

Department of Energy
TECHNICAL QUALIFICATION PROGRAM

Safeguards and Security
Program Specific Qualification Standard



FTCP-PSQS-1171-2020

This document is available on the
Federal Technical Capability Program website at:

<https://www.energy.gov/ehss/worker-health-safety-policy-guidance-reports/federal-technical-capability-program-ftcp-5>

APPROVAL

The Federal Technical Capabilities Panel (FTCP) consists of senior U.S. Department of Energy (DOE) managers responsible for overseeing the implementation of the DOE Technical Qualification Programs within their respective organizations. The Panel is also responsible for reviewing and approving technical qualification standards for Department-wide application. Per DOE O 426.1B, *DOE Federal Technical Capabilities*, the FTCP is responsible for concurring on Program Specific Qualification Standards (PSQS). Approval and concurrence with this PSQS is indicated by the signature below.

Karen L.
Boardman

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08/03/2020

Karen L. Boardman, Chair
Federal Technical Capabilities Panel

Date

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ACKNOWLEDGMENT

In support of the Federal Technical Capabilities Panel, the Office of Enterprise Assessments, DOE National Training Center facilitated the development of this Safeguards and Security (S&S) Program Specific Qualification Standard (PSQS).

Subject-matter experts from the following organizations participated in the development of this PSQS:

- Office of Enterprise Assessments
- Office of Environment, Health, Safety and Security
- National Nuclear Security Administration
- Office of Nuclear Energy
- Office of Environmental Management
- Office of Fossil Energy
- Office of Science

SAFEGUARDS AND SECURITY PROGRAM SPECIFIC QUALIFICATION STANDARD

PURPOSE

The primary purpose of the Technical Qualification Program (TQP) is to ensure employees have the requisite knowledge, skills, and abilities to support the mission of the Department. The technical qualification standards developed to support the TQP provide the basis for verifying that DOE personnel responsible for ensuring the safe and secure operation of DOE facilities have the competence commensurate with their job responsibilities. These technical qualification standards are not intended to replace the U.S. Office of Personnel Management (OPM) qualifications standards or other departmental personnel standards, rules, plans, or processes. However, the technical qualification standards should form the primary basis for developing vacancy announcements, qualification requirements, crediting plans, interview questions, and other criteria associated with the recruitment, selection, and internal placement of technical personnel.

APPLICABILITY

DOE O 426.1B, *DOE Federal Technical Capabilities*, allows a PSQS to be developed and included in the DOE TQP in areas where a defined and consistent qualification program is needed to ensure personnel have the technical competence commensurate with their job responsibilities. The DOE FTCP, in collaboration with the DOE Program Office Chief Security Officers (CSOs), decided to develop this S&S PSQS to establish common performance competencies for all DOE S&S personnel. For ease of transportability of qualifications between DOE elements, Program and Field Offices must use this PSQS without modification or addition to the performance competency knowledge requirements. Satisfactory and documented attainment of the performance competencies contained in this PSQS ensures personnel possess the minimum requisite knowledge and skills to fulfill S&S Program duties and responsibilities common to the DOE enterprise. Additionally, organization specific qualification standards (OSQSs) may be developed to supplement this PSQS and establish unique performance competencies at the headquarters, field element, site, or facility level.

There are two broad categories of personnel that could be assigned this PSQS. The first are personnel who are in organizations that have oversight responsibilities of DOE Defense Nuclear Facilities as described in DOE O 426.1B. These organizations will be referred to as TQP organizations in this PSQS. The qualification of personnel assigned this PSQS who are in TQP organizations will be completed per the requirements of DOE O 426.1B and the local organization TQP documentation. This includes using the Electronic Technical Qualification Program (eTQP) system or successor system of record, to document final qualification and continuing training requirements.

The second broad category is personnel who are in organizations that are not required to have a TQP per DOE O 426.1B. These organizations will be referred to as Non-TQP organizations in this PSQS. Personnel in Non-TQP organizations who are assigned this PSQS are expected to follow the process steps for qualification in DOE O 426.1B, including formal assignment of the PSQS, competency verification by a designated qualifying official (QO), and supervisory verification of qualification through completion of a final qualification activity. The duties and

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responsibilities associated with these activities will be established by the individual's organization, with concurrence from the associated program office CSO and FTCP HQ Agent. It is preferred that Non-TQP organizations use eTQP to document the final qualification and continuing training requirements of personnel assigned this PSQS. However, documentation of final qualification and continuing training requirements may be retained in the Non-TQP organization's qualification record system.

IMPLEMENTATION

This PSQS, derived from several topical area job-task analyses (JTAs), is composed of performance competencies based on task performance. These topical area JTAs identified tasks that were grouped into performance competencies in this PSQS. The topics and supporting knowledge included in this PSQS were based on the associated requirements in applicable DOE directives at the time the related JTAs were completed. The content of this PSQS will be periodically updated to address any changes in applicable DOE S&S policy requirements.

Each performance competency includes supporting knowledge requirements and any mandatory performance activities (MPA) that need to be completed in order to demonstrate the performance competency has been met. Supporting MPA evaluation requirements may also be included in order to describe the criteria for successfully demonstrating completion of a particular MPA.

This PSQS is comprised of required common S&S knowledge competencies followed by appendices with topical area performance competencies. For initial qualification, all Federal S&S personnel assigned this PSQS must demonstrate attainment of the knowledge in the "Required Safeguards and Security Competencies" section. Upon completion of the required competency section of this PSQS, personnel must be assigned and demonstrate attainment of the related performance competencies in one or more of the topical area appendices. Supervisors should select the appendices that must be completed based on the specific duties and responsibilities assigned to the individual S&S candidate. If any duties are changed, supervisors should ensure that the candidate is assigned any other applicable appendices.

