injury, are judged as having had an appreciable probability of causing death or lost-time injury, or that have adverse political implications.
      - (ii) Class B. Malfunctions that result in damage to major equipment that cannot be repaired at the unit level of maintenance or that result in an ammunition suspension that significantly impacts readiness or training.
      - (iii) Class C. Malfunctions that are neither Class A nor Class B.
    - (e) Are managed and reported IAW AR 75-1.
  - (4) UXO are military munitions that:
    - (a) Have been primed, fuzed, armed, or otherwise prepared for action and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material.
    - (b) Remain unexploded whether by malfunction, design, or other causes. (10 U.S.C. 101(e)(5)(A) thru (C)).
    - (c) Commanders must restrict access to areas known or suspected of containing UXO to personnel trained in UXO identification and procedures to be taken should UXO be encountered.
    - (d) Fire prevention and emergency response personnel require appropriate UXO awareness training.
    - (e) Installation master plans and maps will identify all UXO restricted areas, impact areas, live fire ranges.
    - (f) Plans and maps will include appropriate labels that identify areas requiring fences; warning signs and markers (paragraph 2-2, DA Pam 385-63).
    - (g) SOHM and QASAS will annually report on conditions and adequacy of barriers and signage IAW paragraph 3-2 of this regulation.
  - (5) Inert Certification Programs.
    - (a) Boxes, metal cans, fiber containers, and packaging materials associated with AE must be inspected by qualified personnel, properly controlled, and certified inert and free of hazardous and explosive materials.

(b) Range residue (cartridge cases, links, etc) and target scrap pose safety or environmental hazards and must be inspected by qualified personnel, properly controlled, and certified inert and free of hazardous residue.

(c) Safety managers and/or QASAS will regularly inspect and determine the inert certification program is being operated IAW an approved SOP and certification documents are being properly maintained.

g. Non-Standard AE and improvised explosive devices.

(1) AE must be released, fielded and transferred IAW AR 700-142 and DA Pam 700-142.

(2) Procedural safeguards ensure the safety of U.S. military and civilian personnel, contractors, and the general public. The Army centrally procures AE assuring that its AE meet strict operational, safety and quality criteria.

(3) Local procurement of non-standard AE violates U.S. Code, Army regulations, policy and unnecessarily exposes U.S. military and civilian personnel, contractors and members of the public to potential injury or death.

(4) Army policy regarding training aids, devices, simulators, and simulations.

(a) Is contained in AR 350-38.

(b) Require Commanders and training managers at all levels to establish necessary management controls to ensure that devices are used for their intended purpose.

(5) Non-standard AE (usually without a National Stock Number and DoD Identification Code) includes:

(a) Items that are not released, fielded, and/or transferred IAW AR 700-142 and DA Pam 700-142.

(b) Standard AE devices that have been modified, such as altering the amount of propellant in fixed ammunition.

(c) Standard AE that are being used for other than the intended purpose.

(d) The construction or manufacture of improvised explosive devices.

(e) Use of demolition effects simulators by other than MOS qualified Soldiers and for other than their intended purpose.

(6) Use of non-standard AE is prohibited, unless specifically approved by one of the following; CG, AMC; CG, Chief of Ordnance, Aberdeen Proving Ground, MD; CG, U.S. Special Forces Command (USASOC); CG, U.S. Army John F. Kennedy Special Warfare Center and School, as appropriate.

(7) DARNNG, State Adjutant General, and Commanders may also disapprove the use of non-standard AE at ranges under their command and control.

(8) Complete policy and guidance on standard and non-standard ammunition are included in: AR 5-13, AR 700-142, AR 385-10, DA Pam 385-64, AR 385-63, DA Pam 385-63, AR 385-16. The most current information on standard and non-standard information is found at the following web site, <https://www3.dac.army.mil/>.

h. Storage or Disposal of non-DoD hazardous materials (ammunition) on Army real estate.

(1) Title 10 USC §2692.

(a) Imposes a general prohibition on the storage, treatment, and disposal of non-DoD owned toxic or hazardous materials on a DoD installation.

(b) Authorizes the ASA(I&E) to make determinations that the prohibition does not apply under the provisions of Title 10 USC §2692(b)(5), (9), (10), and (11).

(i) Title 10 allows delegation of authority from ASA(I&E).

(ii) Current delegation of authorities is in effect from ASA(I&E) to CNGB and to the DARNNG.

