

# Standard Review Plan for Training and Qualifications Plans for Security Personnel at Category I Fuel Facilities

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U.S. Nuclear Regulatory Commission  
Office of Nuclear Material Safety and Safeguards  
Washington, DC 20555-0001



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# **Standard Review Plan for Training and Qualifications Plans for Security Personnel at Category I Fuel Facilities**

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## ABSTRACT

This document is a Standard Review Plan (SRP) for evaluating Training and Qualifications (T&Q) Plans for security personnel at Category I fuel facilities. Conducting a review according to an SRP ensures that license applicants address every pertinent U.S. Nuclear Regulatory Commission (NRC) requirement in their NRC-approved T&Q Plans and ensures consistency and comprehensiveness in the NRC review of the plans. The information presented here utilizes a “modular” format to streamline the information and facilitate its use.

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# 1. INTRODUCTION

## 1.1 Background and Applicability

The NRC undertook a major upgrade of its physical protection requirements for fixed sites containing formula quantities of strategic special nuclear material (SSNM) (Category I facilities) between 1977 and 1979. Included in this effort were rules for contingency planning, for upgrading physical security at Category I fuel facilities, and for guard training and qualification. Security personnel must meet minimum criteria to ensure that they will effectively perform their assigned security-related job duties. These criteria establish requirements for the selection, training, equipping, testing, qualification, and re-qualification of security personnel. An applicant or licensee must establish, maintain, and follow a T&Q Plan that documents how these criteria are met.

Appendix B to 10 CFR 73, which preceded the upgrade rulemaking, sets forth the NRC's general criteria for security personnel at fixed sites. Appendix B includes detailed requirements for the training and qualifications of security personnel at NRC-licensed nuclear facilities, as well as additional specific requirements that apply to security personnel protecting the transport of special nuclear material subject to NRC regulation. 10 CFR 73.46 contains additional requirements that apply specifically to Tactical Response Team personnel at Category I facilities. Tactical Response Team members, armed response personnel, and guards at Category I facilities must qualify and requalify at least every 12 months for day- and night-firing with assigned weapons in accordance with Appendix H to 10 CFR 73. Additional employment criteria for security personnel at Category I fuel facilities are found in 10 CFR 11, which sets forth requirements for access authorizations for personnel with access to SSNM, in 10 CFR 26, which addresses criteria for fitness-for-duty, and in 10 CFR 10, which establishes criteria for determining eligibility for access to classified information.

## 1.2 Regulatory History

The chronological regulatory history of the NRC's requirements related to the training and qualification of licensee security personnel shows how Appendix B and related requirements have evolved. On August 23, 1978, the NRC published an amendment to 10 CFR 73 requiring licensees and applicants to develop a T&Q Plan for guards, watchmen, armed response persons, and other members of the security organization. The rulemaking applied to applicants or licensees possessing, using, or transporting formula quantities of SSNM, or operating spent fuel storage facilities, irradiated fuel reprocessing plants, or nuclear power reactors. Section 73.2 of 10 CFR 73 was amended to add new definitions for armed response personnel, armed escort (for shipments), security management and security supervision. Other portions of 10 CFR 73 were amended to require the T&Q Plan to address a new Appendix B of 10 CFR 73, "General Criteria for Security Personnel."

Appendix B provided criteria for qualification for employment, general training and demonstration of qualification to perform security duties, weapons training, and daylight demonstration of weapons proficiency. Appendix B also listed equipment and weapons which must be provided to guards and armed response personnel. It also required that individuals perform night-firing for familiarization with assigned weapons, but did not require night weapons qualification.

A rulemaking published on November 28, 1979 upgraded physical security at fuel facilities possessing or using formula quantities of SSNM (Category I facilities). It also removed the requirement for a T&Q Plan that would be separate from the Physical Security Plan for Category I facilities. (The requirement for a separate T&Q Plan still exists in 10 CFR 73.55 and 73.50, for nuclear power reactors and irradiated fuel reprocessing plants, respectively.)

The current Appendix B is essentially identical to the original published in 1978. However, several subsequent amendments to other portions of Part 73 significantly upgraded training and qualifications requirements for security personnel at fuel facilities possessing or using formula quantities of SSNM. Since these new requirements applied only to those fuel facilities, and Appendix B also applies to transportation, power reactors, and irradiated fuel reprocessing plants, Appendix B was not modified.

On November 21, 1980, the NRC published a new 10 CFR 11, which established a special nuclear material access authorization program. On September 2, 1982, the NRC published a new 10 CFR 10, which established criteria and procedures for determining eligibility for access to restricted data or national security information.

On November 10, 1988, the NRC published a rulemaking consisting of a number of upgrades applicable to Category I fuel facilities to maintain comparability with like Department of Energy facilities. These upgrades included establishment of a Tactical Response Team whose other duties would permit immediate response. Each Tactical Response Team member must be armed with a 9mm semiautomatic pistol. All but one member of the Tactical Response Team must also be armed with either a shotgun or semiautomatic rifle. The remaining member must carry a rifle of no less caliber than .30 inches or 7.62 mm. Members of the Tactical Response Team must receive training in addition to that provided to other armed guards.

The November 10, 1988, rulemaking also required all guards and Tactical Response Team members to qualify for night-firing in accordance with a new Appendix H. It required periodic demonstrations and exercises, including force-on-force drills. This rulemaking also allowed the substitution of shoulder firing in place of the hip firing for shotgun qualification in Appendix B.

On June 3, 1993, the NRC amended 10 CFR 26 to require fitness-for-duty programs at Category I facilities.



On August 31, 1993, the NRC published a rulemaking establishing new day-firing courses for the purpose of qualifying Tactical Response Team members, armed response personnel, and guards at Category I fuel facilities. These new courses of fire were added to Appendix H rather than Appendix B. The techniques and methods required to successfully complete the new courses of fire include weapons manipulation skills in addition to marksmanship.

On July 28, 1994, the NRC published a rulemaking requiring a continuing physical fitness program and annual physical performance test for Tactical Response Team members, armed response personnel, and guards at Category I fuel facilities.

### **1.3 Purpose of the Document**

This document is an SRP for use by NRC personnel in evaluating T&Q Plans prepared pursuant to 10 CFR 73 Appendix B and 10 CFR 73.46 for Category I fuel facilities. An applicant or licensee must establish, maintain, and follow a plan that shows how it will meet the criteria in Appendix B and 10 CFR 73.46 for training, equipping, and qualifying security personnel for assigned duties. An applicant or licensee may address this requirement in either its Physical Protection Plan or a separate T&Q Plan. Hereinafter, this SRP will refer simply to the T&Q Plan, which encompasses either of these approaches to meeting this requirement.

The SRP contains the requirements that a Category I fuel facility licensee must meet and address in its T&Q Plan and also contains additional information to be used as guidance in the implementation of the regulations. The NRC staff uses the SRP to assure comprehensive and consistent reviews of T&Q Plans for Category I facilities. This document is also of use to license applicants and licensees seeking an amendment to their license that would require resubmittal of their T&Q Plan because it presents a format acceptable to NRC for the required T&Q Plan and concisely describes the requirements that the applicant or licensee must meet.

There were two objectives in issuing this SRP. The first was to increase the usefulness and usability of T&Q Plans for the existing and future licensees and the NRC staff by providing guidance on ways to enhance their user friendliness through simplifying and streamlining the structure of the plans. Appendix B and the other sections of NRC regulations cited above contain a large number of detailed requirements for T&Q Plans for security personnel. This SRP regroups those requirements to sharpen the focus on functional training and on qualification requirements in Appendix B that relate to the types of security personnel encountered at a Category I fuel facility.

The second objective is to provide a sharper focus on those requirements in Appendix B that apply specifically to the fixed-site security system at a Category I fuel facility. Appendix B also applies to training and qualifications of security personnel protecting special nuclear material in transit. By addressing only those requirements that apply to

physical protection at Category I fuel facilities, this SRP provides a clearer structure for NRC personnel reviewing T&Q Plans for such facilities.

#### **1.4 Description of the Document**

This document contains eight modules that comprise the major elements of T&Q Plans for meeting the requirements of 10 CFR 73 Appendix B that are applicable to Category I fuel facilities. The plans must comply with the intent of every requirement presented in the modules. Some modules are sub-divided into sub-modules. Following each sub-module is a "Guidance" section that contains supplemental information on the NRC's interpretation of the regulations, acceptable means for meeting the regulations, and other pertinent information.

The SRP identifies the principal modules and sub-modules (left column) and the corresponding requirement (right column) which the module or sub-module addresses. The modular structure groups together the requirements in 10 CFR 73 Appendix B and redundant or related requirements from 10 CFR 73 Appendix H, 10 CFR 73.46, 10 CFR 10, 10 CFR 11, and 10 CFR 26, and presents them in a logical sequence.

- ◆ Module I groups together three sections that essentially require contract security personnel to meet the same training and qualifications requirements as those that apply to security personnel employed by the licensee.
- ◆ Module II groups together pre-employment requirements for determining suitability for employment.
- ◆ Module III groups together requirements regarding physical and mental qualifications—first those for pre-employment and then those for continued qualification. It includes qualifications for medical and physical fitness of the security personnel.
- ◆ Module IV groups together requirements for equipping security personnel. It further groups these requirements into those that apply to *all* security personnel, regardless of position category, those that apply generally to armed security personnel, and those that apply only to members of the Tactical Response Team.
- ◆ Module V groups together requirements for training. It further groups the requirements into 11 areas of training involving basic orientation, security systems, equipment, and procedures. The first six areas of training would probably be provided to all uniformed security personnel, regardless of whether they are armed. The remaining areas are related to armed guards and the performance of a specific security function or responsibility. Because a Category I fuel facility receives and ships SSNM, the SRP includes a sub-module that addresses security force onsite actions in connection with taking delivery

and making a shipment. (The SRP does not address training requirements for the actual *en route* shipment protection.)

- ◆ Module VI begins with generally applicable requirements for duty qualifications and then addresses those that are specific to weapons qualification.
- ◆ Module VII addresses the requirement in 10 CFR 73.46 for drills and demonstrations, and their use to demonstrate ability to carry out security force responsibilities and functions. This module provides a link between training and qualifications and the periodic drills and the “on-demand” demonstrations. The feedback from lessons-learned in drills and demonstrations provides input to the contents of T&Q programs.
- ◆ Module VIII addresses the various requirements for documentation of T&Q plans and individual training and qualification of security force members, and retention of records.

### **1.5 Modular Format**

This SRP has been developed in a new modular format. This effort is part of a new initiative by NRC to simplify, and gain efficiencies in, the NRC licensing process by presenting information in a user-friendly format.

### **1.6 Protection of the Plan**

Those portions of T&Q Plans for security personnel that disclose features of the physical protection system or response procedures at Category I facilities should be protected from unauthorized disclosure in accordance with the requirements in 10 CFR 73.21 for protection of Safeguards Information.

## **2. BASIC STEPS IN THE PHYSICAL PROTECTION LICENSING PROCESS**

The licensee Physical Security Plans, Safeguards Contingency Response Plans, and the T&Q plans for security personnel collectively establish a set of licensee commitments to effective protection of formula quantities of SSNM.

