

NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

RIN: 3150-A164
[NRC-2009-0163]

Physical Protection of Irradiated Reactor Fuel in Transit

AGENCY: Nuclear Regulatory Commission.

ACTION: The proposed rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its security regulations pertaining to the transport of irradiated reactor fuel (for purposes of this rulemaking, the terms “irradiated reactor fuel” and “spent nuclear fuel” are used interchangeably). This proposed rulemaking would establish generically applicable security requirements similar to those previously imposed by Commission orders issued after the terrorist attacks of September 11, 2001. The proposed rulemaking would establish the acceptable performance standards and objectives for the protection of spent nuclear fuel shipments from theft, diversion, or radiological sabotage. The proposed amendments would apply to those licensees authorized to possess or transport spent nuclear fuel. The proposed security requirements would also address, in part, a petition for rulemaking from the State of Nevada (PRM-73-10) that requests that the NRC strengthen the regulations governing the security of spent nuclear fuel shipments against malevolent acts.

DATES: The comment period expires (**insert 75 days from date of publication**). Submit comments specific to the information collection aspects of this rule by (**insert 30 days from date of publication**). Comments received after this date will be considered if practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any one of the following methods. Please include the Document ID: NRC-2009-0163 in the subject line of your comments. Comments on rulemakings submitted in writing or electronic form will be posted on the NRC website and on the Federal rulemaking website, regulations.gov. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed.

The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform those persons that the NRC will not edit their comments to remove any identifying or contact information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

Federal Rulemaking Website: Go to <http://www.regulations.gov> and search for documents filed under Docket ID: NRC-2009-0163. Address questions about NRC dockets to Carol Gallagher 301-415-5905; e-mail Carol.Gallagher@nrc.gov.

Mail comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff. **E-mail comments to:** Rulemaking.Comments@nrc.gov. If you do not receive a reply e-mail confirming that we have received your comments, contact us directly at (301) 415-1677.

Hand deliver comments to: 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 am and 4:15 pm during Federal workdays. (Telephone 301-415-1677)

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

You may submit comments on the information collections by the methods indicated in the Paperwork Reduction Act Statement.

You can access publicly available documents related to this document using the following methods: **NRC's Public Document Room (PDR):** The public may examine and have copied for a fee publicly available documents at the NRC's PDR, Public File Area Room O F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland.

NRC's Agencywide Document Access and Management System (ADAMS):

Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into 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 NRC's PDR reference staff at 1-800-397-4209, or 301-415-4737, or by e-mail to PDR.Resource@nrc.gov.

Federal Rulemaking Website: Public comments and supporting materials related to this proposed rule can be found at <http://www.regulations.gov> by searching on Docket ID: **NRC-2009-0163.**

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I. Background

A. Pre-September 11, 2001

On June 15, 1979, the NRC published in the *Federal Register* (44 FR 34466) an interim final rule that established its first requirements for the physical protection of spent nuclear fuel in transit. The interim final rule added 10 CFR 73.37, "Requirements for Physical Protection of Irradiated Reactor Fuel in Transit" to 10 CFR Part 73. After considering public comments, the Commission affirmed the interim final rule on June 3, 1980 (45 FR 37399).

The current 10 CFR 73.37 has changed little since its promulgation in 1980. These regulations require licensees to establish a physical protection system for spent nuclear fuel shipments that meets the following objectives: (1) minimize the possibilities for radiological sabotage of spent nuclear fuel shipments, especially within heavily populated areas, and (2) facilitate the location and recovery of spent nuclear fuel shipments that may have come under the control of unauthorized persons. The regulation also provides for: (1) the early detection and assessment of attempts to gain unauthorized access to or control over spent nuclear fuel shipments, (2) the notification to the appropriate response forces of any sabotage events, and (3) the impeding of attempts at radiological sabotage of spent nuclear fuel shipments in heavily populated areas or attempts to illicitly move such shipments into heavily populated areas.

Other Commission regulations support the protection of spent nuclear fuel in transit. The regulations in 10 CFR 73.72, "Requirement for Advance Notice of Shipment of Formula Quantities of Strategic Special Nuclear Material, Special Nuclear Material of Moderate Strategic

Significance, or Irradiated Reactor Fuel” require licensees to notify the NRC in advance about shipments of spent nuclear fuel. The regulations in 10 CFR Part 71, “Packaging and Transportation of Radioactive Material,” establish requirements for packages used to transport spent nuclear fuel.

This proposed rulemaking would consider and address, in part, a petition for rulemaking submitted by the State of Nevada. By a letter dated June 22, 1999, the State of Nevada submitted a petition for rulemaking requesting that the NRC strengthen its regulations governing the security of spent nuclear fuel shipments against malevolent acts. The NRC docketed the petition on July 13, 1999, as Docket No. PRM-73-10 (PRM-73-10). The NRC published a notice of receipt of petition and a request for public comment on September 13, 1999 (64 FR 49410). The Commission review of this petition was tabled following the terrorist attacks of September 11, 2001. This proposed rulemaking would consider and address certain requests for NRC rulemaking made in PRM-73-10.

B. Post-September 11, 2001

Although the current 10 CFR 73.37 has changed little since its promulgation in 1980, there have been significant changes in the threat environment. The terrorist attacks of September 11, 2001, heightened concerns about the use of risk-significant radioactive materials in a malevolent act. After the terrorist attacks of September 11, 2001, the NRC issued a series of security-related orders to specific licensees. In the area of spent nuclear fuel transit security, the orders were issued to licensees who ship or receive, or were planning to ship or receive, spent nuclear fuel. The orders were issued as immediately effective under NRC’s authority to protect the common defense and security under the Atomic Energy Act of 1954, as amended (AEA). The requirements put in place by the orders supplement the existing

regulatory requirements. These additional security requirements are primarily intended to ensure that spent nuclear fuel is shipped in a manner that protects the common defense and security and the public health and safety.

II. Discussion

A. What Action is the NRC Taking?

The NRC is proposing amendments to its regulations to enhance the security requirements that apply to the transportation of spent nuclear fuel. This proposed rulemaking would establish generically applicable security requirements similar to those previously imposed by Commission orders issued after the terrorist attacks of September 11, 2001. The proposed rulemaking would also add several new requirements not derived directly from the security order requirements, but developed as a result of insights gained by performing security assessments of potential security vulnerabilities associated with spent nuclear fuel in transit. Also, the proposed rulemaking would address, in part, the requests for NRC rulemaking raised by PRM-73-10.

The proposed requirements would establish acceptable performance objectives for the protection of spent nuclear fuel in transit from sabotage, theft, or diversion for malevolent use. These requirements would ensure that spent nuclear fuel is shipped in a manner that protects the common defense and security and public health and safety.

