Department of the Army
West Point, New York 10996

West Point Regulation 385-2

10 June 2015

Safety and Occupational Health

Chemical and Biological Agents, Radiation, Nuclear, and Explosives (CBRNE) Safety Programs

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By Order of the Senior Commander:

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Superintendent

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Summary: This regulation implements the safety requirements of Army Regulation 385-10, The Army Safety Program and other applicable Army safety regulations, Department of Defense instructions, Executive Orders, and Federal Codes in regard to chemical agents, biological agents, radioactive materials, nuclear materials/processes, and ammunition and explosives.

Supplementation: Supplementation of this regulation is prohibited without prior approval from Director of Safety and Occupational Health, West Point Safety Office, 667A Ruger Road, West Point, New York 10996.

Scope: The requirements of this regulation apply to any activity or organization operating on West Point whose mission involves the use, handling, transportation, transfer, storage, response to, or disposal of chemical agents, biological agents (infectious agents and toxins), radioactive materials, nuclear materials/processes, or ammunition and explosives as defined by AR 385-10.

Contents

Appendixes

Glossary

Chapter 1
General

1-1. Purpose

a. This regulation is a compilation of the safety and occupational health requirements for chemical and biological agents, radiation, nuclear reactors, and ammunition and explosives (CBRNE) safety programs. The purpose of this regulation is to prescribe the responsibilities, policies, and procedures necessary to protect the safety and health of activities and organization with a mission involving these materials, their employees, the West Point community, and the public outside of the West Point Military Reservation.

b. Chapter 4, Radiation Safety of this regulation fulfills the requirements of the installation radiation safety plan.

c. Chapter 6, Ammunition and Explosives (A&E) of this regulation fulfills the requirement of an installation explosives safety management plan (ESMP).

1-2. References Required and related publications and prescribed and referenced forms are listed in Appendix A.

1-3. Explanation of Abbreviations and Terms. Abbreviations and special terms used in this publication are explained in the Glossary.

1-4. General Responsibilities. The following roles and responsibilities apply to the implementation and execution of the programs contained in this regulation. Specific program responsibilities are addressed in each of the following chapters as needed.

a. Senior Commander (SC) and Installation Commander (IC). At West Point the roles, responsibilities, and authorities of both the SC and IC are performed by the Superintendent of the United States Military Academy (USMA).

(1) Superintendent. The Superintendent is the senior general officer at West Point. The Superintendent is assigned the functional responsibilities of command, control, and governance of the USMA and the West Point Military Reservation.

(2) The Superintendent uses the Garrison as the primary organization to provide services and resources to customers in support of accomplishing this mission. The Superintendent:

(a) Is responsible for synchronizing and integrating Army priorities and initiatives at West Point. Since West Point is an IMCOM managed installation there is a requirement for a strong collaborative relationship between the Superintendent, the IMCOM Region Director, and the Garrison Commander. The Superintendent

commands West Point but funding of almost all installation activities flows through the Garrison.

(b) Assumes the duties and responsibilities of the installation commander where that title is mentioned in U.S. Code or DOD or Army policies and regulations.

(c) Assumes the duties and responsibilities of the senior mission commander where that title is mentioned in Army regulations except for regulations involving operational duties and responsibilities. Tenant mission commanders/leaders will retain operational duties and responsibilities.

(d) Unless prohibited by law or regulation, the Superintendent may delegate, as necessary, assigned duties and responsibilities to the Garrison Commander (GC). Such delegation is made in writing and specifically states the duties and responsibilities so delegated and the termination date of the delegation. (The Superintendent in assigning responsibility and authority to Garrison Commander still retains the overall responsibility for the actions of the Garrison.)

(e) Establishes installation priorities affecting all tenant commands and activities.

(f) Prioritizes base operations support consistent with HQDA priorities and approved common levels of support (CLS) bands.

(g) Oversees the CLS services and capabilities provided to customers.

(h) Approves and submits the installation master plan consistent with HQDA long-range plans and goals. As West Point is an IMCOM managed installation the Superintendent collaborates with the Garrison Commander and IMCOM Region Director (RD) before the Superintendent submits the installation master plan.

(i) Approves the military construction, Army (MCA) project priority list at West Point. The Superintendent collaborates with the IMCOM RD before the Superintendent approves the MCA project priority list for West Point.

b. Garrison Commander (GC). The GC commands the Garrison and is the Superintendent's senior executive for West Point's installation activities. The GC is responsible for day-to-day operation and management of West Point's installation and base support services. The GC ensures that West Point's installation services and capabilities are provided in accordance with HQDA directed programs, Superintendent's guidance and priorities, CLS, and IMCOM guidance. The GC provides additional service support in accordance with HQDA directives and provides reimbursable services in accordance with memorandum of understanding or agreement (MOU/MOA). The GC is responsible to deliver Family and installation programs, coordinates and integrates the delivery of support from other service providers, and obtains

Superintendent's approval of the West Point installation master plan. The Garrison Commander's responsibilities include:

(1) Represent the Army and the installation in the surrounding community as directed by the Superintendent.

(2) Approve and issue West Point and Garrison regulations and policies in accordance with respective Army regulations, or installation level policies involving tenant units as directed by the Superintendent.

(3) Approves and issues policies for West Point's IMCOM civilian workforce.

(4) Develops and implements the West Point Force Protection Program.

c. West Point Safety Program Manager.

(1) Develop the policies and procedures required to implement the Army safety programs for each of the materials, activities, or processes included in this regulation.

(2) Perform the periodic review of each program included in this regulation as required by Federal, Department of Defense, or Army standards.

(3) Perform periodic audits of each program as required by Federal, Department of Defense, or Army standards.

d. Activities and Organizations with missions involving the materials or processes included in this regulation.

(1) Determine the applicability of this regulation to mission requirements and comply with the stated standards.

(2) Comply with all applicable standards for each material or process included in this regulation. Submit requests for deviation from this regulation to the Garrison Commander for consideration.

1-5. Risk Management

a. The goal of risk management is to enhance operational effectiveness by conserving our mission resources without degrading the Army's performance. The risk management process contributes to a high level of operational readiness and increased mission effectiveness by eliminating unnecessary hazards. Identifying hazards and eliminating those that are unnecessary greatly contributes to force protection and the Army's readiness and effectiveness.

b. Risk management for the chemical agent safety program is executed in accordance with DA Pam 385–30, Mishap Risk Management and Chapter 6, Safety Criteria for Agent Activities of DA Pam 385-61, Toxic Chemical Agent Standards.

1-6. Operating Concept.

a. This regulation supersedes guidance contained in previously issued West Point and United States Military Academy (USMA) policy letters and regulations.

b. In situations where conflict exists between this regulation and the standards of regulating agencies, the most stringent standard is applied to provide the greatest possible degree of safety.

1-7. Provisions

a. This regulation has mandatory procedures and guidance as well as preferred and acceptable methods of accomplishment.

b. The terms “shall,” “will,” and “must” are used to state mandatory requirements. Deviation from these provisions requires an approved exception to policy from the Garrison Commander and a certificate of risk acceptance per provisions of Army Regulation (AR) 385–10 and DA Pam 385–30.

c. The word “should” indicates a preferred method of accomplishment. Deviation from these provisions requires written authorization from the Garrison Commander.

d. The word “may” indicates an acceptable or suggested means of accomplishment and is at the discretion of the individual activity or organization leadership.

1-8. Command Policy.

a. Senior commander. The Superintendent of the United States Military Academy serves as the Senior Commander of West Point. The Superintendent’s mission is to provide a safe and healthy environmental for the Soldiers, Families, and Civilians, to facilitate mission accomplishment. While the delegation of Senior Command authority is direct from HQDA, the Superintendent will routinely resolve installation issues with the Garrison Commander. The Superintendent uses the Garrison as the primary organization to provide installation support and resources to customers in support of accomplishing this mission.

b. The Superintendent operates through the Garrison Commander to execute the responsibilities and programs contained within the regulation as follows:

(1) On West Point there is a strong collaborative relationship between the Superintendent and the Garrison Commander. The Superintendent commands the installation but almost all installation support flows through the Garrison Commander.

(2) Unless prohibited by law or regulation, the Superintendent delegates, as necessary, assigned duties and responsibilities to the Garrison Commander for day-to-day execution, including the development of policies and procedures to implement Army programs such as those contained in this regulation.

(3) The Superintendent establishes installation priorities among all tenant organizations.

(4) The Superintendent prioritizes installation operations support consistent with HQDA priorities and approved common levels of support.

c. Garrison commander.

(1) The Garrison Commander commands the U. S. Army Garrison West Point and is the Superintendent's senior executive for installation support activities. The Garrison Commander ensures that installation services and capabilities are provided in accordance with HQDA directed programs, Senior Commander guidance, Common Levels of Support, and IMCOM guidance. The Garrison Commander is responsible for delivering installation support programs on behalf of the Superintendent.

(2) The Garrison Commander:

(a) Approves and issues garrison policies in accordance with respective Army policies and regulations, and Senior Commander guidance and priorities.

(b) Develops installation level policies involving tenant units as directed by the Superintendent. This includes the programs included in this regulation.

(c) Ensures that tenants develop and update adequate policies, procedures, and Continuity of Operation Plans (COOP) for emergencies resulting from missions involving the materials covered by this regulation, and tenants and first responders rehearse emergency and COOP plans as required, or at least annually.

Chapter 2
Chemical Agent Safety Management

2-1. Applicability.

a. This chapter applies to any activity or organization on West Point with a chemical agent mission. This requirement does not apply to commercially available or produced chemicals, or to recovered chemical warfare material (RCWM). At this time there are no commands, organizations, units, or tenant activities on West Point with a chemical agent mission.

b. Chemical agent definition. A chemical agent is defined as a chemical compound (to include experimental compounds) that, through its chemical properties, produces lethal or other damaging effects on human beings, and is intended for use in military operations to kill, seriously injure, or incapacitate persons through its physiological effects. Excluded are dilute RDT&E solutions, riot control agents, chemical defoliants and herbicides, smoke and other obscuration materials, flame and incendiary materials, and industrial chemicals.

2-2. Purpose. This chapter describes the mandatory minimum safety criteria, guidance, and procedures for use in processing, handling, storage, transportation, disposal, or decontamination of chemical agents in the event that an organization on West Point is assigned a chemical agent mission.

2-3. Responsibilities.

a. Any Army command (ACOM), Army service component command (ASCC), direct reporting unit (DRU), Army National Guard, units, or activities with a chemical agent safety function will ensure that all applicable safety procedures and guidance outlined in DA Pam 385-61 are implemented and enforced. To maintain an effective chemical agent safety function, it is important that commands take the same aggressive leadership in chemical agent safety that is taken in other command functions. This level of command involvement and emphasis is critical to ensuring the safety and welfare of West Point and the surrounding communities.

b. Any activity or organization having a mission involving chemical agents will comply with the requirements of AR 385-10 and DA Pam 385-61. As a minimum, any activity or organization planning or conducting any mission or activity involving chemical agents as defined by AR 385-10 will:

(1) Develop a standard operating procedure (SOP) in accordance with paragraph 6-7, Standard Operating Procedures of DA Pam 385-61, and staff it with the West Point Safety Office, Directorate of Plans, Training, Mobilization, and Security (DPTMS), Directorate of Emergency Services (DES), and Keller Army Community Hospital (KACH) 90 days in advance of any new or proposed chemical agent mission or activity on West Point.

(2) Review, update and/or revise as needed, and certify each SOP annually to ensure it reflects the current set of circumstances and contains effective procedures. Failure to recertify the SOP within 13 months will result in a suspension of the chemical agent mission or operation pending completion of the review.

c. The Garrison Commander designates, as required, the Director of Safety as the official responsible for maintaining any chemical agent exposure monitoring records, and interpreting and correlating the results. A summary of the rosters documenting individual agent area entrance and egress (as defined per NFPA 101), level of PCE worn, and the records of air-monitoring measurements will be retained in accordance with Section 1020(d), Part 1910, Title 29, Code of Federal Regulations (29 CFR 1910.1020(d)).

Chapter 3
Biological (Infectious Agents and Toxins) Safety Management

3-1. Applicability. This chapter applies to any organization on West Point using, handling, transporting, transferring, storing, or disposing of infectious agents and toxins (IAT) rated at bio-safety level 2 (BSL-2), BSL-3, or BSL-4 (See Glossary) used in microbiological activities in clinical laboratories, biomedical and biological research settings, microbiology teaching laboratories, and veterinary reference laboratories on West Point.

3-2. Biological Safety Program. Any organization or activity conducting microbiological activities in a clinical or academic laboratory or in a biomedical research setting will include a biological safety section in their organization's written safety and occupational health program document implementing the requirements of Chapter 20, Infectious Agents and Toxins of AR 385-10 and Chapter 3, Biological Safety Program, of DA Pam 385-69. These organizations or activities will coordinate their biological safety program with their chain-of-leadership and the West Point Safety Office.

a. All commands (includes Army Headquarters, Army commands, Army Service components, and Direct Reporting Units) conducting microbiological activities in clinical laboratories or in biomedical research settings will develop and implement a biological safety program, as required by AR 385-10. The biological safety programs will include the following:

(1) Program policy and goals.

(2) Program responsibilities.

(3) Safety committee.

(4) Requirements and procedures for risk assessments and selection of appropriate BSL.

(5) Requirements and procedures for SOPs.

(6) Occupational health requirements and procedures.

(7) Facility design and commissioning.

(8) Access control.

(9) Engineering controls/safety equipment.

(10) Bio-safety practices.

(11) The PPE (selection, use, training, testing, and maintenance).

(12) Labeling and posting of hazards.

(13) Chemical hygiene plan.

(14) Personnel qualifications and training.

(15) Safety information.

(16) Inspections.

(17) Facility, utilities, and equipment continuing maintenance plan.

(18) Pest management.

(19) Transportation and transfer of IAT.

(20) Decontamination and disposal of IAT.

(21) Emergency planning and response.

(22) Mishap investigation and reporting.

(23) Select agent registration, if applicable.

(24) Recombinant deoxyribonucleic acid (DNA), if applicable.

(25) Radiation safety, if applicable.

(26) Animal safety, if applicable.

(27) Contract activities, if applicable.

b. Any organization with an IAT related mission located on West Point will develop its own facility specific internal standard operating procedures (SOP) for each of its laboratory or activities.

(1) Standards for development of a facility IAT SOP are described in paragraph 3-5, Standard Operating Procedures in DA Pam 385-69. The organization will submit all new SOPs to the West Point Safety Office, Emergency Operations Center, Directorate of Emergency Services, and Keller Army Community Hospital for review no less than 90 days in advance of any new IAT related mission on West Point.

(2) Each proponent activity or organization with an IAT related mission will certify their SOP(s) annually to ensure relevance and accuracy. Failure to recertify the SOP

within 13 months may result in a suspension of the IAT mission or operation pending completion of the review.

(3) Each proponent activity or organization will request an annual review of their SOP(s), or any change to an existing SOP, by the West Point Safety Office. The proponent activity or organization will not commence operations or implement any change to a SOP until a review is completed. Failure to request an annual review within 13 months may result in suspension of the IAT mission or operation pending completion of the review. The proponent will submit any change to an existing SOP for review at least 90 days prior to implementing the change.

3-3. Biological Safety Program Organization. In addition to development of written biological safety programs and SOPs, a bio-safety organization and procedures must be established to support these documents. These biological safety program organizations include a Biological Safety Committee, Bio-safety Officer(s), personal qualification and training standards, inspections, mishap notification, investigation, and reporting, Institutional Bio-safety Committee, and contractor activities.

a. Biological Safety Committee. Organizations, with the exception of clinical laboratories, conducting BSL-2 IAT activities will establish and charter a biological safety committee, consisting of representatives of the following: commander or institute director or designee, laboratory supervisors, bio-safety officer, occupational health, industrial hygiene (IH), facility maintenance, safety, emergency response, and an employee representative. At a minimum, the biological safety committee will:

(1) Review proposed work activities and facility modifications.

(2) Assist in performing biological risk assessments.

(3) Discuss mishaps and near misses.

(4) Evaluate compliance and adequacy of established safety policy, training, engineering, and administrative controls, PPE, and safe work practices.

(5) Be chaired by a military or civilian senior management official in the rank of Colonel (O-6) or civilian equivalent.

(6) Meet at least quarterly. Meeting minutes will be—

(a) Prepared and staffed through the institute commander/director.

(b) Available for review.

(c) Maintained for at least three years.

(7) Provide updates and information at the West Point Safety Council as needed.

(8) Clinical laboratories, BSL–3 and above, conducting IAT research or diagnosis will establish and charter a biological safety committee or similar committee. Standards for a BSL-3 and above are found at paragraph 3-2, Safety Committee or DA Pam 385-69.

(9) Clinical laboratories, BSL–2 and below, need not establish their own biological safety committee but will participate in an existing BSL-2 IAT safety committee meetings on West Point.

b. Bio-safety Officer.

(1) Organizations conducting IAT research and all facilities that store select agents and toxins as defined in Part 331, Title 7, Code of Federal Regulations (CFR), 9 CFR 121, and 42 CFR 73 will designate an individual as the bio-safety officer. Other IAT activities (for example, clinical laboratories) will have access to a bio-safety officer, such as on a regional support basis. Bio-safety officers will be trained and qualified as specified in paragraph 3–8a, Personnel Qualifications and Training, of DA Pam 385-69.

(2) Biosafety officers will serve as a facility/activity's bio-safety subject matter expert and will provide/support risk assessments, risk management, bio-safety controls, biological safety program management, SOPs, bio-safety training, inspections, mishap notification, investigation and reporting, and emergency planning and response.

c. Personnel qualifications and training.

(1) Bio-safety officers will meet the following qualifications:

(a) Bachelor's degree with background in science.

(b) One year of laboratory experience at equivalent BSL/animal BSL.

(c) A 3, 4, or 5 day Service-approved bio-safety course.

(d) The Department of Defense (DOD) biosafety course.

(e) Training in Service-specific safety policy and standards and risk management.

(2) Supervisors are responsible for understanding IAT operations and Army safety policy and standards for microbiological and biomedical activities.

(3) Supervisors are responsible for ensuring that employees have received the training to enable them to safely execute the operation, and maintaining records of this training; and ensuring safety equipment and controls are available, safe, functioning, inspected, tested, and maintained.

(4) Supervisors are responsible for ensuring that personnel entering a clinical or biomedical research laboratory meet applicable access control, medical, and safety and occupational health training requirements.

(5) Prior to performing assigned duties, personnel working with IAT will be aware of the associated hazards, will receive instruction that adequately prepares them for their assigned duties, and will be proficient in microbiological practices and procedures. Training will be developed in coordination with the organization's safety office and will be documented to include the date of the training session, the contents or a summary of the training, and employee's name. Training will include:

(a) Risk management principles and techniques.

(b) Concept and definition of BSLs.

(c) Modes of transmission, infectivity, time delay to onset of signs and symptoms, as well as the potential acute and chronic health effects and signs/ symptoms associated with the IAT to which workers are potentially exposed.

(d) Facility safety controls.

(e) Selection and use of safety equipment (for example, biological safety cabinets, glove boxes, laboratory chemical hoods).

(f) Laboratory practices and safety requirements, including all applicable SOPs and special practices and requirements.

(g) Bloodborne pathogens, hazard communication, and occupational exposure to hazardous chemicals in laboratories.

(h) Selection and use of PPE.

(i) Access control.

(j) Facility signage, labeling of containers, and safety communications.

(k) The purpose and description of the occupational health program, including specific medical surveillance and immunization requirements associated with the IAT to which workers are potentially exposed.

(l) Hazardous biological waste handling, approaches to minimizing the volume of waste, decontamination, packaging, and disposal.

(m) Disinfection and sterilization.

(n) Emergency procedures.

(o) Reporting mishaps.

(p) Inspection requirements.

(q) Transportation (packaging and shipment) and transfer of IAT, when applicable.

(6) Training for all new employees working with IAT will include a period of supervised orientation in the facilities, as prescribed in the agency/facility biological safety program, by a scientist or technician with specific training in the procedures and properties of the IAT in use. During the training period, new laboratory personnel will be under the supervision of appropriately trained personnel.

(7) Biosafety personnel working with biological select agents and toxins (BSAT) will comply with 42 CFR 73.15 refresher training requirement.

d. Inspections.

(1) Before performing operations with IAT, supervisors and operators will survey their work area daily. Supervisors will have a means to correct the deficiencies found or to report any unsafe conditions and have them corrected prior to beginning operations.

(2) A qualified Collateral Duty Safety Officer (CDSO) will be designated for each laboratory room or suite in research facilities or per clinical department for healthcare diagnostic laboratories. In addition to specific safety training required for them to be qualified as a CDSO and knowledgeable of general safety and health matters relevant to their lab, the CDSO will complete the DOD bio-safety course and training in Army-specific safety policies and standards, and risk management.

(a) The laboratory CDSO is be responsible for assisting with monitoring the safety, functioning, inspection, testing, and maintenance of required laboratory safety controls and equipment. Logs are posted on or near specific items (such as biological safety cabinets, chemical hoods, autoclaves, centrifuges, freezers, and refrigerators) and laboratory personnel will document daily checks to ensure proper operation and identify any malfunction or safety concern.

(b) The laboratory CDSO will assist in ensuring that malfunctions of room or building systems, laboratory safety controls, or equipment or shortages in required equipment and supplies are reported to the appropriate supervisors. The laboratory CDSO will assist in ensuring that the laboratory room and/or safety controls and equipment are labeled to warn of the malfunction and indicate that it should not be used until repaired and, as applicable, tested. Tags for this purpose are available from the West Point Safety Office.

(3) The laboratory supervisor will conduct and document a monthly inspection of his or her laboratories.

(4) The CDSO, bio-safety officer, or qualified safety and occupational health personnel designated by the commander/director will inspect BSL-2 and toxin laboratories at least semi-annually, and BSL-3 and BSL-4 laboratories and those in which dry forms of toxins are handled at least quarterly. The competent medical authority (CMA) will participate in inspections at least annually to identify potential workplace hazards and determine if revision of exposure prevention strategies is indicated. These documented inspections may be unannounced and will include coverage of general safety practices as well as requirements applicable to the laboratory's BSL. One of the semi-annual or quarterly inspections can be a Standard Army Safety and Occupational Health Inspection (SASOHI) as required by AR 385-10.

(5) A qualified industrial hygienist (GS–0690 job series) will conduct an IH survey of research microbiology laboratories on an annual basis. Surveys will identify and document chemical, physical, biological and ergonomic hazards. Industrial hygienists will evaluate and assign a risk assessment code to each hazard and recommend appropriate hazard control (see DA Pam 40–503). Each visit is documented, and the work site supervisor is provided a written report. At a minimum, these evaluations should include hazardous material identification, type of engineering controls needed (if applicable), type of PPE required, and posting of appropriate signs needed (that is, noise-hazardous area or eye protection required). Appropriate entries should be made in the Defense Occupational and Environmental Health Readiness System-IH.

(6) Deficiencies or procedures that create a potentially life-threatening situation will be immediately referred to supervisory personnel, the West Point Safety Office (845-938-3717), the commander or institute director, and the Garrison Commander (845-938-2022). The operation will be stopped, and corrective actions will be immediately
implemented or the residual risk will be accepted at the appropriate level in accordance with Army Headquarters' (for example, U.S. Army Materiel Command, U.S. Army Medical Command, and U.S. Army Test and Evaluation Command) risk acceptance policy.

(7) Reports of deficiencies for other than life-threatening situations will be made as soon as possible to the appropriate supervisor, with copies furnished to the safety office. If a problem is widespread, all affected personnel will be notified.

e. Mishap notification, investigation, and reporting.

(1) Biological mishap reporting and investigation will be in accordance with requirements of DA Pam 385-69, AR 50-1, AR 385-10, DA Pam 385-40, 7 CFR 331, 9 CFR 121, 42 CFR 73, and applicable Federal, State, and local requirements. Commanders will establish procedures to ensure initial notification, investigation, and reporting of a biological mishap is accomplished in accordance with the requirements of

these documents as follows, as well as applicable State and local requirements. All biological mishaps will be investigated for the purpose of accident prevention.

(2) The term “biological mishap" is defined as an event in which the failure of laboratory facilities, equipment, or procedures appropriate to the level of potential pathogenicity of an IAT may allow the unintentional, potential exposure of humans or the laboratory environment to that agent.

(3) Biological Select Agents and Toxins (BSAT). Procedures for reporting a BSAT incident are found in paragraph 3-11, Mishap Notification, Investigation, and Reporting of DA Pam 385-69.

