

# CROSSWALK REPORT - DOE 5480.16A TO NEW DIRECTIVES

31-May-96

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480.16A U.S. Department of Energy Washington, D.C. Order DOE 5480.16A 10-10-90 Requirement SUBJECT: FIREARMS SAFETY 1. PURPOSE. To provide standards and procedures for the safe use of firearms by Department of Energy (DOE) and contractor personnel involved in carrying out Departmental activities. 2. APPLICABILITY. a. Departmental. The provisions of this Order apply to all Departmental Elements performing work that requires the use of firearms. b. Contractors. The provisions of this Order apply to all contractors and any of the subcontractors, the performance of whose contracts require the use of firearms. 3. CANCELLATION. DOE 5480.16, FIREARMS SAFETY, of 1-12-88.</p>	<p>O440.1 paragraph 1. 1. OBJECTIVE. To establish the framework for an effective worker protection program that will reduce or prevent accidental losses, injuries, and illnesses by providing DOE Federal and contractor workers with a safe and healthful workplace. O440.1 paragraph 3.a. 3. APPLICABILITY. a. DOE Elements. Except for the exclusions in paragraph 3c, this Order (including Attachment 1) applies to all DOE Elements. O440.1 paragraph 3.b. b. Contractors. Except for the exclusions in paragraph 3c, Attachment 2, Contractor Requirements Document (CRD), sets forth requirements that shall be applied to all contractors awarded contracts and subcontracts for performing work for DOE on DOE- owned or -leased facilities. Contractor compliance with the CRD will be required to the extent set forth in a contract. Contractors shall be directed to continue to comply with the requirements of Orders canceled by this Order until their contracts are modified to delete the reference to the requirements of the canceled Orders.</p>		<p>FS_0&lt;part of&gt; SCOPE Information in this document is applicable to all DOE facilities, elements, and contractors engaged in work that requires the use of firearms as provided by law or contract.  The standard in this document provides principles and practices for implementing a safe and effective firearms safety program for protective forces and for non-security use of firearms. This document describes acceptable interpretations and methods for meeting Order requirements. FS_0&lt;part of&gt; PURPOSE The purpose of this Technical Standard is to facilitate the development, implementation, and maintenance of a comprehensive firearms safety program so as to achieve the policy objectives and fulfill the requirements delineated in DOE C 440.1, "Worker Protection Management for DOE Federal and Contractor Employees." FS_0&lt;part of&gt; APPLICABILITY 1. Departmental. The provisions of this Standard apply to all Departmental Elements performing work that requires the use of firearms.  2. Contractors. The provisions of this Standard apply to all contractors and any of their subcontractors, the performance of whose contracts require the use of firearms.</p>	<p>No significant change</p>	<p>Equivalent language in the new order, implementation guide and technical standard.</p>

WP\_I  
 Section I. INTRODUCTION  
 DOE Order 440.1, Worker Protection Management for DOE Federal and Contractor Employees, establishes the framework for an effective worker protection program that will reduce or prevent accidental losses, injuries, and illnesses by providing DOE Federal and contractor workers with a safe and healthful workplace. The worker protection program integrates occupational safety, industrial hygiene occupational medical, construction safety, fire protection, firearms safety, explosives safety, motor vehicle safety pressure vessel safety, and other functions addressed in standards required by the Order.

The purpose of DOE Order 440.1 is to establish a comprehensive worker protection program that ensures that DOE and its contractor employees are afforded a level of safety and health on the job that is at least equal to that provided to private-sector employees under the Occupational Safety and Health Act of 1970. The Order establishes a baseline program that can be used as the foundation for the type of proactive worker protection program that the best employers in private industry have established for their workplaces.

WP\_II<part of>  
 Section II. APPLICATION  
 DOE Order 440.1 applies to all activities (including design, construction, operation, maintenance, decontamination and decommissioning, research and development, and environmental restoration activities) performed by DOE and its contractors (and their subcontractors). The Order (including the functional area requirements in Attachment 1 to the Order) is applicable to all DOE elements except the Naval Nuclear Propulsion Program and activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations to the extent a requirement under this part cannot be implemented for a particular facility in a manner that does not compromise the effectiveness of such activities. The Contractor Requirements Document (CRD) (Attachment 2 to the Order) delineates requirements that are to be applied to contractors that have been awarded contracts for performing work for DOE on DOE-owned or -leased facilities. Contractor compliance with the CRD will be required to the extent set forth in a contract.

This implementation guide provides general information and methodologies that DOE finds acceptable in meeting the Department's requirements defined in DOE Order 440.1. Other worker protection related implementation guides are:  
 -G-440.1/B-0, "Construction Safety Management"  
 -G-440.1/C-0, "Occupational Exposure Assessment"  
 -G-440.1/D-0, "Contractor Occupational Medical Program"  
 -G-440.1/E-0, "Fire Safety Program"

5480\_16A.Requ.4., 4.a.  
 4. Policy  
 a. Firearms shall be used in a manner that ensures the safety and health of DOE and contractor personnel, as well as the public, and is consistent with operational objective

O440.1 paragraph 1.  
 1. OBJECTIVE. To establish the framework for an effective worker protection program that will reduce or prevent accidental losses, injuries, and illnesses by providing DOE Federal and contractor workers with a safe and

C440.1, Attach 2, paragraph 1.a.-b.  
 Contractor Requirements Document Worker Protection Management for DOE Contractor Employees  
 The contractor shall comply with the requirements contained herein.  
 1. Implement a written worker

WP\_I  
 Section I. INTRODUCTION  
 DOE Order 440.1, Worker Protection Management for DOE Federal and Contractor Employees, establishes the framework for an effective worker protection program that will reduce or

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	<p>healthful workplace.</p> <p>O440.1 paragraph 4.a.(1)-(2)</p> <p>4. REQUIREMENTS. DOE elements shall:</p> <p>a. Implement a written worker protection program that:</p> <p>(1) provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees; and</p> <p>(2) integrates all requirements contained in paragraphs 4a through 4l of this Order; program requirements, contained in Title 29 Code of Federal Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"; applicable functional area requirements contained in Attachment 1; and other related site-specific worker protection activities.</p>	<p>protection program that:</p> <p>a. provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and</p> <p>b. integrates all requirements contained in this attachment and other related site-specific worker protection activities.</p>	<p>prevent accidental losses, injuries, and illnesses by providing DOE Federal and contractor workers with a safe and healthful workplace. The worker protection program integrates occupational safety, industrial hygiene occupational medical, construction safety, fire protection, firearms safety, explosives safety, motor vehicle safety, pressure vessel safety, and other functions addressed in standards required by the Order.</p> <p>The purpose of DOE Order 440.1 is to establish a comprehensive worker protection program that ensures that DOE and its contractor employees are afforded a level of safety and health on the job that is at least equal to that provided to private-sector employees under the Occupational Safety and Health Act of 1970. The Order establishes a baseline program that can be used as the foundation for the type of proactive worker protection program that the best employers in private industry have established for their workplaces.</p>		
<p>5480_16A.Requ.4.b.</p> <p>b. Only firearms provided by the Department of Energy and approved by the local Operations Office Manager shall be used by on-duty DOE employees and contractor personnel.</p>				Deleted from the Order. .	Equivalent language contained in DOE 5632.7A, PROTECTIVE FORCES PROGRAM OF 4-13-94
<p>5480_16A.Requ.4.c.</p> <p>c. Non security use of firearms other than for testing operations outlined in DOE/EV/06194, DOE Explosives Safety Manual, shall conform as a minimum to the requirements of Chapter V of this Order.</p>	<p>O440.1 paragraph 4.a.(1)-(2)</p> <p>4. REQUIREMENTS. DOE elements shall:</p> <p>a. Implement a written worker protection program that:</p> <p>(1) provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees; and</p> <p>(2) integrates all requirements contained in paragraphs 4a through 4l of this Order; program requirements, contained in Title 29 Code of Federal Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related</p>	<p>C440.1, Attach 2, paragraph 1.a.-b. Contractor Requirements Document Worker Protection Management for DOE Contractor Employees</p> <p>The contractor shall comply with the requirements contained herein.</p> <p>1. Implement a written worker protection program that:</p> <p>a. provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and</p> <p>b. integrates all requirements contained in this attachment and other related site-specific worker protection activities.</p>	<p>FS_6.0-6.1.3</p> <p>6 NON-SECURITY USE OF FIREARMS</p> <p>6.1 WORK-RELATED ACTIVITIES</p> <p>6.1.1 All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the cognizant DOE Operations Office official and address, as a minimum, the following:</p> <p>a. A statement of management policy relating to the safe use of firearms;</p>	Captured under top-level worker protection requirements.	Requirements in the Order do not distinguish between security and non-security use of firearms. Specific guidance for non-security use of firearms is contained in the technical standard.

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	<p>Matters"; applicable functional area requirements contained in Attachmen 1; and other related site-specific worker protection activities.</p> <p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)</p> <p>3. FIREARMS SAFETY.</p> <p>a. Requirements.</p> <p>(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls ar in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)</p> <p>15. FIREARMS SAFETY.</p> <p>a. Establish firearms safety policies and procedures to ensure proper accident prevention controls ar in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	<p>b. Activity-specific procedures for the operations being conducted;</p> <p>c. Maintenance and inspection of firearms being used under DOE control;</p> <p>(1) Firearms shall be inspected by the user through functional manipulation prior to use.</p> <p>(2) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.</p> <p>(3) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.</p> <p>d. Provisions for the storage, inventory and control of firearms and ammunition;</p> <p>e. Emergency response and communications needs; and</p> <p>f. Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for-duty.</p> <p>6.1.2 Independent assessments of internal operations shall be conducted at least annually.</p> <p>6.1.3 Developmental and quality assurance activities involving small arms shall be controlled in accordance with the DOE Explosives Safety Manual.</p>		
5480_16A.Poli.5., 5.a.	<p>5. General</p> <p>a. Mandatory standards, denoted by the words "shall" or "must," are requirements that must be followed unless DOE issues a written variance for a particular standard (see page 2, paragraph 8).</p>			Deleted from the Order.	The Order contains requirements only, thus, there is no need to differentiate between mandatory requirements and non-mandatory guidance within the body of the Order.

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<p>5480_16A.Poli.5.b., 6  b. Specific site policies and procedures covering the safe transportation, handling, use, and storage of all firearms, live ammunition, blank ammunition, riot agents, liquid grenades (tear gas), smoke, and other explosive or incendiary devices used in firearms operations are based on the material contained in this Order and are subject to review and approval by the appropriate DOE official.  6. REFERENCES. See Attachment 1.  1. DOE 3790.1B, FEDERAL EMPLOYEE OCCUPATIONAL SAFETY AND HEALTH PROGRAM, of 1-7-93, which sets Federal regulations for Government personnel health and safety.  2. DOE 5000.3B, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, of 1-19-93, which sets Departmental requirements and procedures for reporting unusual occurrences.  3. DOE 5480.4, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS, of 5-15-84, which sets standards for protecting the environment and the health and safety of people.  4. DOE 5481.1B, SAFETY ANALYSIS AND REVIEW SYSTEM, of 9-23-86, which establishes uniform requirements for the preparation and review of safety analysis of Departmental operations.  5. DOE 5482.1B, ENVIRONMENT, SAFETY, AND HEALTH APPRAISAL PROGRAM, of 9-23-86, which presents the Department's policy and requirements for appraisal of environment, safety, and health programs.  6. DOE 5483.1A, OCCUPATIONAL SAFETY AND HEALTH PROGRAM FOR DOE CONTRACTOR EMPLOYEES AT GOVERNMENT-OWNED CONTRACTOR-OPERATED FACILITIES, of 6-22-83, which describes the requirements for ensuring the safety of Government-owned contractor-operated facilities.  7. DOE 5484.1, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, of 2-24-81, which sets DOE information reporting and accident investigation requirements regarding the environment, safety, and health.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (b) activities such as loading, unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and  (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (2) activities such as loading, unloading, and exchanging firearms;  (3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.</p>	<p>FS_0&lt;part of&gt;  REFERENCES  The following DOE Order forms a part of this document to the extent specified herein:    DOE 5632.7A, PROTECTIVE FORCES PROGRAM OF 4-13-94, which prescribes Departmental policies, and requirements for the management, operation, training, and equipping of protective forces charged with the protection of security interests at DOE facilities.    The following other Government documents and publications form a part of this document to the extent specified herein. Unless otherwise indicated, the issues of these documents are those cited in the contracting document.    1. Army Regulation (AR) 385-63, "Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat," which specifies requirements including Surface Danger Zones for a variety of firing ranges for the U.S. Army and Marine Corps.    2. Atomic Energy Act of 1954 (42 United States Code (U.S.C. 2201k), as amended, section 161k, which authorizes the appropriate arming of Department or Departmental contractor personnel while engaged in the protection of property of the United States and provides the authority to make arrests without warrant.    3. DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards," which provides standards for protection to personnel and property, both inside and outside an installation, from damaging effects of potential accidents involving munitions.    4. DOE M 440.1-1, "Department of Energy Explosives Safety Manual," which prescribes the Department's procedures for operations involving explosives.</p>	<p>Requirement for procedures retained in the Order. List of references deleted from the Order.</p>	<p>Other Orders are mandatory in and of themselves and need not be mandated in DOE O 440.1. Other references are transferred to the technical standard since Orders contain requirements only.</p>

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8. DOE 5500.1B, EMERGENCY MANAGEMENT SYSTEM, of 4-30-91, which establishes the Department's overall policy and requirements for response to emergencies.				
9. DOE 5632.7, PROTECTIVE FORCES, of 2-9-88, which prescribes Departmental policies, and requirements for the management, operation, training, and equipping of protective forces charged with the protection of security interests at DOE facilities.				
10. DOE 5632.8, PROTECTION PROGRAM OPERATIONS: SYSTEM PERFORMANCE TESTS, of 2-4-88, which requires that protective forces shall perform force-on-force exercises.				
11. DOE/EV/06194, "Department of Energy Explosives Safety Manual," which prescribes the Department's procedures for operations involving explosives and is available from the Office of Occupational Safety.				
12. Atomic Energy Act of 1954 (42 United States Code (U.S.C.) 2201k), as amended, Section 161k, which authorizes the appropriate arming of Department or Departmental contractor personnel while engaged in the protection of property of the United States and provides the authority to make arrests without warrant.				
13. DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards," which provides standards for protection to personnel and property, both inside and outside an installation, from damaging effects of potential accidents involving munitions.				
14. Title 48 Code of Federal Regulations (CFR) 970.5204-2, "Department of Energy Acquisition Regulation," which provides clauses to be used in contracts where the Department of Energy is either required to, or elects to, enforce environmental protection, safety, and health protection requirements.				
15. Title 49 CFR Chapter 1, "Research and Special Programs Administration," Department of Transportation, of 10- 1-86, which prescribes the procedures for the development and promulgation of Cargo Security Advisory Standards.				
16. Title 29 CFR 1910, "Occupational Safety and Health Standards," which provides general industry safety and health standards pursuant to Public Law 91-596.				
17. Army Regulation (AR) 385-63, "Policies				

and Procedures for Firing Ammunition for Training, Target Practice, and Combat," which specifies requirements including Surface Danger Zones for a variety of firing ranges for the U.S. Army and Marine Corps 18. Military Handbook 1027/3, "Range Facilities and Miscellaneous Training Facilities Other Than Buildings," presents design criteria for training facilities for use by design engineers for design of new facilities and rehabilitation of existing facilities for firearms used by the Navy and Marine Corps.

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7. DEFINITIONS. See Attachment 2.

1. AMMUNITION are a type of munitions normally containing explosives, propellant, pyrotechnics, initiating composition, nuclear, or chemical material which are designed to inflict damage upon structures, personnel, or materiel. It also includes assembled cartridges, projectiles, grenades, bombs, pyrotechnics and mines together with projectiles such as bullets, shot and their necessary primers, propellants, fuzes, and detonators.

2. APPROVED is being in compliance with the provisions of this Order and the instructions issued by the authority having jurisdiction.

3. ARMORER is an individual who by schooling, experience, and assignment is certified by the Central Training Academy (CTA) to operate, maintain, and repair firearms used by protective force personnel

4. AUTHORIZED FIREARMS are firearms authorized by the Department and issued by the responsible contractor or Departmental Element to be used by protective force personnel in the performance of their duties

5. AUTOMATIC RIFLE is a lightweight firearm normally shoulder fired, designed to fire rifle ammunition, and capable of firing more than one round of ammunition by a single manipulation of the trigger.

6. BLANK AMMUNITION is a cartridge loaded with powder but containing no projectile, or ammunition that is deemed by the manufacturer to be incapable of firing a projectile that will kill, wound, or otherwise harm any individual at a distance greater than 10 feet (3.05 meters).

7. BLANK FIRE ADAPTER (BFA) is a mechanical device attached to a firearm for the purpose of adapting it for use with blank ammunition.

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ATTACHMENT: DEFINITIONS

1. AMMUNITION is a type of munitions normally containing explosives, propellant, pyrotechnics, initiating composition, nuclear, or chemical material which is designed to inflict damage upon structures, personnel, or material. It also includes assembled cartridges, projectiles, grenades, bombs, pyrotechnics, and mines together with projectiles such as bullets, shot, and their necessary primers, propellants, fuzes, and detonators.

2. APPROVED is being in compliance with the provisions of this standard and the instructions issued by the authority having jurisdiction.

3. ARMORER is an individual who by schooling, experience, and assignment is certified by the Safeguards and Security Central Training Academy to operate, maintain, and repair firearms used by protective force personnel.

4. AUTHORIZED FIREARMS are firearms authorized by the Department and issued by the responsible contractor or Departmental Element to be used by protective force personnel in the performance of their duties.

5. AUTOMATIC RIFLE is a lightweight firearm normally shoulder fired, designed to fire rifle ammunition, and capable of firing more than one round of ammunition by a single manipulation of the trigger.

Definitions transferred to the technical standard.

Order contains requirements only.



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<p>8. BULLET CONTAINMENT DEVICE (see Clearing Barrel).</p> <p>9. CENTRAL TRAINING ACADEMY (CTA), located in Albuquerque, New Mexico, is the organization designated by the Director of Safeguards and Security to carry out a safeguards and security education program that includes instructor training, development of course material, firearms R&amp;D, and selected site assistance programs.</p> <p>10. CHEMICAL DEVICES are devices that contain incendiary mixtures or liquid mixtures that will produce smoke or irritant, burning, poisonous or asphyxiating gases.</p> <p>11. CLEARING BARREL is a device used to point a firearm at or into during the loading and unloading process that will contain any inadvertently discharged round</p> <p>12. CONTRACTOR is any DOE prime contractor or subcontractor subject to the contractual provisions of DOE or specific negotiated contract provisions indicating DOE s decision to enforce environmental protection, safety, and health protection requirements.</p> <p>13. CONTROLLER is an individual trained in firearms activities who helps to ensure that training exercises are conducted safely and that all participants are following the rules.</p> <p>14. DEFECTIVE FIREARM is a firearm that, because of improper assembly, excessive wear, or broken or missing parts does not function according to design specifications.</p> <p>15. DRY FIRING is a training procedure to improve proficiency that uses a firearm without blank or live ammunition.</p> <p>16. DUD is a bomb, grenade, or shell that fails to explode.</p> <p>17. ENGAGEMENT SIMULATION SYSTEM (ESS) is composed of three elements: (a) devices that provide firearm effects, (b) a control system, and (c) a training-support package.</p> <p>18. EXERCISE is any scenario that simulates an actual incident to which a protective force would respond.</p> <p>19. EXERCISE AREA is an area geographically defined to contain the exercise.</p> <p>20. EXERCISE PLAN is a plan that is written and reviewed to outline a security exercise.</p> <p>21. EXPLOSIVE is any chemical compound or mechanical mixture which, when</p>				<p>6. BLANK AMMUNITION is a cartridge loaded with powder but containing no projectile, or ammunition that is deemed by the manufacturer to be incapable of firing a projectile that will kill, wound, or otherwise harm any individual at a distance greater than 11 feet (3.05 meters).</p> <p>7. BLANK FIRE ADAPTER (BFA) is a mechanical device attached to a firearm for the purpose of adapting it for use with blank ammunition.</p> <p>8. BULLET CONTAINMENT DEVICE (see Clearing Barrel).</p> <p>9. CENTRAL TRAINING ACADEMY (CTA), located in Albuquerque, New Mexico, is the organization designated by the Director of Office of Security Affairs to carry out a safeguards and security education program that includes instructor training, development of course material, firearms R&amp;D, and selected site assistance programs.</p> <p>10. CHEMICAL DEVICES are devices that contain incendiary mixtures or liquid mixtures that will produce smoke or irritant, burning, poisonous or asphyxiating gases.</p>

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<p>subjected to heat, impact, friction, shock, or other suitable initiation stimulus, undergoes a very rapid chemical change with the evolution of large volumes of highly heated gases that exert pressures in the surrounding medium.</p> <p>22. FIELD ELEMENT is a Departmental organizational component located outside the Washington, D.C., metropolitan area.</p> <p>23. FIREARMS are rifles, handguns, shotguns, machine guns and similar devices designed to be carried and operated by a person. For the purposes of this Order, laser engagement systems, other firearms simulators, chemical devices, and pyrotechnic devices are considered to be firearms.</p> <p>24. FLASH-SOUND DIVERSIONARY DEVICES are used to momentarily distract and/or confuse suspects in order to allow SPOs to gain control of a tactical situation. Diversionary devices include both pyrotechnical and non-incendiary methods.</p> <p>25. FORCE-ON-FORCE EXERCISE simulates the actual engagement of hostile personnel by the protective force personnel. This may include limited scope performance tests and similar exercises.</p> <p>26. GRENADE LAUNCHER is a light weight firearm used to deploy multipurpose munitions such as HE, smoke, chemical agents, etc.</p> <p>27. HANDGUNS are firearms designed to be held and fired with one hand.</p> <p>28. HANGFIRES are missiles or rockets that have been fired but have not left the launching device.</p> <p>29. INCENDIARY DEVICES (see Chemical Devices).</p> <p>30. INHABITED BUILDING DISTANCE is the minimum distance permitted between locations containing munitions and inhabited buildings, administrative areas, site boundaries, main power stations, and other facilities of vital or strategic nature.</p> <p>31. LIGHT ANTI-TANK WEAPON (LAW) is a portable, shoulder-fired, recoilless firearm capable of launching explosive projectiles.</p> <p>32. LAW HAZARD ZONE is the zone at the rear of a LAW or LAW simulator where flame, hot gases, or fragments may be present during discharge of the firearm. The hazard zone is defined as a 30 degree cone truncated at 10 feet wide by 30 feet deep at the rear of the LAW tube.</p> <p>33. LAW SIMULATOR is a firearm that</p>			<p>FS_Att.Def 11-20</p> <p>11. CLEARING BARREL is a device used to point a firearm at or into during the loading and unloading process that will contain any inadvertently discharged round.</p> <p>12. CONTRACTOR is any DOE prime contractor or subcontractor subject to the contractual provisions of DOE or specific negotiated contract provisions indicating DOE's decision to enforce environmental protection, safety, and health protection requirements.</p> <p>13. CONTROLLER is an individual trained in firearms activities who helps to ensure that training exercises are conducted safely and that all participants are following the rules.</p> <p>14. DEFECTIVE FIREARM is a firearm that, because of improper assembly, excessive wear, or broken or missing parts, does not function according to design specifications.</p> <p>15. DRY FIRING is a training procedure to improve proficiency that uses a firearm without blank or live ammunition.</p> <p>16. DUD is a bomb, grenade, or shell that fails to explode.</p> <p>17. ENGAGEMENT SIMULATION SYSTEM (ESS) is composed of three elements: (a) devices that provide firearm effects, (b) a control system, and (c) a training-support package.</p> <p>18. EXERCISE is any scenario that simulates an actual incident to which a protective force would respond.</p> <p>19. EXERCISE AREA is an area geographically defined to contain the exercise.</p> <p>20. EXERCISE PLAN is a plan that is written and reviewed to outline a security exercise.</p>	

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<p>simulates the firing of a LAW and emits a coded laser beam in the direction aimed. The simulator does not fire a projectile but does expel fragments and a hot flash from the rear of the launch tube.</p> <p>34. LIVE-FIRE RANGE is an area designated for firearms training; it does not include training areas where blank ammunition or ESS firearms are used exclusively.</p> <p>35. LIVE-ROUND EXCLUDER is a removable (spring pressure retained) flagging device inserted between the breech and the bolt face of a firearm which restricts a live round of ammunition from feeding from a magazine into the chamber without removal of the device.</p> <p>36. LIVE-ROUND INHIBITOR is an obstructive device mounted in the cylinder or barrel permitting chambering and firing of blank ammunition but preventing chambering of a live round.</p> <p>37. MACHINE GUN is a fully automatic firearm capable of firing multiple rounds of rifle ammunition with a single pull of the trigger; it is belt fed and is usually mounted on a bipod, tripod, or other fixture.</p> <p>38. MAGAZINE is a mechanical device used to hold a predetermined number of cartridges in position for feeding into a firearm.</p> <p>39. MINIMUM FRAGMENT DISTANCE is the minimum distance required to protect personnel from hazardous fragments in open areas, inhabited buildings, and public traffic routes.</p> <p>40. MISFIRE is an event involving any cartridge, missile, or rocket that does not properly fire when triggered.</p> <p>41. MODIFICATION is any alteration of a firearm or firearm component part other than that alteration necessary to maintain factory required tolerances, or addition of any part not made to the firearm manufacturer's specification or military specification supplied by the particular manufacturer for the specific firearm.</p> <p>42. MUNITIONS are small arms ammunitions, diversionary devices, and explosives.</p> <p>43. NET EXPLOSIVE WEIGHT is the weight of the energy-producing material in munitions.</p> <p>44. NON SECURITY USE OF FIREARMS is the utilization of firearms in any activity sponsored and/or funded by DOE and not authorized within the scope of Section 1611</p>			<p>FS_Att.Def 21-30</p> <p>21. EXPLOSIVE is any chemical compound or mechanical mixture which, when subjected to heat, impact friction, shock, or other suitable initiation stimulus, undergoes a very rapid chemical change with the evolution of large volumes of highly heated gases that exert pressures in the surrounding medium.</p> <p>22. FIELD ELEMENT is a Departmental organizational component located outside the Washington, D.C., metropolitan area.</p> <p>23. FIREARMS are rifles, handguns, shotguns, machine guns, and similar devices designed to be carried and operated by a person. For the purposes of this Standard, laser engagement systems, other firearms simulators, chemical devices, and pyrotechnic devices are considered to be firearms.</p> <p>24. FLASH-SOUND DIVERSIONARY DEVICES are used to momentarily distract and/or confuse suspects in order to allow SPOs to gain control of a tactical situation. Diversionary devices include both pyrotechnical and non-incendiary methods.</p> <p>25. FORCE-ON-FORCE EXERCISE simulates the actual engagement of hostile personnel by the protective force personnel. This may include limited scope performance tests and similar exercises.</p> <p>26. GRENADE LAUNCHER is a lightweight firearm used to deploy multi-purpose munitions such as HE, smoke, chemical agents, etc.</p> <p>27. HANDGUNS are firearms designed to be held and fired with one hand.</p> <p>28. INCENDIARY DEVICES (see Chemical Devices).</p> <p>29. LIGHT ANTI-TANK WEAPON (LAW) is a portable, shoulder-fired, recoil-less firearm capable of</p>	

**Old Order Provision****New Order (Feds)****New Order (Contractors)****Imp Guide/Tech Std****Change Description Basis for Change**

of the Atomic Energy Act as amended.

