

is required only when a performance or payment bond is required.

(f) *Subcontracting.* Not more than 50 percent of the work to be performed under a prime contract negotiated pursuant to the Buy Indian Act shall be subcontracted to one other than an Indian firm. For this purpose, work to be performed does not include the providing of materials, supplies, or equipment.

(g) *Wage rates.* A determination of the minimum wage rates by the Secretary of Labor as required by the Davis-Bacon Act (40 U.S.C. 276a-276a-5) shall be included in all contracts negotiated under the Buy Indian Act for over \$2,000 for construction, alteration, or repair, including painting and decorating, of public buildings and public works, except contracts with Indian tribes or public nonprofit corporations serving as governmental instrumentalities of an Indian tribe. Such a determination is to be included in contracts with private business entities even if they are owned by an Indian tribe or members of an Indian tribe and in connection with joint ventures with, or subcontractors of, an Indian tribe or a public nonprofit corporation serving as a governmental instrumentality of an Indian tribe.

§ 3-4.5704 Competition.

(a) Contracts negotiated under the Buy Indian Act shall be subject to competition among Indians to the maximum extent that competition is determined by the contracting officer to be practicable, pursuant to § 1-1.301-1 of this title. When competition is determined not to be practicable, a Justification for Noncompetitive Procurement shall be prepared in accordance with § 3-3.802-50 of this Chapter and retained in the contract file.

(b) Notwithstanding the provisions of § 3-3.802-50 of this Chapter, requests for approval of procurements to be negotiated under the Buy Indian Act in activities covered by that Act may, if \$25,000 or less, be approved by the Chief of the procurement office, or, if over \$25,000, by the official in charge of the office one level above the procurement office.

[FR Doc. 73-1529 Filed 1-31-73; 8:45 am]

ATOMIC ENERGY COMMISSION

[10 CFR Part 50]

LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

Requirements for Physical Security

The Atomic Energy Commission has under consideration amendments to its regulations in 10 CFR Part 50, "Licensing of Production and Utilization Facilities," which, in the interest of the common defense and security and the public health and safety would require measures for protection of licensed fuel reprocessing facilities against acts of industrial sabotage. An act of industrial sabotage is any deliberate act against a nuclear facility, any component of a nuclear facility, or licensed nuclear material involved in such facility which could endanger the public health and safety,

other than such acts committed by an enemy of the United States, whether a foreign government or other person.

The proposed amendments would require fuel reprocessing plant licensees to train and equip guards and watchmen, establish a protected area enclosing the facility, and control access to the protected area. In addition, areas which contain vital equipment—systems, devices, or material, the failure, destruction, or release of which could endanger the public health and safety—would be required to be protected by additional physical barriers within the protected area, and access to such areas to be controlled. Further, areas between physical barriers, and the zone surrounding a protected area, would be required to be monitored to detect the presence of persons or vehicles within those areas.

The proposed amendments would apply to holders of licenses for fuel reprocessing facilities issued pursuant to 10 CFR Part 50 and to applicants for such licenses. Further, nuclear reactor licensees would be required to protect their facilities against industrial sabotage. However, in view of the imminent publication of the American Nuclear Society Standard 3.3, "Industrial Security for Nuclear Power Plants," no detailed physical protection requirements for nuclear power reactors are specified in the proposed amendments. Such requirements will be forthcoming, as appropriate, following consideration of the American Nuclear Society standard.

The proposed amendments do not affect § 50.13 of Part 50 which provides that applicants for licenses for production or utilization facilities are not required to provide design features or other measures to protect their facilities against destructive acts by an enemy of the United States, whether a foreign government or other person. Protection against attack and destructive acts, including sabotage, directed against a facility by an enemy of the United States, whether a foreign government or other person, is the responsibility of the Department of Defense.

If the Commission adopts the proposed amendments, all holders of licenses heretofore issued pursuant to Part 50 would be given a period of 60 days after publication of the effective rules in the Federal Register to submit required physical security plans. Remaining physical protection requirements, as applicable, would be made effective 120 days after publication in the Federal Register.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments of 10 CFR Part 50 is contemplated. All interested persons who desire to submit written comments or suggestions should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attn: Chief, Public Proceedings Staff, by March 3, 1973. Comments received after the specified period will be considered if it is practicable to do so, but assurance of consideration cannot

be given except as to comments filed within the period specified. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street NW., Washington, D.C.

1. Section 50.2 of 10 CFR Part 50 is amended by adding new paragraphs (w), (x), (y), (z), and (aa), to read as follows:

§ 50.2 Definitions.

(w) The terms "guard," "watchman," "intrusion alarm," "physical barrier," and "protected area," defined in Part 73 of this chapter, shall have the same meaning when used in this part.

(x) "Industrial sabotage" means any deliberate act directed against a facility licensed pursuant to this part, or against any component of such facility, which could endanger the public health and safety, other than such acts by an enemy of the United States, whether a foreign government or other person.

(y) "Vital area" means any area within a structure which contains vital equipment, the walls, roof and floor of which constitute physical barriers of construction at least as substantial as construction of exterior walls described in § 73.3 (f) (2) of this chapter.

(z) "Vital equipment" means any equipment, system, device, or material within a facility in which an activity licensed pursuant to this part is conducted, the failure, destruction, or release of which could endanger the public health and safety. Equipment or systems which would be required to function to protect public health and safety following such failure, destruction, or release are also considered to be vital equipment.

(aa) "Isolation zone" means an area clear of all objects which could conceal or shield an individual, adjacent to a physical barrier, which is monitored to detect the presence of persons or vehicles within the area.

2. A new paragraph (c) is added to § 50.34 of 10 CFR Part 50 to read as follows:

§ 50.34 Contents of applications: technical information.

(c) *Physical security plan.* Each application for a license to operate a production or utilization facility shall include a physical security plan. The plan shall consist of two parts. Part I shall deal with vital equipment, vital areas, and isolation zones, and shall demonstrate how the applicant plans to comply with the requirements of § 50.55 (c) or (d), as applicable, at the proposed facility. Part II shall list tests, inspections, and other means to be used to demonstrate compliance with such requirements.

3. New paragraphs (o) and (p) are added to § 50.54 of 10 CFR Part 50 to read as follows:

§ 50.54 Conditions of licenses.

(c) The licensee shall make no change to a physical security plan prepared pursuant to §§ 50.34(c) or paragraph (p) of this section that has been approved by the Commission, which would decrease the effectiveness of physical security, without the prior approval of the Commission.

(p) Each licensee who is authorized to operate a production or utilization facility and who has not submitted a physical security plan, as described in § 50.34 (c) by (publication date of these amendments) shall submit such a plan to the Commission for approval within 60 days after (publication date of these amendments).

4. A new § 50.55c is added to 10 CFR Part 50, to read as follows:

§ 50.55c Physical protection requirements for nuclear reactors.

Each licensee authorized to operate a nuclear reactor shall provide appropriate protection against industrial sabotage.

5. A new § 50.55d is added to 10 CFR Part 50 to read as follows:

§ 50.55d Physical protection requirements for fuel reprocessing plants.

Each licensee authorized to operate a fuel reprocessing plant shall provide protection against industrial sabotage as follows:

(a) *Physical security organization.* (1) The licensee shall train and equip guards and watchmen to protect against industrial sabotage.

(2) The licensee shall establish, maintain, and follow written security procedures which detail the duties of guards, watchmen and other individuals responsible for security.

(3) The licensee shall not permit an individual to act as a guard or watchman unless such individual has demonstrated (i) understanding of the licensee's security procedures, and (ii) the ability to execute all duties required of him by such procedures.

(b) *Physical barriers.* (1) The licensee shall locate vital equipment only within a vital area, which, in turn, is within a protected area. More than one vital area may be within a single protected area.

(2) The physical barrier at the perimeter of the protected area shall be separated from any other physical barrier within the protected area, and the intervening space monitored or periodically checked to detect the presence of persons or vehicles to enable the facility guards and watchmen to respond to suspicious activity or to the breaching of any physical barrier.

(3) An isolation zone shall be maintained around the physical barrier at the perimeter of the protected area, and any part of a building used as part of that physical barrier. Parking facilities, both for employees and visitors, shall be located outside the isolation zone.

(4) The isolation area shall be provided with illumination sufficient for the monitoring required by paragraph (b) (2) of this section at all times.