B. Why Revise the Requirements?

After the attacks of September 11, 2001, the NRC re-evaluated its security requirements for spent nuclear fuel in transit. From this effort, additional measures were identified that would

improve security. The additional security measures deemed immediately necessary were issued as orders and supplemented existing regulations. The orders are not publically available because they contain detailed security requirements that are designated as Safeguards Information (SGI). The proposed revisions are based on the NRC efforts undertaken since the events of September 11, 2001, including issuance of additional security requirements by orders, insights gained from implementation of the orders, insights gained by performing security assessments of potential security vulnerabilities associated with spent nuclear fuel transportation, and to reflect portions of the State of Nevada's Petition for Rulemaking (PRM-73-10).

C. What is Requested by the State of Nevada in its Petition for Rulemaking (PRM-73-10)?

By a letter dated June 22, 1999, the State of Nevada submitted a rulemaking petition (docketed as PRM-73-10) requesting that the NRC initiate rulemaking to strengthen its regulations for the physical protection of spent nuclear fuel shipments against radiological sabotage and terrorist acts. The NRC published a notice of receipt of petition and a request for public comment on September 13, 1999 (64 FR 49410). The Commission review of this petition was tabled following the terrorist attacks of September 11, 2001.

In PRM-73-10, Nevada requested that the NRC: (1) clarify the meaning of the term "hand-carried equipment" in 10 CFR 73.1(a)(1)(i)(D); (2) clarify the definition of the term "radiological sabotage" in 10 CFR 73.2 to include actions against spent nuclear fuel shipments which are intended to cause a loss of shielding, release of radioactive materials or cause economic damage or social disruption, regardless of the success or failure of the action; (3) amend the advance route approval requirements in 10 CFR 73.37(b)(7) to require shippers and carriers of spent nuclear fuel to identify primary and alternative routes which avoid heavily

populated areas; (4) require armed escorts along the entire road shipment route by eliminating the differential based on population in 10 CFR 73.37(c); (5) require armed escorts along the entire rail shipment route by eliminating the differential based on population in 10 CFR 73.37(d); (6) amend 10 CFR 73.37(b) by adopting additional planning and scheduling requirements for spent nuclear fuel shipments that are the same as those required for formula quantities of special nuclear material by 10 CFR 73.26(b); (7) amend 10 CFR 73.37(d) to require that rail shipments of spent nuclear fuel be made in dedicated trains; and (8) conduct a comprehensive assessment of the consequences of terrorist attacks that have the capability of radiological sabotage.

In this proposed rulemaking, the NRC will consider the above items raised in PRM-73-10, except for the first and eighth items, namely, clarification of the meaning of the term “hand-carried equipment” and the conducting of a comprehensive assessment of the consequences of terrorist attacks that have the capability of radiological sabotage. The first and eighth items of PRM-73-10 will be addressed in a separate NRC notice. The remaining items are addressed below:

PRM-73-10, Item 2: Clarify the definition of the term “radiological sabotage” in 10 CFR 73.2, “Definitions,” and amend it to expressly include “deliberate actions which cause, or are intended to cause economic damage or social disruption regardless of the extent to which public health and safety are actually endangered by exposure to radiation.”

The staff considers that the existing definition already encompasses actions of the type described by the Petitioner. However, the NRC agrees that clarification may be useful. The NRC is addressing this petition item by clarifying the definition of radiological sabotage in the supporting guidance document associated with the proposed rule.

PRM-73-10, Item 3: Amend the advance route approval requirements in 10 CFR

73.37(b)(7) to “specifically require shippers and carriers to identify primary and alternative routes which minimize highway and rail shipments through heavily populated areas.” Also, as part of this request, PRM-73-10 stated that NRC should consider adopting the route selection criteria in NUREG-0561, *Requirements for Physical Protection of Irradiated Reactor Fuel in Transit*, as part of the regulations, and specifically require shippers and carriers to minimize use of routes which fail to comply with the route selection criteria.

Licensees must implement U.S. Department of Transportation (DOT) routing requirements when shipping spent nuclear fuel. The staff considered incorporating the route selection criteria in NUREG-0561, but determined that implementing such criteria may cause conflicts with DOT requirements and recommendations. Instead, the NRC is addressing the goal of minimizing spent nuclear fuel shipments through heavily populated areas in the proposed rulemaking. The proposed revisions to 10 CFR 73.37 would require licensees to preplan and coordinate their shipments with the affected States. This issue is discussed below under “Why Require Shipment Preplanning and Coordination with States?” Combining the NRC proposed requirements, which includes State involvement in licensees’ planning activities, with the requirements of DOT is expected to minimize movement of spent nuclear fuel through heavily populated areas.

PRM-73-10, Items 4 and 5: The current regulations, 10 CFR 73.37(c) and (d), for road and rail shipments, respectively, require armed escorts in heavily populated areas, but not in other areas along the route. PRM-73-10 requested that the NRC eliminate these differential armed escort requirements based upon population for both road and rail spent nuclear fuel shipments.

The proposed sections 73.37(c) and (d) reflect these PRM-73-10 requests. The differentiation of security requirements based upon population causes potential areas of

vulnerability along the shipment route for theft, diversion, or radiological sabotage. The proposed rule would require that the same security requirements for heavily populated areas apply along the entire route for road and rail shipments, and at any U.S. ports where vessels carrying spent fuel shipments are scheduled to stop.

PRM-73-10, Item 6: Amend 10 CFR 73.37(b) by adopting additional planning and scheduling requirements for spent nuclear fuel shipments that are the same as those required for formula quantities of special nuclear material by 10 CFR 73.26(b). The regulations in 10 CFR 73.26(b) require that shipments be scheduled to avoid delays and stops, and to ensure timely delivery of the shipment.

The NRC agrees that improvements are needed in the planning and coordination of shipments and has addressed this concern in the proposed amendment. This issue is discussed below under “Why Require Shipment Preplanning and Coordination with States?”

PRM-73-10, Item 7: Amend 10 CFR 73.37(d) to require that all spent nuclear fuel rail shipments to be made in dedicated trains.

The same NRC security requirements would apply to a spent nuclear fuel rail shipment, regardless of whether the shipment was made using a dedicated train or a mixed-use train. In either case, the licensee making the shipment would be required to ensure that the security protection measures (both hardware and personnel) required by the NRC’s regulations would be present to provide the requisite high assurance of protection of public health and safety and the common defense and security during the entire duration of the shipment. The NRC considers the same level of security will be obtained regardless of whether the shipment is made in a dedicated train or mixed-use train. Thus, this item is not addressed as a part of the proposed rulemaking.

The NRC invites comments on its proposed disposition of items 2 through 7 of PRM-73-

10 as part of its consideration of this proposed rule. Comments should be sent to the address listed under the “ADDRESSES” heading of this document. The PRM-73-10 is available at ADAMS Accession Number: ML092540603 and the NRC’s September 13, 1999, notice of receipt of petition and request for public comments (64 FR 49410) is available on the *Federal Register’s* website, <http://www.gpoaccess.gov/fr/index.html>.

