the shipment will be protected in accordance with Annex I to the Convention on the Physical Protection of Nuclear Material (see appendix E of this part).

[52 FR 9654, Mar. 26, 1987, as amended at 53 FR 4112, Feb. 12, 1988; 60 FR 24553, May 9, 1995; 67 FR 3586, Jan. 25, 2002; 68 FR 58820, Oct. 10, 2003]

ENFORCEMENT

§ 73.80 Violations.

(a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of—

(1) The Atomic Energy Act of 1954, as amended;

(2) Title II of the Energy Reorganization Act of 1974, as amended; or

(3) A regulation or order issued pursuant to those Acts.

(b) The Commission may obtain a court order for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act:

(1) For violations of—

(i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act of 1954, as amended:

(ii) Section 206 of the Energy Reorganization Act;

(iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section;

(iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.

(2) For any violation for which a license may be revoked under Section 186 of the Atomic Energy Act of 1954, as amended.

[57 FR 55078, Nov. 24, 1992]

§ 73.81 Criminal penalties.

(a) Section 223 of the Atomic Energy Act of 1954, as amended, provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b, 161i, or 161o of the Act. For purposes of section 223, all the regulations in part 73 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.

(b) The regulations in part 73 that are not issued under sections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§ 73.1, 73.2, 73.3, 73.4, 73.5, 73.6, 73.8, 73.25, 73.45, 73.80, and 73.81.

[57 FR 55079, Nov. 24, 1992]

APPENDIX A TO PART 73—U.S. NUCLEAR REGULATORY COMMISSION OFFICES AND CLASSIFIED MAILING ADDRESSES

	Address	Telephone (24 hour)	E-Mail
NRC Headquarters Operations Center	USNRC, Division of Incident Response Operations, Washington, DC 20555–0001.	(301) 816–5100, (301) 951–0550, (301) 816–5151 (fax).	*H001@nrc.gov*
Region I: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont	USNRC, Region I, 475 Allendale Road, King of Prussia, PA 19406–1415.	(610) 337–5000, (800) 432–1156, TDD: (301) 415–5575.	*RidsRgn1MailCenter@nrc.gov*
Region II: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, Virgin Islands, and West Virginia	USNRC, Region II, Sam Nunn Atlanta Federal Center, Suite 23T85, 61 Forsyth Street, SW, Atlanta, GA 30303–8931.	(404) 562–4400, (800) 877–8510, TDD: (301) 415–5575.	*RidsRgn2Mail Center@nrc.gov*
Region III: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin	USNRC, Region III, 801 Warrenville Road, Lisle, IL 60532–4351.	(630) 829–9500, (800) 522–3025, TDD: (301) 415–5575.	*RidsRgn3MailCenter@nrc.gov*

	Address	Telephone (24 hour)	E-Mail
Region IV: Alaska, Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Kansas, Louisiana, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, and the U.S. territories and possessions in the Pacific	USNRC, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011–4005.	(817) 860–8100, (800) 952–9677, TDD: (301) 415–5575.	*RidsRgn4MailCenter@nrc.gov*

CLASSIFIED MAILING ADDRESSES

	Address
NRC Headquarters	U.S. NRC, Caller Box 2500, Rockville, MD 20852.
Region I	U.S. NRC, 475 Allendale Road, King of Prussia, PA 19406.
Region II	U.S. NRC, Region II, P.O. Box 2257, Atlanta, GA 30303
Region III	U.S. NRC, Region III, 801 Warrenville Road, Lisle, IL 60532–4351.
Region IV	U.S. NRC, Region IV, 611 Ryan Plaza Drive, Suite 4000, Arlington, TX 76011.

I. Classified mail shall be transmitted in accordance with §95.39 of this chapter to the appropriate NRC classified mailing address listed in this appendix.

II. Classified documents may be hand delivered to the NRC to the appropriate NRC street address listed in this appendix. Hand delivered classified documents shall be transmitted in accordance with §95.39 of this chapter.