(iii) Delegations of authority are effective for periods of two years. POC NGB-ARI.

(2) Proposals and requests for any storage or disposal provided under §2692 will include a MOA endorsed by State Adjutant General and executed by the USPFPO.

(3) MOA will be reviewed and approved by NGB-AVS and include the following minimum provisions:

(a) All hazardous materials are identified in a DoD contract with a DoD Identification Code or locally assigned DoD Identification Code. Contractor or non-DoD entity must provide NGB-ARE the constituent data for all AE items, components, materials and/or devices prior to storing, treating, disposing, or expending materials.

(b) All explosive items or components that are un-packed, disassembled, of non-standard or prototype design, and/or undergoing testing or development are in separate storage magazines from DoD ammunition and materials.

(c) Transportation, storage and handling of AE adheres to current DoD and HQDA Explosive Safety Standards in addition to the specific management controls included with subject MOA.

(d) Contractor performs no modifications or maintenance to any ammunition item or explosive component within the cantonment area, at the AHA or within the ASP.

(e) Contractor remains a party to a DoD Contract that identifies specific types and quantities of AE materials and maintains its HQDA/COE License (if required).

(f) Contractor reports all expenditures of AE (including destruction of duds) IAW NGR 5-3.

(g) AE is compatible with the ASP's Explosive Storage Site Plan and IAW limits of Explosive Storage Licenses.

(h) AE is appropriate for the surface danger zones associated with the caliber of ammunition, type of military weapons, and design of training ranges.

(i) Contractor complies with all DoD, HQDA, Federal, State, and local statutes regarding hazardous materials, explosive safety and environmental issues.

(j) Contractor and/or State are responsible and liable for all expenses and costs incurred associated with the use of federally operated or owned installation or facility.

(k) A QASAS will review MOA prior to final approval.

(l) An SOP will be submitted for SOHM and supporting QASAS review and concurrence prior to AE operations commencing.

i. Civil Authorities & Law Enforcement Agencies.

(1) It is hereby determined that the expenditure of "limited quantities" of non-DoD AE by civil authorities at ARNG Installations and/or Facilities ranges is an authorized and compatible use IAW Title 10, USC Section 2692.

(2) MOAs between Commanders, USPFO and Civil Authorities for storage of the non-DoD AE at ARNG Installations, Facilities, and/or Ranges requires approval IAW Title 10 USC §2692 and requirements of 5-9h above apply.

(3) Commercial AE that is brought onto ARNG facilities is not subject to the MR conditional exemption. Handling, transportation and disposal of civilian AE and residue must meet applicable environmental laws/regulations.

(4) Expenditure of AE on ranges by Federal, State and Local Civil and Law Enforcement Agencies requires a memorandum of agreement MOA with the facility. MOAs as a minimum will include:

(a) Disposal of commercial ammunition is treated as solid waste and liability and reimbursements for these costs will be provided for in MOAs.

(b) AE received in the facilities AE Amnesty program that is determined to be commercial, non-military ammunition will be treated as solid waste for disposal purposes.

(c) The extent and method of remuneration for all services provided and liabilities incurred by the ARNG installation as part of any MOA submitted for storage, use, or disposal of non-DoD Hazardous Materials including AE.

(d) The specific types and quantities of AE .

(e) An acknowledgement that non-DoD agency ownership of its AE is verifiable, indisputable and accountability, control and liability for non-DoD AE, and residue material is verifiable by audit of installations Standard Army Ammunition System and procedures for recording munitions expenditures on Army ranges.

j. Civic groups and/or individuals partaking in recreational shooting, marksmanship or hunting activities.

(1) Commanders approve use:

(a) When persons are not otherwise prohibited by DoD, HQDA, Federal, State, and/or local regulations.

(b) When Ranges are operating without range deviation and conducted IAW AR 385-63.

(2) Facility and installation:

(a) Will publish procedures and requirements in a command approved SOP.

(b) Publish SOP and provide copy to persons using ranges.

(3) SOPs will include and address.

(a) The potential hazards to which persons are exposed and the extent to which they release the government of liability for damages to personal property and/or injury.

(b) The responsibilities toward the conservation of natural/cultural resources and the liabilities for violations of environmental regulations.