There are four steps in the NRC evaluation of new Physical Protection Plans, Safeguards Contingency Response Plans, and T&Q Plans required to be submitted by NRC regulations: submittal; initial review; final review; and issuance of a license condition.

The submittal process can be prompted by the issuance of a new rule or amendments to an existing regulation or it can be prompted by a request from the licensee. During this process, the applicant or licensee develops its protection strategy for meeting the new or amended requirement, and documents it in a letter to the NRC licensing staff for review and comment.

The initial review process is an iterative process in which discussions take place between the NRC and the licensee or applicant to arrive at a proposal acceptable to NRC. A number of proposals may be submitted and evaluated during this process. The license reviewer, guided by an SRP, informally ensures that the proposal agreed to is adequate and sufficient in meeting NRC requirements. However, as stated in 10 CFR 73.46(a) "The Commission may require, depending on individual facility and site conditions, alternate or additional measures deemed necessary to meet the general performance objective and requirements of 10 CFR 73.20. The NRC also may authorize protection measures other than those required by this section if, in its opinion, the overall level of performance meets the general performance objective and requirements of 10 CFR 73.20 and the performance capability requirements of 10 CFR 73.45." This statement is based on the requirement that is stated in 10 CFR 73.46(b)(i), which is that "the licensee is responsible to the NRC for maintaining safeguards in accordance with NRC regulations and the licensee's security plan." Although this SRP provides a guide to assuring that the T&Q Plan meets formal requirements in the regulation, the reviewer should assure that any facility- or site-specific requirements affecting T&Q are fully addressed.

The licensee or applicant then makes a formal and final submittal of its proposal. License reviewers document their formal review of the proposal in a Safeguards Evaluation Report, which is stored and maintained on file for the life of the license.

The physical protection licensing process ends when a license condition is attached to the main license. The license condition contains the commitments made by the licensee or applicant to meet the new or amended proposal and becomes a permanent part of the license.

Existing Category I facility licensees already possess NRC-approved T&Q Plans and need not revise or restructure those plans pursuant to this SRP. Any new guidance in this SRP is intended primarily for clarification for new licensed activities only, and is not intended as a backfit of existing licensed operations. Should a future license amendment or rulemaking, or substantive revisions to Physical Security Plans or Safeguards Contingency Response Plans that affect security-related duties and responsibilities also require revision and resubmittal by existing licensees of their T&Q Plans to the NRC for review and approval, or the licensee voluntarily revises its plan, this SRP sets forth guidance on content that is acceptable to NRC.

## **2.1 Plan Revisions Using 10 CFR 70.32(g)**

T&Q Plans also may be revised using the provisions of 10 CFR 70.32(g), that allows licensees to make changes without prior approval by the NRC if the changes do not decrease the safeguards effectiveness of the plan. A report containing a description of each change must be submitted to the NRC within 60 days after the change is made. The NRC staff reviews these revisions and determines whether it agrees that the changes do not decrease the effectiveness of the plan. If the NRC staff agrees, it notifies the licensee. If it does not agree, it notifies the licensee and initiates an iterative process in which discussions take place between the NRC and the licensee to arrive at a proposal acceptable to the NRC.

Existing licensees may use 10 CFR 70.32(g) and the guidance contained in this SRP to simplify their existing T&Q Plans. Any substantive items already in a licensee's T&Q Plan and recommended in this SRP should not be left out in changes made under 10 CFR 70.32(g).

### 3. COMPONENTS OF LICENSEE TRAINING AND QUALIFICATIONS PLANS

3.1 MODULE I—CONTRACT PERSONNEL REQUIREMENTS	
3.1 Contract Security Personnel	<p><b>Appendix B: I. D.</b> Contract security personnel shall be required to meet the suitability, physical, and mental requirements as appropriate to their assigned security job duties in accordance with section I of this Appendix.</p> <p><b>Appendix B: II. C.</b> Contract personnel shall be trained, equipped, and qualified as appropriate to their assigned security-related job tasks or job duties, in accordance with sections II, III, IV, and V of this Appendix. The qualifications of each individual must be documented and attested by a licensee security supervisor.</p> <p><b>73.46 (b) Security organization.</b></p> <p>(1) The licensee shall establish a security organization, including guards. If a contract guard force is utilized for site security, the licensee's written agreement with the contractor will clearly show that: ... (iii) the requirement, in 73.46(b)(4) of this section that the licensee demonstrate the ability of physical security personnel to perform their assigned duties and responsibilities, include demonstration of the ability of the contractor's physical security personnel to perform their assigned duties and responsibilities in carrying out the provisions of the Security Plan and these regulations, and (iv) the contractor will not assign any personnel to the site who have not first been made aware of these responsibilities.</p>

#### GUIDANCE:

(a) Contract security personnel must meet the same initial and recurring suitability requirements as proprietary (licensee) security personnel.

(b) The T&Q Plan must either reference the contractual agreement, which must specify that the contractor personnel must be aware of their assigned duties/responsibilities and will demonstrate their ability to perform them, or otherwise demonstrate how the operator will impose these requirements on a contractor guard force.

### 3.2 MODULE II—PRE-EMPLOYMENT REQUIREMENTS

#### 3.2 Employment Suitability

#### **Appendix B. I. Employment suitability and qualification.**

A. Suitability: 1. Prior to employment, or assignment to the security organization, an individual shall meet the following suitability criteria:

a. Educational development -- Possess a high school diploma or pass an equivalent performance examination designed to measure basic job-related mathematical, language, and reasoning skills, ability, and knowledge, required to perform security job duties.

b. Felony convictions -- Have no felony convictions involving the use of a weapon and no felony convictions that reflect on the individual's reliability.

2. Prior to employment or assignment to the security organization in an armed capacity, the individual, in addition to (a) and (b) above, must be 21 years of age or older.

G. Nothing herein authorizes or requires a licensee to investigate into or judge the reading habits, political or religious beliefs, or attitudes on social, economic, or political issues of any person.

**10 CFR 10.11** Criteria for determining eligibility for access to restricted data.

**10 CFR 11.11** General requirements for SNM access authorization.

**10 CFR 11.21** Application of the criteria for determining eligibility for access to SNM.

#### **GUIDANCE:**

(a) 10 CFR 10.11 identifies criteria to be used for determining eligibility for access to Restricted Data or National Security Information.

10 CFR 11.11 requires that the licensee identify and document all positions and jobs where an individual could steal, divert, or sabotage SNM to the degree it would endanger the public by exposure to radiation, either individually or in collusion with an individual not possessing an NRC-U special nuclear material access authorization. The licensee must also identify any position that can direct or coerce any individual to assist in such activities. 10 CFR 11.11 A.1.(i) specifically identifies all positions in the licensee's security force as requiring access authorization. It also lists exceptions to the NRC access authorization requirements, such as other equivalent Federal agency

clearances, that may be accepted while awaiting an NRC access authorization to be granted.

10 CFR 11.21 provides direction to the licensee on how to apply the criteria from 10 CFR 10.11 to those identified positions in 10 CFR 11.11.

(b) 10 CFR 10.11(a)(8) and (9) overlap the felony conviction requirement in Appendix B and provide more specificity on the types of crimes to be considered in the access authorization process, including conviction of crimes indicating habitual criminal tendencies or crimes that are of a nature indicating poor judgement, unreliability, or untrustworthiness. 10 CFR 10.11(a)(1) through (7) and (10) through (13) identify other criteria for making the determination for eligibility for access to classified information.

(c) Commitments must be made in the Physical Security Plan or in the T&Q Plan concerning the access authorization requirements for the security force and other personnel as identified in 10 CFR 11.11.



<b>3.3 MODULE III—REQUIREMENTS REGARDING PHYSICAL AND MENTAL QUALIFICATIONS</b>	
3.3 Physical & Mental Qualifications of Uniformed Security Personnel	<b>73.46 (b)(4)</b> The licensee may not permit an individual to act as a Tactical Response Team Member, armed response person, guard, or other member of the security organization unless the individual has been .... qualified .... in accordance with Appendix B ....

**GUIDANCE:**

(a) The requirements stated in Appendix B were later augmented by those in 10 CFR 73.46. Both are both stated in this module and have some overlap. Conflict is clarified in the guidance.

(b) A typical security personnel organization hierarchy allows a new employee to be utilized as an unarmed watchman while awaiting completion of access authorization processing, physical qualification achievement, and/or advanced job task training. The hierarchy of job position/tasks also allows security personnel that are temporarily unqualified for their current position due to various reasons (physical, mental, emotional, or training) to continue work while requalifying for their previous position. The positions of watchman, guard/armed responder, and Tactical Response Team member each have different job-related requirements, and Tactical Response Team members must meet more stringent physical and job-related requirements. Central alarm station (CAS) and secondary alarm station (SAS) operators have a completely different set of job-related requirements beyond the basic job skills level that all security personnel must attain.

(c) This module addresses the initial screening process to ensure that a person is physically and mentally qualified to become a member of the security force. It also addresses the ongoing training, observation and testing required to ensure they maintain those physical and mental qualifications. It addresses only the physical and mental aspects of the qualifications necessary to ensure the employee's ability to perform the assigned duties. Task-specific training and qualifications, and weapons training and qualifications, are addressed in later modules.

(d) Sub-module 3.3.1.1 provides pre-employment medical qualifications, including vision, hearing, and freedom from disqualifying diseases or addictions, and annual physical requalification. Sub-module 3.3.1.2 provides general mental and emotional stability qualifications as well as requirements for behavioral observation training. Sub-modules 3.3.2, 3.3.3, and 3.3.4 address continuing physical and mental requirements for security personnel, once they are hired, under a fitness program established for the prescribed criteria in 10 CFR 73.46(b)(10) or under a licensee-established program per

10 CFR 73.46(b)(12). All of these sub-modules address the exceptions for CAS/SAS personnel based on their duty assignments, and medical waivers for personnel not able to continue a fitness program or testing. Sub-module 3.3.2 provides requirements for a continuing physical fitness training program and the required demonstration of physical fitness for a person becoming a member of the Tactical Response Team. Sub-module 3.3.3 provides requirements for demonstrating physical fitness for assigned duties by performing a practical physical exercise program within a specific time period. This sub-module also includes the requirements for the alternative approach of a licensee-developed site-specific, content-based, physical fitness performance test which will duplicate response duties which each individual may need to perform during a strenuous tactical engagement. Sub-module 3.3.4 provides requirements for continued physical and medical qualifications for participation in the ongoing physical fitness programs and qualification tests.