[68 FR 58820, Oct. 10, 2003]

APPENDIX B TO PART 73—GENERAL CRITERIA FOR SECURITY PERSONNEL

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INTRODUCTION

Security personnel who are responsible for the protection of special nuclear material on site or in transit and for the protection of the facility or shipment vehicle against radiological sabotage should, like other elements of the physical security system, be required to meet minimum criteria to ensure that they will effectively perform their assigned security-related job duties. In order to ensure that those individuals responsible for security are properly equipped and qualified to execute the job duties prescribed for them, the NRC has developed general criteria that specify security personnel qualification requirements.

These general criteria establish requirements for the selection, training, equipping, testing, and qualification of individuals who will be responsible for protecting special nuclear materials, nuclear facilities, and nuclear shipments.

When required to have security personnel that have been trained, equipped, and qualified to perform assigned security job duties in accordance with the criteria in this appendix, the licensee must establish, maintain, and follow a plan that shows how the criteria will be met. The plan must be submitted to the NRC for approval and must be implemented within 30 days after approval by the

NRC unless otherwise specified by the NRC in writing.

DEFINITIONS

Terms defined in parts 50, 70, and 73 of this chapter have the same meaning when used in this appendix.

CRITERIA

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.

B. Physical and mental qualifications. 1. Physical qualifications:

a. Individuals whose security tasks and job duties are directly associated with the effective implementation of the licensee physical security and contingency plans shall have no physical weaknesses or abnormalities that would adversely affect their performance of assigned security job duties.

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 contingency plans. Armed personnel shall meet the following additional physical requirements:

(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.

(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 that 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 individual's 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.

(4) Addiction—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.

(5) Other physical requirements—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.

2. Mental qualifications: a. Individuals whose security tasks and job duties are directly associated with the effective implementation of the licensee physical security

and contingency 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.

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.

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.

C. Medical examinations and physical fitness qualifications—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. Subsequent to this medical examination, 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 training and qualifications 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. 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.

D. Contract security personnel—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.

E. Physical requalification—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. 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.

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.

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.

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 contingency 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 training and qualifications plan. The licensee or the agent shall maintain documentation of the current 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.

B. Qualification requirements—Each person who performs security-related job tasks or job duties required to implement the licensee physical security or contingency plan shall, prior to being assigned to these tasks or duties, be qualified in accordance with the licensee's NRC-approved training and qualifications plan. 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.

C. Contract personnel—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. 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.

D. Security knowledge, skills, and abilities—Each individual assigned to perform the security related task identified in the licensee physical security or contingency 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 training and qualifications plan. The areas of knowledge, skills, and abilities that shall be considered in the licensee's training and qualifications plan are as follows:

1. Protection of nuclear facilities, transport vehicles, and special nuclear material.
2. NRC requirements and guidance for physical security at nuclear facilities and for transportation.
3. The private security guard's role in providing physical protection for the nuclear industry.
4. The authority of private guards.
5. The use of nonlethal weapons.
6. The use of deadly force.
7. Power of arrest and authority to detain individuals.
8. Authority to search individuals and seize property.
9. Adversary group operations.
10. Motivation and objectives of adversary groups.
11. Tactics and force that might be used by adversary groups to achieve their objectives.
12. Recognition of sabotage related devices and equipment that might be used against the licensee's facility or shipment vehicle.
13. Facility security organization and operation.
14. Types of physical barriers.
15. Weapons, lock and key control system operation.
16. Location of SNM and/or vital areas within a facility.
17. Protected area security and vulnerability.
18. Types of alarm systems used.
19. Response and assessment to alarm annunciations and other indications of intrusion.
20. Familiarization with types of special nuclear material processed.
21. General concepts of fixed site security systems.
22. Vulnerabilities and consequences of theft of special nuclear material or radiological sabotage of a facility.
23. Protection of security system information.
24. Personal equipment use and operation for normal and contingency operations.
25. Surveillance and assessment systems and techniques.
26. Communications systems operation, fixed site.
27. Access control systems and operation for individuals, packages, and vehicles.
28. Contraband detection systems and techniques.
29. Barriers and other delay systems around material access or vital areas.
30. Exterior and interior alarm systems operation.
31. Duress alarm operation.
32. Alarm stations operation.
33. Response force organization.
34. Response force mission.
35. Response force operation.
36. Response force engagement.
37. Security command and control system during normal operation.
38. Security command and control system during contingency operation.
39. Transportation systems security organization and operation.
40. Types of SNM transport vehicles.
41. Types of SNM escort vehicles.
42. Modes of transportation for SNM.
43. Road transport security system command and control structure.
44. Use of weapons.
45. Communications systems operation for transportation, shipment to control center and intraconvoy.
46. Vulnerabilities and consequences of theft of special nuclear material or radiological sabotage of a transport vehicle.
47. Protection of transport system security information.
48. Control of area around transport vehicle.
49. Normal convoy techniques and operations.
50. Familiarization with types of special nuclear materials shipped.
51. Fixed post station operations.
52. Access control system operation.
53. Search techniques and systems for individuals, packages and vehicles.
54. Escort and patrol responsibilities and operation.
55. Contengency response to confirmed intrusion or attempted intrusion.
56. Security system operation after component failure.
57. Fixed site security information protection.
58. Security coordination with local law enforcement agencies.
59. Security and situation reporting, documentation and report writing.
60. Contingency duties.
61. Self defense.