(c) *Access requirements.* (1) The licensee shall control all points of person-

nel access and all points of vehicle access into each protected area, including shipping or receiving areas, and into each vital area. Identification of personnel and vehicles shall be made and access authorization checked at such points. All individuals, packages, and vehicles shall be searched for devices such as firearms, explosives, incendiary devices, or other items which could be used for industrial sabotage before entry into the protected area is permitted. All emergency exits in each protected area and each vital area shall be alarmed.

(2) A picture badge identification system shall be used for all employees.

(3) Access to vital areas shall be limited to individuals who are authorized access to vital equipment and who require such access to perform their duties. Access authorization for such individuals shall be provided by the issuance of specially coded numbered badges indicating the areas to which access is authorized. Unoccupied vital areas shall be protected by an active intrusion alarm system.

(4) Except as provided in paragraph (c) (6) of this section, individuals not employed by the licensee shall be escorted by a watchman, or other individual designated by the licensee, while in a protected area and shall be badged to indicate that an escort is required.

(5) Except as provided in paragraph (c) (6) of this section, prior to being permitted entry into a protected area, each individual not employed by the licensee shall be required to register his name, date, time, purpose of visit, employment affiliation, citizenship, name and badge number of the escort, and name of the individual to be visited.

(6) The requirements of paragraph (c) (4) and (5) of this section need not be followed with respect to individuals not employed by the licensee, who, to perform their duties require frequent and extended access to a protected area or a vital area, provided: (i) such individuals are required to give name, purpose of visit, employment affiliation, and citizenship before access authorization for the period in question is granted; (ii) such access is granted only to those protected and vital areas to which access is necessary; (iii) access authorization for such an individual is validated daily prior to entry into any protected area; and (iv) such individual is badged on a daily basis to indicate: (A) non-employee—no escort required; and (B) areas to which access is authorized.

(7) No personal vehicles shall be permitted within a protected area.

(8) Keys, locks, combinations, and related equipment shall be controlled to minimize the possibility of compromise and shall be promptly changed whenever there is a reasonable possibility that they have been compromised and on termination of employment of any employee having access to keys, locks, combinations, and related equipment.

(d) *Detection aids.* (1) All alarms shall annunciate in a continuously manned, onsite central alarm station and in at least one other continuously manned station, not necessarily on site.

All alarms shall be self-checking and tamper indicating. The annunciation of an alarm at the onsite central alarm station shall indicate the type of alarm (e.g., intrusion alarm, emergency exit alarm, etc.) and location. All intrusion alarms, emergency exit alarms, alarm systems, and line supervisory systems shall at a minimum meet the level of performance and reliability indicated by GSA Interim Federal Specification W-A-00450 A (GSA-FSS).

(2) Equipment and devices which are utilized pursuant to paragraph (c) (1) of this section shall be capable of detecting the presence of firearms, explosives, and incendiary devices on personnel and in hand-carried packages.

(e) *Communication requirements.* (1) The licensee shall establish liaison with local law enforcement authorities capable of providing assistance when needed. In developing his physical security plan, the licensee shall take account of the probable size and response time of the local law enforcement authority assistance.

(2) Each guard and watchman on duty shall be capable of maintaining continuous communication with an individual in a continuously manned central alarm station, who shall be capable of calling for assistance from other guards or watchmen or from the local law enforcement authority referred to in paragraph (e) (1) of this section.

(3) As a minimum, one two-way voice communication link, such as radio, shall be established, in addition to conventional telephone service, between local law enforcement authorities referred to in paragraph (e) (1) of this section and the facility and shall terminate at the facility in a continuously manned central alarm station.

(4) All communications equipment, including offsite equipment, shall remain operable from independent power sources in the event of loss of primary power.

(f) *Testing and maintenance.* Each licensee shall test and maintain intrusion alarms, emergency exit alarms, communications equipment, physical barriers, and other security related devices utilized pursuant to this section as follows:

(1) All alarms, communications equipment, physical barriers, and other security related devices shall be maintained in operable and effective condition.

(2) Each intrusion alarm shall be functionally tested for operability and required performance at the beginning and end of each interval during which it is used for security, but not less frequently than once every seven (7) days when in use.

(3) Communications equipment shall be tested for operability and performance not less frequently than once at the beginning of each security personnel work shift.

(g) *Records requirements.* The licensee shall maintain the following records:

(1) Names, addresses, and badge numbers of all individuals authorized to have

access to vital equipment and the vital areas to which authorization is granted.

(2) A register of visitors, vendors, and other individuals not employed by the licensee recorded pursuant to paragraphs (c) (5) and (6) of this section.

(3) A log indicating name, badge number, time of entry, reason for entry, and time of exit of all individuals granted access to a normally unoccupied vital area.

(4) Results of all tests, inspections, and maintenance which have been performed on physical barriers, intrusion alarms, communication equipment, and other security related devices used pursuant to this section.

(5) A record at each onsite alarm annunciation location of each alarm, false alarm, alarm check, and tamper indication that identifies the type of alarm, location, alarm circuit, date, and time. In addition, details of response by facility guards and watchmen to an alarm shall be recorded.

(h) *Response requirement.* Upon detection of abnormal presence or activity of persons or vehicles within an isolation zone, a protected area, or a vital area, or upon evidence of intrusion into a protected area or a vital area, the facility guards and watchmen shall (1) determine the existence of a threat, (2) assess the extent of the threat, if any, and (3) take measures to neutralize the threat, either by appropriate action by facility guards and watchmen or by calling for assistance from local law enforcement authorities, or both.

(Sec. 161, 68 Stat. 948; 42 U.S.C. 2201)

Dated at Germantown, Md. this 26th day of January, 1973.

For the Atomic Energy Commission.

PAUL C. BENDER,
Secretary of the Commission.

[FR Doc. 73-1975 Filed 1-31-73; 8:45 am]

[10 CFR Part 70]

SPECIAL NUCLEAR MATERIAL

Requirements for Physical Security

The Atomic Energy Commission has under consideration amendments to its regulation, 10 CFR Part 70, "Special Nuclear Material" which, in the interest of the common defense and security and the public health and safety, would require measures for the protection of certain facilities at which licensed activities are conducted against industrial sabotage. An act of industrial sabotage is any deliberate act against a nuclear facility, component of a nuclear facility, or licensed nuclear material involved in such facility, which could endanger the public health and safety other than such acts by an enemy of the United States, whether a foreign government or other person.

The amendments would require the licensee to train and equip guards and watchmen; establish a protected area enclosing the facility, and control access to the protected area. In addition, areas which contain vital equipment—systems, devices, or material, the failure, destruc-

tion, or release of which could endanger the public health and safety—would be required to be protected by additional physical barriers within the protected area, and access to such areas restricted and controlled. Further, areas between physical barriers, and a zone surrounding a protected area, would be required to be monitored to detect the presence of persons or vehicles within those areas.

The proposed amendments would apply to persons who are licensed, or who apply for a license to possess more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U^{235} isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or a combination of these materials exceeding 5,000 grams, or a combination of these materials in a quantity less than 5,000 grams where the plutonium or uranium-233 content exceeds 2,000 grams.

If the Commission adopts the proposed amendments, licensees will be given a period of 60 days after publication of the effective rules in the FEDERAL REGISTER to submit required physical security plans. The remaining physical protection requirements would be made effective 120 days after publication in the FEDERAL REGISTER.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments of 10 CFR Part 70 is contemplated. All interested persons who desire to submit written comments or suggestions should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Staff, by March 3, 1973.

Comments received after the specified period will be considered if it is practicable to do so, but assurance of consideration cannot be given except as to comments filed within the period specified. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street NW., Washington, DC.

1. Section 70.4 of 10 CFR Part 70 is amended by redesignating paragraphs (a) through (s) as paragraphs (b) through (t), respectively, and by adding new paragraphs (a), (u), (v), (w), and (x) to read as follows:

§ 70.4 Definitions.

As used in this part, (a) Terms defined in Part 73 of this chapter have the same meaning when used in this part.

(u) "Industrial sabotage" means any deliberate act directed against a facility, in which an activity licensed pursuant to this part is conducted, or to any component of such a facility, which could endanger the public health and safety, other than such acts by an enemy of the United States, whether a foreign government or other person.

(v) "Vital area" means any area which contains vital equipment within a structure, the walls, roof, and floor of which

constitute physical barriers of construction at least as substantial as construction of exterior walls as described in § 73.3(f)(2) of this chapter.