(a) All BSAT incidents are reported to the first general office in the laboratory’s chain-of-command and the Garrison Commander. The first general officer (or equivalent) receiving the report will forward it up the chain of command to the Office of the Director of Army Safety (ODASAF).

(b) In addition, per guidance published by the Office of the Provost Marshal General, a category 1 serious incident report will be submitted for the BSAT mishaps in accordance with paragraph 3-11, Mishap Notification, Investigation, and Reporting of DAM Pam 385-69.

(c) The command responsible for the BSAT incident will submit a completed APHIS/CDC Form 3 to the CDC or APHIS within seven calendar days, with a copy forwarded through the first general officer in the chain of command to ODASAF.

(4) Non-BSAT (IAT not characterized as BSAT).

(a) Upon discovery of a non-BSAT occupational exposure or release of a non-BSAT outside of the laboratory, an individual or entity must immediately notify the first general officer (or equivalent) in the mishap reporting chain and the Garrison Commander. The first general officer (or equivalent) receiving the report will forward it up the chain of command to the ODASAF.

(b) The command responsible for the Non-BSAT incident will submit a closeout report to ODASAF with copy furnished through normal command channels after the mishap investigation is complete.

(5) Class A-D accidents, as defined in AR 385–10, occurring during biological activities will be reported in accordance with requirements of AR 385–10 and West Point Regulation 385-1.

f. Institutional Bio-safety Committee (IBC).

(1) When work with recombinant deoxyribonucleic acid (DNA) is undertaken, an Institutional Bio-safety Committee (IBC) will be established to review recombinant DNA

activities and protocols. The IBC will function as stated in the NIH Guidelines for Research Involving Recombinant DNA Molecules.

(2) Activities funded by the NIH involving recombinant DNA will comply with all requirements of the NIH Guidelines for Research Involving Recombinant DNA molecules and are subject to IBC approval. Facilities conducting work with recombinant DNA that are not funded by the NIH should adopt these guidelines as best practices.

g. Contract Activities.

(1) Contracting agencies, or agencies performing safety and health oversight for a contracting agency, will develop and document procedures for reviewing contractors' capability to perform activities with IAT safely in accordance with AR 385–10 and DA Pam 385-69.

(2) Upon award, the contracting agency or agency performing safety and health oversight will conduct a survey of the contractor's biological safety program to determine if it meets the intent of paragraph 3–1, Biological Safety Program of DA Pam 385-69. In addition, the laboratory facilities to be used for Army-contracted IAT activities will be inspected for compliance with safety and occupational health requirements, using the checklist in Appendix B of DA Pam 385-69 as a guide. For contract laboratory facilities working at BSL–3 or BSL–4, the contracting agency or agency performing safety and health oversight will reinspect the laboratory facilities on a 12-month basis. Surveys and inspections may be accomplished by a qualified, independent third party using contracting agency approved survey and inspection criteria. Survey and inspection reports will be provided to the contracting officer and the Bio-safety Committee.

3-4. Occupational Health. All BSL-2 and above will establish an occupational health program for their laboratories that includes:

a. Medical surveillance examinations.

(1) Pre-placement examinations

(2) Periodic medical surveillance

(3) Termination examinations

(4) Post-exposure examinations

b. Documentation of medical opinion. The designated Competent Medical Authority (CMA) for West Point for the purpose of bio-safety laboratory employees is the Chief of Occupational Medicine. The CMA records a written opinion in the medical record for each medical surveillance examination. This opinion includes:

(1) The results of the medical examination and testing.

(2) A statement about any detected medical condition that would place the individual's health at an increased risk of impairment if exposed to etiologic agent.

(3) Any recommended limitations on the potential exposure to etiologic agent or on the use of PPE.

(4) A statement that the employee has been informed of the above.

3-5. Emergency Planning and Response. All IAT biological laboratories will establish specific emergency plans for their facilities in accordance with DA Pam 385-69, Safety Standards for Microbiological and Biomedical Laboratories. Plans will include liaison through proper channels with the Garrison Directorate of Plans, Training, Mobilization, Training and Security (DPTMS) and the Garrison Directorate of Emergency Services (DES). These plans will include both the building and the individual laboratories. Emergency plans for individual laboratories will include SOPs for personal decontamination and responsibilities for spill control and emergency shutdown. Each facility must have a plan that describes evacuation routes, assembly areas, procedures to account for all individuals, facilities for medical treatment, and procedures for reporting mishaps and emergencies. Biological laboratories using BSL-2/3/4 materials will inform the DPTMS and DES of all emergency plans in advance of any call for assistance. The biological laboratories will test emergency plans including all drills, rehearsals, or an exercise, to ensure they are capable of effectively responding to the emergency in a timely manner, before they are adopted. The biological laboratories will exercise and conduct drills of emergency plans at least annually with after-action reviews to identify lessons learned and incorporate these into emergency plan updates and future drills. The DES will arrange for the participation with affected agencies outside of West Point that support emergency plans in an exercise at least once every two years. The biological laboratories will coordinate and conduct basic drills of plans and communications by simulating an emergency, and requiring the DPTMS and DES to simulate their communication and response procedures. See AR 385–10 and DA Pam 385-69 for further information and requirements. Each biological laboratory will submit their emergency plans and all subsequent changes for their IAT faculties for inclusion in the West Point Emergency Action Plan.

Chapter 4
Radiation Safety Management

4-1. Purpose. This chapter serves as the West Point Radiation Safety Program as required by paragraph 1-4p(1) of DA Pam 385-24, The Army Radiation Safety Program.

4-2. Applicability. The West Point Radiation Safety Program applies to all activities and organizations with a mission involving ionizing and non-ionizing sources and applies during peacetime, wartime, contingency operations, training, exercises, and RDT&E.

a. Activities or organizations using radiation sources and radiation producing devices on West Point will identify and comply with all applicable Army, DOD, and Federal regulations and requirements.

b. West Point organizations will develop management and quality control processes to identify, mitigate, and control hazardous radiation fields and other radiation hazards associated with their activities and equipment through engineering design, administrative controls, or protective equipment (in that order). These activities or organizations will also ensure that exposure to ionizing radiation is kept as low as reasonably achievable (ALARA).

c. Requesting activities and organizations using a contract to perform work anywhere on West Point will ensure that applicable Nuclear Regulatory Commission (NRC) and Army radiation safety requirements are included in the Statement of Work for the project and are enforced by the Contracting Officer's Representative (COR) overseeing the contract. All COR's with oversight responsibilities pertaining to radiation will complete the TECOM Unit Radiation Safety Officer Course located at https://cecomsafety.apg.army.mil/rso2/ursotoc.aspx.

4-3. Responsibilities.

a. USMA Superintendent. As a Direct Reporting Unit (DRU) commander the Superintendent:

(1) Ensures USMA compliance with conditions of NRC licenses and Army Radiation Authorizations (ARAs), including AMC-held radioactive commodity licenses, and considers using Memoranda of Agreement or similar mechanisms to clarify the relationship between the USMA and the NRC license holder.

(2) Appoint, in writing, a trained USMA Radiation Safety Officer (RSO) and assistant (ARSO) to execute the USMA Radiation Safety Program in accordance with Chapter 7 of DA Pam 385-24.

(3) Issues ARAs to USMA organizations and activities.

(4) Establishes and employs, as applicable, procedures to ensure that captured, purchased, borrowed, or otherwise obtained foreign equipment and materiel are surveyed for RAM and that appropriate actions are taken following discovery of any RAM in those items.

(5) Maintains the Radiation Safety Program by:

(a) Establishing review and approval procedures for integrating risk management in accordance with FM 5–19 and DA Pam 385–30.

(b) Maintaining a central register of risk decisions regarding deviations from the Army standards of DA Pam 385-24, The Army Radiation Safety Program within the USMA. Provide a copy to affected NRC license holders.

(c) Ensuring that the risk management process is executed before the conduct of all operations.

(d) Ensuring, for programs under their purview, that each NRC license, Army reactor permit, ARA holder, and Army garrison is surveyed periodically for compliance with applicable radiation safety and health regulations and guidance. These surveys will be performed at a frequency consummate with the associated hazard but not to exceed three years. These services may be provided by the Army Public Health Command.

(6) Reports excess military-exempt light amplification by stimulated emission of radiation (laser) to the Defense Reutilization and Marketing Service for utilization screening within DOD.

(a) Maintaining accountability during the screening period. (Losing and gaining organizations will transfer excess directly between themselves.)

(b) Identifying requirements for usable parts and returning them to the supply system after utilization screening has been completed.

(7) Ensures that in the event of an NRC violation or radiation accident involving AMC-licensed RAMs that result in NRC Escalated Enforcement Action against an AMC commodity licensee, any resulting administrative civil penalty will ultimately be divided between AMC and the USMA as mutually agreed between their respective radiation safety offices, based on an evaluation of the nature of the alleged violations and penalty assessment.

b. USMA (DRU) Radiation Safety Officer. The USMA Radiation Safety Officer will:

(1) Ensure implementation of Army radiation safety policy within USMA.

(2) Direct USMA’s Radiation Safety Program.

(3) Establish the USMA radiation safety policy.

(4) Provide radiation safety consultation to USMA command and leadership chains, staffs, and to subordinate USMA commanders and staffs.

(5) Coordinate reporting of radiation accidents/incidents involving RAM or machine generating devices with the applicable licensee or permit holder.

(6) Serve as the USMA radiation safety point of contact.

c. Garrison Commander.

(1) Implement a written West Point Radiation Safety Program, to include procedures for emergency response and reporting procedures for radiation incidents and over-exposure.

(2) Ensure occupational exposures to ionizing and non-ionizing radiation are maintained within regulatory limits and as low as reasonably achievable.

(3) Appoint, in writing, a trained Garrison Radiation Safety Officer (GRSO) and assistant (ARSO) to execute the West Point Radiation Safety Program.

(4) Provide equipment, facilities, resources, support staff, and training to implement the Radiation Safety Program according to NRC license requirements, DOD guidance, and Army policies.

(5) Implement a Garrison Radiation Safety Council according to DA Pam 385-24, 1-8.

(6) Prepare and maintain historical records of the location of use or storage of radioactive materials (RAM) on West Point and the responsible activity for that use or storage.

(7) Maintain documentation listing locations categorized as “RF controlled” and “RF uncontrolled” environments as defined by DODI 6055.11.

(8) Issue Army radiation permits (ARPs).

(9) Obtain radiation safety resources from outside the command by contracting, Memorandum of Agreement, or Memorandum of Understanding, as necessary, to meet the Garrison Radiation Safety Program requirements if the organization lacks organic capability.

(10) Maintain an inventory of radiation sources as directed by IMCOM and in accordance with requirements of NRC licenses, Army reactor permits, ARAs, and

technical publications. Inventories are updated annually or more often if required by NRC license conditions.

(11) Establish written policies and procedures to ensure compliance with radiation safety requirements in applicable regulations and technical publications governing the use of radioactive commodities.

d. Garrison Radiation Safety Officer (RSO).

(1) Establishes and directs the Garrison Radiation Safety Program. Chapter Four of this regulation serves as the Garrison Radiation Safety Program document.

(2) Assists units, tenants, civilian activities, and contractors on West Point to meet requirements of NRC licenses and ARAs for radioactive commodities. In particular, the Garrison RSO

(a) Provides units with radiation safety training support.

(b) Reports accidents or incidents involving IMCOM activities or units to the applicable NRC Licensee and the IMCOM RSSO.

(c) Advises on appropriate RAM inventory control and security.

(3) Notifies the affected mission commander and the AMC RSSO (Army Materiel Command Radiation Safety Staff Officer, 9301 Chapek Road, Fort Belvoir, VA 22060) when a building or area that currently or formerly contained radioactive commodities is scheduled for demolition or will no longer contain radioactive commodities. This is to provide all stakeholders with appropriate notice so that they can take decommissioning actions as necessary.

(4) Ensures that tenant organizations or units are in compliance with NRC licenses and ARAs.

(5) Administers the Garrison Army Radiation Permit (ARP) program (to include maintaining records of ARP applications and ARPs issued by the Garrison Commander).

(6) Administers the Garrison Radiation Safety Council chaired by the Garrison Commander or a designated representative.

(7) Documents, stores, retains, and preserves Garrison Radiation Safety Program records properly, including radiation contamination survey reports in accordance with AR 25–400–2, to ensure availability during decontamination and decommissioning of facilities.

(8) Coordinates with mission RSOs, medical officials, and emergency response personnel to establish plans and procedures for responding to credible radiation emergencies on West Point.

(9) Coordinates with Keller Army Community Hospital (KACH) on occupational monitoring requirements for Garrison radiation workers.

(10) Provides training, guidance, and technical support to Garrison security forces with fixed or portable radiation detection systems, or mobile imaging systems used for force protection purposes.

e. Garrison Internal Review and Audit Compliance (IRAC) Office. The IRAC Office will conduct an annual internal audit of the Garrison Radiation Safety Program and furnish a copy of the report to the Director of Safety for review at the next Garrison Radiation Safety Council.

f. Unit, Activity, or Organization Radiation Safety Officer (other than USMA or Garrison RSOs). Each RSO:

(1) Completes appropriate training on the types of radioactive commodities within the unit.

(2) Provides user-level training in the radiation safety aspects of radioactive commodity use or ensures users receive required training.

(3) Develops and maintains a standing operating procedure for storage, inventory, tracking, and leak testing of radioactive commodities and response to broken and damaged radioactive devices.

(4) Manages their inventory of radioactive commodities.

(5) Conducts annual physical inventories and forwards the inventory to the applicable NRC licensee and West Point Safety Office.

(6) Coordinates with the serialization officer to ensure that applicable transactions are entered into the DOD Radiation Testing and Tracking System database in accordance with AR 710–3 as required.

(7) Stores and secures radioactive commodities properly in locked and properly posted locations when not in use.

(8) Conducts surveys of storage areas, as required by the appropriate NRC license.

(9) Performs (or have performed by direct support units) periodic leak tests, as required.

(10) Establishes and maintains a personnel dosimetry program (when required).

(11) Conducts transportation surveys and ensures that radioactive commodity shipments are certified by the Garrison RSO when required.

(12) Provides shipping information, to include appropriate exposure rate and contamination levels, to the transportation officer or hazardous material officer prior to shipment.

(13) Investigates accidents or incidents involving lost, stolen, broken, damaged radioactive commodities or malfunctioned safety devices of radioactive commodities.

(14) Coordinates with KACH to ensure personnel receive appropriate occupational health surveillance (see AR 40–5) and follow up to possible personnel exposure to RAM.

(15) Secures and stores damaged radioactive commodities properly.

(16) Reports the event of damaged radioactive commodities to the Garrison RSO and the affected NRC license RSO.

(17) Reports lost or damaged radioactive commodities in accordance with DA Pam 385–40, AR 385–10, and AR 735–5 (filling out DA Form 285–AB (U.S. Army Abbreviated Ground Accident Report) and a report of survey as required).

(18) Initiates request for disposal of damaged device though the Garrison and NRC license RSO.

(19) Maintains Radiation Safety Program records.

(20) Maintains “ACTIVE” (health and safety calibrated) calibrated radiation detection, indication, and computation instruments required to perform mandated surveys.

g. Radiation Safety Officers with LASER and Radio Frequency Safety Responsibilities:

(a) For an RSO with LASER safety responsibilities, assume the responsibilities of a LASER Safety Officer (LSO) as listed in section 1.3.2, ANSI Z136.1, except for occupational health responsibilities. (The RSO/ LSO will assist the occupational health physician as necessary in meeting laser occupational health responsibilities) An LSO shall complete a formal course of instruction prior to assuming the position, which addresses LASER fundamentals, terminology, biological effects, hazard analysis, protective and control measures.

(b) For an RSO with Radio Frequency safety responsibilities, assume the duties of a Radio Frequency Safety Officer (RFSO) as listed in section 4.1.2.1, Institute of Electrical and Electronics Engineers (IEEE) C95.7. (The RFSO will assist the occupational health physician as necessary in meeting RF occupational health responsibilities) An RFSO shall complete a formal course of instruction prior to assuming the position, which addresses RF radiation, terminology, biological effects, and exposure control measures.

4-4. License, Army Radiation Authorization (ARA,) and Army Radiation Permit (ARP) management and associated recordkeeping.

a. Nuclear Regulatory Commission (NRC) License.

(1) Tenant/mission commanders shall provide a copy of each NRC license and ARA (including all amendments) possessed by their command to the Garrison Commander.

(2) Army personnel may communicate Radiation Safety Program concerns directly to the NRC without restriction at 1-800-695-7403. Personnel are encouraged to first report concerns to the chain of command for resolution.

(3) When contract employees perform Army radiation work in Army facilities, on Army installations, under the auspices of any Army NRC license, the contract must contain specific requirements tying the contract work force to license conditions and other administrative requirements of the Radiation Safety Program. Contractors will obtain NRC licenses on Government owned contractor operated (GOCO) facilities versus working under Army NRC licenses on Army property and if possible obtain NRC licenses for their operations on Army property. Contractors may not work under the auspices of any Army NRC license in non-Army facilities or at off-post locations.

b. Army Radiation Authorizations (ARA). The Army uses ARAs to control ionizing radiation sources that the NRC does not license (including machines that emit ionizing radiation).

(1) An ARA is required for all sources not regulated by NRC except—

(a) By-product, source, or special material that the NRC has declared to be license exempt (see 10 CFR 30, sections 30.14 through 30.20; 10 CFR 40, sections 40.13 and 40.14; and 10 CFR 70, section 70.14) or generally licensed (see 10 CFR 31; 10 CFR 40, sections 40.20 through 40.28; and 10 CFR 70, section 70.19).

(b) Less than 0.1 micro curie (µCi) (3.7 kilobecquerel (kBq)) of radium.

(c) Electron tubes containing less than 10 µCi (370 kBq) of any naturally occurring or accelerator produced radioactive material (NARM) radioisotope.

(d) Machine-produced ionizing radiation sources not capable of producing a high radiation area or very high radiation area (for example, 100 millirem in 1 hour at 30 centimeters from any surface of the device). (For example, medical and dental diagnostic X-ray systems and some battery powered pulsed X-ray systems do not require an ARA.) However, commanders will establish policies and procedures to ensure that design and use of these excepted sources are in compliance with applicable radiation safety regulations and guidelines and that only appropriately trained and authorized personnel operate them.

(e) Army nuclear reactors and Army reactor-produced RAM that remains at the reactor site are permitted by the Army reactor office (see AR 50–7).

(2) In special cases where NRC general license requirements attach to centrally purchased radioactive devices, the CG, AMC, can issue an ARA to ensure that the general license requirements are met, the provisions of paragraph 2–3c(1) notwithstanding. An ARA must be issued for NRC generally licensed higher activity devices in accordance with 10 CFR 30.5(c)(13)(i). In the case of centrally purchased machine-generated devices, the CG, AMC, can issue an ARA to ensure that the safety requirements are met.

(3) Applications for new ARAs, ARA renewals, and ARA amendments shall be completed on a DA Form 3337 http://www.apd.army.mil/pub/eforms/ pureedge / a3337 . xfdl and forwarded through command channels to Army HQ (ACOM, ASCC, DRU) or IMCOM headquarters, as appropriate, for approval. Instructions are found in DA Pam 385-24.

(a) The unit, organization, or activity RSSO will ensure that applications meet appropriate regulatory and advisory guidelines before sending approval through command channels to the applicant.

(b) Tenant commanders will provide a copy of each ARA, including all amendments, to the Garrison Commander.

(4) The Army HQ (ACOM, ASCC, DRU) commander/director, HQ IMCOM, in consultation with the Army HQ (ACOM, ASCC, DRU)/IMCOM RSSO is the termination authority for ARAs issued by the Army HQ (ACOM, ASCC, DRU)/HQ IMCOM. The ARA can be terminated in one of two ways:

(a) An ARA that is linked directly to an NRC license terminates concurrently with the NRC license, providing that all of the ARA RAM/radiation devices and use areas are appropriately dispositioned in accordance with the terms of NRC license termination plan.

(b) An ARA that is not linked to an NRC license shall follow the same general course as terminating NRC licenses. A termination plan approved by the Army HQ

commander/director, HQ IMCOM is required. The RSSO will consult the Army Public Health Command or the Army Radiation Safety Office for guidance.

(5) The unit, organization, or activity RSSO will provide a copy of all correspondence relating to ARA applications and terminations to Commander, U.S. Army Public Health Command, Aberdeen Proving Ground, MD 21010–5403 for archiving. A sample ARA memorandum is in found in DA Pam 395-24, Figure 2–1.

c. Army Radiation Permits (ARP). Non-Army agencies (including other military Services, vendors, and civilian contractors) require an ARP to use, store, or possess ionizing radiation sources on an Army installation (see 32 CFR 655). Non-Army applicants will apply by letter with supporting documentation (see DA Pam 385-24, para 2–4a) through the Garrison Safety Office to the Garrison Commander. The applicant must submit their request so that the Garrison Safety Office receives the application no less than 30 days before the requested start date of the permit.

(1) The ARP application will specify start and stop dates for the ARP and describe the intended use of the RAM. For sealed sources, an affirmation that leak test requirements are current shall be included in the application. The Garrison Commander will approve the application only if the applicant provides evidence to show that one of the following is true:

(a) For installations that maintain exclusive Federal jurisdiction and installations in NRC nonagreement states, the ARP applicant must possess one of the following that allows the applicant to use the source as specified in the ARP application:

(i) A valid NRC license.

(ii) A Department of Energy (DOE) radiological work permit (for work performed under DOE regulations).

(iii) A State RAM license with an NRC reciprocity agreement. The ARP applicant establishes reciprocity by submitting an NRC Form 241 (Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction or Offshore Waters) to the NRC in accordance with 10 CFR 150.20. The NRC limits work performed under a reciprocity agreement to 180 days in a calendar year. Otherwise, an NRC license is required.

(b) For installations that maintain concurrent jurisdiction with the state and are located in NRC agreement states, the ARP applicant must possess one of the following that allows the applicant to use the source as specified in the ARP application:

(i) A state RAM license (issued by the state in which the installation is located).

(ii) An out-of-state license with host-state reciprocity. The ARP applicant establishes reciprocity by notifying the host state RAMs licensing authority before work commences and complying with host state reciprocity requirements. Some states limit work under a reciprocity agreement to 180 days in a calendar year.

(iii) An NRC license with host state reciprocity. The ARP applicant establishes reciprocity by notifying the host state RAMs licensing authority before work commences and complying with host state reciprocity requirements. Some states limit work under a reciprocity agreement to 180 days in a calendar year.

(iv) A DOE radiological work permit (for work performed under DOE regulations).

(c) The Garrison Commander will consult the Staff Judge Advocate to ascertain the jurisdiction status of the area on the installation where the ARP applicant will use the radiation source.

(d) For machine-produced ionizing radiation sources, the applicant has an appropriate state authorization that allows the applicant to use the source as specified in the ARP application or has in place a Radiation Safety Program that complies with Army regulations.

(e) For overseas installations, the applicant has an appropriate host-nation authorization as necessary that allows the applicant to use the source as specified in the ARP application and has in place a Radiation Safety Program that complies with Army regulations. Applicants will comply with applicable SOFAs and other international agreements.

(2) All ARPs require applicants to remove all permitted sources from Army property by the end of the permitted time.

(3) A sample ARP is in DA Pam 385-24, Figure 2–2, (http://www.apd.army.Mil pdffiles/p385_24.pdf) .

4-5. Recordkeeping. Recordkeeping requirements pertaining to the Radiation Safety Program are as follows:

a. Records pertaining to audits and other reviews of program content and implementation are maintained and accessible for three years after the record was established.

b. Records pertaining to the provisions of the program (i.e. dosimetry, bioassay, pregnancy declarations, etc.) are retained in accordance with the NRC license requiring this record.

4-6. Personal Monitoring. Activities or organizations that require personnel monitoring will provide personal monitoring devices to occupationally exposed personnel IAW the requirements of DA Pam 385-24 and 10 CFR Part 20. The unit, activity, or organization RSO may choose to issue dosimeters for exposures less than levels required by regulation. The requirements for personal monitoring for all personnel that may potentially be exposed to radiation exceeding 10 percent of the dose limits are listed in 10 CFR Part 20.1201 (http://www.nrc.gov/reading-rm/doc-collections /cfr/part020 /part020-201.html).

a. External Dosimetry. The RSO of the unit, activity, or organization using the RAM obtains and issues dosimeters to assess ionizing radiation exposure from external sources.