62. Use of and defenses against incapacitating agents.
63. Security equipment testing.
64. Contingency procedures.
65. Night vision devices and systems.
66. Mechanics of detention.
67. Basic armed and unarmed defensive tactics.
68. Response force deployment.
69. Security alert procedures.
70. Security briefing procedures.
71. Response force tactical movement.
72. Response force withdrawal.
73. Reponse force use of support fire.
74. Response to bomb and attack threats.
75. Response to civil disturbances (e.g., strikes, demonstrators).
76. Response to confirmed attempted theft of special nuclear material and/or radiological sabotage of facilities.
77. Response to hostage situations.
78. Site specific armed tactical procedures and operation.
79. Security response to emergency situations other than security incidents.
80. Basic transportation defensive response tactics.
81. Armed escort deployment.
82. Armed escort adversary engagement.
83. Armed escort formations.
84. Armed escort use of weapons fire (tactical and combat).
85. Armed escort and shipment movement under fire.
86. Tactical convoying techniques and operations.
87. Armed escort tactical exercises.
88. Armed escort response to bomb and attack threats.
89. Verification of shipment documentation and contents.
90. Continuous surveillance of shipment vehicle.
91. Normal and contingency operation for shipment mode transfer.
92. Armed personnel procedures and operation during temporary storage between mode transfers of shipments.
93. Armed escort threat assessment and response.
94. System for and operation of shipment vehicle lock and key control.
95. Techniques and procedures for isolation of shipment vehicle during a contingency situation.
96. Transportation coordination with local law enforcement agencies.
97. Procedures for verification of shipment locks and seals.
98. Transportation security and situation reporting, documentation, and report writing.
99. Procedures for shipment delivery and pickup.
100. Transportation security system for escort by road, rail, air and sea.

E. Requalification—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 training and qualifications plan. 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.

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 licensees' 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:

1. Mechanical assembly, dissasembly, range penetration capability of weapon, and bullseye firing.
2. Weapons cleaning and storage.
3. Combat firing, day and night.
4. Safe weapons handling.
5. Clearing, loading, unloading, and reloading.
6. When to draw and point a weapon.
7. Rapid fire techniques.
8. Close quarter firing.
9. Stress firing.
10. Zeroing assigned weapon(s).

IV. Weapons qualification and requalification program.

Qualification firing for the handgun and the rifle must be for daylight firing, and each individual shall perform night firing for familiarization with assigned weapon(s). The results of weapons qualification and requalification must be documented by the licensee or the licensee's agent. Each individual shall be requalified at least every 12 months. The licensee shall retain this documentation of each qualification and requalification as a record for three years from the date of the qualification or requalification, as appropriate.

A. Handgun—Guards, armed escorts and armed response personnel shall qualify with a revolver or semiautomatic pistol firing the national police course, or an equivalent nationally recognized course. Qualifying score shall be an accumulated total of 70 percent of the maximum obtainable score.

B. Semiautomatic Rifle—Guards, armed escorts and armed response personnel, assigned to use the semiautomatic rifle by the licensee training and qualifications plan, shall qualify with a semiautomatic rifle by firing the 100-yard course of fire specified in section 17.5(1) of the National Rifle Association, High Power Rifle Rules book (effective

March 15, 1976),[1] or a nationally recognized equivalent course of fire. Targets used shall be as stated in section 17.5 for the 100-yard course. Time limits for individuals shall be as specified in section 8.2 of the NRA rule book, regardless of the course fired. Qualifying score shall be an accumulated total of 80 percent of the maximum obtainable score.