(w) "Vital equipment" means any equipment, system, device, or material within a facility in which an activity licensed pursuant to this part is conducted, the failure, destruction, or release of which could endanger the public health and safety. Equipment or systems which would be required to function to protect public health and safety following such failure, destruction, or release are also considered to be vital equipment.

(x) "Isolation zone" means any area, clear of all objects which could conceal or shield an individual, adjacent to a physical barrier, monitored to detect the presence of persons or vehicles within that area.

2. Section 70.22 of 10 CFR Part 70 is amended by adding a new paragraph (g) to read as follows:

§ 70.22 Contents of applications.

(g) Each application for a license to possess or use at any site or contiguous sites subject to control by the licensee more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or a combination of these materials which exceeds 5,000 grams, or a combination of these materials which is less than 5,000 grams if the plutonium or uranium-233 content exceeds 2,000 grams, other than a license for possession or use of such material in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, shall include a physical security plan, consisting of two parts. Part I shall deal with vital equipment, vital areas, and isolation zones, and shall demonstrate how the applicant plans to meet the physical protection requirements of §§ 73.32 and 73.33 of this chapter, and of § 70.25 in the conduct of the activity to be licensed. Part II shall list tests, inspections, and other means to demonstrate compliance with such requirements.

3. A new subparagraph (9) is added to § 70.23(a) of 10 CFR Part 70 to read as follows:

§ 70.23 Requirements for the approval of applications.

(a) An application for a license, other than a license for export, will be approved if the Commission determines that:

(9) Where the applicant is required to submit a physical security plan pursuant to § 70.22(g), the applicant's proposed plan is adequate.

4. A new § 70.25 is added to 10 CFR Part 70 to read as follows:

§ 70.25 Physical security requirements.

In addition to any other requirements of this part, each licensee who is authorized to possess or use 5,000 grams or

more of uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or a combination of these materials which exceeds 5,000 grams, or a combination of these materials which is less than 5,000 grams if the plutonium or uranium-233 content exceeds 2,000 grams, other than in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, shall comply with the following:

(a) *Physical security organization.* (1) The licensee shall train and equip guards and watchmen to protect special nuclear material against theft or diversion, and to protect against industrial sabotage.

(2) The licensee shall establish, maintain and follow written security procedures which detail the duties of guards, watchmen and other individuals responsible for security.

(3) The licensee shall not permit an individual to act as a guard or watchman unless such individual has demonstrated (i) understanding of the licensee's security procedures, and (ii) the ability to execute all duties required by him by such procedures.

(b) *Physical barriers.* (1) The licensee shall locate vital equipment only within a vital area, which, in turn, is within a protected area. More than one vital area may be within a single protected area.

(2) The physical barrier at the perimeter of the protected area shall be separated from any other physical barrier within the protected area, and the intervening space monitored or periodically checked to detect the presence of persons or vehicles to enable the facility guards and watchmen to respond to suspicious activity or to the breaching of any physical barrier.

(3) An isolation zone shall be maintained around the physical barrier at the perimeter of the protected area and any part of a building used as part of that physical barrier. Parking facilities, both for employees and visitors, shall be located outside the isolation zone.

(4) The isolation zones shall be provided with illumination sufficient for the monitoring required by § 70.25(b) (2) at all times.

(c) *Access requirements.* (1) The licensee shall control all points of personnel access and all points of vehicle access into a protected area including shipping or receiving areas, and into each vital area. Identification of personnel and vehicles shall be made and access authorization checked at such points. All individuals, packages, and vehicles shall be searched for devices such as firearms, explosives, incendiary devices, or other items which could be used for industrial sabotage before entry into the protected area is permitted. All emergency exits in each protected area and each vital area shall be alarmed.

(2) A picture badge identification system shall be used for all employees.

(3) Access to vital areas shall be limited to individuals who are authorized access to vital equipment and who require such access to perform their duties.

Access authorization for such individuals shall be provided by the issuance of specially coded numbered badges indicating vital areas to which access is authorized. Unoccupied vital areas shall be protected by an active intrusion alarm system.

(4) Except as provided in paragraph (c) (6) of this section, individuals not employed by the licensee shall be escorted by a watchman, or other individual designated by the licensee, while in a protected area and shall be badged to indicate that an escort is required.

(5) Except as provided in paragraph (c) (6) of this section, prior to being permitted entry into a protected area, each individual not employed by the licensee shall be required to register his name, date, time, purpose of visit, employment affiliation, citizenship, name and badge number of the escort, and name of the individual to be visited.

(6) The requirements of paragraph (c) (4) and (5) of this section need not be followed with respect to individuals not employed by the licensee, who, to perform their duties, require frequent and extended access to a protected area or a vital area provided: (i) such individuals are required to give name, purpose of visit, employment affiliation, and citizenship before access authorization for the period in question is granted; (ii) such access is granted only to those protected and vital areas to which access is necessary; (iii) access authorization for such an individual is validated daily prior to entry into any protected area; (iv) such individual is badged on a daily basis to indicate: (A) nonemployee—no escort required; and (B) areas to which access is authorized.

(7) No personal vehicles shall be permitted within a protected area.

(8) Keys, locks, combinations, and related equipment shall be controlled to minimize the possibility of compromise and promptly changed whenever there is a reasonable possibility that they have been compromised and on termination of employment of any employee having access to keys, locks, combinations, and related equipment.

(d) *Detection aids.* (1) All alarms shall annunciate in a continuously manned, onsite central alarm station and in at least one other continuously manned station not necessarily on site. All alarms shall be self-checking and tamper indicating. The annunciation of an alarm at the onsite central alarm station shall indicate the type of alarm (e.g., intrusion alarm, emergency exit alarm, etc.) and location. All intrusion alarms, emergency exit alarms, alarm systems, and line supervisory systems shall at minimum meet the performance and reliability levels indicated by GSA Interim Federal Specification W-A-00450 A (GSA-FSS).

(2) Devices and equipment which are utilized pursuant to subparagraph (c) (1) of this section shall be capable of detecting the presence of firearms, explosives, and incendiary devices on personnel and in hand-carried packages.

(e) *Communication requirements.* (1) The licensee shall establish liaison with local law enforcement authorities capable of providing assistance when

needed. In developing his physical security plan, the licensee shall take account of the probable size and response time of the local law enforcement authority assistance.

(2) Each guard or watchman on duty shall be capable of maintaining continuous communication with an individual in a continuously manned central alarm station, who shall be capable of calling for assistance from other guards and watchmen or from the local law enforcement authority referred to in paragraph (e) (1) of this section.

(3) As a minimum, one two-way voice communication link, such as radio, shall be established in addition to conventional telephone service, between local law enforcement authorities referred to in paragraph (e) (1) of this section and the facility and shall terminate at the facility in a continuously manned central alarm station.

(4) All communications equipment, including offsite equipment, shall remain operable from independent power sources in the event of loss of primary power.

(f) *Testing and maintenance.* Each licensee shall test and maintain intrusion alarms, emergency alarms, communications equipment, physical barriers, and other security-related devices or equipment utilized pursuant to this section as follows:

(1) All alarms, communications equipment, physical barriers, and other security-related devices or equipment shall be maintained in operable and effective condition.

(2) Each intrusion alarm shall be functionally tested for operability and required performance at the beginning and end of each interval during which it is used for security, but not less frequently than once every 7 days.

(3) Communications equipment shall be tested for operability and performance not less frequently than once at the beginning of each security personnel work shift.

(g) *Records requirements.* The licensee shall maintain the following records:

(1) Names, addresses, and badge numbers of all individuals authorized to have access to vital equipment, and the vital areas to which authorization is granted.

(2) A register of visitors, vendors, and other individuals not employed by the licensee recorded pursuant to paragraphs (c) (5) and (6) of this section.

(3) A log indicating name, badge number, time of entry, reason for entry, and time of exit of all individuals granted access to a normally unoccupied vital area.

(4) Results of all tests, inspections, and maintenance which have been performed on physical barriers, intrusion alarms, communications equipment, and other security related equipment used pursuant to the requirements of this section.

(5) A record at each onsite alarm annunciation location of each alarm, false

alarm, alarm check, and tamper indication that identifies the type of alarm, location, alarm circuit, date, and time. In addition, details of response by facility guards and watchmen to an alarm shall be recorded.

(h) *Response requirement.* Upon detection of abnormal presence or activity of persons or vehicles within an isolation zone, a protected area, or a vital area, or upon evidence of intrusion into a protected area or a vital area, the facility guards and watchmen shall (1) determine the existence of a threat, (2) assess the extent of the threat, if any, and (3) take measures to neutralize the threat, either by appropriate action by facility guards and watchmen or by calling for assistance from local law enforcement authorities, or both.