D. Why Require Procedures and Training for the Security of Spent Nuclear Fuel In Transit?

The proposed §§ 73.37(b)(3)(v) and (b)(4) would expressly require that licensees shipping spent nuclear fuel develop normal and contingency procedures. These procedures would cover notifications; communication protocols; loss of communication; and responses to actual, attempted, or suspicious activities. The proposed revisions would also require drivers, accompanying personnel, railroad personnel, and other movement control personnel to be adequately trained in normal and contingency procedures. These proposed requirements would ensure that all personnel associated with the shipment are prepared to prevent the theft, diversion, or radiological sabotage of spent nuclear fuel shipments. The proposed revisions would address, in part, PRM-73-10 items (3) and (6).

E. Why Require A Telemetric Position Monitoring System or an Alternative Tracking System for Continuous Monitoring of Spent Nuclear Fuel Shipments?

The current rule, at 10 CFR 73.37(b)(4), requires that the licensee’s physical protection plan include a communications center, which will be staffed continuously by at least one individual who will monitor the progress of the spent fuel shipment. The proposed rule would reflect the availability of new technology and as such, the ability to have more active control over the shipment by the licensee. The proposed § 73.37(b)(3) would replace the term

“communications center” with the term “movement control center.” The proposed § 73.37(b)(3)(ii) would also require that the movement control center be staffed continuously by at least one individual, who will actively monitor the progress of the spent nuclear fuel shipment and who has the authority to direct the physical protection activities. The proposed § 73.37(b)(3)(iii) would specify that the movement control center must monitor the shipment continuously, i.e., from the time of delivery of the shipment to the carrier for transport until safe delivery of the shipment at its final destination, and must immediately notify the appropriate agencies in the event of a safeguards event in accordance with the provisions of 10 CFR 73.71.

In addition, the proposed §§ 73.37(c)(5) and (d)(4), for road and rail shipments respectively, would require movement control centers to use a telemetric position monitoring system or an alternative tracking system to monitor the location and status of shipments at all times, which would provide a real time indication of any potential threats. A telemetric position monitoring system is a data transfer system that captures information by instrumentation and/or measuring devices about the location and status of a transport vehicle or package between the departure and destination locations. The gathering of this information permits remote monitoring and reporting of the location of a transport vehicle or package. Global positioning systems (GPS) and radiofrequency identification (RFID) are examples of telemetric position monitoring systems. Since the movement control center is required to respond to any actual, attempted, or suspicious activities, the proposed requirements would mitigate the likelihood of theft, diversion, or radiological sabotage of spent nuclear fuel shipments.

F. Why Preplan and Coordinate Spent Nuclear Fuel Shipments?

The current regulations require limited shipment preplanning and coordination with the NRC, States, and local law enforcement agencies (LLEAs). For example, the current

regulations in § 73.37(f) require an advance notification to the Governor (or designee) by mail to be postmarked at least 7 days before transport of a shipment within or through the State; and require a messenger-delivered notification to reach the Office of the Governor (or designee) at least 4 days before transport of a shipment within or through the State. There have been some instances in which States have indicated that the current notification requirements are insufficient to adequately plan for a spent nuclear fuel shipment. In addition, the current 10 CFR 73.37(b)(7) regulation requires licensees to obtain advance NRC approval of the routes used for road and rail shipments of spent nuclear fuel, but does not require prior State coordination of the route. The proposed amendments would ensure that the affected States have early and substantial involvement in the management of spent nuclear fuel shipments by participating in the initial stages of the planning, coordination, and implementation of the shipment.

The proposed § 73.37(b)(1)(iv) would require licensees to preplan and coordinate spent nuclear fuel shipment information with the Governors of the States which the shipment will transit across in order to: (a) ensure minimal shipment delays, (b) arrange for State law enforcement escorts, (c) coordinate movement control information, as needed, (d) coordinate safe haven locations, and (e) coordinate the shipping route. The proposed requirements would ensure that no unusual event associated with the shipment goes unnoticed or unreported. These proposed revisions mitigate the risk of theft, diversion, or radiological sabotage of a spent nuclear fuel shipment. These proposed revisions would address, in part, PRM-73-10 items 3 and 6.

G. Why Require Constant Visual Surveillance by Armed Escort?

Existing requirement 73.37(b)(9) requires constant visual surveillance by an escort when

a shipment is stopped. The existing requirement does not specify whether the escort should be armed. The proposed § 73.37(b)(3)(vii)(C) would ensure that when a shipment is stationary, at least one armed escort maintains constant visual surveillance. Constant surveillance by an armed escort while a shipment is stopped provides assurance that attempts by an adversary to either perform radiological sabotage in place, or to gain control of the transport to move it to another location are impeded or stopped. The requirements of proposed § 73.37(b)(3)(vii)(C) would address parked or stopped road shipments, rail shipment stops in marshaling areas, and docked sea shipments. It would also require periodic reports of shipment status to the movement control center by the armed escort. The proposed § 73.37(b)(3)(vii)(C) would provide reasonable assurance that spent nuclear fuel shipments are protected from theft, diversion, or radiological sabotage when stopped.

H. Why Require Two-way Redundant Communication Capabilities?

The regulations in current 10 CFR 73.37(c), 10 CFR 73.37(d), and 10 CFR 73.37(e) provide for redundant communication; however, the requirements are specific, i.e., use of citizens band radio and radiotelephone. In view of the continued advancements in technology, these methods of communication could become obsolete in the near future. Instead of specifying an acceptable communications technology, the proposed revisions describe the performance characteristics of the communications capabilities.

The proposed §§ 73.37(c)(3), (d)(3) and (e)(3) would require the establishment of two-way communication capabilities for the transport and escorts to contact the movement control center and LLEAs at all times. The revisions would also require the establishment of alternate capabilities for the transport and escorts to contact the movement control center. The alternate communications cannot be subject to the same interference factors. The same interference

factors are defined as any two systems that rely on the same hardware or software to transmit their signal (e.g., cell tower, proprietary network). These requirements would provide the capability for continued communication between movement control personnel, which would ensure the prompt reporting of any incident that could lead to theft, diversion, or radiological sabotage.

I. Why Require Background Investigations?

1. *What is the Objective of the Background investigations requirements for those with unescorted access to spent nuclear fuel in transit?*

The proposed rule would add a new § 73.38 that would require that licensees conduct background investigations of those individuals being considered for unescorted access authorization. The main objective of the background investigations is to ensure that those individuals who have unescorted access to spent nuclear fuel in transit, including but not limited to armed escorts and drivers, are trustworthy and reliable and do not constitute an unreasonable risk to the public health and safety or common defense and security. These background investigations are similar to those already in place for unescorted access to a commercial power reactor.

2. *What is the basis for the fingerprinting requirements in the proposed rule?*

Section 149 of AEA requires that any person who is permitted unescorted access to radioactive materials subject to regulation by the Commission be fingerprinted for FBI identification and criminal history records check. However, Section 149 also requires that the Commission make a determination that such radioactive material is of such significance to the public health and safety or the common defense and security as to warrant fingerprinting and background checks before the Commission can exercise the authority provided by Section 149.