C. Shotgun—Guards, armed escorts, and armed response personnel assigned to use the 12 gauge shotgun by the licensee training and qualifications plan shall qualify with a full choke or improved modified choke 12 gauge shotgun firing the following course:

Range	Position	No. Rounds[1]	Target[2]
15 yds	Hip fire point	4	B–27
25 yds	Shoulder	4	B–27

[1] The 4 rounds shall be fired at 4 separate targets within 10 seconds using 00 gauge (9 pellet) shotgun shells.

[2] As set forth by the National Rifle Association (NRA) in its official rules and regulations, ''NRA Target Manufacturers Index,'' December 1976. The Index has been approved for incorporation by reference by the Director of the Federal Register. A copy of the index is available for inspection at the NRC Library, 11545 Rockville Pike, Rockville, Maryland 20852-2738.

To qualify the individual shall be required to place 50 percent of all pellets (36 pellets) within the black silhouette.

D. Requalification—Individuals shall be weapons requalified at least every 12 months in accordance with the NRC approved licensee training and qualifications plan, and in accordance with the requirements stated in A, B, and C of this section.

V. Guard, armed response personnel, and armed escort equipment.

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 contingency 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.

4. Ammunition:

(a) For each assigned weapon as appropriate to the individual's assigned contingency security job duties and as readily available as the weapon:

(1) 18 rounds per handgun.

(2) 100 rounds per semiautomatic rifle.

(3) 12 rounds each per shotgun (00 gauge and slug).

(b) Ammunition available on site—two (2) times the amount stated in (a) above for each weapon.

5. Personal equipment to be readily available for individuals whose assigned contingency security job duties, as described in the licensee physical security and contingency 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.

B. Transportation—Armed escorts shall either be equipped with or have readily 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 contingency plans:

1. Semiautomatic rifles with the following nominal minimum specifications:

(a) .223 caliber.

(b) Muzzle velocity, 1,980 ft/sec.

(c) Muzzle energy, 955 foot-pounds.

(d) Magazine or clip of 10 rounds.

(e) Reload capability, 10 seconds.

(f) Operable in any environment in which it will be used.

2. 12 gauge shotguns.

(a) 4 round pump or semiautomatic.

(b) Operable in any environment in which it will be used.

(c) Full or modified choke.

[1] Copies of the ''NRA High Power Rifle Rules'' may be examined at, or obtained from, the National Rifle Association, 1600 Rhode Island Avenue NW., Washington, DC 20036.

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.
4. Ammunition for each shipment.
(a) For each assigned weapon as appropriate to the individual's assigned contingency security job duties and as readily available as the weapon:
(1) 36 rounds per handgun.
(2) 120 rounds per semiautomatic rifle.
(3) 12 rounds each per shotgun (00 gauge and slug).
5. Escort vehicles, bullet resisting, equipped with communications systems, red flares, first aid kit, emergency tool kit, tire changing equipment, battery chargers for radios (where appropriate, for recharging portable radio batteries).
6. Personal equipment to be readily available for individuals whose assigned contingency security job duties, as described in the licensee physical security and contingency 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) Ammunition/equipment belt.
(g) Pager/duress alarms.
7. Binoculars.
8. Night vision aids, *i.e.*, hand-fired illumination flares or equivalent.
9. Tear gas or other nonlethal gas.

[43 FR 37426, Aug. 23, 1978, as amended at 46 FR 2026, Jan. 8, 1981; 53 FR 405, Jan. 7, 1988; 53 FR 19261, May 27, 1988; 57 FR 33432, July 29, 1992; 57 FR 61787, Dec. 29, 1992; 59 FR 50689, Oct. 5, 1994]

APPENDIX C TO PART 73—LICENSEE SAFEGUARDS CONTINGENCY PLANS

INTRODUCTION

A licensee safeguards contingency plan is a documented plan to give guidance to licensee personnel in order to accomplish specific defined objectives in the event of threats, thefts, or radiological sabotage relating to special nuclear material or nuclear facilities licensed under the Atomic Energy Act of 1954, as amended. An acceptable safeguards contingency plan must contain: (1) a predetermined set of decisions and actions to satisfy stated objectives, (2) an identification of the data, criteria, procedures, and mechanisms necessary to efficiently implement the decisions, and (3) a stipulation of the individual, group, or organizational entity responsible for each decision and action.

