

U.S. NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

RIN: 3150-AH90

Secure Transfer of Nuclear Materials

**AGENCY:** U.S. Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to implement requirements for secure transfer of nuclear materials as required by Section 656 of the Energy Policy Act of 2005 (EPAAct), signed into law on August 8, 2005. The proposed amendment would implement Section 656 by specifically excepting certain licensees from provisions of Section 170I of the Atomic Energy Act (AEA), as amended.

**DATES:** The comment period expires [insert 30 days from date of publication]. Comments received after this date will be considered if it is practical to do so, but NRC is able to assure consideration only for comments received on or before this date. A copy of the draft proposed rule was made available for information only on July 6, 2006, on NRC's rulemaking website at: <http://ruleforum.llnl.gov>.

**ADDRESSES:** You may submit comments by any one of the following methods. Please include the following number (RIN 3150-AH90) in the subject line of your comments.

Comments on rulemakings submitted in writing or in electronic form will be made available for public inspection. Because your comments will not be edited to remove any identifying or contact information, NRC cautions you against including personal information such as social security numbers and birth dates in your submission.

Mail comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.

E-mail comments to: [SECY@nrc.gov](mailto:SECY@nrc.gov). If you do not receive a reply e-mail confirming that we have received your comments, contact us directly at (301) 415-1966. You may also submit comments via NRC's rulemaking website at <http://ruleforum.llnl.gov>. Address questions about our rulemaking website to Carol Gallagher (301) 415-5905; email: [cag@nrc.gov](mailto:cag@nrc.gov).

Comments can also be submitted via the Federal eRulemaking Portal

<http://www.regulations.gov>.

Hand deliver comments to: 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m., Federal workdays. (Telephone (301) 415-1966).

Fax comments to: Secretary, U.S. Nuclear Regulatory Commission at (301) 415-1101.

Publicly available documents related to this rulemaking may be viewed electronically on the public computers located at the NRC's Public Document Room (PDR), Public File Area O1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The PDR reproduction contractor will copy documents for a fee. Selected documents, including comments, may be viewed and downloaded electronically via NRC's rulemaking website at:

<http://ruleforum.llnl.gov>.

Publicly available documents created or received at NRC after November 1, 1999, are available electronically at NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm.html>. From this site, the public can gain entry into NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the PDR Reference staff at 1-800-397-4209, (301) 415-4737, or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

**FOR FURTHER INFORMATION CONTACT:** Frank Cardile, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-6185, e-mail: [fpc@nrc.gov](mailto:fpc@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Energy Policy Act of 2005

On August 8, 2005, the President signed into law the EAct of 2005 Pub L. No. 109-58, 119 Stat. 594 (2005). Section 656 of the EAct added Section 170I to the Atomic Energy Act of 1954 (AEA), 42 U.S.C, 2210i, and requires that:

a) A system be established by the Commission to ensure that materials transferred or received in the United States, by any party, pursuant to an import or export license issued by NRC, are accompanied by a manifest describing the type and amount of materials. Each individual receiving or accompanying the transfer of such materials shall be subject to a security

background check conducted by appropriate Federal entities. Section 656 also states that, except as provided by the Commission by regulation, the materials referred to are: byproduct material; source material; special nuclear material; high-level radioactive waste; spent nuclear fuel; transuranic waste; and low-level radioactive waste; and

b) The Commission issue regulations, within one year after enactment of the EPAAct, identifying radioactive materials or classes of individuals that, consistent with the protection of the public health and safety and the common defense and security, are appropriate exceptions to the requirements in Section 170I<sup>1</sup> of the AEA.

## **II. Discussion**

Based on the above, Section 656 of the EPAAct amends the AEA by adding three broad elements: (a) establish a system for manifests of import/export shipments of radioactive materials; (b) require security background checks of persons receiving or accompanying import/export shipments; and (c) issue a regulation within one year with provisions for excepting certain types of radioactive materials or classes of individuals from the requirements of Section 170I of the EPAAct. Establishing a system for manifests, requiring security background checks, and issuing a regulation with provisions for exceptions, are discussed in Sections II.A, II.B, and II.C, respectively, of this document.

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<sup>1</sup> The text of Section 656 actually refers to “exceptions to the requirements of Section 170D of the AEA”; however, that is a misprint. The correct citation is Section 170I.