45. PROTECTIVE FORCE PERSONNEL are security officers, security police officers (I, II, III), couriers, authorized escorts, and personnel assigned to protective details, who are employed to protect the security interests of the Department.

46. PUBLIC TRAFFIC ROUTE DISTANCE is the minimum distance permitted between locations containing munitions and any public street, road, highway, or passenger railroad (including roads on DOE-controlled land open to public travel).

47. QUANTITY DISTANCE is the distance required for a specific level of protection for a particular hazard class/division of ammunition and explosives.

48. RANGE MASTER is the individual designated to provide overall management and administration of a live-fire range facility to ensure that all operations and training are conducted in accordance with applicable DOE Orders.

49. RANGE SAFETY OFFICER is the designated and specifically trained individual responsible for safety at a live-fire range.

50. RIFLE is a shoulder firearm with a rifle bore.

51. SAFETY ANALYSIS REPORT (SAR) is prepared in accordance with DOE 5481.1B; the report summarizes the hazards associated with the operation of a particular facility and defines minimum safety requirements.

52. SECURITY AREA. A DOE physical space (fenced area) which has been designated as requiring access control.

53. SECURITY POLICE OFFICER is a Departmental contractor (see DOE 5632.7) employed for and charged with the protection of classified matter, special nuclear material, or other Government property; the security police officer is authorized under Section 161k of the Atomic Energy Act of 1954, as amended, or other statutory authority (i.e., Section 661 of U.S.C. 7270a), to carry firearms and to make arrests without warrant.

54. SEMIAUTOMATIC FIREARM is a type of firearm that employs either gas pressure or recoil force and mechanical spring action in ejecting the empty cartridge case after the first shot and loading the next cartridge from the magazine, but that requires release and another pressure of the trigger for firing each successive shot.

launching explosive projectiles.

30. LAW SIMULATOR is a firearm that simulates the firing of a LAW and emits a coded laser beam in the direction aimed. The simulator does not fire a projectile but does expel fragments and a hot flash from the rear of the launch tube.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>55. SENIOR CONTROLLER is responsible for assigning tasks and coordinating the efforts of all controllers during force-on-force exercises.</p> <p>56. SHADOW FORCE is an armed security force that provides continuing site protection under the constant supervision of a controller while an exercise is being conducted.</p> <p>57. SMALL ARMS are hand-carried firearms, including but not limited to handguns, rifles, shotguns, submachine guns, machine guns, LAWs, and grenade launchers.</p> <p>58. SMALL ARMS AMMUNITION is ammunition of a caliber less than 20 mm.</p> <p>59. SHOTGUN is a shoulder firearm with a smooth bore.</p> <p>60. SUBMACHINE GUN is a fully automatic or selective-fire firearm designed to fire handgun ammunition.</p> <p>61. SUPERVISOR is a specifically trained person who has been designated by a DOE Element or contractor to accomplish the requirements for a supervisor in this Order.</p> <p>62. TAGOUT is a safety procedure for identifying and labeling a defective firearm's status.</p> <p>63. UNAUTHORIZED DISCHARGE is the discharge of a firearm under circumstances other than either (a) during firearms training with the firearm properly pointed downrange (or toward a target) or (b) the intentional firing at hostile parties when deadly force is authorized.</p>			<p>FS_Att.Def 31-40</p> <p>31. LIVE-FIRE RANGE is an area designated for firearms training; it does not include training areas where blank ammunition or ESS firearms are used exclusively.</p> <p>32. LIVE-ROUND INHIBITOR is an obstructive device mounted in the cylinder or barrel permitting chambering and firing of blank ammunition but preventing chambering of a live round.</p> <p>33. MACHINE GUN is a fully automatic firearm capable of firing multiple rounds of rifle ammunition with a single pull of the trigger; it is belt fed and is usually mounted on a bipod tripod, or other fixture.</p> <p>34. MAGAZINE is a mechanical device used to hold a predetermined number of cartridges in position for feeding into a firearm.</p> <p>35. MISFIRE is an event involving a cartridge, missile, or rocket that does not properly fire when triggered.</p> <p>36. MODIFICATION is any alteration of a firearms or firearm component part other than that alteration necessary to maintain factory required tolerances, or the addition or attachment of any part or substance not supplied by the particular manufacturer for the specific firearm.</p> <p>36. MUNITIONS are small arms ammunitions, diversionary devices, and explosives.</p> <p>37. NON SECURITY USE OF FIREARMS is the utilization of firearms in any activity sponsored and/or funded by DOE and not authorized within the scope of Section 161k of the Atomic Energy Act as amended.</p> <p>38. PROTECTIVE FORCE PERSONNEL are security officers, security police officers (I, II, III), couriers, authorized escorts, and personnel assigned to protective details, who are employed to protect</p>	

the security interests of the Department.

39. RANGE MASTER is the individual designated to provide overall management and administration of a live-fire range facility to ensure that all operations and training are conducted in accordance with applicable DOE Orders, Rules, and regulations.

40. RANGE SAFETY OFFICER is the designated and specifically trained individual responsible for safety at a live-fire range.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
			<p>FS_Att.Def 41-49</p> <p>41. RIFLE is a shoulder firearm with a rifled bore.</p> <p>42. SAFETY ANALYSIS REPORT (SAR) is prepared in accordance with DOE 5481.1B; the report summarizes the hazards associated with the operation of a particular facility and defines minimum safety requirements.</p> <p>43. SEMIAUTOMATIC FIREARM is a type of firearm that employs either gas pressure or recoil force and mechanical spring action in ejecting the empty cartridge case after the first shot and loading the next cartridge from the magazine, but that requires release and another pressure of the trigger for firing each successive shot.</p> <p>44. SENIOR CONTROLLER is responsible for assigning tasks and coordinating the efforts of all controllers during force-on-force exercises.</p> <p>45. SHADOW FORCE is an armed security force that provides continuing site protection under the constant supervision of a controller while an exercise is being conducted.</p> <p>46. SMALL ARMS are hand-carried firearms, including but not limited to handguns, rifles, shotguns, submachine guns, machine guns, LAWs, and grenade launchers.</p> <p>47. SHOTGUN is a shoulder firearm with a smooth bore.</p> <p>48. SUBMACHINE GUN is a fully automatic or selective-fire firearm designed to fire handgun ammunition.</p> <p>49. SUPERVISOR is a specifically trained person who has been designated by a DOE Element or contractor to accomplish the requirements for a supervisor in this Standard.</p>		

5480\_16A.Poli.8.  
8. VARIANCES. A variance does not exempt contractors from a DOE-prescribed firearms safety requirement. However, a

O440.1 paragraph 5.a.(1)-(6)  
5. RESPONSIBILITIES.  
a. Assistant Secretaries.  
(1) Ensure that program-

WP\_7.3<part of>  
7.3 Exemptions  
The Secretarial Officer responsible for a facility or activity to which the Order

Exemption/variance approval authority transferred to Assistant

Standardized procedure for relief from DOE Order requirement

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>contractor may request a variance from a specific DOE-prescribed firearms safety requirement when they are unable to comply, due to their mission, to meet the required firearms safety specifications and the contractor provides equivalent protection of employees for the duration of the variance (if approved). Heads of Departmental Elements may deny variances; however, only the Assistant Secretary for Environment, Safety, and Health can approve variances. There are two types of variances:</p> <p>a. Temporary. A temporary variance may be requested when DOE or contractors are unable to meet this Order's standards, for a short period of time, but anticipate subsequent full conformance with requirements. While a temporary variance is in effect, the contractor shall provide equivalent or acceptable firearms safety protection to employees. Requests for a temporary variance shall be submitted to the Heads of Departmental Elements for action.</p> <p>b. Permanent. If any firearms activity, operation, or process is determined not to comply with this Order's requirements, yet the manager of the facility, or Operations Office Safeguards and Security manager, or the protective force contractor determines that the activity, operation, or process is providing equivalent or acceptable protection to employees, he or she may submit a request for a permanent variance to the appropriate DOE official.</p> <p>c. Variance Submittal Process.</p> <p>(1) The Director of Occupational Safety shall be notified of, and be furnished with copies of, all variances relating to contract personnel; the Assistant Secretary for Human Resources and Administration shall be notified of, and be furnished with copies of, all variances relating to DOE employees.</p> <p>(2) The variance request shall be submitted from the Operations Office Manager to DOE Headquarters (HQ). The Associate Deputy Secretary for Field Management or the Director of the Office Safeguards and Security, as applicable, shall submit to the Director of Occupational Safety, all request for variance. After review of the request for variance, the Director of the Office of Occupational Safety, shall submit an approval or disapproval recommendation to the Assistant Secretary for Environment, Safety, and Health, who shall grant or disapprove the variance. The formal review</p>	<p>specific worker protection goals and objectives are developed and resources are provided.</p> <p>(2) Ensure that worker protection policies and requirements are effectively implemented.</p> <p>(3) Develop or participate in recognition programs that encourage the improvement of worker protection programs.</p> <p>(4) When contractors report directly to the Cognizant Secretarial Officer or an Assistant Secretary, ensure that the responsibilities of paragraph 5b (and applicable responsibilities in the specific functional areas contained in Attachment 1) and the requirements of the CRD (Attachment 2) are implemented.</p> <p>(5) Assist in the resolution of significant worker protection issues and the improvement in cost effectiveness and efficiency of worker protection programs.</p> <p>(6) Review and be approving authority for exemptions to requirements contained in this Order. Requests for exemptions to all requirements except those exemption related to OSHA standards imposed on contractors by this Order may be delegated.</p>		<p>relates may grant an exemption to a specific requirement in the Order provided that:</p> <ul style="list-style-type: none"> <li>-it is not prohibited by law,</li> <li>-it does not present an undue risk to public health and safety or the environment, and</li> <li>-equivalent protection is provided to facility workers.</li> </ul> <p>A request from a contractor should be submitted to the Secretarial Officer (or his delegated authority) responsible for a facility or activity to which DOE Order 440.1 relates. All exemption decisions should be accompanied by written documentation giving the reasons for granting or denying the exemption and, if granted, the basis for determining that the exemption does not present an undue risk.</p> <p>This authority to grant an exemption may also be delegated by the Secretarial Officer to others (except for exemptions to OSHA standards). All exemption decisions should be accompanied by written documentation giving the reasons for granting or denying the exemption and, if granted the basis for determining that the exemption does not present an undue risk.</p>	<p>Secretaries. Specific procedures transferred to DOE M 251.1.</p>	<p>is contained in DOE M-251.1.</p>



and notification process through Assistant Secretary for Environment, Safety and Health shall take no longer than 60 calendar days after receipt.

5480\_16A.Glue.8.d.  
d. Content of Variance. Any variance request shall include the following element:  
(1) Description of condition;  
(2) Safety standard requiring deviation;  
(3) Reason why a variance is requested;  
(4) Steps taken to provide equivalent or greater protection;  
(5) Statement of whether equivalent safety is provided, description of safety enhancements, and an analysis of corresponding risk reduction;  
(6) Any proposed corrective action and schedule; and  
(7) Duration of requested variance (if temporary).

O440.1 paragraph 5.a.(1)-(6)  
5. RESPONSIBILITIES.  
a. Assistant Secretaries.  
(1) Ensure that program-specific worker protection goals and objectives are developed and resources are provided.  
(2) Ensure that worker protection policies and requirements are effectively implemented.  
(3) Develop or participate in recognition programs that encourage the improvement of worker protection programs.  
(4) When contractors report directly to the Cognizant Secretarial Officer or an Assistant Secretary, ensure that the responsibilities of paragraph 5b (and applicable responsibilities in the specific functional areas contained in Attachment 1) and the requirements of the CRD (Attachment 2) are implemented.  
(5) Assist in the resolution of significant worker protection issues and the improvement in cost effectiveness and efficiency of worker protection programs.  
(6) Review and be approving authority for exemptions to requirements contained in this Order. Requests for exemptions to all requirements except those exemption related to OSHA standards imposed on contractors by this Order may be delegated.

WP\_7.3<part of>  
7.3 Exemptions  
The Secretarial Officer responsible for a facility or activity to which the Order relates may grant an exemption to a specific requirement in the Order provided that:  
-it is not prohibited by law,  
-it does not present an undue risk to public health and safety or the environment, and  
-equivalent protection is provided to facility workers.

A request from a contractor should be submitted to the Secretarial Officer (or his delegated authority) responsible for a facility or activity to which DOE Order 440.1 relates. All exemption decisions should be accompanied by written documentation giving the reasons for granting or denying the exemption and, if granted, the basis for determining that the exemption does not present an undue risk.

This authority to grant an exemption may also be delegated by the Secretarial Officer to others (except for exemptions to OSHA standards). All exemption decisions should be accompanied by written documentation giving the reasons for granting or denying the exemption and, if granted the basis for determining that the exemption does not present an undue risk.

No significant change Standardized procedures for relieve from DOE Order requirement is contained in DOE M-251.1.

5480\_16A.Glue.9., 9.a  
9. RESPONSIBILITIES.  
a. The Assistant Secretary for Environment Safety and Health shall:  
(1) Develop and coordinate firearms safety policies, standards and guidance.  
(2) Conduct independent performance-based assessments of CSO firearms safety programs to ensure DOE line management organizations are effectively implementing their occupational safety and health responsibilities. Verify, on a sampling basis actual DOE line performance practices; the

O440.1 paragraph 5.e.  
e. Assistant Secretary for Environment, Safety and Health. Establish committees as necessary to assist in the development of Departmental requirements and guidance.

No significant change Equivalent policy in policy development and coordination responsibilities. Other responsibilities deleted from the Order. development and coordination language in the new Order. Other responsibilities captured under the FAR Manual.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>viability of the implementation process; the effectiveness of management controls and oversight; and conformance with established DOE firearms safety requirements.</p> <p>(3) Provide authoritative interpretations of firearms safety requirements.</p> <p>(4) Provide technical guidance to line programs as necessary and support the line organization in implementing firearms safety programs.</p> <p>(5) Determine the response to and disposition of requests for variances.</p>				
<p>5480_16A.Glue.9.b.</p> <p>b. Heads of Departmental Elements shall develop, administer and implement a comprehensive line firearms safety program; establish programmatic goals, objectives, and priorities that are coordinated with the Lead CSO; plan, program and budget for the resources necessary to implement the requirements of this Order, with a goal of maintaining continuing program improvement to achieve excellence; ensure that line firearms safety self assessment programs are established and properly implemented in accordance with the requirements contained in Chapter III.</p>	<p>O440.1 paragraph 4.a.(1)-(2)</p> <p>4. REQUIREMENTS. DOE elements shall:</p> <p>a. Implement a written worker protection program that:</p> <p>(1) provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees; and</p> <p>(2) integrates all requirements contained in paragraphs 4a through 4l of this Order; program requirements, contained in Title 29 Code of Federal Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"; applicable functional area requirements contained in Attachment 1; and other related site-specific worker protection activities.</p>			<p>No significant change. Equivalent language in the new Order.</p>

O440.1 paragraph 5.b.(1)-(5)  
 b. Heads of Departmental Elements and Heads of Field Elements.  
 (1) Ensure through the Contracting Officer that contractors implement effective worker protection programs.  
 (2) Review contractor worker protection program budgets and provide recommendations to the funding official on the appropriateness of the budget request.  
 (3) Provide contractors with technical direction on and criteria for the development of contractor goals, objectives, and performance measure  
 (4) Hold DOE line personnel accountable for providing technical direction to contractors that is consistent with the requirements contained in this Order.  
 (5) Evaluate the need for and direct the development of formal written agreements between organizations on their sites. These agreements shall outline the respective roles, responsibilities, and authorities of each organization as they relate to compliance with DOE worker protection requirements and the resolution of cross-cutting worker protection-related issues.

O440.1, Attach 1, paragraph 3.b.(1)(a)  
 (b)  
 b. Responsibilities  
 (1) Operations Office Managers.  
 (a) Ensure effective implementation and control of the firearms safety program.  
 (b) Approve the location and use of the contractor's live fire ranges.

5480\_16A.Glue.9.c.  
 c. Managers of Operations Offices and Director of Security Affairs (for Headquarters operations), shall be responsible for ensuring that:  
 (1) All firearms activities by DOE personnel under their control comply with this Order; and  
 (2) All contracts the performance of which require the use of firearms also require the contractor to comply with this Order. The application to contractors shall be accomplished by noting prominently in the procurement request package that the

O440.1 paragraph 4.a.(1)-(2)  
 4. REQUIREMENTS. DOE elements shall:  
 a. Implement a written worker protection program that:  
 (1) provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees; and  
 (2) integrates all requirements contained in paragraphs 4a through 4l of this Order; program requirements, contained in Title 29 Code of Federal

C440.1, Attach 2, paragraph 21  
 21. Ensure that subcontractors performing work on DOE-owned or -leased facilities comply with this Contractor Requirements Document and the contractor's own site worker protection standards (where applicable).

WP\_1.1<part of>  
 -DOE elements to implement a written worker protection program that integrates all requirements contained in paragraphs 4.a through 4.l, program requirements contained in Title 29, Code of Federal Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters," applicable functional area requirements contained in Attachment 2 of the Order, and other related site-specific worker protection

No significant change. Equivalent language in the Order and implementation guide.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>contract will require the contractor to use firearms with the identification of this Order or the particular portions, including, if appropriate, the paragraph dealing with variances, that should apply to the contractor. Provision should be made for flow down to subcontracts of any tier that will require the use of firearms.</p>	<p>Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"; applicable functional area requirements contained in Attachment 1; and other related site-specific worker protection activities.</p> <p>O440.1 paragraph 5.b.(1)-(5)</p> <p>b. Heads of Departmental Elements and Heads of Field Elements.</p> <p>(1) Ensure through the Contracting Officer that contractors implement effective worker protection programs.</p> <p>(2) Review contractor worker protection program budgets and provide recommendations to the funding official on the appropriateness of the budget request.</p> <p>(3) Provide contractors with technical direction on and criteria for the development of contractor goals, objectives, and performance measure</p> <p>(4) Hold DOE line personnel accountable for providing technical direction to contractors that is consistent with the requirements contained in this Order.</p> <p>(5) Evaluate the need for and direct the development of formal written agreements between organizations on their sites. These agreements shall outline the respective roles, responsibilities, and authorities of each organization as they relate to compliance with DOE worker protection requirements and the resolution of cross-cutting worker protection-related issues.</p>		<p>activities [paragraph 4.a.(2)]; and WP_1.1&lt;part of&gt;</p> <p>-contractors to implement a written worker protection program that integrates all requirements contained in paragraphs 1 through 20 of the CRD and other related site-specific worker protection activities [Attachment 2, paragraph 1.b].</p> <p>WP_7.2</p> <p>7.2 Subcontractor Compliance</p> <p>The CRD (Attachment 2 to DOE Order 440.1), paragraph 21, requires DOE contractors to ensure that their subcontractors performing work on DOE-owned or -leased facilities comply with requirements in the CRD and with the contractor's own site worker protection standards (where applicable).</p> <p>All work performed by contractors or subcontractors on DOE-owned or leased sites must comply with DOE-prescribed worker protection standards. It is important that contractors include provisions in their subcontract documents to ensure that subcontractors also comply with all DOE-prescribed standards and other appropriate requirements. Contractor must determine which program requirements should flow down into contracts with their subcontractors and incorporate appropriate requirements. All requirements in DOE Order 440.1 must be met, regardless of whether the contractor or the subcontractor performs the actual worker protection activity. For example, a contractor may provide exposure monitoring for the subcontractor, or the contractor may require the subcontractor to conduct its own exposure monitoring. In either case, DOE looks to the prime contractor for ensuring compliance at the site.</p>	