The goals of licensee safeguards contingency plans for responding to threats, thefts, and radiological sabotage are:

(1) to organize the response effort at the licensee level,

(2) to provide predetermined, structured responses by licensees to safeguards contingencies,

(3) to ensure the integration of the licensee response with the responses by other entities, and

(4) to achieve a measurable performance in response capability.

Licensee safeguards contingency planning should result in organizing the licensee's resources in such a way that the participants will be identified, their several responsibilities specified, and the responses coordinated. The responses should be timely.

It is important to note that a licensee's safeguards contingency plan is intended to be complementary to any emergency plans developed pursuant to appendix E to part 50 or to §70.22(i) of this chapter.

CONTENTS OF THE PLAN

Each licensee safeguards contingency plan shall include five categories of information:

1. Background
2. Generic Planning Base
3. Licensee Planning Base
4. Responsibility Matrix
5. Procedures

Although the implementing procedures (the fifth category of Plan information) are the culmination of the planning process, and therefore are an integral and important part of the safeguards contingency plan, they entail operating details subject to frequent changes. They need not be submitted to the Commission for approval, but will be inspected by NRC staff on a periodic basis. The licensee is responsible for ensuring that the implementing procedures reflect the information in the Responsibility Matrix, appropriately summarized and suitably presented for effective use by the responding entities.

The following paragraphs describe the contents of the safeguards contingency plan.

1. *Background.* Under the following topics, this category of information shall identify and define the perceived dangers and incidents with which the plan will deal and the general way it will handle these:

a. Perceived Danger—A statement of the perceived danger to the security of special nuclear material, licensee personnel, and licensee property, including covert diversion of special nuclear material, radiological sabotage, and overt attacks. The statement of perceived danger should conform with that promulgated by the Nuclear Regulatory Commission. (The statement contained in 10

CFR 73.55(a) or subsequent Commission statements will suffice.)

b. Purpose of the Plan—A discussion of the general aims and operational concepts underlying implementation of the plan.

c. Scope of the Plan—A delineation of the types of incidents covered in the plan.

d. Definitions—A list of terms and their definitions used in describing operational and technical aspects of the plan.

2. *Generic Planning Base.* Under the following topics, this category of information shall define the criteria for initiation and termination of responses to safeguards contingencies together with the specific decisions, actions, and supporting information needed to bring about such responses:

a. Identification of those events that will be used for signaling the beginning or aggravation of a safeguards contingency according to how they are perceived initially by licensee's personnel. Such events may include alarms or other indications signaling penetration of a protected area, vital area, or material access area; material control or material accounting indications of material missing or unaccounted for; or threat indications—either verbal, such as telephoned threats, or implied, such as escalating civil disturbances.

b. Definition of the specific objective to be accomplished relative to each identified event. The objective may be to obtain a level of awareness about the nature and severity of the safeguards contingency in order to prepare for further responses; to establish a level of response preparedness; or to successfully nullify or reduce any adverse safeguards consequences arising from the contingency.

3. *Licensee Planning Base.* This category of information shall include the factors affecting contingency planning that are specific for each facility or means of transportation. To the extent that the topics are treated in adequate detail in the licensee's approved physical security plan, they may be incorporated by cross reference to that plan. The following topics should be addressed:

a. Licensee's Organizational Structure for Contingency Responses—A delineation of the organization's chain of command and delegation of authority as these apply to safeguards contingencies.

b. Physical Layout—(i) Fixed Sites—A description of the physical structures and their location on the site, and a description of the site in relation to nearby town, roads, and other environmental features important to the effective coordination of response operations. Particular emphasis should be placed on main and alternate entry routes for law-enforcement assistance forces and the location of control points for marshalling and coordinating response activities.