5. New paragraphs (d) and (e) are added to § 70.32 of 10 CFR Part 70 to read as follows:

§ 70.32 Conditions of licenses.

(d) The licensee shall make no change to a physical security plan prepared pursuant to § 70.22(g) or paragraph (e) of this section that has been approved by the Commission which would decrease the effectiveness of physical security, without the prior approval of the Commission.

(e) Each licensee who is authorized to possess or use at any site or contiguous site subject to control by the licensee more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or a combination of these materials which exceeds 5,000 grams or a combination of these materials which is less than 5,000 grams if the plutonium or uranium-233 content exceeds 2,000 grams, other than possession or use involved in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, and who has not submitted a physical security plan as described in § 70.22(g), shall submit a physical security plan to the AEC for approval within sixty (60) days after (publication date of effective amendment).

(Sec. 161, 68 Stat. 948; 42 U.S.C. 2201)

Dated at Germantown, Md., this 26th day of January 1973.

For the Atomic Energy Commission.

PAUL C. BENDER,
Secretary of the Commission.

[FR Doc. 73-1976 Filed 1-31-73; 8:45 am]

[10 CFR Part 70]

SPECIAL NUCLEAR MATERIAL

Revised Material Control and Accounting Requirements for Special Nuclear Material

The Atomic Energy Commission is considering the amendment of its regula-

tions in 10 CFR Part 70, "Special Nuclear Material," to revise the material control and accounting requirements for special nuclear material. The new requirements are needed to provide further assurance that the loss or diversion of significant amounts of such material does not go undetected for extended periods of time. The closing of material balances based on physical inventories is a necessary means for determining the effectiveness of measures for the physical protection of special nuclear material.

Licensees authorized to possess more than 350 grams of contained uranium 235, uranium 233, or plutonium, or any combination thereof, would be required to conduct physical inventories at least annually. Licensees authorized to possess more than one effective kilogram¹ in unsealed form would be required to establish a measurement system and physical inventory procedures adequate to assure that any uncertainty on the material balance be within prescribed limits, and to calculate material balances based on physical inventories at intervals more frequent than annually, with the frequency depending on the strategic importance of the material. Certain minimum standards would be stipulated for the quality of these material balances. These minimum standards, effective until December 31, 1975, are performance requirements considered to be achievable with the use of present material control and accounting technology. The standards that would be effective after that date are based on the estimated technology capability and anticipate greater utilization of commercially available equipment, improved measurement quality assurance programs, additional measurement points and improved physical inventory measurements, than under current practice.

If the Commission adopts the proposed amendments, licensees will be given a period of 6 months after publication of the effective rule in the FEDERAL REGISTER before the new requirements become effective for existing plants, to allow time to make process or system changes needed to comply with the new inventory requirements. Licensees who determine and can substantiate that the requirements would necessitate modifications to their plant or equipment costing \$500,000 or more would be permitted

¹ "Effective kilograms" of special nuclear material is determined: (a) For plutonium and uranium 233 by their weight in kilograms; (b) For uranium with an enrichment of 0.01 (1 percent) and above, by its weight in kilograms multiplied by the square of its enrichment; and (c) For uranium with an enrichment below 0.01 (1 percent) by its weight in kilograms multiplied by 0.0001. The term "effective kilogram" has been used by the International Atomic Energy Agency for a number of years to define equivalent quantities of plutonium, uranium 233, and uranium 235 from the standpoint of safeguards significance.

to make application with such substantiating evidence for an extension of time, not exceeding an additional 6 months, for compliance with the new requirements. Inspections would be conducted to assure that the licensee makes satisfactory progress in completing such modifications during the extended period.

These requirements are being proposed as part of an overall AEC effort to strengthen the safeguarding of strategically important special nuclear material.

The application of the proposed amendments to large scale U²³⁵ recycle fuel fabrication facilities has not been considered since there are currently no such facilities in the licensee sector. The application of materials protection systems and procedures to such facilities is under study and additional rules will be developed as necessary.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments of 10 CFR Part 70 is contemplated. All interested persons who desire to submit written comments or suggestions should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Staff, by April 2, 1973. Persons who would be subject to the proposed new requirements are invited to provide specific information concerning the expected cost impact of the proposed amendments on their existing operations. Copies of comments on the proposed amendment may be examined at the Commission's Public Document Room at 1717 H Street NW., Washington, DC.

1. Section 70.4 is amended by adding a new paragraph (b) to read as follows:

§ 70.4 Definitions.

(b) "Effective kilograms of special nuclear material" means: (1) For plutonium and uranium 233 their weight in kilograms; (2) For uranium with an enrichment in the isotope U-235 of 0.01 (1 percent) and above, its weight in kilograms multiplied by the square of its enrichment; and (3) For uranium of its enrichment in the isotope U-235 below 0.01 (1 percent), by its weight in kilograms multiplied by 0.0001.

2. Paragraph (b) of § 70.22 is amended to read as follows:

§ 70.22 Contents of applications.

(b) Each application for a license to possess at any one time special nuclear material in a quantity exceeding one effective kilogram of special nuclear material and to use such special nuclear material for activities other than those involved in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, or as sealed sources, shall contain:

(1) A full description of the applicant's procedures for control of and accounting for special nuclear material which will be in his possession under license, including:

(i) Procedures used in receiving, storing and shipping special nuclear material;

(ii) Procedures for controlling special nuclear material during its processing or use in the facility, if appropriate;

(iii) Procedures by which process losses are determined;

(iv) Special nuclear material records and reporting procedures;

(v) Physical inventory procedures showing how the requirements of paragraphs (e) and (f) of § 70.51 will be satisfied;

(vi) Measurement and statistical controls procedures; and

(vii) Administrative controls (organization and management) for assuring appropriate implementation of the foregoing procedures.¹

(2) An identification of the fundamental material controls provided in the procedures described in subparagraph (1) (i) through (vii) of this paragraph, which the applicant considers essential for assuring that special nuclear material in his possession under license will be adequately safeguarded. Such proposed controls will be considered by the Commission in determining the conditions to be incorporated in the license pursuant to § 70.32(c).

3. Paragraph (c) of § 70.32 of 10 CFR Part 70 is amended to read as follows:

§ 70.32 Conditions of licenses.

(c) Each license authorizing the possession at any one time of special nuclear material in a quantity exceeding one effective kilogram of special nuclear material, and the use of such special nuclear material except those uses involved in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, or in sealed sources, shall contain and be subject to a condition requiring the licensee to maintain (1) such fundamental material controls identified pursuant to § 70.22(b)(2) and (2) such other material control procedures as the Commission determines to be essential for the safeguarding of special nuclear material.

(4) Section 70.51 of 10 CFR Part 70 is amended to read as follows:

§ 70.51 Material balance, inventory, and records requirements.

(a) As used in this section:

(1) "Additions to material in process" means receipts that are opened except

for receipts opened only for sampling and subsequently maintained under tamper-safing and opened sealed sources.

(2) "Enrichment category" for uranium-235 means high-enriched uranium—that material whose uranium isotope content is 20 percent or more uranium 235 by weight, and low-enriched uranium—that material whose uranium isotope content is less than 20 percent uranium 235 by weight.

(3) "Element" means uranium or plutonium.

(4) "Fissile isotope" means any of the following: (i) plutonium-239 plus plutonium-241; (ii) uranium-233; and (iii) uranium-235 by enrichment category.

(5) "Limit error" means the uncertainty component used in constructing a 95 percent confidence interval associated with a quantity after any recognized bias has been eliminated or its effect accounted for.

(6) "Material balance" means a determination of material unaccounted for (MUF) by subtracting ending inventory (EI) plus removals (R) from beginning inventory (BI) plus additions to inventory (A). Mathematically,

$$MUF = BI + A - EI - R$$

(7) "Material in process" means any special nuclear material possessed by the licensee except in unopened receipts, sealed sources, and ultimate product maintained under tamper-safing.

(8) "Physical inventory" means determination on a measured basis of the quantity of special nuclear material on hand at a given time. The methods of physical inventory and associated measurements will vary depending on the material to be inventoried and the process involved.²

(9) "Removals from material in process" includes special nuclear material disposed of as measured discards, encapsulated as a sealed source, or in other ultimate product placed under tamper-safing, and shipments of special nuclear material.