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>O440.1 paragraph 5.c.(1)-(4)  c. Operations Office Managers (and Heads of Field Elements, where applicable).  (1) Ensure that unannounced worker protection inspections of contractor workplaces are conducted at least annually.  (2) Ensure immediate and effective remedial actions are taken for imminent danger situations discovered during worker protection inspections to ensure employees are removed from the hazard or the hazard is eliminated  conduct an inspection as soon as possible after an imminent danger situation has been corrected to ensure that appropriate actions have been taken to preclude recurrence.  (3) Determine whether adequate protection can most effectively be achieved by continuing to operate under the terms of existing contracts requiring compliance with old Orders or by modifying the contract to incorporate the CRD (Attachment 2 requirements).  (4) Ensure that initiators of procurement requests specify therein whether requirements in the CRD (Attachment 2) are to be applied to the resulting award or subawards.</p>				
<p>5480_16A.Requ.9.d.  d. The cognizant local DOE authority for safeguards and security at each Operations Office and at Headquarters shall be responsible for implementing this Order for protective force activities.</p>	<p>O440.1, Attach 1, paragraph 3.b.(1)(a)(b)  b. Responsibilities  (1) Operations Office Managers.  (a) Ensure effective implementation and control of the firearms safety program.  (b) Approve the location and use of the contractor's live fire ranges.</p>			<p>Top-level performance-based responsibilities established in the new Order.</p>	<p>Allow DOE elements flexibility in determining the most effective means for local implementation.</p>
<p>5480_16A.Requ.9.e.  e. The cognizant director of safety and health at each Operations Office and at Headquarters shall be responsible for ensuring the safety and health of employee and the public through application of the environmental protection, safety, and health protection assessment program.</p>	<p>O440.1, Attach 1, paragraph 3.b.(1)(a)(b)  b. Responsibilities  (1) Operations Office Managers.  (a) Ensure effective implementation and control of the firearms safety program.  (b) Approve the location and use of the contractor's live fire ranges.</p>			<p>Top-level performance-based responsibilities established in the new Order.</p>	<p>Allow DOE elements flexibility in determining the most effective means for local implementation.</p>
<p>5480_16A.Requ.9.f.  f. Instructors (rangemasters, range safety officers, or other persons assigned training</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(a)  (4) Implement safety provisions related to firearms safety training.</p>	<p>C440.1, Attach 2, paragraph 15.d.(1)  d. Implement safety provisions related to firearms safety training.</p>	<p>FS_2.3&lt;part of&gt;  During firearms training, all personnel shall have access to an instruction</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
duties) shall implement the requirements of this Order and the regulations of the specific sites during firearms training, including classroom and firing range training, tactical training, field exercise, and other situations designed to teach and retrain.	<p>qualification, or requalification.</p> <p>(a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(d)</p> <p>(d) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>qualification, or requalification.</p> <p>(1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p> <p>C440.1, Attach 2, paragraph 15.d.(4)</p> <p>(4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.</p> <p>Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.</p> <p>All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.</p> <p>Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.</p> <p>All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.</p>		<p>technical standard.</p> <p>Equivalent language in the new order and technical standard.</p>
<p>5480_16A.Glue.9.g.</p> <p>g. The training manager shall ensure that someone is present or readily available who is trained and capable of:</p> <p>(1) Providing safety direction and guidance in the transportation, storage, handling, and operation of firearms and munitions used on the range and shall control all personnel ar</p>	<p>O440.1, Attach 1, paragraph 3.a.(2)</p> <p>(2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program</p> <p>Firearms instructors and armorers</p>	<p>C440.1, Attach 2, paragraph 15.b.</p> <p>b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program</p> <p>Firearms instructors and armorers</p>	<p>FS_2.3&lt;part of&gt;</p> <p>During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>activities on the range when firearms are present;</p> <p>(2) Identifying, analyzing, and evaluating a variety of hazards involving the use of ammunition, explosives, or chemical devices used in live-fire training exercises;</p> <p>(3) Verifying range safety data and/or protective containment construction requirements through onsite inspection, interpretation, and use of surface danger zones and maps; (i.e., AR 385-63 and Military Handbook 1027/3); and</p> <p>(4) Assessing risk to personnel conducting range operations and recommend safety measures consistent with training requirements.</p>	<p>shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>the safe use of that firearm.</p> <p>Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.</p> <p>All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.</p> <p>Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.</p> <p>All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.</p>	<p>Deleted from the Order.</p>	<p>Equivalent guidance in the technical standard.</p>
<p>5480_16A.Requ.9.h.</p> <p>h. Supervisors shall be cognizant of any deterioration in subordinates' physical or mental condition/fitness for duty, whether the deterioration is caused by long workday or other factors; supervisors shall restrict participation in training or work activities involving the use of firearms where a noted deterioration may have dangerous consequences.</p>			<p>FS_2.3&lt;part of&gt;</p> <p>No person shall be issued a firearm if there is any indication that he or she has a deteriorated mental or physical condition which could have a dangerous consequence while conducting training or work activities with firearms.</p>	<p>Deleted from the Order.</p>	<p>Equivalent guidance in the technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
5480_16A.Requ.9.i. i. Supervisors who have direct operational control of activities involving firearms shall ensure that personnel under their control adhere to this Order.	O440.1 paragraph 4.d. d. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance. O440.1 paragraph 4.h. h. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.	C440.1, Attach 2, paragraph 4. 4. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance. C440.1, Attach 2, paragraph 8. 8. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.	FS_2.3<part of> If the presence of alcohol or drugs is detected on a person, it shall be grounds for denial of the issuance of a firearm or removal from a duty station.  FS_2.3<part of> All personnel covered by this Standard shall be required to comply with the personal protective and safety rules in effect at each work place.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Dele.9.j. j. Director of Naval Nuclear Propulsion Program shall, in accordance with the responsibilities and authorities assigned by Executive Order 12344 (statutorily prescribed by Pub. L. 98-525, 42 U.S.C. Section 7158, note) and to ensure consistency throughout the joint Navy/DOE organization of the Naval Nuclear Propulsion Program, implement and oversee all policy and practices pertaining to this DOE Order for activities under the Director's cognizance.	O440.1 paragraph 3.a. 3. APPLICABILITY. a. DOE Elements. Except for the exclusions in paragraph 3c, this Order (including Attachment 1) applies to all DOE Elements. O440.1 paragraph 3.b. b. Contractors. Except for the exclusions in paragraph 3c, Attachment 2, Contractor Requirements Document (CRD), sets forth requirements that shall be applied to all contractors awarded contracts and subcontracts for performing work for DOE on DOE-owned or -leased facilities. Contractor compliance with the CRD will be required to the extent set forth in a contract. Contractors shall be directed to continue to comply with the requirements of Orders canceled by this Order until their contracts are modified to delete the reference to the requirements of the canceled Orders.		WP_II<part of> Section II. APPLICATION DOE Order 440.1 applies to all activities (including design, construction, operation, maintenance, decontamination and decommissioning, research and development, and environmental restoration activities) performed by DOE and its contractors (and their subcontractors). The Order (including the functional area requirements in Attachment 1 to the Order) is applicable to all DOE elements except the Naval Nuclear Propulsion Program and activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations to the extent a requirement under this part cannot be implemented for a particular facility in a manner that does not compromise the effectiveness of such activities. The Contractor Requirements Document (CRD) (Attachment 2 to the Order) delineates requirements that are to be applied to contractors that have been awarded contracts for performing work for DOE on DOE-owned or -leased facilities. Contractor compliance with the CRD will be required to the extent set forth in a contract.	The Order is not applicable to the Director of Naval Nuclear Propulsion Program.	Authorities for the Director of Naval Nuclear Propulsion Program are contained in the current Public Law 98-525.
			This implementation guide provides		



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>O440.1 paragraph 3.c.(1)-(2)  c. Exclusions.  (1) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Public Law 98-525.  (2) Activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations to the extent a requirement under this part cannot be implemented for a particular facility in a manner that does not compromise the effectiveness of such activities.</p>		<p>general information and methodology that DOE finds acceptable in meeting the Department's requirements defined in DOE Order 440.1. Other worker protection related implementation guides are:  -G-440.1/B-0, "Construction Safety Management"  -G-440.1/C-0, "Occupational Exposure Assessment"  -G-440.1/D-0, "Contractor Occupational Medical Program"  -G-440.1/E-0, "Fire Safety Program"</p>		
<p>5480_16A.Poli.9.k., 10  k. DOE facilities, projects, and programs that are subject to regulation by the Nuclear Regulatory Commission (NRC) or an NRC Agreement State shall use, where applicable, the requirements specified by the NRC or NRC Agreement State in lieu of this Order whose requirements overlap or duplicate NRC or NRC Agreement State regulations.  10. ASSISTANCE. Questions concerning this Order shall be directed to Edward Patigalia, EH-313, 301-903-3972.</p>				<p>Deleted from the Order.</p>	<p>Applicable NRC requirements are mandatory in and of themselves and need not be mandated through DOE O 440.1.</p>
<p>5480_16A.Requ.[CHAPI].1., 1.a.  CHAPTER I  FIREARMS SAFETY TRAINING  1. REQUIREMENTS.  a. The Office of Safeguards and Security, with the assistance of impacted Headquarters and Operations Offices, shall publish standard DOE training programs for firearms being used at the various sites. Such training programs shall contain attachments of specific site developed firing range and on-duty (off-duty when applicable) safety information and shall incorporate those sections of the manufacturer's operating manuals that are necessary for the safe operation, inspection, and maintenance of specific firearms.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(a)  (4) Implement safety provisions related to firearms safety training, qualification, or requalification.  (a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p>	<p>C440.1, Attach 2, paragraph 15.d.(4)  (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>FS_2.3&lt;part of&gt;  2.3 STANDARD OPERATING PROCEDURES  The Office of Safeguards and Security, with the assistance of impacted Headquarters and Operations Offices, shall publish standard DOE training programs for firearms being used at the various sites. Such training programs shall contain attachments of specific site developed firing range and on-duty (off-duty when applicable) safety information and shall incorporate those sections of the manufacturer's operating manuals that are necessary for the safe operation, inspection, and maintenance of specific firearms.</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and technical standard.</p>
<p>5480_16A.Glue.[CHAPI].1.b.  b. During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(b)  (b) Personnel authorized to carry firearms shall have access to instruction manuals for each type of firearm with which they are armed while on duty.</p>	<p>C440.1, Attach 2, paragraph 15.d.(d)  (2) Personnel authorized to carry firearms shall have access to instruction manuals for each type of duty firearms with which they are armed while on duty.</p>	<p>FS_2.3&lt;part of&gt;  During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and technical standard.</p>

knowledge of the contents of the manual governing the safe use of that firearm.

technical and practical knowledge of the contents of the manual governing the safe use of that firearm.

Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.

All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.

Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.

5480\_16A.Requ.[CHAPI].1.c.  
c. Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.

O440.1, Attach 1, paragraph 3.a.(4)(a)  
(4) Implement safety provisions related to firearms safety training, qualification, or requalification.  
(a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.

C440.1, Attach 2, paragraph 15.d.(1)  
d. Implement safety provisions related to firearms safety training, qualification, or requalification.  
(1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.

FS\_2.3<part of>  
During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.

Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.  
Eliminate "how to" guidance from the Order.

Training records for personnel

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
	<p>O440.1, Attach 1, paragraph 3.a.(4)(c)  (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.</p>	<p>C440.1, Attach 2, paragraph 15.d.(3)  (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.</p>	<p>authorized to carry firearms shall be available for review by appropriate safety and security personnel.</p> <p>All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.</p> <p>Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.</p> <p>All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.</p>	
<p>5480_16A.Requ.[CHAPI].1.d.  d. All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.</p>	<p>O440.1, Attach 1, paragraph 3.a.(2)  (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>C440.1, Attach 2, paragraph 15.b.  b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>FS_2.3&lt;part of&gt;  During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.</p> <p>Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.</p> <p>All firearms training, qualification,</p>	<p>No significant change. Equivalent language in the new order and technical standard.</p>

requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.

Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.

5480\_16A.Requ.[CHAPI].1.e.  
e. Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

O440.1, Attach 1, paragraph 3.a.(4)(d)  
(d) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.

C440.1, Attach 2, paragraph 15.d.(4)  
(4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.

FS\_2.3<part of>  
During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.

No significant change. Equivalent language in the new order and technical standard.

Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.

All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific

and personnel shall not conduct activities for which they have not been certified.

Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.

5480\_16A.Glue.[CHAPI].1.f.(1)(2)(3)(4)  
 f. Standard Operating Procedures.  
 (1) All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.  
 (2) All standard operating procedures shall be reviewed and approved by appropriate contractor safety and protective force personnel at least annually or more frequently if significant revisions are made in the training program. Field Element safety and protective force personnel review and approve standard operating procedures initially and whenever significant changes are made.  
 (3) All firearms training and qualification shall require instructor- to-shooter ratios

O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  
 3. FIREARMS SAFETY.  
 a. Requirements.  
 (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (b) activities such as loading, unloading, and exchanging firearms;  
 (c) use of pyrotechnics and/or explosive projectiles;  
 (d) handling misfires and duds;  
 (e) live fire operations; and  
 (f) training and exercises using engagement simulation systems

C440.1, Attach 2, paragraph 15.a.(1)-(6)  
 15. FIREARMS SAFETY.  
 a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (2) activities such as loading, unloading, and exchanging firearms;  
 (3) use of pyrotechnics and/or explosive projectiles;  
 (4) handling misfires and duds;  
 (5) live fire operations; and  
 (6) training and exercises using engagement simulation systems.

FS\_2.3<part of>  
 All standard operating procedures shall be reviewed and approved by appropriate contractor safety and protective force personnel at least annually or more frequently if significant revisions are made in the training program. Field Element safety and protective security personnel review and approve standard operating procedures initially and whenever significant changes are made.

Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.  
 Eliminate "how to" guidance from the Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>with no more than the following:</p> <p>(a) One-to-one for any automatic fire training (e.g., submachine gun, rifle, or machine gun). Other one-to-one ratios include the use of any firearm that has an explosive projectile (e.g., M79, M203, M72, 3.5-inch rocket launcher), or any advanced course of fire with any firearm involving movement of the shooter other than straight down range, or a fan of fire greater than 10 degrees. An exception shall be for special response team (SRT) courses developed by the CTA and approved by Office of Safeguards and Security and conducted by the CTA or by sites certified to conduct CTA SRT courses. The ratio for these excepted courses shall be no greater than one-to-four.</p> <p>(b) One-to-four for requalification with a submachine gun, rifle, or machine gun in automatic mode using controlled bursts of fire and for practice or training for personnel who have qualified on at least one automatic course of fire in the DOE Firearms Qualification Manual.</p> <p>(c) One-to-eight when firing in the semiautomatic mode (e.g., automatic rifle in semiautomatic mode, shotgun, semiautomatic rifle, and pistols), except during night firing and initial training where the instructor-to- shooter ratio shall be no greater than one-to-four. When using an indoor range, whether daylight or simulated night fire, the instructor-to- shooter ratio shall be one-to-five.</p> <p>(4) A range safety officer or an instructor with specific delineated responsibilities for range safety (e.g., monitor the safety performance of the shooters as well as overall safety of the firing range) shall be present during all firearms training activities: qualification, or requalification activities.</p> <p>(a) When the shooter-to-instructor ratio requires only one instructor on the firing line, he or she shall be the lead instructor and may be assigned range safety responsibilities if approved by the range master.</p> <p>(b) When the shooter-to-instructor ratio requires two or more instructors on the firing line, there shall be a lead instructor presiding over the firing activities (i.e., "calling the line") who will not be assigned additional instructional duties or be include in the shooter-to- instructor ratio, but may be assigned range safety responsibilities. To accomplished these activities, the lead</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(d)</p> <p>(d) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>C440.1, Attach 2, paragraph 15.d.(4)</p> <p>(4) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>FS_2.3&lt;part of&gt;</p> <p>All firearms training, qualification and re-qualifications shall require instructor-to-shooter ratios with no more than the following:</p> <p>(a) One-to-one for any automatic fire training (e.g., submachine gun, rifle, or machine gun). Other one-to-one ratios include the use of any firearm that has an explosive projectile (e.g., M79, M203, M72, 3.5-inch rocket launcher), or any advanced course of fire with any firearm involving movement of the shooter other than straight down range, or a fan of fire greater than 10 de-grees. An exception shall be for special response team (SRT) courses developed by the CTA and approved by Office of Security Affairs and conducted by the CTA or by sites certified to conduct CTA SRT courses. The ratio for these excepted courses shall be no greater than one-to-four.</p> <p>(b) One-to-four for re-qualification with a submachine gun, rifle, or machine gun in automatic mode using controlled bursts of fire and for practice or training for personnel who have qualified in at least one automatic course of fire in the DOE Firearms Qualification Manual.</p> <p>(c) One-to-eight when firing in the semiautomatic mode (e.g., automatic rifle in semiautomatic mode, shotgun, semiautomatic rifle, and handgun), except during night firing and initial raining where the instructor-to-shooter ratio shall be no greater than one-to-four. When using an indoor range, whether daylight or simulated night fire, the instructor-to-shooter ratio shall be on greater than one-to-five.</p>	

instructor may be positioned either behind the firing line, in a booth, or in a tower whichever location provides the greatest safety and control.

FS\_2.3<part of>  
A range safety officer or an instructor with specific delineated responsibilities for range safety (e.g., monitoring the safety performance of the shooters as well as overall safety of the firing range) shall be present during all firearms training activities, qualification, or re-qualification activities.

When the shooter-to-instructor ratio requires only one instructor on the firing line, he or she shall be the lead instructor and may be assigned range safety responsibilities if approved by the range master.

When the shooter-to-instructor ratio requires two or more instructors on the firing line, there shall be a lead instructor presiding over the firing activities (i.e., "calling the line") who will not be assigned additional instructional duties or be included in the shooter-to-instructor ratio, but may be assigned range safety responsibilities. To accomplish these activities, the lead instructor may be positioned either behind the firing line, in a booth, or in a tower, whichever location provides the greatest safety and control.

All personnel involved in firearms training shall be required to comply with the personal protective equipment rules in effect at each training location. In particular, eye and hearing protective equipment shall be worn.

5480\_16A.Requ.[CHAPI].1.g.  
g. All personnel involved in firearms training shall be required to comply with the personal protective equipment rules in effect at each training location. In particular, eye and hearing protective equipment shall be worn.

O440.1, Attach 1, paragraph 3.a.(1)(a) (f)  
3. FIREARMS SAFETY.  
a. Requirements.  
(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
(b) activities such as loading,

C440.1, Attach 2, paragraph 15.a.(1)-(6)  
15. FIREARMS SAFETY.  
a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
(2) activities such as loading, unloading, and exchanging firearms;

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A range safety officer or an instructor with specific delineated responsibilities for range safety (e.g., monitoring the safety performance of the shooters as well as overall safety of the firing range) shall be present during all firearms training activities, qualification, or re-qualification activities.  
  
When the shooter-to-instructor ratio requires only one instructor on the firing line, he or she shall be the lead instructor and may be assigned range safety responsibilities if approved by

No significant change. Equivalent language in the new order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and  (f) training and exercises using engagement simulation systems</p>	<p>(3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.</p>	<p>the range master.</p> <p>When the shooter-to-instructor ratio requires two or more instructors on the firing line, there shall be a lead instructor presiding over the firing activities (i.e., "calling the line") who will not be assigned additional instructional duties or be included in the shooter-to-instructor ratio, but may be assigned range safety responsibilities. To accomplish these activities, the lead instructor may be positioned either behind the firing line, in a booth, or in a tower, whichever location provides the greatest safety and control.</p> <p>All personnel involved in firearms training shall be required to comply with the personal protective equipment rules in effect at each training location. In particular, eye and hearing protective equipment shall be worn.</p>	<p>No significant change. Equivalent language in the new order and technical standard. Detailed requirements contained in DOE O 231.1.</p>		
<p>5480_16A.Glue.[CHAPI].1.h.  h. Any injury/illness sustained during firearms training, regardless of degree, shall be reported immediately to an instructor. The instructor shall follow the established local operating procedures for accident reporting and injury treatment.</p>	<p>O440.1 paragraph 4.i.(4)  (4) Report and investigate accidents, injuries, and illnesses (reference DOE O 231.1, ENVIRONMENT, SAFETY AND HEALTH REPORTING; DOE O 232.1, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION; and DOE O 225.1, ACCIDENT INVESTIGATIONS) and analyze related data for trends and lessons learned (reference DOE O 210.1, PERFORMANCE INDICATORS PROGRAM AND ANALYSIS OF OPERATIONS).</p>	<p>C440.1, Attach 2, paragraph 9.d.  d. Report and investigate accidents, injuries, and illnesses, and analyze related data for trends and lessons learned (reference DOE O 210.1).</p>	<p>FS_2.3&lt;part of&gt;  Any injury/illness sustained during firearms training, regardless of degree shall be reported immediately to an instructor. The instructor shall follow the established local operating procedures for accident reporting and injury treatment.</p>	<p>No significant change. Equivalent language in the new order and technical standard. Detailed requirements contained in DOE O 231.1.</p>	
<p>5480_16A.Requ.[CHAPI].1.i.  i. Prior to the implementation of any new training or evaluation method involving firearms tactical operations, a risk analysis report shall be completed.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(e)  (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	<p>C440.1, Attach 2, paragraph 15.d.(5)  (5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	<p>FS_2.3&lt;part of&gt;  Prior to the implementation of any new training or evaluation method involving firearms tactical operations, a risk analysis report shall be completed.</p>	<p>No significant change. Equivalent language in the new order and technical standard.</p>	



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
5480_16A.Requ.[CHAPI].1.j. j. No person shall be issued a firearm if there is any indication that he or she has a deteriorated mental or physical condition which could have a dangerous consequence while conducting training or work activities with firearms.			FS_2.3<part of> No person shall be issued a firearm if there is any indication that he or she has a deteriorated mental or physical condition which could have a dangerous consequence while conducting training or work activities with firearms.	Deleted from the Order.	Equivalent guidance in the technical standard.
5480_16A.Glue.[CHAPI].2. 2. BASIC TRAINING. a. Basic firearms safety training and demonstrated technical knowledge and practical proficiency shall be required before firearms are permitted to be carried on duty. Safety training shall be repeated at least semi-annually, at which time safety proficiency must be demonstrated in order to retain firearm carrying status.	O440.1, Attach 1, paragraph 3.a.(4)(a) (4) Implement safety provisions related to firearms safety training, qualification, or requalification. (a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms. O440.1, Attach 1, paragraph 3.a.(4)(c) (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.	C440.1, Attach 2, paragraph 15.d.(1) d. Implement safety provisions related to firearms safety training, qualification, or requalification. (1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms. C440.1, Attach 2, paragraph 15.d.(3) (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.	FS_2.2<part of> 2.2 TRAINING Firearms safety training and demonstrated technical knowledge and practical proficiency shall be required before firearms are permitted to be carried on duty. Safety training shall be repeated at least semi-annually, at which time safety proficiency must be demonstrated in order to retain firearm carrying status.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Glue.[CHAPI].2.b. b. Basic firearms training shall be conducted at a site approved by the Manager of the Operations Office. Sites not falling under any Operations Office shall be approved by the appropriate Departmental official.	O440.1, Attach 1, paragraph 3.b.(1)(a) (b) b. Responsibilities (1) Operations Office Managers. (a) Ensure effective implementation and control of the firearms safety program. (b) Approve the location and use of the contractor's live fire ranges. O440.1, Attach 1, paragraph 3.b.(2) (2) Office of Security Affairs. Approve the location of live fire ranges for the Safeguards and Security Central Training Academy.	C440.1, Attach 2, paragraph 15.d.(7) (7) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range. Request approval from the DOE Operations Office for the location and use of a live fire range.	FS_2.2<part of> Firearms training shall be conducted at a site approved by the Manager of the Operations Office. Sites not falling under any Operations Office shall be approved by the appropriate Departmental official.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Glue.[CHAPI].2.c. c. Basic firearms safety training shall include, at a minimum, the following: (1) General firearms safety orientation; (2) Instructions on the capabilities of firearms and ammunition and the implications thereof; (3) Firearms safety information for each type of firearm required by duty assignment; (4) Practice with an unloaded firearm in the teaching environment; (5) Range safety procedures and	O440.1, Attach 1, paragraph 3.a.(1)(a) (f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:	C440.1, Attach 2, paragraph 15.a.(1)-(6) (6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning,	FS_2.2<part of> Firearms safety training shall include, at a minimum, the following: general firearms safety orientation; instructions on the capabilities of firearms and ammunition and the implications thereof; firearms safety information for each type of firearm required by duty assignment; practice with an unloaded firearm in the teaching environment; range safety procedures and demonstration of safe firing technique;	No significant change.	Equivalent language in the new order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>demonstration of safe firing techniques on the range;</p> <p>(6) Dry firing techniques and hazards associated with dry firing;</p> <p>(7) Handling of misfires;</p> <p>(8) As applicable, instructions on the hazards associated with the impact of bullets and other projectiles on nuclear explosives, nuclear weapons, explosives, and other possible items that could result in a significant release of energy or toxic substances;</p> <p>(9) Detailed procedures on clearing, handling of malfunctions, inspecting, cleaning, loading, unloading, and other specific tasks related to each firearm for which the student receives training. This may include instruction and practice in assembly/disassembly but shall not include repair, modification, or replacement of parts and,</p> <p>(10) Details of firearms accidents and how they could have been prevented.</p> <p>(11) Four General Firearms Safety Rules;</p> <p>(a) All firearms are always loaded,</p> <p>(b) Never point a firearm at anything you are not willing to destroy,</p> <p>(c) Keep your finger off the trigger until your sights are on the target, and</p> <p>(d) Be sure of your target.</p>	<p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(b)</p> <p>(b) Personnel authorized to carry firearms shall have access to instruction manuals for each type of firearm with which they are armed while on duty.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(d)</p> <p>(d) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p> <p>C440.1, Attach 2, paragraph 15.d.(d)</p> <p>(2) Personnel authorized to carry firearms shall have access to instruction manuals for each type of duty firearms with which they are armed while on duty.</p> <p>C440.1, Attach 2, paragraph 15.d.(4)</p> <p>(4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>on the range; dry firing techniques and hazards associated with dry firing; handling of misfires; as applicable, instructions on the hazards associated with the impact of bullets and other projectiles on nuclear explosives, nuclear weapons, explosives, and other possible items that could result in a significant release of energy or toxic substances; detailed procedures on clearing, handling of malfunctions, inspecting, cleaning, loading, unloading, and other specific tasks related to each firearm for which the student receives training. This may include instruction and practice in assembly/disassembly but shall not include repair, modification, or replacement of parts; and, details of firearms accidents and how they could have been prevented.</p>	
<p>5480_16A.Requ.[CHAPI].3.a, 3.b.</p> <p>3. ADVANCED TRAINING</p> <p>a. The firearms safety portions of the advanced firearms training and of the SR training shall follow the same rules as those listed on page I-3, paragraph 2. Also:</p> <p>(1) Lesson plans shall include a safety briefing for all participants and authorized observers. The briefing must be conducted by personnel experienced in performing exercises and knowledgeable about the firearms to be used. Lesson plans shall be made available to all students (e.g., through a library).</p> <p>(2) Lesson plans must be written and include safety requirements for any course of fire.</p> <p>b. During advanced firearms training, eye and hearing protection equipment shall be worn.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(d)</p> <p>(d) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>C440.1, Attach 2, paragraph 15.d.(4)</p> <p>(4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>FS_2.3&lt;part of&gt;</p> <p>During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.</p> <p>Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.</p> <p>All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Safeguards and Security Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.</p>	<p>No significant change. Equivalent language in the new order and technical standard.</p>
			<p>Lesson plans for all firearms training</p>	

shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Safeguards and Security Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security. Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.