(ii) Transportation—A description of the vehicles, shipping routes, preplanned alternate routes, and related features.

c. Safeguards Systems Hardware—A description of the physical security and accounting system hardware that influence how the licensee will respond to an event. Examples of systems to be discussed are communications, alarms, locks, seals, area access, armaments, and surveillance.

d. Law Enforcement Assistance—A listing of available local law enforcement agencies and a description of their response capabilities and their criteria for response; and a discussion of working agreements or arrangements for communicating with these agencies.

e. Policy Constraints and Assumptions—A discussion of State laws, local ordinances, and company policies and practices that govern licensee response to incidents. Examples that may be discussed include:

Use of deadly force;
Use of employee property;
Use of off-duty employees;
Site security jurisdictional boundaries.

f. Administrative and Logistical Considerations—Descriptions of licensee practices that may have an influence on the response to safeguards contingency events. The considerations shall include a description of the procedures that will be used for ensuring that all equipment needed to effect a successful response to a safeguards contingency will be easily accessible, in good working order, and in sufficient supply to provide redundancy in case of equipment failure.

4. *Responsibility Matrix.* This category of information consists of detailed identification of the organizational entities responsible for each decision and action associated with specific responses to safeguards contingencies. For each initiating event, a tabulation shall be made for each response entity depicting the assignment of responsibilities for all decisions and actions to be taken in response to the initiating event. (Not all entities will have assigned responsibilities for any given initiating event.) The tabulations in the Responsibility Matrix shall provide an overall picture of the response actions and their interrelationships. Safeguards responsibilities shall be assigned in a manner that precludes conflict in duties or responsibilities that would prevent the execution of the plan in any safeguards contingency.

5. *Procedures.* In order to aid execution of the detailed plan as developed in the Responsibility Matrix, this category of information shall detail the actions to be taken and decisions to be made by each member or unit of the organization as planned in the Responsibility Matrix.

AUDIT AND REVIEW

(1) For nuclear facilities subject to the requirements of §73.46, the licensee shall provide for a review of the safeguards contingency plan at intervals not to exceed 12 months. For nuclear power reactor licensees subject to the requirements of §73.55, the licensee shall provide for a review of the safeguards contingency plan either:

(i) At intervals not to exceed 12 months, or

(ii) As necessary, based on an assessment by the licensee against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect security, but no longer than 12 months after the change. In any case, each element of the safeguards contingency plan must be reviewed at least every 24 months.

(2) A licensee subject to the requirements of either §73.46 or §73.55 shall ensure that the review of the safeguards contingency plan is by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. The review must include an audit of safeguards contingency procedures and practices, and an audit of commitments established for response by local law enforcement authorities.

(3) The licensee shall document the results and the recommendations of the safeguards contingency plan review, management findings on whether the safeguards contingency plan is currently effective, and any actions taken as a result of recommendations from prior reviews in a report to the licensee's plant manager and to corporate management at least one level higher than that having responsibility for the day-to-day plant operation. The report must be maintained in an auditable form, available for inspection for a period of 3 years.

(Sec. 161i, Pub. L. 83–703, 68 Stat. 948, secs. 201, 204(b)(1), Pub L. 93–438, 88 Stat. 1243, 1245 (42 U.S.C. 2201, 5841, 5844))

[43 FR 11965, Mar. 23, 1978; 43 FR 14007, Apr. 4, 1978, as amended at 57 FR 33432, July 29, 1992; 64 FR 14818, Mar. 29, 1999]

APPENDIX D TO PART 73—PHYSICAL PROTECTION OF IRRADIATED REACTOR FUEL IN TRANSIT, TRAINING PROGRAM SUBJECT SCHEDULE

Pursuant to the provision of §73.37 of 10 CFR part 73, each licensee who transports or delivers to a carrier for transport irradiated reactor fuel is required to assure that individuals used as shipment escorts have completed a training program. The subjects that are to be included in this training program are as follows:

Security Enroute

—Route planning and selection
—Vehicle operation
—Procedures at stops
—Detours and use of alternate routes

Communications

—Equipment operation
—Status reporting
—Contacts with law enforcement units
—Communications discipline
—Procedures for reporting incidents

Radiological Considerations

—Description of the radioactive cargo
—Function and characteristics of the shipping casks
—Radiation hazards
—Federal, State and local ordinances relative to the shipment of radioactive materials
—Responsible agencies

Response to Contingencies

—Accidents
—Severe weather conditions
—Vehicle breakdown
—Communications problems
—Radioactive ''spills''
—Use of special equipment (flares, emergency lighting, etc.)