Pursuant to Section 149, the Commission has determined that the transportation of irradiated fuel (spent nuclear fuel) is of such significance to the public health and safety or the common defense and security as to warrant fingerprinting and background checks for those individuals who have such access to the materials in transit. Persons who have “unescorted access” to this material for purposes of Section 149, are persons accompanying the shipment of spent nuclear fuel during transit who have direct access and maintain control over the spent nuclear fuel. These persons may include, but are not limited to, the driver and armed escorts.

Therefore, in accordance with the authority granted by Section 149, this rulemaking would impose a requirement for fingerprinting as a prerequisite to granting unescorted access to spent nuclear fuel in transit. The criminal history records check obtained as a result of that fingerprinting would be used by licensees as part of the overall background investigation to determine the trustworthiness and reliability of these individuals prior to permitting unescorted access.

3. What are the Components of a Background Investigation?

The proposed § 73.38(a) lists the requirements for a background investigation, including: fingerprinting for an FBI identification and criminal history records check; verification of true identity; employment history evaluation; verification of education and military history; credit history evaluation; local criminal history review; and character and reputation determination.

Under the proposed § 73.38(b), it is the licensee’s responsibility to make a trustworthiness and reliability determination of an individual who has unescorted access to a spent nuclear fuel shipment. It is expected that licensees will use their best efforts to obtain the information required to conduct a background investigation to determine the individuals’ trustworthiness and reliability.

The full credit history evaluation requirement, in proposed § 73.38(a)(6), reflects the Commission's intent that all financial information available through credit reporting agencies is to be obtained and evaluated because it has the potential to provide highly pertinent information. The Commission recognizes that some countries may not have routinely accepted credit reporting mechanisms, and therefore, the Commission allows multiple sources of credit history that could potentially provide information about a foreign national's financial record and responsibility.

Fingerprinting an individual for a FBI criminal history records check, as would be required by the proposed § 73.38(a)(1), is an important element of the background investigation for determining the trustworthiness and reliability of an individual. It can provide comprehensive information regarding an individual's recorded criminal activities within the U.S. and its territories and the individual's known affiliations with violent gangs or terrorist organizations. In addition, the local criminal history review, which would be required by the proposed § 73.38(a)(7), provides the licensee with a record of local criminal activity that may adversely impact an individual's trustworthiness and reliability.

It is noted that the proposed § 73.38(a)(10) would require licensees to document any refusals by outside entities to provide information on an individual. If local law enforcement, a previous employer or an educational institution or any other entity with which the individual claims to have been engaged, fails to provide information or indicates an inability or unwillingness to provide information in a timely manner, the licensee would be required to document the refusal, unwillingness, or inability to respond in the record of investigation. The licensee would then need to obtain confirmation from at least one alternate source that has not been previously used. An alternate source could be another person associated with the entity or institution. For example, if the human resources department of a company will not verify the

employment history of the individual, an alternate source could be the individual's supervisor during the claimed period. The proposed § 73.38(a)(10) is patterned after the requirements of 10 CFR 73.56(d)(4)(iv)(B).

4. What Information Should the Licensee Use to Determine that an Individual is Trustworthy and Reliable?

The licensee would use all of the information gathered during the background investigation, including the information received from the FBI, in making a determination that an individual is trustworthy and reliable. The licensee may not determine that an individual is trustworthy and reliable and grant them unescorted access to spent nuclear fuel in transit until all of the information for the background investigation has been obtained and evaluated. The licensee may deny an individual unescorted access based on any information obtained at any time during the background investigation. The proposed § 73.38(b) includes a provision for licensees to document their determinations of trustworthiness and reliability.

5. How Frequently Would a Reinvestigation Be Required?

The proposed rule would include a provision, § 73.38(e), that would require a reinvestigation every 10 years to help maintain the integrity of the program. This reinvestigation requirement is necessary because an individual's financial situation or criminal history may change over time in a manner that can adversely affect his or her trustworthiness and reliability. The reinvestigation would include fingerprinting, FBI identification and criminal history records check, local criminal history review and credit history check. The reinvestigation would not include employment verification, education verification, military history verification, or the character and reputation determination for the reinvestigation.

6. Are Licensees Required to Protect Information Obtained During a Background Investigation?

Yes. The proposed §§ 73.38(c)(1)-(2) would require licensees to protect the information obtained during a background investigation. Licensees would only be permitted to disclose the information to the subject individual, the individual's representative, those who have a need-to-know to perform their assigned duties to grant or deny unescorted access, or an authorized representative of the NRC. This proposed revision is consistent with the requirements of 10 CFR 73.57(f).

7. Could a Licensee Transfer Personal Information Obtained During an Investigation to Another Licensee?

Yes. The proposed § 73.38(c)(3) includes a provision that a licensee would be able to transfer background information on an individual to another licensee if the individual makes a written request to the licensee to transfer the information contained in his or her file.

8. What Records Are Required to be Maintained?

The proposed § 73.38(c)(5) would require licensees to retain all fingerprint and criminal history records received from the FBI, or a copy if the individual's file has been transferred, for 5 years after the individual no longer requires unescorted access to spent nuclear fuel in transit.

J. Why Enhance Shipment Notifications to the NRC?

The current regulations in 10 CFR 73.72(a)(4) requires an NRC notification, by phone, at least 2 days before the shipment commences. The proposed rule would revise § 73.72(a)(4) to require 2 additional notifications of the NRC, one to be made 2 hours before the shipment commences, and the other to be made when the shipment reaches its final destination. These additional notifications allow the NRC to monitor spent nuclear fuel shipments, and to maximize its readiness in case of a safeguards event. The notification of shipment completion allows the NRC to resume normal operations.

To further enhance notification of the NRC, the proposed revision would remove the 10 CFR 73.72(b) exemption for shipments of spent nuclear fuel that are transported on public roads. Currently, the requirements of 10 CFR 73.72(b) exempt licensees who make a road shipment or transfer with one-way transit times of one hour or less between installations of the licensee from providing advance notification of the shipment to the NRC. The proposed revision would require that NRC be informed of any spent nuclear fuel shipment on a public road so that NRC is able to monitor spent nuclear fuel shipments and to maximize its readiness in case of a safeguards event. These proposed revisions mitigate the risk of theft, diversion, or radiological sabotage of a shipment.

K. Who Would This Action Affect?

The proposed amendments affect all NRC licensees that are authorized to possess and transport spent nuclear fuel. This includes, but is not limited to, licensees of commercial power reactors, research and test reactors, and independent spent fuel storage installations, who transport, or deliver to a carrier for transport, in a single shipment, a quantity of irradiated reactor fuel in excess of 100 grams (0.22 lbs) in net weight of irradiated fuel, exclusive of cladding or other structural or packaging material, which has a total external radiation dose rate in excess of 1 Sv (100 rems) per hour at a distance of .91 meters (3 feet) from any accessible surface without intervening shielding.