The MPAs listed in this PSQS are required to be satisfactorily performed only once. If, during a performance of the MPA, any of the evaluation criteria are not satisfactorily met, the qualifying official may require the candidate to perform the MPA again. In these cases, satisfactory completion of the MPA only needs to be documented once. Also, the intent is for S&S candidates to perform the MPAs as written in the site or facility where they are assigned. However, in cases where the MPAs cannot be performed exactly as written in the S&S candidate's assigned facility within the required qualification timeframe, supervisors may use other options to complete the MPA requirements. This could include performance of the MPA in a simulated environment or performance of the activity using exercise materials. There also may be situations where minor modifications to the MPA or MPA evaluation criteria may be needed to fit local conditions. The reason for any changes in the MPA or MPA evaluation criteria or changes in the method of performance (for example, simulation or use of exercise materials) must be documented by the designated qualifying official (QO) with approval of the supervisor and local FTCP Agent.

Personnel assigned this PSQS are not required to complete Part A, *Knowledge Requirements*, of DOE-STD-1146-2017, *General Technical Base* (GTB) Qualification Standard (QS). However,

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supervisors in TQP organizations that assign this PSQS may require personnel to complete all or a subset of the competencies in GTB Part A, as part of another assigned technical qualification standard or as part of the continuing training requirements.

Personnel in TQP organizations that assigned this PSQS, must complete the knowledge requirements and MPAs in GTB Part B, *Oversight Performance*, prior to or in parallel with attaining the knowledge requirements in this PSQS. Some of the MPAs in the GTB Part B and/or this PSQS may already be included in OSQs. In these cases, each organization should either modify their organization specific qualification standard and related qualification cards and remove any duplicate MPAs, or develop a crosswalk that shows which MPAs (if any) are included in existing OSQs. In either case, the intent is that the completion of the MPA only needs to be signed once as part of GTB Part B, this PSQS, or the completion of the OSQs.

EVALUATION REQUIREMENTS

Personnel in TQP organizations must document the attainment of performance competency knowledge requirements and MPAs listed in this PSQS in accordance with the TQP plan or policy of the organization qualifying the individual and the requirements in DOE O 360.1C, *Federal Employee Training*, and DOE O 426.1B, *DOE Federal Technical Capabilities*.

Each performance competency includes knowledge requirements that need to be completed in order to demonstrate the performance competency has been met. Attainment of the performance competency knowledge requirements listed in this PSQS must be verified by a designated QO using one or more of the following methods identified in DOE O 426.1B, *DOE Federal Technical Capabilities*:

- Satisfactory completion of a written examination
- Satisfactory completion of an oral evaluation
- Documented evaluation of equivalencies
- Completion of approved training courses that confirm attainment of specific knowledge requirements

Evaluation guides have been developed to support candidate attainment of and QO verification of the performance competencies for each of the topical area appendices in this PSQS. These evaluation guides provide the expected level of knowledge for each performance competency knowledge requirement and are available for personnel assigned this PSQS, as well as QOs responsible for verifying the attainment of performance competency knowledge requirements. The evaluation guides for each of the S&S topical area appendices in this PSQS are available through the DOE National Training Center (NTC) website at: <https://ntc.doe.gov>.

Each performance competency defines the expected level of knowledge an individual must possess to meet the intent of this PSQS. The performance competencies in the topical appendices also include MPAs that must be completed to verify the candidate can apply the knowledge to satisfactorily complete key tasks in the various topical areas.

Successful completion of the MPAs in this PSQS must also be verified by a designated QO. The QO must verify that the evaluation criteria, including any organization specific requirements, were satisfactorily met during observation of the MPA and/or review of the results of the MPA. Satisfactory attainment of the performance competency knowledge requirements and MPAs

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contained in this PSQS must be documented using the S&S PSQS qualification card in the Electronic Technical Qualification Program (eTQP) at: <https://etqp.ntc.doe.gov>.

After verification of attainment of all the performance competency knowledge requirements and the MPAs in this PSQS, an S&S candidate must satisfactorily complete the final qualification activity requirements identified in DOE O 426.1B, and any other applicable organization specific requirements before being designated as qualified to the S&S PSQS.

INITIAL QUALIFICATION AND TRAINING

Initial qualification of S&S personnel in TQP Organizations must be conducted in accordance with the requirements of DOE O 426.1B, *DOE Federal Technical Capabilities*. Personnel in Non-TQP organizations who are assigned this PSQS are expected to follow the process steps for initial qualification in DOE O 426.1B, including formal assignment of the PSQS, competency verification by a designated QO, and supervisory verification of qualification.

The DOE NTC has developed a comprehensive S&S training curriculum to support the initial training of personnel to meet this PSQS. The S&S course curriculum aligns with the performance competencies in the “Required Safeguards and Security Competencies” section and the topical area appendices, and provides a standardized method for personnel to obtain knowledge requirements for the assigned topical area(s). A crosswalk of NTC training courses to the performance competencies for each of the topical area appendices are available through the NTC website at: <https://ntc.doe.gov>.

Personnel attending the NTC instructor-led safeguard and security training courses will be given the opportunity to practice some of the MPAs identified in this PSQS.