A. Establish a system for manifests for shipments of radioactive material

Requirements for a system of manifests for shipments of material would include maintaining appropriate paperwork with a shipment that identifies the material being shipped. Specifically, the EPA Act requires that a manifest include a description of the type of material and an indication of the amount of material being transported.

Currently, requirements for manifesting shipments of radioactive materials already exist in U.S. Department of Transportation (DOT) regulations at 49 CFR Part 172. Specifically, 49 CFR Part 172.202(a) requires that shipping papers with radioactive shipments must indicate the basic description of the material, the total quantity of material (by mass, volume, or activity level in appropriate units), and the number and type of packages. In addition, for the quantities of radioactive material covered by the EPA Act, 49 CFR Part 172.203(d) contains requirements that descriptions of a shipment containing radioactive material must include the name (and/or chemical symbol) of each radionuclide in the material; a description of the physical and chemical form of the material, if not special form; the activity contained in each package of the shipment in terms of appropriate international units (e.g., Becquerels (Bq)) and/or appropriate customary units (Curies (Ci), etc.) in parentheses following the international units; and labeling of each package being transported.

NRC's current regulations cross-reference the DOT requirements applicable to the transportation of licensed materials at 10 Part CFR 71.5. Section 71.5 requires that each licensee who transports licensed material outside the site of usage, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the DOT regulations at 49 CFR Parts 107, 171-180, and 390-397, as appropriate to the mode of transport.

Based on the existing DOT requirements for shipping papers for shipments of radioactive materials at 49 CFR Part 172 and NRC's regulations at 10 CFR Part 71, NRC believes that an appropriate system is already established to ensure that shipments of radioactive materials are accompanied by papers (i.e., a "manifest") appropriately describing the type and amount of materials being shipped. Thus, NRC considers that the requirements of the EAct have been met in this area. Therefore, NRC is not including any additional requirements for manifesting of radioactive material shipments in this proposed rule.

**B. Require security background checks for persons accompanying or receiving shipments of radioactive materials**

Section 656 of the EAct states that each individual who "accompanies" or "receives" the transfer of radioactive materials in the United States, pursuant to an NRC import or export license, shall be subject to a security background check<sup>2</sup> conducted by appropriate Federal entities. Section 656(c) of the EAct also indicates that such background check requirements would become effective on a date established by the Commission.

The NRC believes that the most appropriate and comprehensive approach for establishing requirements for security background checks is as part of the broader considerations of NRC's planned rulemaking to implement Section 652 of the EAct. Section 652 mandates the Commission to require fingerprinting and criminal history record checks for any individual who is permitted unescorted access to radioactive material "...that the Commission determines to be of such significance to the public health and safety or the

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<sup>2</sup> The term "security background check" is not defined in Section 656. In related regulatory efforts, it has been noted that background checks form the basis of trustworthiness and reliability and are comprised of several elements (e.g., verification of identity; a check into employment history, education and personal references; and a criminal history record check requiring fingerprints).

common defense and security, as to warrant fingerprinting and background checks.” The individuals referred to under Section 656 are a subgroup (i.e., those transferring radioactive material pursuant to an export or import license) of the larger group of individuals at a licensed facility, with unescorted access to radioactive material, who would ultimately be included under a Section 652 rulemaking. The goal of the Section 652 rulemaking is that requirements for access are coherent and use a graded approach for the wide range of licensees impacted by Section 652, including those who might import or export radioactive material, and that there be coordinated consideration of appropriate exceptions, and of both domestic and import/export transport.

Thus, NRC considers the rulemaking to implement Section 652 to be the most appropriate and comprehensive approach for establishing requirements for security background checks for licensees, and for licensee employees, for unescorted access to radioactive material and for the broad range of transportation networks that licensees use. The Section 652 rulemaking will incorporate technical basis development and will also provide opportunity for stakeholder comment. Those individuals involved in “receiving” and “accompanying” radioactive materials, addressed in Section 656, would be covered by the comprehensive Section 652 rulemaking.