L. Does the NRC Plan To Issue Guidance on These The Proposed Requirements?

In conjunction with this the proposed rulemaking, the NRC is revising NUREG-0561, "Requirements for Physical Protection of Irradiated Reactor Fuel in Transit," which was published in June 1980, to address the new requirements in the proposed rule. NUREG-0561

provides general guidance to licensees concerning the establishment of an acceptable security program for spent nuclear fuel shipments.

M. What Should I Consider as I Prepare My Comments to NRC?

Tips for preparing your comments: When submitting your comments, remember to:

- i. Identify the rulemaking (Docket ID: NRC-2009-0163).
- ii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- iii. Describe any assumptions and provide any technical information and/or data that you used.
- iv. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- v. Provide specific examples to illustrate your concerns, and suggest alternatives.
- vi. Explain your views as clearly as possible.
- vii. Make sure to submit your comments by the comment period deadline.
- viii. See Section VI of the preamble for the request for comments on the use of plain language and Section XI for the request for comments on the draft regulatory analysis.

III. Discussion of the Proposed Amendments by Section

A. The Proposed §73.37(a)(1)

The proposed rule would revise § 73.37(a)(1) to include the International System of Measurement (SI) accompanied by the equivalent English units in parentheses for the weight and dose rate measurements. This is in accordance with the NRC's metrication policy (57 FR 46202, October 7, 1992), and the Metric Conversion Act of 1975, 15 U.S.C. §§ 205a

et seq. The proposed rule would also add a footnote to clarify that the term “irradiated reactor fuel,” as used in 10 CFR 73.37, means “spent nuclear fuel.”

B. The Proposed § 73.37(a)(1)(i)

The language in the current regulation solely addresses potential radiological sabotage of spent nuclear fuel shipments. The proposed rule would revise § 73.37(a)(1)(i) to clarify that any attempted theft or diversion of spent nuclear fuel shipments is also covered by this regulation.

The proposed rule would also revise §§ 73.37(a)(1)(i) and (a)(2)(iii) to remove the distinction between heavily populated areas and other areas through or across which a spent nuclear fuel shipment may pass. The differentiation of security requirements based upon population densities creates potential vulnerabilities in the physical security of the shipment. The proposed requirement of armed escorts throughout the shipment route minimizes the risk of theft, diversion, or radiological sabotage. The proposed revisions would also address items 4 and 5 of the PRM-73-10.

C. The Proposed § 73.37(a)(2)

The proposed rule would revise § 73.37(a)(2) to insert “system” after the word phrase “physical protection” to read as “physical protection system.” This change provides consistency in the terminology used throughout 10 CFR Part 73.

The proposed revision would renumber the paragraphs in § 73.37(a)(2). The current § 73.37(a)(2)(ii) would become the proposed § 73.37(a)(2)(iii), and the current § 73.37(a)(2)(iii) would become the proposed § 73.37(a)(2)(ii). The proposed rule would revise the current § 73.37(a)(2)(iii) to clarify that the licensee should delay, as well as impede, any attempted

theft, diversion, or radiological sabotage of spent nuclear fuel shipments.

D. The Proposed § 73.37(b)

This overall section is revised to provide a logical, step-by-step approach to the development of a physical protection system for spent nuclear fuel shipments that is more user-friendly.

E. The Proposed § 73.37(b)(1)

The proposed rule would add a new section entitled, “*Preplan and Coordinate Spent Nuclear Fuel Shipments*,” which is explained in further detail below. The proposed rule would move and incorporate the current § 73.37(b)(1) into a new § 73.37(b)(2).

The proposed rule would add a new § 73.37(b)(1)(i) which requires that licensees instruct armed escorts on the use of deadly force. The existing provisions of 10 CFR 73.37 provide performance objectives to be achieved by the physical protection system for spent nuclear fuel shipments. These performance objectives are not specific about the degree of force an armed escort may use in protecting shipments.

Specifically, the licensee is to ensure that each non-LLEA armed escort delay or impede attempted acts of theft, diversion, or radiological sabotage by using force sufficient to counter the force directed at that person, including the use of deadly force when there is a reasonable belief that the use of deadly force is necessary in self-defense or in the defense of others, or any other circumstances as authorized by applicable Federal or State law. The requirements for use of deadly force are established under applicable Federal and State laws (i.e., the States through which the shipment is passing through). It should be noted that the proposed revision is not authorizing the use of deadly force, but instead is ensuring that the armed guards are

knowledgeable of the Federal and State statutes that apply regarding the use of deadly force. The statutes regarding the use of deadly force may vary depending on what jurisdiction the shipment is located. Armed escorts are expected to carry out their assigned duties, including implementation of contingency procedures in case of attack, in a manner consistent with the legal requirements applicable to other private armed guards in a particular jurisdiction. The LLEA personnel escorts are exempt from this requirement since they are subject to, and should have received training on, State and Federal restrictions regarding the use of deadly force.

The proposed rule would add new §§ 73.37(b)(1)(ii) and 73.37(b)(1)(iii), which are accounting and control measures that ensure only authorized individuals receive the shipment. The proposed requirements would reduce the risk of theft, diversion, or radiological sabotage of the spent nuclear fuel.

The proposed rule would re-designate 10 CFR 73.37(b)(8) as § 73.37(b)(1)(iv) and revise it to include requirements for licensees to preplan and coordinate spent nuclear fuel shipments with States. The preplanning and coordination would include efforts to minimize intermediate stops and delays, arranging for State law enforcement escorts, the sharing of positional information and the development of route information, including the location of safe havens. The proposed amendments would ensure that States have early and substantial involvement in the management of spent nuclear fuel shipments by participating in the initial stages of the planning, coordination, and implementation of the shipment.

The proposed rule would re-designate § 73.37(b)(6) as § 73.37(b)(1)(v) and revise it to make minor editorial changes.

The proposed rule would re-designate § 73.37(b)(7) as § 73.37(b)(1)(vi) and revise it to expand the requirements for preplanning and coordination with NRC. The proposed § 73.37(b)(1)(vi) would require licensees to identify the locations of safe havens along road

shipment routes, obtain NRC route approval prior to the 10 day advance notice required by 10 CFR 73.72(a)(2), and provide specific information to the NRC, such as identification of the shipper, consignee, carriers, transfer points, modes of shipment, and a description of shipment security arrangements.

The proposed rule would add a new § 73.37(b)(1)(vii), which requires the documentation of preplanning and coordination activities.

F. The Proposed § 73.37(b)(2)

The proposed rule would re-designate § 73.37(f), the advance notifications provision, as § 73.37(b)(2) and would revise it to include: (1) a reference to § 73.22 SGI protection requirements, (2) a reference to the NRC website listing contact information for State governors and governors' designees, (3) a requirement to include within the notification the license number of the shipper and receiver, and (4) a requirement to provide the estimated date and time of arrival of the shipment at the destination. The proposed § 73.37(b)(2) would also include new recordkeeping and shipment cancellation notification requirements.

G. The Proposed § 73.37(b)(3)

The proposed rule would add a new § 73.37(b)(3) entitled, "*Transportation Physical Protection Program*." The proposed § 73.37(b)(3) would both streamline and combine existing requirements in §§ 73.37(b)(3)-(5) and 73.37(b)(9)-(11).