Following initial qualification of this PSQS, DOE S&S personnel must participate in an organization specific continuing training (CT) program. For S&S personnel in TQP organizations, the CT program must meet the requirements of DOE O 426.1B.

DUTIES AND RESPONSIBILITIES

The following are typical duties and responsibilities expected of S&S personnel:

- Analyze S&S documents and implement process descriptions
- Monitor day-to-day S&S contractor activities
- Evaluate the adequacy of S&S physical structures
- Conduct oversight activities to support periodic contractor performance evaluations
- Provide subject-matter expertise as requested

Common knowledge and skills to support the oversight and evaluation of contractor performance duty areas are included in GTB Part B.

Technical support duties are dependent on the level of subject-matter expertise of the individual and the needs of the organization and will not be addressed by any performance competencies in this PSQS. Position-specific duties and responsibilities for S&S personnel should be included in OSQs and position descriptions.

REQUIRED SAFEGUARDS AND SECURITY COMPETENCIES

The S&S competencies contained within this section are required for all S&S Federal personnel assigned this PSQS regardless of their specific topical area responsibilities. Each competency defines the expected level of knowledge and performance an individual must possess to meet the intent of this standard. Each competency is further described by supporting knowledge requirements and, if necessary, MPAs that describe the task(s) that must be demonstrated in order to meet the intent of the related competency.

Note: When regulations, DOE directives, or other industry standards are referenced in this PSQS, the most recent revision should be used. It is recognized that some S&S personnel may oversee facilities that utilize prior document versions. In those cases, such documents should be included in OSQSs as applicable.

The following are expected core competencies of Federal personnel assigned to S&S:

1. Program Planning
2. Site Security Plan
3. Equivalencies and Exemptions
4. Security Conditions
5. Performance Assurance
6. Surveys and Self Assessments

1. PROGRAM PLANNING

S&S Federal personnel shall demonstrate knowledge of site program planning methodologies.

Knowledge Requirements:

- A. Identify the purpose of site security planning.
- B. Identify elements of security planning activities.

2. SITE SECURITY PLAN

S&S Federal personnel shall demonstrate knowledge of the site security plan.

Knowledge Requirements:

- A. Identify the purpose of a site security plan.
- B. Identify key components of a site security plan.
- C. Identify security risk management methods.

3. EQUIVALENCIES AND EXEMPTIONS

S&S Federal personnel shall demonstrate knowledge of DOE equivalencies and exemptions.

Knowledge Requirements:

- A. Identify the purpose of equivalencies and exemptions.
- B. Identify DOE requirements for equivalencies and exemptions.
- C. Identify impacts of equivalencies and exemptions to oversight strategies.

4. SECURITY CONDITIONS (SECON)

S&S Federal personnel shall demonstrate knowledge of DOE SECON.

Knowledge Requirements:

- A. Identify the purpose of DOE SECON.
- B. Identify the different levels of SECON.
- C. Identify departmental and site-specific SECON requirements.
- D. Identify resource impacts to changes in SECON levels.

5. PERFORMANCE ASSURANCE

S&S Federal personnel shall demonstrate knowledge of performance assurance programs.

Knowledge Requirements:

- A. Identify the purpose of a performance assurance program.
- B. Identify components of a performance assurance program.
- C. Identify the elements of performance assurance planning.
- D. Describe the required components of a performance test plan.
- E. Define compensatory measures.
- F. Identify the process for establishing compensatory measures.

6. SURVEYS AND SELF-ASSESSMENTS

S&S Federal personnel shall demonstrate knowledge of DOE S&S survey programs.

Knowledge Requirements:

- A. Identify all applicable directives associated with surveys and self-assessments.
- B. Identify the roles and responsibilities of a survey team.
- C. Identify pre-planning activities associated with surveys.
- D. Identify survey methodologies.
- E. Identify post-survey activities.

REQUIRED TOPICAL AREA COMPETENCIES

The S&S topical area competencies contained within this section are required for all S&S Federal personnel assigned this PSQS within their assigned topical area responsibilities. Each competency defines the expected level of knowledge and performance an individual must possess to meet the intent of this standard. Each competency is further described by supporting knowledge requirements and, if necessary, MPAs that describe the task(s) that must be demonstrated in order to meet the intent of the related competency.

Note: When regulations, DOE directives, or other industry standards are referenced in this PSQS, the most recent revision should be used. It is recognized that some S&S personnel may oversee facilities that utilize prior document versions. In those cases, such documents should be included in OSQSs as applicable.

The following are identified DOE S&S topical areas:

1. Information Security
2. Nuclear Material Control and Accountability
3. Personnel Security
4. Physical Security
5. Protective Force
6. Security Risk Management/ Vulnerability Assessment

APPENDIX A: INFORMATION SECURITY

1. Information Security Specialists shall demonstrate knowledge about the DOE Information Security Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Identify the purpose of the Information Security Program.
- C. Identify roles associated with the Information Security Program.
- D. Identify the levels of classified information and their associated protection requirements.

2. Information Security Specialists shall validate the site's methods to handle, protect, and control departmental information.

Knowledge Requirements:

- A. Describe the requirements for access to classified matter.
- B. Identify the requirements for accountability records disposition, documentation, and inventory.
- C. Identify the protection requirements for classified information.
- D. Describe the methods to deter and detect unauthorized access of classified information.
- E. Describe protection requirements for disclosure of classified information to individuals who are not otherwise eligible for access.
- F. Describe who is authorized to make classification determinations.
- G. Describe the protection requirements for working papers, drafts, and living documents.
- H. Describe the marking requirements for levels and categories of classified information.
- I. Identify forms related to transmission and receipt of classified matter.