In addition to the rulemaking to implement Section 652, there are various regulatory initiatives, in place or underway, at other Federal agencies who have authority in the area of transportation security, including the Department of Homeland Security (DHS) and the DOT (see further discussion below). NRC views the transport security requirements of DHS and/or DOT, that apply to the nation’s hazardous material transportation infrastructure as a whole, as the most effective long-term solution to implementing certain provisions of Section 656 of the EPAct. NRC is aware of DHS initiatives, such as the Transportation Worker Identification

Credential (TWIC)<sup>3</sup> program, that are being implemented and views such programs as an effective solution for security background checks on transportation workers. NRC will work with other Federal agencies with authority in the area of transport security during the Section 652 rulemaking to ensure a coordinated Federal approach and to consider other Federal agency programs that are developed and initiated.

The current schedule for the rulemaking to implement Section 652 calls for issuance of a proposed rule in the Fall of 2007 and a final rule in the Fall of 2008. While the more comprehensive Section 652 rulemaking is being conducted, the combination of NRC's system of Orders to a broad range of licensees setting conditions for access to radioactive material, as well as the system of DHS's and DOT's authorities and security regulations for transport personnel, provide adequate protection of the common defense and security, as they relate to persons accompanying and receiving material. These existing systems, described more fully below, include provisions for background checks for trustworthiness and reliability and provisions for fingerprinting for the purpose of obtaining a criminal history record check from the Federal Bureau of Investigation.

NRC issued an extensive series of Orders during 2002-2005 that included background check requirements for unescorted access to radioactive material for certain facilities which it licenses. NRC has also issued Orders to reactor and materials licensees for shipment of radioactive material in quantities of concern (RAMQC). The purpose of these Orders has been to impose certain security measures to supplement existing regulations at 10 CFR Part 20, and equivalent Agreement State regulations, for securing licensed materials from unauthorized access, with the intent of providing the NRC with reasonable assurance that the common

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<sup>3</sup> TSA and USCG recently published a proposed rule in the *Federal Register* on implementing the TWIC program for the maritime sector (see 71 FR 29395; May 22, 2006).

defense and security is protected. The Orders note that conditions for unescorted access to risk-significant sources of radioactive material are governed by an appropriate need-to-know and by background checks as input to a determination concerning the trustworthiness and reliability of individuals who have access to the material. The Orders for unescorted access to radioactive material issued to date do not include fingerprinting for a criminal history record check.

Currently, NRC is preparing additional Orders to pool-type irradiator licensees, manufacturing and distribution (M&D) licensees, and licensees making shipments of RAMQC, to require fingerprinting and criminal history checks for unescorted access to the risk-significant sources of radioactive material at their facilities. These Orders would cover all individuals with unescorted access to radioactive material at these facilities; persons “receiving” material at these licensee’s facilities, pursuant to an import/export license, would be a subset of the persons covered by the Orders.

As noted above, other Federal agencies have separate statutory authority in the area of transportation security. DHS is responsible for protecting the movement of international trade across U.S. borders and maximizing the security of the international supply chain. DHS includes the Transportation Security Administration (TSA), U.S. Coast Guard (USCG), and U.S. Customs and Border Protection. Collectively, these agencies are responsible for protecting our nation’s transportation systems and supervising the entry of goods into the United States. In carrying out these responsibilities, TSA has regulations for both civil aviation security (49 CFR Parts 1540 to 1562) and maritime and land transportation security (49 CFR Parts 1570 to 1572). Sections 1544.229 and 1544.230 of Title 49 require that each aircraft flight crew member, and each person with unescorted access authority and authority to perform checked baggage or cargo functions, undergo a Federal fingerprint-based criminal history

record check. 49 CFR Part 1572.5 requires security threat assessments for individuals applying for, renewing, or transferring a commercial driver's license with a hazardous materials endorsement (radioactive material is a Class 7 hazardous material under DOT regulations). 49 CFR Part 1572.15 establishes procedures for security threat assessments. A TSA security threat assessment includes a fingerprint-based criminal history check, an intelligence-related background check, and a final disposition. Personnel involved in these functions can be disqualified if the checks indicate potential security risks. Similarly, the USCG has requirements for security at U.S. ports and background checks for maritime personnel (33 CFR Part 110 and 46 CFR Part 10). Recently, DHS announced that it would begin conducting name-based background checks on nearly 400,000 port workers in the U.S. as a initial measure as DHS expedites the comprehensive nationwide biometric-based TWIC program in 2006.