The proposed § 73.37(b)(3)(i) would introduce the term "movement control center," which replaces the term "communication center" used in the current regulation. The term "movement control center" is used for consistency with physical protection terminology and to better define the role and responsibilities of the facility. The movement control center is defined

as an operations center which is remote from transport activity and which maintains periodic position information on the movement of the shipment, receives reports of attempted theft, diversion, or radiological sabotage, provides a means for reporting these and other problems to appropriate agencies, and can request and coordinate appropriate aid.

The proposed rule would re-designate § 73.37(b)(4) as § 73.37(b)(3)(ii) and revise it to reflect that the movement control center personnel will have the authority to direct physical protection activities. The proposed rule would also add a new § 73.37(b)(3)(iii), which will clarify the duties of the movement control center personnel.

The proposed rule would re-designate § 73.37(b)(5) as § 73.37(b)(3)(iv) and revise it to make minor editorial changes.

The proposed rule would add a new § 73.37(b)(3)(v), which requires licensees to develop, maintain and implement written physical protection procedures to address access controls, duties of the movement control center personnel, drivers, armed escorts and other individuals responsible for the security of the shipment, reporting of safeguards events, communications protocols, and normal conditions operating procedures.

The proposed rule would add a new § 73.37(b)(3)(vi), which incorporates the recordkeeping requirements of the current §§ 73.37(b)(2) and (3).

The proposed rule would re-designate § 73.37(b)(10) as § 73.37(b)(3)(vii)(A) and revise it to include additional training requirements described in sections III and IV of Part 73, Appendix B. This revision is a clarification of the existing requirements in 10 CFR 73.37. The current 10 CFR 73.37(b)(10) refers to training requirements in 10 CFR 73, Appendix D. Appendix D, in turn, refers to requirements in 10 CFR 73, Appendix B, III and IV. For clarity, the proposed revision would add a direct reference to Appendix B.

The proposed rule would re-designate § 73.37(b)(11) as § 73.37(b)(3)(vii)(B) and revise

it by changing the escort's requirement to contact movement control center from "at least every 2 hours" to contacts at "random intervals, not to exceed 2 hours." The proposed provision would also change "communications center" to "movement control center."

The proposed rule would re-designate the current § 73.37(b)(9) as § 73.37(b)(3)(vii)(C) and would revise it by further clarifying the escort's responsibilities when the shipment vehicle is stopped, or the shipment vessel is docked. The proposed revisions would ensure that when a shipment is stationary at least one armed escort maintains constant visual surveillance. The proposed rule also would provide for periodic reports of shipment status to the movement control center by the armed escort.

H. The Proposed § 73.37(b)(4)

The proposed rule would re-designate § 73.37(b)(2) as § 73.37(b)(4)(i)-(iii), "*Contingency and Response Procedures*," and would add additional requirements. The proposed rule would add new §§ 73.37(b)(4)(i) and 73.37(b)(4)(ii), which would require licensees to develop and implement contingency and response procedures, and would require licensees to train personnel in these procedures. The current requirements in 10 CFR 73.37(b) do not specifically require personnel training, but only require escorts to receive instructions. The proposed rule would expressly require that written procedures are developed and that all personnel associated with the transport and security of the shipment are adequately trained to carry out their responsibilities. The proposed revisions provide reasonable assurance of a more timely and effective response to any attempted theft, diversion, or radiological sabotage. A response to an event must be initiated without delay in order to have a high probability of success. The response is more likely to be timely and effective if roles, responsibilities, and actions are clearly delineated and understood in advance.

The proposed rule would also add a new § 73.37(b)(4)(iii), which would incorporate the current § 73.37(b)(2) recordkeeping requirements.

The proposed rule would re-designate § 73.37(b)(3) as § 73.37(b)(4)(iv) and revise it to include the requirement that the contingency and response procedures direct the escort to take the necessary steps to delay or impede theft, diversion, or radiological sabotage of spent nuclear fuel in transit.

I. The Proposed § 73.37(c)

The proposed rule would revise § 73.37(c)(1) and delete § 73.37(c)(2) to eliminate the distinction between heavily populated areas and other areas through which a road shipment of spent nuclear fuel shipment may pass. The proposed § 73.37(c)(1) would require armed escorts for the entire shipment route. In addition, a new § 73.37(c)(1)(iii) would require non-LLEA armed escorts to have a minimum of two weapons. The NRC staff has determined that it is prudent to require a minimum of two weapons for each armed escort.

The proposed deletion of the current § 73.37(c)(2) would result in a renumbering of the section. The proposed rule would re-designate current § 73.37(c)(3) as § 73.37(c)(2) and revise it as described below. The requirements in the current § 73.37(c)(3) describe specific acceptable types of communication devices, i.e., use of citizens band radio, radiotelephone, which may become obsolete in the near future. Instead of specifying an acceptable communications technology, the proposed § 73.37(c)(2) revisions describe the performance characteristics of the communications capabilities.

The proposed rule would re-designate § 73.37(c)(4) as § 73.37(c)(3) and § 73.37(c)(5) as § 73.37(c)(4). The proposed rule would add a new § 73.37(c)(5), which would require continuous and active monitoring of the shipment by a telemetric position monitoring system or

an alternative tracking system. The proposed revisions would ensure that shipments are continuously and actively monitored by a tracking system that communicates continuous position information to a movement control center. This requirement would allow the movement control center to receive positive confirmation of the location, status, and control of the shipment. These requirements would ensure immediate detection of any deviations from the authorized route, which will provide a prompt notification of any emergency or safeguards event. The proposed revisions would facilitate a more timely and effective response.

J. The Proposed § 73.37(d)

The proposed rule would revise § 73.37(d)(1) and delete § 73.37(d)(2) to eliminate the distinction between heavily populated areas and other areas through which a rail shipment of spent nuclear fuel may pass. The proposed § 73.37(d)(1) would require armed escorts for the entire shipment route. The proposed rule would add a new § 73.37(d)(2) to require a minimum of 2 weapons for non-LLEA armed escorts. The proposed rule would revise § 73.37(d)(3), which describes acceptable types of communication devices. The NRC recognizes that these devices may become obsolete in the near future. Instead of specifying acceptable communications technology, the proposed § 73.37(d)(3) describes the performance characteristics of the communication capabilities. The proposed rule would also add a new § 73.37(d)(4) which would address continuous and active monitoring of the shipment by a telemetric position monitoring system or an alternative tracking system.

K. The Proposed § 73.37(e)

The proposed rule would revise §§ 73.37(e)(1) and (e)(2) to eliminate the distinction between heavily populated areas and other areas for sea shipments of spent nuclear fuel. The

proposed § 73.37(e)(1)(i) would require armed escorts at any U.S. port where vessels carrying spent nuclear fuel shipments are docked. The proposed § 73.37(e)(1)(i) would also require a minimum of two weapons for each non-LLEA escort. The proposed rule would revise § 73.37(e)(3) to eliminate the listing of communication devices. Instead of specifying acceptable communication technology, the proposed § 73.37(e)(3) would describe the performance characteristics of the communication capabilities.