(1) The RSO obtains the dosimeters from U.S. Army Dosimetry Center (USADC), Building 5417, Redstone Arsenal, Alabama, 35898-5000, using DD Form 1952, Dosimetry Application and Record of Previous Radiation Exposure (http://www.dtic.mil/ whs/directives/infomgt/forms/eforms/dd1952.pdf). Used dosimeters must be returned to the USADC within 14 working days following the conclusion of the established wearing period that is provided by the USADC. After three months of monthly dosimetry service, the using unit, organization, or activity will review the exposure records to determine the appropriate thermoluminescence dosimeter (TLD) wearing period.

(2) Dosimeters are returned for reading to the USADC at the above address.

(3) The using unit, activity, or organization will provide copies of the of the annual automated dosimetry reports (ADR) or NRC Form 5 provided by the USADC to the Occupational Health Clinic where these file copies are maintained in the employee's employee health record. Annually the USADC will issue an ADR or NRC Form 5 to replace the previous year's record. (Prior year exposure records are carried over to the updated annual report).

(4) Unit, activity, or organizational RSOs use external dosimetry to monitor the radiation exposure of the following:

(a) Personnel who are occupationally exposed to ionizing radiation in the course of normal job duties.

(b) Personnel who have a reasonable probability of receiving the following doses in any one calendar year:

(i) Adult occupationally exposed individuals where the dose may be in excess of 10 percent of the limits or any dose associated with entering high or very high radiation areas.

(ii) Minors (less than 18 years of age) will not receive a dose in excess of 10 percent of the annual limits.

(iii) Declared pregnant women will not receive a dose in excess of 10 percent of the exposure limits. Issue dosimeters to an occupationally exposed female when she declares her pregnancy in writing to the RSO and dosimetry shall comply with all aspects of DA PAM 385-25, 2-4 and 3-1(b)(2c) (http://www.apd.army.mil/ pdffiles/ p385_24.pdf) .

(iv) Firefighters and emergency response personnel in situations where they have the potential to be exposed to radiation will use (USADC) dosimeters.

(v) Personnel under U.S. Nuclear Regulatory Commission licenses, Army radiation authorizations, or activities subject to U.S. State/Territory regulatory authority requiring dosimetry. These personnel will use an Army-approved National Volunteer Laboratory Accreditation Program (NVLAP)-accredited dosimeter that is issued by USADC.

(vi) Personnel who receive exposures from medical x-ray radiation or wear protective apparel (such as, protective apron) shall reduce exposure to personnel by following both the guidance provided by The National Council on Radiation Protection and Measurements (NCRP) Report 122 (http://www.ncrppublications.org/Reports/122) and DA PAM 385-25, 3-1(c)5a (http://www.apd.army.mil/pdffiles/p385_25.pdf).

(vii) All radiographers and radiographers' assistants. Individuals associated with the use of ionizing radiation sources used for radiographic purposes will wear dosimetry. Army-approved NVLAP-accredited dosimeter and a self-reading alarming electronic dosimeter are issued and worn in accordance with 10 CFR 34.47 (http://www.nrc.gov/reading-rm/doc-collections/cfr/part034/part034-0047.html).

b. Internal Dosimetry. The unit, organization, or activity RSO determines the need for monitoring occupational intakes of radioactive material, using Federal regulations and NRC license conditions as guides. The RSO may consult the Occupational Health Clinic medical personnel for assistance and guidance, as needed. At a minimum, the committed effective dose equivalents (CEDE) from radioactive material intakes require evaluation by the RSO when both of the following criteria are present:

(1) Personnel who are occupationally exposed to unsealed radioactive materials in the course of normal job duties.

(2) Personnel have a reasonable probability of receiving the following dose in any one year:

(a) Adults occupationally exposed with an intake of radioactive material in excess of 10 percent of the applicable ALIs specified in table 1, columns 1 and 2 of appendix B, 10 CFR 20 (http://www.nrc.gov/reading-rm/doc-collections/cfr/ part020/ part020-appb.html).

(b) Minors and declared pregnant women will not exceed a CEDE in excess of 10 percent of the specified limits IAW 10 CFR 20.1201 appendix B (http://www. nrc. gov/reading-rm/doc-collections/cfr/part020/part020-1201.html), 10 CFR 20.1207 (http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-1207.html) for minors and 10 CFR 20.1208(c)(2) dose equivalent to the embryo or fetus from radioactive sources internal to the body http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-1208.html).

(3) Bioassay. Bioassay measurements and internal dose assessments are determined IAW DA PAM 385-25, 3–1*c*, (http://www.apd.army.mil/pdffiles/p385_25.pdf). or as follows:

(i) When the types and quantities of radioactive material licensed for use at the facility could, under normal operational occurrences, result in airborne levels in normally occupied areas exceeding 10 percent of the Annual Limit on Intake (ALI) (200 derived air concentration hours (DAC-hours)) as per 10 CFR 20.1502 (http://www.nrc. gov/reading-rm/doc-collections/cfr/part020/part020-1502.html).

(ii) To confirm the adequacy of radiological controls (such as, engineering principles and calculations, and respiratory protection).

(iii) To determine compliance with occupational dose limits.

(iv) When a NRC license requires it.

(v) When an individual may have received a significant exposure from an incident, or to support the ALARA concept.

4-7. Personal Protective Equipment, Engineering Controls and Safe Handling Procedures. Measures taken to assess and mitigate exposure are documented using a DD Form 2977, Deliberate Risk Assessment Worksheet (http://www.dtic.mil/ whs/ directives/forms/eforms/dd2977.pdf).

NOTE: For all radiation exposure of employees or the public, the risk level is increased by one (e.g. from low to moderate, from moderate to high) when determining the risk decision authority.

a. Whenever feasible, activities or organizations will pursue the use of engineering controls to limit employee exposure to concentrations of radioactive material (RAM) to levels as defined in 10 CFR 20.1902 (http://www.nrc.gov/reading-rm/doc-collections/cfr/ part020/part020-1902.html).

b. When it is not feasible to use engineering controls to limit employee exposure the activity or organization will develop administrative procedures to reduce employee exposure. If neither engineering controls nor administrative procedures are adequate to reduce employee exposure to acceptable levels, the activity or organization will provide

exposed employees with appropriate personal protective equipment (PPE) to their employees, at no cost.

c. Safe Handling Procedures.

(1) Personnel must NEVER deliberately breach or degrade a radioactive source, or violate safe handling and maintenance instructions developed to assure continuing integrity of sealed sources. All commodities containing a radioactive source will be marked with a trefoil.

(2) Avoid contacting nose, mouth, eyes and ears, with one's hands while working with radioactive commodities or in a radiological controlled area such as maintenance and storage areas. Prior to entering a controlled area, any open wound(s) will require a means of coverage to protect from contamination.

(3) Employee's are prohibited from smoking, eating, drinking, applying cosmetics, or chewing gum or tobacco within a radiological controlled area.

(4) Always wash hands with *non-abrasive* soap and *cool water* after handling radioactive materials or sources.

(5) Dispose of potentially contaminated radioactive waste materials in appropriately labeled containers. NEVER dispose of suspected radioactive waste in normal trash.

(6) All accidents or injuries involving RAM are immediately reported to 911, the Garrison Radiation Safety Officer, the applicable unit, organization, or activity radiation safety officer, and the employee's immediate supervisor. Administer any appropriate life-saving first aid. Minimize the movement of any potentially contaminated employees until emergency responders arrive.

(7) Immediately disclose radiological inventories, handling operations, respective storage and maintenance locations to the first responders upon arrival at the scene of any accident/injury. Rehearse emergency response plans at least annually at each site where RAM is stored, used, or maintained as part of the facilities emergency action plan.

4-8. Handling, Storage, and Disposal of Radioactive Waste.

a. Radioactive wastes are stored in approved shipping containers to reduce handling and facilitate transfer to the appropriate treatment facility. Do not transfer waste to uncontaminated areas unless materials are properly containerized, labeled, and secured for transport. Placard vehicles appropriately IAW 49 CFR 178 (http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49tab_02.tpl). Do not store containers outdoors unless these are covered and secured to prevent unauthorized access and removal. The GRSO approves each site before use as a RAM storage site.

b. Storage and operating areas for radioactive materials will post the following required documents. These include, but are not limited to:

(1) NRC Form 3, Notice to Employees (http://www.nrc.gov/reading-rm/doc-collections/forms/nrc3.pdf).

(2) Applicable licenses and license applications.

(3) Instructions for complying with 10 CFR 21, Reporting of Defects and Non-compliance (http://www.nrc.gov/reading-rm/doc-collections/cfr/part021/full-text.html).

(4) An Emergency Action Plan including an emergency notification list of persons that are required to be notified in the event of an emergency.

(5) Unit SOPs for operation of the facility/equipment.

c. Agencies will contact the GRSO for all RAM disposal/turn-in requests and provide an accompanying inventory of the RAM. The GRSO requests disposition instructions from the appropriate Radioactive Waste Coordinator IAW TM 3-261, "Radioactive Waste Disposal Requests and Shipping Instructions" (https://cecomsafety .apg.army .mil /rso2/tbtmtrs/tm03-261.pdf).

4-9. Equipment Calibration.

a. The RSO must maintain at least two survey instruments to accommodate maintenance and calibration downtime. Other organizations and activities using radiation survey equipment requiring calibration may include the installation's fire department, medical and dental facilities. Radiation safety audits and inspections should include an assessment of equipment calibration programs and records.

b. Calibrate radiation survey instruments used for health or safety purposes at least annually (or as specified in TB 43–0180) using National Institute of Standards and Technology traceable radiation sources (see TB 750–25).

c. Some instruments may require more frequent calibration. Consult applicable technical publications and TMDE personnel for appropriate calibration intervals as necessary.

d. Calibration sources will be of a type and activity appropriate for the intended use of the instrument.

e. Radiation survey instruments should be response checked with an appropriate check source before and after use. Fixed, walk-through, portal, or step-in contamination monitors shall be response checked on a routine basis sufficient to ensure satisfactory

operation, in accordance with the manufacturer's instructions. A log should be maintained to document these checks.

f. Ensure organizations providing calibration support adhere to the requirements of ANSI N323 and TB 9–665–285–24.

4-10. Maintenance of Radioactive Materials.

a. Radioactive material maintenance areas are only specifically authorized by TACOM-RI license in writing.

b. Leaks or Spills. Call 911 and the GRSO (x-3717) immediately if any item containing RAM is, or is suspected broken or leaking. Limit access to the area pending arrival of first responders.

c. Unauthorized personnel will not disassemble or remove radioactive components during maintenance.

4-11. Training.

a. Garrison Radiation Safety Officer.

(1) Prerequisite courses: Formal radiation safety training is required prior to appointment and assumption of the GRSO's duties. The following are required prerequisite courses:

(a) Radiological Safety Course.

(b) Technical Transportation of Hazardous Materials Course (80 Hour).

(c) Radioactive Commodity Identification and Transportation Course (RCIT).

(d) Laser and Radio Frequency Radiation Hazards Course.

(e) Additional training is required for specific radioactive commodities or radiation producing equipment for which he/she is responsible.

(2) Refresher training.

(a) The Technical Transportation of Hazardous Materials Refresher Course is required at bi-annually IAW AFMAN 24-204/ (Interservice) TM 38-250, "Preparing Hazardous Materials for Military Air Shipments" (https://safety.army.mil/Link Click.aspx?fileticket=3Bewk9dVKtc=&tabid=552).

(b) The dynamic aspects of the radiation protection program require that each GRSO is provided radiation protection training annually to ensure that he or she is

adequately trained. Annual training requirements and funding authority is IAW DA Pam 385–24 (http://www.apd.army.mil/pdffiles/p385_24.pdf) and is identified on the GRSO's individual development plan.

b. Unit Radiation Safety Officers.

(1) An online RSO course is provided by TECOM (https://cecomsafety.apg.army.mil/rso2/ursotoc.aspx) which addresses the following required topics:

(a) Basic radiation interactions.

(b) Radioactivity.

(c) Terms and units.

(d) Biological effects.

(e) Radiation detection and measurement.

(f) Radiation and contamination control.

(g) Radiation Dosimetry.

(h) In addition, the RSO shall receive specific training for the Army radioactive commodities or radiation producing equipment for which he/she is responsible.

(2) The URSO shall complete all required training before assuming the responsibilities as the URSO.

(3) Contact the GRSO to develop an individual development plan for annual refresher training and formal retraining every five years.

(4) The URSO will provide a copy of all initial and refresher training certificates to the GRSO upon completion.

c. LASER Safety Officer (LSO).

(1) Activity or organization LSO's will complete a formal course of instruction addressing such topics as LASER fundamentals, terminology, biological effects, hazard analysis, protective and control measures prior to assignment and performance of LSO duties.

(2) LASER safety courses are offered by the U.S. Army Public Health Command (https://usaphcapps.amedd.army.mil/TrainCon/Describe.aspx?Name=LaserRF) and on-line by non-governmental organizations such as the Laser Institute of America (http://www.lia.org/education/online-laser-safety-training).

(3) The LSO will forward a copy of their initial and refresher training certificate(s) to the GRSO.

(4) Contact the GLSO to develop an individual development plan for initial and any refresher training.

d. Radio Frequency Safety Officers (RFSO).

(1) An activity or organization RFSO with responsibility for a non-ionizing radiation safety program (other than a LASER program) will complete a formal course of instruction addressing such topics as RF radiation, terminology, biological effects, and exposure control measures. Resident training is available from the U.S. Army Public Health Command, (https://usaphcapps.amedd.army.mil/ TrainCon/Describe. aspx? Name=LaserRF), or non-governmental sources providing resident or on-line training.

(2) The activity or organization RFSO will forward a copy of their initial and refresher training certificate(s) to the GRSO.

e. Employees using, transporting, or exposed to RAM.

(1) Read and follow SOP, ARA, NRC license, ARP policies and procedures, and any manufacturer warnings, caution statements, or instructions for each item containing RAM.

(2) Obtain required safety equipment from your supervisor.

(3) Call 911, the GRSO, and the employee's supervisor to report any accident, unusual incident, personnel injury (however slight), suspected exposure and/or internal contamination.

(4) Wear assigned dosimetry as required.

f. Ancillary Personnel. Ancillary personnel include nursing staff, clerical or administrative employees, housekeeping, security personnel, and any other employees working in proximity to RAM. Ancillary personnel whose duties may require them to work near RAM (whether escorted or not) are informed about radiation hazards and appropriate precautions. All training is tailored to meet the needs of the individuals in regard to the nature of the RAM. All training programs and instructions are documented.

(1) Ancillary personnel are provided training

(a) Before assuming duties with, or near, RAM.

(b) Annual refresher training.

(c) Whenever there is a significant change in duties, materials, exposure, regulatory standards, or the terms of the license.

(2) Training for ancillary personnel includes the following subjects:

(a) Applicable regulations and license conditions.

(b) Areas where RAM is used or stored.

(c) Potential hazards associated with RAM in each area where the employees work.

(d) Appropriate radiation safety procedures.

(e) How to identify RAM.

4-12. Inventory and Accountability.

a. Commanders, directors, or activity chiefs maintain an inventory of radiation sources as higher headquarters directs and in accordance with requirements of NRC licenses, Army reactor permits, ARAs, and technical publications. Inventories shall be updated at least annually or more often if required by NRC license conditions or local procedure. A copy of the inventory will be furnished to the Garrison RSO annually (or more frequently if necessitated by inventory changes). An inventory of both ionizing and non-ionizing (LASER and radio frequency) equipment is compiled or updated in accordance with the applicable NRC License, or annually, whichever is more stringent.

(1) Compile and maintain unit, organization, or activity inventories of ionizing and non-ionizing equipment containing radioactive material or capable of producing radiation. The inventory shall include the national stock number or manufacturer's model/part number, nomenclature, isotope, quantity, activity, LASER Class, location (building and room), and POC for the source. Items covered under the Army IMCOM license shall include serial and cell numbers.

(2) Annual inventories are submitted to the GRSO no later than 1 July.

(3) Annual radiation inventories are submitted using the format at Appendix B.

b. Records of survey results, air sampling, bioassays, or calculations to determine the dose from external sources and used, in the absence of or in combination with individual monitoring data, are maintained IAW 20CFR.2103 (http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-2103.html).

c. External and internal dosimetry selection are recorded on a DD Form 1952 (http://www.dtic.mil/whs/directives/infomgt/forms/eforms/dd1952.pdf). Every employee

on a dosimetry program will have their ADR, which are issued by the USADC filed in the Employee's Health record maintained by the Occupational Health Clinic.

4-13. Shipping and Receiving.

a. The following monitoring procedures for receiving and opening packages are found in Title 10 CFR 20.1906 paragraphs (b) (3), (c) and (e) (http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/part020-1906.html) and also in TB 43-0197 "Instructions for Handling, Maintenance, Storage and Transportation of Radioactive Items" (https://cecomsafety.apg.army.mil/rso2/tbtmtrs/tb43-0197.pdf).

(1) Monitor all packages known to contain radioactive material for radioactive contamination and radiation levels if there is evidence of degradation of package integrity, such as packages that are crushed, wet, or damaged.

(2) Perform this monitoring as soon as practical after receipt of the package, but not later than three hours after the package is received if it is received during normal working hours. If it is received after working hours, monitor package not later than three hours from the beginning of the next working day.

(3) Every RSO will establish, maintain, and retain written procedures for safely opening packages in which RAM is received, ensure compliance with this Radiation Safety Program, and that due consideration is given to special shipping instructions for the type of package being opened.

b. Requisitions for individually controlled radioactive items are submitted through the GRSO. The GRSO ensures proper certification is accomplished prior to the requisition being forwarded to the Radioactive Material Control Point (RMCP) at the major command level.

c. Individually controlled radioactive items are not transferred between units without the approval of the RMCP. Requests for transfers are forwarded through the GRSO.

d. Controlled items, other than individually controlled items, are requisitioned through normal channels.

e. Packages containing radioactive materials are received only at the location designated by the Logistics Readiness Center (LRC). If a package has a Department of Transportation (DOT) Yellow II or III label, notify the activity or organization RSO who must be present prior to unloading.

f. Off-post shipments comply with regulations established by the DOT, the NRC, and affected states in addition to Army regulations. The LRC personnel in close coordination with the GRSO prepare the package for shipment, to include preparation of paperwork. Certification that the package meets all regulatory requirements is completed by the GRSO, who also completes the Radioactive Materials Movement

Report. No radioactive materials are accepted by the LRC Transportation Division without this form.

g. Standard issue/military specification (MILSPEC) items containing radioactive materials (except individually controlled items) may be moved anywhere on West Point consistent with the mission of the owning activity or organization, providing the item is used under proper supervision for its intended purpose as specified in the applicable technical publication.

h. Individually controlled items may be moved on West Point if the user complies with procedures approved by the activity or organization RSO for the movement of that particular item.

i. The movement of military equipment containing radioactive materials off of West Point for training/field exercise purposes is exempt from the shipping requirements specified by 49 CFR, Transportation. Military personnel must accompany the equipment at all times during the movement to qualify for the exemption. Accompanying military personnel must be knowledgeable of the types of RAM in the equipment and be familiar with the associated hazards and emergency procedures to be followed in the event of an incident. Units will coordinate with the activity or organization RSO prior to conducting such a movement.

j. Call 911 and the GRSO (x-3717) if an unsealed or leaking “sealed” sources (e.g., broken vials on fire control equipment) are discovered.

k. Coordinate any movement of radioactive materials not covered above with the GRSO prior to movement.

4-14. Foreign, Captured, and Historic Material.

a. Radioactive materials have long been used in both U.S. and non-U.S. produced equipment to facilitate performance. The same kinds of radioactive components found in equipment such as night sights, surge arresters, calibrators, and other equipment used by the U.S. are often found in material manufactured for non-U.S. armed forces.

b. Past experience indicates that many gauges and other luminescent devices in captured foreign and historic material contain radium. Radium luminescent paint is easily degraded by age or abrasion and could be ingested or inhaled by personnel. Special care and procedures are required in storing, handling, transporting military equipment containing RAM. Debris containing RAM can easily contaminate floor sweepings, dust on shelving, and substrates that can result in inadvertent inhalation or ingestion by employees or other personnel.

c. The radioactive materials in foreign, captured, or historic equipment are subject to the same kinds of contamination potential as current U.S. equipment. Therefore, any

captured, damaged foreign, or historic equipment is handled the same manner as similar current U.S. equipment.

d. Guidelines include:

(1) Assume abandoned, captured, or historic equipment is contaminated until proven otherwise, especially if the equipment has been hit or damaged in combat. Exercise the basic precautions of using disposable gloves (NITRILE available at the Safety Store) unless the material is contaminated with depleted uranium (DU), in which case all U.S. source guidelines are provided in Appendix D of DA PAM 700-48 (http://www.apd.army. mil/pdffiles/r700_48. pdf).

(2) The specific radioactive materials (e.g. radium, tritium, americium, etc.) may or may not be the same activity as its American counterpart.

(3) The precautions in handling captured, foreign, or historic radioactive contaminated equipment (RCE) is based on the specific radioactive materials involved rather than the type of component in which the radioactive source is installed.

(4) Precautions and guidelines generally apply to foreign sources once the specific radioactive source has been identified.

(5) Consult with the GRSO prior to using, storing, handling, transporting, or disposing of any historic or non-U.S. military equipment that is suspected of containing a radioactive source.

(6) Consult DA PAM 700-48 (http://www.apd.army.mil/jw2/xmldemo/p700_48 /main.asp), for specific identification of the sources to be found in foreign (captured) equipment.

(7) Be alert for gauges with damaged radioactive dial indicators. They are likely to contain Radium.

4-15. Military Operations Support. Except in the case of armed conflict, no deviations from Federal regulations (NRC and DOT), DOD regulations and standards or TACOM-RI license commitments are allowed for support of peacetime support to military operations.

4-16. Garrison Support of Tenants and Contractors.

a. The Garrison RSO:

(1) Establishes and directs the Garrison Radiation Safety Program (to include a written Radiation Safety Program document).

(2) Assists units, tenants, civilian activities, and contractors on West Point to meet requirements of NRC licenses and ARAs for radioactive commodities. In particular, the Garrison RSO:

(a) Provides units, organizations, and activities with radiation safety training support.

(b) Reports accidents or incidents involving IMCOM activities or units to the applicable NRC Licensee and the IMCOM RSSO.

(c) Advises on appropriate RAM inventory control and security.

(3) Notifies the affected mission commander and the AMC RSSO (Army Materiel Command Radiation Safety Staff Officer, 9301 Chapek Road, Fort Belvoir, VA 22060) when a building or area that currently or formerly contained radioactive commodities is scheduled for demolition or will no longer contain radioactive commodities. This is to provide all stakeholders with appropriate notice so that they can take decommissioning actions as necessary.

(4) Ensures that tenant organizations or units are in compliance with NRC licenses and ARAs.

(5) Administers the Garrison ARP program (to include maintaining records of ARP applications and ARPs issued by the Garrison Commander).

(6) Administers the Garrison RSC, if applicable.

(7) Documents, stores, retains, and preserves Garrison Radiation Safety Program records properly, including radiation contamination survey reports in accordance with AR 25–400–2, to ensure availability during decontamination and decommissioning of facilities.

(8) Coordinates with unit, organization, and activity RSOs, medical officials, and emergency response personnel (both military and civilian if appropriate) to establish plans and procedures for responding to credible radiation emergencies on West Point.

(9) Coordinates with the Occupational Health Clinic on occupational monitoring requirements for garrison radiation workers.

(10) Provides training, guidance, and technical support to garrison security forces with fixed or portable radiation detection systems, or mobile imaging systems used for force protection purposes.

b. Tenants and contractors.

(1) Tenants and contractors are required to execute the requirements of a radiation safety program if any of the conditions listed below pertain, which include designating in writing an activity or organization RSO who establishes, maintains, and manages a written radiation program according to Federal DOT and NRC standards and Departments of Defense, Army, and IMCOM regulations.

(2) A radiation safety program is required if the tenant or contractor has:

(a) A NRC license, Army reactor permit, ARA, or an applicable technical publication that requires a written radiation safety program.

(b) Any personnel in the activity who are required to wear U.S. Army Dosimetry Center-issued or contractor provided dosimetry in accordance with DA Pam 385–25, or NRC license or manufacturer's instructions.

(c) Any personnel in the activity who are required to participate in a bioassay program in accordance with DA Pam 385–25 or NRC license.

(d) A Class 3b or Class 4, or military-exempt laser.

(e) An electromagnetic frequency (EMF) or radio frequency (RF) system that exceeds the maximum permissible exposure (MPE).

(f) An activity, organization, or contractor possessing radioactive commodities or radiation-emitting equipment (to include X-ray, accelerators, Class 3B, Class 4, or military-exempt lasers, or EMF emitters that exceed the MPE) requiring the implementation of a radiation safety program (for example, leak testing, radiation postings, and shipping requirements).