(c) Trespassing – A definition for unauthorized persons entering the installation training complex and consequences for trespassing will be clearly stated. Entry into Army impact areas will be restricted to mission essential activities only. Outdoors recreational activities in temporary or permanent (dud-producing) contaminated impact areas are strictly prohibited, without exception. There will be no hunting, fishing, or other recreational activity in officially designated or marked impact areas. The range, safety, and natural resource officers shall determine recreational use area boundaries adjacent to an impact area in accordance AR 385-63, AR 405-80, and AR 200-3.

(d) UXO.

(i) Restrict access to areas known or suspected of containing UXO. Include map that identifies all UXO restricted areas, impact areas, ranges. Annotate maps with location of fences, signage, and postings (paragraph 2-2, DA Pam 385-63).

(ii) Handling or removal of UXO by unauthorized personnel is strictly prohibited. Installation and community Commanders will ensure all participants successfully complete safety awareness training requirements.

(e) Access and egress controls – All users must report to Range Control upon entering and leaving ranges. The conduct of uncontrolled or unscheduled outdoors recreation and/or training activities within the training complex is prohibited.

(f) Environmental compliance requirements – All users must abide by HQDA, ARNG, Federal, State, Local Environmental Laws. Requirements must clearly state specific procedures for reporting type and quantity of ammunition, munitions, and residue material brought to, expended on, and/or removed from each range or facility.

(g) Fire and environmental hazards – The use of fireworks, ammunition and/or munitions that represent unacceptable fire or environmental hazards will be restricted from use unless specifically coordinated and approved by the Commander.

(h) Hazardous materials and waste – Procedures for reporting hazardous material spills, reporting of accidents and request for cleanup or medical assistance.

(i) Communications capability – Communication equipment for coordinating activity, requesting medical assistance, and announcing unsafe conditions.

(j) Legal prohibition on disposing of serviceable or unserviceable ammunition into contaminated impact areas or elsewhere within or outside installation or community boundaries.

(k) Requirements to collect and remove expended brass, packaging and dunnage materials associated with occupying training ranges, firing ranges, weapons training facilities.

(l) Limitations on type and quantity of ammunition.

(m) Requirements for removing of ammunition from the facility.

(n) Special-Use Airspace – Information permitting and/or restricting use of airspace over training areas.

(o) Range and Hunter Safety – Requirements for personal protective equipment and first aid. Completion of a National Rifle Association hunter safety course or equivalent is mandatory before individuals participate in hunting activities. Installations will enforce a “blaze-orange” policy for hunters in coordination with state wildlife or management officials.

(p) Severe Weather – Warnings and advisories about climatic conditions users need to take heed of prior to use of ranges.

#### **5-10. AE Accident Notification Requirements**

AE accidents will be reported and investigated in accordance with AR 385-10. Malfunctions must be reported in accordance with AR 75-1.

## **Appendix A References**

### **Section I Required Publications**

#### **AR 385-10**

The Army Safety Program [Cited in paragraphs 1-4, 1-7b, 1-8b(1), 1-10d, 1-11a(2), 1-14d, 2-1b, 3-1a(1), 3-2b(1)(b), 3-2b(2)(b), 5-10]

#### **DA Pam 385-64**

Ammunition and Explosives Safety Standards (Cited in paragraphs 1-4, 1-7b, 1-8b(1), 1-11a(2), 1-12a, 2-1c, 3-1a(1), 3-2b(3)(e), 3-2b(4)(b), 3-2b(5)(c), 3-2b(6)(b), 5-5b&c, 5-5d(2)(b), 5-5e(2)(c), 5-6j(3), 5-6j(5)(d), 5-7b(1), 5-7c, 5-8e, 5-9(1)(b), 5-9c(3), 5-9d(4)d)(vii), 5-9d(5)(b), 5-9g(8))

### **Section II Related Publications**

#### **AR 5-9**

Area Support Responsibilities

#### **AR 5-13**

Training Ammunition Management

#### **AR 75-1**

Malfunctions Involving Ammunition and Explosives (RCS CSGLD--1961(MI))