<p>3.3.1 Initial Medical Condition/Physical Qualification</p> <p>3.3.1.1 Medical Qualifications</p>	<p><b>Appendix B: I. B. Physical ... qualifications.</b></p> <p>1. Physical qualifications: ... a. Individuals whose security tasks and job duties are directly associated with the effective implementation of the licensee Physical Security and Safeguards Contingency Response Plans shall have no physical weaknesses or abnormalities that would adversely affect their performance of assigned security job duties.</p> <p>b. In addition to a. above, guards, armed response personnel, armed escorts, and central alarm station operators shall successfully pass a physical examination administered by a licensed physician. The examination shall be designed to measure the individual's physical ability to perform assigned security job duties as identified in the licensee Physical Security and Safeguards Contingency Response Plans. Armed personnel shall meet the following additional physical requirements:</p> <p>(1) Vision: (a) For each individual, distant visual acuity in each eye shall be correctable to 20/30 (Snellen or equivalent) in the better eye and 20/40 in the other eye with eyeglasses or contact lenses. If uncorrected distance vision is not at least 20/40 in the better eye, the individual shall carry an extra pair of corrective lenses. Near visual acuity, corrected or uncorrected, shall be at least 20/40 in the better eye. Field of vision must be at least 70 horizontal meridian in each eye. The ability to distinguish red, green, and yellow colors is required. Loss of vision in one eye is disqualifying. Glaucoma shall be disqualifying, unless controlled by acceptable medical or surgical means, provided such medications as may be used for controlling glaucoma do not cause undesirable side effects which adversely affect the individual's ability to perform assigned security job duties, and provided the visual acuity and field of vision requirements stated above are met. On-the-job evaluation shall be used for individuals who exhibit a mild color vision defect.</p>
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(b) Where corrective eyeglasses are required, they shall be of the safety glass type.

(c) The use of corrective eyeglasses or contact lenses shall not interfere with an individual's ability to effectively perform assigned security job duties during normal or emergency operations.

(2) Hearing: (a) Individuals shall have no hearing loss in the better ear greater than 30 decibels average at 500 Hz, 1,000 Hz, and 2,000 Hz with no level greater than 40 decibels at any one frequency (by ISO 389 "Standard Reference Zero for the Calibration of Puritone Audiometer" (1975) or ANSI S3.6 1969 (R. 1973) "Specifications for Audiometers"). ISO 389 and ANSI S3.6 - 1969 have been approved for incorporation by reference by the Director of the Federal Register. A copy of each standard is available for inspection at the NRC Library, 11545 Rockville Pike, Rockville, Maryland 20852-2738.

(b) A hearing aid is acceptable provided suitable testing procedures demonstrate auditory acuity equivalent to the above stated requirement.

(c) The use of a hearing aid shall not decrease the effective performance of the individuals assigned security job duties during normal or emergency operations.

(3) Diseases: Individuals shall have no established medical history or medical diagnosis of epilepsy or diabetes, or, where such a condition exists, the individual shall provide medical evidence that the condition can be controlled with proper medication so that the individual will not lapse into a coma or unconscious state while performing assigned security job duties.

**Appendix B: I. C. Medical examinations....**

... Guards, armed response personnel, armed escorts and other armed security force members shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications as disclosed by the medical examination to participation by the individual in physical fitness tests.

	<p><b>Appendix B: I. E. Physical requalification</b> - At least every 12 months, central alarm station operators shall be required to meet the physical requirements of B.1.b of this section, and guards, armed response personnel, and armed escorts shall be required to meet the physical requirements of paragraphs B.1.b(1) and (2), and C of this section.</p> <p><b>Appendix B: I. B. 1. b. (4) Addiction</b> - Individuals shall have no established medical history or medical diagnosis of habitual alcoholism or drug addiction, or, where such a condition has existed, the individual shall provide certified documentation of having completed a rehabilitation program which would give a reasonable degree of confidence that the individual would be capable of performing assigned security job duties.</p> <p><b>10 CFR 26.2</b> Scope of fitness-for-duty programs.</p> <p><b>10 CFR 26.10</b> General performance objectives.</p>
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**GUIDANCE:**

(a) 10 CFR 26.2 identifies the security guards as one of the types of positions at Category I fuel facilities that are subject to fitness-for-duty requirements. 10 CFR Part 26 overlaps Appendix B:I.B.1:B.(4), *Addiction*, and provides additional specificity for a person's expected performance and trustworthiness as well as the requirements for the licensee's written policy and procedures. It addresses not only addiction to drugs (prescription and non-prescription) and alcohol, but their use, possession, and sale. It also addresses the testing process to establish drug-related disqualifying conditions, the preservation of evidence, and corrective employee assistance programs. The T&Q Plan must demonstrate how the licensee will meet the Appendix B requirements, and should show how the program to meet the 10 CFR Part 26 fitness-for-duty requirements cited here support this demonstration.

(b) Alarm station operators that do not perform other duties assigned to armed guards and armed response personnel must be physically able to perform assigned security duties, but need not meet the detailed requirements regarding vision, hearing, etc. for armed guards and armed response personnel. This requirement also applies to sub-modules 3.3.2 and 3.3.3 for physical training programs and qualifications.

<p>3.3.1.2 Mental Qualifications</p>	<p><b>Appendix B: I. B. 2. Mental qualifications:</b></p> <p>a. Individuals whose security tasks and job duties are directly associated with the effective implementation of the licensee Physical Security and Safeguards Contingency Response Plans shall demonstrate mental alertness and the capability to exercise good judgment, implement instructions, assimilate assigned security tasks, and possess the acuity of senses and ability of expression sufficient to permit accurate communication by written, spoken, audible, visible, or other signals required by assigned job duties.</p> <p>b. Armed individuals, and central alarm station operators, in addition to meeting the requirement stated in paragraph a. above, shall have no emotional instability that would interfere with the effective performance of assigned security job duties. The determination shall be made by a licensed psychologist or psychiatrist, or physician, or other person professionally trained to identify emotional instability.</p> <p>c. The licensee shall arrange for continued observation of security personnel and for appropriate corrective measures by responsible supervisors for indications of emotional instability of individuals in the course of performing assigned security job duties. Identification of emotional instability by responsible supervisors shall be subject to verification by a licensed, trained person.</p> <p><b>10 CFR 26.22(a)(4) Behavioral observation training.</b></p>
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**GUIDANCE:**

(a) The medical examination required in sub-module 3.3.1.1 must be conducted by a licensed physician. The determination of emotional stability required in this sub-module may be made by a licensed physician, a licensed psychologist or psychiatrist, or other person professionally trained to identify emotional instability. Both of these requirements may be met during a single examination by a licensed physician.

(b) In addition to the Appendix B:I.B.2.c. requirement for continued observation of security personnel for indications of emotional instability, 10 CFR 26.22(a)(4) requires

that managers and supervisors be trained for fitness-for-duty behavioral observations. Depending on its scope, the fitness-for-duty behavioral observation program may help support the implementation of Appendix B:I.B.2.c. by supplementing information submitted with the security T&Q Plan. The T&Q Plan should explain the connections between the two requirements, if any, in committing to the training for behavioral observation that is required to implement Appendix B:I.B.2.c.

**3.3.2 Physical Fitness Training Program**

**73.46 (b)(10)** Each Tactical Response Team member, armed response person, and guard, except as provided in paragraph (b)(10)(v) of this section, shall participate in a physical fitness training program on a continuing basis.

(I) The elements of the physical fitness training program must include, but not necessarily be limited to, the following:

(A) Training sessions of sufficient frequency, duration, and intensity to be of aerobic benefit, e.g., normally a frequency of three times per week, maintaining an intensity of approximately 75 percent of maximum heart rate for 20 minutes;

(B) Activities that use large muscle groups, that can be maintained continuously, and that are rhythmical and aerobic in nature, e.g., running, bicycling, rowing, swimming, or cross-country skiing; and

(C) Musculoskeletal training exercises that develop strength, flexibility, and endurance in the major muscle groups, e.g., legs, arms, and shoulders.

(ii) The licensee shall assess Tactical Response Team members, armed response personnel, and guards for general fitness once every 4 months to determine the effectiveness of the continuing physical fitness training program. Assessments must include a recent health history, measures of cardiovascular fitness, percent of body fat, flexibility, muscular strength, and endurance. Individual exercise programs must be modified to be consistent with the needs of each participating Tactical Response Team member, armed response person, and guard and consistent with the environments in which they must be prepared to perform their duties. Individuals who exceed 4 months without being assessed for general fitness due to excused time off from work must be assessed within 15 calendar days of returning to duty as a Tactical Response Team member, armed response person, or guard.



	<p>(iv) Licensees may temporarily waive an individual's participation in the physical fitness training program on the advice of the licensee's examining physician, during which time the individual may not be assigned duties as a Tactical Response Team member.</p> <p>(v) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the physical fitness training program specified in paragraph (b)(10) of this section, provided that they are not assigned temporary response guard duties.</p> <p><b>73.46 (b)(12)</b> The licensee may elect to comply with the requirements of this paragraph instead of the requirements of paragraphs (b)(10) ...each licensee...shall develop and submit to the NRC for approval site-specific content based, physical fitness performance tests, ....</p>
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**GUIDANCE:**

(a) 10 CFR 73.46(b)(12) allows the licensee to have an alternative to develop, and submit to the NRC for approval, a site-specific, content-based, physical fitness performance test that simulates the response duties needed to be performed during a strenuous tactical engagement. This alternative program involves quarterly testing in lieu of continuing physical fitness training program participation with an annual physical fitness testing program. (See sub-module 3.3.3.) Any plan using this alternative approach must satisfy these requirements and must document and demonstrate how this is achieved.

(b) In addition to the last sentence in 10 CFR 73.46(b)(10)(ii), Appendix B:I.B.(5) requires that a person who "has been incapacitated due to serious illness, injury, disease, or operation, which could interfere with the effective performance of assigned security job duties shall, prior to resumption of such duties, provide medical evidence of recovery and ability to perform such security job duties." (See sub-module 3.3.4.) The T&Q Plan must contain a commitment to this effect.

**3.3.3 Physical Fitness  
Qualification Criteria**

**Appendix B: I. C. ....** Guards, armed response personnel, armed escorts and other armed security force members shall demonstrate physical fitness for assigned security job duties by performing a practical physical exercise program within a specific time period. The exercise program performance objectives shall be described in the license T&Q Plan and shall consider job-related functions such as strenuous activity, physical exertion, levels of stress, and exposure to the elements as they pertain to each individual's assigned security job duties for both normal and emergency operations.

**73.46 (b)(11)** In addition to the physical fitness demonstration contained in paragraph I.C. of Appendix B, Tactical Response Team members, armed response personnel, and guards shall meet or exceed the requirements in paragraphs (73.46)(b)(11)(I) through (b)(11)(v) of this section, except as provided in paragraph (b)(11)(vi) ...initially and at least once every 12 months thereafter.

(I) For Tactical Response Team members the criteria are a 1-mile run in 8 minutes and 30 seconds or less and a 40-yard dash starting from a prone position in 8 seconds or less. For armed response personnel and guards that are not members of the Tactical Response Team the criteria are a one-half mile run in 4 minutes and 40 seconds or less and a 40-yard dash starting from a prone position in 8.5 seconds or less. The test may be taken in ordinary athletic attire under the supervision of licensee designated personnel.....

(ii) ...Tactical Response Team members, armed response personnel, and guards shall meet or exceed the qualification criteria ... prior to assignment as a Tactical Response Team member, armed response person, or guard.

(iv) The licensee shall place Tactical Response Team members, armed response persons, and guards, who do not meet or exceed the qualification criteria, in a monitored remedial physical fitness

training program and relieve them of security duties until they satisfactorily meet or exceed the qualification criteria.