<p>5480_16A.Requ.[CHAPI].4.a. 4. RANGE OPERATIONS AND PROCEDURES. a. Specific site range safety rules and regulations shall be developed and implemented by the organization designated to be responsible for operating a live-fire range. Such rules and regulations shall be formal, provide a disciplined approach to range operations, and include rules and regulations on pre- and post-firing range activities. The Central Training Academy shall provide training on developing basic policy and guidelines for range operations.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(e) (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests. O440.1, Attach 1, paragraph 3.a.(4)(f) (f) Site-specific firing range safety procedures shall be conspicuously posted at all ranges. O440.1, Attach 1, paragraph 3.a.(4)(g) (g) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range</p>	<p>C440.1, Attach 2, paragraph 15.d.(5) (5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests. C440.1, Attach 2, paragraph 15.d.(6) (6) Site-specific firing range safety procedures shall be conspicuously posted at all ranges. C440.1, Attach 2, paragraph 15.d.(7) (7) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range. Request approval from the DOE Operations Office for the location and use of a live fire range.</p>	<p>FS_2.4&lt;part of&gt; 2.4 Range OPERATIONS AND PROCEDURES Specific site range safety rules and regulations shall be developed and implemented by the organization designated to be responsible for operating a live-fire range. Such rules and regulations shall be formal, provide a disciplined approach to range operations, and include rules and regulations on pre- and post-firing range activities. The Safeguards and Security Central Training Academy shall provide training on developing basic policy and guidelines for range operations.</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and technical standard.</p>
<p>5480_16A.Glue.[CHAPI].4.b. b. A risk analysis or a Safety Analysis Report (DOE 5481.1B) shall be prepared for the facilities and the operations of each live fire range. This report shall be reviewed by</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(e) (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire</p>	<p>C440.1, Attach 2, paragraph 15.d.(5) (5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A</p>	<p>FS_2.4&lt;part of&gt; A safety analysis shall be prepared for the facilities and the operations of each live-fire range. This analysis shall be reviewed by the contractor</p>	<p>No significant change.</p>	<p>Equivalent language in the new order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
the contractor safety staff, the Operations Office safety staff and approved by the Operations Office Manager, or as appropriate, the Office of Safeguards and Security, Headquarters.	range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.	safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.	safety staff, reviewed by the Operations Office safety staff, and approved by the Operations Office Manager, or as appropriate, Office of Safeguards and Security, Headquarters. In addition, each live-fire range shall be approved by the Operations Office Manager.		
<p>5480_16A.Glue.[CHAPI].4.c.  c. Specific site range safety rules and regulations shall be conspicuously posted at all DOE-controlled live-fire ranges and as a minimum shall contain the following elements:  (1) While on the range, it is mandatory to use approved eye and sound barrier-type ear protection and other personal protective equipment as required by the range safety officer.  (2) Unsafe conditions shall be immediately reported to the range safety officer or the range master.  (3) Other than duty equipment, only firearms and ammunition scheduled for use on the firing line shall be brought to the line. An exception is when an on-duty shooter is qualifying with a firearm other than a handgun.  (4) A firearm shall only be exchanged with another shooter at the direction of the instructor who, prior to the exchange, shall verify that the cylinder or action of the firearm is open and that the chamber is empty. If a firearm is exchanged, both parties shall check it for safety (i.e., verify that the chamber is empty, and depending on the type of firearm, that either (a) safety is on or (b) the selector lever is on safe ).  (5) All firearms shall be carried in the manner specified in the approved instruction manual (see page I-1, paragraph 1a).  (6) Firearms shall not be left unattended or unsecured.  (7) Fingers shall not be placed on a firearm's trigger or in the trigger guard until the firearm is pointed at the target.  (8) Firearm loading and firing shall commence only on command.  (9) Shooters shall not be permitted to talk while on the firing line during a firing exercise, except in reply to an instructor as a part of the exercise or to shout "cease fire" in an unsafe situation.  (10) Until the firing line has been declared safe by the firearms instructor, shooters</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(e)  (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.  O440.1, Attach 1, paragraph 3.a.(4)(f)  (f) Site-specific firing range safety procedures shall be conspicuously posted at all ranges.</p>	<p>C440.1, Attach 2, paragraph 15.d.(5)  (5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.  C440.1, Attach 2, paragraph 15.d.(6)  (6) Site-specific firing range safety procedures shall be conspicuously posted at all ranges.</p>	<p>FS_2.4&lt;part of&gt;  Specific site range safety rules and regulations shall be conspicuously posted at all DOE-controlled live-fire ranges and as a minimum shall contain the following elements:</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>shall not bend over or move over the line.</p> <p>(11) All shooters shall be trained and instructed on what constitutes an unsafe condition and to shout "cease fire" when such a condition is observed.</p> <p>(12) Smoking, eating, or drinking shall be prohibited while on the firing line.</p> <p>(13) Alcohol beverages and drugs are prohibited on DOE firing ranges. If the firearms staff detects the presence of alcohol or drugs on a shooter or if a shooter is believed to be under the influence of either, the firearms staff shall remove the shooter from the range and report the incident to the appropriate DOE official; appropriate follow-up action shall be taken in accordance with pre-established directives. Shooters taking medication shall report this fact to the staff before reporting to the firing line. The staff shall be responsible for determining whether a shooter is safe to use the range. A medical doctor shall be consulted by the staff if necessary.</p> <p>(14) When automatic or semiautomatic firearms are being fired, shooters shall take precautions to prevent hot spent cartridge and gunshot residues from getting inside their clothing. Spent cartridge defectors, when available and practical, shall be required for all shooters (none required if determined by risk analysis that shooters are protected by partitions or by distance).</p> <p>(15) When a training session is completed, each firearm shall be physically examined by the shooter and by a designated range safety officer or qualified firearms instructor to ensure that it is unloaded and in safe (clear) condition before leaving the range. If the shooter is using a duty firearm on the range, he or she may reload that firearm at the range if returning directly to duty.</p> <p>(16) Shooters shall collect unexpended ammunition and return it to a range officer/instructor to ensure its proper accounting and disposition.</p> <p>(17) Shooters shall collect spent cartridge for proper disposal, checking for live rounds.</p> <p>(18) Shooters shall ensure that their firearms are properly cleaned, stored, and secured after firing. Cleaning materials shall be properly stored or disposed.</p> <p>(19) While a firearm is being cleaned, live ammunition shall not be allowed in the cleaning area.</p>			<p>FS_2.4&lt;part of&gt;</p> <p>(a) While on the range, it is mandatory to use approved eye and sound barrier type ear protection and other personal protective equipment as required by the range safety officer.</p> <p>(b) Unsafe conditions shall be immediately reported to the range safety officer or the range master.</p> <p>(c) Other than duty equipment, only firearms and ammunition scheduled for use on the firing line shall be brought to the line. An exception is when an on-duty shooter is qualifying with a firearm other than a handgun.</p> <p>(d) A firearm shall be exchanged with another shooter only at the direction of the instructor who, prior to the exchange, shall verify that the cylinder or action of the firearm is open and that the chamber is empty. If a firearm is exchanged, both parties shall check it for safety (i.e., verify that the chamber is empty, and depending on the type of firearm, that either the safety is "on" or the selector lever is in "safe").</p> <p>(e) All firearms shall be carried in the manner specified in the approved instruction manual.</p> <p>(f) Firearms shall not be left unattended or unsecured.</p> <p>(g) Fingers shall not be placed on a firearm's trigger or in the trigger guard until the firearm is pointed at the target.</p> <p>(h) Firearm loading and firing shall commence only on command.</p> <p>(i) Shooters shall not be permitted to talk while on the firing line during a firing exercise, except in reply to an instructor as a part of the exercise or to shout "cease fire" in an unsafe situation.</p> <p>(j) Until the firing line has been declared safe by the firearms instructor, shooters shall not bend over or move over the line.</p>	

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(k) All shooters shall be trained and instructed on what constitutes an unsafe condition and to shout "cease fire" when such a condition is observed.

(l) Smoking, eating, or drinking shall be prohibited while on the firing range

(m) Alcohol beverages and drugs are prohibited on DOE firing ranges. If the firearms staff detects the presence of alcohol or drugs on a shooter or if a shooter is believed to be under the influence of either, the firearms staff shall remove the shooter from the range and report the incident to the appropriate DOE official; appropriate follow-up action shall be taken in accordance with pre-established directives. Shooters taking medication shall report this fact to the staff before reporting to the firing line. The staff shall be responsible for determining whether it is safe to allow each shooter to use the range. A medical doctor shall be consulted by the staff if necessary.

(n) When an automatic or semiautomatic firearm is being fired, shooters shall take precautions to prevent hot spent cartridge and gunshot residues from getting inside their clothing. Spent cartridge defectors, when available and practical, shall be required for all shooters unless it is determined by risk analysis that shooters are protected by partitions or by distance.

(o) When a training session is completed, each firearm shall be physically examined by the shooter and by a designated range safety officer or qualified firearms instructor to ensure that it is unloaded and in safe (clear) condition before leaving the range. If the shooter is using a duty firearm on the range, he or she may reload that firearm at the range if returning directly to duty.

(p) Shooters shall collect unexpended ammunition and return it to a range officer/instructor to ensure its proper

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5480_16A.Requ.[CHAPI].4.d. d. Before firing commences, a safety briefing for all participants shall be conducted that will include the basic range safety rules, the capabilities of the firearms to be used, and the safe operating procedures for the course of fire to be undertaken.	O440.1, Attach 1, paragraph 3.a.(4)(d) (d) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.	C440.1, Attach 2, paragraph 15.d.(4) (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.	accounting and disposition.  (q) Shooters shall collect spent cartridge for proper disposal, checking for live rounds.  (r) Shooters shall ensure that their firearms are properly cleaned, stored, and secured after firing. Cleaning materials shall be properly stored or disposed of.  (s) While a firearm is being cleaned, live ammunition shall not be allowed in the cleaning area.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Requ.[CHAPI].4.e. e. Dry firing shall only be conducted on a live-fire range or in an approved area, and then under the direct supervision of a firearms instructor.	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.	FS_2.4<part of> Dry firing shall only be conducted on a live-fire range or in an approved area, and then under the direct supervision of a firearms instructor.	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.
5480_16A.Glue.[CHAPI].4.f. f. A scarlet streamer shall be prominently displayed at outdoor live-fire ranges at all	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY.	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY.	FS_2.4<part of> A scarlet streamer shall be prominently displayed at outdoor live-	Captured under performance-based requirement. Specific	Eliminate "how to" guidance from the Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
times during daylight firing. The streamer shall be replaced with blinking or pulsating red lights for nighttime firing that shall be activated before firing exercises actually begin. These day and night range warning indicators must be visible to aircraft.	<p>a. Requirements.</p> <p>(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	fire ranges at all times during daylight firing. The streamer shall be replaced with blinking or pulsating red lights for night-time firing that shall be activated before firing exercises actually begin. These day and night range warning indicators must be visible to aircraft.	implementation guidance provided in the technical standard.	
5480_16A.Glue.[CHAPI].4.g. For outdoor ranges where it is credible that live-fire operations may affect aircraft operations, the contractor aircraft operation center, the Federal Aviation Administration, or another authorized aviation control center shall be notified of live-fire range schedules and activities. Schedules shall be coordinated with communications, medical, and fire department elements.	<p>O440.1 paragraph 5.a.(1)-(6)</p> <p>5. RESPONSIBILITIES.</p> <p>a. Assistant Secretaries.</p> <p>(1) Ensure that program-specific worker protection goals and objectives are developed and resources are provided.</p> <p>(2) Ensure that worker protection policies and requirements are effectively implemented.</p> <p>(3) Develop or participate in recognition programs that encourage the improvement of worker protection programs.</p> <p>(4) When contractors report directly to the Cognizant Secretarial Officer or an Assistant Secretary, ensure that the responsibilities of paragraph 5b (and applicable responsibilities in the specific functional areas contained in Attachment 1) and the requirements of the CRD (Attachment 2) are implemented.</p> <p>(5) Assist in the resolution of significant worker protection issues and the improvement in cost effectiveness and efficiency of worker protection programs.</p> <p>(6) Review and be approving authority for exemptions to requirements contained in this Order. Requests for exemptions to all requirements except those exemption related to OSHA standards imposed</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)</p> <p>15. FIREARMS SAFETY.</p> <p>a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p> <p>C440.1, Attach 2, paragraph 15.d.(5)</p> <p>(5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities an operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	FS_2.4<part of> For outdoor ranges where it is credible that live-fire operations may affect aircraft operations, the contractor aircraft operations center, the Federal Aviation Administration, or another authorized aviation control center shall be notified of live-fire range schedules and activities. Schedules shall be coordinated with communications, medical, and fire department elements	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.



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	<p>on contractors by this Order may be delegated.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(e) (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(g) (g) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range</p>	<p>C440.1, Attach 2, paragraph 15.d.(7) (7) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range. Request approval from the DOE Operations Office for the location and use of a live fire range.</p>			
<p>5480_16A.Glue.[CHAPI].4.h. h. If emergency medical technician personnel or professional medical personnel are not available at a live-fire range, all firearms instructors shall be cardiopulmonary resuscitation (CPR)/first aid trained and qualified and retrained annually. CPR/first aid training shall be from instructors certified by the American Red Cross or the American Heart Association. Specific training on the handling of gunshot wounds shall be provided.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.</p>	<p>FS_2.4&lt;part of&gt; If emergency medical technician personnel or professional medical personnel are not available at a live-fire range, all firearms instructors shall be cardiopulmonary resuscitation (CPR)/first-aid trained and qualified and retrained annually. CPR/first-aid training shall be administered by instructors certified by the American Red Cross or the American Heart Association.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Requ.[CHAPI].4.i. i. An approved plan shall be required for quickly handling, treating, and evacuating injured personnel through the use of air ambulance, on-scene wheeled ambulance, and the like. Emergency response drills shall be carried out at least annually to test personnel preparedness in implementing the plan. Medical equipment shall be available at a live-fire range as determined by the cognizant site physician or other</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures</p>	<p>FS_2.4&lt;part of&gt; An approved plan shall be required for quickly handling, treating, and evacuating injured personnel through the use of air ambulance, on-scene wheeled ambulance, and the like. Emergency response drills shall be carried out at least annually to test personnel preparedness in implementing the plan. Medical equipment shall be available at a live-</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
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authorized personnel.	<p>must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p> <p>C440.1, Attach 2, paragraph 18.h.(1)</p> <p>h. Emergency and Disaster Preparedness.</p> <p>(1) The physician responsible for the delivery of medical services shall be responsible for the medical portion of the site emergency and disaster plan.</p> <p>C440.1, Attach 2, paragraph 18.h.(2)</p> <p>(2) The plan shall be integrated with the overall site plan and with the surrounding community emergency and disaster plan.</p>	<p>fire range. The exact equipment shall be de-termined by the cognizant site physician or other authorized personnel.</p>		
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<p>5480_16A.Glue.[CHAPI].4.j. j. Airborne lead concentrations at all firing ranges shall be measured semiannually and the measurement technique shall comply with Occupational Safety and Health Administration (OSHA) lead standard, 29 CFR 1910.1025 as required by DOE 5480.4. The medical surveillance provisions of the lead standard shall be established and implemented, when indications are that employees are or may be exposed to airborne lead concentrations that exceed the action level for 30 days per year.</p>	<p>O440.1 paragraph 4.i.(2)</p> <p>(2) Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling), biological monitoring, and observation. Monitoring results shall be recorded. Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.</p>	<p>C440.1, Attach 2, paragraph 9.b.</p> <p>b. Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling); biological monitoring; and observation. Monitoring results shall be recorded. Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.</p>	<p>FS_2.4&lt;part of&gt; Airborne lead concentrations at all firing ranges shall be measured semiannually and the measurement technique shall comply with Occupational Safety and Health Administration (OSHA) lead standard, 29 CFR 1910.1025. The medical surveillance provisions of the lead standard shall be established and implemented, when indications are that employees are or may be exposed to airborne lead concentrations that exceed the action level for 30 days per year.</p> <p>WP_6&lt;part of&gt; It should be noted that DOE Elements are required to comply with OSHA standards in accordance with 29 CFR 1960.</p>	<p>No significant change.</p>	<p>Captured under top-level exposure assessment requirement. Specific requirements for worker protection from occupational lead exposures contained in 29 CFR 1910.1025. 29 CFR 1910.1025 is mandated for federal employees under 29 CFR 1960. Additional guidance contained in the technical standard.</p>
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C440.1, Attach 2, paragraph 12.a.-i.  
 12. Comply with the following worker protection requirements.

- a. Title 29 of the Code of Federal Regulations (CFR), Part 1910, "Occupational Safety and Health Standards."
- b. Title 29 CFR, Part 1915, "Shipyard Employment."
- c. Title 29 CFR, Part 1917, "Marine Terminals."
- d. Title 29 CFR, Part 1918, "Safety and Health Regulations for Longshoring."
- e. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."
- f. Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture."
- g. American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" (most recent edition, as specified in the contract), when ACGIH Threshold Limit Values (TLVs) are lower (more protective) than Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits. [When ACGIH TLVs are used as exposure limits, DOE operations shall nonetheless comply with the other provisions of any applicable OSHA-expanded health standard.] The TLVs for exposures to laser emissions in the ACGIH Indices are excluded from this requirement.
- h. American National Standards Institute Z136.1, Safe Use of Lasers. [Only the exposure limits and technical requirements apply. Programmatic components of American National Standards Institute Z136.1 do not apply.]
- i. American National Standards Institute Z88.2, Practices for Respiratory Protection.

Requirements for specific functional areas are contained in paragraphs 13 through 20 and only apply if the contract is involved in these activities.

5480\_16A.Requ.[CHAPI].4.k.  
 k. Any employee involved in regular firearr

C440.1, Attach 2, paragraph 12.a.-i.  
 12. Comply with the following worker

FS\_2.4<part of>  
 Any employee involved in regular

Specific requirement  
 deleted from the Requirement is  
 contained in 29

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
training (e.g., instructors, security police officers) shall be entered into a Hearing Conservation Program.		<p>protection requirements.</p> <p>a. Title 29 of the Code of Federal Regulations (CFR), Part 1910, "Occupational Safety and Health Standards."</p> <p>b. Title 29 CFR, Part 1915, "Shipyard Employment."</p> <p>c. Title 29 CFR, Part 1917, "Marine Terminals."</p> <p>d. Title 29 CFR, Part 1918, "Safety and Health Regulations for Longshoring."</p> <p>e. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."</p> <p>f. Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture."</p> <p>g. American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" (most recent edition, as specified in the contract), when ACGIH Threshold Limit Values (TLVs) are lower (more protective) than Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits. [When ACGIH TLVs are used as exposure limits, DOE operations shall nonetheless comply with the other provisions of any applicable OSHA-expanded health standard.] The TLVs for exposures to laser emissions in the ACGIH Indices are excluded from this requirement.</p> <p>h. American National Standards Institute Z136.1, Safe Use of Lasers. [Only the exposure limits and technical requirements apply. Programmatic components of American National Standards Institute Z136.1 do not apply.]</p> <p>i. American National Standards Institute Z88.2, Practices for Respiratory Protection.</p> <p>Requirements for specific functional areas are contained in paragraphs 13 through 20 and only apply if the contract is involved in these activities.</p>	<p>firearms training (e.g., instructors, security police officers) shall be entered into a Hearing Conservation Program.</p> <p>WP_6&lt;part of&gt;</p> <p>It should be noted that DOE Elements are required to comply with OSHA standards in accordance with 29 CFR 1960.</p>	Order.	CFR 1910.95 which is mandated for federal employees under 29 CFR 1960 and for contractors under the CRD. Additional guidance contained in the technical standard.
5480_16A.Requ.[CHAPI].4.l. I. A communications system with backup (i.e., telephone and/or two way radio) shall be available at each live-fire range.	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements.	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety	FS_2.4<part of> A communications system with backup (i.e., telephone and/or two-way radio) shall be available at each	Captured under performance-based requirement. Specific implementation	Eliminate "how to" guidance from the requirement. Specific Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	live-fire range.	guidance provided in the technical standard.	
<p>5480_16A.Glue.[CHAPI].4.m.-o. m. Shooter-to-target distances for steel targets shall be greater than 21 feet (6.41 meters), except for shooters firing shotgun slugs where the shooter-to-target distances shall be greater than 150 feet (45.75 meters). Firearms shall not be fired at steel targets unless the steel is thick enough to prevent dimpling.</p> <p>n. The design and method of deployment of steel targets shall be approved by the cognizant DOE official in consultation with the Central Training Academy.</p> <p>o. Steel targets shall be examined prior to every use. Targets that bow in excess of 1 degree and/or contain dimples in excess of one-sixteenth inch in depth shall be removed from use.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)</p> <p>3. FIREARMS SAFETY.</p> <p>a. Requirements.</p> <p>(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)</p> <p>15. FIREARMS SAFETY.</p> <p>a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	<p>FS_2.4&lt;part of&gt; Shooter-to-target distances for steel targets shall be greater than 21 feet (6.4 meters), except for shooters firing shotgun slugs, where the shooter-to-target distances shall be greater than 150 feet (45.8 meters). Firearms shall not be fired at steel targets unless the steel is thick enough to prevent dimpling.</p> <p>The design and method of deployment of steel targets shall be approved by the cognizant DOE official in consultation with the Safeguards and Security Central Training Academy.</p> <p>Steel targets shall be examined prior to every use. Targets that bow in excess of 10 degrees and/or contain dimples in excess of one-sixteenth inch (0.6mm) in depth shall be removed from use.</p>	Captured under performance-based implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the requirement. Specific Order.
<p>5480_16A.Requ.[CHAPI].4.p. p. Live-fire ranges shall be equipped with sufficient lighting to assure safe nighttime firing exercises.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(g)</p> <p>(g) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range</p>	<p>C440.1, Attach 2, paragraph 15.d.(7)</p> <p>(7) Live fire ranges shall be properly sited to protect personnel on the range, as well as personnel and property not associated with the range. Request approval from the DOE Operations Office for the location and use of a live fire range.</p>	<p>FS_2.4&lt;part of&gt; Live-fire ranges shall be equipped with sufficient lighting to assure safe nighttime firing exercises.</p> <p>Written and approved procedures for handling duds and misfires shall be provided at all live-fire ranges.</p>	Captured under performance-based implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the requirement. Specific Order.