#### **AR 190-11**

Physical Security of Arms, Ammunition, and Explosives

#### **AR 200-1**

Environmental Protection and Enhancement

#### **AR 200-2**

Environmental Effects of Army Actions

#### **AR 200-3**

National Resources -- Land, Forest, and Wildlife Management

#### **AR 210-20**

Real Property Master Planning for Army Installations

#### **AR 350-19**

The Army Sustainable Range Program

#### **AR 350-38**

Training Device Policies and Management

#### **AR 385-16**

System Safety Engineering and Management



**AR 385-63**

Range Safety

**AR 700-13**

Worldwide Ammunition Review and Technical Assistance Program

**AR 700-142**

Materiel Release, Fielding, and Transfer

**AR 702-6**

Ammunition Stockpile Reliability Program (ASRP)

**AR 702-12**

Quality Assurance Specialist (Ammunition Surveillance)

**AR 710-2**

Supply Policy Below the National Level

**DA Pam 385-30**

Mishap Risk Management

**DA Pam 385-63**

Range Safety

**DA Pam 415-28**

Guide to Army Real Property Category Codes

**DA Pam 700-142**

Instructions for Materiel Release, Fielding, and Transfer

**DA Pam 710-2-1**

Using Unit Supply System (Manual Procedures)

**DoD 4500.9R**

Defense Transportation Regulation

**DoD 6055.9-STD**

DoD Ammunition and Explosives Safety Standards

**FM 5-19**

Composite Risk Management

**NG Pam 415-5**

Army National Guard Military Construction Program Development and Execution

**NG Pam 420-10**

Construction and Facilities Management Office Operations

**NGR 5-3**

Army National Guard Training Centers

**NGR (AR) 200-3**

State and Federal Environmental Responsibilities

**NGR 385-10**

Army National Guard Safety and Occupational Health Program - Incl Change 1

**SB 742-1**

Inspection of Supplies and Equipment Ammunition Surveillance Procedures

**TB 9-1300-385**

Munitions Restricted or Suspended.

**Section III****Prescribed Forms**

This section contains no entries.

**Section IV****Referenced Forms****DA Form 7566**

Composite Risk Management Worksheet

**DA Form 7632**

Certificate of Risk Acceptance

**NGB Form 385**

Explosives Storage Limits & License

**Appendix B****Management Control Evaluation Checklist****B-1. Function**

The function covered by this checklist is the ARNG AE Safety Standards.

**B-2. Purpose**

The purpose of this checklist is to assist Commanders, managers, and supervisors in evaluating the key management controls outlined below. It is not intended to cover all controls.

**B-3. Instruction**

Answers must be based on the actual testing of key management controls (e.g., document analysis, direct observation, sampling, simulation, other). Answers which indicate deficiencies must be explained and corrective action indicated in supporting documentation. These management controls must be evaluated at least once every five years. Certification that this evaluation has been conducted must be accomplished on DA Form 11-2-R (Management Control Evaluation Certification Statement).

**B-4. Test questions**

- a. AE Safety Programs – Are AE Safety Programs established and documented?
- b. Composite Risk Management - Commanders and leaders are provided a risk assessment before AE operations. Conscious CRM decisions are made at the proper level of decision-making. Are risk decisions made at the proper command level and documented?
- c. Are explosive safety site plans for storage and range operations completed when required?
- d. Are Army National Guard Personnel trained in AE where needed? Is the training documented?

- e. Does the State have a Ammunition and Explosives Safety Councils, Committees or Certification Boards to provide command oversight and program review?
- f. Does the SOHM review the AE Program every year?
- g. Is there an SOP in place for all AE operations that includes a completed DA Form 7566?
- h. Have AE safety Certificates of Risk Acceptance (DA Form 7632) and/or Certificates of Compelling Reasons been completed and submitted when required?
- i. Are all personnel involved with AE operations have an understanding and awareness of the hazards associated with AE?

**B-5. Comments**

Help make this a better test for evaluating management controls. Submit comments to NGB-AVS-S (NGR 385-64), ARNG Readiness Center, 111 South George Mason Drive, Arlington, VA 22204-1382.