(g) Any X-ray systems, except for small, self-shielded security type X-ray systems (for example, airport X-ray security machines and mail screening systems) that may expose the operator to scatter radiation. Radiation safety functions for X-ray systems are outlined in TB MED 521, or American National Standards Institute (ANSI) or National Council on Radiation Protection and Measurements (NCRPM) standards.

(h) A non-Army agency using, storing, or possessing ionizing radiation sources on an Army installation that requires a ARP from the GRSO.

(i) A unit with chemical agent, biological agent, radiological, or nuclear (CBRN) equipment utilized within Modified Table of Organization (MTOE) or Table of Distribution and Allowances (TDA) organizations.

4-17. Life-cycle Management.

a. Apply the system safety and risk management processes during acquisition of materials, equipment, facilities, and systems to identify and manage hazards during the

entire life cycle. Employ engineering principles to the utmost extent possible to eliminate risks and control residual risks.

b. Ensure that radiological concerns have been addressed in the fielding, training, and life cycle management of commodities containing radioactive material or that produce radiation.

4-18. Use and Storage.

a. All RAM is secured from unauthorized removal or access when stored in controlled or unrestricted areas.

b. All RAM is under constant control and surveillance when present in a controlled or unrestricted area and not in storage.

c. Licensed devices are stored in rooms, buildings, or caged areas designated for storage of radioactive items. There is no storage limit regarding the number of Am-241 or Ni-63 commodities permitted in a storage area. However, the storage areas are located in an area that is free from flooding and away from the effective radius of flammables and explosives.

d. The standard radiation symbol used for posting areas is located is the trefoil as shown in 10 CFR, Part 20.1901 (http://www.nrc.gov/reading-rm/doc-collections/ cfr/part 020/part020-1901.html). The three-bladed symbol is either magenta or black on a yellow background. Facilities containing RAM are labeled as:

(1) "CAUTION, RADIATION AREA" postings are required when an area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 5 mrem in any one hour at 30 centimeters (cm) from the radiation source or from any surface that radiation penetrates.

(2) "CAUTION, HIGH RADIATION AREA" or "DANGER, HIGH RADIATION AREA" postings are required when an area accessible to individuals, in which radiation levels could result in an individual receiving dose equivalent in excess of 100 mrem in any one hour at 30 cm from the radiation source or any flat surface the radiation penetrates.

(3) "GRAVE DANGER, VERY HIGH RADIATION AREA" postings are required when an area accessible to individuals, in which radiation levels could result in an individual receiving and absorbed dose in excess of 500 rads in any one hour at one meter from a radiation source or from any surface that the radiation penetrates.

(4) "CAUTION, RADIOACTIVE MATERIAL(S)" or "DANGER, RADIOACTIVE MATERIAL(S)" postings are required in each area or room in which there is used or stored an amount of licensed material exceeding 10 times the quantity of such material specified in Appendix C of 10 CFR part 20.

(5) "CAUTION, AIRBORNE RADIOCTIVITY AREA" or "DANGER, AIRBORNE RADIOACTIVITY AREA" postings are required in each area or room in which there is licensed material that may exist in concentrations that either exceed the derived air concentration (DAC) limits or would result in an individual present in the area without respiratory protection, exceeding 0.6 percent of the annual limit of intake or 12 DAC hours.

(6) "CONTAMINATED AREA" postings are required in areas that a contamination hazard is present.

(7) "TLD REQUIRED" postings or sign inserts are required in areas IAW the requirements of DA Pam 385-24 and 10 CFR Part 20.

(8) "NO EATING DRINKING OR USE OF TOBACCO" postings or inserts are required when entering a posted contaminated area. They also are required in a posted RAM area as directed by the GRSO.

4-19. Radiation Surveys.

a. Survey frequency:

(1) Radiation areas, high-radiation areas, and airborne-radioactivity areas are surveyed at least once each month by the activity or organization RSO and by the GRSO annually. Permanent storage areas may be exempted from monthly surveys at the discretion of the GRSC; however, the time between surveys of storage areas may not exceed 12 months. All surveys performed will have the following documentation and will be maintained for five (5) years.

(a) Provide a sketch of the area surveyed with annotations for entrance, storage container and locations of all wipes or radioactivity detection and computation (RADIAC) instrumentation readings.

(b) List RADIAC instrument used with calibration date and if wipes are utilized, provide the type of wipe and document on the CECOM Radiological Analysis and Calibration Laboratory Wipe Test Analysis Request Form provided on the CECOM RSO Website located at http://www.cecom.army.mil/safety/radiation/rso.html.

(c) Signature and date are required on all radiation surveys performed.

(2) The frequency of surveys should increase if changes in conditions or procedures could increase the possibility of personnel exposure. Daily surveys or continuous monitoring are required if conditions are highly variable or unpredictable, if unsealed RAM is being handled directly, or if a radiation accident has occurred.

(3) Reasons to conduct surveys:

(a) Requirement of the NRC license or ARA

(b) Changes in work practice.

(c) Accident investigation.

(d) Evaluation of worker doses.

(e) Pre-operational surveys.

(f) Post-operational surveys.

(g) Release survey.

(5) Surveys are conducted by:

(a) Identifying the area to be surveyed and map/diagram the area.

(b) Collect samples through survey equipment, swipe testing or air sampling, according to the area to survey.

(c) Survey results

4-20. Leak Testing.

a. Sealed sources are tested for leakage and/or contamination at intervals not to exceed six months or as specified in the certificate of registration issued by the NRC.

b. Sealed sources designed to primarily emit alpha particles are tested for leakage and/or contamination at intervals not to exceed three months.

c. A sealed source need not be tested if it contains only tritium (hydrogen-3), a radioactive gas, the half-life of the isotope is 30 days or less, contain no more than 100 microcuries (µCi) of beta-and/or gamma-emitting material, or not more than 10 µCi of alpha-emitting material.

d. Commercial-off-the-Shelf (COTS) equipment is leaked tested per the appropriate NRC License, ARA, or manufacturer's requirements.

e. Devices containing Americium 241 are leak tested annually. Americium 241 containing devices in bulk or long-term storage are exempt from leak testing.

f. Nickel 63 containing devices are leak tested as follows:

(1) After any removal and reinstallation of a source module. The leak test is performed by taking the sample from the outer surface of the module at a point that is the most directly accessible to the Nickel-63 source.

(2) On new replacement source modules in the same fashion as stated above.

(3) In addition to leak testing, module membranes are inspected after involving disassembly of the source module. Replacement by a person authorized by NRC (TACOM-RI) license or an Agreement State License, as appropriate, is required if there is any deterioration of the membrane module. A leak test is performed after the replacement of the membrane if a leak test was not performed on the source module.

(4) Cell modules with leak tests greater than 1,000-dpm/100 cm2 are double bagged and disposed as radioactive waste. Contact the GRSO for disposal instructions.

(5) Leak test analysis must be capable of detecting the presence of 0.005 microcuries of removable contamination. Results in excess of 0.005 microcuries are reported to the GRSO and TACOM-RI License Staff immediately. TACOM-RI has established a much more stringent action level of 20 dpm for alpha contamination and 1,000 dpm /100 cm2 for beta contamination. M43A1 (M8) detectors that exceed contamination action levels are withdrawn from service for shipment to radioactive waste disposal facilities. Nickel 63 devices that exceed contamination action levels are retested and removed from service if contamination levels are verified to be greater than 1000 dpm. Contaminated Nickel 63 devices are evaluated for disposition at the depot maintenance level or general support activities by the GRSO.

(6) The Rock Island Arsenal, Radiological Test Lab, analyzes leak test samples. Individuals or agencies authorized by the NRC or Agreement State can also perform sample analysis. If mailing Americium 241 or Nickel 63 leak tests samples to the Rock Island Arsenal for analysis, label the mailing envelope as follows:

ROCK ISLAND ARSENAL
1 Rock Island Arsenal
AMSTA-RIA-SEM
ATTN: Mail Room Do Not Open
RODMAN AVE., BLDG. 210, RM 407
ROCK ISLAND, IL 61299-5000

(7) Leak test kits for the CAM, ICAM, and ACADA are available through the supply system. The NSN for the leak test kit is 6665-01-447-5639.

(8) Leak Test Procedures: M43A1 Chemical Agent Detector (CAD).

(a) Prepare a work area or table by covering all work surfaces with paper. Assemble leak-testing supplies and clean paper envelope.

(b) Put on disposable gloves and any other PPE listed in the SOP.

(c) Place CAD on a stable work surface. Unfasten the four catches and remove the bottom case of the M43A1 detector.

(d) Record the serial numbers of cell module and the M43A1 on the envelope.

(e) Rotate the turn lock handle of the cell module ¼ turn counterclockwise and pull the cell module from the chassis assembly.

(f) Insert a dry, disposable applicator through the red seal of the chassis and into the small hole (cell module outlet port connector), twisting the applicator as it is pulled out.

(g) Screen wipe test with an appropriately calibrated survey meter. Call 911 and the GRSO (x-3717) if a sustained reading is observed on the meter 1X scale in excess twice background. Secure the area pending arrival of the Fire Department.

(h) Place applicator in the labeled envelope. Seal envelope with tape (DO NOT LICK THE ENVELOPE).

(i) After notifying the GRSO that a sample has been taken, place the labeled sample envelope into an addressed, stamped envelope and mail to the Rock Island Arsenal Laboratory as indicated above or other Army laboratories licensed by the NRC or an Agreement State to perform such services.

(j) Wash hands with non-abrasive soap and cool water.

(9) Leak Testing for Chemical Agent Monitor (CAM), Improved Chemical Agent Monitor (ICAM) and ACADA Wipe tests are only performed by DS or higher maintenance personnel in accordance with MAM 04-035. Contact the GRSO (x-3717) if leaking testing is required.

4-21. Garrison Radiation Safety Council (GRSC). The Garrison Commander establishes, convenes, and chairs the Garrison Radiation Safety Council.

a. The GRSC is the advisory body to the Senior Commander that gathers and disseminates information about the status of the Garrison Radiation Safety Program.

b. Membership of the GRSC includes:

(1) The Garrison Commander as chair (or a designee who is a senior member of the commander’s staff)

(2) The Garrison Radiation Safety Officer as the GRSC Recorder

(3) All tenant Radiation Safety Officers.

(4) Unit, organization, or activity personnel knowledgeable about their radiation sources and equipment.

c. The GRSC will meet at least once each calendar year and at any other time as necessary at the call of the chair.

d. The GRSO compiles GRSC minutes and submits to the Garrison Commander for approval.

Chapter 5
Nuclear Safety Management

5-1. Applicability. This chapter describes the requirements of the West Point Army Reactor Safety Program (ARSP) and assigns safety responsibilities, establishes safety policy, and prescribes safety procedures if a nuclear reactor/process is located on, or proposed on West Point, or in the event of a nuclear incident in the vicinity of West Point requiring activation of the Nuclear Accident or Incident Response and Assistance (NAIRA) Operations Plan. At this time there are no Army nuclear reactors operating on West Point, but West Point is located within the 10 Mile Indian Point Protective Action Area.

5-2. The Army Reactor Program.

a. Policy. The purpose of the Army reactor program is to ensure that all Army reactors are operated in a safe, secure, and reliable manner from activation through decommissioning. The Army's reactor policy is to follow NRC guidelines, as well as the recommendations of the National Council on Radiation Protection and Measurements, and American National Standards Institute (ANSI).

b. The Army Reactor Program concept. The ARP establishes policies, assigns responsibilities, and prescribes procedures to ensure that Army reactors are designed, constructed, operated, maintained, and decommissioned in a safe secure, and reliable manner, in compliance with laws, regulations and agreements, and consistent with sound practices. It also provides controls to prevent unauthorized reactor operations, the loss of special nuclear material (SNM), and response to nuclear accidents or incidents.

5-3. Responsibilities.

a. Commanders, Army Commands, Army Service Component Commands, and Direct Reporting Units possessing nuclear reactors:

(1) Ensure that command nuclear health, surety, security, and safety programs are consistent with AR 50–5, AR 50-7, AR 190–54, DA Pam 40–18, DA Pam 385–24, and this regulation.

(2) Notify the Army Reactor Office (ARO) of plans to build or acquire a reactor as early as possible in the development process and before applying for a reactor system construction permit.

(3) Apply for appropriate reactor permits by submitting the documents listed in table 2–1 of AR 50-7 to the ARO.

(4) Send reports and plans required by this regulation to the ARO.

(5) Provide technical support and data to the organizations participating in nuclear reactor studies.

(6) Implement a quality assurance program, in conjunction with the USACE, designing, constructing, and decommissioning reactor facilities and for major modifications that affect reactor system safety or security.

(7) Establish a reactor safety program.

(8) Forward changes to the reactor facility which involve positive un-reviewed safety questions (USQs) or a change to the technical specifications through command channels to the ARC for review.

(9) Send requests for conducting tests or experiments that are not addressed in existing nuclear reactor documents to the ARO.

(10) Submit security/augmentation force requirements to HQDA in the appropriate force submission system to allow HQDA to allocate taskings to the appropriate force providers and provide Army Force Generation/Global Force Management (ARFORGEN/GFM) system visibility.

(11) Provides a member to the Army Reactor Council (ARC).

b. Commanders of subordinate commands possessing nuclear reactors:

(1) Implement a surety program in accordance with AR 50–5.

(2) Review reports and activities of the Reactor Facility Safety Committee (RFSC), and provide a copy of the minutes through command channels to the ARO for subsequent ARC review.

(3) Forward changes to the reactor facility which involve positive un-reviewed safety questions (USQs) or a change to the technical specifications through command channels to the ARC for review.

(4) Conduct reviews of reactor safety, security, operations, and personnel reliability programs.

(5) Submit security/augmentation force requirements to HQDA in the appropriate force submission system to allow HQDA to allocate taskings to the appropriate force providers and provide ARFORGEN/GFM system visibility.

(6) Provide a member to the ARC.

c. Commanders responsible for reactor facilities:

(1) Ensure the safety, security, and reliability of reactor operations.

(2) Implement a nuclear surety program in accordance with AR 50–5.

(3) Implement a safety program in accordance with AR 385–10, and designate, in writing, a person to be the Reactor Radiation Safety Officer (RRSO) for the reactor facility.

(4) Develop and implement special nuclear material (SNM) inventory procedures and perform an annual inventory.

(5) Organize a reactor facility safety committee (RFSC).

(6) Forward changes to the reactor facility which involve positive USQs or a change to the technical specifications through command channels to the ARC for review.

(7) Provide a representative to the ARC.

(8) Identify, investigate, report, and correct problems that affect the ARP.

(9) Submit security/augmentation force requirements to HQDA in the appropriate force submission system to allow HQDA to allocate taskings to the appropriate force providers and provide ARFORGEN/GFM system visibility.

(10) Develop a crisis communication plan to inform workforce and general public in the event of an incident.

d. Reactor facility directors:

(1) Manage a safe, secure, and reliable reactor facility.

(2) Establish a reactor staff training program for reactor operators.

(3) Report to the ARO and ARC any safety defects or positive USQs involving reactor operations.

(4) Forward changes to the reactor facility which involve USQs or a change to the technical specifications through command channels to the ARC for review.

(5) Implement a quality assurance program.

(6) Administer the Reactor Staff Certification Program.

e. Reactor safety manager (RSM). The RSM is the point of contact, independent of the reactor operations staff, for safety matters. As independent advisor to the responsible reactor facility commander, the RSM identifies safety problems to the

reactor facility director and responsible reactor facility commander for resolution. The RSM performs duties in accordance with this regulation.

f. Installation Emergency Management Program Manager. The Emergency Program Manager is responsible for developing and maintaining the West Point Nuclear Accident or Incident Response and Assistance (NAIRA) Operations Plan at Incident Annex C, Chemical, Biological, Radiological, Nuclear (CBRN) Incident Response to the West Point Emergency Management Plan.

5-4. West Point Army Reactors.

a. Any activity or organization currently operating an Army nuclear reactor on West Point will provide the Garrison Commander copies of the current reactor permit, requests for changes to any existing permit, the reactor safety program, and other documents required by Chapter 4, Management Programs and Documentation of AR 50-7, Army Reactor Program.

b. Any activity or organization planning to construct and operate a nuclear reactor on West Point will notify the Garrison Commander prior to the development of any nuclear reactor permit. This is necessary to request additional Garrison resources, plans, and capabilities required to support the operation of a nuclear reactor on the installation.

5-5. Nuclear Accident or Incident Response and Assistance (NAIRA) Operations.

a. West Point does not operate an Army nuclear reactor nor store nuclear weapons materials. West Point is located near a commercially operated nuclear power facility in Peekskill, New York and falls within the 10 Mile Indian Point Protective Action Area .

b. Army policy in regard to nuclear accident or incident response and assistance operations states that commanders of Army installations such as West Point may be tasked to provide an Initial Response Force (IRF) to provide assistance at a nuclear accident or incident (NAI) occurring off-post in the vicinity of the installation. One of the requirements includes providing an IRF resulting from a request for assistance by local authorities, or the National Military Command Center, or at the installation commander’s decision, depending on the situation.

c. In accordance with DODD 3025.18, Defense Support of Civil Authorities, the purpose of the IRF is to provide immediate safety, security, rescue, command, control, and communications at the accident/incident site, to save lives and reduce exposure to hazards. An IRF will consist of available installation assets. The installation need not have a nuclear mission or radiological responsibility, but its IRF must accomplish minimum functions outlined in paragraph 2–5 of DA Pamphlet 50-5. Installations do not have to create specially trained and/or dedicated organizations.

d. The senior military officer, or designated civilian official, on West Point will oversee all actions at the accident/incident site at the direction of higher authority until arrival of the Response Task Force.

e. Further information regarding the West Point NAIRA responsibilities is found in Incident Annex C, Chemical, Biological, Radiological, Nuclear (CBRN) Incident Response to the West Point Emergency Management Plan.

5-6. Potassium Iodine. West Point is located within the Indian Point Emergency Planning Zone. In the event of an Indian Point radiation emergency West Point's emergency managers will provide instructions to the community on precautions to take during the emergency. These precautions may include sheltering in place, evacuation, restrictions on food and water precautions, and the use of Potassium Iodide to reduce the effects of radiation exposure.

a. The effective use of Potassium Iodide is limited to specific age groups and medical histories, and should only be used when directed to do so by emergency managers. People with specific medical conditions could have an adverse reaction to Potassium Iodide. For this reason KACH conducts medical screening prior to issuing Potassium Iodide.

b. On West Point Potassium Iodide is issued at no cost by KACH to Cadets, residents, military and civilian employees, and some contractors at events such as New Employee Orientation at Eisenhower Hall. Individuals may also obtain Potassium Iodide at the KACH Pharmacy.

(1) Potassium Iodide tablets have a shelf-life of seven years.

(2) Potassium Iodide can be discarded in the trash once the shelf-life has expired.

(3) Contact the Poison Control Center at 1-800-222-1222 if Potassium Iodide is accidentally ingested.

(4) Point of contact for medical questions is the KACH Pharmacy at 845-938-6608.

Chapter 6
Ammunition and Explosives Safety Management

6-1. Purpose.

a. This chapter establishes the safety responsibilities, policies and procedures for transporting, storing, maintaining, using or disposing of ammunition or explosives on West Point.

b. This chapter also serves as the West Point Explosives Safety Management Plan, and will henceforth be referred to as the Explosives Safety Management Plan (ESMP).

6-2. Applicability. This ESMP applies:

a. To all Department of Defense (active or reserve component), Federal, State, and local government agencies, and Garrison Commander approved non-governmental activities and organizations, assigned to or operating on any part of West Point.

b. During peacetime, wartime, contingency operations, training, exercises, military munitions responses, and RDT&E missions.

6-3. Roles and Responsibilities.

a. Commanders of installations and activities with an ammunition or explosives mission. Commanders of installations and activities with an ammunition or explosives mission:

(1) Ensures that explosive safety management plans (ESMP) are established in compliance with AR 385-10 and DA Pam 385–64.

(2) Ensures that civilian and military personnel receive and document explosives safety training as required by Army policy and standards. Explosives safety training includes explosives risk management training for those responsible for the development and review of deviations and associated risk assessments. Ensures that ammunition and explosives contracts include appropriate explosives safety training requirements.

(3) Ensures that periodic reviews of deviations to explosives safety standards are conducted to ensure that assessments are current and that all exposures, risks, and mitigating actions have been identified and provide. Provides a copy of the review to the USATCES for centralized management and oversight.

(4) Ensures that periodic inspections and/or audits of ammunition and explosives activities are conducted to ensure compliance with the West Point ESMP (this regulation), AR 385-10, and DA Pam 385–64, including compliance with the hazards of electromagnetic radiation to ordnance (HERO) program requirements.

b. Garrison Commander.

(1) Establish written explosives safety policy to implement AR 385-10 and DA Pam 385-64. This policy outlines the responsibilities of all organizations, including installation and tenant activities with an ammunition or explosives mission. As part of the ESMP, the Garrison Commander will ensure that a Memorandum of Agreement that outlines the ESMP requirements and responsibilities of both the Garrison and tenants is created.

(2) Appoint an occupational safety and health manager per AR 385-10 who is qualified under Office of Personnel Management standards and is certified in explosives safety by the Army Safety Center, as the point of contact for all aspects of the West Point ESMP.

(3) Ensure competent and qualified personnel initiate and review site plans, safety submissions, and ammunition and explosives facility designs, and that West Point master plans take into account all ESMP requirements.

(4) Ensure personnel who initiate and review explosives safety certificates of risk acceptance for ammunition and explosives-related operations, facilities or equipment are qualified to provide the Garrison Commander or Superintendent with the information needed to make an informed decision regarding the risk being accepted.

(5) Ensure operating, training, and construction plans and budgets provide adequate resources to comply with ESMP requirements and to mitigate to the extent possible any explosives safety hazards as required by AR 385-10.

(6) Ensure coordination occurs with QASAS personnel regarding explosives safety.

(7) Implement ammunition and explosives amnesty programs and ensures that amnesty containers are provided at the Ammunition Supply Point.

c. West Point/United States Army Garrison (USAG) Safety Manager. The USAG safety manager serves in two roles as both the West Point installation and Garrison safety manager. In these capacities the USAG safety manager supports both the Senior Commander/Superintendent and the Garrison Commander on all installation and Garrison explosives safety programs respectively. The Safety Manager will:

(1) Serve as the point of contact for all Explosive Safety Management Program (ESMP) related actions on West Point.

(2) Identify requirements for permanent and temporary explosives licenses, submission of explosives safety site plans, explosives safety Certificates of Risk Acceptance (CoRA), Certificates of Compelling Reason (CCR). The West Point Safety

Office will coordinate these actions with the West Point Fire Department and Physical Security Office.

(3) Ensure all potential explosion sites (PESs) and exposed sites (ES), both military and civilian, are indicated on approved explosives safety site plans and submissions, and master plan database.

(4) Ensure that plans and protective construction designs for explosive manufacture, testing, storage, surveillance, maintenance, response actions, demilitarization, and disposal facilities are reviewed for compliance with safety standards, by appropriately trained personnel.

(5) Ensure a safety inspection is conducted at least annually for all areas where ammunition and explosives related activities are conducted. Maintain a list of all such areas and records of inspections.

(6) Monitor ammunition and explosives uploads and other activities that involve the transportation and storage of ammunition and explosives to ensure that pertinent requirements are met.

(7) Serve as the focal point for and coordinate ESMP requirements with tenant unit commanders/directors; and provide concurrence on tenant unit ESMPs.

(8) Review the West Point installation master plan and quantity-distance (QD) compliance for planned facilities on existing ammunition and explosives sites both prior to and after construction.

(9) Review policies, SOPs, and directives for compliance with explosives safety requirements from all Garrison, tenant, and other organizations that transport, store, and use ammunition or explosives on West Point.

(10) Review Certificates of Risk Acceptance and Certificates of Compelling Reason for completeness and accuracy prior to forwarding for approval.

(11) Maintain a list of approved Certificates of Risk Acceptance and advise incoming Garrison Commanders of such, and plans for correction of such situations.

(12) Actively participate in the West Point installation master planning process and annually review the installation master plan to ensure construction is not planned inside explosives safety quantity distance (ESQD) arcs. When construction that is not related to ammunition and explosives operations is required within ESQD, ensure explosives safety site plans and submissions and explosives licenses are updated and approved at the appropriate level.

(13) Ensure procedures are developed and in place for;

(a) Maintaining fire symbols and chemical hazard symbols current with actual ammunition and explosives stored at a particular location.

(b) Ensure that personnel responsible for managing ammunition and explosives keep current information on the type and location of ammunition and explosives storage and provide this information to safety, physical security and fire fighting personnel.