Mandatory Performance Activities:

- A. Perform a review and evaluation of the site facility data and approval record (FDAR) to determine appropriate protection levels are implemented.
- B. Perform a review and evaluation of established site protections for disclosure of classified information during emergency situations.
- C. Perform a review and evaluation of working papers, drafts, and living documents to verify they are in compliance with applicable directives.
- D. Perform a review and evaluation of classified matter for appropriate markings.
- E. Perform a review and evaluation of classified matter for appropriate storage protections.
- F. Perform a review and evaluation of classified destruction and reproduction equipment to verify compliance with applicable national and DOE policies.
- G. Perform a review and evaluation of the transmission and receipt procedures of classified matter.

3. Information Security Specialists shall validate the site's Operations Security (OPSEC) Program.

Knowledge Requirements:

- A. Identify site OPSEC policies and procedures.
- B. Verify compliance of the site OPSEC program with national and DOE policy.

Mandatory Performance Activities:

- A. Perform a review and evaluation of an OPSEC program plan to verify the critical

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information list is up to date and adequate resources are allocated.

- B. Perform a review and evaluation of the OPSEC program plan to verify publicly released critical information is in compliance with DOE requirements.
- C. Perform a review and evaluation of OPSEC assessments as required per national and DOE policies.

4. Information Security Specialists shall demonstrate knowledge about the processes and procedures for the protection of shared foreign government and U.S. classified information.

Knowledge Requirements:

- A. Describe the protection requirements for foreign government information (FGI).
- B. Describe the protection requirements for releasing U.S. classified information to foreign governments.

APPENDIX B: NUCLEAR MATERIAL CONTROL AND ACCOUNTABILITY

1. Nuclear Material Control and Accountability (NMC&A) Federal personnel shall demonstrate knowledge about the DOE NMC&A Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Identify the purpose of the NMC&A Program.
- C. Define NMC&A key terminology.
- D. Identify the subtopical areas of the NMC&A Program.
- E. Identify the objectives of the subtopical areas.
- F. Identify roles associated with the NMC&A Program.

2. NMC&A Federal personnel shall ensure the NMC&A Program meets the objectives for deterring and detecting theft or diversion and is appropriate for Site Mission Operations.

Knowledge Requirements:

- A. Identify the site's NMC&A Program system effectiveness methodology.
- B. Identify the required components of an NMC&A plan.

Mandatory Performance Activities:

- A. Perform a review and evaluation of the site's NMC&A Program system effectiveness methodology.
- B. Perform a review and evaluation of the NMC&A plan.

3. NMC&A Federal personnel shall ensure the NMC&A Program meets the objectives for conducting physical inventories of nuclear material.

Knowledge Requirements:

- A. Identify the objectives of physical inventory.
- B. Describe the frequency requirements for physical inventory.
- C. Describe the types of physical inventory.
- D. Describe the preparation activities for physical inventory.
- E. Describe physical inventory reconciliation activities.

Mandatory Performance Activities:

- A. Perform a review and evaluation of the methodology for physical inventory.
- B. Perform a review and evaluation of a statistical sample plan, as applicable.
- C. Observe and evaluate the preparation activities for physical inventory.
- D. Conduct and evaluate a walk-down of the Material Balance Areas (MBAs).
- E. Observe and evaluate a physical inventory.
- F. Perform a review and evaluation of physical inventory reconciliation procedure(s).
- G. Observe and evaluate the physical inventory reconciliation process(es).
- H. Demonstrate the ability to reconcile book inventory to physical inventory.

Category I – IV Processing

- A. Demonstrate the ability to identify active inventory.
- B. Demonstrate the ability to determine measurement uncertainties.

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- C. Demonstrate the ability to determine control limits for inventory difference.
- D. Demonstrate the ability to calculate and evaluate inventory difference.
- E. Demonstrate the ability to resolve inventory difference alarms.

Category I – IV Storage

- A. Demonstrate the ability to resolve alarms for anomalous conditions.

4. NMC&A Federal personnel shall ensure the NMC&A Program meets the objectives for nuclear material accounting.

Knowledge Requirements:

- A. Identify the objectives of material accounting.
- B. Identify the requirements for maintaining a material accounting system.

Mandatory Performance Activities:

- A. Perform a review and evaluation of a Material Balance Report.
- B. Demonstrate the ability to generate a Material Balance Report.
- C. Demonstrate the ability to perform a transaction.
- D. Perform a review and evaluation of material accounting process(es)/procedure(s).
- E. Perform a review and evaluation of source documents to the accounting system.
- F. Verify the facility can produce an inventory listing of special nuclear material (SNM) within three hours.

5. NMC&A Federal personnel shall ensure the NMC&A Program meets the objectives for nuclear material measurements and measurement control.

Knowledge Requirements:

- A. Identify objectives for measurements.
- B. Identify the requirements for the measurement program.
- C. Identify the requirements for the measurement control program.
- D. Describe the requirements for materials not amenable to measurement.

Mandatory Performance Activities:

- A. Perform a review and evaluation of measurement selection and qualification documentation.
- B. Perform a review and evaluation of training and the qualification of measurement personnel.
- C. Demonstrate the ability to calculate measurement uncertainties.
- D. Perform a review and evaluation of the measurement procedures.
- E. Perform a review and evaluation of the measurement report.
- F. Perform a review and evaluation of measurement control process(es)/procedure(s).
- G. Determine if the measurement system is in or out of control.
- H. Demonstrate the ability to conduct a qualitative and quantitative measurement.
- I. Observe and evaluate a verification measurement.
- J. Observe and evaluate a confirmation measurement.
- K. Observe and evaluate a waste measurement.
- L. Determine the traceability of standards used for measurement.