**Glossary**

**Section I**

**Abbreviations**

**AE**

Ammunition and Explosive

**AHA**

ammunition holding areas

**AR**

Army Regulation

**ARNG**

Army National Guard

**ASP**

ammunition supply point

**ATPs**

ammunition transfer points

**CCR**

Certificate of Compelling Reasons

**CRM**

composite risk management

**DA Pam**

Department of the Army Pamphlet

**DDESB**

Department of Defense Explosive Safety Board

**DoD**

Department of Defense

**DOT**

Department of Transportation

**EOD**

explosive ordnance disposal

**ESS**

Explosive Safety Submittals

**ESSP**

Explosive Safety Site Plan

**GIS**

global information system

**GKO**

Guard Knowledge Online

**HD**

hazard class/division

**HQDA**

Headquarters, Department of the Army

**IAW**

in accordance with

**LRTAO**

Logistics Review and Technical Assistance Office

**MEC**

munitions of explosive concern

**MOA**

memorandum of agreement

**MR**

Military Rule

**NEW**

net explosive weight

**NGB**

National Guard Bureau

**Pam**

pamphlet

**QASAS**

Quality Assurance Specialist – Ammunition Surveillance

**QD**

quantity-distance

**SOHM**

Safety and Occupational Health Manager

**SOP**

Standing Operating Procedure

**USACHPPM**

U.S. Army Center for Health Promotion and Preventive Medicine

**USADAC**

U.S. Army Defense Ammunition Center

**USATCES**

U.S. Army Technical Center for Explosive Safety

**USPFO**

United States Property and Fiscal Officers

**UXO**

Unexploded Ordnance

**Section II****Terms****Administration area**

The area in which administrative buildings that function for the installation as a whole, excluding those offices located near and directly serving components of explosives storage and operating areas, are located.

**Ammunition and explosives**

Includes (but is not limited to) all items of ammunition; propellants, liquid and solid; high and low explosives; guided missiles; warheads; devices; pyrotechnics; chemical agents; and components and substances associated therewith, presenting real or potential hazards to life and property.

**Ammunition and explosives area**

An area specifically designated and set aside from other portions of an installation for the development, manufacture, testing, maintenance, storage, disposal, or handling of ammunition and explosives.

**Ammunition holding area**

An area that is used for temporary storage, weapons assembly and staging.

**Ammunition and explosives staging area**

An area used as a transient area for A&E. This area may be used for staging all-up-round weapons, staging weapons to support daily aircraft requirements, or for the assembling convoys.

**Ammunition lot**

A quantity of components, each of which is manufactured by one manufacturer under uniform conditions, and which is expected to function in a uniform manner. The lot is designated and identified by assignment of an ammunition lot number and preparation of an ammunition data card.

**Ammunition storage unit (ASU)**

All types of explosives storage magazines including outdoor or indoor, open storage areas, sheds, bunkers, and earth covered and above-ground magazines.

**Armament pads**

A location where ammunition is located for immediate loading onto combat aircraft or vehicles.

**Army accident**

An unplanned event or series of events that results in damage to Army property, occupational illness to Army military or civilian personnel, injury or death to Army military personnel on- or off-duty, injury to on-duty civilian personnel, damage to public and private property, or injury or illness to non-Army personnel as a result of Army operations.

**Army National Guard Personnel**

This phrase includes, for purposes of this regulation Army National Guard Personnel are:

- a. Federal civilians employed by the Department of Defense.
- b. Active Guard Reserves (AGRs) who are in either a Title 10 or a Title 32 status.
- c. Federal Technicians.
- d. Military members who are not AGRs (i.e., do not perform 180 days of continuous active service).
- e. State civilians whose salaries are paid by the Federal Government through cooperative agreements.
- f. Contractors who work for the Army National Guard.

**Barricade**

An intervening barrier, natural or artificial, of such type, size, and construction as to limit in a prescribed manner the effect of an explosion on nearby buildings or exposures.

**Basic load ammunition holding area (BLAHA)**

A storage area for basic load ammunition located within the boundaries of a barracks or in the immediate vicinity thereof, in armored vehicles, trucks, trailers, structures, or on pads to ensure mission readiness. BLAHAs consist of one or more storage sites and involve acceptance of risks to personnel, facilities and equipment that are greater than that normally permitted.

**Blast overpressure**

The pressure, exceeding the ambient pressure, manifested in the shock wave of an explosion.

**Central register**

An official record of range deviations held at the respective major Army Command.

**Common carrier**

A person who transports passengers or goods for a fee.

**Compatibility**

Ammunition or explosives are considered compatible if they may be stored or transported together without increasing significantly either the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident.

**Compatibility group**

The compatibility group for ammunition, explosives and/or other hazardous materials which can be stored and/or transported together without significantly increasing the probability of accident or, for a given quantity, the magnitude of the effects of such an accident. The compatibility groups are based on the system recommended for international use by the United Nations Organization (UNO) and as adopted by NATO and the Department of Defense.