(v) Licensees may temporarily waive the annual performance testing for an individual on the advice of the licensee's examining physician, during which time the individual may not be assigned duties as a Tactical Response Team member.

(vi) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the annual performance testing specified in paragraph (b)(11) of this section, provided that they are not assigned temporary response guard duties.

**73.46 (b)(12)** The licensee may elect to comply with the requirements of this paragraph instead of the requirements of paragraphs (b)(10) and (b)(11) of this section. In addition to the physical fitness qualifications of paragraph I.C of Appendix B, each licensee subject to the requirements of this section shall develop and submit to the NRC for approval site-specific, content-based, physical fitness performance tests which will, when administered to each Tactical Response Team member, armed response person, or guard, duplicate the response duties these individuals may need to perform during a strenuous tactical engagement.

(I) The test must be administered to each Tactical Response Team member, armed response person, and guard once every 3 months. The test must specifically address the physical capabilities needed by armed response personnel during a strenuous tactical engagement at the licensed facility. Individuals who exceed 3 months without having been administered the test due to excused time off from work must be tested within 15 calendar days of returning to duty as a Tactical Response Team member, armed response person, or guard.

	(iii) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the performance test specified in this section, provided that they are not assigned temporary response guard duties.
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**GUIDANCE:**

(a) The specific performance test demonstration of 10 CFR 73.46(11) or (12) may or may not satisfy the requirements of Appendix B:I.C, depending upon what performance the job duties specifically require. The T&Q Plan should demonstrate that the performance objectives for the physical fitness program required by Appendix B:I.C. support performance of job duties in the Physical Security and Safeguards Contingency Response Plan, and will be revised, as appropriate, on the basis of results of contingency response drills.

(b) The performance testing for the licensees that have an ongoing physical fitness program per 10 CFR 73.46(b)(10) must include an annual physical fitness demonstration to ensure that the guards, armed response personnel, and Tactical Response Team personnel meet the criteria stipulated in 10 CFR 73.46(b)(11). Those licensees choosing to develop an NRC approved site-specific, content-based, physical fitness performance test per 10 CFR 73.46(b)(12) must conduct a similar test quarterly for their guards, armed response personnel, and Tactical Response Team personnel. The T&Q Plan must include these commitments.

(c) CAS/SAS operators may also have to meet armed personnel physical fitness requirements if they are expected to respond or fulfill armed personnel duties. The burden is on the licensee to show why they do not need to meet such qualifications/training requirements.

(d) 10 CFR 73.46(b)(11)(ii) The first sentence only applies to "grand-fathered" facilities and is no longer applicable.

3.3.4 Physical Fitness Medical Examinations

**Appendix B: I. C. Medical examinations....**

... Guards, armed response personnel, armed escorts and other armed security force members shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications as disclosed by the medical examination to participation by the individual in physical fitness tests.

**73.46 (b)(10)(iii)** Within 30 days prior to participation in the physical fitness training program, the licensee shall give Tactical Response Team members, armed response personnel, and guards a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical fitness training program.

**73.46 (b)(11)(iii)** Tactical Response Team members, armed response personnel, and guards shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical fitness performance testing. The medical examination must be given within 30 days prior to the first administration of the physical fitness performance test and on an annual basis thereafter

**73.46 (b)(12)(ii)** Within 30 days before the first administration of the physical fitness performance test, and on an annual basis thereafter, Tactical Response Team members, armed response personnel, and guards shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical fitness performance test.

	<b>Appendix B: I. B.1.b.(5) Other physical requirements</b> -- An individual who has been incapacitated due to a serious illness, injury, disease, or operation, which could interfere with the effective performance of assigned security job duties shall, prior to resumption of such duties, provide medical evidence of recovery and ability to perform such security job duties.
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**GUIDANCE:**

(a) Appendix B:I.C. establishes general requirements for medical and mental examination for Tactical Response Team members, armed response personnel, and guards to assure that there are no medical contraindications as disclosed by the medical examination to participation by the individual in physical fitness tests.

The licensee has the option of conducting this exam as part of the exam required by Appendix B:I.B.1.b. (see sub-module 3.3.1.1); otherwise, a separate examination must be conducted for this purpose. The T&Q Plan must include a commitment to meet the requirements described in this sub-module.

(b) 10 CFR 73.46(b)(10) specifies a medical exam in preparation for entering the physical fitness training program specified in the regulation.

(c) 10 CFR 73.46(b)(11) provides details for the NRC-prescribed annual physical fitness demonstration participated in by security personnel to ensure they are capable of carrying out their assigned duties. The medical exam prior to this test provides evidence that the person has no medical problems that would prevent that person from participating in the test. 10 CFR 73.46(b)(12) requires a similar annual medical exam, but applies to a licensee-developed/NRC-approved alternative annual physical fitness testing program. This alternative program requires a quarterly physical testing program in lieu of a formal physical training program and annual testing as required by 10 CFR 73.46(b)(10 & 11), respectively. The T&Q Plan must specify which approach the licensee is taking.

(d) 10 CFR 73.46(b)(11 & 12) specifies the time period in which the medical exam must be conducted relative to the physical test or program start.

(e) Appendix B:I.B.1.b.(5) addresses the evidence of a medical exam that provides the NRC with assurance that a person is recovered sufficiently from a disease, illness, injury, or operation to effectively resume their former or newly assigned duties and responsibilities.

(f) The various medical exams can be conducted simultaneously to qualify a person for the site's physical fitness program and/or to assure that the person is fit for the job that they are assigned as long as they are conducted within the prescribed 30 days. The thoroughness of the medical examination is directly related to the job task and/or physical training/testing requirements. In the case of a site-specific alternative approach (10 CFR 73.46(b)(12); sub-module 3.3.3), this medical exam is required prior to the "site-specific content-based physical fitness performance test."

(g) These medical exams must be extensive enough to ensure that these personnel are able to perform their assigned duties under conditions of strenuous tactical engagements and/or safely participate in a continuing physical fitness program simulating such activities.

### 3.4 MODULE IV—EQUIPMENT

#### 3.4.1 All Uniformed Security Personnel

**Appendix B: V.A.5.** Personal equipment to be readily available for individuals whose assigned contingency security job duties, as described in the licensee Physical Security and Safeguards Contingency Response Plans, warrant such equipment:

- (a) Helmet, combat.
- (b) Gas mask, full face.
- (c) Body armor (bullet-resistant vest).
- (d) Flashlights and batteries.
- (e) Baton.
- (f) Handcuffs.
- (g) Ammunition equipment belt.
6. Binoculars.
7. Night vision aids, i.e., hand-fired illumination flares or equivalent.
8. Tear gas or other nonlethal gas.
9. Duress alarms.
10. Two-way portable radios (handi-talkie) 2 channels minimum, 1 operating and 1 emergency.

#### GUIDANCE:

(a) The T&Q Plan should reference any portion of the Security Plan or Safeguards Contingency Response Plan that defines security job duties, and that further describes the equipment that must be readily available to personnel assigned to carry out these duties. Should any of this information not be included in the Security or Safeguards Contingency Response Plans, it must be included in this portion of the T&Q Plan.

(b) Training (see module 3.5) must include the use of all assigned personnel security equipment. Training objectives must address the performance expectations involving the use of each piece of equipment.

(c) The licensee should use drills and demonstrations (see module 3.7) to verify the adequacy of assigned equipment in the conduct of security job duties as it relates to the defensive strategy.

(d) Some types of equipment may not be necessary at every licensee site. For example, night vision aids identified in item 7 may not be necessary if the following



conditions are met: (1) the defensive strategy, as confirmed in drills, involves adversary engagements only within buildings or within exterior areas that are illuminated in accordance with the requirements of 10 CFR 73.46(c)(4); (2) and, the exterior lighting is adequately protected against elimination by an adversary, considering factors such as vulnerability of wiring, availability of a continuous power supply or other backup power, and promptness of lamp re-strike. However, if any of the equipment listed in this module is not committed to in an NRC-approved plan, the exclusion must be justified in writing by the licensee and approved by NRC. Any additional types of security equipment utilized, but not listed above, must be included in either the Security, Contingency Response, or T&Q Plans.

**3.4.2 Armed Security Personnel**

**Appendix B: V. Guard, Armed Response Personnel**

A. Fixed Site - Fixed site guards and armed response personnel shall either be equipped with or have available the following security equipment appropriate to the individual's assigned contingency security related tasks or job duties as described in the licensee Physical Security and Safeguards Contingency Response Plans:

1. Semiautomatic rifles with following nominal minimum specifications:

- (a) .223 caliber.
- (b) Muzzle velocity, 1980 ft/sec.
- (c) Muzzle energy, 955 foot-pounds.
- (d) Magazine or clip load of 10 rounds.
- (e) Magazine reload, < 10 seconds.
- (f) Operable in any environment in which it will be used.

2. 12 gauge shotguns with the following capabilities:

- (a) 4 round pump or semiautomatic.
- (b) Operable in any environment in which it will be used.
- (c) Full or modified choke.

3. Semiautomatic pistols or revolvers with the following nominal minimum specifications:

- (a) .354 caliber.
- (b) Muzzle energy, 250 foot-pounds.
- (c) Full magazine or cylinder reload capability < 6 seconds.
- (d) Muzzle velocity, 850 ft/sec.
- (e) Full cylinder or magazine capacity, 6 rounds.
- (f) Operable in any environment in which it will be used.

	<p>4. Ammunition:</p> <p>(a) For each assigned weapon as appropriate to the individual's assigned contingency security job duties and as readily available as the weapon:</p> <ul style="list-style-type: none"><li>(1) 18 rounds per handgun.</li><li>(2) 100 rounds per semiautomatic rifle.</li><li>(3) 12 rounds each per shotgun (00 gauge and slug)</li></ul> <p>(b) Ammunition available on site – two (2) times the amount stated in (a) above for each weapon.</p> <p><b>73.46 (b)(6)</b> Each guard shall be armed with a handgun, as described in Appendix B of this part.</p>
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**GUIDANCE:**

(a) The T&Q Plan must include a commitment that armed security personnel and fixed-site guards will be provided with the weapons and quantities of ammunition specified in Appendix B:V and in 10 CFR 73.46(b)(6) as a minimum.

3.4.3 Tactical Response Team	<b>73.46(b)(6)</b> Each Tactical Response Team member shall be armed with a 9mm semiautomatic pistol. All but one member of the Tactical Response Team shall be armed additionally with either a shotgun or semiautomatic rifle, as described in Appendix B. The remaining member of the Tactical Response Team shall carry, as an individually assigned weapon, a rifle of no less caliber than .30 inches or 7.62mm.
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**GUIDANCE:**

- (a) The weapons and ammunition assigned to the Tactical Response Team are in lieu of those documented in sub-module 3.4.2.
  
- (b) A licensee may commit to a larger caliber semiautomatic pistol with comparable energy levels and penetration characteristics.

### 3.5 MODULE V—TRAINING REQUIREMENTS

#### 3.5 Training

#### **Appendix B: II. Training and qualifications.**

A. Training requirements - Each individual who requires training to perform assigned security-related job tasks or job duties as identified in the licensee Physical Security or Safeguards Contingency Response Plans shall, prior to assignment, be trained to perform these tasks and duties in accordance with the licensee or the licensee's agent's documented T&Q Plan.