### C. Issue regulations with exceptions

As discussed in Section I of this document, Section 656(b) of the EPAct mandates that the NRC issue regulations, within one year after enactment of the EPAct, identifying radioactive materials or classes of individuals that, consistent with the protection of the public health and safety and the common defense and security, are appropriate exceptions to provisions for security background checks in Section 170I of the AEA, as amended.

Consistent with Section 656(b) of the EPAct, the Commission is proposing to amend its regulations to except, from the security background check requirements of Section 170I of the AEA, as amended, licensees who have not received NRC Orders restricting unescorted access to radioactive materials based on background checks for trustworthiness and reliability that include fingerprinting and criminal history record checks. As noted above, Orders restricting

access based on fingerprinting and criminal history record checks will be issued for pool-type irradiator licensees, M&D licensees, and licensees who make shipments of RAMQC. Under this proposed rule, those licensees who did not receive Orders for background checks that include fingerprinting would be excepted from the security background check requirements at Section 170I of the AEA .

The rationale for the exceptions is that it is consistent with the system of Orders, issued to certain licensees, that the NRC has instituted for protection of the common defense and security. The materials possessed and transferred by the licensee groups who have received Orders have been deemed, during the process of issuance of the Orders, to be appropriate for immediately requiring certain security measures for unescorted access based on potential higher risk resulting from malevolent use of those materials. Those licensees excepted by this proposed amendment possess materials and use them in a manner that generally presents a lesser hazard for causing harm to the public health and safety and common defense and security, even if used for malevolent purposes. Generally, the basis for inclusion of materials within the system of Orders has been use of International Atomic Energy Agency (IAEA) Code of Conduct Category threshold quantity amounts which take account of the IAEA's categorization of sources found in IAEA Safety Guide No. RS-G-1.9, "Categorization of Radioactive Sources" (2005). The safety guide provides a risk-based ranking of radioactive sources in five categories in terms of their potential to cause severe deterministic effects for a range of scenarios that include both external exposure from an unshielded source and internal exposure following dispersal. Most licensees excepted under this proposed amendment are not expected to import or export radioactive material containing radionuclides in the higher risk categories of the IAEA Safety Guide 1.9.

Using the framework of the existing system of Orders to codify exceptions allows for a consistent approach for radioactive materials which NRC considers appropriate, at this time, for exception from the requirements of Section 170I of the AEA as amended by the EAct. As discussed in Section II.B of this document, the NRC intends to address background checks and fingerprinting for criminal history record checks for licensees in a more comprehensive manner under the rulemaking to implement Section 652 of the EAct. One of the elements of that rulemaking, as mandated by Section 652(B)(i)(II), will be determining requirements for access to quantities of radioactive material, subject to regulation by the Commission, that the Commission determines to be of such significance to the public health and safety or to the common defense and security as to warrant fingerprinting and background checks. Thus, the proposed requirements for exceptions in this Section 656 rulemaking will be revisited and may be superseded by the more comprehensive Section 652 rulemaking. At this time, in this Section 656 rulemaking, NRC is making a risk-informed decision to except licensees other than those with risk-significant sources (i.e., pool-type irradiators, M&D, and those making shipments of RAMQC, who received Orders) from the security background check requirements of Section 170I. In the more comprehensive Section 652 rulemaking, NRC will consider whether the exceptions for security background checks should be modified.

Under this proposed amendment, licensees not excepted can use the provisions of their existing Orders (or new or amended Orders) to comply with Section 170I. As noted above, the Commission believes that this system of NRC Orders and the system of transport security of other Federal agencies provide adequate protection of the common defense and security while NRC is conducting the Section 652 rulemaking.

Also, under the proposed amendment, if additional Orders for fingerprinting and criminal history checks for unescorted access to radioactive material are issued to licensees other than

those noted above (i.e., pool-type irradiators, M&Ds, and those making shipments of RAMQC), licensees who receive any such new Orders would no longer be excepted from the security background check requirements of Section 170I.

### **III. Effective Date of Implementation of Rule**

Section 656(c) of the EAct provides that amendments to the AEA take effect upon issuance of regulations by the Commission under Section 656(b) of the EAct. Consistent with this provision, the requirements for exceptions proposed in this amendment would become effective on the date of issuance of a final rule.