(10) "Tamper-safing" means the use of devices on containers or vaults in a manner that insures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault.

(11) "Ultimate product" means any special nuclear material in the form of a product that would not be further processed at that licensed location, but excludes unrecovered scrap and waste.

(12) "Unopened receipts" means receipts not opened by the licensee, including receipts of sealed sources, and receipts opened only for sampling and subsequently maintained under tamper-safing.

(b) Each licensee shall keep records showing the receipt, inventory (including location), disposal, acquisition, import, export, and transfer of all special nuclear material in his possession regardless of its origin or method of acquisition.

¹Criteria for physical inventories are set out in paragraph (f) of § 70.51.

(c) Each licensee who is authorized to possess at any one time special nuclear material in a quantity exceeding 1 effective kilogram of special nuclear material shall establish, maintain, and follow written material control and accounting procedures which are sufficient to enable the licensee to account for the special nuclear material in his possession under license.

(d) Except as required by paragraph (e) of this section, each licensee who is authorized to possess at any one time and location special nuclear material in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof, shall conduct a physical inventory of all special nuclear material in his possession under license at intervals not to exceed 12 months.

(e) Each licensee who is authorized to possess at any one time special nuclear material in a quantity exceeding 1 effective kilogram of special nuclear material, and to use such special nuclear material for activities other than those involved in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter; as sealed sources; or as reactor irradiated fuels involved in research, development, and evaluation programs in facilities other than irradiated fuel reprocessing plants, shall:

(1) Maintain procedures which shall include:

(i) Means for tamper-safing containers or vaults containing special nuclear material not in process;

(ii) Means for unique identification of each such item;

(iii) Inventory records showing the identity, location, and quantity of special nuclear material for all such items;

(iv) Records of the source and disposition of all such items;

(v) Records of the quantities of special nuclear material added to or removed from the process;

(vi) Inventory records for the quantity of special nuclear material in process;

(vii) Documentation of all transfers of special nuclear material between material balance areas to show identity and quantity of special nuclear material transferred;

(viii) Requirements for authorized signatures on each document for transfer of special nuclear material between material balance areas; and

(ix) Means for control of and accounting for internal transfer documents.

(2) Within 90 days after the effective date of this paragraph and thereafter as necessary to comply with the requirements of paragraph (e)(3) of this section, perform a physical inventory of all special nuclear material in his possession in compliance with the criteria for physical inventories set forth in paragraph (f) of this section.

(3) Conduct physical inventories made in accordance with the criteria for physical inventories set forth in paragraph (f) of this section for each element and fissile isotope at intervals determined from the start of the beginning inventory to the start of the ending inventory not to exceed:

¹For guidance in preparing the required descriptions, an applicant may consult "Guide for Preparation of Fundamental Material Controls and Nuclear Materials Safeguards Procedures," which is available for inspection at the Commission's Public Document Room, 1717 H Street NW., Washington, DC. Copies of this guide may be obtained by addressing a request to the Director of Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545.

(i) One calendar month for plutonium (except plutonium in that area of an irradiated-fuel reprocessing plant having shielding equivalent to 3 feet or more of concrete);

(ii) Two calendar months for uranium 233 and for uranium enriched 20 percent or more in the isotope uranium 235 (except such uranium in that area of an irradiated-fuel reprocessing plant having shielding equivalent to 3 feet or more of concrete); and

(iii) Six calendar months for uranium enriched less than 20 percent in the isotope uranium 235 and for plutonium and high-enriched uranium that area of an irradiated-fuel reprocessing plant having shielding equivalent to 3 feet or more of concrete;

(4) Within 30 calendar days after the start of each ending physical inventory required by paragraph (e)(3) of this section:

(i) Calculate, for the material balance interval terminated by that inventory, the material unaccounted for (MUF) and its associated limit of error for each element and fissile isotope contained in material in process;

(ii) Reconcile and adjust the book record of quantity of element and fissile isotope contained in material in process to the results of the physical inventory;

(iii) Complete and maintain material balance records for each material balance showing the quantity of element and fissile isotope in each component of the material balance, with the associated limit of error for the material unaccounted for both in terms of absolute quantity of element and fissile isotope and relative to additions to or removals from material in process for the interval, where results of limit of error calculations are recorded in sufficient detail to permit an evaluation of sources of error.

(iv) Complete and maintain a record summarizing the quantities of element and fissile isotope for ending inventory of material in process, total additions to material in process during the material-balance interval and total removals from the material in process during the material-balance interval; and

(v) Complete and maintain a record summarizing the quantities of element and fissile isotope in unopened receipts (including receipts opened only for sampling and subsequently maintained under tamper-safing), and ultimate products maintained under tamper-safing, or in the form of sealed sources;

(5) Establish and maintain a system of control and accountability such that the limits of error for any material unaccounted for (MUF) ascertained as a result of the material balances made pursuant to paragraph (e)(3) of this section do not exceed 200 grams for plutonium or uranium 233, 300 grams of uranium 235 contained in high-enriched uranium, or 2,000 grams of uranium 235 contained in low-enriched uranium, or the following, whichever is greater:

Material type	Limit of error of MUF on any material balance ¹	
	Until Dec. 31, 1975	Jan. 1 and thereafter 1976
Plutonium or uranium-233 in a chemical reprocessing plant.....	1.0	0.6
Uranium-235 in a reprocessing plant.....	.7	.6
Plutonium, uranium-233, or high-enriched uranium—all other.....	.5	.3
Low-enriched uranium—all other.....	.5	.5

¹ As a percentage of additions to or removals from material in process, whichever is greater.

(6) A licensee or applicant for a license may apply for an exception to the limits specified in paragraph (e)(5) of this section. The Commission will approve the application for exception if the applicant demonstrates: (i) That his operation has a low throughput of special nuclear material, and (ii) That a reasonable effort has been made to minimize the limit of error of MUF.

(f) Each licensee subject to the requirements of paragraph (e) of this section shall:

(i) Establish physical inventory procedures to assure that:

(i) The quantity of special nuclear material associated with each item on inventory is a measured value of special nuclear material element and fissile isotope;

(ii) Each item on inventory is listed and identified to assure that all items are listed and that no item is listed more than once;

(iii) Cutoff procedures for transfers and processing are established so that all quantities are inventoried and none are inventoried more than once;

(iv) Cutoff procedures for records and reports are established so that all transfers for the inventory and material balance interval and no others are included in the records; and

(v) Upon completion of the inventory, all book and inventory records, both total plant and material balance area, are reconciled with and adjusted to the physical inventory.

(2) Establish inventory procedures for sealed sources and containers or vaults containing special nuclear material that provide for:

(i) Identification and location of all such items;

(ii) Verification of the integrity of the tamper-safing devices for such items;

(iii) Reverification of identity and quantity of contained special nuclear material for each item not tamper-safed, or whose tamper-safing is found to have been compromised;

(iv) Verification of the correctness of the inventory records of identity and location for all such items; and

(v) Documentation in compliance with the requirements of paragraph (f)(2)(i), (ii), (iii) and (iv) of this section.

(3) Establish inventory procedures for special nuclear material in process that provide for:

(i) Measurement of all quantities not previously measured by the licensee for element and fissile isotope; and

(ii) For all material whose content of element and fissile isotope has been previously measured by the licensee but for which the validity of such previously made measurements has not been assured by tamper-safing, verification of the quantity of contained element and fissile isotope by:

(A) Remeasurement of the quantity of element and fissile isotope contained in each item on inventory; or

(B) For any given category or population of inventory items, demonstration, by remeasurement of the quantity of element and fissile isotope for a randomly selected representative sample of the items in that category or population, that the stated quantity of element and fissile isotope for that category or population of items is within the limit of error assigned to such category or population of items as recorded in the licensee's records, with the following provisions:

(1) The risk that an incorrectly stated quantity of element or fissile isotope for any category or population (that is, a quantity outside the assigned limit of error) will be accepted is not more than 5 percent for plutonium, uranium-233, and high-enriched uranium and 10 percent for low-enriched uranium;

(2) If an attribute sampling plan is used, assurance shall be provided that no less than 95 percent of the items for plutonium, uranium-233, and high-enriched uranium and 90 percent of the items for low-enriched uranium have contents of element and fissile isotope within the stated limits of error; and

(3) If a variables sampling plan is used, assurance shall be provided that systematic errors as low as those specified by the licensee's records for the category or population will be detected.