D. Security knowledge, skills, and abilities ... The areas of knowledge, skills, and abilities that shall be considered in the licensee's T&Q Plan are as follows:

#### **GUIDANCE:**

(a) This module includes requirements related to task-specific training for normal and contingency situations.

(b) Appendix B:II.D. lists 100 areas of security knowledge, skills, and abilities. Those areas that are applicable to Category I fuel facilities are compiled in logical groups in sub-modules 3.5.1 – 3.5.11 to aid the user in associating them with specific functional tasks. Some topics may not be appropriate at some sites, and, conversely, some topics not identified in Appendix B may be important. The licensee must determine, based on job-task assignments and responsibilities, which topical area each position candidate or assignee must receive in their training, and commit to including the topical areas in the plan. The licensee must also determine the depth and breadth of each of the topical areas' course curricula and state such in the various training objectives.

(c) The groupings of security knowledge, skills and abilities in this module are not intended to be mandatory or all inclusive. However, this module should help in enabling a license reviewer to ensure that a T&Q Plan commits to an adequate set of training objectives.

(d) The T&Q Plan should show a direct relationship between the various security duties and responsibilities and the documentation or practices that prove that: (1) personnel have received the training; and (2) that training has been effectively conducted.

(e) Although it is not specifically stated in the regulations that trainers be trained or qualified to any specific degree, it is essential to ensure that they are well-trained and

knowledgeable in the subjects they teach. This is especially true in the area of tactical training and weapons handling and use. Any minimum standards required of the trainers by the licensee should be included in the T&Q Plan.

<p>3.5.1 Basic Orientation</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <ol style="list-style-type: none"> <li>1. Protection of nuclear facilities and special nuclear material.</li> <li>2. NRC requirements and guidance for physical security at nuclear facilities.</li> <li>3. The private security guard's role in providing physical protection for the nuclear industry.</li> <li>4. The authority of private guards.</li> <li>10. Motivation and objectives of adversary groups.</li> <li>13. Facility security organization and operation.</li> <li>16. Location of SNM and/or vital areas within a facility.</li> <li>20. Familiarization with types of special nuclear material processed.</li> <li>21. General concepts of fixed site security systems</li> <li>22. Vulnerabilities and consequences of theft of special nuclear material or radiological sabotage of a facility.</li> <li>23. Protection of security system information.</li> <li>57. Fixed site security information protection.</li> </ol>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide basic orientation on the need for physical security to protect nuclear material, the physical security program at the site, and the responsibilities and authorities of the facility's security officers.

(b) The T&Q Plan must include a commitment that training objectives will provide adequate basic orientation for an individual to understand why SSNM must be protected, how the physical security program provides that protection, and what the security officer's responsibility and authority are in implementing the program.

(c) The physical security program also provides property protection for non-nuclear materials, facilities, and activities in addition to the protection required by NRC regulations. The licensee must clearly distinguish training for activities not required by NRC regulation and ensure that the security force training program establishes that the protection of nuclear materials be given top priority. The training must also identify how these different goals apply to a security officer's responsibility and authority, and their priority for actions.

<p>3.5.2 Access Control</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>8. Authority to search individuals and seize property.</p> <p>12. Recognition of sabotage related devices and equipment that might be used against the licensee's facility or shipment vehicle.</p> <p>27. Access control systems and operation for individuals, packages, and vehicles.</p> <p>28. Contraband detection systems and techniques.</p> <p>52. Access control system operation.</p> <p>53. Search techniques and systems for individuals, packages and vehicles.</p>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in access control of individuals, packages, and vehicles entering or exiting a Protected Area, a Material Access Area, a Vital Area, and Vaults containing strategic quantities of special nuclear material.

(b) The T&Q Plan must include a commitment that a training objective is to provide adequate training so that an assigned individual: (1) understands the concepts of access control into and out of the facility's Protected Area, Material Access Areas, Vital Areas, and Vaults; (2) understands the capability and limitations of access control systems and techniques and how to employ them; (3) understands how to recognize material that should not be taken into or removed from Controlled Areas; (4) understands how to implement personnel and vehicle control measures; and (5) understands the security officer's responsibilities and authority in performing assigned access control tasks.



**3.5.3 Barriers and Detection Systems**

**Appendix B: II.D. Security knowledge, skills, and abilities**

- 14. Types of physical barriers.
- 15. ... Lock and key control system operation.
- 17. Protected area security and vulnerability.
- 18. Types of alarm systems used.
- 25. Surveillance and assessment systems and techniques.
- 29. Barriers and other delay systems around material access or vital areas.

**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in the types of physical barriers and systems used to channel authorized personnel through the access controls discussed in sub-module 3.5.2, systems used to detect and assess unauthorized penetrations through barriers, and barriers or other systems used to delay unauthorized entry.

(b) The T&Q Plan must include a commitment that a training objective is to provide an (1) understanding of the purposes of the various barriers, locks, and key control; (2) understanding of the principles, strengths, and vulnerabilities of alarm and assessment systems used; (3) understanding of various barrier penetration techniques and associated delay times; and (4) understanding of the security officer's responsibilities and authority in assuring that their system's function is effective.

<p>3.5.4 Non-Lethal Equipment &amp; Defense</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <ul style="list-style-type: none"> <li>5. The use of non-lethal weapons.</li> <li>24. Personal equipment use and operation for normal and contingency operations.</li> <li>31. Duress alarm operation.</li> <li>61. Self defense.</li> <li>62. Use of and defenses against incapacitating agents.</li> <li>67. Basic .... unarmed defensive tactics.</li> </ul>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training to guards, armed responders, and Tactical Response Team personnel in responding to and protecting themselves in contingency situations not involving the use of weapons.

(b) The T&Q Plan must include a commitment to a training objective to provide adequate training and assure understanding and an ability to use: (1) the applicable equipment identified in sub-module 3.4.1; (2) the non-lethal techniques and equipment to prevent the theft or sabotage of SSNM and to protect the lives of the site's employees and the public. An additional commitment should be made to ensure that each individual understands the security officer's responsibilities and authorities in the use of this equipment and these techniques.

<p>3.5.5 Security Personnel Policy &amp; Procedures</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>19. Response and assessment to alarm annunciation and other indications of intrusion.</p> <p>51. Fixed post station operations.</p> <p>54. Escort and patrol responsibilities and operation.</p> <p>56. Security system operation after component failure.</p> <p>59. Security and situation reporting, documentation and report writing.</p> <p>63. Security equipment testing</p> <p>65. Night vision devices and systems</p> <p>66. Mechanics of detention</p> <p>70. Security briefing procedures.</p> <p><b>10 CFR 26.22(b)</b> Drug recognition training for escorts</p>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in miscellaneous security policy and procedures, including patrols, alarm assessment, security equipment testing, fixed posts other than access control or CAS/SAS, escorting, compensatory measures, security officer equipment, and security briefings and documentation.

(b) The T&Q Plan must include a commitment to a training objective to assure that an assigned individual understands: (1) the importance of performing patrol duties; (2) the importance of timely assessment of alarms; (3) the importance and process of testing security equipment to assure functionality; (4) the purpose, duties and procedures for fixed posts not addressed in other modules; (5) the purpose and procedures for escorting visitors; (6) the need and procedures for compensatory measures; (7) the use of applicable security officer equipment identified in module 3.4; and (8) the security officer's responsibilities and authority for each of these functions.

(c) Functional testing of security equipment was included as a required commitment in paragraph (b) above because it is a routine assignment for security officers. Testing to assure an adequate performance level was not included because such testing is highly specialized and would normally be conducted by experts or specially trained personnel.

3.5.6 Local Law Enforcement Agency (LLEA) Support

**Appendix B: II.D. Security knowledge, skills, and abilities**

7. Power of arrest and authority to detain individuals.

58. Security coordination with local law enforcement agencies.

72. Response force withdrawal.

77. Response to hostage situations

**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training for: (1) coordination with the LLEA; (2) the security officer's power of arrest and authority to detain individuals; and (3) the transfer of responsibilities to the LLEA upon arrival.

(b) The T&Q Plan must include a commitment to a training objective to provide an understanding of the agreement for LLEA support, the security officer's responsibility and authority until the LLEA arrives, and what, when and how these responsibilities and control will be transferred to the LLEA upon their arrival. A statement of commitment should include training involving LLEA interfaces to ensure timely and effective coordination with the LLEA during contingency situations.

<p>3.5.7 Weapons</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>6. The use of deadly force.</p> <p>15. Weapons... operation.</p> <p>44. Use of weapons.</p> <p>67. Basic armed... defensive tactics.</p> <p><b>Appendix B. III. Weapons training. A. Guards, armed response personnel and armed escorts requiring weapons training to perform assigned security related job tasks or job duties shall be trained in accordance with the licensee's documented weapons training programs. Each individual shall be proficient in the use of his assigned weapon(s) and shall meet prescribed standards in the following areas:</b></p> <ol style="list-style-type: none"> <li>1. Mechanical assembly, disassembly, range penetration capability of weapon, and bulls eye firing.</li> <li>2. Weapons cleaning and storage.</li> <li>3. Combat firing, day and night.</li> <li>4. Safe weapons handling.</li> <li>5. Clearing, loading, unloading, and reloading.</li> <li>6. When to draw and point a weapon.</li> <li>7. Rapid-fire techniques.</li> <li>8. Close quarter firing.</li> <li>9. Stress firing.</li> <li>10. Zeroing assigned weapon(s).</li> </ol>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in the use of weapons and the tactics involved in the use of that equipment for the prevention of theft or sabotage of SSNM.

(b) The T&Q Plan must include a training objective commitment to provide adequate training to ensure that an individual understands: (1) the concepts and legal implications for the use of deadly force; (2) the effective and safe operation of assigned weapons; (3) the associated armed tactics that may be involved in protecting SSNM; and (4) the security officer's responsibility and authority for use of the weapons.

(c) Areas of training not specifically identified in Appendix B: III may have to be added if experienced during drills. Examples include firing from elevated positions and barriers, firing at moving targets, and weak-handed firing.

<p>3.5.8 Communications</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p><b>Alarm Station Operations</b></p> <p>19. Response and assessment to alarm annunciation and other indications of intrusion.</p> <p>26. Communications systems operation, fixed site.</p> <p>30. Exterior and interior alarm systems operation.</p> <p>32. Alarm stations operation.</p> <p>38. Security command and control during contingency operation.</p> <p>69. Security alert procedures.</p> <p><b>Command and Control</b></p> <p>37. Security command and control system during normal operation.</p> <p>38. Security command and control system during contingency operation.</p>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in alarm station operations and the centralized command and control during normal and contingency operations. The training should provide the comprehensive knowledge to those that will be required to operate the CAS and SAS.

(b) The T&Q Plan must include a commitment that a training objective is to provide adequate training to both the security force, in general, as well as the CAS/SAS operators in particular. It is important for everyone to have a basic knowledge of the capabilities of the CAS/SAS operation. It is also important for personnel in charge of the CAS/SAS to be able to efficiently and quickly: (1) monitor alarms; (2) direct assessment and response forces; (3) communicate with the security force and the LLEA; and (4) activate various alert procedures in the event of a heightened security awareness to a potential threat.