(c) Ensure training of personnel responsible for ammunition and explosives related operations, operational personnel including security personnel and firefighters in fire symbols and chemical hazard symbols, and in precautions and procedures for fighting fires when ammunition and explosives is involved.

(d) Ensure the existence of adequate communications between safety, fire fighting, security, emergency response, and ammunition surveillance and storage personnel.

(e) Ensure maintenance of current maps, showing all explosives locations with fire and chemical hazard symbols, and current facility response cards and notebooks for ammunition and explosives storage by West Point Military Police Desk and Fire Department Dispatcher. Distribution plan is at Appendix

(14) Annually review and document West Point's explosives safety arcs to monitor encroachment within ESQD and ensure required explosives safety site plans, submissions and explosives licenses are accomplished.

(15) Maintain the lightning protection system test results and/or records for the last six annual inspections cycles and conduct an annual trend analysis.

(16) Monitor selected ammunition and explosives operations conducted on West Point to ensure compliance with all DOD, Federal, State, and West Point standards. Also ensure that contractors understand and comply with these standards.

(17) Monitor, on a periodic basis, selected ammunition and explosives related activities to evaluate explosives safety and the integration of risk management. Activities that should be monitored include, but may not be limited to the following:

(a) Ammunition and explosives storage, handling, and operating sites.

(b) Ammunition and explosives transportation activities.

(c) Ammunition and explosives disposal and demilitarization activities.

(d) Munitions response actions and access to munitions response site.

(e) Weapon systems modifications, special exercises, test programs, Cadet projects, particularly those that involve ammunition and explosives

(f) Planning for contingencies.

(g) Combat load and reload operations.

(h) Explosives safety training records for unit personnel.

(i) Public demonstrations to include but not limited to funeral honors, band concerts, and 4th of July/Labor activities.

(18) Assist commanders, directors, and activity chiefs with resolving explosives safety concerns associated with real property known or suspected to contain munitions and explosives of concern (MEC).

(19) Investigate and report ammunition and explosives accidents, incidents and mishaps, per DOD 6055.09-M, AR 385-10, AR 75-1 and DA Pam 385-40, and document and disseminate explosives safety lessons learned.

(20) Brief the leadership about explosives safety requirements and issues and the status of the commander's ESMP.

(21) Conduct annual inspections of all arms rooms and issue arms rooms explosive site licenses.

(22) Serve as the UXO subject-matter-expert pending the arrival of EOD, QASAS, or Explosive Safety Specialist personnel for all UXO incidents.

d. Director, West Point Museum shall:

(1) Ensure that all inert ammunition or explosives on permanent display on West Point are suitably identified and permanently marked (for example, metal stamped) "INERT," "EMPTY," or "DUMMY."

(2) Ensure that all small arms ammunition or small inert ammunition and explosives components mounted on wall plaques or display boards, in display cases, or permanent museum exhibits are inert and have the word "INERT" on an attached plate. The plate could be of metal, wood, or plastic permanently affixed to the display.

(3) Ensure the following procedure is applied to each empty or inert ammunition or explosive:

(a) Drill four holes no smaller than one-fourth inch through each complete item. This includes fuse, body section, and cartridge case. The holes will be 90 degrees

apart. When components such as detonators are too small for the one-fourth inch holes, fewer holes of smaller diameter may be drilled.

(b) Exception to this standard applies to the West Point Museum collection if such drilling would diminish their historical value.

(4) Inspections. The EOD or other technically qualified personnel will inspect each inert ammunition or explosive that is part of a permanent museum display. Museum curators will use DA Form 2609 (Historical Property Catalog) to record the date of the inspection and the inspecting unit. The Museum Curator will note in the remarks section of DA Form 2609 that the ammunition or explosive was found to be or made inert.

e. Director of Emergency Services.

(1) Request explosive ordnance disposal (EOD) support upon discovery or report of unexploded ordnance on West Point.

(2) Immediately notify the West Point Safety Office when unexploded ordnance is found on West Point.

(3) Secure the site of any unexploded ordnance, establish a safety zone, and initiate necessary evacuations in accordance with FM 4-30.5, Explosive Ordnance Disposal Operations, pending the arrival of an Explosives Safety Specialist or an Explosive Ordnance Disposal Technician. Provide additional support as requested.

(4) Forward all DA Form 3265, Explosive Ordnance Incident Reports (http://www.apd.army.mil/pub/eforms/pdf/a3265.pdf) to the West Point Safety Office. The West Point Safety Office is the central repository for all UXO incident reports and the Safety Office retains these reports for a period of not less than five years.

(5) Secure the site of any ammunition or explosives accident/incident pending the arrival of an appropriate investigating entity (West Point Safety Office, Accident Investigation Board, etc.).

(6) Develop pre-fire plans in accordance with AR 420–1 for all licensed ammunition or explosives storage facilities. Plans will cover all explosives areas and possible exposures of explosives to fire. In addition to the requirements of AR 420–1, the overall plan will specify responsible individuals and alternates, their organizations and training, and include a description of the emergency function of each department or outside agency.

(7) Submit all draft risk assessment for operations involving the transportation, storage, or use of ammunition or explosives for ceremonial purposes to the West Point Safety Office for review prior to approval NLT five working days prior to the event.

f. Tenant Unit Commanders, Directors, and Activity Chiefs shall:

(a) Appointment a primary and alternate Additional or Collateral Duty Safety Officer (ADSO or CDSO) with the assigned duties of ensuring compliance with applicable safety requirements for their ammunition or explosives mission.

(b) Ensure that explosives facility licenses are requested for any ammunition or explosives being stored outside of the West Point ASP.

(c) Ensure that a SOP is developed and maintained for the transportation and storage of explosives and ammunition being stored outside the ASP, to include accountability and procedures in the event of lost or stolen explosives and ammunition.

(d) Ensure compliance with DOD, Army, and West Point explosives safety standards and that ammunition and explosives are stored IAW their explosives storage license(s).

(e) Ensure a Deliberate Risk Management Worksheet, DD Form 2977, is completed and signed by the appropriate risk decision authority for each activity involving the storage, transportation, or use of ammunition and explosives on West Point, and any mission where ammunition or explosives are transported off the installation to another location.

g. Safety managers of units, activities, and organizations with an ammunition and explosives mission:

(1) Establish, manage, and direct the organization’s ESMP according to the requirements of this regulation and DA Pam 385–30, DA Pam 385–64, DA Pam 385–65, and other policies and standards the command deems necessary.

(2) Serve as the primary POC for all ESMP-related actions, coordinating with other agencies as necessary to maximize awareness as well as stakeholder and subject matter expert input.

(3) Keep leadership informed of the organization’s ESMP posture and ammunition and explosives safety issues.

(4) Ensure that explosives safety deviations are accurate and kept current. When the organization’s leadership transitions, ensure that the incoming leadership is informed of and renews explosives safety risk acceptance.

(5) Ensure that explosives safety training requirements are properly identified, resourced, and complied with, and that individuals’ completed training is documented.

(6) Conduct periodic evaluations to ensure the effectiveness of the organization’s ESMP.

(7) Ensure that a primary and alternate Explosive Safety Representative is appointed in writing and one copy is submitted to the West Point Safety Office.

(8) Report any explosives safety issues or concerns to the West Point Safety Office as soon as possible.

(9) Immediately report any ammunition or explosives mishaps to the West Point Safety Office. Ensure that ammunition and explosives mishaps are properly reported, investigated, and analyzed.

(10) Ensure that a Deliberate Risk Management Worksheet, DD Form 2976 is completed and signed by the appropriate risk decision authority for any activity involving the transportation, storage, or use of ammunition or explosives.

h. USCC Safety Manager shall also:

(a) Ensure that the USCC Land and Ammunition NCOIC coordinates all temporary license requests for Cadet Summer Training (CST), Sandhurst competitions, and any other USCC Cadet activity requiring the storage of ammunition outside of the ASP with the West Point Safety Office.

(b) Ensure the Cadets are properly trained and licensed to transport and handle ammunition and explosives.

(c) Ensure that the USCC Skeet and Trap Club adhere to the criteria established by the National Skeet Shooting Association (NSSA) for range safety. The USCC Skeet and Trap Club will appoint a primary and alternate sponsor in writing, and submit one copy to the West Point Safety Office.

(d) Ensure that all draft risk assessment for operations involving the transportation, storage, or use of ammunition or explosives for ceremonial purposes and football games are submitted to the West Point Safety Office for review NLT five working days prior to the event.

i. USMA Safety Manager shall:

(1) Ensure that primary and alternate explosive safety representatives are appointed to ensure that activities (e.g. ODIA Rifle Team) that transport, store, or use ammunition or explosives are trained and licensed in accordance with DOD, Army, and West Point standards.

(2) Ensure that a risk assessment is completed for any academic project in the Dean when ammunition or explosive substances are used for academic purposes.

j. Career Program (CP) -12 Activity Career Program Manager (ACPM). The West Point CP-12 ACPM is appointed by the Superintendent to assist leadership with the career management of West Point's safety professionals. The West Point CP-12 ACPM is responsible for:

(a) Assisting all CP-12 safety professionals with obtaining both Safety and Occupational Health Level 1 and Explosives Safety Levels-1 and 2 certifications.

(b) Monitoring the status of all CP-12 safety professional's explosives safety training and refresher training requirements.

(c) Advising leadership on CP-12 recruiting, professional development, explosives safety career management and providing guidance and support to CP-12 safety professionals on issues relating to ammunition and explosives safety.

k. Reserve Officer Training Corps (ROTC) units shall:

(1) Request a temporary explosives facility storage license no later than 45 days for any ammunition or explosives being stored outside of the ASP for operations on West Point.

(2) Ensure that the unit or organization has a written SOP for the transportation, storage, and use of ammunition and explosives.

(3) Ensure ammunition is stored IAW the explosives storage license.

(4) Comply with DOD, Army, and West Point explosives safety requirements while transporting, storing, and using ammunition and explosives on West Point.

(5) Ensure that a Deliberate Risk Management Worksheet, DD Form 2977 is completed and signed by the appropriate risk decision authority for any ROTC activity involving the transportation, storage, or use of ammunition or explosives on West Point.

l. Active and Reserve Component (National Guard and Reserve) Units:

(1) Request an explosives facility license for any ammunition or explosives being stored outside of the ASP no later than 45 days prior to conducting operations involving ammunition or explosives at West Point.

(2) Develop a unit or organization SOP for the transportation, storage, and use of ammunition and explosives.

(3) Ensure ammunition is stored IAW their temporary explosives storage license.

(4) Comply with all DOD, Army, West Point, or individual service ammunition and explosives safety standards, whichever are more stringent.

(5) Ensure that a Deliberate Risk Management Worksheet, DD Form 2976, or service equivalent, is completed and signed by the appropriate risk decision authority for any activity involving the transportation, storage, or use of ammunition or explosives on West Point.

m. Contractors shall:

(1) Comply with OSHA standards, Federal, State, DOD, Army, West Point, Department of Transportation (DOT) and National Fire Protection Association (NFPA) standards dealing with explosives or fireworks transported, stored, or used on West Point.

(2) Comply with Subpart 223.370 of the Defense Federal Acquisition Regulation Supplement and include DOD 4145.26-M, DOD Contractor's Safety Manual for Ammunition and Explosives.

(3) Submit a written request to the West Point Safety Office no less than 45 days prior to bringing explosives or fireworks on to West Point. The West Point Fire Department, Military Police, Physical Security, West Point Safety Office and the contractor's COR will review the request to ensure compliance with applicable standards. The contractor's request letter will include the dates the explosives will be on West Point, the amount of explosives (Hazard Classification), purpose for using explosives on West Point, and their point of contact, including a telephone number and email address. The contractor will also include a copy of their SOP or safety plan along with the request letter.

(a) The proponent of the fireworks show will complete a DD Form 2976, Risk Management Worksheet approved and signed by the appropriate risk decision authority for each fireworks show/display.

(b) The proponent of the fireworks or pyrotechnic show or display consult with the West Point Fire Department to complete a Pyrotechnics-Outdoor Display Form (Appendix F) and submit it for approval to the West Point Safety Office along with the Risk Assessment for the show or display.

n. Contracting Officers shall

(1) Inform contractors bringing explosives or fireworks onto West Point of local requirements, including submission of a request letter stating the type and amount of explosives, purpose for using explosives on West Point, and their SOP or Safety Plan.

(2) Ensure that contracts for ammunition and explosives operations comply with Subpart 223.370 of the Defense Federal Acquisition Regulation Supplement and include DOD 4145.26-M, DOD Contractor's Safety Manual for Ammunition and Explosives.

o. Contracting Officer's Representative (COR) shall:

(1) Ensures that contractors submit their request to transport, store, or use ammunition or explosives on West Point to the West Point Garrison Safety Office 45 days in advance of the arrival of the ammunition or explosives on West Point.

(2) Serve as the point of contact if the contractor's request is incomplete or if additional information is needed to process the request.

p. The West Point Fire Department and Physical Security Office will coordinate with the West Point Safety Office to ensure that proposed ammunition or explosives storage facilities meets applicable fire, physical security, and safety requirements prior to approval of a temporary storage license.

q. Director of the Logistics Readiness Center.

(1) Coordinate with DPW for testing of lightning protection systems at all ammunition storage facilities and airfield grounding points as required by DA Pam 385-64, chapter 17 and IMCOM Reg 5-13.

(2) Ensure ammunition is stored per the explosives storage license and applicable explosives safety requirements. Inform all tenant units and satellite facility commanders of the license limits for facilities they occupy.

(3) Notify the West Point Safety Office of proposed new construction or conditions that require explosive site license modification, DDESB submissions, etc.

(4) Provide the following items for review upon request by the West Point Safety Office.

(1) A complete inventory by storage facility showing Department of Defense Identification Code (DODIC) nomenclature, quantity, and total Net Explosive Weight (NEW).

(2) Copies of the current lightning protection system inspection reports. Inspections of all lightning protection subsystems (bonding checks) are required every 24 months, airfield grounding tests are required every 12 months and visual inspections are required every 12 months. Results of these tests are kept on file for 30 years at the Safety Office.

(3) Copy of work orders submitted for correction of safety deficiencies.

r. Quality Assurance Specialist Ammunition Surveillance (QASAS) shall:

(1) Develop explosives safety site plans, submissions, and explosives licenses.

(2) Prepare explosives safety CoRA's and CCR's.

(3) Review protective construction designs for ammunition and explosives operational facilities for compliance with explosives safety standards at least every five years.

(4) Conduct safety inspections of ammunition and explosives handling, storage, use, maintenance, and disposal areas not to exceed 12-15 months.

(5) Monitor ammunition and explosives uploads and other activities that involve the transportation, storage or conduct of other ammunition and explosives related operations for which a Certificate of Risk Acceptance or Certificate of Compelling Reason has been approved or is awaiting approval to ensure that pertinent requirements are met.

(6) Review quantity-distance (QD) compliance of existing and planned facilities, both prior to and after construction.

(7) Assist in the installation master planning process and reviewing, annually, the West Point installation master plan to ensure construction is not planned within ESQD.

(8) Maintain a copy of the lightning protection system test results and/or records for the last six inspections cycles and review yearly for a trend analysis. Conduct and record a visual inspection yearly.

(9) Monitoring and evaluating ammunition and explosives related activities, including the following:

(a) Production, storage, handling, maintenance, operating, demilitarization, and disposal.

(b) Transportation.

(c) Weapon systems modifications, special exercises, and test programs.

(d) Contingency planning.

(e) Combat load and reload operations.

(f) Explosives safety training.

(10) Assisting in ammunition and explosives accident, incident and mishap investigations.

(11) Ensure Explosive Safety Management Program policies and procedures are followed for operational and tactical ammunition and explosives related activities, such as;

(a) Siting and operation of ammunition holding areas (AHA) and ammunition transfer points (ATPs).

(b) Siting of uploaded tactical vehicles.

(c) Relief in place and transfer of authority (RIP/TOA) A&E operations.

(d) Storage and processing of captured ammunition and explosives.

(e) A&E retrograde, reconstitution, and reset activities in a tactical area of operation.

s. Director of Public Works:

(1) Provide for testing lightning protection systems of ammunition storage facilities and grounding points as required by DA Pam 385-64, chapter 17, and IMCOM Reg 5-13.

(2) Provide engineering support necessary to ensure explosives safety standards are met.

(3) Notify the West Point Safety Office of proposed new construction or conditions that require explosive site license modification, DDESB submissions, etc.

(4) Prepare and maintain an installation map showing all explosives areas or locations including the Inhabited Building Quantity-Distance (QD) Archs.

(5) Notify the West Pont Safety Office, Physical Security, Military Police and Fire Department of any construction work which may affect the response of emergency vehicles.

(6) Provide the following items for review upon request by personnel of the Garrisons' Safety Office:

(a) Current lightning protection system inspection report. Inspections of all lightning protection subsystems (bonding checks) are required every 24 months and visual inspections are required every 12 months, airfield grounding tests and visual inspections are required every 12 months. Results of these tests are kept on file for 30 years at the safety office.

(b) Copy of work orders submitted for correction of safety deficiencies.

t. Proponents of fireworks, reenactments and ceremonial use of ammunition or explosives.

(1) Require the providers of commercial fireworks used in holiday celebrations on West Point to transport, set up, and, when possible, use the fireworks on the same day.

(2) Ensure that only commercial firms or licensed pyrotechnic technicians will transport, set up, or use commercial fireworks on West Point. Such use will comply with this regulation and National Fire Protection Association (NFPA) Standard 1123.

(3) When commercial fireworks or munitions of any kind are confiscated or found the proponent will contact the Provost Marshal to request EOD support per AR 75–15.

(4) The fireworks or pyrotechnics proponent and West Point Fire Department will complete a Pyrotechnics Outdoor Display (Appendix F) checklist prior to any use or display of fireworks or other recreational pyrotechnics on West Point.

6-4. Access. The West Point Director of Safety and Occupational Health is responsible for oversight of the Installation Explosives Safety Management Plan and represents the Superintendent on all issues relating to the safety of ammunition and explosives on West Point. The West Point Director of Safety and Occupational Health is also responsible for oversight of the Garrison Explosives Safety Management Plan and represents the Garrison Commander on all issues relating to the safety of ammunition and explosives in the Garrison. As such, in both cases, the Director has direct access to the Superintendent, Garrison Commander, and the leadership of all activities and organizations on West Point with an ammunition or explosives mission.

6-5. Organization and Staffing.

a. Organization

(1) The West Point Safety Office is structured and staffed to manage installation safety and occupational health programs, implementing guidance and priorities established by leadership, and in accordance with applicable statutory requirements.

(2) Safety offices and organizations on West Point will be established in accordance with the uniform criteria of AR 385-10 and DA Pam 385-10 to ensure that each office or organization has trained and experienced personnel of sufficient grade and rank to support the installation ammunition and explosives safety mission as well as each organization’s unique requirements.

(3) Commanders will fund and fully resource their safety office to execute all applicable ammunition and explosives safety responsibilities and functions designated in Table 1-1 of AR 385-10.

b. Staffing

(1) The West Point Safety Manager will exercise staff supervision over the West Point Safety Office installation safety program, risk management, and accident prevention activities. Duties performed by the West Point Safety Manager will include the full range of program management responsibilities required of an installation safety program. The West Point Safety Manager is also a member of the Garrison Commander's special staff and reports directly to the Garrison Commander. Individuals selected to serve as the West Point Safety Manger will meet Office of Personnel Management (OPM) standards for the positions of Occupational Safety and Health, GS-0018/0803 and Army safety certification standards.

(2) The Superintendent in his role as the Senior Commander for West Point will appoint the Director of Safety per AR 385-10 and Office of Personnel Management standards, as the point of contact for all aspects of the West Point Installation Safety Program, including management of the West Point ESMP.

(3) The safety staff/safety organizations will be staffed with professional safety personnel meeting the requirements for these positions established by the OPM and the Army personnel office and certified by the Army Safety Center.

6-6. Facilities Conformance.

a. Explosives storage and operations facilities (known as PESs), as well as facilities exposed (known as ESs) to them, must conform to the DA and DOD Explosives Safety Site Plan (ESSP) documentation. In addition, facilities must meet construction requirements as detailed in approved drawings including fire suppression and electrical standards, lightning protection and electrical dissipation systems, and consideration of glass hazards. Barricades and substantial dividing walls need to be considered in the conformance evaluation. In some cases, these facilities may be addressed on a Certificate of Risk Acceptance (CoRA), exemption, or a Secretarial Certification (also known as a Certificate of Compelling Reason (CCR).

b. The categories of facilities to be evaluated are dependent on the type of mission and whether they are DOD or non-DOD facilities. It is imperative that the facilities of all tenants be evaluated for conformance.

c. Facilities to be evaluated.

(1) Flight related facilities - Runways, taxiways, combat aircraft parking areas (CAPA), arming and de-arming, hot cargo pad, survival systems, aviation and life support equipment storage (ALSE), safety of flight shops, silos, joint use flight operations, launch and flight test facilities, thrust and test stands, and hangars.

(2) Ground and weapon related facilities - Ammunition holding areas (AHA), forward arming and refueling points (FARP), static missile sites, basic load ammunition holding area (BLAHA), earth-covered magazines (ECM), aboveground magazines

(AGM), storage pads, rail sidings, munitions build-up, munitions assembly/disassembly, chemical ammunition and agent storage, chemical ammunition and agent destruction, military operations other than war (MOOTW) facilities or operations, manufacturing areas, training and test ranges, and operations buildings.

(3) Common explosives facilities - General vehicle parking areas, uploaded vehicle parking, suspect cargo, rail facilities, holding pads, stuffing and unstuffing facilities, explosives routes, security facilities, reduced quantity-distance (QD) containers, laboratories, arms rooms, barricades, non-DOD operations, explosive ordnance disposal (EOD) operations, destruction and disposal operations, emergency response facilities, base realignment and closure (BRAC), and remediation sites.

(4) Vessel related facilities - Piers, anchorages, wharfs, scuttling sites, and associated facilities and operations.

6-7. Facility Maintenance.

a. Facility maintenance is an all-inclusive process to ensure explosives facilities are maintained in accordance with Army and DOD requirements. It is imperative to maintain explosives facilities, and the supporting facilities such as barricades, to the highest standard to ensure safe operations and the continuance of the mission.

b. These facilities include, but are not limited to, all storage locations (aboveground magazines, earth-covered magazines, open pads, warehouses), barricades, lightning protection systems to include centenary and integral, operating buildings, arms rooms, security systems used to protect ammunition and explosives facilities, piers, wharfs, laboratories, test facilities, explosive-laden truck holding areas, just to name a few. See paragraph 6-5 for more facilities.

c. Facilities requiring maintenance or repairs are identified through maintenance schedules, manufacturer’s instructions, daily operations, supervisor safety checks, ADSO/CDSO inspections, and formal safety inspections or audits.

d. If ammunition or explosives facilities are found in need or maintenance:

(1) Submit a service order or work order to the Director of Public Works and assign an appropriate Risk Assessment Code (RAC) to any hazard associated with the condition of the facility.

(2) Ensure hazards are properly posted with a notice of unsafe conditions or a hazard abatement plan approved by the appropriate safety manager.

(3) Ensure ammunition and explosives facility and equipment maintenance plans and schedules are in place and implemented.

(4) Ensure periodic inspection and trend analysis are conducted on lightning protection systems.

(5) Ensure maintenance and repairs are completed by personnel specially trained and certified (if required) to maintain ammunition explosives facilities and equipment.

6-8. Site Plans, Safety Submissions, and Facility Design Reviews.

a. New facilities and construction. Site plans are required for constructing new explosives facilities and for constructing any facility within the explosives arc of an existing explosives facility.

b. Increased level of risk. Site plans are required when the use or remodeling of the facility increases the level of risk associated with the facility. Site plans are not required for remodeling or changes in use when associated with a similar or lower level of risk.

c. Site plan submission.

(1) The unit or organization responsible for operating the explosive site will request that the West Point Safety Office initiate the site plan and will provide all necessary information to the West Point Safety Office for the site plan development and coordination.

(2) The West Point Safety Office will:

(a) Develop, coordinate, and submit explosive safety site plans according to DA Pam 385–61, DA Pam 385–64, and DA Pam 385–65.

(b) Develop and coordinate the site plan with the West Point installation master planer, affected operating units, logistics, quality assurance specialists-ammunition surveillance, fire departments, security, and environmental and health agencies.

(c) Forward site plans through the IMCOM Safety Office to the USATCES and, at a minimum, copy furnish the unit or organization responsible for the operation.

