

- 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 MATERIAL¹

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

(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

¹See 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:

- 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.

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]

APPENDIX F TO PART 73—NATIONS THAT ARE PARTIES TO THE CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL¹

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.

¹An 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.

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Nation	Date of deposit of instrument of ratification with the IAEA
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 committed 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.

(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 CRITERIA¹

[see footnotes at end of Table H-1]

Weapon	Stage	String ²	Distance	Number of rounds	Timing ³	Position	Scoring
Hand-gun.	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							
4	1	10 yards ...	2	4 seconds	Draw and fire 2 rounds, come to low ready position.		
	2					10 yards ...	2