Response to Threats

—Reporting
—Calling for assistance
—Use of immobilization features
—Hostage situations
—Avoiding suspicious situations

The licensee is also required to assure that armed individuals serving as shipment escorts, other than members of local law enforcement agencies, have completed a weapons training and qualifications program equivalent to that required of guards, as described in III and IV of appendix B of this part, to assure that each such individual is fully qualified to use weapons assigned him.

[44 FR 34468, June 15, 1979, as amended at 45 FR 34710, June 3, 1980]

APPENDIX E TO PART 73—LEVELS OF PHYSICAL PROTECTION TO BE APPLIED IN INTERNATIONAL TRANSPORT OF NUCLEAR MATERIAL [1]

(Verbatim from Annex I to the Convention on the Physical Protection of Nuclear Material)

[1] See appendix C to part 110 of this chapter from the physical description of the categories of nuclear material as set forth in Annex I to the Convention. For the purposes of this part, the following categories of nuclear material are synonymous:

(a) Levels of physical protection for nuclear material during storage incidental to international nuclear transport include:

(1) For Category III materials, storage within an area to which access is controlled;

(2) For Category II materials, storage within an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control or any area with an equivalent level of physical protection;

(3) For Category I material, storage within a protected area as defined for Category II, to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access, or unauthorized removal of material.

(b) Levels of physical protection for nuclear material during international transport include:

(1) For Category II and III materials, transportation shall take place under special precautions including prior arrangements among sender, receiver, and carrier, and prior agreement between natural or legal persons subject to the jurisdiction and regulation of exporting and importing States, specifying time, place and procedures for transferring transport responsibility;

(2) For Category I materials, transportation shall take place under special precautions identified for transportation of Category II and III materials, and in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces;

(3) For natural uranium other than in the form of ore or ore residue, transportation protection for quantities exceeding 500 kilograms U shall include advance notification of shipment specifying mode of transport, expected time of arrival and [shall provide for] confirmation of receipt of shipment.

[52 FR 9654, Mar. 26, 1987]

Category I is a formula quantity of strategic special nuclear material;

Category II is special nuclear material of moderate strategic significance or irradiated fuel; and

Category III is special nuclear material of low strategic significance.

APPENDIX F TO PART 73—NATIONS THAT ARE PARTIES TO THE CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL [1]

Nation	Date of deposit of instrument of ratification with the IAEA
Brazil	Oct. 17, 1985.
Bulgaria	May 2, 1984.
Canada	Mar. 21, 1986.
Czechoslovakia	Apr. 23, 1982.
German Democratic Republic (E. Germany).	Feb. 5, 1981.
Guatemala	Apr. 23, 1985.
Hungary	May 4, 1984.
Indonesia	Nov. 5, 1986.
Korea, Republic of	Apr. 7, 1982.
Liechtenstein	Nov. 25, 1986.
Mongolia	May 28, 1986.
Norway	Aug. 15, 1985.
Paraguay	Feb. 6, 1985.
Philippines	Sept. 22, 1981.
Poland	Oct. 5, 1983.
Sweden	Aug. 1, 1980.
Switzerland	Jan. 9, 1987.
Turkey	Feb. 27, 1985.
Yugoslavia	May 14, 1986.
Union of Soviet Socialist Republic	May 25, 1983.
United States of America	Dec. 13, 1982.

[52 FR 9654, Mar. 26, 1987]

APPENDIX G TO PART 73—REPORTABLE SAFEGUARDS EVENTS

Pursuant to the provisions of 10 CFR 73.71 (b) and (c), licensees subject to the provisions of 10 CFR 73.20, 73.37, 73.50, 73.55, 73.60, and 73.67 shall report or record, as appropriate, the following safeguards events.

I. *Events to be reported within one hour of discovery, followed by a written report within 60 days.*

(a) Any event in which there is reason to believe that a person has commited or caused, or attempted to commit or cause, or has made a credible threat to commit or cause:

(1) A theft or unlawful diversion of special nuclear material; or

(2) Significant physical damage to a power reactor or any facility possessing SSNM or its equipment or carrier equipment transporting nuclear fuel or spent nuclear fuel, or to the nuclear fuel or spent nuclear fuel a facility or carrier possesses; or

(3) Interruption of normal operation of a licensed nuclear power reactor through the unauthorized use of or tampering with its machinery, components, or controls including the security system.