**Competent authority**

An individual of the armed forces designated in command, responsible for the direction, coordination and control of military forces. The Commander alone is responsible for everything his unit does or fails to do. He cannot delegate his responsibility, or any part of it although he may delegate portions of his authority to competent individuals. An individual designated by the Commander to address areas of primary interest within that individual's technical expertise.

**Component (Ammunition Item)**

Any part of a complete item whether loaded with explosives, inert (not containing explosives), or empty (not filled with explosives).

**Composite risk management**

A holistic approach to preserving readiness that applies 24/7 to Army National Guard Personnel.

**Composite risk management process**

Composite risk management is the process of identifying and controlling hazards to protect the force. It is a five-step process representing a logical thought process from which users develop tools, techniques and procedures for applying composite risk management in their areas of responsibility. It is a closed loop process applicable to any situation and environment. The five steps are:

- a. Identify Hazards: Identify hazards to the force. Consider all aspects of the current and future situations, environment and known historical problem areas.
- b. Assess Hazards to Determine Risks. Assess the impact of each hazard in terms of potential severity and probability.
- c. Develop Controls and Make Risk Decisions: Develop control measures that eliminate the hazard or reduce its risk. As control measures are developed, risks are reevaluated until all risks are reduced to a level where benefits outweigh potential costs and are accepted by appropriate authority.

- d. Implement Controls: Put controls in place that reduce the risk.
- e. Supervise and Evaluate: Enforce standards and controls. Evaluate the effectiveness of the controls and adjust/update as necessary.

**Debris**

Any solid particle thrown by an explosion or other strong energetic reaction. For aboveground detonations, debris usually refers to secondary fragments. For underground storage facilities, debris refers to both primary and secondary fragments, which are transported by a strong flow of detonation gases.

**Detonation**

A violent chemical reaction within a chemical compound or mechanical mixture involving heat and pressure. A detonation is a reaction which proceeds through the reacted material toward the un-reacted material at a supersonic velocity. A detonation, when the material is located on or near the surface of the ground, is normally characterized by a crater.

**Dud**

Explosive munitions which has not armed as intended or which has failed to function after being armed. (See misfire.)

**Dummy ammunition**

Ammunition or ammunition components having the appearance of actual items and not having any explosives components.

**Easement**

The right to make limited use of another person's real property.

**Exemption**

A written authority that permits a long-term deviation from a mandatory requirement of United States Army ammunition and explosives safety standards. Exemptions will be reviewed for applicability and currency at intervals not to exceed 5 years.

**Explosion**

A chemical reaction of any chemical compound or mechanical mixture that, when initiated, undergoes a very rapid combustion or decomposition, releasing large volumes of highly heated gases that exert pressure on the surrounding medium. Depending on the rate of energy release, an explosion can be categorized as a deflagration or a detonation.

**Explosives area**

A restricted area specifically designated and set aside from other portions of an installation for the manufacturing, processing, storing, and handling of explosives and ammunition.

**Explosives facility**

Any structure or location containing ammunition and explosives, excluding combat aircraft parking areas or ammunition and explosives aircraft cargo areas.

**Explosive license**

An installation - generated document which shows the allowable net explosives weight at each explosive site.

**Hazard**

Any actual or potential condition that can cause injury, illness, or death of personnel, damage to or loss of equipment, property or mission degradation; a condition or activity with potential to cause damage, loss or mission degradation.

**Hazard analysis**

The logical, systematic examination of an item, process, condition, facility, or system to identify and analyze the probability, causes, and consequences of potential or real hazards.



**Hazard class**

The United Nations Organization (UNO) hazardous classification system, which contains nine hazard classes, is used by the DoD for dangerous materials to identify the hazardous characteristics of A&E. Hazard Class 1 (A&E) is further divided into seven division designators that indicate the primary characteristics and associated hazards.

**Hazard classification**

An assignment of ammunition and explosives (class 1 substances) into one of six divisions for purposes of storage, transportation, and QD computations. These divisions are:

- a. 1.1 - mass detonating.
- b. 1.2 - fragment producing.
- c. 1.3 - mass fire.
- d. 1.4 - moderate fire.
- e. 1.5 - very insensitive explosives and blasting agent (Used by the Army for transportation only).
- f. 1.6 - extremely insensitive ammunition.