(c) Those personnel with command and control responsibilities, including CAS/SAS personnel or other supervisory personnel in the field, must be trained to understand and be able to carry out those command and control functions in an effective and coordinated manner using all resources at their disposal for normal and contingency situations.

(d) Security officers must be trained to understand their responsibilities and authorities and be able to demonstrate them in the periodic contingency drills as well as in daily operations.



<p>3.5.9 Armed Response</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>9. Adversary group operations.</p> <p>11. Tactics and force that might be used by adversary groups to achieve their objectives.</p> <p>33. Response force organization.</p> <p>34. Response force mission.</p> <p>35. Response force operation.</p> <p>36. Response force engagement.</p> <p>68. Response force deployment.</p> <p>71. Response force tactical movement.</p> <p>72. Response force withdrawal.</p> <p>73. Response force use of support fire.</p> <p>78. Site-specific armed tactical procedures and operation.</p> <p><b>73.46(b)(8)</b> In addition to the training requirements contained in appendix B, Tactical Response Team members shall successfully complete training in response tactics.</p>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in potential adversary actions and armed response policies, organization, techniques, tactics, and procedures.

(b) The T&Q Plan must include a commitment to a training objective to provide adequate training so that an assigned individual understands (1) the NRC's design basis threat and the range of potential adversary tactics, (2) armed response policies, organization, techniques, tactics, and procedures, and (3) the security officer's responsibilities and authority for responding to armed attacks.

<p>3.5.10 SSNM Shipment Delivery &amp; Pickup</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>89. Verification of shipment documentation and contents.</p> <p>90. Continuous surveillance of shipment vehicle.</p> <p>97. Procedures for verification of shipment locks and seals.</p> <p>99. Procedures for shipment delivery and pickup.</p>
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**GUIDANCE:**

(a) The security knowledge, skills and abilities identified in this sub-module provide training in the proper, efficient and secure handling of inbound and outbound shipments.

(b) The T&Q Plan must include a commitment that a training objective is to provide specific procedural training for processing and protecting inbound and outbound vehicle shipments to the site. The commitment should address the arrangements and procedures for assuring continuous protection during the transfer of responsibility to or from the security force that will protect the material during shipment. The commitment should address proper inspection and surveillance techniques and systems as well as the proper use and protection of locks and seals used to secure the vehicle and its cargo. The training should assure understanding of the purposes of the documentation, inspection and escort duties, locks and seals, and the related security threat concerns associated with the movement of vehicles into or from the site.

(c) Training must ensure that security officers understand their responsibilities and authorities for implementing these procedures.

<p>3.5.11 Contingency Plans &amp; Procedures</p>	<p><b>Appendix B: II.D. Security knowledge, skills, and abilities</b></p> <p>55. Contingency response to confirmed intrusion or attempted intrusion.</p> <p>60. Contingency duties.</p> <p>64. Contingency procedures.</p> <p>74. Response to bomb and attack threats.</p> <p>75. Response to civil disturbances (e.g., strikes, demonstrators).</p> <p>76. Response to confirmed attempted theft of special nuclear material and/or radiological sabotage of facilities.</p> <p>79. Security response to emergency situations other than security incidents.</p>
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**GUIDANCE:**

- (a) The security knowledge, skills and abilities identified in this sub-module provide training in response to security contingencies other than armed attacks and the role of the security force in emergencies other than security incidents.
- (b) The T&Q Plan must include a commitment that a training objective is to provide adequate training so that an assigned individual understands: (1) the Generic Planning Base and Responsibility Matrix committed to in the licensee's Safeguards Contingency Response Plan; (2) the contingency procedures for implementing the plan; (3) security procedures in emergencies other than security incidents; and (4) the security officer's responsibilities and authority for responding to contingencies and emergencies.

<b>3.6 MODULE VI—DUTY QUALIFICATIONS</b>	
3.6.1 General	<p><b>Appendix B: II.B. Qualification requirements -</b>  Each person who performs security-related job tasks or job duties required to implement the licensee Physical Security or Safeguards Contingency Response Plan shall, prior to being assigned to these tasks or duties, be qualified in accordance with the licensee's NRC-approved T&amp;Q Plan. ....</p> <p><b>73.46 (b)(4)</b> The licensee may not permit an individual to act as a Tactical Response Team member, armed response person, guard, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security duty in accordance with Appendix B of this part.</p>

**GUIDANCE:**

(a) A commitment must be stated in the T&Q Plan that the licensee will verify a trainee's understanding of how, when, where, and why he should employ such equipment and skills as listed in module 3.5 as well as the consequences of misapplying them.

(b) A fundamental component of the effectiveness of the physical security system for a Category I facility is that all security personnel are trained and qualified to perform the security duties and responsibilities assigned them in the Physical Security Plan and the Safeguards Contingency Response Plan in carrying out the licensee commitments made in those plans. The licensee may, in this module of the T&Q Plan, reference these other plans in stating his commitment that all security personnel are trained and qualified to carry out their duties and assignments pursuant to those plans.

3.6.2 Weapons

**Appendix H to Part 73 -- Weapons Qualification Criteria (See Tables H-1 and H-2)**

**73.46(b)(4)** ... In addition, Tactical Response Team members, armed response personnel, and guards shall be trained, equipped, and qualified for use of their assigned weapons in accordance with paragraphs ... (b)(7) of this section. ...

**73.46 (b)(7)** Tactical Response Team members, armed response personnel, and guards shall qualify..., for day and night firing with assigned weapons in accordance with Appendix H. Tactical Response Team members, armed response personnel, and guards shall be permitted to practice fire prior to qualification ... but shall be given only one opportunity to fire for record on the same calendar day. If a Tactical Response Team member, armed response person, or guard fails to qualify..., the licensee shall remove the individual from security duties which require the use of firearms and retrain the individual prior to any subsequent attempt to qualify or re-qualify. If an individual fails to qualify ... on two successive attempts, he or she shall be required to receive additional training and successfully fire two consecutive qualifying scores prior to being reassigned to armed security duties.

**Table H-1. Minimum Day Firing Criteria**

(See footnotes at end of Table H-1)

Weapon	Stage	String	Distance	Number of Rounds	Timing	Position	Scoring
Handgun	1	1	3 yards	6	9 seconds	Draw and fire 2 rounds (repeat 2 times) 3 seconds each string.	Minimum qualifying = 70%
		2					
		3					
	2	1	7 yards	6	10 seconds	Draw and fire 2 rounds at center mass and 1 round at the head (repeat once) 5 seconds each string.	
		2					
	3	1	7 yards	6	12 seconds (4 seconds each string)	Using weaker hand only, from the low ready position, fire 2 rounds (repeat twice).	
		2					
		3					
	4	1	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position.	
		2	10 yards	2	3 seconds	Fire 2 rounds from low ready position and reholster.	
		3	10 yards	2	12 seconds (revolver) 10 seconds (semi-automatic)	Draw and fire 2 rounds, reload, fire 2 rounds and reholster.	
		4	10 yards	2	4 seconds	Draw and fire 2 rounds, come to low ready position.	
		5	10 yards	2	3 seconds	Fire 2 rounds from low ready position and reholster.	
	5	1	15 yards	2	5 seconds	Standing, draw weapon, move to kneeling position, then fire 2 rounds and reholster.	
		2	15 yards	2	5 seconds	Standing, draw weapon, move to kneeling position, then fire 2 rounds and reholster.	
		3	15 yards	4	14 seconds (revolver) 12 seconds (semi-automatic)	Standing, draw weapon, fire 2 rounds, move to kneeling position and fire 2 rounds, reload and reholster.	
4		15 yards	2	5 seconds	Draw weapon and fire 2 rounds standing, come to low ready position and ...		

**Table H-1. Minimum Day Firing Criteria**  
(See footnotes at end of Table H-1)

Weapon	Stage	String	Distance	Number of Rounds	Timing	Position	Scoring
Handgun (cont.)	5	5	15 yards	2	3 seconds	Fire 2 rounds from low ready.	Minimum qualifying = 70%
	6	1	25 yards	2	5 seconds	Draw and fire 2 rounds, standing, left side of barricade.	
		2	25 yards	2	5 seconds	Draw and fire 2 rounds, right side of barricade (standing).	
		3	25 yards	4	15 seconds (revolver) 12 seconds (semi-automatic)	Draw weapon and move from standing to kneeling position, fire 2 rounds, left side of barricade, reload, and from the kneeling position, fire 2 rounds, right side of barricade.	
		4	25 yards	2	10 seconds	Draw weapon and move from standing to prone, fire 2 rounds.	
		5	25 yards	2	10 seconds	Draw weapon and move from standing position to prone, fire 2 rounds.	
		7	1	50 yards	2	8 seconds	
	2		50 yards	2	10 seconds	Draw weapon and fire 2 rounds from a kneeling barricade position (right or left side, shooter's option).	
	3		50 yards	2	12 seconds	Draw weapon and fire 2 rounds from prone position.	
	Shotgun	1	1	7 yards	2 double 0 buck-shot	4 seconds	
2		1 2	15 yards	4 double 0 buck-shot	15 seconds	At low ready position fire 2 rounds standing, reload and fire 2 rounds.	
3		1 2	25 yards	4 rifled slugs or 00 buck-shot	20 seconds	On command, load 4 rounds and fire 2 rounds standing and 2 rounds kneeling.	

**Table H-1. Minimum Day Firing Criteria**

(See footnotes at end of Table H-1)

Weapon	Stage	String	Distance	Number of Rounds	Timing	Position	Scoring
Rifle	1	1 2 3	15 yards	6	10 seconds (4 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to standing point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string.	Minimum qualifying = 70%
	2	1 2 3	25 yards	6	11 seconds (5 seconds for 1st string, 3 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to standing point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string.	
	3	1 2 3	25 yards	6	17 seconds (7 seconds for 1st string, 5 seconds for each of 2nd and 3rd string)	Standing in low ready position, move to kneeling point shoulder position (1 magazine loaded with 6 rounds, weapon in half-load configuration), fire 2 rounds per string.	Minimum qualifying = 70%
	4	1 2	50 yards	4	16 seconds (9 seconds for 1st string, 7 seconds for 2nd string)	Standing in low ready position, move to kneeling point shoulder position (1 magazine loaded with 4 rounds, weapon in half-load configuration), fire 2 rounds per string.	
	5	1	50 yards	4	20 seconds	Standing in low ready position, move to prone (weapon in half-load configuration) with two magazines each loaded with 2 rounds, fire 2 rounds, reload with 2nd magazine and fire 2 rounds.	
	6	1	100 yards	4	25 seconds	Standing in low ready position, move to prone (weapon in half-load configuration) two magazines each loaded with 2 rounds, fire 2 rounds, reload with 2nd magazine and fire 2 rounds.	

**Footnotes:**

1 This day firing qualifications course is to be used by all Tactical Response Team members, armed response personnel, and guards.