[1] An update list of party nations will appear annually in the Department of State's publication, Treaties in Force. Appendix F will be amended as required to maintain its currency.

(b) An actual entry of an unauthorized person into a protected area, material access area, controlled access area, vital area, or transport.

(c) Any failure, degradation, or the discovered vulnerability in a safeguard system that could allow unauthorized or undetected access to a protected area, material access area, controlled access area, vital area, or transport for which compensatory measures have not been employed.

(d) The actual or attempted introduction of contraband into a protected area, material access area, vital area, or transport.

II. *Events to be recorded within 24 hours of discovery in the safeguards event log.*

(a) Any failure, degradation, or discovered vulnerability in a safeguards system that could have allowed unauthorized or undetected access to a protected area, material access area, controlled access area, vital area, or transport had compensatory measures not been established.

(b) Any other threatened, attempted, or committed act not previously defined in appendix G with the potential for reducing the effectiveness of the safeguards system below that committed to in a licensed physical security or contingency plan or the actual condition of such reduction in effectiveness.

[52 FR 21658, June 9, 1987, as amended at 60 FR 13618, Mar. 14, 1995; 68 FR 33617, June 5, 2003]

APPENDIX H TO PART 73—WEAPONS QUALIFICATION CRITERIA

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

TABLE H–1—MINIMUM DAY FIRING CRITERIA [1]

[see footnotes at end of Table H–1]

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

TABLE H–1—MINIMUM DAY FIRING CRITERIA [1]—Continued

[see footnotes at end of Table H–1]

Weapon	Stage	String [2]	Distance	Number of rounds	Timing [3]	Position	Scoring
		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 to prone, fire 2 rounds.	
	7	1	50 yards ...	2	8 seconds	Draw weapon and fire 2 rounds from a standing barricade position (right or left side, shooter's option).	
		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 buckshot	4 seconds	At low ready position fire 2 rounds standing.	Minimum qualifying = 70%.
	2	1 2	15 yards ...	4 Double 0 buckshot	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 buckshot	20 seconds	On command, load 4 rounds and fire 2 rounds standing and 2 rounds kneeling.	
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.	
	4	1 2	50 yards ...	4	16 seconds (9 seconds for 1st string, 7 second 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.	
	[4]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.	Minimum qualifying = 70%.
	[4]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 TRT 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.

TABLE H–2—MINIMUM NIGHT FIRING CRITERIA

Weapon	Stage	Distance	No. of rounds	Timing	Position	Scoring	Lighting
Handgun (Rev.).	1	7 yds	12	35 seconds	Standing-no artificial support.	Minimum qualifying=70%.	For all courses 0.2 footcandles at center mass of target area.
	2	15 yds	12	45 seconds.			
Handgun (Semi-).	1	7 yds	2+clip	30 seconds	Standing-no artificial support.		
	2	15 yds	2+clip	40 seconds.			
Shotgun	1	25 yds	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 yds	5 Double 0 buckshot.	10 seconds (Load 5rds Buckshot—chamber, empty—Time starts—Commence firing).	Standing-strong shoulder.	Double 0 Buckshot: Hits in black=2 pts (5rds × 9 pellets/rd × 2 pts=90) Minimum qualifying=70%.	
Rifle	1	25 yds	1–5rd mag	45 sec	Standing-barricade.	Minimum qualifying=70%.	
	2	25 yds	1–5rd mag	45 sec	Standing.		
	3	25 yds	1–5rd mag	45 sec	Kneeling.		
	4	25 yds	1–5rd mag	45 sec	Prone.		

Note.—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.

[58 FR 45785, Aug. 31, 1993]

PART 74—MATERIAL CONTROL AND ACCOUNTING OF SPECIAL NUCLEAR MATERIAL

Subpart A—General Provisions

Subpart B—General Reporting and Recordkeeping Requirements

Subpart C—Special Nuclear Material of Low Strategic Significance

Subpart D—Special Nuclear Material of Moderate Strategic Significance