Section 656(c) of the EAct also provides that the security background check requirement is to become effective "...on a date established by the Commission." As discussed above, the Commission is using its system of Orders to impose the security background check requirements. The Orders specify dates by which licensees must take specific actions. In addition, the Commission will issue more comprehensive security background check requirements in the future rulemaking to implement Section 652 and will establish an effective date for those requirements.

With regard to manifest requirements, the Commission notes, as discussed above, that current NRC and DOT regulations require shipments of radioactive material to be accompanied by shipping papers (i.e., a manifest).

### **IV. Section by Section Analysis of Substantive Changes**

A new Section 73.28 would be added to note that licensees are excepted from the

security background check provisions of Section 170I of the AEA, as amended by the EPA Act, if they have not received Orders from the NRC containing requirements for background checks for trustworthiness and reliability that include fingerprinting and criminal history checks as a prerequisite for unescorted access to radioactive materials. Licensees subject to Orders would not be excepted from the security background check provisions, and would use the requirements in their existing Orders to comply with Section 170I.

## **V. Voluntary Consensus Standards**

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104-113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this proposed rule, NRC would indicate specific exceptions to the requirements of Section 656 of the EPA Act. This action does not constitute the establishment of a standard that establishes generally applicable requirements.

## **VI. Agreement State Compatibility**

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs,” which became effective on September 3, 1997 (62 FR 46517), NRC program elements (including regulations) are placed into four compatibility categories (Compatibility Category A through D). In addition, NRC program elements also can be identified as having particular health and safety significance or as being reserved solely to NRC.

The proposed amendment to Part 73 would be a program element designated “NRC” based on implementation of the procedure in NRC’s Management Directive 5.9, “Adequacy and Compatibility of Agreement States.” The requirements in this proposed amendment are limited to providing exceptions to requirements in Section 170I of the AEA, as amended by the EPA Act, and are based on a system of Orders that were developed under NRC’s authority to protect the common defense and security which are areas of exclusive NRC regulatory authority and cannot be relinquished to the Agreement States. Therefore, the requirements of this proposed amendment should not be adopted by the Agreement States.

## **VII. Plain Language**

The Presidential memorandum entitled "Plain Language in Government Writing" (63 FR 31883; June 10, 1998), directed that the Government's writing be in plain language. NRC requests comments on the proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent using one of the methods detailed under the “ADDRESSES” heading of the preamble to this proposed rule.

## **VIII. Environmental Impact: Categorical Exclusion**

NRC has determined that this proposed rule is the type of action described in 10 CFR Part 51.22(c)(3)(ii) as a categorical exclusion. Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed rule.

## **IX. Paperwork Reduction Act Statement**

This proposed rule does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq). Existing requirements were approved by the Office of Management and Budget, approval number 3150-0002.

### **Public Protection Notification**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

## **X. Regulatory Analysis**

A regulatory analysis has not been prepared for this regulation because it relieves restrictions and does not impose any additional burdens on licensees.

## **XI. Regulatory Flexibility Certification**

A regulatory flexibility Act analysis is not required because the proposed amendment does not impose any additional burdens on licensees.

## **XII. Backfit Analysis**

NRC has determined that the backfit rule (§§ 50.109, 70.76, 72.62, or 76.76) does not apply to this proposed rule because this amendment would not involve any provisions that would impose backfits as defined in the backfit rule. Therefore, a backfit analysis is not required.

### List of Subjects in 10 CFR Part 73

Criminal penalties, Export, Hazardous materials transportation, Import, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements, Security measures.

For the reasons set out in the preamble and under the authority of the AEA, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553; NRC is proposing to adopt the following amendment to 10 CFR Part 73.

### PART 73 - PHYSICAL PROTECTION OF PLANTS AND MATERIALS

1. The authority citation for Part 73 continues to read as follows:

AUTHORITY: Secs. 53, 161, 68 Stat. 930, 948, as amended, sec. 147, 94 Stat. 780 (42 U.S.C. 2073, 2167, 2201); sec. 201, as amended, 204, 88 Stat. 1242, as amended, 1245, sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 5841, 5844,