Category I – IV Processing

- A. Observe and evaluate a holdup measurement.

B. Observe and evaluate a waste measurement.

6. NMC&A Federal personnel shall ensure the NMC&A Program meets the objectives for nuclear material control.

Knowledge Requirements:

- A. Identify requirements for the material control program.
- B. Define unauthorized access.
- C. Describe how the facility detects, assesses, and communicates material control alarms.
- D. Describe how the facility provides loss detection capability for nuclear material.
- E. Describe how material control measures are graded appropriately for the quantity and attractiveness of the material.
- F. Describe the process(es) for determining attractiveness level.
- G. Describe the process(es) for determining categorization given the attractiveness level and amount of SNM.
- H. Describe the process(es) for determining and analyzing roll-up.
- I. Describe the process(es) for reviewing and approving termination of safeguards.
- J. Describe the process(es) for evaluating shipper/receiver differences.

Mandatory Performance Activities:

- A. Perform a review and evaluation of the material control program.
- B. Evaluate the integrity of a tamper-indicating device (TID).
- C. Demonstrate the ability to apply a TID.
- D. Observe and evaluate a transfer of nuclear material.
- E. Observe and evaluate the application of the NMC&A plan for all approved material surveillance procedure(s).
- F. Perform a review and evaluation of the contractor's process(es) for material attractiveness level determination.
- G. Perform a review and evaluation of the contractor's process(es) for material categorization given the attractiveness level and amount.
- H. Perform a review and evaluation of the contractor's process(es) for determining roll-up.
- I. Perform a review and evaluation of the contractor's process(es) for terminating safeguards.
- J. Perform a review and evaluation of shipper/receiver differences.
- K. Demonstrate the ability to calculate and evaluate shipper/receiver differences and resolve alarms, if applicable.

APPENDIX C: PERSONNEL SECURITY

1. Personnel Security Specialists shall demonstrate knowledge about the DOE Personnel Security Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Define security clearance and access authorization.
- C. Identify the purpose of the Personnel Security Program.

2. Personnel Security Specialists shall be knowledgeable in processing a security clearance.

Knowledge Requirements:

- A. Identify the level of requested access is appropriate.
- B. Describe the process(es) for initiating a security clearance.
- C. Identify required documents and databases necessary to process a clearance.
- D. Identify the purpose of reciprocity.
- E. Identify the purpose of reinstatements, re-approvals, temporary access, upgrades, and downgrades.
- F. Describe the process(es) to cancel an investigative request.
- G. Describe the reinvestigation/continuous evaluation (CE) process(es).
- H. Describe the process(es) for intra-agency security clearance actions.
- I. Describe the administrative withdrawal process(es) of a security clearance.

Mandatory Performance Activities:

- A. Demonstrate the ability to process a security clearance.
- B. Perform a review and evaluation of other agency clearance information for reciprocity verification.
- C. Demonstrate the ability to process a reinstatement request.
- D. Demonstrate the ability to process a request for a re-approval.
- E. Demonstrate the ability to process a request for temporary access.
- F. Demonstrate the ability to process the cancellation of an investigative request.
- G. Demonstrate the ability to process an intra-agency security clearance action request.
- H. Demonstrate the ability to process the administrative withdrawal of a security clearance.

3. Personnel Security Specialists shall be knowledgeable in personnel security file management.

Knowledge Requirements:

- A. Identify the purpose of the personnel security file.
- B. Describe the process(es) for creating a personnel security file.
- C. Describe the process(es) for maintaining a personnel security file.
- D. Describe the process(es) for identifying and protecting personal identifiable information (PII).

Mandatory Performance Activity:

- A. Demonstrate the ability to maintain a personnel security file.

4. Personnel Security Specialists shall be knowledgeable in the adjudication of a security clearance.

Knowledge Requirement:

- A. Describe the process(es) for determining eligibility for access to classified matter or special nuclear material (SNM).

Mandatory Performance Activity:

- A. Perform a review and evaluation of investigative results and determine eligibility for access to classified matter or SNM in accordance with national and DOE policies.

5. Personnel Security Specialists shall be knowledgeable about administrative review determinations.

Knowledge Requirements:

- A. Identify the purpose of the administrative review process(es).
- B. Describe the administrative review process(es).
- C. Describe the process(es) for suspending a security clearance.
- D. Describe the elements of the administrative review hearing.
- E. Describe the appeal process(es).
- F. Describe the reconsideration process(es).

Mandatory Performance Activity:

- A. Perform a review and evaluation of derogatory information to determine the applicability of administrative review in accordance with national and DOE policies.

APPENDIX D: PHYSICAL SECURITY

1. Physical Security Specialists shall demonstrate knowledge about the DOE Physical Security Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Identify the purpose of the Physical Security Program.
- C. Identify roles associated with the Physical Security Program.
- D. Define physical systems key terminology.