L. The Proposed § 73.37(f)

The proposed rule would re-designate the current § 73.37(f) as § 73.37(b)(2). A new proposed § 73.37(f) would require an immediate investigation if a shipment is lost or unaccounted for after the designated no-later-than arrival time. This proposed requirement would facilitate the location and recovery of shipments that may have come under control of unauthorized persons.

M. The Proposed § 73.37(g)

The proposed rule would delete the reference to § 73.37(f)(3) and insert the reference to § 73.37(b)(2)(iii) to reflect the reorganization of § 73.37.

N. The proposed § 73.38 background investigation requirements for unescorted access to irradiated reactor fuel in transit

The proposed § 73.38 would establish the elements of a background investigation for granting an individual unescorted access to spent nuclear fuel in transit. The scope of the investigation would cover the past 10 years. The proposed § 73.38(a) would establish the initial investigation requirements for individuals with unescorted access to spent nuclear fuel in transit.

For an individual seeking unescorted access to spent nuclear fuel in transit, the proposed §§ 73.38(a)(1)-(9) would require licensees to conduct fingerprinting and an FBI identification and criminal history records check; verification of true identity; employment history evaluation, verification of education; military history verification; credit history evaluation; criminal history review; character reputation and determination; and obtain independent information, respectively. The proposed § 73.38(a)(10) would allow a licensee to rely upon an alternate source that has not been previously used, if the licensee cannot obtain information on an individual from their previous employer, educational institution, or any other entity with which the individual claims to have been engaged. The proposed § 73.38(a)(10) is patterned after 10 CFR 73.56(d)(4)(iv)(B).

The proposed § 73.38(b) would require licensees to make and document trustworthiness and reliability determinations after obtaining and evaluating the information required by §§ 73.38(a)(1)-(10). Licensees would be required to maintain records of trustworthiness and reliability for 5 years from the date the individual no longer requires unescorted access to spent nuclear fuel shipments.

The proposed § 73.38(c) would require licensees to protect the information obtained from background investigations, while allowing licensees to transfer background information on an individual to another licensee if the individual makes a written request for such transfer. The proposed § 73.38(c) would allow a licensee to rely on the background information transferred from another licensee, provided that the receiving licensee verifies the name, date of birth, social security number, sex, and other applicable physical characteristics to ensure that the individual is the person whose file has been transferred.

A number of individuals who would be subject to the background investigation portion of this proposed rule may have recently satisfied similar requirements under prior NRC orders.

For such individuals, it would be an unnecessary use of resources to re-fingerprint them. Thus, the proposed § 73.38(d) would permit persons to essentially re-use the results of a fingerprint check that has been created within 5 years of the effective date of the rule. This would not be "relieving" such individuals from the rule, but rather permitting them to satisfy the fingerprinting requirements by other means. It is important to emphasize, however, that a licensee's ability to use previous fingerprinting results is not a substitute for the licensee independently concluding that the person is suitable for unescorted access to spent nuclear fuel in transit, including subjecting the person to all other applicable requirements of the background investigation that would be required by § 73.38(a).

The proposed § 73.38(e) would establish the requirements for reinvestigation of individuals with unescorted access to spent nuclear fuel in transit. The proposed § 73.38(e) would establish completion of reinvestigations within 10 years of the last investigation. The scope of the investigation would be the past 10 years and would consist of fingerprinting and a FBI identification and criminal history records check; criminal history review; and credit history re-evaluation.

O. The Proposed § 73.72(a)(4)

The proposed rule would revise § 73.72(a)(4) to require 2 additional notifications of the NRC, 1 to be made 2 hours before the commencement of the shipment and the other to be made when the shipment arrives at its final destination. The current requirements of 10 CFR 73.72 require notification 2 days before the shipment commences, but not 2 hours before the shipment begins or when it ends.

P. The Proposed § 73.72(a)(5)

The proposed rule would revise § 73.72(a)(5) to clarify the meaning of the language “greater than ± 6 hours” that appears in the section. The proposed revision deletes “greater” and inserts “more,” and deletes the symbol “±.”

Q. The Proposed § 73.72(b)

The current requirements in § 73.72(b) exempt licensees who make a road shipment or transfer with one-way transit times of one hour or less between installations of the licensee from providing advance notification of the shipment to the NRC. The proposed amendment would remove this exemption from the regulations. This proposed revision would ensure that the NRC is informed of any spent nuclear fuel shipment on a public road, even those of short duration, and the NRC is prepared to respond to an emergency or safeguards event. It would mitigate the risk of theft, diversion, or radiological sabotage of a shipment.

Table 1 - Cross Reference of Proposed Regulations with Existing Regulations

THE PROPOSED REGULATION	EXISTING REGULATION
73.37 (a)(1)	73.37 (a)(1)
73.37 (a)(2)	73.37 (a)(2)
73.37 (b)(1)(i)-(iii)	New (no existing equivalent)
73.37 (b)(1)(iv)(A)	73.37(b)(8)
73.37 (b)(1)(iv)(B)	New (no existing equivalent)
73.37 (b)(1)(iv)(C)	New (no existing equivalent)
73.37 (b)(1)(iv)(D)	New (no existing equivalent)
73.37 (b)(1)(v)	73.37(b)(6)
73.37 (b)(1)(vi)	73.37(b)(7)
73.37 (b)(1)(vi)(A)	New (no existing equivalent)
73.37 (b)(1)(vi)(B)	73.37(b)(7)
73.37 (b)(1)(vi)(C)	73.37(b)(7)
73.37 (b)(1)(vii)	New (no existing equivalent)
73.37 (b)(2)	73.37 (b)(1) & 73.37(f)
73.37 (b)(2)(i)	73.37 (f)(1)
73.37 (b)(2)(ii)	73.37(f)(2)
73.37 (b)(2)(iii)	73.37(f)(3)
73.37 (b)(2)(iv)	73.37(f)(4)
73.37 (b)(2)(v)	73.37(f)(4)