2 A string is one of the different phases within a single stage.

3 Security personnel will be timed as shown.

4 Stages 5 and 6 are to be used for .30 caliber or larger rifles.

NOTE-- The B - 27 Target or a target of equivalent difficulty will be used for all weapon qualification testing.



**Table H-2. Minimum Night Firing Criteria**

Weapon	Stage	Distance	Number of Rounds	Timing	Position	Scoring	Lighting
Handgun (Rev.)	1	7 yards	12	35 seconds	Standing--no artificial support.	Minimum qualifying = 70%	For all courses 0.2 foot-candles at center mass of target area.
	2	15 yards	12	45 seconds			
Handgun (Semi-)	1	7 yards	2+clip	30 seconds	Standing--no artificial support.		
	2	15 yards	2+clip	40 seconds			
Shotgun	1	25 yards	2 rifled slugs	30 seconds (Load 2 slugs-chamber empty-Time starts-Commence firing)	Standing-strong shoulder.	Rifled slug hits-strike area on target (10, 9, 7).	
	1	15 yards	5 Double 0 buckshot	10 seconds (Load 5 rds Buckshot-chamber, empty-Time starts-Commence firing)	Standing-strong shoulder.	Double 0 Buckshot: Hits in black=2 pts (5 rds X 9 pellets/rd X 2 pts=90) Minimum qualifying=70%	
Rifle	1	25 yards	1-5rd mag	45 seconds	Standing-barricade	Minimum qualifying=70%	
	2	25 yards	1-5rd mag	45 seconds	Standing.		
	3	25 yards	1-5rd mag	45 seconds	Kneeling.		
	4	25 yards	1-5rd mag	45 seconds	Prone.		

NOTES--All firing is to be done only at night. Use of night simulation equipment during daylight is not allowable. Use of site specific devices (i.e., laser, etc.) Should be included in the licensee amended security plan for NRC approval.

The B - 27 Target or a target of equivalent difficulty will be used for all weapon qualification testing.

## GUIDANCE:

(a) The weapons qualifications requirements of section IV of Appendix B are not listed above because they have been superseded by Appendix H.

The discussion of the regulatory history in Section 1.2 of this SRP points out that the August 31, 1993, additional rulemaking imposed new day-firing qualification courses for Category I fuel facilities focusing on weapon manipulation skills. The background discussion stated “the NRC has decided to establish *new* (emphasis added) day-firing courses for the purpose of qualifying Tactical Response Team members, armed response personnel, and guards at Category I licensees.” The rule amended the November 10, 1988 rulemaking to read “In addition to the weapons qualification and requalification criteria of appendix B of this part, Tactical Response Team members, armed response personnel, and guards shall qualify and requalify, at least every 12 months, for day and night firing with assigned weapons in accordance with Appendix H of this part.” The language “In addition to” was intended to be dropped and therefore, the weapons qualifications requirements in Appendix B are no longer applicable.

Hence, only the requirements from Appendix H are shown in this module, and the corresponding section of the T&Q Plan should address only those requirements.

(b) A licensee may specify a variance from the specific requirements of Appendix H, such as the handgun shooting and scoring requirements for the 50 yard range, with sufficient site-specific justification illustrating that a possibility of using a handgun at this range does not exist at the site. This type of variance applies to all weapons and shooting/scoring conditions that can be specified as not applicable due to site-specific conditions. It is incumbent upon the licensee to provide evidence to support any such request for a site-specific variance, and the variance enters into effect only upon NRC approval.

### 3.6.3 Requalification

**Appendix B: II.E.** Security personnel shall be requalified at least every 12 months to perform assigned security-related job tasks and duties for both normal and contingency operations. Requalification shall be in accordance with the NRC-approved licensee T&Q Plan.

**Appendix B: IV.D.** Requalification – Individuals shall be weapons requalified at least every 12 months in accordance with the NRC approved licensee T&Q Plan, and in accordance with the requirements stated in A, B, and C of this section.

**73.46(b)(4)** Each Tactical Response Team member, armed response person, and guard, whether a licensee or contractor employee, shall requalify in accordance with Appendix B. Tactical Response Team members, armed response personnel, and guards shall also requalify in accordance with paragraph (b)(7) of this section at least once every 12 months.

**73.46(b)(7)** Tactical Response Team members, armed response personnel, and guards shall ... requalify, at least every 12 months, for day and night firing with assigned weapons in accordance with Appendix H of this part. Tactical Response Team members, armed response personnel, and guards shall be permitted to practice fire prior to .... requalification but shall be given only one opportunity to fire for record on the same calendar day. If a Tactical Response Team member, armed response person, or guard fails to ... requalify, the licensee shall remove the individual from security duties which require the use of firearms and retrain the individual prior to any subsequent attempt to ... requalify. If an individual fails to ... requalify on two successive attempts, he or she shall be required to receive additional training and successfully fire two consecutive qualifying scores prior to being reassigned to armed security duties.

## **GUIDANCE:**

(a) Requalification for performing assigned security-related job tasks and duties can be accomplished in several ways. These include, for example, spreading individual training modules for security personnel over the calendar year, having the training officer administer a proficiency test, evaluating personnel performance during drills, and observation of job/duty performance during normal operations. The T&Q Plan must describe the method in which the commitment will be implemented. It is essential that adequate documentation be recorded and maintained by the proper licensee authorities for all performance evaluation results including such information as date, time, applicable training objective, and name and signature of observing authority.

(b) Appendix H takes precedence over Appendix B: IV. Elements of Appendix B are not listed above because they have been superseded by Appendix H.

(c) Licensee requalification for general fitness under the NRC-specified physical fitness program is to be conducted every 4 months and is addressed in module 3.3.2 Physical Fitness Training Program.

<b>3.7 MODULE VII—DRILLS AND DEMONSTRATIONS</b>	
<b>3.7.1 Drills</b>	<b>73.46(b)(9)</b> The licensee shall conduct Tactical Response Team and guard exercises to demonstrate the ability of the security force to perform response and contingency plan responsibilities and to demonstrate individual skills in assigned team duties. ...during each 12-month period commencing on the anniversary of the date specified in paragraph (I)(2)(ii) of this section, an exercise must be carried out at least every four months for each shift, one-third of which are to be force-on-force.
<b>3.7.2 Demonstrations</b>	<b>Appendix B: II.D. Security knowledge, skills, and abilities -</b> Each individual assigned to perform the security related task identified in the licensee Physical Security or Safeguards and Contingency Response Plan shall demonstrate the required knowledge, skill, and ability in accordance with the specified standards for each task as stated in the NRC approved licensee T&Q Plan. ....
<b>3.7.3 On-demand Demonstration</b>	<b>73.46(b)(4)</b> Upon the request of an authorized representative of the NRC, the licensee shall demonstrate the ability of the physical security personnel, whether licensee or contractor employees, to carry out their assigned duties and responsibilities. <b>73.46(b)(7)(I)</b> In addition, Tactical Response Team members, armed response personnel, and guards shall be prepared to demonstrate day and night firing qualification with their assigned weapons at any time upon request by an authorized representative of the NRC.

**GUIDANCE:**

(a) Each drill or demonstration should be well-documented to record which of the job tasks it addresses and should record the security officers' effectiveness in utilizing their skills and abilities. Drills and demonstrations should not be Pass/Fail exercises. They should be used to demonstrate the effectiveness of the site's defensive strategy and the efficiency and effectiveness of the training program.

(b) A commitment should be made that drills and demonstrations will be used as a training tool and will help identify needs for remedial training or modification of the training program or requalification process.

(c) Drills and demonstrations should address a range of threats, but a commitment must be made to regularly incorporate the full capabilities of the NRC Design Basis Threat.

(d) The T&Q Plan or the Physical Security Plan should include a post-drill debriefing that involves all participants, including controllers. Lessons-learned should be documented and may require follow-up to revise the defensive strategy, response equipment, procedures, tactics, or training.

## MODULE VIII—DOCUMENTATION REQUIREMENTS

### 3.8 Documentation Requirements

**Appendix B: I.C. Medical Examinations and Physical Fitness** ...The physical fitness qualification of each guard, armed response person, armed escort, and other security force member shall be documented and attested to by a licensee security supervisor. The licensee shall retain this documentation as a record for three years from the date of each qualification.

**Appendix B: I.E. Physical Requalification** ...The licensee shall document each individual's physical requalification and shall retain this documentation of requalification as a record for three years from the date of each requalification.

**Appendix B: I.F. Documentation** – The results of suitability, physical, and mental qualifications data and test results must be documented by the licensee or the licensee's agent. The licensee or the agent shall retain this documentation as a record for three years from the date of obtaining and recording these results.

**Appendix B: II.A.** ...The licensee or the agent shall maintain documentation of the current (*Training and Qualifications*) Plan and retain this documentation of the plan as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the plan was developed and, if any portion of the plan is superseded, retain the material that is superseded for three years after each change.

**Appendix B: II.B.** ...The qualifications of each individual must be documented and attested by a licensee security supervisor. The licensee shall retain this documentation of each individual's qualifications as a record for three years after the employee ends employment in the security-related capacity and for three years after the close of period for which the licensee possesses the special nuclear material under each license, and superseded material for three years after each change.

**Appendix B: II.C.** ... The licensee shall retain this documentation of each individual's qualifications as a record for three years after the employee ends employment in the security-related capacity and for three years after the close of period for which the licensee possesses the special nuclear material under each license, and superseded material for three years after each change.

**Appendix B: II.E.** ... The results of requalification must be documented and attested by a licensee security supervisor. The licensee shall retain this documentation of each individual's requalification as a record for three years from the date of each requalification.

**Appendix B: IV.** ... The results of weapons qualification and requalification must be documented by the licensee or the licensee's agent. ... The licensee shall retain this documentation of each qualification and requalification as a record for three years from the date of the qualification and requalification, as appropriate.

**73.46(b)(1)(ii)** The NRC may inspect, copy, and take away copies of all reports and documents required to be kept by NRC regulations, orders, or applicable license conditions whether such reports and documents are kept by the licensee or the contractor,

**73.46 (b)(3)** The licensee shall have a management system to provide for the development, revision, implementation, and enforcement of security procedures. The system shall include: (i) Written security procedures which document the structure of the security organization and which detail the duties of the Tactical Response Team, guards, watchmen, and other individuals responsible for security. The licensee shall retain a copy of the current procedures as a record until the NRC terminates the license for which these procedures were developed and, if any portion of these procedures is superseded, retain the superseded material for three years after



	<p>each change; and (ii) Provision for written approval of such procedures and any revisions thereto by the individual with overall responsibility for the security function.</p> <p><b>73.46(b)(4)</b> ...The licensee shall document the results of the qualification and requalification (for each Tactical Response Team member, armed response person, and guard, whether a licensee or contractor employee every 12 months). The licensee shall retain the documentation of each qualification and requalification as a record for 3 years after each qualification and requalification.</p> <p><b>73.46(b)(7)(ii)</b> The licensee or the licensee's agent shall document the results of weapons qualification and requalification for day and night firing. The licensee shall retain the documentation of each qualification and requalification as a record for 3 years after each qualification and requalification.</p> <p><b>73.46(b)(8)</b>...The licensee shall document the completion of (response tactics) training. The licensee shall retain the documentation of training as a record for three years after training is completed.</p> <p><b>73.46(b)(9)</b> ...The licensee shall document the results of all exercises. The licensee shall retain the documentation of each exercise as a record for three years after each exercise is completed.</p> <p><b>73.46(b)(11)(i)</b> ... The licensee shall retain a record of each individual's performance for 3 years (for their physical fitness examination).</p>
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**GUIDANCE:**

(a) Most of the documentation retention requirements are for 3 years following the event (revision of the documentation or training, training completion, testing, or performance exercise), although a few include an “and” statement that require records retention until “after the close of period for which the licensee possesses the special nuclear material under each license”. These combined statements require records to be kept for the longest required time period.