2. Physical Security Specialists shall be knowledgeable about site protection planning for departmental interests.

Knowledge Requirements:

- A. Identify national and DOE physical security policy requirements.
- B. Identify site physical protection policies and procedures.
- C. Verify site physical protection strategies are documented and in compliance with national and DOE policy.
- D. Identify DOE security areas.
- E. Identify the site's applicable DOE security areas.
- F. Verify all security areas have been established in the site security plan.
- G. Identify DOE posting requirements for security areas.
- H. Verify all security areas are in compliance with the applicable DOE posting requirements.
- I. Identify physical security and technical standards for security areas.
- J. Verify all security areas are in compliance with all physical security and technical standards for asset protection and applicable designated protection levels.
- K. Identify access control requirements for security areas.
- L. Verify all security areas are in compliance with access control requirements.
- M. Identify memoranda of understandings (MOUs) and memoranda of agreements (MOAs) with outside alarm monitoring agencies.
- N. Verify all outside agency alarm responses are in compliance with Underwriter Laboratories (UL) 827, *Standard for Central-Station Alarm Services*, if applicable.

Mandatory Performance Activities:

- A. Perform a review and evaluation of site physical security procedures.
- B. Perform a review and evaluation of all MOUs/MOAs with outside agencies.

3. Physical Security Specialists shall be knowledgeable about physical protection of departmental assets.

Knowledge Requirements:

- A. Identify the purpose of a DOE lock and key program.
- B. Identify site security requirements for the lock and key program.
- C. Verify a site lock and key program has been established and documented.
- D. Verify locks and keys are in compliance with appropriate protection levels.
- E. Identify the purpose of a systems testing and maintenance program.
- F. Verify that a systems testing and maintenance program has been established.

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- G. Verify systems testing and maintenance program documentation is in compliance with DOE requirements.
- H. Identify DOE requirements for physical barriers.
- I. Identify the purpose of physical barriers.
- J. Identify types of physical barriers.
- K. Identify site physical barriers.
- L. Verify barriers appropriately deter and delay unauthorized access.
- M. Verify fencing, gates, and structures are in compliance with DOE requirements.
- N. Verify fencing around limited areas or higher are in compliance with DOE requirements.

Category I and II SNM

- A. Verify maintenance of system elements is in compliance with DOE requirements.
- B. Monitor personnel who test, maintain, or service system elements to verify that they have the appropriate security clearance.
- C. Verify activated barriers, vehicle barriers, deterrents, and obscurants protecting Category I and II SNM are in compliance with security and operational requirements.

Mandatory Performance Activities:

- A. Perform a review and evaluate that the site lock and key program is in compliance with all physical security and technical standards.
- B. Observe and evaluate the site systems testing and maintenance program.
- C. Observe and evaluate the site's physical barriers.

4. Physical Security Specialists shall be knowledgeable about the physical security systems, programs, and structural standards.

Knowledge Requirements:

- A. Identify the components of a communication system.
- B. Verify site communication systems are in compliance with DOE security and operational requirements.
- C. Identify the DOE requirements for electrical power supplies.
- D. Identify site electrical power supply elements.
- E. Verify site electrical power supply elements are in compliance with DOE protection requirements.
- F. Identify DOE requirements for lighting systems.
- G. Verify site lighting systems are in compliance with DOE requirements.
- H. Identify DOE requirements for physical protection of secure storage locations.
- I. Verify vault and vault-type room safeguards are documented and in compliance with DOE requirements.
- J. Identify DOE requirements for intrusion detection and assessment systems.
- K. Identify site-implemented intrusion detection and assessment systems.
- L. Verify site-implemented intrusion detection and assessment system safeguards are documented and in compliance with DOE requirements.
- M. Identify DOE requirements for security badges, credentials, and shields.
- N. Verify the site security badge program is documented and in compliance with DOE requirements.
- O. Verify DOE-issued credentials and shields are documented and in compliance with DOE requirements.

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Category I and II SNM

- A. Identify communications requirements for Category I and II SNM.
- B. Verify protective force (PF) communication systems protecting Category I and II SNM are in compliance with DOE requirements.
- C. Verify communication systems used to protect Category I and II SNM incorporate alternative means of communication.
- D. Verify local law enforcement communications are established and reliable for the protection of Category I and II SNM.
- E. Verify site electrical power systems protecting Category I and II SNM are in compliance with DOE requirements.
- F. Verify auxiliary power capabilities protecting Category I and II SNM and/or Top Secret matter are in compliance with DOE requirements.
- G. Verify uninterruptible power sources (UPS) used in the protection of Category I and II SNM are in compliance with DOE security and operational requirements.
- H. Verify intrusion detection systems have documented false and nuisance alarm rates that do not degrade the overall system effectiveness.
- I. Analyze a security plan to ensure the acceptable false and nuisance alarm rates for early warning and extended range exterior intrusion detection sensors, as well as the monitoring personnel's ability to assess and manage alarms used in the protection of Category I and II SNM are documented.

Mandatory Performance Activities:

- A. Perform a review and evaluation of site-implemented communications.
- B. Perform a review and evaluation of site-implemented electrical power.
- C. Observe and evaluate site-implemented lighting systems.
- D. Observe and evaluate the site's secure storage locations.
- E. Perform a review and evaluation of site-implemented intrusion detection and assessment system safeguards.
- F. Perform a review and evaluation of the site badge, credential, and shield program.

5. Physical Security Specialists shall be knowledgeable about site protection systems for all applicable categories of SNM.