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5480_16A.Requ.[CHAPI].4.q. q. Written and approved procedures for handling duds and misfires shall be provided at all live-fire ranges.	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.	FS_2.4<part of> Live-fire ranges shall be equipped with sufficient lighting to assure safe nighttime firing exercises.  Written and approved procedures for handling duds and misfires shall be provided at all live-fire ranges.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Requ.[CHAPI].5.a.(1) 5. FORCE-ON-FORCE EXERCISES a. Requirements (1) All exercises shall be governed by a plan that specifically addresses safety issues while remaining consistent with realistic training.	O440.1, Attach 1, paragraph 3.a.(4)(d) (d) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.	C440.1, Attach 2, paragraph 15.d.(4) (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.	FS_4.0<part of> 4 EXERCISES All exercises shall be governed by a plan that specifically addresses safety issues while remaining consistent with realistic training.	No significant change.	Equivalent language in the new order and technical standard.
5480_16A.Glue.[CHAPI].5.a.(2)-(3) (2) All exercises and related activities shall be regulated by controllers under the supervision of a senior controller who shall have final authority. The senior controller shall signal the beginning and end of the exercises and shall guide and supervise the other controllers. (3) The senior controller or his or her representative shall conduct pre-exercise briefings to discuss the exercise and to ensure a clear understanding of safety procedures and requirements. Post-exercise briefings of both participants and bystanders shall include a safety recap.	O440.1, Attach 1, paragraph 3.a.(2) (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program. Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.	C440.1, Attach 2, paragraph 15.b. b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program. Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.	FS_4.0<part of> All exercises and related activities shall be regulated by controllers under the supervision of a senior controller who shall have final authority. The senior controller shall signal the beginning and end of the exercises and shall guide and supervise the other controllers.  The senior controller or his or her representative shall conduct pre-exercise briefings to discuss the exercise and to ensure a clear understanding of safety procedures and requirements. Post-exercise briefings of both participants and bystanders shall include a safety recap.	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Glue.[CHAPI].5.a.(4)            (4) An exercise plan shall be approved by a safety representative designated by the manager of the organization responsible for the exercise. For each force-on-force training exercise, all participants, safety representatives, or controllers shall have the authority to stop an activity if in their opinion unsafe conditions develop.</p>	<p>O440.1 paragraph 4.g.            g. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and responsible manner.            O440.1, Attach 1, paragraph 3.a.(1)(a)(f)            3. FIREARMS SAFETY.            a. Requirements.            (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:            (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;            (b) activities such as loading, unloading, and exchanging firearms;            (c) use of pyrotechnics and/or explosive projectiles;            (d) handling misfires and duds;            (e) live fire operations; and            (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 7.            7. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and responsible manner.            C440.1, Attach 2, paragraph 15.a.(1)-(6)            15. FIREARMS SAFETY.            a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:            (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;            (2) activities such as loading, unloading, and exchanging firearms;            (3) use of pyrotechnics and/or explosive projectiles;            (4) handling misfires and duds;            (5) live fire operations; and            (6) training and exercises using engagement simulation systems.</p>	<p>FS_4.0&lt;part of&gt;            An exercise plan shall be approved by a safety representative designated by the manager of the organization responsible for the exercise. For each force-on-force training exercise, all participants, safety representatives, or controllers shall have the authority to stop an activity if in their opinion unsafe conditions develop.            WP_2.3            2.3 Stop Work Authority            DOE Order 440.1 requires that DOE elements and contractors implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards [paragraph 4.g and Attachment 2, paragraph 7].            The procedure should ensure that any stop work authority is exercised in a justifiable and responsible manner. A workers, supervisors, managers, and OSH professionals are responsible for being cognizant of the conditions in their workplaces and for being prepared to stop work when these conditions pose a serious threat to health or safety. When a "reasonable person" views the circumstances as having the potential to cause injury, serious impairment, or harmful health effects, a stop work order should be issued. Whenever workers see a need for a stop work order, they are expected to request one from their supervisors. Before a stop work order is issued, the person issuing it should ensure that the work stoppage itself will not negatively impact the health and safety of workers. DOE elements and contracts should have procedures in place that address stop work authority, and workers should be trained to those procedures.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Glue.[CHAPI].5.a.(5)-(6)            (5) Individuals with live firearms (shadow force) in an operational area where an exercise is to be conducted must be under the continuous and direct supervision of a controller who preferably is a protective force supervisor. This controller must be knowledgeable of security requirements to</p>	<p>O440.1, Attach 1, paragraph 3.a.(2)            (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program            Firearms instructors and armorers</p>	<p>C440.1, Attach 2, paragraph 15.b.            b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program            Firearms instructors and armorers</p>	<p>FS_4.0&lt;part of&gt;            Individuals with live firearms (shadow force) in an operational area where an exercise is to be conducted must be under the continuous and direct supervision of a controller who preferably is a protective force supervisor. This controller must be</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>ensure that the members of the shadow force understand their roles and do not become involved in the exercise. Management of facilities/buildings involved in exercises must be informed of exercises in advance. The cognizant DOE official, Federal Bureau of Investigation, and local law enforcement officials shall be notified of pending exercises as appropriate. (6) During exercises, in the event of an unscheduled security alarm, the exercise controller shall suspend the exercise and release the shadow force to respond to the alarm. The exercise will not resume until the members of the shadow force are out of the exercise area.</p>	<p>shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided. O440.1, Attach 1, paragraph 3.a.(4)(d) (d) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided. C440.1, Attach 2, paragraph 15.d.(4) (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>knowledgeable of security requirements to ensure that the members of the shadow force understand their roles and do not become involved in the exercise. Management of facilities/buildings involved in exercises must be informed of exercises in advance. The cognizant DOE official, Federal Bureau of Investigation, and local law enforcement officials shall be notified of pending exercises as appropriate.</p> <p>During exercises, in the event of an unscheduled security alarm, the exercise controller shall suspend the exercise and release the shadow force to respond to the alarm. The exercise will not resume until the members of the shadow force are out of the exercise area.</p>		
<p>5480_16A.Glue.[CHAPI].5.a.(7) (7) All firearms used in an exercise shall be inspected at the beginning of the exercise, clearly marked as exercise firearms, closely controlled, and kept separate from any firearms not associated with the exercise. The senior controller shall not permit issuance of blank ammunition and exercise firearms until all live firearms and live ammunition have been collected from participants and accounted for.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a) (f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.</p>	<p>FS_4.0&lt;part of&gt; All firearms used in an exercise shall be inspected at the beginning of the exercise, clearly marked as exercise firearms, closely controlled, and kept separate from any firearms not associated with the exercise. The senior controller shall not permit issuance of blank ammunition and exercise firearms until all live firearms and live ammunition have been collected from participants and accounted for.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Glue.[CHAPI].5.a.(8)-(9) (8) All firearms used in laser engagement simulation system (ESS) exercises shall: (a) Be designated for ESS use; (b) Be individually inspected just prior to the beginning of an exercise unless equipped with an approved live-round inhibitor, and kept segregated from firearms that fire live rounds;</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a) (f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment</p>	<p>FS_4.0&lt;part of&gt; All firearms used in laser engagement simulation system (ESS) exercises shall be designated for ESS use; be individually inspected just prior to the beginning of an exercise unless equipped with an approved live-round inhibitor, and kept segregated from firearms that fire live rounds; not be</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>(c) Not be loaded until authorized by the senior controller; and</p> <p>(d) Never be pointed or fired at an individual who is closer than 10 feet (3.05 meters).</p> <p>(9) Maintenance or adjustments to ESS laser transmitters shall only be performed by the supplier or by qualified site personnel and approved by the supplier.</p>	<p>personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	<p>loaded until authorized by the senior controller; and, never be pointed or fired at an individual who is closer than 10 feet (3.1 meters).</p>		
<p>5480_16A.Glue.[CHAPI].5.a.(10)-(11)</p> <p>(10) The transmitters of all laser engagement systems used in Departmental exercises shall have warning signs or stickers displayed in accordance with American National Standards Institute (ANSI) Standard Z136.1-1986. In addition, safe distances from these systems shall be calculated using the methodologies in ANSI Z136.1-1986.</p> <p>(11) All equipment containing semiconductor laser diodes shall be FDA certified and shall be subject to the ANSI Z136.1-1986 (see DOE 5480.4, Attachment 2, page 3, paragraph 2d(3)(c)).</p>	<p>O440.1 paragraph 4.I.(1)-(3)</p> <p>I. Comply with the following worker protection requirements.</p> <p>(1) American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" (most recent edition), when ACGIH Threshold Limit Values (TLVs) are lower (more protective) than Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits. [When ACGIH TLVs are used as exposure limits, DOE operations shall nonetheless comply with the other provisions of any applicable OSHA-expanded health standard.] The TLVs for exposures to laser emissions in the ACGIH Indices are excluded from this requirement.</p> <p>(2) American National Standards Institute Z136.1, Safe Use of Lasers. [Only the exposure limits and technical requirements apply. Programmatic components of American National Standards Institute Z136.1 do not apply.]</p> <p>(3) American National Standards Institute Z88.2, Practices for Respiratory Protection.</p>	<p>C440.1, Attach 2, paragraph 12.a.-i.</p> <p>12. Comply with the following worker protection requirements.</p> <p>a. Title 29 of the Code of Federal Regulations (CFR), Part 1910, "Occupational Safety and Health Standards."</p> <p>b. Title 29 CFR, Part 1915, "Shipyard Employment."</p> <p>c. Title 29 CFR, Part 1917, "Marine Terminals."</p> <p>d. Title 29 CFR, Part 1918, "Safety and Health Regulations for Longshoring."</p> <p>e. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."</p> <p>f. Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture."</p> <p>g. American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" (most recent edition, as specified in the contract), when ACGIH Threshold Limit Values (TLVs) are lower (more protective) than Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits. [When ACGIH TLVs are used as exposure limits, DOE operations shall nonetheless comply with the other provisions of any applicable OSHA-expanded health standard.] The TLVs for exposures to laser emissions in the ACGIH Indices are excluded from this requirement.</p> <p>h. American National Standards Institute Z136.1, Safe Use of Lasers.</p>	<p>FS_4.0&lt;part of&gt;</p> <p>Maintenance or adjustments to ESS laser transmitters shall only be performed by the supplier or by qualified site personnel and approved by the supplier.</p> <p>The transmitters of all laser engagement systems used in Departmental exercises shall have warning signs or stickers displayed in accordance with American National Standards Institute (ANSI) Standard Z136.1-1986. In addition, safe distances from these systems shall be calculated using the methodologies in ANSI Z136.1-1986.</p> <p>All equipment containing semiconductor laser diodes shall be FDA certified and shall be subject to ANSI Z136.1-1986.</p> <p>At the end of an exercise, explosive simulators and exercise firearms shall be collected and accounted for under the direction of the senior controller. Excess blank ammunition and explosive simulators shall be returned to the point of issue. Live firearms and ammunition shall not be reissued until all blank ammunition, simulators, exercise firearms, ESS equipment, and personnel are accounted for.</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Glue.[CHAPI].5.a.(12)  (12) At the end of an exercise, explosive simulators and exercise firearms shall be collected and accounted for under the direction of the senior controller. Excess blank ammunition and explosive simulators shall be returned to the point of issue. Live firearms and ammunition shall not be reissued until all blank ammunition, simulators, exercise firearms, ESS equipment, and personnel are accounted for</p>		<p>[Only the exposure limits and technical requirements apply. Programmatic components of American National Standards Institute Z136.1 do not apply.]  i. American National Standards Institute Z88.2, Practices for Respiratory Protection.</p> <p>Requirements for specific functional areas are contained in paragraphs 13 through 20 and only apply if the contract is involved in these activities.</p>	<p>FS_4.0&lt;part of&gt;  Maintenance or adjustments to ESS laser transmitters shall only be performed by the supplier or by qualified site personnel and approved by the supplier.</p> <p>The transmitters of all laser engagement systems used in Departmental exercises shall have warning signs or stickers displayed in accordance with American National Standards Institute (ANSI) Standard Z136.1-1986. In addition, safe distances from these systems shall be calculated using the methodologies in ANSI Z136.1-1986.</p> <p>All equipment containing semiconductor laser diodes shall be FDA certified and shall be subject to ANSI Z136.1-1986.</p> <p>At the end of an exercise, explosive simulators and exercise firearms shall be collected and accounted for under the direction of the senior controller. Excess blank ammunition and explosive simulators shall be returned to the point of issue. Live firearms and ammunition shall not be reissued until all blank ammunition, simulators, exercise firearms, ESS equipment, and personnel are accounted for.</p>	<p>Deleted from the Order.</p>	<p>Detailed "how to" guidance not appropriate for the Order. Equivalent guidance in the technical standard.</p>
<p>5480_16A.Glue.[CHAPI].5.a.(13)  (13) The exercise plan will include specific direction involving engagement of adversaries, handling of firearms, loading and unloading procedures and locations, and any other scenario specific firearm deployment information. The site range</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall</p>	<p>FS_4.0&lt;part of&gt;  The exercise plan will include specific direction involving engagement of adversaries, handling of firearms, loading and unloading procedures and locations, and any other scenario specific firearm deployment</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>master or designated firearms instructor shall be consulted prior and should be present during the exercise to ensure that ESS firearm use procedures are compatible with approved live fire training.</p>	<p>in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(b) activities such as loading, unloading, and exchanging firearms;</li> <li>(c) use of pyrotechnics and/or explosive projectiles;</li> <li>(d) handling misfires and duds;</li> <li>(e) live fire operations; and</li> <li>(f) training and exercises using engagement simulation systems</li> </ul>	<p>address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(2) activities such as loading, unloading, and exchanging firearms;</li> <li>(3) use of pyrotechnics and/or explosive projectiles;</li> <li>(4) handling misfires and duds;</li> <li>(5) live fire operations; and</li> <li>(6) training and exercises using engagement simulation systems.</li> </ul>	<p>information. The site range master or designated firearms instructor shall be consulted prior to and should be present during the exercise to ensure that ESS firearm use procedures are compatible with approved live fire training.</p>		
<p>5480_16A.Requ.[CHAPI].5.b.(1)-(3)  b. Exercise Hazards and Safety Rules.  (1) Exercise plans or standard operating procedures shall discuss exercise hazards and enumerate all applicable safety rules such as those dealing with vehicles, fence climbing, and hand-to-hand combat.  (2) Participants in ESS exercises shall wear eye protection and shall wear hearing protective equipment unless exercise safety considerations indicate otherwise as determined by the senior controller and approved in the exercise plan.  (3) Directives for force-on-force exercises shall include or cover the following:  (a) The location of the exercise site and the identification of responsible personnel and organizations;  (b) A description of the equipment, firearms ammunition, explosive devices, and materials involved;  (c) A description of the operation with appropriate diagrams;  (d) Details of the hazardous conditions;  (e) Procedures for the actions of personnel and/or the use and accountability of equipment;  (f) Procedures for tracking and controlling personnel with live ammunition;  (g) Procedures covering an accident, emergency, or unexpected occurrence;  (h) The assignment of responsibility for ensuring compliance with safety procedures; and  (i) Notification of appropriate management and of all personnel affected by the exercise</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(b) activities such as loading, unloading, and exchanging firearms;</li> <li>(c) use of pyrotechnics and/or explosive projectiles;</li> <li>(d) handling misfires and duds;</li> <li>(e) live fire operations; and</li> <li>(f) training and exercises using engagement simulation systems</li> </ul> <p>O440.1, Attach 1, paragraph 3.a.(4)(d)  (d) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(2) activities such as loading, unloading, and exchanging firearms;</li> <li>(3) use of pyrotechnics and/or explosive projectiles;</li> <li>(4) handling misfires and duds;</li> <li>(5) live fire operations; and</li> <li>(6) training and exercises using engagement simulation systems.</li> </ul> <p>C440.1, Attach 2, paragraph 15.d.(4)  (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>FS_4.1&lt;part of&gt;  4.1 EXERCISE HAZARDS AND SAFETY RULES  Exercise plans or standard operating procedures shall discuss exercise hazards and enumerate all applicable safety rules such as those dealing with vehicles, fence climbing, and hand-to-hand combat.  FS_4.1&lt;part of&gt;  Participants in ESS exercises shall wear eye protection and shall wear hearing protective equipment unless exercise safety considerations indicate otherwise as determined by the senior controller and approved in the exercise plan.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

FS\_4.1<part of>  
 Directives for force-on-force exercises shall include or cover the location of the exercise site and the identification of responsible personnel and organizations; a description of the equipment, firearms, ammunition, explosive devices, and materials involved; a description of the operation with appropriate diagrams; details of the hazardous conditions; procedures for the actions of personnel and/or the use and accountability of equipment; procedures for tracking and controlling personnel with live ammunition; procedures covering an accident, emergency, or unexpected occurrence; the assignment of responsibility for ensuring compliance with safety procedures; and, notification of appropriate manager and of all personnel affected by the exercise.

5480\_16A.Glue.[CHAPI].5.c.  
 c. Blank Ammunition and Blank Fire Adapters.  
 (1) All blank ammunition magazines, and belts (first link) shall be distinctively color-coded and, where practicable, adapted to accept only blank ammunition.  
 (2) All semi-automatic and automatic firearms, using gas expansion as the means to cause the intended cycling of the firing mechanism, shall be equipped with approved blank fire adapter (BFA), if an approved BFA is available for the firearm. All firearms equipped with BFAs shall not be fired at any individual who is closer than 10 feet (3.05 meters).  
 (3) Blank ammunition shall not be used in force-on-force exercises except with ESS equipment.  
 (4) Blank ammunition shall be stored separately from live ammunition, either in a different location or in a locked cabinet, and shall be inspected prior to issuance, preferably by a safety representative having munitions experience.  
 (5) Prior to each ESS exercise, participants shall inspect their firearms to ensure that only blank ammunition and properly equipped ESS firearms are in use.  
 (6) Prior to each ESS exercise, each firearm and all ammunition shall be inspected by the responsible safety or protective force supervisor to ensure that

O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  
 3. FIREARMS SAFETY.  
 a. Requirements.  
 (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (b) activities such as loading, unloading, and exchanging firearms;  
 (c) use of pyrotechnics and/or explosive projectiles;  
 (d) handling misfires and duds;  
 (e) live fire operations; and  
 (f) training and exercises using engagement simulation systems

C440.1, Attach 2, paragraph 15.a.(1)-(6)  
 15. FIREARMS SAFETY.  
 a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (2) activities such as loading, unloading, and exchanging firearms;  
 (3) use of pyrotechnics and/or explosive projectiles;  
 (4) handling misfires and duds;  
 (5) live fire operations; and  
 (6) training and exercises using engagement simulation systems.

FS\_4.2<part of>  
 4.2 BLANK AMMUNITION AND BLANK FIRE ADAPTERS  
 All blank ammunition magazines, and belts (first link) shall be distinctively color-coded and, where practicable, adapted to accept only blank ammunition.  
 FS\_4.2<part of>  
 All semiautomatic and automatic, using gas expansion as the means to cause the intended cycling of the firing mechanism, shall be equipped with approved blank fire adapter (BFA), if an approved BFA is available for the firearm. All firearms equipped with BFAs shall not be fired at any individual who is closer than 10 feet (3.05 meters).  
 FS\_4.2<part of>  
 Blank ammunition shall not be used in force-on-force exercises except with ESS equipment.  
 Blank ammunition shall be stored separately from live ammunition, either in a different location or in a locked cabinet, and shall be inspected prior to issuance, preferably by a safety representative having munitions experience.

Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.  
 Eliminate "how to" guidance from the Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>only blank ammunition and properly equipped ESS firearms are being used. (7) Only those blank rounds approved by, c meeting specifications approved by, the manufacturer of ESS equipment shall be used in firearms associated with that equipment.</p>			<p>FS_4.2&lt;part of&gt; Prior to each ESS exercise, participants shall inspect their firearms to ensure that only blank ammunition and properly equipped ESS firearms are in use.</p> <p>Prior to each ESS exercise, each firearm and all ammunition shall be inspected by the responsible safety or protective force supervisor to ensure that only blank ammunition and properly equipped ESS firearms are being used.</p> <p>Only those blank rounds approved by, or meeting specifications approved by the manufacturer of ESS equipment shall be used in firearms associated with that equipment.</p>		
<p>5480_16A.Glue.[CHAPI].5.d., 5.d.(1)(2)(3)(4) d. Light Anti-Tank Weapon (LAW) Simulator Operation. (1) Exercise participants shall be given comprehensive instruction before using the LAW simulator and shall make sure that personnel, obstructions, and combustible materials are outside the hazard zone prior to firing a LAW simulator. (2) Exercise participants shall not cock the LAW simulator until a target is sighted. If the LAW simulator is not fired at a given target but is anticipated to be fired at another target during the exercise, it will be returned to the uncocked position until the next target is sighted. If the LAW simulator is not fired, it will be returned to an unloaded/tube-empty position prior to turn-in. (3) LAW simulators shall only be used in designated areas identified in the exercise plan. (4) In training with the LAW simulator, exclusion distances and conditions shall be established as though an actual firearm were being fired.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems O440.1, Attach 1, paragraph 3.a.(4)(a) (4) Implement safety provisions related to firearms safety training, qualification, or requalification. (a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems. C440.1, Attach 2, paragraph 15.d.(1) d. Implement safety provisions related to firearms safety training, qualification, or requalification. (1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p>	<p>FS_4.3 4.3 LIGHT ANTI-TANK WEAPON (LAW) SIMULATOR OPERATION Exercise participants shall be given comprehensive instruction before using the LAW simulator and shall make sure that personnel, obstructions, and combustible materials are outside the hazard zone prior to firing a LAW simulator.</p> <p>Exercise participants shall not cock the LAW simulator until a target is sighted. If the LAW simulator is not fired at a given target but is anticipated to be fired at another target during the exercise, it will be returned to the uncocked position until the next target is sighted. If the LAW simulator is not fired, it will be returned to an unloaded/tube-empty position prior to turn-in.</p> <p>LAW simulators shall only be used in designated areas identified in the exercise plan.</p> <p>In training with the LAW simulator, exclusion distances and conditions shall be established as though an actual firearm were being fired.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the requirement. Specific Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>O440.1, Attach 1, paragraph 3.a.(4)(b)  (b) Personnel authorized to carry firearms shall have access to instruction manuals for each type of firearm with which they are armed while on duty.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(c)  (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.</p>	<p>C440.1, Attach 2, paragraph 15.d.(d)  (2) Personnel authorized to carry firearms shall have access to instruction manuals for each type of duty firearms with which they are armed while on duty.</p> <p>C440.1, Attach 2, paragraph 15.d.(3)  (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.</p>			
<p>5480_16A.Glue.[CHAPI].5.e.(1)(2)(3)(4)(5)6)(7)(8)(9)  e. Hand-Thrown Pyrotechnics, Flash-Sound Diversionary Devices and Chemical Agents:  (1) Controllers shall ensure that all participants deploying hand-thrown pyrotechnics, flash-sound diversionary devices and chemical agents are fully trained and qualified. Flash-sound diversionary devices shall not be thrown within 50 feet (15.25 meters) of personnel in open areas or into an occupied room.  (2) Participants shall never pick up a thrown pyrotechnic, flash-sound diversionary device, or chemical agent, even one that appears to be a dud. Duds must be reported as soon as possible after discovery to the senior controller.  (3) Written and approved procedures for handling duds shall be included in force-on-force directives.  (4) Only flash-sound diversionary devices meeting specifications approved by Office of Safeguards and Security shall be used for training, qualification or operations.  (5) Written and approved procedures for such activities as the wiring of pyrotechnics into vehicle electrical systems and the use of booby traps and trip wires shall be included in force-on-force directives.  (6) Smoke generators shall not be used indoors. If exposure to smoke is anticipated, participants shall be provided with appropriate protective equipment. Personnel responsible for deploying smoke in exercises shall ensure that the smoke agents in use contain no carcinogens or other harmful by-products.  (7) All pyrotechnic devices generate sufficient heat to start fires and shall only be used in areas identified as safe in the</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (b) activities such as loading, unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and  (f) training and exercises using engagement simulation systems.  O440.1, Attach 1, paragraph 3.a.(4)(a)  (4) Implement safety provisions related to firearms safety training, qualification, or requalification.  (a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (2) activities such as loading, unloading, and exchanging firearms;  (3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.  C440.1, Attach 2, paragraph 15.d.(1)  d. Implement safety provisions related to firearms safety training, qualification, or requalification.  (1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.  C440.1, Attach 2, paragraph 15.d.(3)  (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.</p>	<p>FS_4.4&lt;part of&gt;  4.4 HAND-THROWN PYROTECHNICS, FLASH-SOUND DIVERSIONARY DEVICES, AND CHEMICAL AGENTS  Controllers shall ensure that all participants deploying hand-thrown pyrotechnics, flash-sound diversionary devices and chemical agents are fully trained and qualified.</p> <p>Flash-sound diversionary devices shall not be thrown within 50 feet (15.25 meters) of personnel in open areas or into an occupied room.</p> <p>FS_4.4&lt;part of&gt;  Participants shall never pick up a thrown pyrotechnic, a flash-sound diversionary device, or a chemical agent, even one that appears to be a dud. Dud must be re-reported as soon as possible after discovery to the senior controller.</p> <p>FS_4.4&lt;part of&gt;  Written and approved procedures for handling duds shall be included in force-on-force directives.</p> <p>FS_4.4&lt;part of&gt;  Only flash-sound diversionary devices meeting specifications approved by Office of Safeguards and Security shall be used for training, qualification or operations.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>exercise plan. When pyrotechnic devices are to be used in an exercise, appropriate fire fighting equipment shall be readily available.</p> <p>(8) Exercise plans shall address the hazards and personnel protective equipment when using pyrotechnics and liquid grenades (tear gas) in the vicinity of personnel, aircraft, critical facilities, roads traveled by non participants, and buildings occupied by non participants.</p> <p>(9) Pyrotechnics and liquid grenades (tear gas) shall not be taken on board aircraft unless participants and flight crew have appropriate (NIOSH approved) respiratory protection readily available.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(c) (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(d) (d) All firearms training lessor plans shall incorporate safety for all aspects of firearms training task performance standards. Lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training program. Safety briefings shall be conducted before any live fire training commences.</p>	<p>C440.1, Attach 2, paragraph 15.d.(4) (4) All firearms training lesson plans shall incorporate safety for all aspects of firearms training task performance standards. The lesson plans shall follow the standards and criteria set forth by the Safeguards and Security Central Training Academy's standard training programs. Safety briefings shall be conducted before any live fire training commences.</p>	<p>FS_4.4&lt;part of&gt; Written and approved procedures for such activities as the wiring of pyrotechnics into vehicle electrical systems and the use of booby traps and trip wires shall be included in force-on-force directives.</p> <p>FS_4.4&lt;part of&gt; Pyrotechnic smoke generators shall not be used indoors. If exposure to smoke is anticipated, participants shall be provided with appropriate protective equipment. Personnel responsible for deploying smoke in exercises shall ensure that the smoke agents in use contain no carcinogens or other harmful by-products.</p> <p>All pyrotechnic devices generate sufficient heat to start fires and shall only be used in areas identified as safe in the exercise plan. When pyrotechnic devices are to be used in an exercise, appropriate fire-fighting equipment shall be readily available.</p>		

5480\_16A.Requ.[CHAPI].6.a.  
6. EXERCISES OR SYSTEMS PERFORMANCE TESTS.

a. Any exercise (see DOE 5632.7) or systems performance tests (see DOE 5632.8) that require the drawing of a firearm or deployment of ESS equipment shall conform to the force-on-force requirements that are appropriate to the scenario as outlined in Chapter I, paragraph 5.

Crosswalk for the requirements of Chapter 1, paragraph 5 is provided under that section of the old Order.

5480\_16A.Requ.[CHAPI].6.b.  
b. Each Operations Office site shall have approved site-specific policies and procedures governing limited scope performance tests, alarm response and assessment performance tests, and emergency management performance tests (see DOE 5632.8).

O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  
3. FIREARMS SAFETY.  
a. Requirements.  
(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
(b) activities such as loading, unloading, and exchanging firearms;  
(c) use of pyrotechnics and/or explosive projectiles;

C440.1, Attach 2, paragraph 15.a.(1)-(6)  
15. FIREARMS SAFETY.  
a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
(2) activities such as loading, unloading, and exchanging firearms;  
(3) use of pyrotechnics and/or explosive projectiles;  
(4) handling misfires and duds;

FS\_4.0<part of>  
4 EXERCISES  
All exercises shall be governed by a plan that specifically addresses safety issues while remaining consistent with realistic training.