**Holding yard**

A location for groups of railcars, trucks, or trailers used to hold ammunition, explosives, and dangerous materials for interim periods before storage or shipment.

**Inert ammunition**

Ammunition containing no explosives or chemical agents.

**Inhabited buildings**

Buildings or structures, other than operating buildings occupied in whole or in part by human beings, both within and outside DOD establishments.

**Inhabited building distance (IBD)**

The minimum distance permitted between an inhabited building and an ammunition or explosives location for the protection of administration, quarters, industrial and other similar areas within a naval shore establishment.

**Magazine**

Any building or structure, except an operating building, used for the storage of ammunition and explosives.

**Maximum credible event**

In hazards evaluation, the maximum credible event from a hypothesized accidental explosion, fire, or agent release is the worst single event that is likely to occur from a given quantity and disposition of ammunition and explosives. The event must be realistic, with a reasonable probability of occurrence considering the explosion propagation, burning rate characteristics, and physical protection given to the items involved.

**Military munitions**

All ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy, and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under Department of Energy nuclear weapons program, after all required sanitizing operations under the Atomic Energy Act of 1954, as amended, have been completed.

**Military pyrotechnics**

Ammunition manufactured specifically for use as signals, illuminants, and like items.

**NEW**

Net explosive weight expressed in pounds.

**Potential explosion site**

The location of a quantity of explosives that will create a blast, fragment, thermal, or debris hazard in the event of an accidental explosion of its contents.

**Quality assurance specialist - ammunition surveillance (QASAS)**

Department of the Army civilians that function in the ammunition surveillance program at DOD installations, activities, and commands that receive, store, maintain, issue, use, and dispose of ammunition.

**Quantity-distance**

The quantity of explosives material and distance separation relationships that provide defined types of protection.

**Risk**

Chance of hazard or undesired consequences; the probability of exposure to chance of injury or loss from a hazard; risk level is expressed in terms of hazard probability and severity.

- a. Exposure: The frequency and length of time personnel and equipment are subjected to a hazard.
- b. Severity: The expected consequence of an event, in terms of degree of injury, property damage, or other mission impairing factors (loss of combat power, adverse publicity, and so forth) that could occur.
- c. Probability: The likelihood that a hazardous incident will occur.

**Risk acceptance**

The practice of having the proper authority to review risks for acceptability.

**Risk assessment**

The evaluation of the risk associated with an activity which may include one or more analysis methodologies.

**Risk decision**

The decision to accept or not accept the risk(s) associated with an action; made by the Commander, leader, or individual responsible for performing that action.

**Risk tolerance**

The level of risk the command is willing to accept.

**Storage compatibility**

A relationship between different items of ammunition, explosives, and other dangerous materials whose characteristics are such that a quantity of two or more of the items stored or transported together is no more hazardous than a comparable quantity of any one of the items stored alone.

**Unexploded ordnance (UXO)**

Ammunition and explosives which have been primed fused, armed, or otherwise prepared for action and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations/communities, personnel, or materiel, and remains unexploded either by malfunction or design or any other cause.

**Waiver**

A written authority that permits a temporary deviation from a short-term (5 years or less) mandatory requirement of United States Army ammunition and explosives safety standards. (See exemption.)

**Waste military munitions**

A military munitions is a “waste” if it is either a solid or hazardous waste under regulations implementing RCRA, (42 U.S.C. Section 9601 et seq.) or defined as a waste under a DOD Component’s formal written policies and procedures. In general:

- a. An unused military munitions is a solid waste when any of the following occurs:
  - (1) The munitions is abandoned by being disposed of, burned, detonated (except during intended use), incinerated, or treated prior to disposal; or
  - (2) The munitions is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal, or
  - (3) The munitions is deteriorated or damaged (e.g., the integrity of the munitions is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or
  - (4) An authorized military official has declared the munitions a solid waste.
- b. A used or fired military munitions is a solid waste:
  - (1) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
  - (2) If recovered, collected, and then disposed of by burial or land filling either on or off a range.
  - (3) For purposes of RCRA section 1004(27), a used or fired military munitions is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under Section 3004(u) and (v), and Section 3008(h), or imminent and substantial endangerment authorities under Section 7003, if the munitions lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is not feasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munitions and its location (to the extent the location is known). For further clarification see 40 CFR 266.202 under Definition of Solid Waste.