(4) Conduct physical inventories according to written inventory instructions for each inventory which shall:

(i) Assign inventory duties and responsibilities;

(ii) Specify the extent to which each material balance area and process is to be shut down, cleaned out, and/or remain static;

(iii) Identify the basis for accepting previously made measurements and their limits of error;

(iv) Designate measurements to be made for inventory purposes and the procedures for making such measurements; and

(v) Identify the means by which material on inventory will be listed to assure that each item is inventoried and that there is no duplication.

(g) Each licensee, subject to the requirements of paragraph (e) of this section on (effective date), shall submit to the Commission within 120 days of that date a full description of the procedures intended to be used to enable the licensee to comply with that paragraph and the requirements set forth in paragraph (f) of this section.

(h) Each licensee who, on (publication date), determines that the requirements of paragraph (e) of this section will require modifications of his plant or equipment costing \$500,000 or more may, within 120 days of that apply to the Commission for an extension of time, not to exceed 6 additional months, for compliance with those requirements. Each application for extension shall include a description of the modifications to be made, a statement of estimated associated costs with substantiating evidence, and a schedule of the dates when the modifications will be commenced and completed.

5. Section 70.53 of 10 CFR Part 70 is amended to read as follows:

§ 70.53 Material status reports.

(a) Each licensee who is authorized to possess at any one time and location special nuclear material in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium or any combination thereof, shall complete and submit to the Commission Material Status Reports on Form AEC-742, in accordance with printed instructions for completing the form, concerning special nuclear material received, produced, possessed, transferred, consumed, disposed of or lost by the licensee. All such reports shall be made as of June 30 and December 31 of each year and shall be filed with the Commission within thirty (30) days after the end of the period covered by the report. The Commission may permit a licensee to submit Material Status Reports at other times when good cause is shown.

(b) Each licensee subject to the requirements of § 70.51(e) shall submit to the appropriate Regional Office of the AEC Directorate of Regulatory Operations listed in Appendix A of Part 73 of this chapter within 34 calendar days after the start of each ending physical inventory required by § 70.51(e)(3):

(1) if the material unaccounted for exceeded both (i) its associated limit of error and (ii) 200 grams of plutonium or U-233, 300 grams of U-235 contained in high-enriched uranium, or 2,000 grams of U-235 contained in low-enriched uranium, a statement of the probable reasons for the material unaccounted for and actions taken or planned with respect to the material unaccounted for; and

(2) if the limit of error of the material unaccounted for for any material balance exceeds the limits specified in § 70.51(e) (5) a statement of the probable reasons for the limit of error and actions taken or planned with respect to the limit of error.

(Secs. 53, 161, 68 Stat. 930, 148; 42 U.S.C. 2073, 2201)

Dated at Germantown, Md., this 26th day of January 1973.

For the Atomic Energy Commission.

PAUL C. BENDER,
Secretary of the Commission.

[FR Doc. 73-1977 Filed 1-31-73; 8:45 am]

[10 CFR Part 73]

PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIAL

Security Measures

The Atomic Energy Commission has under consideration amendments to its regulations in 10 CFR Part 73, "Physical Protection of Special Nuclear Material," which would, in the interest of the common defense and security, strengthen existing requirements for physical protection of special nuclear material while in transit.

The amendments would apply to shipments of more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope) or 2,000 grams of plutonium or uranium-233. They would also apply to combined shipments of these materials which exceed 5,000 grams or in a combined shipment of less than 5,000 grams where the plutonium or uranium-233 content is greater than 2,000 grams.

Under separate amendments to 10 CFR Part 73 a rule is being made effective immediately which would limit the quantities of SNM that can be transported by passenger carrying aircraft to no greater than 20 grams or 20 curies, whichever is less of plutonium or uranium-233 or 350 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope).

The amendments being proposed are intended to reduce the risk of theft of special nuclear material. The factors that lead to theft of vehicle commodities have been identified in Department of Transportation studies as (a) longer dwell-time in transportation; (b) packages of a size and weight that can be moved by one man; and (c) large number of intervehicular transfers during course of shipment. The amendments being proposed would also implement criteria that have been developed for the protection of special nuclear material in transit, as follows: (a) assurance that a theft or diversion cannot be successfully carried out short of a significant armed attack; (b) assurance of prompt detection of an actual or attempted theft or diversion; (c) assurance of prompt alerting and timely response of armed guards or police; and (d) assurance against misroutings.

The dwell-time in the transportation system would be reduced by requiring direct shipper to receiver shipments of special nuclear material for truck transportation with no cargo transfers permitted while the special nuclear material is in the cargo. Additionally, when air cargo transportation is used, the number of different flights would be required to be minimized.

The term "continuous personal custody" in § 73.31(a)(1) would be deleted. Reliance would be placed on the monitoring of shipments at transfer points to assure against misroutings. The individual who monitors a shipment could be any individual designated by the licensee or his agent, or as specified in a contract of carriage. Additionally, the shipment would be required to be protected by the

use of a specially designed truck which is dual occupied or by a dual occupied ordinary truck and an armed escort vehicle during the truck segment of truck-air shipments and throughout entire "truck only" shipments. Rail shipments would have to be escorted by two armed guards.

Other measures required to be taken to assure against diversion would be the use of closed vans or containers which are secured by locks, and the use of fingerprinted seals on containers. Furthermore, it would be required that areas of natural disasters or civil disorders be avoided, and that shipments be preplanned to assure that deliveries occur at a time when the receiver is present to accept receipt of shipments.

In order to assure prompt detection of an actual or attempted theft or diversion, the location of a truck and/or escort vehicle would be traced by the shipper or receiver, through the use of a continuous communication capability by radio-telephone on board. Communication would be maintained on at least 2-hour intervals. Where radio-telephone coverage is not available, a telephone call would be required whenever a lapse of communication exceeds 2 hours. A continuous communication capability shall exist between the cargo and escort vehicle. Further, motor vehicles used to transport special nuclear material would be marked on the top and sides with identifying letters or numbers.

A requirement that importers of special nuclear material protect each incoming shipment, beginning at the time and place in the United States of the shipment's first discharge from the arriving carrier, would be added. With this change, the protection required for import shipments would be the same as that required for domestic shipments.

Changes to the recordkeeping requirement of § 73.41 are being proposed to more clearly define the recordkeeping requirements.

The notice of proposed rule making published in the *FEDERAL REGISTER* on February 3, 1971 (36 FR 1914) is withdrawn.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments to 10 CFR Part 73 is contemplated. Interested persons who desire to submit written comments or suggestions for consideration in connection with the proposed amendments should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief Public Proceedings Staff, by March 3, 1973.

The Commission particularly solicits comments concerning the cost impact of the proposed criteria with regard to the shipment of special nuclear material. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street NW., Washington, DC.

1. Section 73.1(a) of 10 CFR Part 73 is amended to read as follows:

§ 73.1 Purpose and scope.

(a) This part prescribes requirements for the physical protection of special nuclear material by any person who is licensed pursuant to the regulations in Part 70 of this chapter and who imports, exports, transports, delivers to a carrier for transport in a single shipment, takes delivery of a single shipment free on board at the point where it is delivered to a carrier, or possesses at any site or contiguous sites subject to control by the licensee, of (1) more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U^{235} isotope), or 2,000 grams of uranium-233 or plutonium, or (2) a combination of such materials of more than 5,000 grams, or (3) a combination of such materials of less than 5,000 grams if the plutonium or uranium-233 content is greater than 2,000 grams.

2. A new paragraph (n) is added to § 73.3 of 10 CFR Part 73 to read as follows:

§ 73.3 Definitions.

(n) "Dual occupancy protection" means a signature security service plus continuous attendance and surveillance of the shipment through the use of two drivers or one driver and an authorized individual. A vehicle is attended when at least one of the drivers or the authorized individual is in the cab of the transport vehicle, awake, and not in a sleeper berth or is within 10 feet of an access door leading to the special nuclear material.

3. Paragraph (b) of 73.30 is amended to read as follows:

§ 73.30 Transportation of special nuclear material by aircraft.

(b) Shipments by air of special nuclear material in quantities exceeding (1) 20 grams or 20 curies, whichever is less, of plutonium or uranium-233, but not exceeding 2,000 grams of plutonium or uranium-233 or (2) 350 grams but not exceeding 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U^{235} isotope) are not subject to the requirements of this part other than this section.

4. Section 73.31 is amended to read as follows:

§ 73.31 Physical protection of special nuclear material in transit.