Knowledge Requirements:

- A. Identify DOE requirements for the protection of all categories of SNM.
- B. Verify site-implemented protection systems for all categories of SNM are in compliance with DOE requirements.
- C. Identify site procedures for escorting individuals who require access to limited areas or higher and do not possess the appropriate security clearance.
- D. Identify DOE requirements for alarm management and control systems.
- E. Identify site alarm management and control systems documentation.
- F. Verify alarm management and control systems for all categories of SNM are operating in compliance with DOE requirements.
- G. Verify training and records maintenance for alarm station personnel protecting Category III and IV SNM.
- H. Verify closed-circuit television (CCTV) assessment systems protecting all applicable categories of SNM, particularly Category I and II SNM, are in compliance with all operational requirements.
- I. Identify DOE requirements for the protection of SNM during transportation.
- J. Verify all categories of SNM shipments are in compliance with DOE security and operational requirements.

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Category I and II SNM

- A. Identify site-protected area access control safeguards and documented equivalencies/ compensatory measures when safeguards are inoperable or not implemented.
- B. Identify site-protected area pedestrian and vehicle access controls are in compliance with DOE requirements.
- C. Identify DOE requirements for PF posts controlling access to protected areas and material access areas.
- D. Verify PF posts and fighting positions controlling access to protected and material access areas are in compliance with all security and construction requirements.
- E. Evaluate PF posts used in the protection of Category I and II SNM to determine if all security and construction requirements are met.

Mandatory Performance Activities:

- A. Perform a review and evaluation of site-implemented protection systems.
- B. Perform a review and evaluation of site-implemented alarm management and control systems.

APPENDIX E: PROTECTIVE FORCE

1. Protective Force (PF) Program Managers shall demonstrate knowledge about the DOE PF Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Identify the purpose of the PF Program.
- C. Define PF key terminology.
- D. Identify roles associated with site PF operations.
- E. Identify elements associated with site PF operations.
- F. Identify the objectives of each element associated with site PF operations.

2. PF Program Managers shall validate the site's ability to protect critical national security assets, DOE property, classified matter, and employees and visitors from theft, sabotage, terrorism, or other malevolent acts.

Knowledge Requirement:

- A. Identify the site-specific mission requirements of the PF Program.

3. PF Program Managers shall validate that the resources available for PF operations are adequate for site protections.

Knowledge Requirements:

- A. Describe the requirements for resourcing a PF Program.
- B. Analyze costs of PF personnel and equipment authorizations.
- C. Analyze the process(es) for site protection and tactical response.
- D. Analyze the sufficiency of PF munitions for site response capabilities.

Mandatory Performance Activities:

- A. Perform a review and evaluation of PF plans and procedures for recommendation to the Officially Designated Federal Security Authority (ODFSA) for approval.
- B. Perform a review and evaluation of the vulnerability assessment report (VAR) or security risk assessment (SRA) for PF equipment needs.

4. PF Program Managers shall validate all PF documentation is in compliance with DOE and site requirements.

Knowledge Requirements:

- A. Identify DOE PF-required documents.
- B. Identify PF site-required documents.

Mandatory Performance Activities:

- A. Perform a review and evaluate that PF-required documentation is in compliance with national and DOE policy.
- B. Perform a review and evaluation of ODFSA-approved PF documentation.
- C. Perform a review and evaluation of PF documentation to provide a recommendation to the ODFSA for approval.
- D. Perform a review and evaluate if the arming credentials are issued in accordance with national and DOE policy.

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- 5. PF Program Managers shall validate all PF memoranda of understandings (MOUs) and memoranda of agreements (MOAs) are current and in compliance with DOE and site requirements.**

Knowledge Requirements:

- A. Identify ODFSA-approved site agreements with local law enforcement agencies (LLEA).
- B. Identify that non-DOE PF training courses are approved by the ODFSA or designee.

Mandatory Performance Activities:

- A. Perform a review and evaluate all MOUs/MOAs with LLEAs to confirm they are established and current.
- B. Perform a review and evaluation of any non-DOE PF training.

- 6. PF Program Managers shall validate PF training and qualification programs are current and in compliance with DOE and site requirements.**

Knowledge Requirements:

- A. Identify PF training requirements.
- B. Verify special skills in which PF personnel are trained.
- C. Verify PF training programs are based on a job analysis (JA) or mission-essential task list (METL).
- D. Verify DOE medical personnel meet nomination and qualification requirements.
- E. Verify armed PF personnel are qualified per DOE/mission requirements.
- F. Verify procedures for remedial firearms training are established.
- G. Verify PF training exercises incorporate individual and team competency levels.
- H. Verify opposition force (OPFOR) personnel are trained in adversary tactics and techniques.
- I. Verify PF training incorporates performance test results.
- J. Verify all on-duty PF personnel are up to date with training and qualifications.

Mandatory Performance Activities:

- A. Perform a review and evaluate that a systematic approach is incorporated into the PF training program.
- B. Perform a review and evaluate that PF training is in compliance with DOE medical requirements.
- C. Perform a review and evaluation of PF training records to ensure all on-duty PF personnel are in compliance.
- D. Perform a review and evaluation of DOE-required frequencies of PF training and qualifications.
- E. Perform a review and evaluate that all training exercises are in compliance with DOE requirements.

- 7. PF Program Managers shall be knowledgeable about DOE firearms operations.**

Knowledge Requirements:

- A. Verify site firearms operations are in compliance with DOE safety requirements.
- B. Identify site operations for issuance of weapons.
- C. Verify site procedures for issuance and revocation of arming credentials.
- D. Verify site procedures for ammunition and munitions compliance with DOE transportation, handling, and storage requirements.
- E. Verify firearms, ammunition, pyrotechnics, and explosives inventories are up to date.