No significant change. Equivalent language in the Order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(e)</p> <p>(e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	<p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p> <p>C440.1, Attach 2, paragraph 15.d.(5)</p> <p>(5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities an operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>			
<p>5480_16A.Requ.[CHAPII].1., 1.a.(1)</p> <p>CHAPTER II</p> <p>OPERATIONS</p> <p>1. BASIC CONSIDERATIONS.</p> <p>a. The Department is required to develop and implement its responsibilities by the following:</p> <p>(1) The Atomic Energy Act of 1954, as amended;</p> <p>(2) Federal statutes;</p> <p>(3) Executive orders; and</p> <p>(4) Other orders, such as DOE Orders.</p> <p>b. These responsibilities include the protection of:</p> <p>(1) Restricted Data and other classified information or matter;</p> <p>(2) Nuclear weapons and nuclear weapon components; and</p> <p>(3) Departmental and contractor facilities, property, and equipment.</p> <p>c. In order to provide the required level of protection, some Departmental and contractor employees are armed. These employees include protective force personnel, Transportaton Safeguards Division (AL) couriers, and Departmental safeguards and security staff personnel.</p>			<p>FS_2.0-2.1</p> <p>2. RESPONSIBILITIES, TRAINING, OPERATIONS AND PROCEDURES</p> <p>2.1 RESPONSIBILITIES</p> <p>The Department is required to develop and implement its responsibilities by Atomic Energy Act of 1954, as amended; Federal statutes; Executive orders; and, Other standards and requirements, e.g. DOE Orders</p> <p>These responsibilities include the protection of restricted Data and other classified information or matter; nuclear weapons and nuclear weapon components; and, Departmental and contractor facilities, property, and equipment.</p> <p>Employees shall not be authorized to carry a firearm until they have demonstrated their technical and practical knowledge governing the safe use of those firearms as set forth in this standard.</p> <p>Authorization to remain in armed status shall continue only if the employee demonstrates his or her technical and practical knowledge of firearms safety semi-annually.</p>	<p>Deleted from the Order. Integration of these requirements is discussed in the technical standard.</p>	<p>These statutes and Orders are already mandatory and need not be mandated through DOE O 440.1.</p>
<p>5480_16A.Requ.[CHAPII].1.d.</p> <p>d. Employees shall not be authorized to carry a firearm until they have:</p> <p>(1) Received appropriate safety training in its use; and</p> <p>(2) Demonstrated their technical and</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(a)</p> <p>(4) Implement safety provisions related to firearms safety training, qualification, or requalification.</p> <p>(a) Personnel shall successfully complete and</p>	<p>C440.1, Attach 2, paragraph 15.d.(1)</p> <p>d. Implement safety provisions related to firearms safety training, qualification, or requalification.</p> <p>(1) Personnel shall successfully complete and demonstrate</p>	<p>FS_2.0-2.1</p> <p>2. RESPONSIBILITIES, TRAINING, OPERATIONS AND PROCEDURES</p> <p>2.1 RESPONSIBILITIES</p> <p>The Department is required to develop and implement its responsibilities by</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
practical knowledge governing the safe use of those firearms.	demonstrate understanding of initial firearms safety training before being issued any firearms.	understanding of initial firearms safety training before being issued any firearms.	<p>Atomic Energy Act of 1954, as amended; Federal statutes; Executive orders; and, Other standards and requirements, e.g. DOE Orders</p> <p>These responsibilities include the protection of restricted Data and other classified information or matter; nuclear weapons and nuclear weapon components; and, Departmental and contractor facilities, property, and equipment.</p> <p>Employees shall not be authorized to carry a firearm until they have demonstrated their technical and practical knowledge governing the safe use of those firearms as set forth in this standard.</p> <p>Authorization to remain in armed status shall continue only if the employee demonstrates his or her technical and practical knowledge of firearms safety semi-annually.</p>		
5480_16A.Requ.[CHAPII].1.e. e. Authorization to remain in armed status shall continue only if the employee demonstrates his or her technical and practical knowledge of firearms safety semiannually.	O440.1, Attach 1, paragraph 3.a.(4)(c) (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.	C440.1, Attach 2, paragraph 15.d.(3) (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.	<p>FS_2.0-2.1 2. RESPONSIBILITIES, TRAINING, OPERATIONS AND PROCEDURES 2.1 RESPONSIBILITIES The Department is required to develop and implement its responsibilities by Atomic Energy Act of 1954, as amended; Federal statutes; Executive orders; and, Other standards and requirements, e.g. DOE Orders</p> <p>These responsibilities include the protection of restricted Data and other classified information or matter; nuclear weapons and nuclear weapon components; and, Departmental and contractor facilities, property, and equipment.</p> <p>Employees shall not be authorized to carry a firearm until they have demonstrated their technical and practical knowledge governing the safe use of those firearms as set forth in this standard.</p> <p>Authorization to remain in armed status shall continue only if the employee demonstrates his or her technical and practical knowledge of firearms safety semi-annually.</p>	No significant change.	Equivalent language in the Order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Requ.[CHAPII].2.a., 2.a.(1)  a. Semiautomatic and automatic firearms shall be carried in the manner specified below except when responding to an incident where there is reasonable cause to believe that deadly force is authorized.  (1) Semiautomatic handguns shall not be carried with a live round in the firing chamber unless the following conditions are met:  (a) The site has, in place, a documented training program for such handguns, which has been approved by the Operations Office Manager,  (b) The training program in use is approved by the CTA, and  (c) After receiving CTA approval, and after all involved protective force personnel have successfully completed the training program, the Operations Office Manager shall formally notify the Office of Occupational Safety and Office of Safeguards and Security as to when they intend to allow the carrying of a round in the chamber at the site.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (b) activities such as loading, unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and  (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (2) activities such as loading, unloading, and exchanging firearms;  (3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.</p>	<p>FS_2.3&lt;part of&gt;  Semiautomatic and automatic firearms shall be carried in the manner specified below except when responding to an incident where there is reasonable cause to believe that deadly force is authorized.  FS_2.3&lt;part of&gt;  Semiautomatic handguns shall not be carried with a live round in the firing chamber unless the following conditions are met:  (a) The site has, in place, a documented training program for such handguns, which has been approved by the Operations Office Manager;  (b) The training program in use is approved by the CTA, and  (c) After receiving CTA approval, and after all involved protective force personnel have successfully completed the training program, the Operations Office Manager shall formally notify the Office of Occupational Safety and Health Policy and Office of Security Affairs as to when he or she intend to allow the carrying of a round in the chamber at the site.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Requ.[CHAPII].2.a.(2)-2.c.  (2) Semiautomatic long guns, e.g., rifles, shotguns, submachine guns, shall not be carried during normal operations or placed in post or vehicle racks or carriers with a round in the firing chamber.  b. All duty firearms shall be carried in the manner approved by the cognizant local DOE authority for Safeguards and Security Unless otherwise stated, from check-in to check-out a handgun shall always be in a holster; and a rifle, shotgun, or submachine gun shall always be carried on an appropriate sling with the muzzle pointed up or down, except where the firearm is designed to be carried in a different manner or operational conditions dictate otherwise. At no time shall a firearm be carried with fingers on the trigger or inside the trigger guard.  c. When firearms are carried in vehicles, watercraft, or aircraft, they shall be mounted</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (b) activities such as loading, unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (2) activities such as loading, unloading, and exchanging firearms;  (3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.</p>	<p>FS_2.3&lt;part of&gt;  Semiautomatic long guns, e.g., rifles, shotguns, submachine guns, shall not be carried during normal operations or placed in post or vehicle racks or carriers with a round in the firing chamber.  All duty firearms shall be carried in the manner approved by the cognizant local DOE authority for safeguards and security. Unless otherwise stated from check-in to check-out a handgun shall always be in a holster; and a rifle shotgun, or submachine gun shall always be carried on an appropriate sling with the muzzle pointed up or down, except where the firearm is designed to be carried in a different manner or operational conditions dictate otherwise. At no time shall a firearm be carried with fingers on the</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
in an appropriate rack or container when not held by an individual.	(f) training and exercises using engagement simulation systems		trigger or inside the trigger guard.		
5480_16A.Requ.[CHAPII].2.d. d. All personnel covered by this Order shall be required to comply with the personal protective and safety rules in effect at each workplace.	O440.1 paragraph 4.d. d. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance. O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 4. 4. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance. C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.	FS_2.3<part of> All personnel covered by this Standard shall be required to comply with the personal protective and safety rules in effect at each work place.	No significant change.	Equivalent language in the Order and technical standard.
5480_16A.Glue.[CHAPII].2.e.-f. e. The loading or clearing of firearms shall take place only in an approved area or where the barrel of the firearm is in or pointing toward a bullet containment device. Each site shall have an approved procedure for loading and clearing firearms under field conditions when no bullet containment device is available. f. The routine loading and clearing of all firearms shall be witnessed by a supervisor	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms;	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or	FS_2.3<part of> Each site shall have an approved procedure for the loading and clearing of firearms which shall take place only in an approved area or when the barrel of the firearm is in or pointing toward a bullet containment device. The procedure shall include those when no bullet containment device is available.  The routine loading and clearing of all firearms shall be witnessed by a supervisor.	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<ul style="list-style-type: none"> <li>(c) use of pyrotechnics and/or explosive projectiles;</li> <li>(d) handling misfires and duds;</li> <li>(e) live fire operations; and</li> <li>(f) training and exercises using engagement simulation systems</li> </ul>	<ul style="list-style-type: none"> <li>explosive projectiles;</li> <li>(4) handling misfires and duds;</li> <li>(5) live fire operations; and</li> <li>(6) training and exercises using engagement simulation systems.</li> </ul>			
<p>5480_16A.Poli.[CHAPII].2.g. g. If the presence of alcohol or drugs is detected on a person, it shall be grounds for denial of the issuance of a firearm or removal from a duty station.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(b) activities such as loading, unloading, and exchanging firearms;</li> <li>(c) use of pyrotechnics and/or explosive projectiles;</li> <li>(d) handling misfires and duds;</li> <li>(e) live fire operations; and</li> <li>(f) training and exercises using engagement simulation systems</li> </ul>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(2) activities such as loading, unloading, and exchanging firearms;</li> <li>(3) use of pyrotechnics and/or explosive projectiles;</li> <li>(4) handling misfires and duds;</li> <li>(5) live fire operations; and</li> <li>(6) training and exercises using engagement simulation systems.</li> </ul>	<p>FS_2.3&lt;part of&gt; If the presence of alcohol or drugs is detected on a person, it shall be grounds for denial of the issuance of a firearm or removal from a duty station.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Requ.[CHAPII].2.h. h. Departmental elements and contractors performing security operations shall develop specific site policies and procedures covering the safe transportation, handling, use and storage of live ammunition, blank ammunition, chemical munitions and pyrotechnic devices used in firearms operations.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(b) activities such as loading, unloading, and exchanging firearms;</li> <li>(c) use of pyrotechnics and/or explosive projectiles;</li> <li>(d) handling misfires and duds;</li> <li>(e) live fire operations; and</li> <li>(f) training and exercises</li> </ul>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <ul style="list-style-type: none"> <li>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</li> <li>(2) activities such as loading, unloading, and exchanging firearms;</li> <li>(3) use of pyrotechnics and/or explosive projectiles;</li> <li>(4) handling misfires and duds;</li> <li>(5) live fire operations; and</li> <li>(6) training and exercises using engagement simulation systems.</li> </ul>	<p>FS_2.3&lt;part of&gt; Departmental elements and contractors performing security operations shall develop specific site policies and procedures covering the safe transportation, handling, use, and storage of live ammunition, blank ammunition, chemical munitions, and pyrotechnic devices used in firearms operations.</p> <p>Each Operations Office shall require that analyses be performed to determine what ammunition and firearms can be used safely in each site for which it has responsibility.</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>using engagement simulation systems</p> <p>O440.1, Attach 1, paragraph 3.a.(5) (5) Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>	<p>C440.1, Attach 2, paragraph 15.e. e. Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>			
<p>5480_16A.Requ.[CHAPII].2.i. i. Each Operations Office shall require that analyses be performed to determine what ammunition and firearms can be used safely in each site for which it has responsibility.</p>	<p>O440.1, Attach 1, paragraph 3.a.(4)(e) (e) A safety analysis approved by the Operations Office Manager shall be developed for the facilities and operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	<p>C440.1, Attach 2, paragraph 15.d.(5) (5) A safety analysis approved by the Operations Office Manager shall be developed for the facilities an operation of each live fire range. A safety analysis shall be completed and approved prior to implementation of any new training. Results of these analyses shall be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests.</p>	<p>FS_2.3&lt;part of&gt; Departmental elements and contractors performing security operations shall develop specific site policies and procedures covering the safe transportation, handling, use, and storage of live ammunition, blank ammunition, chemical munitions, and pyrotechnic devices used in firearms operations.</p> <p>Each Operations Office shall require that analyses be performed to determine what ammunition and firearms can be used safely in each site for which it has responsibility.</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>
<p>5480_16A.Glue.[CHAPII].3.a. 3. FIREARMS MAINTENANCE. a. All sites, including the Central Training Academy, shall have (onsite, under contract offsite, or in association with another DOE site) an armorer with the knowledge, capability, and responsibility for inspecting, maintaining, and repairing all firearms available for use. The armorer and all other personnel shall be prohibited from modifying the basic design of a firearm or any of the firearm's operating or safety components without written approval from the Operation Office Manager or, as applicable, Office of Safeguards and Security.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) (f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) (6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.</p>	<p>FS_3.0-3.1&lt;part of&gt; 3. FIREARMS MAINTENANCE AND ASSESSMENT 3.1 FIREARMS MAINTENANCE All sites, including the Safeguards and Security Central Training Academy, shall have (onsite, under contract offsite, or in association with another DOE site) an armorer with the knowledge, capability, and responsibility for inspecting, maintaining, and repairing all firearms available for use. The armorer and all other personnel shall be prohibited from modifying the basic design of a firearm or any of the firearm's operating or safety components without written approval from the Operations Office Manager or, as applicable, Office of Security Affairs.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>O440.1, Attach 1, paragraph 3.a.(2)  (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>C440.1, Attach 2, paragraph 15.b.  b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>			
<p>5480_16A.Glue.[CHAPII].3.b.,  3.b.(1)(2)(3)(4)(5)(6)  b. Armorers shall successfully complete a factory authorized or U.S. military approved training course for each firearm available for on duty use at a site. In addition, armorers shall demonstrate proficiency in the following:  (1) Conducting firearms safety inspections;  (2) Performing minor repair of basic firearms;  (3) Assembling/disassembling the firearms used at the various sites;  (4) Rendering firearms safe, including confiscated firearms;  (5) Knowing the minimum and maximum tolerances associated with safe operation of all firearms in inventory and available for use at each site; and  (6) Identifying unapproved modifications to firearms.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (b) activities such as loading, unloading, and exchanging firearms;  (c) use of pyrotechnics and/or explosive projectiles;  (d) handling misfires and duds;  (e) live fire operations; and  (f) training and exercises using engagement simulation systems  O440.1, Attach 1, paragraph 3.a.(2)  (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  (2) activities such as loading, unloading, and exchanging firearms;  (3) use of pyrotechnics and/or explosive projectiles;  (4) handling misfires and duds;  (5) live fire operations; and  (6) training and exercises using engagement simulation systems.  C440.1, Attach 2, paragraph 15.b.  b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.</p>	<p>FS_3.1&lt;part of&gt;  Armorers shall successfully complete a factory authorized or U.S. military approved training course for each firearm available for on duty use at a site. In addition, armorers shall demonstrate proficiency in conducting firearms safety inspections; performing minor repair of basic firearms; assembling/disassembling the firearms used at the various sites; rendering firearms safe, including confiscated firearms; knowing the minimum and maximum tolerances associated with safe operation of all firearms in inventory and available for use at each site; and, identifying unapproved modifications to firearms.</p>	<p>Captured under performance-based implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the requirement. Specific Order.</p>
<p>5480_16A.Glue.[CHAPII].3.c.  c. Certification procedures for armorers shall be established by the Central Training Academy, which shall certify all DOE armorers. Recertification shall be required at least every 2 years or whenever there is major change in firearms policy.</p>	<p>O440.1, Attach 1, paragraph 3.a.(2)  (2) Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers</p>	<p>C440.1, Attach 2, paragraph 15.b.  b. Ensure that staff members responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the established program Firearms instructors and armorers</p>	<p>FS_3.1&lt;part of&gt;  Certification procedures for armorers shall be established by the Safeguard and Security Central Training Academy, which shall certify all DOE armorers. Recertification shall be required at least every 2 years or whenever there is a major change in</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.	shall be Safeguards and Security Central Training Academy-certified to conduct the level of activity provided.	firearms policy.		
<p>5480_16A.Glue.[CHAPII].3.d.-f.</p> <p>d. The armorer shall inspect and certify for use all firearms available for duty issue. This inspection shall be in accordance with the recommendations of the manufacturer or the Central Training Academy, but not less often than semiannually.</p> <p>e. The armorer shall maintain accurate individual records on all firearms, including the name of manufacturer, model, serial number of firearm, inspection dates, and nature and date of any repair, in accordance with prescribed authorized schedules.</p> <p>f. The armorer shall inspect and conduct test firings of a firearm following any unusual operation of, occurrence with, or functional repairs made to that firearm. Functional repairs are those that may have an effect on the safe operation or reliability of the firearm. Any firearm that has experienced an unusual operation shall be tagged "out-of-service" and segregated from operational firearms until certified by the armorer as safe to operate. Records of any unusual occurrence and subsequent inspection/test firing shall be maintained in accordance with prescribed authorized schedules.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a) (f)</p> <p>3. FIREARMS SAFETY.</p> <p>a. Requirements.</p> <p>(1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)</p> <p>15. FIREARMS SAFETY.</p> <p>a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	<p>FS_3.1&lt;part of&gt;</p> <p>The armorer shall inspect and certify for use all firearms available for duty issue. This inspection shall be in accordance with the recommendation of the manufacturer or the Safeguards and Security Central Training Academy, but not less often than semiannually.</p> <p>FS_3.1&lt;part of&gt;</p> <p>The armorer shall maintain accurate individual records on all firearms, including the name of manufacturer, model, serial number of firearm, inspection dates, and nature and date of any repair, in accordance with prescribed authorized schedules.</p> <p>FS_3.1&lt;part of&gt;</p> <p>The armorer shall inspect and conduct test firings of a firearm following any unusual operation of, occurrence with, or functional repairs made to that firearm. Functional repairs are those that may have an effect on the safe operation or reliability of the firearm. Any firearm that has experienced an unusual operation shall be tagged "out-of-service" and segregated from operational firearms until certified by the armorer as safe to operate. Records of any unusual occurrence and subsequent inspection/test firing shall be maintained in accordance with prescribed authorized schedules.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>
<p>5480_16A.Requ.[CHAPIII].1., 1.a.</p> <p>CHAPTER III</p> <p>OPERATIONAL ASSURANCE</p> <p>1. APPRAISALS/SELF ASSESSMENTS.</p> <p>a. Formal appraisals or self assessments of the safety and health aspects of the safeguards and security program following the procedures detailed in DOE 3790.1A and DOE 5482.1B shall include firearms safety and shall be performed by line management at least annually.</p>	<p>O440.1, Attach 1, paragraph 3.a.(3)</p> <p>(3) Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.</p>	<p>C440.1, Attach 2, paragraph 15.c.</p> <p>c. Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.</p>	<p>FS_3.2&lt;part of&gt;</p> <p>3.2 APPRAISALS/SELF ASSESSMENTS.</p> <p>Formal appraisals or self assessments of the safety and health aspects of the safeguards and security program shall include firearms safety and shall be performed by line management at least annually.</p> <p>Contractors shall conduct formal appraisals, and self assessments (i.e., annual program reviews and worksite appraisals and periodic surveillances)</p> <p>Cognizant DOE field and line management shall conduct formal self</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
5480_16A.Requ.[CHAPIII].1.b. b. Contractors shall conduct formal appraisals, and self assessments (i.e., annual program reviews and worksite appraisals and periodic surveillances).		C440.1, Attach 2, paragraph 15.c. c. Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.	assessments to include annual program reviews (assessments) of each contractor and appraisals of selected worksites.  FS_3.2<part of> 3.2 APPRAISALS/SELF ASSESSMENTS. Formal appraisals or self assessments of the safety and health aspects of the safeguards and security program shall include firearms safety and shall be performed by line management at least annually.  Contractors shall conduct formal appraisals, and self assessments (i.e., annual program reviews and worksite appraisals and periodic surveillances)  Cognizant DOE field and line management shall conduct formal self assessments to include annual program reviews (assessments) of each contractor and appraisals of selected worksites.	No significant change. Equivalent language in the Order and technical standard.
5480_16A.Requ.[CHAPIII].1.c. c. Cognizant DOE field and line management shall conduct formal self assessments to include annual program reviews (assessments) of each contractor and appraisals of selected worksites.	O440.1 paragraph 5.c.(1)-(4) c. Operations Office Managers (and Heads of Field Elements, where applicable). (1) Ensure that unannounced worker protection inspections of contractor workplaces are conducted at least annually. (2) Ensure immediate and effective remedial actions are taken for imminent danger situations discovered during worker protection inspections to ensure employees are removed from the hazard or the hazard is eliminated conduct an inspection as soon as possible after an imminent danger situation has been corrected to ensure that appropriate actions have been taken to preclude recurrence. (3) Determine whether adequate protection can most effectively be achieved by continuing to operate under the terms of existing contracts requiring compliance with old Orders or by modifying the contract to incorporate the CRD (Attachment 2 requirements). (4) Ensure that initiators of procurement requests specify therein		FS_3.2<part of> 3.2 APPRAISALS/SELF ASSESSMENTS. Formal appraisals or self assessments of the safety and health aspects of the safeguards and security program shall include firearms safety and shall be performed by line management at least annually.  Contractors shall conduct formal appraisals, and self assessments (i.e., annual program reviews and worksite appraisals and periodic surveillances)  Cognizant DOE field and line management shall conduct formal self assessments to include annual program reviews (assessments) of each contractor and appraisals of selected worksites.	No significant change. Equivalent language in the Order and technical standard.



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>whether requirements in the CRD (Attachment 2) are to be applied to the resulting award or subawards.</p> <p>O440.1, Attach 1, paragraph 3.a.(3)</p> <p>(3) Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.</p>				
<p>5480_16A.Requ.[CHAPIII].1.d.-g.</p> <p>d. All shall maintain audits of their internal operations.</p> <p>e. Such evaluations and audits should be conducted by safety personnel or by a joint safety and protective force evaluation team</p> <p>f. Such evaluations and audits shall cover procedures, responsibilities, and duty assignments within the firearms safety program to ensure that overall objectives and performance are being met.</p> <p>g. Such evaluations or audits shall include reviews of the following:</p> <p>(l) Records of unauthorized firearms discharges, investigations of such discharges, and the application of lessons learned;</p> <p>(2) Armorer's records of firearms inspections, malfunctions, and repairs;</p> <p>(3) Firearms documentation maintained by the DOE or contractor ES&amp;H manager to ensure that management decisions and actions to correct deficiencies have been completed and documented on time;</p> <p>(4) Protective force safety performance data, as compared with similar operations and programs, to determine whether there are lessons to be learned or deficiencies that require corrective action;</p> <p>(5) Hazardous incidents involving firearms and associated equipment;</p> <p>(6) Safety tagout program for defective firearms;</p> <p>(7) Disciplinary actions for violation of firearms safety procedures or regulations;</p> <p>(8) Results of the airborne lead monitoring programs at firing ranges and of the testing programs for blood lead level changes and hearing loss;</p> <p>(9) Storage and handling of firearms, ammunition, and cleaning materials in armories;</p> <p>(10) High risk activities, such as loading, unloading, and exchanging firearms, to ensure the existence of proper accident</p>	<p>O440.1, Attach 1, paragraph 3.a.(3)</p> <p>(3) Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.</p>	<p>C440.1, Attach 2, paragraph 15.c.</p> <p>c. Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.</p>	<p>FS_3.2&lt;part of&gt;</p> <p>All shall maintain audits of their internal operations.</p> <p>Such evaluations and audits should be conducted by safety personnel or by a joint safety and protective force evaluation team.</p> <p>Such evaluations and audits shall cover procedures, responsibilities, and duty assignments within the firearms safety program to ensure that overall objectives and performance are being met. Such evaluations or audits shall include reviews of the records of unauthorized firearms discharges, investigations of such discharges, and the application of lessons learned; armorer's records of firearms inspections, malfunctions, and repairs firearms documentation maintained by DOE or contractor Environmental, Safety and Health manager to ensure that management decisions and actions to correct deficiencies have been completed and documented on time; protective force safety performance data, as compared with similar operations and programs, to determine whether there are lessons to be learned or deficiencies that require corrective action; hazardous incidents involving firearms and associated equipment; safety tagout program for defective firearms; disciplinary actions for violation of firearms safety procedures or regulations; results of the airborne lead monitoring programs at firing ranges and of the testing programs for blood lead level changes and hearing loss; storage and handling of firearms, ammunition, and cleaning materials in armories; high risk activities such as loading, unloading,</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
prevention controls; and (11) Firearms training programs.			and exchanging firearms, to ensure the existence of proper accident prevention controls; and firearms training programs.		
5480_16A.Glue.[CHAPIII].2.a. (1)(2)(3)(4)(5)(6) 2. FIREARMS SAFETY COMMITTEE. a. Composition. The DOE Firearms Safety Committee shall be comprised of one permanent DOE safety representative voting member or alternate from each of the following: (1) Office of Occupational Safety; (2) Office of Safeguards and Security; (3) Central Training Academy; (4) Transportation Safeguards Division (AL) (5) Each of the DOE Operations Offices; and (6) A representative from the Office of Human Resources and Administration shall serve as an ex-officio member of the committee.	O440.1 paragraph 5.e. e. Assistant Secretary for Environment, Safety and Health. Establish committees as necessary to assist in the development of Departmental requirements and guidance.		FS_1.3 1.3 ORGANIZATION The DOE Firearms Safety Committee is composed of one permanent DOE safety representative voting member or alternate from each of the following organizations:· Office of Occupational Safety and Health Policy (EH-51),· Office of Office of Security Affairs (NN-512.1),· the Central Training Academy (NN-511),· the Transportation Safeguards Division, and· each DOE Operations Offices.  A member from the Office of Occupational Safety and Health Policy and a member of the Office of Security Affairs, respectively, shall serve as the committee co-chairpersons. A recording secretary shall be named from the personnel in attendance at any meeting to provide a transcription of the minutes of the meeting. In the absence of the permanent member, a permanent voting member can be represented by a knowledgeable DOE alternate who has voting power. DOE contractor personnel are invited and encouraged to participate in all committee meetings and activities.	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.
5480_16A.Requ.[CHAPIII].2.b.(1) b. Responsibilities. (1) Assistant Secretary for Environment, Safety and Health, through the Director, Office of Occupational Safety, shall administer and manage the Firearms Safety Committee. (2) The Committee shall review, evaluate, and make recommendations for action on proposed changes to DOE Order 5480.16A Firearms Safety, the DOE Firearms Safety Manual, and the DOE Range Design Criteria Manual. The Committee shall meet annually or more often to review and evaluate the Order.	O440.1 paragraph 5.e. e. Assistant Secretary for Environment, Safety and Health. Establish committees as necessary to assist in the development of Departmental requirements and guidance.		FS_1.4 1.4 RESPONSIBILITIES The committee shall meet to present and discuss problems, concerns, and questions of mutual interest and to exchange information concerning firearms safety. The committee shall review, evaluate, and makes recommendations for action on proposed changes to the DOE Technical Standard on Firearms Safety, and the DOE Range Design Criteria Guide.  The committee shall develops and discuss firearms safety issues, and makes recommendations on interpretations of these issues to the Office of Occupational Safety and Health Policy. The committee shall be	No significant change.	Equivalent language in the Order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Requ.[CHAPIII].3.  3. MANAGERS OF OPERATIONS OFFICES AND CONTRACTORS. Those providing protective force functions on, at, or for a DOE site shall have a firearms safety committee formally organized and chartered to assist management in providing safe firearm activities.</p>	<p>O440.1 paragraph 4.a.(1)-(2)  4. REQUIREMENTS. DOE elements shall:  a. Implement a written worker protection program that:  (1) provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees; and  (2) integrates all requirements contained in paragraphs 4a through 4l of this Order; program requirements, contained in Title 29 Code of Federal Regulations (CFR) Part 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"; applicable functional area requirements contained in Attachmen 1; and other related site-specific worker protection activities.  O440.1 paragraph 4.e..  e. Encourage the involvement of employees in the development of program goals, objectives, and performance measures and in the identification and control of hazards in the workplace.</p>	<p>C440.1, Attach 2, paragraph 1.a.-b.  Contractor Requirements Document Worker Protection Management for DOE Contractor Employees  The contractor shall comply with the requirements contained herein.  1. Implement a written worker protection program that:  a. provides a place of employem free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and  b. integrates all requirements contained in this attachment and other related site-specific worker protection activities.  C440.1, Attach 2, paragraph 5.  5. Encourage employee involvement in the development of program goals, objectives, and performance measure and in the identification and control of hazards in the workplace.</p>	<p>responsive to the needs and concerns of the firearms safety community.</p> <p>Manager of DOE Operations Offices an contractors whom providing protective force functions on, at, or for a DOE site shall have a firearms safety committee formally organized and chartered to assist management ii providing safe firearms activities.</p> <p>FS_1.4  1.4 RESPONSIBILITIES  The committee shall meet to present and discuss problems, concerns, and questions of mutual interest and to exchange information concerning firearms safety. The committee shall review, evaluate, and makes recommendations for action on proposed changes to the DOE Technical Standard on Firearms Safety, and the DOE Range Design Criteria Guide.</p> <p>The committee shall develops and discuss firearms safety issues, and makes recommendations on interpretations of these issues to the Office of Occupational Safety and Health Policy. The committee shall be responsive to the needs and concerns of the firearms safety community.</p> <p>Manager of DOE Operations Offices an contractors whom providing protective force functions on, at, or for a DOE site shall have a firearms safety committee formally organized and chartered to assist management ii providing safe firearms activities.</p>	<p>Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.</p>	<p>Eliminate "how to" guidance from the Order.</p>