(a) Except as specified in subparagraph (a) (8) and paragraph (b) of this section, each licensee who transports or who delivers to a carrier for transport special nuclear material, shall make arrangements to assure that such special nuclear material will be protected in transit as follows:

(1) When truck transportation only is used, special nuclear material shall be transported under the established procedures of a carrier which provides a system for the physical protection of valuable material in transit and requires an exchange of hand-to-hand receipts at origin and destination, or by a Commis-

sion licensee authorized to transport special nuclear material. No intermediate stops to transfer special nuclear material or other cargo shall be made between the facility of the shipper and the facility of the receiver. The shipment shall be protected by dual occupancy protection as defined in § 73.3(n). The shipment shall be further protected by one of the following methods:

(i) An armed escort consisting of at least two armed guards shall accompany the shipment in a separate motor vehicle. Escorts shall maintain continuous vigilance for the presence of conditions or situations which might threaten the security of the cargo, take such action as circumstances might require to avoid interference with continuous safe passage of the vehicle, provide assistance to, or summon aid for crew of cargo vehicles in case of emergency, check seals and locks at each stop where time permits, and observe vehicles and adjacent areas during stops or layovers. Continuous communication capability shall be provided between the cargo vehicle and the escort vehicle. The licensee may use his own employees as armed escorts or he may use an agent.

(ii) The shipment shall be made in a specially designed truck or trailer which reduces the vulnerability to diversion. Design features of the truck or trailer shall permit immobilization of the van and provide barriers or deterrents to physical penetration.

Within 60 days after (the effective date of this amendment), licensees using either method shall submit a plan for the selection, qualification, and training of armed escorts, or the specification and design of a specially designed truck or trailer, as appropriate.

(2) When both truck and air transportation are used: (i) special nuclear material shall be transported between a licensee facility and the airport as specified in paragraph (1) of this section. The licensee shall assure that transfers during the air segments of a shipment are minimized.

(ii) Special nuclear material shall be transported under the established procedures of a carrier which provides a system for the physical protection of valuable material in transit and require an exchange of hand-to-hand receipts at origin and destination and at all points en route where there is a transfer of custody.

(iii) Special nuclear material shall be monitored by an individual or individuals designated by the licensee or his agent, or as specified by contract of carriage, during each scheduled transfer from storage to a vehicle, from one vehicle to another, or from a vehicle to storage. The monitor shall keep the shipment under constant surveillance from the time it is released from the locked compartment of the truck or aircraft until it is loaded on to another aircraft or truck and that compartment is locked, and while the shipment is in storage. "Constant surveillance" means that the monitor shall be within 10 feet of the access door to the shipment. The individual who mon-

itors shall be required to notify the carrier and the licensee who made the arrangements for protection of special nuclear material immediately of any deviation from, or attempted interference with, schedule or routing.

(3) When rail transportation is used, the shipment shall be escorted by two armed individuals, in the shipment car or an escort car of the train, who shall keep the shipment cars under observation and shall detain at stops when practicable and time permits to guard the shipment cars and check car or container locks and seals. Radio-telephone communication shall be maintained with a licensee or his agent every 2 hours or less, and at scheduled stops in the event that radio-telephone coverage was not available in the last 2 hours before the stop. In the event no call is received in accordance with these requirements, the licensee or his agent shall immediately notify an appropriate law enforcement authority and the appropriate Atomic Energy Commission regulatory operations regional office listed in appendix A.

(4) Transit times shall be minimized by selecting the most direct route which avoids areas of natural disaster or civil disorders. Shipments shall be preplanned to assure that deliveries occur at a time when the receiver at the final delivery point is present to accept receipt of shipment.

(5) All motor vehicles used to transport special nuclear material and escort vehicles shall be equipped with a radio-telephone which can communicate with a licensee or his agent. The licensee or agent with whom communications shall be monitored for different segments of the shipment shall be pre-designated before a shipment is made. Radio-telephone calls to such licensee or agent shall be made at least every 2 hours to relay position and projected route. Telephone calls shall be made every 2 hours when radio-telephone coverage is not available. In the event no call is received in accordance with these requirements, the licensee or his agent shall immediately notify an appropriate law enforcement authority and the appropriate Atomic Energy Commission regulatory operations regional office listed in appendix A.

(6) Motor vehicles shall be marked on top with identifying letters or numbers which will permit identification of the vehicle from the air in clear weather at 1,000 feet above ground level, and marked on the sides and rear with the same letters or numbers to permit identification from the ground.

(7) When surface transportation is used, special nuclear material shall be carried in closed vehicles or containers that are locked. Fingerprint type seals shall also be used on containers.

(8) A licensee or applicant for a license may apply to the Commission for approval of proposed procedures for transport of special nuclear material in a manner not otherwise authorized by the regulations of this chapter. Such application shall include a description

and quantity of the special nuclear material involved, the origin and destination, the carriers to be used, the expected time in transit, the number of transfer points, the communication to be used, the vehicle visual identification, and the cargo security and surveillance measures to be used.

(b) Each licensee who takes delivery of special nuclear material free-on-board (f.o.b.) the point where it is delivered to a carrier for transport shall make the arrangements to assure that such special nuclear material will be protected in transit as prescribed in paragraph (a) of this section, rather than the person who delivers such shipment to the carrier for transport.

(c) Each licensee who imports special nuclear material shall make arrangements to assure that such material will be protected in transit as follows:

(1) An individual designated by the licensee or his agent, or as specified by a contract of carriage, shall confirm the container count at the first place in the United States where the shipment is discharged from the arriving carrier.

(2) The shipment shall be protected after arrival in the United States as provided in paragraphs (a), (d), and (g) of this section.

(d) Each licensee who delivers to a carrier for transport special nuclear material shall immediately notify the consignee by telephone, telegraph, or teletype, of the time of departure of the shipment, and shall notify or confirm with the consignee the method of transportation, including the names of carriers, and the estimated time of arrival of the shipment at its destination. In the case of a shipment free-on-board (f.o.b.) the point where it is delivered to a carrier for transport, he shall, before the shipment is delivered to the carrier, obtain assurance from the licensee or other person who is to take delivery of the shipment at the f.o.b. point that the physical protection arrangements, required by paragraph (a) of this section for licensed shipments or required by AEC Manual chapters 2401 or 2405 for AEC license-exempt shipments, have been made. He shall also make arrangements with the consignee to be notified immediately by telephone, telegraph, or teletype, of the arrival of the shipment at its destination.

(e) In addition to complying with the requirements specified in paragraphs (a), (d), and (g) of this section, each licensee who exports special nuclear material shall make arrangements with the consignee to be notified immediately by telephone, telegraph, or teletype, of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination.

(f) Each licensee who receives a shipment of special nuclear material shall immediately notify the person who delivered the material to a carrier for transport of the arrival of the shipment at its destination. In the event such a shipment fails to arrive at its destination at the estimated time, the consignee, if

a licensee, or in the case of an export shipment, the licensee who exported the shipment, shall immediately notify by telephone, telegraph, or teletype, the Director of the appropriate Atomic Energy Commission Regulatory Operations Regional Office listed in appendix A, and the licensee or other person who delivered the material to a carrier for transport.

(g) Each licensee who makes arrangements for physical protection of a shipment of special nuclear material as required by this section shall immediately conduct a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and file a report with the Commission as specified in § 73.42. If the licensee who conducts the trace investigation is not the consignee, he shall also immediately report the results of his investigation by telephone, telegraph, or teletype to the consignee.

5. Paragraph (c) of § 73.41 is amended to read as follows:

§ 73.41 Records.

Each licensee shall keep the following records:

(c) Shipments of special nuclear material subject to the requirements of this part, including names of carriers, major roads to be used, flight numbers in the case of air shipments, dates and expected times of departure and arrival of shipments, names and addresses of the monitor and one alternate monitor at each transfer point, verification of communication equipment on board the transfer vehicle, names of individuals who are to communicate with the transport vehicle, container seal descriptions and identification; and any other information to confirm the means utilized to comply with § 73.31. Such information shall be recorded prior to shipment.

(Sec. 161, 68 Stat. 948; 42 U.S.C. 2201)

Dated at Germantown, Md., this 26th day of January 1973.

For the Atomic Energy Commission.

PAUL C. BENDER,
Secretary of the Commission.