(3) While the West Point Safety Office is generally responsible for site plan development and coordination, in some circumstances a tenant or other organization may assume those responsibilities. Local agreements can dictate deviations in site plan responsibilities as long as all affected organizations are consulted and agree.

(4) As of 30 March 2012, all site plans are submitted electronically using the ODASAF-approved software. West Point will submit site plans with this software. If the West Point Safety Office is unable to submit a site plan using the ODASAF approved software it will submit site plans in electronic format by converting required documents

to portable document format and emailing to the USATCES or uploading to a secure server.

d. List of explosive facilities. The West Point Safety Office will develop and maintain a comprehensive listing of all existing explosives facilities. Each explosives facility will be identified by building number, facility type (earth covered magazine, aboveground magazine, operating building, and so forth) and user or owner activity, as applicable, and placed in one of the following categories:

(1) Facility has an approved explosives safety siting plan (ESSP) or an ESSP has been submitted for approval.

(2) Facility is grandfathered and the required documentation is on file.

(3) Facility has a properly executed risk assessment and CORA.

(4) Facility does not have an ESSP (approved or submitted), is not grandfathered, and does not have a properly executed CORA.

(5) ESSP is not required per DA Pamphlet 385–64.

6-9. Real Property Master Planning.

a. Real Property master planning is a continual, collaborative, and integrated process, primarily performed at the installation level by the Director of Public Works, and is reflective of local mission requirements, yet strongly influenced by the plans, guidance, and initiatives of the Superintendent as the Senior Commander, the Commander of the Installation Management Command, and the Department of the Army. The West Point real property master plan (RPMP) is, therefore, the principal real property management tool in support of West Point's real property operation, management, development, privatization, realignment, cleanup, and disposal and must be apprised of the safety requirements of the ammunition and explosives mission on West Point.

(1) The process involves collecting, mapping, and evaluating planning information, integrating mission requirements, performing a set of analyses, and conducting extensive coordination, staff reviews, and deliberations. Included in this process must be the requirements/hazards posed by the ammunition and explosives missions of the commands, organizations, and activities located on West Point. As such, the West Point Safety Manager and any other affected safety managers must be included as part of the RPMP process to ensure that proposed projects do not encroach on existing or proposed ammunition or explosives facilities or hazards. Therefore the West Point Installation Safety Manager is a non-voting member of the RPPB and serves the RPPB in an advisory capacity.

(2) The West Point Safety Manager will coordinate with the DPW Master Planner to ensure that and plans are continually updated in regard to ammunition and explosives storage and mission safety requirements, so these factors are to be included in any future construction or renovation planning.

6-10. Ammunition and Explosives Storage Licensing.

a. Explosives licenses are required for all facilities that store ammunition and explosives on West Point.

b. All ammunition and explosives storage facilities will comply with the applicable DOD and Army standards, and in addition, any facility specific requirements contained in the DDESB approved ESSP.

c. Facilities that do not meet ammunition and explosives safety standards shall not be licensed unless an approved CoRA is on file with both the organization having the ammunition and explosives mission and the West Point Safety office.

d. Ammunition and explosives are not stored at any location that does not have a current explosives license (Appendix C, Explosives Facility License). Procedures for obtaining an initial license and for 12 month revalidation are contained in Appendix D, Request for Ammunition Storage License.

6-11. Certificate of Risk Acceptance (CoRA). Certificates of Risk Acceptance are required for violations of explosives and chemical agent safety standards and will be signed to document risk acceptance for noncombat situations of duration greater than seven calendar days. Every effort should be made to comply with explosives safety requirements. If the minimum explosives safety quantity distances, either internal or external cannot be obtained then the situation calls for a Certificate of Risk Acceptance. The CoRA took the place of a waiver or exemption. A CoRA can also be used for other explosives safety deficiencies such as lack of lightning protection for ammunition storage or risk to mission capability (e.g., less than asset preservation distance). The West Point Safety Office maintains a copy of, and tracks the status of, each CORA until the violations or hazards are resolved.

6-12. Certificate of Compelling Reason (CCR). A certificate of compelling reason (CCR) is required for all new construction involving explosives and chemical regulatory violations. A CCR is written authority, granted by the Assistant Secretary of the Army (Installation and Environment), to build or perform a major modification on a structure that violates or will violate the provisions of AR 385-10 dealing with explosives or chemical agents, DA Pam 385-61 or DA Pam 385-64.

6-13. Arms Room Storage.

a. Prior storing ammunition or explosives in an arms room, the unit commander or the responsible authority will prepare a memorandum and a risk assessment that justifies the storage based on operational necessity and/or safety considerations.

b. Ammunition stored in a unit's arms room is classified either as operational readiness, training, or ceremonial in accordance with Department of the Army Policy, Storage of Ammunition and Explosive in Arms Rooms, dated 1 August 2011:

(1) Operational readiness ammunition involves ammunition for wartime, contingency or peacetime operations in which consequences of the ammunition storage justify the risk of loss of personnel, equipment and resources. The qualifier "operational necessity" is intended to provide commanders the flexibility to ensure mission without a waste of resources. It is not intended to allow such storage for convenience.

(2) Training ammunition is defined as limited quantities of ammunition stored temporarily in a unit's arms room to facilitate personnel training on ranges or in the field where receiving and returning ammunition from and to an ammunition holding area or supply point would delay the unit's training adversely. Units that are conducting weapons qualification during inactive duty training may, when required, store limited quantities of HD 1.4 munitions inside an arms room for a limited period of time. Access convenience is not considered valid justification for storage.

(3) Ceremonial ammunition is not considered an operational necessity. A limited quantity of HD 1.3 and HD 1.4 ceremonial ammunition such as 75 mm blank or 105 mm blank (if applicable) may be stored in an arms room provided no other practical alternative exists. The amount of HD 1.3 and HD 1.4 stored will not exceed the lesser of 100 pounds NEW or one full outer pack of ammunition.

c. The term "limited quantities" is defined as the minimum amount of ammunition required to support operational missions (e.g., security guard forces, military police) or the immediate training requirements of the unit.

d. Operational ammunition will be separated from training ammunition as far as possible. Ceremonial ammunition will be separated from training and operational ammunition. All combustible, solvents, petroleum products, or radioactive items must be stored in an approved cabinet for their type and not in the vicinity of the ammunition.

e. All ammunition is maintained in its original shipping container and sealed. One package of each caliber of operational ammunition may be opened if required to support mission execution (e.g., guard ammunition). Training ammunition must be closed and sealed unless returning from the range or field, in which case the ammunition will be repacked in its original package, closed and secured shut. Ceremonial ammunition outer packs will remain closed and if possible secured with their original seal.

f. The appropriate fire and/or chemical hazard symbols will properly posted on the arms room and at the entrance of the building exterior.

g. Property book, hand receipt, accountability and inventory procedures will be consistent with 710 series regulation and pamphlets.

h. The activity operating the arms room will notify the West Point Fire Department and Military Police when an arms room is vacated of munitions for indefinite periods and when its use for storage of munitions is initiated or resumed. When ammunition or explosives is stored in an arms room, the unit commander or the responsible authority will prepare a memorandum and a risk assessment that justifies the storage based on operational necessity and/or safety considerations.

6-14. Ammunition and Explosives Safety Council.

a. In order to provide proper integration of ammunition and explosives responsibilities, the West Point Explosives Safety Council is established as of the effective date of this West Point regulation.

b. The Garrison Commander, or his/her designated representative, shall serve as chairperson of the Explosives Safety Council.

c. The Explosives Safety Council meets no less than annually to review the ESMP and conduct other ammunition and explosives matters as required.

d. Representatives from all organizations with an ammunition or explosives mission will participate in the Council. As a minimum, representatives from the following organizations/offices comprise the Council:

(1) West Point/Garrison Safety Office

(2) Logistics Readiness Center (LRC) Ammunition Supply Point Manager

(3) Directorate of Public Works (DPW)

(4) Directorate of Emergency Services (DES)

(a) West Point Fire Department

(b) West Point Military Police Company

(c) West Point Physical Security Office

(5) Director of Plans, Training, Mobilization, and Security

(6) Director of Family, Morale, Welfare, and Recreation

(7) United States Military Academy (USMA)

(a) Safety Manager

(b) Director of Intercollegiate Activities (DIA)

(6) United States Corps of Cadets (USCC)

(a) Safety Manager

(b) DCA Skeet and Trap Club

(7) Army Air Force Exchange Service (AAFES)

6-15. Risk Management.

a. Explosive safety site planning is the risk management process associated with explosives/toxic chemical activities to ensure the minimum risk to personnel, equipment, and assets, while meeting mission requirements. This management process also ensures that risks above those normally accepted for ammunition and explosives activities are identified and approved at the proper management level.

b. The DD Form 2976, Deliberate Risk Management Worksheet to document the processes to identify, assess, and mitigate risk posed by ammunition and explosives missions or activities. These are approved in accordance with the organization or activity's risk decision authority policy.

c. In situations where it is not feasible to comply with an ammunition or explosives safety standard the current DA policy is to use DA Form 7632, Certificate of Risk Acceptance (CoRA) to document and accept a risk associated with a deviation from DOD and Army explosives safety or chemical agent safety standards at the appropriate level of command. The CoRA should be prepared and reviewed by trained and qualified explosives safety staff, and at a minimum are reviewed by the West Point Safety Office prior to approval.

d. A Secretarial Certification (also known as a Certificate for Compelling Reason (CCR) is granted by the Assistant Secretary of the Army (Installation, Energy & Environment) to build or perform a major modification on a structure that violates or will violate the provisions of the DA regulations and pamphlets. There is currently no standard form for a CCR. Needs for CCRs should be rare.

e. Organizations with an ammunition and explosives mission must have a well-defined process to prepare, submit, review, and approve CoRAs.

6-16. Accident Prevention and Reporting.

a. Accident prevention programs are designed to mitigate the causes and contributing factors necessary to eliminate explosive accidents and incidents before they occur. Methods to ensure this occurs include:

(1) Report, investigate, and analyze all mishaps, near-misses, and reportable accidents to the command's, organization's, or activity's supporting safety office in accordance with West Point Regulation 385-1, Safety Program Management and Army Regulation 385-10, The Army Safety Program.

(2) Ensure that lessons learned identified from accident investigations are being disseminated and, as appropriate, incorporated in training programs, policies, and operating procedures.

(3) Evaluate all accidents/near misses to determine root cause, contributing factors, and identification of preventable measures. Report and document findings for command review.

b. Accidents can be prevented, or their occurrence or severity can be reduced by promoting a culture of safety. Commanders and leaders will utilize the following methods for promoting a culture of explosives safety:

(1) Empowering personnel to stop ammunition and explosives operations that are unsafe.

(2) Emphasize safe execution of ammunition and explosive operations over scheduling.

(3) Increase explosives safety awareness through the display or distribution of posters, fliers, and incentives.

(4) Provide and document daily and weekly explosive safety meetings.

(5) Reward safe explosive operations working habits and ideas.

(6) Establish ownership/accountability for the safety of ammunition and explosives operations and missions.

6-17. Ammunition Weapons Malfunction Reporting Procedure

a. A malfunction is defined as the failure of an ammunition item to function as expected when fired or launched causing injury, damage to the weapon, or renders the weapon temporarily inoperative or when explosive items function under conditions that should not cause functioning.

b. Malfunctions include hang fires, misfires, duds, abnormal functioning and premature functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or

incidents that arise solely from negligence, malpractice, or situations such as vehicle accidents or fires. Misfires of small arms ammunition, which are corrected by immediate action procedures, are not considered as a malfunction.

c. In the event of a malfunction, the commander or person in charge of the firing unit will:

(1) Immediately cease firing the suspected ammunition/weapon and shut down the range, secure the firing site, and notify range control providing the following information:

(a) Range, observation point (OP), firing point, training area, and grid coordinates.

(b) Type and caliber of ammunitions.

(c) Type of malfunction.

(d) Time/date of malfunction.

(e) Name of officer in charge.

(f) Name, unit, and telephone number of person.

(2) Range Operations will notify the Ammunition Supply Point Manager, and request Explosives Ordnance Disposal support if the ammunition is considered hazardous.

(3) Unless overriding safety or security considerations exist, the immediate malfunction area, including equipment and weapons, will not be disturbed before an investigation is conducted. Weapons, ammunition, and brass involved in malfunctions will remain undisturbed and under guard until cleared or until indent investigation is completed by all parties. After the initial investigation and ammunition is determined not to be a factor in the malfunction, the unit can coordinate with Range Support to resume normal operations for the other firing points.

Note: All missile malfunctions will be reported. The reportable rate for misfires and duds is one.

(4) After being informed by the firing unit of a malfunction, the Ammunition Supply Point Manager will immediately respond.

(5) The Ammunition Supply Point Manager's will conduct a preliminary inspection and gather data as necessary for all reported malfunctions and prepare a preliminary report. The Range Control Office and West Point Safety Office will assist as requested. The QASAS will locally suspend affected ammunition and immediately notify all units in possession of suspended stock.

(6) If the Ammunition Supply Point Manager or QASAS is not immediately available, the preliminary report will not be delayed. The Range Control Officer, or in his/her absence, the Range Control Safety Specialist will prepare the report on the DA Form 4379.

(7) The appropriate commodity command will notify West Point within 24 hours from receipt of the preliminary report as to whether an on-site Department of the Army investigative team for malfunctions (DAITM) investigation will be conducted. Where no DAITM on-site investigation is conducted, a local investigation will be conducted by the Ammunition Surveillance Officer, QASAS, Range Safety Officer, LAR, and the West Point Safety Office.

6-18. Fire prevention management.

a. Training. All ammunition and explosives operating and West Point Fire Department personnel training will include the risks involved in each fire hazard group and the best methods of fighting fires of all kinds of materials under their protection. This training will include the application and meaning of each type fire hazard symbol, reporting fires, sounding alarms, area evacuations, and type and use of appropriate firefighting equipment. See Figure 1-1, Chapter 1, of DA Pam 385-64. Training will also include how to use personnel protective devices required for the various types of ammunition and explosives fires.

b. Pre-fire Plan. The Ammunition Supply Point Manager, with assistance from the West Point Fire Department will develop a pre-fire plan in accordance with AR 420–1. The plan will cover all explosives areas and possible exposures of explosives to fire at all ammunition or explosives sites on West Point. In addition to the requirements of AR 420–1, the overall plan will specify responsible individuals and alternates, their organizations and training, and include a description of the emergency function of each agency.

(1) Duties of the Ammunition Supply Point personnel spelled out in the plan will include the following:

(a) Reporting the fire.

(b) Directing orderly evacuation of personnel.

(c) Notifying personnel in nearby locations of impending dangers.

(d) Activating means of extinguishing or controlling the fire.

(e) Meeting and advising the firefighters on the details of the fire up to the time of their arrival.

(2) The West Point Fire Department Dispatcher will have an area map showing all explosives areas or locations on West Point. Locations with less than 1,000 rounds of HD 1.4 small arms ammunition (.50 caliber or less) are exempt.

(3) The Ammunition Supply Point Manager will notify the Fire Department if there is a change in the type of explosives being worked which would require a change of fire or chemical hazard symbols.

(4) Where explosives, highly flammable, or energetic materials are involved, a written permit is required for using heat-producing equipment capable of reaching a temperature higher than 228 degrees Fahrenheit (F).

(5) Matches or other flame or spark producing devices are not be permitted in any magazine area or explosives area.

(6) Carrying and using “strike anywhere” (kitchen) matches are prohibited in/around ammunition and explosives facilities.

(7) Only flashlights or storage-battery lamps certified for the hazardous environment by the United States Bureau of Mines or by a similarly recognized testing laboratory for that specific type of exposure can be used in buildings containing hazardous quantities of exposed explosives or flammable vapors.

(8) Instructions for Fighting Fires Involving Ammunition or Explosives.

(a) When an employee discovers smoke coming from a closed magazine, or sees any evidence that a magazine is on fire, he or she will give the alarm as quickly as possible and evacuate to a safe distance. He or she will not enter a burning building or magazine, nor open the building or magazine door if a fire is suspected.

(b) If a fire is discovered in grass or other combustible material surrounding a magazine, the employee will sound the alarm and the employee should do all that is possible, using available firefighting tools to extinguish or control the fire until the Fire Department arrives. If a fire has actually started inside a magazine, the Fire Department should either combat the fire or seek the nearest suitable protection, depending on the type of ammunition or explosives with the magazine.

(c) The fire alarm is sounded when an employee discovers a fire in a building where people are working and explosives are present, and all personnel present will be evacuated. At least one employee is dispatched in the direction from which the Fire Department is expected to come, to inform firefighters of the location, nature, and extent of the fire. The Incident Commander will not permit personnel to advance until accurate information is available about the existing hazard and concludes that the advance is justified.

(9) Smoking. Smoking is prohibited in all ammunition and explosives storage or operating area or locations on West Point.

(a) A “No Smoking” sign will be posted at each entrance to an explosives storage area. Where applicable, include a notice that flame-producing devices must be turned over to the entry controller or placed in the container provided.

(b) Smoking is prohibited in, on, or within 50 feet of any motor vehicle, trailer, railcar, or material handling equipment loaded with explosives items.

(c) Smoking is prohibited in any explosives-laden compartment of an aircraft.

(10) Fire Drills. Fire drills are held within the explosives areas at intervals of no more than six months. See Table 6–4 of DA Pam 385-64 for withdrawal distances.

(a) Drills are conducted to train firefighters and ensure other personnel involved understand their duties and to evaluate fire alarm systems and firefighting equipment.

(b) Fire drills involving a fire department response are coordinated with the Fire Chief. This does not preclude unannounced tests of a fire department’s response capabilities, provided adequate prior coordination with the Fire Chief is accomplished. Personnel who conduct these tests will make sure all personnel in the area are aware that an exercise, and not a real fire, is in progress.

(c) Fire Exit Drills. Frequent fire exit drills should be held when warranted by the size of the building and the number of occupants. If emergency exits other than the usual doors and stairways are provided, these drills will cover their use. All emergency exits will have exit signs which are clearly visible. Signs will meet the requirements of 29 CFR 1910 Subpart E – Exit Routes, Emergency Action Plans, and Fire Prevention Plans and The Life Safety Code (NFPA 101).

(d) Alarms. In addition to any fire detection systems required by AR 420–1 or other applicable directives, an audible, manually operated fire evacuation alarm system should be installed in each explosives operating building. All alarm systems will be clearly labeled and used for an actual emergency, and for no other purpose.

c. Fire Prevention Requirements.

(1) Heat-producing devices. The use of devices that produce temperatures higher than 228 degrees F (109 degrees C) in any explosives area should be confined to essential, temporary use. Written instructions and a DA Form 5383 (Hot-Work Permit) issued by the West Point Fire Department are required before beginning work. They should cover the location, purpose, duration, and details of general and explosives safety precautions to be used. Approved furnaces, electrical space heaters, and electrical cigarette lighters that are properly installed in an operating building are exempt.

(2) Control on wax pots.

(a) All wax pots regardless of size will be equipped with a power indicator light, lids with fusible link, and placed on noncombustible surfaces.

(b) Wax pots with a capacity in excess of one gallon must be equipped with dual temperature controls.

(3) Vegetation control. The Ammunition Supply Point Manager determines what vegetation control measures are required and develop a vegetation control program.

(4) Flammable liquids for cleaning. Flammable liquids will not be used for cleaning within an explosives area or near explosives.

(5) Petroleum, oils, and lubricants fire separation distances.

(a) POL storage location requirements. The NFPA Standard 30 specifies fire clearance criteria from POL locations. If required fire clearances are greater than those required by this regulation, use the greater required separation.

(1) Anti-siphon systems will be used where applicable.

(2) Any aboveground petroleum storage tank which has a capacity of 2,000 gallons or more must be enclosed within a dike area as prescribed in 29 Code of Federal Regulation (CFR) 1910.106 and NFPA Standard 30. The capacity of this diked area must equal the capacity of the largest tank within the diked area.

(b) Quantities of 500 gallons or less.

(1) Where tanks serve equipment (such as oil heaters or diesel generators) located in explosives buildings, antisiphoning devices will be used. They are not needed if the level of the tank installation is such that siphoning is impossible.

(2) Above ground petroleum facilities (such as tanks, pumps, or pump houses) will be located a minimum of 50 feet from explosives locations.

(c) Parking fuel service trucks. Parking areas for fuel service trucks will be located a minimum of 50 feet from explosives locations.

(d) Mobile dispensing units. There must be at least 100 feet between explosives and any mobile petroleum dispensing unit operating in an explosives area, unless a shorter distance is needed during transfer operations to an underground tank (as allowed under (2) above).

(e) Liquid petroleum gas facilities. LP gas facilities will meet the requirements of this section.

(f) Vehicle refueling. Gasoline and diesel-powered vehicles and equipment will not be refueled inside any structure in the explosives storage area or in any facility, site, revetment, or other building containing explosives, regardless of location. When being refueled, vehicles will be at least 100 feet from structures or sites containing explosives. When refueling is completed, the refueling vehicle must be removed promptly from the storage area.

(1) Use the smallest available refueling unit consistent with the mission.

(2) When refueling explosives-loaded vehicles, maintain an electrically continuous bonding path between the vehicle being filled and the tank being emptied. The entire system will be grounded.

(3) Do not allow smoking or open flame devices within 50 feet of gasoline or diesel refueling. At least one person must be present during the entire operation. During the refueling, stop the motor of both the vehicle being refueled and the refueling truck (unless the refueling truck motor drives the pump).

(4) If a fuel spill occurs, immediately notify the West Point Fire Department. Do not start the motors of the refueling truck or unit being refueled until the area is rendered safe by the fire department.

(5) Refueling will not be done within 20 feet of an inert ammunition storage building or loading dock.

(6) Exceptions. The following are exempt from the above requirements:

(a) Separation of POL facilities and aircraft during combat or simulated combat operations.

(b) Separation between POL hydrants set on the flight line flush with the pavement and explosives loaded aircraft or explosives loading or unloading operations.

(7) Diesel-powered generators may be equipped with an operational “day-tank” of the smallest size needed to operate the motor properly. Supply tanks will be separated by the applicable underground or aboveground criteria.

(8) Siting. Do not locate ammunition and explosives within the drainage path downstream of temporary or permanent POL sites.

(g) Paint and other flammable materials. Small stocks of flammable materials, such as paints and solvents required to support explosives maintenance operations, may be stored in an explosives storage area in accordance with 29 CFR 1910.106.

(1) Combustible materials, such as wood, paper, and rags, will not be stored with flammables. Containers of flammable materials will be closed, except when in use.

(2) Flammable materials in approved weatherproof containers may be stored outdoors. Grounding and bonding are required when contents are being dispensed.

(3) Flammable storage will be located at least 50 feet from explosives locations.

(4) A limited supply of paint, not to exceed a one-day requirement, may be stored in explosives operating facilities if stored inside cabinets designed for flammable material storage.

(5) At least one fire extinguisher, suitable for the type of materials involved, will be readily available for use (see Table 6–1 of DA Pam 385-64).

(h) Vehicle parking. Vehicles, except during loading or unloading, will not be parked closer than 50 feet to any noncombustible explosives facility or 100 feet for combustible facilities. APE 1965 or other approved shelter may be parked at magazines while in use, and may remain there unattended as long as all munitions or explosives are removed from it and returned to the storage structure.

(i) Operating support equipment. The following applies to all support equipment powered by internal combustion engines used with explosives and not otherwise regulated under Paragraph 2–17 of DA Pam 385-64.

(1) This equipment should be located 50 feet or more from explosives but shall be no less than 25 feet from explosives operations or facilities. In the case of mobile shelters or other support equipment that includes built-in generators, the generator will be physically separated from any ammunition by being housed in an exterior compartment on the shelter. The generator will be maintained at least 50 feet from the supported magazine.

(2) Only qualified personnel will use the equipment.

(3) The equipment will be inspected for cleanliness and visual defects before each use. Defects will be documented on the applicable forms. Equipment that is malfunctioning or has defects that present a hazard will be removed from the operational site for repairs.

(4) One fire extinguisher rated 10BC or higher (1–A: 10–B: C recommended) for flammable or combustible liquid fires (Class B fire) and electrical fires (Class C fire) will be readily available.

(5) Equipment powered by gasoline or diesel fuel will not be refueled within 100 feet of explosives. LP gas powered equipment may have its fuel container replaced, as long as the magazine is closed, no ammunition operations are in progress at the site, and the equipment is not in use at the time of fuel container exchange.

(j) Stacking combustible material. Containers, dunnage, lumber, and other material will be stacked in an orderly manner. Stacks should be limited to an area of no more than 1,500 square feet. Bulk stacks of combustible materials should not be closer than ILD from locations containing explosives (use Chapter 8 of DA Pam 385-64 to establish minimum separations). Working quantities may be stacked in the vicinity of explosives. Portable fire extinguishers or water barrels should be provided in these areas.