## WP\_2.1.1

## 2.1.1 Committees

An important component of employee involvement for any worker protection program is the establishment of one or more worker protection committees, which bring people together in a cooperative effort to promote safety and health at the worksite. Such committees can be used to promote employee involvement in the development of program goals, objectives, and performance measure and in the identification and correction of workplace hazards. Many types of committees exist that address worker protection issues, and no one committee organization fits all occasions and activities. (For example worker protection functions may be included in the charter of other committees.) The charter, decisions, and actions of the worker protection committee are decided by the committee through negotiations and voting.

Each worker protection committee should consist of employees and management representatives, with the majority being non-managerial. Note that the organization of any such committee must be consistent with acceptable practices for labor/management relations. The responsibilities of each worker protection committee should be clearly stated in a written charter, and each committee should have clear and specific performance-based goals. These goals should be responsive to the atmosphere and operations in the worksite and should be revised as necessary to accommodate changes in operations, technology, and materials and to reflect tasks completed by the committee.

Worker protection committees should have access to necessary records (subject to provisions of the Privacy Act), work areas, and personnel to full investigate any worker protection concern. Committees should also have access to the training, resources and technical expertise that will allow them to function effectively.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Poli.[CHAPIII].4. 4. EMPLOYEE REVIEW. All DOE, contractor and subcontractor employees have the right and responsibility to lodge a formal complaint about deficient safety practices or procedures. DOE employees are to be guided by DOE 3790.1A, contractor employees by DOE 5483.1B.</p>	<p>O440.1 paragraph 4.f.(1)-(8) f. Provide workers the right, without reprisal, to: (1) accompany DOE worker protection personnel during workplace inspections; (2) participate in activities provided for in this Order on official time; (3) express concerns related to worker protection; (4) decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with this Order; (5) have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace; (6) observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring; (7) be notified when monitoring results indicate they were overexpose to hazardous materials; and (8) receive results of inspections and accident investigations upon request.</p>	<p>C440.1, Attach 2, paragraph 6.a.-h. 6. Provide workers the right, without reprisal, to: a. accompany DOE worker protection personnel during workplace inspections; b. participate in activities provided for herein on official time; c. express concerns related to worker protection; d. decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with the requirements herein; e. have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace; f. observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring; g. be notified when monitoring results indicate they were overexpose to hazardous materials; and h. receive results of inspections and accident investigations upon request.</p>	<p>WP_2.2&lt;part of&gt; 2.2 Workers' Rights DOE Order 440.1 requires DOE elements and contractors to provide workers the right, without reprisal, to: -accompany DOE worker protection personnel during workplace inspections; -participate in activities provided for in the Order on official time; -express concerns related to worker protection; -decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with the Order; -have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace; -observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring; -be notified when monitoring results indicate they were overexposed to hazardous materials; and -receive results of inspections and accident investigations upon request [paragraph 4.f and Attachment 2, paragraph 6].</p> <p>One or more employee representative should be provided the opportunity to participate in briefings and in the walk around phase of DOE-conducted oversight inspections. Employee participation may be waived by DOE in the event of labor disputes or other special circumstances. Note that employee participation must be consistent with acceptable practices for labor/management relations (e.g., union official or bargaining unit representative participation in compliance inspections).</p> <p>Workers have the right to report</p>	<p>No significant change.</p>	<p>Equivalent language in the Order and technical standard. Specific requirements in DOE O 5480.29.</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>5480_16A.Requ.[CHAPIII].5., 5.a.  5. REPORTING/INVESTIGATION REQUIREMENTS.  a. The reporting and investigation of firearms-related incidents shall be in accordance with applicable requirements of DOE 5000.3B, DOE 5484.1B, and DOE 5632.7.</p>	<p>O440.1 paragraph 4.i.(4)  (4) Report and investigate accidents, injuries, and illnesses (reference DOE O 231.1, ENVIRONMENT, SAFETY AND HEALTH REPORTING; DOE O 232.1, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION; and DOE O 225.1, ACCIDENT INVESTIGATIONS) and analyze related data for trends and lessons learned (reference DOE O 210.1, PERFORMANCE INDICATORS PROGRAM AND ANALYSIS OF OPERATIONS).</p>	<p>C440.1, Attach 2, paragraph 9.d.  d. Report and investigate accidents, injuries, and illnesses, and analyze related data for trends and lessons learned (reference DOE O 210.1).</p>	<p>hazards without fear of reprisal and to refuse to work when faced with an imminent danger of death or serious injury. If workers are punished for reporting such hazards or for refusing to work when faced with an imminent danger condition, they may file a discrimination complaint.</p>	<p>No significant change. Equivalent language in the Order and technical standard. Specific requirements contained in DOE O 231.1, 232.1, and 225.1.</p>
			<p>WP_3.4  3.4 Accident, Injury, and Illness Reporting and Data Analysis  DOE 440.1 requires the reporting and investigation of accidents, injuries, and illnesses and analysis of related data for trends and lessons learned [paragraph 4.i.(4) and Attachment 2, paragraph 9.d].</p>	
			<p>The collection of detailed, accurate data and information regarding workplace accidents, injuries, and illnesses and the subsequent analysis of the data and information are useful in identifying worker protection problem areas. This type of analysis or trending is used to identify the prevalent types of accidents, injuries, and illnesses and their sources and causes. Information derived from trend analysis can be used to focus worker protection efforts on the actual sources of injuries and illnesses and to help prioritize hazard abatement activities.</p>	
			<p>Necessary components of accident, injury, and illness data collection and analysis include:  -Systems and methods to collect, record, compile, and manage accident injury, and illness data and information, including but not limited to the OSHA 200 log of occupational injuries and illnesses, workers compensation data, accident reports, incident reports, industrial hygiene and health physics exposure monitoring results, and inspection reports and corrective action tracking entries;  -Methodologies to analyze data and information to identify and trend accidents, injuries, and illnesses by type and source; and  -A formalized approach to analyze identified trends, to determine root causes, and to develop appropriate</p>	

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
			control measures.		
			Requirements for accident, injury, and illness reporting and investigation are contained in DOE Orders 231.1, 232.1, and 225.1. Requirements for analysis of related data for trends and lessons learned are contained in DOE Order 210.1.		
5480_16A.Requ.[CHAPIII].5.b. b. In addition to the above reporting, the appropriate Operations Office safety and protective force managers, Office of Occupational Safety and Office of Safeguards and Security shall be notified.				Deleted from the Order.	Captured under DOE O 231.1 and 232.1.
5480_16A.Requ.[CHAPIII].6. 6. EMERGENCY/EVENT PLANNING. Emergency plans and procedures required by DOE 5500.1B shall specifically address, as applicable, incidents involving firearms.				Deleted from the Order.	Emergency management requirements captured under DOE O 151.1, "Comprehensive Emergency Management"
5480_16A.Glue.[CHAPIV]1., 1.a. CHAPTER IV TRANSPORTATION, HANDLING, AND STORAGE OF MUNITIONS 1. APPROVED AMMUNITION. a. Office of Safeguards and Security shall be responsible for developing, updating, and maintaining a list of approved ammunition for the daily use of Department personnel. This list shall specify the caliber, bullet type and weight, and manufacturer of the ammunition.	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems. C440.1, Attach 2, paragraph 15.e. e. Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).	FS_5.0-5.1.2 5. TRANSPORTATION, HANDLING, AND STORAGE OF MUNITIONS 5.1 APPROVED AMMUNITION 5.1.1 Office of Security Affairs shall be responsible for developing, updating, and maintaining a list of approved ammunition for the daily use of Departmental personnel. This list shall specify the caliber, bullet type and weight, and manufacturer of the ammunition.  5.1.2 Ammunition used for live fire training and qualification, ESS training and other nonlethal training shall be of the highest quality. Reloaded, reprocessed, or military surplus ammunition should not be used for training purposes. Ammunition shall not be unboxed and placed in bulk containers.	No significant change.	Equivalent language in the Order and technical standard and in DOE M 440.1-1.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	O440.1, Attach 1, paragraph 3.a.(5) (5) Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).				
5480_16A.Glue.[CHAPIV]1.b. b. Ammunition used for live fire training and qualification, ESS training, and other non-lethal training shall be of the highest quality. Re-loaded, reprocessed or military surplus ammunition should not be used for training purposes. Ammunition shall not be unboxed and placed in bulk containers.	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.	FS_5.0-5.1.2 5. TRANSPORTATION, HANDLING, AND STORAGE OF MUNITIONS 5.1 APPROVED AMMUNITION 5.1.1 Office of Security Affairs shall be responsible for developing, updating, and maintaining a list of approved ammunition for the daily use of Departmental personnel. This list shall specify the caliber, bullet type and weight, and manufacturer of the ammunition.  5.1.2 Ammunition used for live fire training and qualification, ESS training and other nonlethal training shall be of the highest quality. Reloaded, reprocessed, or military surplus ammunition should not be used for training purposes. Ammunition shall not be unboxed and placed in bulk containers.	Captured under performance-based requirement. Specific implementation guidance provided in the technical standard.	Eliminate "how to" guidance from the Order.
5480_16A.Glue.[CHAPIV]2., 2.a. 2. TRANSPORTATION OF MUNITIONS. a. Transportation of munitions on public highways shall be governed by Department of Transportation (DOT) regulations (49 CFR part 173). For transportation purposes only, munitions shall be given DOT class designations.	O440.1, Attach 1, paragraph 3.a.(5) (5) Ensure that the	C440.1, Attach 2, paragraph 15.e. e. Ensure that the transportation.	FS_5.2-5.2.2 5.2 TRANSPORTATION OF MUNITIONS 5.2.1 Transportation of munitions on public highways shall be governed by Department of Transportation (DOT) regulations (49 CFR part 173). For transportation purposes only, munitions shall be given DOT class designations.  5.2.2 Transportation of munitions onsite shall comply with requirements contained in Chapter I, Section 16, of the Department of Energy Explosive Safety Manual, DOE M 440.1-1. Munitions not in original DOT containers shall be transported in containers specified in paragraph 17.5, Chapter II of the DOE M 440.1-1	Deleted from the Order.	DOT requirements are mandatory in and of themselves and need not be mandated in DOE O440.1. DOE M 440.1-1 establishes DOE implementation procedures for these DOT requirements.
5480_16A.Requ.[CHAPIV]2.b. b. Transportation of munitions onsite shall	O440.1, Attach 1, paragraph 3.a.(5) (5) Ensure that the	C440.1, Attach 2, paragraph 15.e. e. Ensure that the transportation.	FS_5.2-5.2.2 5.2 TRANSPORTATION OF	No significant change.	Equivalent language in the



Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>comply with requirements contained in Chapter I, Section 16, of the "Department of Energy Explosives Safety Manual" (DOE/EV/06194). Munitions not in original DOT containers shall be transported in containers specified in paragraph 17.5, Chapter II of the Manual.</p>	<p>transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>	<p>handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>	<p>MUNITIONS</p> <p>5.2.1 Transportation of munitions on public highways shall be governed by Department of Transportation (DOT) regulations (49 CFR part 173). For transportation purposes only, munitions shall be given DOT class designations.</p> <p>5.2.2 Transportation of munitions onsite shall comply with requirements contained in Chapter I, Section 16, of the Department of Energy Explosive Safety Manual, DOE M 440.1-1. Munitions not in original DOT containers shall be transported in containers specified in paragraph 17.5, Chapter II of the DOE M 440.1-1</p>		<p>Order and technical standard.</p>
<p>5480_16A.Requ.[CHAPIV]3.,3.a.-5.c. 3. HANDLING OF MUNITIONS.</p> <p>a. Munitions shall be protected from abnormal stimuli or environments such as impact, shock, high temperatures, and open flames.</p> <p>b. Smoking shall be prohibited when handling, transporting, or storing munitions. No matches, lighters, other fire-, flame-, or spark-producing devices shall be taken into a munitions storage area; appropriate signs or markings shall be posted at such areas.</p> <p>4. STORAGE OF MUNITIONS. (This is a summary of applicable requirements for the munitions listed in this Order. Additional criteria can be found in DOE/EV/06194, and in DOD Ammunition and Explosives Safety Standards (DOD 6055.9-STD).)</p> <p>a. Storage Structures. Refer to DOE/EV/06194 for guidance on design of structures for storing munitions.</p> <p>b. Hazard Class and Hazard Division.</p> <p>(1) For the purpose of placarding, the United Nations Organization (UNO) or the National Fire Protection Association (NFPA) hazard classification systems may be used. To ease identification of hazard characteristics and thus promote safe storage of munitions, the hazard classification system recommended by the UNO is used for DOE explosives classification. The system consists of nine classes for dangerous goods, with munitions included in Class 1. Class 1 is further subdivided into divisions that are based on the character and predominance of the associated hazards and on the potential for causing personnel casualties c</p>	<p>O440.1, Attach 1, paragraph 3.a.(5)</p> <p>(5) Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>	<p>C440.1, Attach 2, paragraph 15.e.</p> <p>e. Ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable requirements of DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194).</p>	<p>FS_5.3-5.3.2</p> <p>5.3 HANDLING OF MUNITIONS</p> <p>5.3.1 Munitions shall be protected from abnormal stimuli or environments such as impact, shock, high temperatures, and open flames.</p> <p>5.3.2 Smoking shall be prohibited when handling, transporting, or storing munitions. No matches, lighters, other fire-, flame-, or spark-producing devices shall be taken into a munition storage area; appropriate signs or markings shall be posted at such areas.</p> <p>FS_5.4-5.4.1</p> <p>5.4 STORAGE OF MUNITIONS</p> <p>This is a summary of applicable requirements for the munitions listed in this Standard. Additional criteria can be found in the DOE M 440.1-1, and in DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards."</p> <p>5.4.1 Storage Structures. Refer to the DOE Explosives Safety Manual for guidance on design of structures for storing munitions.</p>	<p>Specific handling and storage procedures deleted from the Order and captured under DOE M 440.1-1. Additional detailed guidance contained in the technical standard.</p>	<p>Eliminate overlapping/redundant requirements.</p>

property damage.  
 The four divisions of Class 1 are as follows  
 (a) Hazard Class/Division 1.1. Mass detonating with possible fragments.  
 (b) Hazard Class/Division 1.2. Non mass-detonating, fragment producing (fragments falling within indicated minimum distances)  
 (c) Hazard Class/Division 1.3. Mass fire (fragments and fire brands could fall within indicated minimum distances).  
 (d) Hazard Class/Division 1.4. Moderate fire, no blast.  
 (2) When required to properly describe the hazard, a numerical figure in parentheses shall be placed to the left of the hazard class/division 1.1 through 1.3 (e.g., (18) 1.1 (08) 1.2, and (06) 1.3); this number in parentheses is used to indicate the minimum separation distance (in hundreds of feet) for specified levels of protection from munitions for inhabited buildings, public traffic routes, and personnel in the open.  
 (3) The hazard class/division designation for the munitions presently in use by DOE security forces is contained in Attachments IV-1 and IV-2. Attachment IV-1 lists the military-type ammunition and explosives; Attachment IV-2 contains commercial items  
 c. Quantity Distance Requirements.  
 (1) Hazard Class/Division 1.1 Munitions. Inhabited building and public traffic route separation distances shall be in accordance with those specified in Table 9-1, DOD 6055.9-STD. If the storage structure is an above-ground magazine (not earth-covered), Column 5 for inhabited buildings and Column 9 for public traffic routes shall be used. The minimum fragment distance has been incorporated into the table except when the minimum fragment distance is indicated by a numerical figure in parentheses. For example, "Hazard Class/Division (04) 1.1" means that for 100 pounds or less of net explosives weight, the minimum fragment distance will be 400 feet  
 (2) Hazard Class/Division 1.2 Munitions.  
 (a) (04) 1.2 Munitions. Inhabited building and public traffic route separation distances shall be as specified in Table 9-6, DOD 6055.9-STD. If the minimum distances specified are available, there is no limit as to the quantity of the material which can be stored in an approved structure. If the minimum distances are not available, (04) 1.2 material shall not be stored in the structure. Limited quantities of (04) 1.2

FS\_5.4.2-5.4.2.2  
 5.4.2 Hazard Class and Hazard Division  
 5.4.2.1 For the purpose of placarding, the United Nations Organization (UNO) or the National Fire Protection Association (NFPA) hazard classification systems may be used. To ease identification of hazard characteristics and thus promote safe storage of munitions, the hazard classification system recommended by the UNO is used for DOE explosives classification. The system consists of nine classes for dangerous goods, with munitions included in Class 1. Class 1 is further subdivided into divisions that are based on the character and predominance of the associated hazards and on the potential for causing personnel casualties or property damage. The four divisions of Class 1 are as follows  
  
 (a) Hazard Class/Division 1.1. Mass detonating with possible fragments.  
  
 (b) Hazard Class/Division 1.2. Non mass-detonating, fragment producing (fragments falling within indicated minimum distances).  
  
 (c) Hazard Class/Division 1.3. Mass fire (fragments and fire brands could fall within indicated minimum distances).  
  
 (d) Hazard Class/Division 1.4. Moderate fire, no blast.  
  
 5.4.2.2 When required to properly describe the hazard, a numerical figure in parentheses shall be placed to the left of the hazard class/division 1.1 through 1.3 (e.g., (18) 1.1, (08) 1.2, and (06) 1.3); this number in parentheses is used to indicate the minimum separation distance (in hundreds of feet) for specified levels of protection from munitions for inhabited buildings, public traffic routes, and personnel in the open.

items, for reasons of operational necessity, may be stored in security facilities; however fragmentation shielding is required.

(b) (08) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-7, DOD 6055.9-STD. If the minimum distance specified is available, there is no limit as to the quantity of material that may be stored in an approved structure. If the minimum distance is not available, the structure shall not be used for this material.

(c) (12) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-8, DOD 6055.9-STD. If the minimum distance is not available, the structure shall not be used for this material.

(3) Hazard Class/Division 1.3 Munitions.

(a) Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-10. DOE 6055.9-STD, for Hazard Class/Division 1.3 munitions.

(b) If the Hazard Class/Division 1.3 material is further described by a numerical figure in parenthesis, that number in hundreds of feet shall be minimum separation distance required, regardless of the distances given in Table 9-10 for the specific quantity.

(4) Hazard Class/Division 1.4 Munitions.

(a) Limited quantities of Hazard Class/Division 1.4 material for operational use may be stored in security facilities such as guard headquarters, security operations buildings, and guard stations without regard to quantity distance separation requirements.

(b) Storage of larger quantities, such as training stocks, shall be in accordance with Table 9- 11, DOD 6055.9-STD.

Additionally, this material in its original DOD Class C packaging may be stored in warehouses if the material is placed in segregated and specifically designed areas.

(5) Combined Storage of Hazard Class/Division.

(a) If Hazard Class/Division 1.1, 1.2, and 1.3 materials are stored together, the large separation distance for each individual Hazard Class/Division shall be required for protection of inhabited buildings and public traffic routes (See Chapter 9, Paragraphs B.1 c through g, DOD 6055.9-STD).

(b) Combining Hazard Class/Division 1.4 with any other Hazard Class/Division shall not affect the required separation distances.

(6) Intraline and Intermagazine Distances.

FS\_5.4.3-5.4.3.3<part of>  
 5.4.3 Quantity Distance Requirements  
 5.4.3.1 Hazard Class/Division 1.1 Munitions. Inhabited building and public traffic route separation distances shall be in accordance with those specified in Table 9-1, DOD 6055.9-STD. If the storage structure is an above-ground magazine (not earth-covered), Column 5 for inhabited buildings and Column 9 for public traffic routes shall be used. The minimum fragment distance has been incorporated into the table except when the minimum fragment distance is indicated by a numerical figure in parentheses. For example, "Hazard Class/Division (04) 1.1" means that for 100 pounds or less of net explosives weight, the minimum fragment distance will be 400 feet.

5.4.3.2 Hazard Class/Division 1.2 Munitions

(a) (04) 1.2 Munitions. Inhabited building and public traffic route separation distances shall be as specified in Table 9-6, DOD 6055.9-STD. If the minimum distances specified are available, there is no limit as to the quantity of the material which can be stored in an approved structure. If the minimum distances are not available, (04) 1.2 material shall not be stored in the structure. Limited quantities of (04) 1.2 items, for reasons of operational necessity, may be stored in security facilities; however, fragmentation shielding is required.

(b) (08) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-7, DOD 6055.9-STD. If the minimum distance specified is available, there is no limit as to the quantity of material that may be stored in an approved structure. If the minimum distance is not available, the structure shall not be used for this material.

(c) (12) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-8, DOD 6055.9-

If munitions for a protective force are stored near or within an explosives storage area or near explosives operation buildings, the required intraline and intermagazine separation distances shall be specified by the cognizant safety office using DOD 6055.9-STD.

d. Storage Compatibility Requirements.

(1) Compatibility groupings define which munitions may be safely stored together without increasing the risk of initiation.

Attachments IV-1 and IV-2 list the storage compatibility group for munitions presently in use by Department protective forces.

(2) Storage compatibility mixing.

(a) The permitted mixing of storage compatibility groups shall be as specified in "Department of Energy Explosives Safety Manual," Chapter II, Table II-5. Additionally, items from storage compatibility groups C, D, E, F, G, and S may be combined in storage if the net explosives weight in the items (or in bulk) does not exceed 1,000 pounds and if the items are in their original or approved packages.

(b) Electric blasting caps (storage compatibility group B) shall not be stored in a magazine with other munitions unless the blasting caps are separated from the other items by an enclosure built of sandbags.