[FR Doc. 73-1978 Filed 1-31-73; 8:45 am]

[10 CFR Part 73]

PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIAL

Requirements for Materials Protection

The Atomic Energy Commission has under consideration amendments to its regulations in 10 CFR Part 73, "Physical Protection of Special Nuclear Material," which (1) in the interest of the common defense and security would strengthen requirements for the protection of significant quantities of special nuclear material (SNM) at fixed sites against theft or diversion to unauthorized uses, and (2) would remove the existing exemption of classified special nuclear material from the provisions of 10 CFR

Part 73. The requirements of Part 73 would be in addition to, rather than a substitute for, any security procedures for the protection of classified material of the AEC or other Government agency.

The minimum quantities of plutonium and uranium-233 to which Part 73 applies would be reduced to 2,000 grams. Thus the proposed amendments would apply to persons who possess more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or a combination of these materials exceeding 5,000 grams, or a combination of these materials which is less than 5,000 grams if the plutonium or uranium-233 content exceeds 2,000 grams.

The proposed amendments would require that use, processing, or storage of SNM be only within a material access area which is protected by additional physical barriers within a protected area. Access to the material access area would be controlled and limited to persons granted access to SNM. Further, persons, packages, and vehicles exiting from a material access area would be checked for concealed SNM.

Pursuant to the Atomic Energy Act of 1954, as amended, and Section 553 of Title 5 of the United States Code, notice is hereby given that adoption of the following amendment of 10 CFR Part 73 is contemplated. All interested persons who desire to submit written comments or suggestions should send them to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C., 20545, Attn: Chief, Public Proceedings Staff, by March 3, 1973. Comments received after the specified period will be considered if it is practicable to do so, but assurance of consideration cannot be given except as to comments filed within the period specified. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street, NW., Washington, D.C.

1. Paragraph (a) of section 73.1 is amended and a new paragraph (c) is added to read as follows:

§ 73.1 Purpose and scope.

(a) This part prescribes requirements for the physical protection of special nuclear material by any person who is licensed pursuant to the regulations in Part 70 of this chapter and who imports, exports, transports, delivers to a carrier for transport in a single shipment, or takes delivery of a single shipment free on board at the point where it is delivered to a carrier, possesses at any site or contiguous sites subject to control by the licensee, (i) more than 5,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), 2,000 grams of uranium-233, or 2,000 grams of plutonium, or (ii) a combination of these materials which is more than 5,000 grams, or (iii) a combination of these materials which is less

than 5,000 grams if the plutonium or uranium-233 content is greater than 2,000 grams.

(c) Special nuclear material subject to this part may also be protected pursuant to security procedures prescribed by the Commission or another Government agency for the protection of classified materials. The provisions and requirements of this part are in addition to, and not in substitution for, any such security procedures. Compliance with the requirements of this part does not relieve any licensee from any requirement or obligation to protect special nuclear material pursuant to security procedures prescribed by the Commission or other Government agency for the protection of classified materials.

2. Section 73.3 of 10 CFR Part 73 is amended by deleting paragraphs (h), (i), and (j); by redesignating paragraphs (g), (k), (l), and (m) as paragraphs (h), (i), (j), and (k), respectively; and by adding a new paragraph (g), and by amending paragraph (d) and redesignated paragraph (j) to read as follows:

§ 73.3 Definitions.

(d) "Intrusion alarm" means a tamper indicating electrical, electro-mechanical, electro-optical, electronic or similar device which will detect intrusion by an individual into a building, protected area, vital area, or material access area, and alert guards or watchmen by means of actuated visible and audible signals.

(g) "Material access area" means any location which contains special nuclear material, within a vault, or a building the roof, walls and floor of which each constitute a physical barrier, and which, in turn, is located within a protected area.

(j) Vault-type room means a room with one or more doors, all combination locked, protected by an intrusion alarm which creates an alarm response to the entry of a person anywhere into the room.

§ 73.13 [Amended]

3. Paragraph (c) of § 73.13 is deleted.

4. Section 73.32 of 10 CFR Part 73 is amended to read as follows:

§ 73.32 Physical protection of special nuclear material in use or storage.

Each licensee shall physically protect special nuclear material in accordance with the following requirements:

(a) Access requirements. (1) Special nuclear material shall be stored or processed only in a material access area. No activities other than those which require access to special nuclear material or equipment employed in the process, use, or storage of special nuclear material, shall be permitted within a material access area.

(2) Special nuclear material not in process shall be stored in a vault equipped with an intrusion alarm or in a vault-type room and each such vault or vault-

type room shall be controlled as a separate material access area.

(3) Enriched uranium in the form of small pieces, cuttings, chips, solutions or in other forms which result from a manufacturing process, which are kept for ultimate disposal, contained in 30-gallon or larger containers, may be stored within a locked and separately fenced area which is within a larger protected area provided that the storage area is no closer than 50 feet to the perimeter of the protected area. The storage area shall be protected by a guard or watchman who shall patrol at intervals not exceeding 4 hours, or by intrusions alarms.

(4) A picture badge identification system shall be used for all employees. Employees requiring admittance to a material access area shall have specially coded numbered badges.

(5) Admittance to a material access area shall be under the control of an authorized individual and limited to individuals who require such access to perform their duties.

(6) Packages and personnel entering a protected area shall be searched for devices such as firearms, explosives, incendiary devices, or counterfeit substitute items which could be used for theft or diversion of special nuclear material.

(7) Surveillance shall be maintained of individuals within a material access area such that the activities of a single individual within such an area will be observed.

(b) Exit requirement. Each individual, package, and vehicle shall be checked for concealed special nuclear material before exiting from a material access area unless exit is into a contiguous material access area.

(c) Detection aid requirement. Each unoccupied material access area shall be locked and protected by an intrusion alarm on active status. All emergency exits shall be continuously alarmed.

5. Section 73.33 of Part 73 is amended to read as follows:

§ 73.33 Testing and maintenance.

Each licensee shall test and maintain intrusion alarms, physical barriers, and other devices utilized pursuant to the requirements of this part as follows:

(a) Intrusion alarms, physical barriers, and other devices used for material protection shall be maintained in operable condition.

(b) Each intrusion alarm shall be inspected and tested for operability and required functional performance at the beginning and end of each interval during which it is used for material protection, but not less frequently than once every seven (7) days.

6. Paragraphs (a), (b), and (d) of § 73.41 of 10 CFR Part 73 are amended to read as follows:

§ 73.41 Records.

(a) Names and addresses of all individuals who have been designated as authorized individuals, specifying each ma-

terial access area that each individual is authorized to enter.

(b) Register of visitors, vendors, and other individuals not employed by the licensee recorded pursuant to § 70.25(c) of this chapter.

(d) Results of all tests, inspections, and maintenance which have been performed on physical barriers, intrusion alarms, and other devices utilized by the licensee pursuant to the requirements of this part.

(Sec. 161, 68 Stat. 948; 42 U.S.C. 2201)

Dated at Germantown, Md., this 26th day of January 1973.

For the Atomic Energy Commission.

PAUL C. BENDER,
Secretary of the Commission.

[FR Doc. 73-1979 Filed 1-31-73; 8:45 am]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 51]

PREPARATION, ADOPTION AND SUBMITTAL OF IMPLEMENTATION PLANS

Submission of State Reports and Emission Control Action Programs

On August 14, 1971 (36 FR 15486), the Administrator of the Environmental Protection Agency (EPA) promulgated as 40 CFR Part 420, regulations for the preparation, adoption, and submittal of State implementation plans under section 110 of the Clean Air Act, as amended. These regulations were republished November 25, 1971 (36 FR 22398), as 40 CFR Part 51. Section 51.7, Reports, of these regulations requires State agencies to periodically report to the EPA progress in implementing the applicable plans. Section 51.16, Prevention of Air Pollution Emergency Episodes, requires State agencies to submit to the EPA emission control action programs for stationary sources which emit 100 tons per year or more of a pollutant in any Priority I air quality control region. The amendments to 40 CFR Part 51 proposed herein are designed to further specify the procedures for reporting under § 51.7 and to delete the requirements for submitting individual emission control action programs under § 51.16(c). The proposed amendments are designed to accomplish the following:

(1) To establish the date for submission of the first quarterly report, to be not later than February 15, 1973. The present requirements provide that the first quarterly report be submitted no later than November 15, 1972. This first quarterly report must include all air quality data gathered subsequent to the air quality data which provided the basis for the development of the applicable plan.

(2) To specify a data reporting format to be used by States when submitting air quality and emission data to the EPA. The proposed amendments also provide