(6) Firebreaks. The Ammunition Supply Point Manager will ensure that all firebreaks are kept clear of all readily combustible material, such as dry grass, dead wood, or brush.

(a) A 50-foot firebreak is required around each aboveground magazine, operating building or location, outdoor storage site, and ready explosives facility.

(b) A 5-foot firebreak is required around each earth-covered magazine ventilator.

(c) A 5-foot firebreak is required on both sides of fences (for example, magazine area fences, production line fences, boundary fences). Where access to the outside of the fence is not available the fire break is be doubled on the interior side of the fence.

(7) Auxiliary Firefighting Equipment - Fire Extinguishers.

(a) A minimum of two fire extinguishers suitable for the hazards involved will be available for immediate use when explosives are being handled. Extinguishers need not be permanently located at the site. Each extinguisher will be placed in a conspicuous and readily accessible location. Each fire extinguisher will be kept in a full, or fully charged, operable condition. Table 6–1 of DA Pam 385-64 lists agents for fighting fires.

(b) The West Point Fire Department will provide personnel with responsibilities for using fire extinguishers training on general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting upon initial assignment and at least annually thereafter.

(8) Storage of Water for Firefighting. Adequate (3,000 gallons) water to fight fires as required by paragraph 6-11 of DA Pam 385-64 is not presently available at the West Point Ammunition Supply Point. There is no standing water in the vicinity of the Ammunition Supply Point suitable for firefighting purposes. The Incident Commander

relies on a combination of West Point Fire Department resources and mutual aid partners to supply sufficient water resources for firefighting purposes as follows:

(a) West Point Fire Department.

(1) Fire Engines (2) 500 gallons.

(2) Tanker (1) 1,200 gallons.

(b) Fort Montgomery Fire Department. Tanker (1) 2,500 gallons, 10-15 minute response time.

(c) Cornwall-on-Hudson Fire Department. Tanker (1) 1,800 gallons, 15-20 minute response time.

(d) Cornwall Fire Department. Tanker (1) 2,500 gallons, 15-20 response time.

(e) Woodbury Fire Department. Tanker (1) 2,500 gallons, 15-20 minute response time.

(9) Public Withdrawal Distances.

(a) If a fire involves explosives or involvement is imminent, then the initial withdrawal distance applied will be at least inhabited building distance. When the Incident Commander (IC) determines that the fire is or may become uncontrollable and may result in deflagration and/or detonation of nearby ammunition or explosive material, all nonessential personnel will be withdrawn to the appropriate emergency withdrawal distance listed in Table 6–4 of DA Pam 385-64. If fire is not affecting explosives or involvement is not imminent, then the IC shall determine the withdrawal distance based on the situation at hand.

(b) The IC may use structures or protected locations offering equivalent protection for the distances listed in Table 6–4 of DA Pam 385-64 instead of relocating personnel from the structure and/or location to the specified emergency withdrawal distance.

(c) The Director of Emergency Services is responsible for development of evacuation plans for West Point that reference the appropriate withdrawal distances as part of the disaster response plan. The Director of Emergency Services will alert civilian authorities (Town of Highlands Police Department) of any explosive accident on West Point that may affect the local community and roads, and provide these authorities with the appropriate emergency withdrawal distances.

6-19. Emergency Planning and Response.

a. Planning. All commands, organizations, and activities with an ammunition or explosives mission will prepare and annually exercise a pre-accident plan. The purpose of this plan is to develop the necessary and required procedures in the event of an accident or incident involving ammunition or explosives. Once the plan is developed the proponent will conduct the necessary drills and exercises to practice and evaluate the plan at least once each year. Drills are intended for ammunition or explosives operating personnel to practice their emergency procedures (notification, initial response, and evacuation) prior to the arrival of first responders. Exercises are intended to practice and rehearse the integration of the internal and external assets that would respond to an ammunition or explosives incident or accident. The proponent will conduct and document an After Action Review (AAR) within 72 hours of each exercise that includes all parties involved in the exercise. Any lessons learned will be used to update or revise the pre-accident plan.

b. All responses by emergency service resources on West Point are initiated by calling “911”. Ensure to inform the 911 operator where the incident or accident has occurred, whether on or off of West Point, and exactly where, by street address or building number if possible.

c. West Point uses the National Incident Management System (NIMS) Incident Command System (ICS) to manage all emergencies on West Point. As emergency services resources arrive, it is the responsibility of the ASP’s or other activity’s operating personnel to brief the Incident Commander (IC) about the nature of the emergency, personnel accountability, and hazards to first responders. From that point the senior ASP or other facility employee remains at the Incident Command Post (ICP) to advise the IC on issues arising during the emergency until they are released by the IC.

d. All commands, organizations, and activities with an ammunition or explosives mission will develop a Continuity of Operations Plan (COOP). A COOP is developed in advance of an event that causes a disruption to the ammunition or explosives mission of the command, organization, or activity (e.g. power outage, fire, natural disaster) in order to return to a fully functional capability as soon as possible.

6-20. Refueling Operations: Vehicles that are transporting ammunition and explosives are prohibited from using POL points within the cantonment area. Vehicles that have mounted crew served weapons and other military weapons that are properly locked and cleared and ammunition not present in the vehicle will be able to utilize cantonment area POL points.

6-21. Amnesty Program.

a. In accordance with standard DOD policy as described in the Munitions Rule Implementation Policy, the amnesty program is intended to ensure the maximum recovery of standard military ammunition from outside the normal supply system. The Ammunition Amnesty Program encourages responsible individuals to act by providing a means to expedite the safe recovery of military ammunition. It is not a process to

circumvent normal turn-in procedures. In addition, theft of munitions is not an authorized act and when found to occur, an immediate investigation, IAW AR 15-6, is warranted since negligence and possible criminal penalties apply. The G4-01 Command Policy will reinforce these procedures in order to ensure ammunition and accountability, discipline and safety. The QASAS personnel will monitor the amnesty program.

b. The Ammunition Supply Point Manager will establish amnesty boxes in and around the West Point range complex. Amnesty boxes are not located within the cantonment area. During normal duty hours (0745-1630, Monday through Friday) the telephone number for information on the location of amnesty boxes is 845-938-3216. The 24 hour telephone number for information on the location of amnesty boxes is 845-938-3333.

6-22. Unexploded Ordnance (UXO).

a. General. The Army installation known as West Point has been used continuously by the U.S. Army since the Revolutionary War. As such military munitions have been used and deposited on the area of, and directly adjacent to, West Point. For this reason UXO is often found in areas that West Point currently uses (for example, operational ranges), or once used (for example, former ranges), for military munitions training. For a variety of reasons, UXO can, and has been, encountered in other areas to include housing, West Point Schools, and the hospital.

b. Response to a Report of UXO on West Point.

(1) Individuals discovering an object thought to be UXO will refrain from touching, moving, or disturbing the item in any manner.

(2) If possible mark the general area without disturbing the item or creating unnecessary vibration or ground movement.

(3) Move to a safe distance and call 911. If using a cellular telephone move to a distance of not less than 50 feet from the item prior to making the 911 call.

(4) If possible remain in the area and guide the first arriving officials to the area of the suspected UXO.

(5) The Military Police receiving the UXO 911 call will;

(a) Contact the supporting explosive ordnance disposal unit and the West Point Safety Office.

(i) The Fort Drum Explosives Ordnance Disposal Company 24 hour emergency telephone number: 315-995-9543, or BN EOD Duty Line: 315-777-1173.

(ii) The West Point Safety Office telephone number during duty hours is 845-938-3717. After duty hours contact either the Military Police Desk at 845-938-3333 or Fire Department Dispatcher at 845-938-3151 to contact the West Point Safety Office.

(b) Secure the vicinity of the suspected UXO and if necessary begin an evacuation based on guidance from the West Point Safety Office or Fire Chief.

c. Disposition of unexploded ordnance. There are no safe procedures for moving, rendering safe or destroying UXO, but merely procedures considered less dangerous. Destruction-in-place (referred to as either blow-in-place or BIP) is the least dangerous for explosive ordnance disposal personnel; therefore, it is the preferred method for UXO destruction.

(1) Destruction of UXO In-Place.

(a) On West Point the method of destruction-in-place requires a written risk assessment and consent of the Garrison Commander due to the hazards inherent in this type of disposal. Considerations include factors such as underground utilities and the proximity of adjacent structures or facilities.

(b) As part of the risk assessment decision-making process, the Director of Public Works will provide a Geographical Information System (GIS) map of the area containing the suspected UXO that includes all above and underground utilities, adjacent structures, housing, playgrounds, athletic fields, roads, ammunition storage, and other features that could impact on the response decision.

(2) Moving UXO for disposal. If the decision is made to move the suspected UXO by the unexploded ordnance unit to another location for disposal, the Military Police will:

(a) Contact the Range Control Office at 845-938-3930 during normal duty hours to secure a range for disposal. After normal duty hours the Military Police Desk will contact the on-call Range Control Officer to secure a range for disposal.

(b) Coordinate with the explosive ordnance disposal unit to secure a route to the disposal location, and escort the explosive ordnance disposal unit vehicle to the disposal location.

(c) Secure the unexploded ordnance disposal site until the explosive ordnance disposal unit has given the “all clear”.

(d) Before UXO that may pose an explosive hazard may be transported or shipped over public transportation routes, EOD personnel will determine whether the UXO is safe for transport. The EOD personnel will document their determination that the UXO is safe for transport in the EOD incident report. A copy of the incident report will accompany the shipment.

(3) Disposal of UXO by Rendering Safe. When BIP poses an immediate, certain and unacceptable risk to people and/or to critical operations, facilities or equipment, EOD personnel may determine that render safe procedures (RSP) should be attempted.

(a) Only EOD personnel are authorized to conduct RSP.

(b) Because the application of RSP exposes EOD personnel to added risks (greater than BIP), the application of RSP shall only be attempted in limited circumstances.

(c) Should EOD personnel employ RSP, protective measures shall be applied to mitigate potential explosive effects.

(d) EOD personnel shall only perform RSP per Joint Service EOD Technical Data.

(e) When the condition of UXO (for example, crushed, bent, broken, mangled) precludes strict adherence to published procedures, on-site EOD personnel will determine and perform the procedure-established or innovative-that will have the most probable degree of success to render the munition safe, while mitigating potential explosive effects.

(4) The on-site EOD supervisor or, in the case of munitions responses, the UXO safety officer will ensure that the detonation site is inspected after each detonation, or any misfire. No one is allowed within minimum separation distance (MSD) from the detonation site until the on-site EOD supervisor or UXO safety officer declares the area is safe.

(5) The Military Police or Range Control will forward a copy of DA Form 3265, Explosive Ordnance Incident Report http://www.apd.army.mil/pub/eforms/pdf/a3265.pdf) to the West Point Safety Office. The Safety Office is the central repository of UXO incident reports and maintains all UXO incident reports for a period of not less than five years.

d. Unexploded ordnance safety education. When areas that are known or suspected to contain UXO are present on Army installations, including installations affected by base realignment and closure (BRAC) or formerly used defense sites (FUDS), the West Point Safety Office will:

(1) Provide UXO safety education training or information (e.g. brochures, information papers, etc.) to people living on West Point, adjacent to, or that work on (utility contractors) or use the property (hunters). Such training is based on and incorporates the Army's 3Rs (Recognize, Retreat, Report) message and safety education material (available at http://www.denix.osd.mil/uxosafety). Such training is

also be offered to West Point Schools and other off-post K-12 schools in close proximity to West Point on a periodic basis.

(2) Use the internet and social media to increase availability of the UXO training materials including the:

(a) Elementary School UXO Briefing

(b) Middle School UXO Briefing

(c) Adult UXO Briefing

6-23 Demilitarization/Destruction.

a. No demilitarization/destruction shall be conducted without an approved SOP, which will be reviewed annually.

b. DES will notify the Garrison Safety Office for all suspected or confirmed UXOs. Suspected or confirmed UXOs found on ranges will be report to range control and range control will notify the Garrison Safety Office.

c. The burying or dumping of ammunition, explosives, or propellants is not an approved method of disposal.

6-24. Required Ammunition and Explosives Training: All personnel with responsibility for ammunition or explosives operations, management, or oversight shall be thoroughly trained in explosives safety in accordance with the Army ammunition and explosives training standards found in Figure 1-1 of DA Pam 385-64 as follows:

a. All Army safety and occupational health specialists and managers will complete the training required under the column labeled “Safety and occupational health professionals in 0018 and 0803 job series”. This training satisfies the Career Program – 12 (Safety) Level 1 Certification.

b. Safety and Occupational Health professionals with ammunition or explosives safety oversight responsibilities, and/or prepare, review, or recommend approval of site plans will complete all training required under the column labeled “Safety and occupational health professionals with explosives safety responsibilities”. This training also satisfies the training requirement for personnel who prepare, review, or recommend approval of site plans. This training satisfies the Career Program – 12 (Safety) Level 2 Certification.

c. Personnel responsible for supervising or planning ammunition or explosives operations and/or facilities will complete all training required under the column labeled “Ammunition area and operations supervisors and planners”.

d. Personnel who perform electrical safety tasks relating to ammunition or explosives will complete all of the training required under the column labeled “Personnel who test/inspect grounding, bonding, and/or lightning protection systems”. Contractors performing this work must provide documentation of electrical safety training equating to Ammo-28, Electrical Explosives Safety for Army Facilities.

e. Personnel handling or providing disposal services of munitions classified as hazardous waste must complete the training required under the column labeled “Personnel who handle or manage waste military munitions”.

f. Contracting Officer Representatives, Fire Inspectors, and any other West Point personnel monitoring contractors providing ammunition or explosives services on West Point will complete the training required under the column labeled “Personnel who monitor the safety of contractors handling ammunition or explosives”.

g. In addition to the above training, all personnel involved with transporting ammunition and explosives are required to complete Ammo 45 and have a Hazmat certification endorsement on the (SF 346) Operators License. Commanders/directors will request a driver’s background check from the Director of Emergency Services prior to licensing an ammunition or explosives driver.

6-25. Explosive Safety Inspection Program. Periodic (at least annual) inspections shall be conducted to evaluate compliance with the safety requirements for explosives storage, packing, handling, surveillance, maintenance, demilitarization, and disposal activities. Inspections should use a team approach and include those elements with ESMP-related responsibilities in explosives safety (Safety, QASAS, LRC, Fire Department, and DPW subject matter experts) if possible. Findings shall be documented, routed through the appropriate chain-of-leadership, and followed-up to ensure implementation and effectiveness of corrective measures.

6-26. Explosives Safety Audit Program.

a. Purpose. An ammunition and explosives safety program audit is a process of collecting information about an organization’s explosives safety management system and making judgments about its adequacy and performance, identifying both the strengths and weaknesses of the explosives safety program as implemented by the organization, and to ensure that all necessary explosives safety program elements are operating and that procedures are in place for thorough implementation. The aims of explosives safety program auditing should be to establish that:

(1) appropriate explosives safety management arrangements are in place;

(2) an adequate explosives safety risk management control system exists which reflects the hazard profile of the organization and is properly implemented; and

(3) appropriate explosives safety workplace precautions are in place.

b. Explosives Safety Program Audit. Explosives safety programs will be evaluated for integration of the Army Explosives Safety Program into the organization's mission and for effectiveness of execution, both internally and by higher command, on a periodic basis according to guidance in DA Pam 385–10. These evaluations will not be compliance audits, but rather programmatic assessments to measure the overall effectiveness of management controls for integrating the Army Safety Program into their business process and mission execution. Compliance issues may be used as a measure of effectiveness but will not be the primary focus of the audit.

(1) Each organization will conduct and document an annual explosives safety program audit to evaluate their program execution using organizational goals, objectives, and performance indicators. Each activity or organization with an ammunition or explosives mission will develop an explosives safety audit checklist and submit it (and any subsequent changes) to the West Point Safety Office for review prior to use. The activity or organization conducting the explosives safety audit will maintain completed copies of their annual audits on hand for at least three years. Activity or organization audit records will be reviewed during triennial external audits by the West Point Safety Office.

(2) Each level of command (Colonel O-6 and higher) will develop and implement an explosives safety audit program that ensures each subordinate organization safety program is formally evaluated by the parent command every 36 months at the minimum. The West Point Safety Office is responsible for conducting these triennial explosives safety audits for all activities or organizations on West Point with an explosives safety mission. The West Point Safety Office will provide the triennial explosives safety audit program checklist (and any subsequent changes) to each activity or organization at least 90 days in advance of their triennial explosives safety audit.

6-27. Recordkeeping. DA PAM 385-64 requires the retention of ammunition and explosives safety records. All compliance related records (Explosives Safety Site Plans, explosive licenses, 12-month revalidation of licenses, Lightning Protection System (LPS) tests, etc.) will be retained by both the organization having an A&E mission, operating the Potential Explosives Site (PES), and the West Point Safety Office for a period of no less than six years.

6-28. Military Pyrotechnics, Simulators, and Blank Ammunition: Organizations planning and using military pyrotechnics, simulators, or blank ammunition will:

a. Restrict the issue, use, and handling of these devices to trained officers, NCOs, and DOD civilians following a course of instruction. As a minimum, this training will include the intended training value of the devices, hazards, use, transportation, and emergency action associated with these devices. Training will include hands-on demonstration of competency by each cadre member prior to actual use. A risk assessment is required for each use of each device and all training requires a written

lesson plan and written safety briefing to be provided to all cadre and participants exposed to the hazard associated with these devices.

b. Follow instructions provided by the ASP and QASAS when using the M115, M117, M118 and the M119 simulators, due to additional precautions that apply to these devices.

c. Coordinate the use of all military pyrotechnics, simulators, and blank ammunition with Range Control prior to use in the training/range complex areas.

d. Report all suspected dud or misfired pyrotechnics, simulators, or blank ammunition to Range Control Support immediately. West Point personnel are strictly prohibited from handling, picking up, transporting, or in any way manipulating a dud or misfired military pyrotechnic, simulator, or blank ammunition.

e. Comply with the following policy in regard to the use of blank ammunition:

(1) Blank adapters are always required when firing blank ammunition, and weapons using blank ammunition are never pointed directly at any individual.

(2) The minimum safe distance for unprotected personnel from small caliber ammunition is 15 feet.

(3) Approved Army issued single hearing protection is required at all times while firing blank ammunition.

(4) During force-on-force training, approved eye protection (ANSI Z87+) is required.

f. Smoke: Cadre using smoke devices for training, including HC, HE, WP, PWP, fog, oil, RP, colored smoke, and diesel smoke will utilize the following precautions:

(1) Personnel participating in exercises, which include the use of smoke, will carry their protective mask.

(2) Personnel will mask:

(a) Before exposure to any concentration of smoke produced by M8 white smoke grenades, smoke pots, or metallic powder obscurants.

(b) When passing through or operating in smoke such as smoke blankets and smoke curtains.

(c) When passing through or operating in a smoke haze and the duration of exposure will not exceed four hours.

(d) Anytime exposure to smoke produces breathing difficulty, eye irritation or discomfort. Such effects in one individual will serve as a signal for all similarly exposed personnel to mask.

(e) When using smoke during Military Operations in Urban Terrain (MOUT) training sites and when operating in enclosed spaces, care must be taken not to enter spaces where oxygen may have been displaced by the obscurant. The standard military protective mask is an air-purifying respirator and is only designed to filter out contaminants, not to provide supplemental oxygen that would be required in an oxygen deficient atmosphere. Use of an air-purifying respirator in an oxygen deficient space can lead to hypoxia and death.

(f) Personnel operating a smoke generator will mask whenever a plume is generated.

(3) The use of smoke within the cantonment area is prohibited without the prior approval of the West Point Fire Department and Safety Office.

6-29. Fireworks.

a. Commercial fireworks used in holiday or other celebratory events (e.g. July 4th and Labor Day USMA Band Concerts, CFT Camp Illumination, etc.) on West Point will be transported, set up, and when possible, used on the same day to prevent the need for overnight storage and licensing.

b. Only commercial firms or licensed pyrotechnic technicians will transport, set up, or use commercial fireworks on West Point. Such use will comply with Army, New York State and National Fire Protection Association Standard 1123 requirements.

c. When commercial or privately owned fireworks or munitions of any kind are confiscated or found on West Point the Director of Emergency Services will request EOD support and notify the West Point Safety Office.

d. The West Point proponent for the fireworks event will submit a completed risk assessment (DD 2977, http://www.dtic.mil/whs/directives/forms/eforms/dd2977.pdf), and a Request to use Fireworks form (Appendix F) to the West Point Safety Office for review 10 working days prior to the arrival of the fireworks on West Point. The West Point Safety Office will coordinate with the West Point Fire Department to conduct the review of the risk assessment and proposed fireworks operation.

e. Use of fireworks within the cantonment area, other than the USMA Band Concerts is prohibited without receiving prior approval from the West Point Fire Department and Safety Office. Submit a risk assessment and Request to Use Fireworks to the West Point Safety Office. The Safety Office will coordinate the review with the West Point Fire Department. The risk assessment must address at least the following hazards:

(1) Wind speed, gusts, and direction

(2) Weather conditions

(3) Proximity to and impact on housing or other occupied buildings

(4) Proximity to and impact on vehicular, aviation, and maritime traffic

(5) Fire condition (obtain from the West Point Fire Department at 845-938-3151)

6-30. Ammunition or Explosives Safety Assistance. Ammunition or explosives safety assistance is available from:

a. West Point Safety Office at 845-938-6131

b. USMA Safety Office at 845-938-0867

c. USCC Safety Office at 845-938-8682

d. KACH Safety Office at 845-938-6307

Appendix A
References

Unless otherwise indicated, all publications are available at http://www.apd.army.mil/.