(b) In most cases the person responsible for documenting and retaining the documentation is either a licensed physician, a security supervisor, the generic

“licensee”, or the licensee’s agent. It is important to document (commit) in the T&Q Plan these recording authorities and the location and time the various records are to be held.

(c) There is some redundancy between Appendix B and 10 CFR 73.46, but 10 CFR 73.46 generally provides greater specificity. The following table is provided to summarize the documentation requirements for ease of use. The specific regulation should be referenced if any question arises.

<b>Record Type</b>	<b>Recorder</b>	<b>Retention Period</b>	<b>Regulation Reference</b>
Physical fitness qualification, including medical exam, for job duties	Licensee Security Supervisor & Licensed Physician	3 years from date of each qualification	Appendix B: I.C.
Physical requalification	Licensee	3 years from date of each requalification	Appendix B: I.E.
Results of suitability, physical and mental exam, qualification and tests	Licensee or agent	3 years from obtaining results	Appendix B: I.F.
Documentation of the T&Q Plan & superseded portions	Licensee or agent	3 years after close of period for possession of nuclear material and 3 years after change in plan	Appendix B: II.A.
Individual qualifications	Attested and documented by Licensee Security Supervisor	3 years after end of employment in security-related capacity and for 3 years after close of period for which licensee possesses SNM, and superseded for 3 years after each change	Appendix B: II.B.
Contractor individual qualifications	Attested and documented by Licensee Security Supervisor	3 years after end of employment in security-related capacity and for 3 years after close of period for which licensee possesses SNM, and superseded for 3 years after each change	Appendix B: II.C.
Individual requalification	Attested and documented by Licensee Security Supervisor	3 years from date of requalification	Appendix B: II.E.

<b>Record Type</b>	<b>Recorder</b>	<b>Retention Period</b>	<b>Regulation Reference</b>
Weapons qualification & requalification	Documented by licensee or licensee's agent	3 years from date of requalification	Appendix B: IV
NRC right to inspect, copy, or take away records	N/A	As stated in this column	73.46(b)(ii)
Management system to develop, revise, implement, and enforce security procedures	Licensee individual with overall security function responsibility	Termination of license and changes & 3 years following any change	73.46(b)(3)
Equipment qualification/requalification	Licensee	3 years after each qual/requal.	73.46(b)(4)
Weapons qualification/requalification for day and night	Licensee or agent	3 years after each qual/requal.	73.46(b)(7)(ii)
Response tactics training	Licensee	3 years after completion of training.	73.46(b)(8)
Exercises	Licensee	3 years after each exercise	73.46(b)(9)
Physical fitness performance demonstrations—initial/annual	Licensee	3 years after each fitness performance demonstration	73.46(b)(11)(i)

## **APPENDIX A—RECOMMENDED FORMAT FOR 10 CFR 73 APPENDIX B SUBMITTALS**

If the recommended format is used, the applicant should adhere to the numbering system of this SRP. Under certain circumstances, subsections may not be appropriate for a specific application. Clearly state if this is so and give enough information to support this conclusion.

The applicant may wish to submit information in support of an application that is not required by regulations and is not essential to the description of the training and qualification program. Such information should include, for example, historical data submitted in demonstration of certain criteria, discussion of alternatives considered by the applicant, or supplementary data regarding assumed models, data, or calculation. This information should be provided in an appendix to the plan.

Upon completion of the plan, the applicant should use the table of contents of this document as a checklist to ensure that each subject has been addressed.

### **A.1 Style and Composition**

A table of contents should be included in each submittal.

The applicant should strive for clear, concise presentation of information. Confusing or ambiguous statements and general statements of intent should be avoided. Definitions and abbreviations should be consistent throughout the submittal, and consistent with generally accepted usage.

Whenever possible, duplication of information should be avoided. The information included in other sections of the application may be covered by specific reference to those sections.

Where numerical values are stated, the number of significant figures should reflect the accuracy or precision to which the number is known. The use of relative values should be clearly indicated. Drawings, diagrams, and tables should be used when information may be presented more adequately or conveniently by such means. These illustrations should be located in the section in which they are first referenced. Care should be taken to ensure that the information presented in drawings is legible, that symbols are defined, and that drawings are not reduced to the extent that they can not be read by people with good vision.

## **A.2 Physical Specifications of Submittal**

All material submitted in an application should conform to the following physical dimensions of page size, quality of papers and inks, numbering of pages, etc.

### **A.2.1 Paper Size**

Text: Paper should measure 21.5 x 28 centimeters [8.5 x 11 inches].

Drawings and graphics: 16 x 23 centimeters [6.5 x 9 inches] (to allow for margin) is preferred; however, a larger size is acceptable as long as the finished copy, when folded, does not exceed 21.5 x 28 centimeters [8.5 x 11 inches].

### **A.2.2 Paper Stock and Ink**

Good quality white laser or photocopy paper and consistent ink density should be used for clear reproduction by microfilming, photocopying, and printing.

### **A.2.3 Paper Margins**

A margin of no less than 2.5 centimeters [1 inch] is to be maintained on the top, bottom, right side, and left side of all pages submitted.

### **A.2.4 Printing**

Composition: Text pages should be single-spaced. Standard NRC type face and style should be used.

Reproduction: Text may be printed or photocopied. Except for an oversize figure, all pages of text will be printed on both sides.

### **A.2.5 Binding**

Pages should be punched for a 3-ring loose leaf notebook.

### **A.2.6 Page Numbering**

Pages should be numbered consecutively throughout the main part of the document. Any appendices may be numbered separately, if desired. Each page of the T&Q Plan should contain a page number, a revision number, as applicable, and a date.

### **A.3 Procedures for Revising Pages**

The updating or revising of data should be on a replacement-page basis. The changes (revised portion of each page) should be highlighted by a vertical line on the margin opposite the binding margin (outside margin) for each line changed, revised, deleted, or added. All pages submitted to update, revise, add, or delete pages to the plan shall show the date of the change. The transmittal letter should include the index page listing the pages to be inserted and the pages to be removed. When major changes, deletions, or additions are made, pages for a revised table of contents should be provided.

### **A.4 Number of Copies**

The applicant should submit the appropriate number of copies of each requested submittal in accordance with 10 CFR 72.16.

### **A.5 Public Disclosure**

NRC has determined that it is not in the public interest to disclose the details of physical protection programs, and that such details should be protected as Safeguards Information pursuant to 10 CFR 73.21.

### **A.6 Compatibility**

The applicant should ensure that information in the T&Q Plan does not conflict with other sections of the application.

### **A.7 Schedule for Submittal**

The applicant should contact NRC to determine a schedule for submitting the T&Q Plan.

## APPENDIX B—GLOSSARY OF TERMS

These terms are excerpted from Title 10 of the *Code of Federal Regulations* (10 CFR Part 73).

**Armed response personnel** means persons, not necessarily uniformed, whose primary duty in the event of attempted theft of special nuclear material or radiological sabotage shall be to respond, armed and equipped, to prevent or delay such actions.

**Category I** is equivalent to a **Formula Quantity**, which means strategic special nuclear material in any combination in a quantity of 5,000 grams or more computed by the formula, grams = (grams contained U-235) + 2.5 (grams U-233 + grams plutonium).

**Guard** means a uniformed individual armed with a firearm whose primary duty is the protection of special nuclear material against theft, the protection of a plant against radiological sabotage, or both.

**Safeguards Information** means information not otherwise classified as National Security Information or Restricted Data which specifically identifies a licensee's or applicant's detailed, (1) security measures for the physical protection of special nuclear material, or (2) security measures for the physical protection and location of certain plant equipment vital to the safety of production or utilization facilities.

**Security management** means persons responsible for security at the policy and general management level.

**Security supervision** means persons, not necessarily uniformed or armed, whose primary duties are supervision and direction of security at the day-to-day operating level.

**Strategic special nuclear material** means uranium 235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), uranium-233, or plutonium.

**Tactical Response Team** means the primary response force for each shift which can be identified by a distinctive item of uniform, armed with specified weapons, and whose other duties permit immediate response.

**Watchman** means an individual, not necessarily uniformed or armed with a firearm, who provides protection for a plant and the special nuclear material therein in the course of performing other duties.

## **APPENDIX C—SAMPLE LICENSE CONDITION**

The licensee shall follow the Training and Qualifications Plan entitled: '(Insert facility name) Category I Fuel Facility Training and Qualifications Plan,' dated (insert date), and as it may be further amended under the provisions of 10 CFR 70.34 and 70.32(d)."

(The requirements of 10 CFR Part 73, Appendix B for guard training and qualification could be incorporated in an appendix of the approved Physical Protection Plan.



**BIBLIOGRAPHIC DATA SHEET**

(See instructions on the reverse)

1. REPORT NUMBER  
(Assigned by NRC, Add Vol., Supp., Rev.,  
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Personnel at Category I Fuel Facilities

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Washington, DC 20555-0001

10. SUPPLEMENTARY NOTES

A. Rayland, NRC Technical Monitor

11. ABSTRACT (200 words or less)

This document is a Standard Review Plan (SRP) for evaluating Training and Qualifications Plans for security personnel at Category I fuel facilities. Conducting a review according to an SRP ensures that license applicants address every pertinent NRC requirement in their NRC-approved T&Q Plans and ensures consistency and comprehensiveness in the NRC review of the plans. The information presented here utilizes a "modular" format to streamline the information and facilitate its use.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

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Security Personnel  
Training and Qualifications Plan  
Appendix B  
Security Plan

13. AVAILABILITY STATEMENT

unlimited

14. SECURITY CLASSIFICATION

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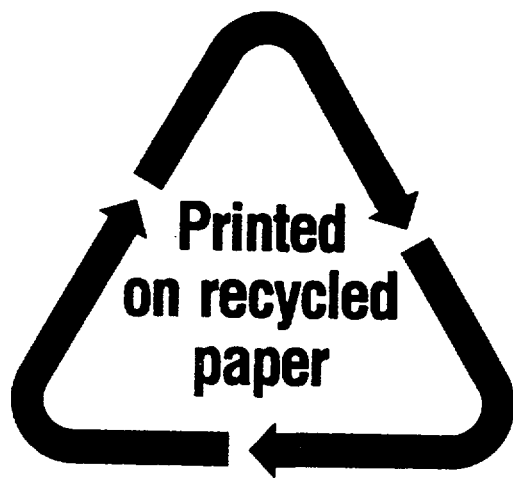
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