5. PROTECTIVE FORCE MUNITIONS.

a. Storage of Small Arms Ammunition.

Articles in Hazard Class/Division 1.4 and Storage Compatibility Group S are considered as inert for storage purposes and only require appropriate fire-protection distance separation requirements as long as they are stored only with inert items or other 1.4 S items. This applies only if the Hazard Class/Division 1.4 and Storage Compatibility Group S articles remain in their original packaging containers. When stored with items in a Storage Compatibility Group other than S, normal quantity-distance requirements must be observed (see Chapter 9, Paragraph C.4.b. [page 9-19] of DOD 6055.9 STD).

b. Transportation of Munitions in Protective Force Vehicles.

(1) Protective force patrol and response vehicles are authorized to transport the minimum quantity of munitions needed to support approved contingency plans and to execute protective force duties.

(2) Whenever possible, support munitions required for defense against hostile forces should be pre-positioned in readily

STD. If the minimum distance is not available, the structure shall not be used for this material.

5.4.3.3 Hazard Class/Division 1.3 Munitions

(a) Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-10. DOE 6055.9-STD, for Hazard Class/Division 1.3 munitions.

(b) If the Hazard Class/Division 1.3 material is further described by a numerical figure in parenthesis, that number in hundreds of feet shall be minimum separation distance required regardless of the distances given in Table 9-10 for the specific quantity.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description Basis for Change
<p>accessible magazines.</p> <p>(3) Protective force vehicles loaded with a combination of up to 25 pounds net explosive weight of Hazard Class/Division 1.1 and 1.2 munitions shall be exempt from explosives quantity-distance requirements when executing approved contingency plan or protective force duties.</p> <p>(a) Vehicles so loaded shall not be used for administrative purposes.</p> <p>(b) Vehicles so loaded shall be separated from inhabited facilities and property lines by a minimum of 125 feet when temporarily out of protective force service.</p> <p>(c) Vehicles so loaded shall be downloaded into properly sited magazines or approved facilities when parked for periods in excess of 4 hours.</p> <p>(4) Operation of explosives-loaded vehicles will be restricted to onsite location.</p> <p>(5) The explosives must be secured within the vehicle.</p> <p>(6) Smoking in explosives loaded vehicles is prohibited.</p> <p>(7) These vehicles shall be downloaded into properly sited magazines or approved facilities prior to repair or maintenance, except under emergency response conditions (see Chapter II, Paragraph 16.1.2.e (1) of DOE/EV/06194).</p> <p>(8) Munition shall not be exposed to temperature conditions within the vehicle that exceed the criteria stated on the MSDS or manufacturer's recommendation. Appropriate safety precautions will be taken to ensure munitions are not exposed to extreme temperatures.</p> <p>c. Munitions Carried by Protective Force Personnel. Protective Force Personnel shall be allowed to carry on their person Hazard Class/Division 1.1 and 1.2 munitions issued to them for use in the execution of approved contingency plans without regard to explosives quantity-distance requirements. Appropriate safety precautions for the handling of munitions shall be observed and the munitions shall be placed in an approved location if temporarily removed from the uniform/load bearing equipment used to carry such item:</p>			<p>FS_5.4.3.4-5.4.3.6&lt;part of&gt; 5.4.3.4 Hazard Class/Division 1.4 Munitions</p> <p>(a) Limited quantities of Hazard Class/Division 1.4 material for operational use may be stored in security facilities such as guard headquarters, security operations buildings, and guard stations without regard to quantity distance separation requirements.</p> <p>(b) Storage of larger quantities, such as training stocks, shall be in accordance with Table 9-11, DOD 6055.9-STD. Additionally, this material in its original DOT Class C packaging may be stored in warehouses if the material is placed in segregated and specifically designed areas.</p> <p>5.4.3.5 Combined Storage of Hazard Class/Division</p> <p>(a) If Hazard Class/Division 1.1, 1.2, and 1.3 materials are stored together, the largest separation distance for each individual Hazard Class/Division shall be required for protection of inhabited buildings and public traffic routes (See Chapter 9, Paragraphs B.1 c through g, DOD 6055.9-STD).</p> <p>(b) Combining Hazard Class/Division 1.4 with any other Hazard Class/Division shall not affect the required separation distances.</p> <p>5.4.3.6 Intraline and Intermagazine Distances. If munitions for a protective force are stored near or within an explosives storage area or near explosives operation buildings, the required intraline and intermagazine separation distances shall be specified by the cognizant safety office using DOD 6055.9-STD.</p>	

FS\_5.4.4.1-5.4.4.2

5.4.4 Storage Compatibility Requirements

5.4.4.1 Compatibility groupings define which munitions may be safely stored together without increasing the risk of initiation.

5.4.4.2 Storage compatibility mixing

(a) The permitted mixing of storage compatibility groups shall be as specified in the DOE Explosive Safety Manual, Chapter II, Table II-5.

Additionally, items from storage compatibility groups C, D, E, F, G, and S may be combined in storage if the net explosives weight in the items (or in bulk) does not exceed 1,000 pounds and if the items are in their original or approved packages.

(b) Electric blasting caps (storage compatibility group B) shall not be stored in a magazine with other munitions unless the blasting caps are separated from the other items by an enclosure built of sandbags.

FS\_5.5-5.5.1

5.5 PROTECTIVE FORCE MUNITIONS

5.5.1 Storage of Small Arms Ammunition. Articles in Hazard Class/Division 1.4 and Storage Compatibility Group S are considered as inert for storage purposes and only require appropriate fire-protection distance separation requirements as long as they are stored only with inert items or other 1.4 S items. This applies only if the Hazard Class/Division 1.4 and Storage Compatibility Group S articles remain in their original packaging containers. When stored with items in a Storage Compatibility Group other than S, normal quantity-distance requirements must be observed (see Chapter 9, Paragraph C.4.b. [page 9-19] of DOD 6055.9 STD).

FS\_5.5.2-5.5.2.8

5.5.2 Transportation of Munitions in Protective Force Vehicles

5.5.2.1 Protective force patrol and response vehicles are authorized to transport the minimum quantity of munitions needed to support approved contingency plans and to execute protective force duties.

5.5.2.2 Whenever possible, support munitions required for defense against hostile forces should be pre-positioned in readily accessible magazines.

5.5.2.3 Protective force vehicles loaded with a combination of up to 25 pounds net explosive weight of Hazard Class/Division 1.1 and 1.2 munitions shall be exempt from explosives quantity-distance requirements when executing approved contingency plans or protective force duties.

(a) Vehicles so loaded shall not be used for administrative purposes.

(b) Vehicles so loaded shall be separated from inhabited facilities and property lines by a minimum of 125 feet when temporarily out of protective force service.

(c) Vehicles so loaded shall be downloaded into properly sited magazines or approved facilities when parked for periods in excess of 4 hours.

5.5.2.4 Operation of explosives-loader vehicles will be restricted to onsite locations.

5.5.2.5 The explosives must be secured within the vehicle.

5.5.2.6 Smoking in explosives loaded vehicles is prohibited.

5.5.2.7 These vehicles shall be downloaded into properly sited magazines or approved facilities prior to repair or maintenance, except under emergency response conditions (see Chapter II, Paragraph 16.1.2.e (1) of DOE Explosives Safety Manual)

5.5.2.8 Munition shall not be exposed to temperature conditions within the vehicle that exceed the criteria stated on the MSDS or manufacturer's recommendation. Appropriate safety precautions will be taken to ensure munitions are not exposed to extreme temperatures.

FS\_5.5.3

5.5.3 Munitions Carried by Protective Force Personnel

Protective Force Personnel shall be allowed to carry on their person Hazard Class/Division 1.1 and 1.2 munitions issued to them for use in the execution of approved contingency plans without regard to explosives quantity-distance requirements. Appropriate safety precautions for the handling of munitions shall be observed and the munitions shall be placed in an approved location if temporarily removed from the uniform/load bearing equipment used to carry such items.

5480\_16A.Glue.[CHAPV]1., 1.a., 1.a.(1)-(3)  
 CHAPTER V  
 NON SECURITY USE OF FIREARMS  
 1. WORK-RELATED ACTIVITIES.  
 a. All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the appropriate Operations Office official and address, as a minimum, the following:  
 (1) A statement of management policy relating to the safe use of firearms;  
 (2) Activity-specific procedures for the operations being conducted;  
 (3) Maintenance and inspection of firearms being used under DOE control;  
 (a) Firearms shall be inspected by the user through functional manipulation prior to use  
 (b) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.  
 (c) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.

O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  
 3. FIREARMS SAFETY.  
 a. Requirements.  
 (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (b) activities such as loading, unloading, and exchanging firearms;  
 (c) use of pyrotechnics and/or explosive projectiles;  
 (d) handling misfires and duds;  
 (e) live fire operations; and  
 (f) training and exercises using engagement simulation systems

C440.1, Attach 2, paragraph 15.a.(1)-(6)  
 15. FIREARMS SAFETY.  
 a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:  
 (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;  
 (2) activities such as loading, unloading, and exchanging firearms;  
 (3) use of pyrotechnics and/or explosive projectiles;  
 (4) handling misfires and duds;  
 (5) live fire operations; and  
 (6) training and exercises using engagement simulation systems.

FS\_6.0-6.1.3  
 6 NON-SECURITY USE OF FIREARMS  
 6.1 WORK-RELATED ACTIVITIES  
 6.1.1 All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the cognizant DOE Operations Office official and address, as a minimum, the following:  
 a. A statement of management policy relating to the safe use of firearms;  
 b. Activity-specific procedures for the operations being conducted;  
 c. Maintenance and inspection of firearms being used under DOE control;  
 (1) Firearms shall be inspected by the user through functional manipulation prior to use.

Captured under top-level firearms safety requirement.  
 The Order does not distinguish between security and non-security use of firearms. Specific guidance on non-security use of firearms is contained in the technical standard.



	O440.1, Attach 1, paragraph 3.b.(1)(a)(b) b. Responsibilities (1) Operations Office Managers. (a) Ensure effective implementation and control of the firearms safety program. (b) Approve the location and use of the contractor's live fire ranges.		(2) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.  (3) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.  d. Provisions for the storage, inventory and control of firearms and ammunition;  e. Emergency response and communications needs; and  f. Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for-duty.  6.1.2 Independent assessments of internal operations shall be conducted at least annually.  6.1.3 Developmental and quality assurance activities involving small arms shall be controlled in accordance with the DOE Explosives Safety Manual.		
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5480_16A.Requ.[CHAPV]1.(4) (a)(b)(c)(d) (4) Training of personnel; (a) All persons shall be trained to a level necessary for safe and efficient operations. Personnel training requirements shall be documented and shall address initial as well as any recurrent training necessary; (b) Individual personnel training records shall be maintained and available for review; (c) All non security personnel who use firearms, in remote areas, shall successfully complete first aid training, including cardiopulmonary resuscitation (CPR) instruction, annually. Training shall be from instructors certified by the American Red Cross or the American Heart Association. Specific training on the handling of gunshot wounds shall be included in the training; (d) Training shall include the safety and health hazards associated with firearms and measures to reduce exposure to these hazards;	O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (b) activities such as loading, unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for: (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms; (3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.	FS_2.2<part of> Four General Firearms Safety Rules: all fire-arms are always load-ed; never point a firearm at anything you are not willing to destroy; keep your finger off the trigger until your sights are on the target; and, be sure of your target. FS_2.2<part of> 2.2 TRAINING Firearms safety training and demonstrated technical knowledge are practical proficiency shall be required before firearms are permitted to be carried on duty. Safety training shall be repeated at least semi-annually, at which time safety proficiency must be demonstrated in order to retain firearm carrying status.	Captured under top-level firearms safety requirement.	The Order does not distinguish between security and non-security use of firearms. Specific guidance on non-security use of firearms is contained in the technical standard.
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Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>O440.1, Attach 1, paragraph 3.a.(4)(a)            (4) Implement safety provisions related to firearms safety training, qualification, or requalification.            (a) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(b)            (b) Personnel authorized to carry firearms shall have access to instruction manuals for each type of firearm with which they are armed while on duty.</p> <p>O440.1, Attach 1, paragraph 3.a.(4)(c)            (c) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests and the results of such testing shall be documented.</p>	<p>C440.1, Attach 2, paragraph 15.d.(1)            d. Implement safety provisions related to firearms safety training, qualification, or requalification.            (1) Personnel shall successfully complete and demonstrate understanding of initial firearms safety training before being issued any firearms.</p> <p>C440.1, Attach 2, paragraph 15.d.(d)            (2) Personnel authorized to carry firearms shall have access to instruction manuals for each type of duty firearms with which they are armed while on duty.</p> <p>C440.1, Attach 2, paragraph 15.d.(3)            (3) Authorized armed personnel shall demonstrate both technical and practical knowledge of firearms handling and safety on a semi-annual basis. This demonstration shall be supported by limited scope performance tests, and the results of such testing shall be documented.</p>	<p>FS_2.2&lt;part of&gt;            Firearms safety training shall include, at a minimum, the following: general firearms safety orientation; instruction on the capabilities of firearms and ammunition and the implications thereof; firearms safety information for each type of firearm required by duty assignment; practice with an unloaded firearm in the teaching environment; range safety procedures and demonstration of safe firing technique; on the range; dry firing techniques and hazards associated with dry firing; handling of misfires; as applicable, instructions on the hazards associated with the impact of bullets and other projectiles on nuclear explosives, nuclear weapons, explosives, and other possible items that could result in a significant release of energy or toxic substances; detailed procedures on clearing, handling of malfunctions, inspecting, cleaning, loading, unloading, and other specific tasks related to each firearm for which the student receives training. This may include instruction and practice in assembly/disassembly but shall not include repair, modification, or replacement of parts; and, details of firearms accidents and how they could have been prevented.</p>		

<p>5480_16A.Requ.[CHAPV]1.(5)-(7)            (5) Provisions for the storage, inventory, and control of firearms and ammunition; and            (6) Emergency response and communications needs.            (7) Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for duty.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)            (f)            3. FIREARMS SAFETY.            a. Requirements.            (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:            (a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;            (b) activities such as loading, unloading, and exchanging firearms;            (c) use of pyrotechnics and/or explosive projectiles;            (d) handling misfires and duds;            (e) live fire operations; and            (f) training and exercises</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6)            15. FIREARMS SAFETY.            a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:            (1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;            (2) activities such as loading, unloading, and exchanging firearms;            (3) use of pyrotechnics and/or explosive projectiles;            (4) handling misfires and duds;            (5) live fire operations; and            (6) training and exercises using engagement simulation systems.</p>	<p>FS_6.0-6.1.3            6 NON-SECURITY USE OF FIREARMS            6.1 WORK-RELATED ACTIVITIES            6.1.1 All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the cognizant DOE Operations Office official and address, as a minimum, the following:            a. A statement of management policy relating to the safe use of firearms;            b. Activity-specific procedures for the operations being conducted;            c. Maintenance and inspection of</p>	<p>Captured under top-level firearms safety requirement.</p>	<p>The Order does not distinguish between security and non-security use of firearms. Specific guidance on non-security use of firearms is contained in the technical standard.</p>
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Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
	<p>using engagement simulation systems</p>		<p>firearms being used under DOE control;</p> <p>(1) Firearms shall be inspected by the user through functional manipulation prior to use.</p> <p>(2) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.</p> <p>(3) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.</p> <p>d. Provisions for the storage, inventory and control of firearms and ammunition;</p> <p>e. Emergency response and communications needs; and</p> <p>f. Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for-duty.</p> <p>6.1.2 Independent assessments of internal operations shall be conducted at least annually.</p> <p>6.1.3 Developmental and quality assurance activities involving small arms shall be controlled in accordance with the DOE Explosives Safety Manual.</p>		

5480\_16A.Requ.[CHAPV]1.b.  
b. Independent assessments of internal operations shall be conducted at least annually.

O440.1, Attach 1, paragraph 3.a.(3)  
(3) Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.

C440.1, Attach 2, paragraph 15.c.  
c. Conduct formal appraisals assessing implementation of procedures, personnel responsibilities and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified safety personnel.

FS\_6.0-6.1.3  
6 NON-SECURITY USE OF FIREARMS

6.1 WORK-RELATED ACTIVITIES

6.1.1 All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the cognizant DOE Operations Office official and address, as a minimum, the following:

a. A statement of management policy relating to the safe use of firearms;

Captured under top-level firearms safety requirement.

The Order does not distinguish between security and non-security use of firearms. Specific guidance on non-security use of firearms is contained in the technical standard.

b. Activity-specific procedures for the operations being conducted;

c. Maintenance and inspection of firearms being used under DOE control;

(1) Firearms shall be inspected by the user through functional manipulation prior to use.

(2) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.

(3) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.

d. Provisions for the storage, inventory and control of firearms and ammunition;

e. Emergency response and communications needs; and

f. Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for-duty.

6.1.2 Independent assessments of internal operations shall be conducted at least annually.

6.1.3 Developmental and quality assurance activities involving small arms shall be controlled in accordance with the DOE Explosives Safety Manual.

5480\_16A.Requ.[CHAPV]1.c.  
c. Developmental and quality assurance activities involving small arms shall be controlled in accordance with DOE/EV/06194, DOE Explosives Safety Manual, Chapter II, Section 13.

O440.1, Attach 1, paragraph 4.  
4. EXPLOSIVES SAFETY. Ensure that applicable explosives operations comply with DOE M 440.1-1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194). Facility management shall determine the applicability of the requirements to research and development laboratory type operations consistent with the DOE level of protection criteria in the manual. The administration and management of the Explosives Safety

C440.1, Attach 2, paragraph 16.  
16. EXPLOSIVES SAFETY. Ensure that applicable explosives operations comply with DOE M 440.1- 1, DOE EXPLOSIVES SAFETY MANUAL (Formerly DOE/EV/06194). Contractor facility management shall determine the applicability of the requirements to research and development laboratory type operation consistent with the DOE level of protection criteria in the manual. The administration and management of the

FS\_6.0-6.1.3  
6 NON-SECURITY USE OF FIREARMS  
6.1 WORK-RELATED ACTIVITIES  
6.1.1 All DOE and DOE contractor organizations with employees using firearms in non security work-related activities shall develop a program of firearms safety specific to those activities. This program shall be approved by the cognizant DOE

No signification change

Equivalent language in the Order and technical standard.

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>5480_16A.Requ.[CHAPV]2.a.-c.  2. PUBLIC HUNTING.  a. Prior to any activity that includes access by members of the general public to DOE-controlled security areas for the purpose of hunting and killing of game with firearms, the appropriate DOE official of the Operations Office involved shall provide for</p>	<p>Manual and any deviations from it shall follow the process specified in Chapter I, Sections 3 and 4, of the manual. Revisions to the manual are made through concurrence of the DOE Explosives Safety Committee.</p> <p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f)  3. FIREARMS SAFETY.  a. Requirements.  (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall</p>	<p>Explosives Safety Manual and any deviations from it shall follow the process specified in Chapter I, Sections 3 and 4, of the manual. Revisions to the manual are made through concurrence of the DOE Explosives Safety Committee.</p> <p>C440.1, Attach 2, paragraph 15.a.(1)-(6)  15. FIREARMS SAFETY.  a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the</p>	<p>Operations Office official and address, as a minimum, the following:</p> <p>a. A statement of management policy relating to the safe use of firearms;</p> <p>b. Activity-specific procedures for the operations being conducted;</p> <p>c. Maintenance and inspection of firearms being used under DOE control;</p> <p>(1) Firearms shall be inspected by the user through functional manipulation prior to use.</p> <p>(2) DOE provided small arms shall be maintained and inspected annually in accordance with manufacturers' guidelines by appropriately trained persons.</p> <p>(3) The integrity of nonstandard modified firearms shall be verified by remote firing before being hand fired.</p> <p>d. Provisions for the storage, inventory and control of firearms and ammunition;</p> <p>e. Emergency response and communications needs; and</p> <p>f. Provisions for ensuring that personnel issued firearms are not under the influence of alcohol or drugs and are otherwise fit-for-duty.</p> <p>6.1.2 Independent assessments of internal operations shall be conducted at least annually.</p> <p>6.1.3 Developmental and quality assurance activities involving small arms shall be controlled in accordance with the DOE Explosives Safety Manual.</p> <p>FS_6.2-6.2.1  6.2 PUBLIC HUNTING  6.2.1 Prior to any activity that includes access by members of the general public to DOE-controlled security areas for the purpose of hunting and killing of game with firearms, the</p>	<p>Captured under top-level firearms safety requirement.</p>	<p>The Order does not distinguish between the types of firearms use. Specific guidance on non-security use of firearms is contained in the</p>

Old Order Provision	New Order (Feds)	New Order (Contractors)	Imp Guide/Tech Std	Change Description	Basis for Change
<p>the establishment of written procedures for conducting and controlling such activities. The procedures for DOE controlled security areas shall describe, as a minimum, the following subjects:</p> <p>(1) The means used for identifying each person engaged in a hunting activity;</p> <p>(2) The provisions and recording of basic safety information and facility orientation specific to the hunting activity to all participants. This may be accomplished by providing each hunter a copy of the site-hunting map and the safety rules and procedures applicable to the hunt. Each hunter must sign that he or she understands the requirements;</p> <p>(3) Whether emergency medical response and care will be available in the area of the hunt;</p> <p>(4) The types of firearms and ammunition acceptable for use in the hunting activity; and</p> <p>(5) The requirement for each hunter to thoroughly inspect his/her firearms for proper and safe function in accordance with the manufacturer's guidelines prior to bringing the firearm onto DOE property.</p> <p>b. The use, possession, or being under the influence of alcoholic beverages, illegal drugs, or controlled substances during or immediately prior to coming onto a DOE facility to hunt is strictly prohibited and shall be cause for denying access.</p> <p>c. Procedures for hunting on DOE-controlled properties shall conform to all applicable state and federal regulations for such activity.</p>	<p>address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading, unloading, and exchanging firearms;</p> <p>(c) use of pyrotechnics and/or explosive projectiles;</p> <p>(d) handling misfires and duds;</p> <p>(e) live fire operations; and</p> <p>(f) training and exercises using engagement simulation systems</p>	<p>personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p> <p>(3) use of pyrotechnics and/or explosive projectiles;</p> <p>(4) handling misfires and duds;</p> <p>(5) live fire operations; and</p> <p>(6) training and exercises using engagement simulation systems.</p>	<p>cognizant DOE official of the Operations Office involved shall provide for the establishment of written procedures for conducting and controlling such activities. Those procedures may be assigned through agreements between DOE and other agencies. The procedures for DOE controlled security areas shall describe, as a minimum, the following subjects:</p> <p>a. The means used for identifying each person engaged in a hunting activity;</p> <p>b. The provisions and recording of basic safety information and facility orientation specific to the hunting activity to all participants. This may be accomplished by providing each hunter a copy of the site-hunting map and the safety rules and procedures applicable to the hunt. Each hunter must sign that he or she understands the requirements;</p> <p>c. Whether emergency medical response and care will be available in the area of the hunt;</p> <p>d. The types of firearms and ammunition acceptable for use in the hunting activity; and</p> <p>e. The requirement for each hunter to thoroughly inspect his or her firearms for proper and safe function in accordance with the manufacturer's guidelines prior to bringing the firearm onto DOE property.</p>	<p>Captured under top-level firearms safety requirement.</p>	<p>technical standard.</p> <p>The Order does not distinguish between the types of firearms use. Specific guidance on non-security use of firearms is contained in the technical standard.</p>
<p>5480_16A.Requ.[CHAPV]3. 3. FIREARMS RELATED ACTIVITIES NOT OTHERWISE SPECIFIED. Specific written procedures shall be developed and approved for any activity not addressed elsewhere in the Order that involves DOE contractor personnel in the planned discharge of firearms, e.g., competitive shooting matches or pest control.</p>	<p>O440.1, Attach 1, paragraph 3.a.(1)(a)(f) 3. FIREARMS SAFETY. a. Requirements. (1) Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(a) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(b) activities such as loading,</p>	<p>C440.1, Attach 2, paragraph 15.a.(1)-(6) 15. FIREARMS SAFETY. a. Establish firearms safety policies and procedures to ensure proper accident prevention controls are in place. Written procedures shall address safety concerns and the personal protective equipment required. As a minimum, procedures must be established for:</p> <p>(1) storage, handling, cleaning, and maintenance of firearms and associated ammunition;</p> <p>(2) activities such as loading, unloading, and exchanging firearms;</p>	<p>FS_6.2.3-6.3 6.2.3 Procedures for hunting on DOE-controlled properties shall conform to all applicable State and Federal regulations for such activity.</p> <p>6.3 FIREARMS-RELATED ACTIVITIES NOT OTHERWISE SPECIFIED</p> <p>Specific written procedures shall be developed and approved for any activity not addressed elsewhere in the Standard that involves DOE or DOE contractor personnel in the planned discharge of firearms, e.g., competitive</p>	<p>Captured under top-level firearms safety requirement.</p>	<p>The Order does not distinguish between the types of firearms use. Specific guidance on non-security use of firearms is contained in the technical standard.</p>

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	unloading, and exchanging firearms; (c) use of pyrotechnics and/or explosive projectiles; (d) handling misfires and duds; (e) live fire operations; and (f) training and exercises using engagement simulation systems	(3) use of pyrotechnics and/or explosive projectiles; (4) handling misfires and duds; (5) live fire operations; and (6) training and exercises using engagement simulation systems.		shooting matches or pest control.	