DOD 6055.09 M, DOD Ammunition and Explosives Safety Standards

AR 10–87 Organization and Functions, Army Commands, Army Service Component Commands, and Direct Reporting Units

AR 75-1 Malfunctions Involving Ammunition and Explosives

AR 385-10 The Army Safety Program

AR 385-63 Range Safety

AR 525-27 Army Emergency Management Program

DA Pam 385-24 The Army Radiation Safety Program

DA Pam 385-25 Occupational Dosimetry and Dose Recording for Exposure to Ionizing Radiation

DA Pam 385-30 Mishap Risk Management

DA Pam 385-40 Army Accident Investigations and Reporting

DA Pam 385-63 Range Safety

DA Pam 385-64 Ammunition and Explosives Safety Standards

DA Pam 525-27 Army Emergency Management Program

IMCOM Reg 5-13 Installation Ammunition Support

DA Policy Storage of Ammunition and Explosive in Arms Rooms

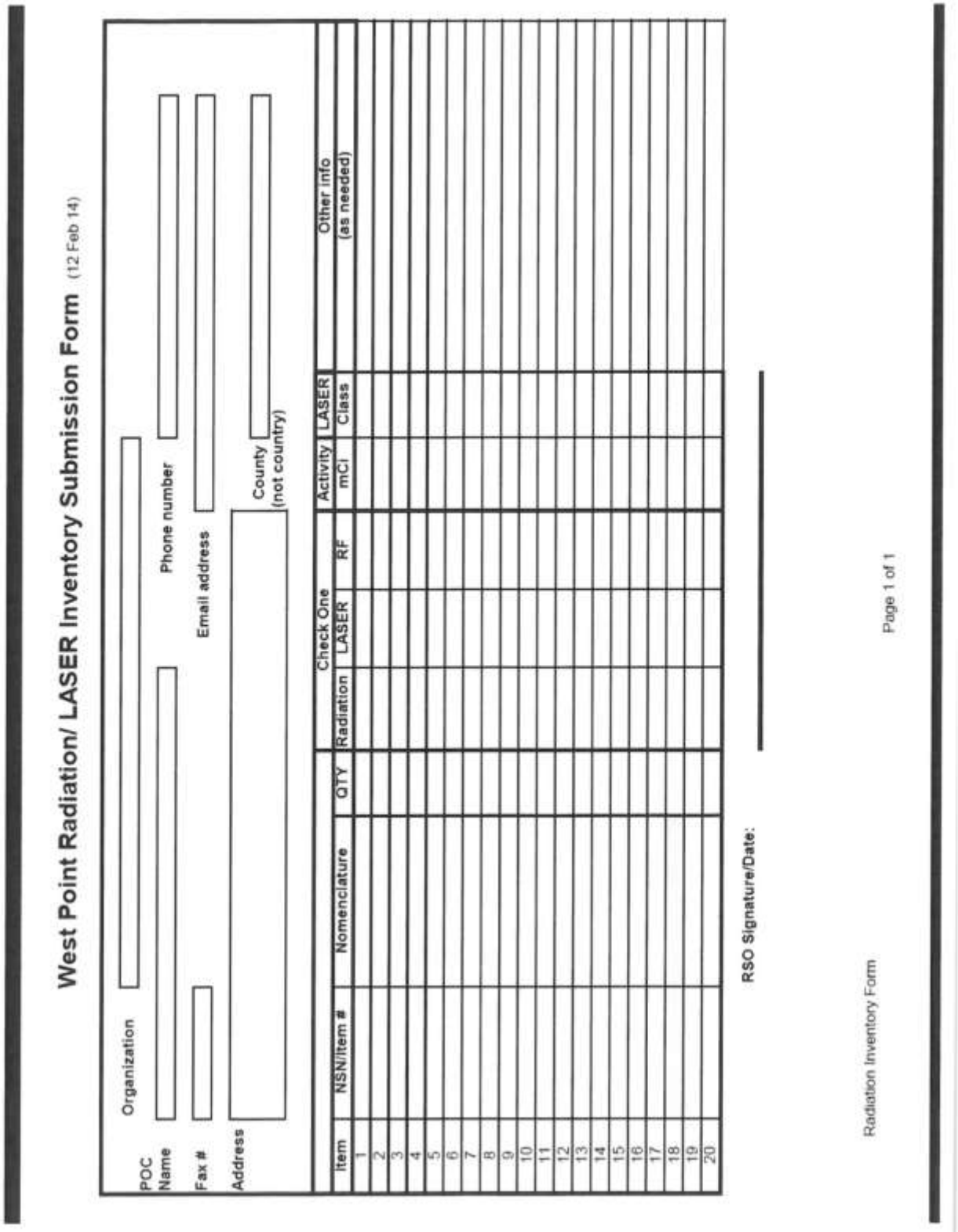
NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. (This is a proprietary consensus standards available at the West Point Safety Office)

NFPA 473 Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents. (This is a proprietary consensus standard available at the West Point Safety Office)

NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. (This is a proprietary consensus standard available at the West Point Safety Office)

NFPA 1123 Code for Fireworks Display. (This is a proprietary consensus standard available at the West Point Safety Office)

Appendix B
Annual Radiation Inventory Form



West Point Radiation/ LASER Inventory Submission Form (12 Feb 14)

POC Name
Organization
Phone number
Fax #
Email address
Address
County (not country)

Item	NSN/Item #	Nomenclature	QTY	Check One			Activity	LASER	Other info
				Radiation	LASER	RF	mCi	Class	(as needed)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

RSO Signature/Date: _____

Radiation Inventory Form

Page 1 of 1

Appendix C
Explosive Facility License

EXPLOSIVES FACILITY LICENSE					
1. INSTALLATION/LOCATION:		2. UNIT/ORGANIZATION:		3. WEST POINT LICENSE NUMBER (Safety Office):	
I. FACILITY DATA					
4. FACILITY IDENTIFICATION/NUMBER:					
5. PRIMARY USE:			6. WRITTEN SOP's:		
7. ROOM NUMBER:	8. ROOM USE:		9. CONSTRUCTION:		
II. EXPLOSIVES LIMITS REQUESTED (If more space is needed use second page)					
A: (HD) HAZARD CLASS/DIVISION	B: COMPATIBILTY GROUP(S)	C: DODIC NUMBER AND NOMENCLATURE	D: QUANITY OF AMMUNITION	E: EXPLOSIVE WEIGHT (NEW)	F: FIRE SYMBOL
III. REQUESTING UNIT/ORGANIZATION					
EXPLOSIVE LICENSE POINT OF CONTACT:			PHONE NUMBER:		
REQUESTING DIRECTOR/COMMANDER TYPED NAME, GRADE AND TITLE:		SIGNATURE:		DATE:	
IV. COORDINATION					
WEST POINT FIRE DEPARTMENT:		SIGNATURE:		DATE:	
WEST POINT PHYSICAL SECURITY: Physical Security Inspector		SIGNATURE:		DATE:	
REMARKS:					
V. CERTIFICATION OF EXPLOSIVE LICENSE (Per Department of Army Pamphlet 385-64, Chapter 5)					
WEST POINT SAFETY MANAGER: Director, Safety & Occupational Health		SIGNATURE:		DATE:	
Explosive License is Valid Once Garrison Commander Signs and Dates. Explosive License Expires On:					
VI. GARRISON COMMANDER APPROVES STORAGE OF AMMUNITION AT EXPLOSIVE LICENSED FACILITY (Per IMCOM Regulation 5-13, Chapter 10)					
WEST POINT GARRISON COMMANDER: COL, Garrison Commander		SIGNATURE:		DATE:	
EXPLOSIVES FACILITY LICENSE					

EXPLOSIVES LIMITS REQUESTED					
(HD) HAZARD CLASS/DIVISION	COMPATIBILTY GROUPS	DODIC NUMBER AND NOMENCLATURE	QUANITY OF AMMUNITION	EXPLOSIVE WEIGHT (NEW)	FIRE SYMBOL

HOW TO COMPLETE EXPLOSIVES FACILITY LICENSE

Item 1. Self-explanatory.
Item 2. Self-explanatory.
Item 3. West Point Safety Office will assign this number that will consist of the last two digits of the calendar year and a serial number, assigned in numerical sequence. (For example, the first license issued in 1990 would be numbered 90-1, the second be 90-2.)
Section I:
Item 4. Insert building number.
Item 5. Insert, for example, small arms rooms, security and administrative building, rod and gun club, as applicable.
Item 6. SOP and Risk Assessment will be attached with Explosive Facility License during coordination and routing for approval.
Item 7. Enter room number.
Item 8. Enter the primary use of room, for example, small arms rooms.
Item 9. Enter construction of facility for example, concrete and steel.
Section II:
Column A. Insert hazard class/division.
Column B. Insert compatibility groups authorized by Hazard Classification of US Military Explosives and Munitions, as applicable.
Column C. Insert stock list nomenclature for each specific type item authorized in the location and national stock number (NSN) or federal supply class and Department of Defense Identification Code (DODIC).
Column D. Insert number of items authorized.
Column E. Insert total explosives weight based on number of items authorized.
Column F. Insert fire symbol as required.
Section III. Director or Commander of unit/organization will appoint a Point of Contact with phone number of individual. Director or Commander will fill in signature block, sign and date.
Section IV. Coordination will be through West Point Fire Department and West Point Physical Security. Each will fill in their signature block, sign and date.
Remarks. The West Point Fire Department can specific the type, quantity, and physical placement of fire extinguishers for the location. Physical Security can list requirement as needed, for example, the use of high security locks, requirements to have a risk assessment for NEW that exceeds 100 pounds of NEW.
Section V. West Point Safety Manager will fill in signature block, sign and date. West Point Safety Manager will assign an expiration date of the Explosive Facility License.
Section VI. West Point Garrison Commander's signature approves storage of ammunition/explosives at explosive licensed facility.

Appendix D
Ammunition and Explosives Storage Location Products

	Cantonment Area Map	ASP Map	Camp Maps (Buck & NB)	Location Plans
West Point Safety Office	2	2	2	2
Director of Public Works (Master Planner)				1
Military Police Desk	1	1	1	1
USMA Safety	1	1	1	1
USCC Safety	1	1	1	1
Fire Station 1 (Dispatcher)	1	1	1	1
Fire Station 2	1	1	1	1
Fire Station 3	1	1	1	1
DPTMS (Range Control)		1	1	
Logistics Readiness Center		1		
Total	8	10	9	9

Appendix E
Request for Ammunition Storage License

(UNIT LETTERHEAD)

ABCD-EFG-CO DATE

MEMORANDUM THRU Commander, (Unit name) Brigade, ATTN: S-2, West Point, New York 10096

Commander, XXXX Brigade, ATTN: S-2, West Point, New York 10996

FOR Commander United States Army Garrison, ATTN: Safety Office, West Point, New York 10996

SUBJECT: Storage of Ammunition in Unit Arms Room

1. Reference memorandum, Department of the Army, Office of the Chief of Staff, SAIEE-ESOH, 1 Aug 2011, subject: Storage of Operational, Training, and Ceremonial Ammunition in Arms Rooms

2. Request to store the following operational ammunition in the (Unit name) Arms Room, Naval Armory SN 10-04-1358, or Bldg XXXXX, Room 123, West Point, New York. Ammunition is required for ceremonial details.

a. 1680 rounds 5.56MM Ball, Ball M855 CLPD (DODIC A059), Hazard Class 1.4S.

3. Required risk assessment and DA Form 4604-R, Security Construction Statement are enclosed.

4. Ammunition is packed in the approved metal containers and secured. A fire symbol "4" is displayed at the entrance outside the Building, visible to all personnel.

5. POC is the undersigned at (254) 287-1234 or email joe.rambo@us.army.mil.

Encls
as

Joe G. Ranger
CPT, FA
Commanding

Appendix F
Unit Arms Room Ammunition Storage License Checklist

Unit Arms Rooms Licensing Requirements **Ammunition storage in unit arms rooms requires an approved explosive storage license** **The Installation Explosives Safety Manager is the approving authority**			
NOTE: A copy of all the documents listed below will be given to the Installation Explosives Safety Manager at the time of the Safety inspection.			
1	Has the unit commander prepared a memorandum requesting authorization for storage of authorized ammunition items in an arms room?	YES	NO
2	Has the unit prepared a risk assessment for the arms room approved by the unit commander?	YES	NO
3	Has a current Security Construction Statement (DA Form 4604-R) been obtained and posted? This document is valid for five years from the date of issue.	YES	NO
4	Has a current Installation Physical Security A&E record inspection been conducted and documented by the DES Physical Security?	YES	NO
5	Has a current Fire Department inspection been conducted and documented?	YES	NO
6	Does arms room have two fire extinguishers, rated at least 10 BC.	YES	NO
7	Does unit have fire symbols displayed? If no ammunition is stored are signs covered or removed?	YES	NO
8	Have all Ammunition Handlers been appointed on orders by their?	YES	NO
9	Does the arms room have a current arms room (A&E) SOP?	YES	NO
10	Has all the above mentioned documentation been posted with the license in the arms room?	YES	NO
NOTE: If any "NO's" are recorded above, ammunition license will not be issued			

Appendix G
Fireworks Display Request

PYROTECHNICS- Outdoor Display
West Point Fire & Emergency Services-DES
Fire Prevention Division
938-4646 or 938-3151

1. EVENT LOCATION	**2. DATE of EVENT**	**3a. START TIME** **3b. FINISH TIME**

4. PYROTECHNICS TYPE & QUANTITY (attach detailed inventory list)

5. SITE PLAN (setbacks in accordance with Table 5.1.3.1, 2010 Edition NFPA 1123)

6. Person Responsible on Site

Name:
Phone:
Company Name:

7. USMA POC:

Name:	Phone:

GENERAL PRECAUTIONS	**YES**	**NO**
8. Proof of Pyrotechnics Operator License provided?		
9. Proof of Pyrotechnics Assistant Operator License provided?		
10. Proof of Drivers License provided for all individuals?		
11. Proof of Insurance provided?		
12. Proof of NYS Dept. Labor License provided?		
13. Proof of ATF Transport License provided?		
14. Did Fire Department representative initially inspect the site?		
15. Are there resources for Fire Department Emergency Notification? **REPORT ANY AND ALL FIRES <u>IMMEDIATELY</u>!** **Emergency Phone Number from Post Telephones: 9-1-1** **Emergency Phone Number from Cellular Phones: 845-938-3333**		
16. Does your staff have the proper personal protective equipment (PPE)?		
17. Do you have the proper amount/type/size fire extinguishers on site?		

PRECAUTIONS TO FOLLOW DURING & AFTER OPERATIONS

18. Do you have a method for disposing of defective fireworks & materials?		
19. Do you agree to ensure that the site is inspected for Hot-Spots/fallout a minimum of 30 minutes after fireworks demonstration is completed?		
20. You are being issued a Fireworks/Hot Work Permit. Do you understand and agree to abide by the USMA Policies, and NFPA Standard 1123, Code		

for Fireworks Display? **Note: The AHJ may revoke or restrict this permit for failure to comply with the prescribed standards or due to unforeseen circumstances.** **SIGNATURE**:_____ Signature of Responsible Person on site. Print Name:_____		
Fire Department Approval:_____		

Pyrotechnics Plan - Required Contents

National Fire Protection Association Standard 1123 - Code for Fireworks Display,

1. The name of the person, group, or organization sponsoring the production.
2. The date and time of day of the production.
3. The exact location of the production.
4. The name of the person actually in charge of firing the pyrotechnics (i.e. the pyrotechnics operator).
5. The number, names and ages of all assistants who are to be present.
6. The qualifications of the pyrotechnic operator.
7. The pyrotechnics experience of the operator.
8. Confirmation of an applicable state and federal licenses held by the operator or assistants.
9. Evidence of the permittee's insurance carrier or financial responsibility.
10. The number and types of pyrotechnic devices and materials to be used, the operator's experience with those devices and effects, and a definition of the general responsibilities of assistants.
11. A diagram of the facilities were the production is to be held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the fallout radius for each pyrotechnic device used in the performance, and the lines behind which the audience shall be restrained.
12. The point of on-site assembly of pyrotechnic devices.
13. The manner and place of storage of the pyrotechnic materials and devices.
14. A material safety data sheet (MSDS) for the pyrotechnic material(s) to be used.

Appendix H
Ammunition and Explosives Internet Resources

https://www3.dac.army.mil/ Defense Ammunition Center

https://www.us.army.mil/suite/designer Explosive Safety Toolbox

http://ammo.okstate.edu/ Online Training

http://www.transcom.mil/dtr/part-ii/chapters.cfm Defense Transportation Regulations

https://www3.dac.army.mil/es/usatces USA Technical Center for Explosives Safety

http://www.denix.osd.mil/uxo/index.cfm Unexploded Ordnance

GLOSSARY

Abbreviations

A&E	Ammunition and Explosives
ARA	Army radiation authorization
ARP	Army radiation permit
ESP	Explosive Safety Program
ACOM	Army Command
AHA	Ammunition Holding Area
ASCC	Army Service Component Command
ASP	Ammunition Supply Point
ATP	Ammunition Transfer Point
CAI	Centralized Accident Investigation
CCR	Certificate of Compelling Reason
COR	Contracting Officer’s Representative
CIIC	Controlled Inventory Item Code
CMA	Competent medical authority
CoRA	Certificate of Risk Acceptance
CONUS	Continental United States
CRC	Combat Readiness Center
DAITM	Department of the Army Investigative Team for Malfunctions
DDESB	Department of Defense Explosives Safety Board
DL	Distance Learning
DOD	Department of Defense

DODIC Department of Defense Identification Code

DPW Directorate of Public Works

DRU Direct Reporting Unit

EOD Explosive Ordnance Disposal

EMR Electromagnetic Radiation

ES Exposed Sites

ESMP Explosive Safety Management Program

ESQD Explosives Safety Quantity Distance

FORSCOM Forces Command

HD Hazard Division

IAI Installation-level Accident Investigations

IAW In Accordance With

IMCOM U.S. Army Installation Management Command

ISO Installation Safety Office

LAR Logistics Assistance Representative

LASER Light Amplification by Stimulated Emission of Radiation

LSO LASER Safety Officer

MAC Major Army Command

MACOM Major Command

MEC Munitions Explosives of Concern

MSU Major Subordinate Unit

MRS Munitions Response Area

MOUT Military Operations in Urban Terrain

NEW	Net Explosive Weight
NM	Nautical Mile
NOTAM	Notice to Airmen
NSN	National Stock Number
PES	Potential Explosion Sites
POL	Petroleum, Oils and Lubricants
PPE	Personal Protective Equipment
QASAS	Quality Assurance Specialist (Ammunition Surveillance)
QD	Quantity-distance
RAC	Risk Assessment Code
RAM	**R**adioactive Material
RDT&E	Research, Development, testing, and Evaluation
RF	Radio Frequency
RFMSS	Range Facility Management Support System
RFSO	radio frequency safety officer
RSC	Radiation Safety Committee
RSO	Radiation Safety Officer
RSSO	Radiation Safety Staff Officer
SIR	Serious Incident Report
SOP	Standing Operating Procedure
USATCES	United States Army Technical Center for Explosives Safety

Terms

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.

Annual Basis or Annually Annual basis or annually should be from the month of the current year to the same month of the following year. However, the time will not exceed 13 months. This does not apply to items covered under the Army Maintenance Management System.

As Low as is Reasonably Achievable (ALARA) Making every reasonable effort to maintain exposures to radiation as far below applicable dose limits as is practically consistent with the purpose for which the activity is undertaken, taking into account the state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations and in relation to utilization of nuclear energy, RAMs, and ionizing radiation in the public interest.

Biological Agent See Infectious Agents and Toxins (below)

Biological Mishap An event in which the failure of laboratory facilities, equipment, or procedures appropriate to the level of potential pathogenicity or toxicity of a given etiologic agent (organism or toxin) may allow the unintentional, potential exposure of humans or the laboratory environment to that agent. Mishaps can be categorized into those resulting in confirmed exposures and those resulting in potential exposures.

Biosafety Level A combination of facilities, equipment, and procedures used in handling etiologic agents to protect the worker, environment, and community. This combination is proportional to the potential hazard of the etiologic agent in question.

Biosafety Level 1 The facilities, equipment, and procedures suitable for work involving agents of no known or of minimal potential hazard to laboratory personnel and the environment.

Biosafety Level 2 The facilities, equipment, and procedures applicable to clinical, diagnostic, or teaching laboratories, suitable for work involving indigenous agents of moderate potential hazard to personnel and the environment. It differs from BSL–1 in that—

a. The laboratory personnel have specific training in handling pathogenic agents.

b. The laboratory is directed by scientists with experience in the handling of specific agents.

c. Access to the laboratory is limited when work is being conducted.

d. Certain procedures in which infectious aerosols could be created are conducted in IAT safety cabinets or other physical containment equipment.

e. Personnel must be trained.

f. Strict adherence to recommended practices is as important in attaining the maximum containment capability, as is the mechanical performance of the equipment itself.

Biosafety Level 3 The facilities, equipment, and procedures applicable to clinical, diagnostic, research, production facilities in which work is performed with indigenous or exotic agents where there is potential for infection by aerosol and the disease may have serious or lethal consequences. It differs from BSL–2 in that more extensive training in handing pathogenic and potentially lethal agents is necessary for laboratory personnel. All procedures involving the manipulation of infectious material are conducted within biological safety cabinets or by other physical containment devices. The laboratory has special engineering and design features, including access zones, sealed penetrations, and directional airflow. Any modification of BSL–3 recommendations must be made only by the commander or director.

Biosafety Level 4 The facilities, equipment, and procedures required for work with dangerous and exotic agents that pose a high individual risk of life-threatening disease. It differs from BSL–3 in that—

a. Members of the laboratory staff have specific and thorough training in handling extremely hazardous infectious agents.

b. Laboratory personnel understand the primary and secondary containment functions of the standard and special practices, containment equipment, and laboratory design characteristics.

c. Access to the laboratory is strictly controlled by the commander or director.

d. The facility is either in a separate building or in a controlled area within a building, which is completely isolated from all other areas of the building.

e. A specific facility operations manual is prepared or adopted.

f. Within work areas of the facility, all activities are confined to Class III biological safety cabinets or Class I or Class II biological safety cabinets used together with one-piece positive pressure personnel suits ventilated by a life support system.

g. The maximum containment laboratory has special engineering and design features to prevent microorganisms from being disseminated to the environment.

Chemical Agent A chemical compound intended for use (to include experimental compounds) in military operations to kill, seriously injure, or incapacitate persons through its physiological effects. Excluded are RDT&E solutions, riot control agents, chemical defoliants and herbicides, smoke, flame and incendiaries, and industrial chemicals.

Chemical Agent Operation Any operation that involves chemical agents, including storage, shipping, handling, manufacturing, maintenance, test chamber activities, laboratory activities, surveillance, demilitarization, decontamination, disposal, and training.

Competent medical authority (CMA) A physician, physician assistant, or nurse practitioner (military, civilian, or contractor) employed by or under contract or subcontract to the U.S. Government or a U.S. Government contractor. A CMA is someone who has been awarded clinical privileges for independent practice granted by the health care facility responsible for the provider's place of duty OR if not privileged for independent practice (for example, a physician assistant or nurse practitioner), then is supervised by an appropriately trained CMA physician who is privileged to practice independently. A CMA is someone who has been specifically trained as a CMA and appointed in writing as a CMA by the MTF commander (or COR) responsible for reviewing healthcare services or conducting clinical evaluations for purposes of the Personnel Reliability Program. For activities that do not require a Personnel Reliability Program, a CMA may be required to have training and qualifications supporting risk management of the specific processes. Occupational medicine privileges would be sufficient and the requirement of appointment in writing as a CMA would not be required. AR 40–68 provides specific guidance for Licensure, Certification, and/or Registration of Health Care Professionals and Delineation of Clinical Privileges-Occupational Medicine (DA Form 5440–53 provides detailed privileges that may be required for different levels of occupational medicine support).

Exposed site A location exposed to the potential hazardous effects (blast, fragments, debris, and heat flux) from an explosion at a PES.

Garrison The garrison is a table of distribution allowance (TDA) organization that operates the installation and provides base operations services to tenant organizations. The garrison normally belongs to the IMCOM.

Infectious Agents and Toxins Fungi, virus, bacteria, prions, rickettsia, parasites or a viable microorganism, or its toxin, or a prion that lacks nucleic acids, that causes or may cause disease, includes clinical cultures.

Installation An aggregation of contiguous or near contiguous, common mission-supporting real property holdings under the jurisdiction of DOD or a state, the District of Columbia, territory, commonwealth, or possession, controlled by and at which an Army unit or activity (active, USAR, or ARNG) is permanently assigned.

Installation-level Safety Director The senior full-time safety professional responsible for providing safety support to Army installations, including camps, stations, military communities, and USAR organizations.

Laboratory An individual room or rooms within a facility that provides space in which work with etiologic or chemical agents may be performed. It contains appropriate engineering features and equipment required for either a given BSL or chemical agent to protect personnel working in the laboratory and the environment and personnel outside of the laboratory.

Laser Light amplification by stimulated emission of radiation; a device capable of producing a narrow beam of intense light. (See TB MED 524 and JP 3–09 for more information on lasers.)

Life Cycle The life of a system from conception to disposal.

Nuclear Reactor System Any equipment or device, except a nuclear weapon or weapon component, capable of neutron multiplication through nuclear fission of special nuclear material. This definition includes both critical and subcritical nuclear reactors, subcritical assemblies of special nuclear material, and the supporting associated equipment or devices (if any).

Qualified Safety and Health Personnel Includes persons who meet Office of Personnel Management standards for SOH manager/specialist, GS–018, and safety engineer, GS/GM–803. Other job specialties will provide support in their respective specialty areas (see table 2–1, AR 385-10 for additional job specialties; includes other personnel determined to be equally qualified as compared to the above Office of Personnel Management standards).

Radiation For the purposes of this pamphlet, unless otherwise specified, radiation includes both ionizing and non-ionizing radiation.

Radiation Safety Officer (RSO) The person that the commander designates, in writing, as the executive agent for the command's Radiation Safety Program (same as "radiation protection officer"). These individuals are provided training commensurate with the radiation hazards they manage. Types of RSOs discussed in this pamphlet include:

a. Garrison RSO. The RSO on the staff of the garrison commander. The garrison RSO normally belongs to the IMCOM) (For ARNG, the state RSO is considered to be the garrison RSO).

b. Installation RSO. The RSO on the staff of the installation commander for arsenals, depots, and similar areas not managed by the IMCOM.

c. Mission RSO. The RSO in an "Army Headquarters" activity. The Army Headquarters activity is typically a tenant organization on an installation (synonymous with tenant activity RSO).

d. Unit RSO. The RSO in an Army unit (typically a brigade, battalion, company, detachment or table of distribution and allowance organization).

Radio Frequency Electromagnetic Radiation Electromagnetic radiation with frequencies between 3 kHz and 300 GHz.

Radiation Safety Committee Recorder The person directly responsible for the accuracy and completeness of the RSC minutes. The recorder may designate someone else to take notes at RSC meetings (for example, an assistant or secretary). The recorder will be the RSO to help ensure that the minutes meet regulatory requirements.

Unexploded Ordnance Ammunition and explosives that have been primed, fused, armed, or otherwise prepared for action and that have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or materiel, and remain unexploded by malfunction, by design, or for any other cause. Unexploded ordnance is synonymous for the dud.