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Mandatory Performance Activities:

- A. Observe and evaluate a firearms safety briefing.
- B. Perform a review and evaluation of site procedures for the issuance of firearms.
- C. Perform a review and evaluation of site procedures for the transportation, storage, and handling of ammunition and munitions.
- D. Observe and evaluate PF firearms, ammunition, munitions, pyrotechnics, and explosives inventories.
- E. Perform a review and evaluation of DOE-required frequencies of firearms, ammunition, and munitions inventories.

8. PF Program Managers shall be knowledgeable in PF facilities and equipment.

Knowledge Requirements:

- A. Identify the purpose of a safety analysis report (SAR).
- B. Verify PF facilities have a risk/SAR approved by the ODFSA.
- C. Identify the components of a PF range operations plan.
- D. Verify PF facilities and equipment to ensure they support applicable PF activities.
- E. Identify site procedures for unmanned aircraft systems, if applicable.

Mandatory Performance Activities:

- A. Perform a review and evaluation of a SAR.
- B. Perform a review and evaluation of site PF facilities for safety and DOE compliance.
- C. Perform a review and evaluation of site PF equipment for safety and DOE compliance.

9. PF Program Managers shall be knowledgeable about PF performance testing to ensure operational readiness.

Knowledge Requirements:

- A. Identify neutralization methodologies.
- B. Verify PF performance tests for program effectiveness.
- C. Verify performance test procedures incorporate coordination with all applicable organizations.
- D. Verify performance testing command and control systems are in compliance with DOE Orders.

Mandatory Performance Activities:

- A. Perform a review and evaluation of site-approved performance test methodologies.
- B. Perform a review and evaluation of the site PF performance testing program for mission effectiveness.
- C. Perform a review and evaluation of the site PF performance testing program in support of continuity of site operations.
- D. Observe and evaluate a force-on-force (FoF) exercise.

**APPENDIX F: SECURITY RISK MANAGEMENT/
VULNERABILITY ASSESSMENT**

Note: This section incorporates performance competencies for vulnerability assessment (VA) analysts and other security professionals, hereinafter referred to as vulnerability assessment specialists, conducting VAs and security risk assessments throughout the DOE.

1. Vulnerability Assessment (VA) Specialists shall demonstrate knowledge about the DOE VA Program.

Knowledge Requirements:

- A. Identify all applicable national and DOE policies.
- B. Identify the purpose of the VA Program.
- C. Identify roles, interfaces, and interactions associated with the VA Program.

2. VA Specialists shall identify the site VA Program elements.

Knowledge Requirements:

- A. Verify that the site security plan incorporates VA, applicable performance tests, and expert analysis.
- B. Verify that site-specific risks to national security or the environment that endanger health and safety have been identified.
- C. Verify that a sufficient analytical basis was used for security planning.
- D. Identify protection levels for all site assets and security interests.
- E. Verify identified risks have been accepted by the Officially Designated Federal Security Authority (ODFSA) or approved designee.
- F. Verify the assets listed in the approved site security plan are the same as those included in the analysis.

Mandatory Performance Activities:

- A. Perform a review and evaluation of the site security plan to ensure it is current and reflects the actual operating conditions at the covered location.
- B. Perform a review and evaluate that site assets and security interests have been categorized and consolidated in accordance with appropriate protection levels.
- C. Compare assets listed in the approved site security plan to those included in the analysis.

3. VA Specialists shall be knowledgeable about the VA process.

Knowledge Requirements:

- A. Identify the steps of the VA process.
- B. Verify materials that require a material risk review committee (MRRC) review have been identified.
- C. Identify the purpose of a roll-up analysis.
- D. Identify approved configurations of special nuclear material (SNM) that require a roll-up analysis.
- E. Verify credible and non-credible roll-up analyses.
- F. Verify the configurations of SNM that require a roll-up analysis have been approved by the ODFSA.

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- G. Verify scenarios, level of rigor, and adversary size and capabilities for all roll-up analysis have been approved by the ODFSA.
- H. Verify the identified assets that have been grouped or bounded have been approved by the ODFSA.
- I. Verify the analysis addresses Design Basis Threat (DBT) adversary capabilities and types.
- J. Verify the developed scenarios for protection level (PL) starting with PL-1 through PL-8 assets are reviewed and approved.
- K. Identify delegation for security risk acceptance levels for system effectiveness determinations.

Mandatory Performance Activities:

- A. Perform a review and evaluate that all VA documentation has been reviewed and approved by the ODFSA or Program Office, as appropriate.
- B. Perform a review and evaluate to ensure roll-up analysis documentation is accurate and reflects current operations.

4. VA Specialists shall be knowledgeable about national asset categorization and protection levels.

Knowledge Requirements:

- A. Identify key protection strategy terminology.
- B. Identify the elements of the DOE tactical doctrine.
- C. Identify the protection strategy associated with denial of access for PL-1 facilities.
- D. Identify the protection strategy associated with denial of task for PL-2 facilities.
- E. Verify that a recapture program for PL-1 and PL-2 facilities has been established.
- F. Verify recovery and pursuit programs are established for PL-1 through PL-4 facilities.
- G. Verify VA-conducted protection programs have been established for PL-1 through PL-8 facilities.
- H. Identify the protection strategy associated with containment of target for PL-3 and PL-4 facilities.

Mandatory Performance Activities:

- A. Perform a review and evaluation of protection strategies associated with all protection levels.
- B. Perform a review and evaluate that site protection strategies incorporate the DOE tactical doctrine, if applicable.