THE PROPOSED REGULATION	EXISTING REGULATION
73.37 (b)(2)(vi)	73.70
73.37 (b)(3)(i)	New (no existing equivalent)
73.37 (b)(3)(ii)	73.37(b)(4)
73.37 (b)(3)(iii)	73.37(b)(4)
73.37 (b)(3)(iv)	73.37(b)(5)
73.37 (b)(3)(v)	New (no existing equivalent)
73.37 (b)(3)(vi)	73.37(b)(3)
73.37 (b)(3)(vii)(A)	73.37(b)(10)
73.37 (b)(3)(vii)(B)	73.37(b)(11)
73.37 (b)(3)(vii)(C)	73.37(b)(9)
73.37 (b)(4)(i)	73.37(b)(2)
73.37 (b)(4)(ii)	73.37(b)(2)
73.37(b)(4)(iii)	73.37(b)(2)
73.37(b)(4)(iv)	73.37(b)(3)
73.37(c)	73.37(c)
73.37(c)(1)	73.37(c)(1)
----- (none-paragraph deleted)---	73.37 (c)(2)
73.37(c)(2)	New (no existing equivalent)
73.37(c)(3)	73.37(c)(3)
73.37(c)(4)	73.37(c)(4)
73.37(c)(5)	73.37(c)(5)
73.37(c)(6)	New (no existing equivalent)
73.37(d)	73.37(d)
73.37(d)(1)	73.37(d)(1)
----- (none-paragraph deleted)---	73.37(d)(2)
73.37(d)	73.37(d)
73.37(d)(2)	New (no existing equivalent)
73.37(d)(3)	73.37(d)(3)
73.37(d)(4)	New (no existing equivalent)
73.37(e)	73.37(4)
73.37(e)(1)	73.37(e)(1)
73.37(e)(2)	New (no existing equivalent)
73.37(e)(3)	73.37(e)(2)
73.37(e)(4)	73.37 (e)(3)
73.37(f)	New – incorporates 73.71 reporting provisions
73.37(g)	73.38 (g)
73.38	New-incorporates background investigations
73.72(a)(1)	73.72(a)(1)
73.72(a)(4)(i)-(iii)	73.72(a)(4)
73.72(a)(5)	73.72(a)(5)
----- (none-exemption deleted from existing)	73.72(b)
73.72(b)	New (no existing equivalent-new exemption)

IV. Criminal Penalties

For the purpose of Section 223 of the AEA, the Commission is proposing to amend 10 CFR Part 73 under one or more of Sections 161b, 161i, or 161o of the AEA. Willful violations of the rule would be subject to criminal enforcement.

V. Agreement State Compatibility

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” approved by the Commission on June 30, 1997, and published in the *Federal Register* on September 3, 1997 (62 FR 46517), this rule is classified as a Compatibility Category “NRC.” The NRC staff analyzed the proposed rule in accordance with the procedure established within Part III, “Categorization Process for NRC Program Elements,” of Handbook 5.9 to Management Directive 5.9, “Adequacy and Compatibility of Agreement State Programs” (a copy of which may be viewed at <http://www.nrc.gov/reading-rm/doc-collections/management-directives/>).

The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the AEA, or the provisions of 10 CFR. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State’s administrative procedure laws but does not confer regulatory authority on the State. The regulation of spent nuclear fuel is reserved to the NRC and cannot be relinquished to an Agreement State. Thus, this rulemaking will have no impact on Agreement States’ regulatory

programs. Therefore, Agreement States will not need to make conforming changes to their regulations.

VI. Plain Language

The Presidential Memorandum “Plain Language in Government Writing,” published June 10, 1998 (63 FR 31885), directed that the Government’s documents be written in clear and accessible language. The NRC requests comments on this proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the address listed under the “ADDRESSES” heading of this document.

VII. 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. The NRC is proposing to amend 10 CFR 73.37, which contains the requirements for the physical protection of spent nuclear fuel in transit, add a new 10 CFR 73.38, which establishes the requirements for a background investigation of individuals applying for unescorted access to spent nuclear fuel shipments, and 10 CFR 73.72, which contains the requirements for the advance notification of the NRC of spent nuclear fuel along with other special nuclear material. This action does not constitute the establishment of a standard that establishes generally applicable requirements.

VIII. Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the NRC regulations in Subpart A of 10 CFR Part 51, the NRC has determined that this proposed rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required for this rulemaking. The NRC has prepared an environmental assessment and, on the basis of this environmental assessment, has made a finding of no significant impact.

The implementation of the proposed rule's security requirements would not result in significant changes to the licensees' facilities, nor would such implementation result in any significant increase in effluents released to the environment. Similarly, the implementation of the proposed rule's security requirements would not affect occupational exposure requirements. No major construction or other earth disturbing activities, on the part of affected licensees, is anticipated in connection with licensees' implementation of the proposed rule's requirements. The Commission has determined that the implementation of this proposed rule would be procedural and administrative in nature.

The determination of this environmental assessment is that there will be no significant impact to the public from this action. However, the general public should note that the NRC welcomes public participation. Comments on any aspect of the environmental assessment may be submitted to the NRC as indicated under the ADDRESSES heading in this document.

The NRC has sent a copy of the environmental assessment and this proposed rule to every State Liaison Officer and requested their comments on the environmental assessment. The environmental assessment may be examined at the NRC Public Document Room, O-1F23, 11555 Rockville Pike, Rockville, MD 20852.

XI. Paperwork Reduction Act Statement

This proposed rule contains new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq). This rule has been submitted to the Office of Management and Budget for review and approval of the information collection requirements.

Type of submission, new or revision: Revision

The title of the information collection: 10 CFR 73, "Physical Protection of Plants and Materials," The Proposed Rule.

The form number if applicable: NA

How often the collection is required: On occasion

Who will be required or asked to report: NRC licensees that are authorized to possess and transport spent nuclear fuel in excess of 100 grams (0.22 lbs) in net weight exclusive of cladding or other material, which has a total radiation level in excess of 1 Sv (100 rems) per hour at a distance of .91 meters (3 feet) from any accessible surface without regard to any intervening shielding.

An estimate of the number of annual responses: 396

The estimated number of annual respondents: 18

An estimate of the total number of hours needed annually to complete the requirement or request: 1099 (61 hrs per respondent)

Abstract: The NRC is proposing to amend its regulations to enhance the requirements for the safety and security of spent nuclear fuel during transit and to make these applicable to all licensees by placing them in the 10 CFR. The proposed rulemaking would

establish the minimum performance standards and objectives for the protection of spent nuclear fuel shipments from theft, diversion or radiological sabotage. The proposed amendments would affect licensees authorized to possess or transport spent nuclear fuel.

The NRC is seeking public comment on the potential impact of the information collections contained in this proposed rule and on the following issues:

1. Is the proposed information collection necessary for the proper performance of the functions of the NRC, including whether the information will have practical utility?
2. Is the estimate of burden accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the information collection be minimized, including the use of automated collection techniques?

A copy of the OMB clearance package may be viewed free of charge at the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Room O-1 F21, Rockville, MD 20852. The OMB clearance package and the proposed rule are available for 60 days after the signature date of this notice at the NRC worldwide Web site:

<http://www.nrc.gov/public-involve/doc-comment/omb/index.html>.

Send comments on any aspect of these proposed regulations related to information collections, including suggestions for reducing the burden and on the above issues, by **(INSERT DATE 30 DAYS AFTER PUBLICATION)** to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to Infocollects.Resource@NRC.gov and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (RIN-3150-AI64), Office of Management and Budget, Washington, DC 20503. Comments on the proposed information collections may also

be submitted via the Federal eRulemaking Portal <http://www.regulations.gov>, Document ID: NRC-2009-0163. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given to comments received after this date.

X. 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 OMB control number.

XI. Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission.

The Commission requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading. The analysis is available for inspection in the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD 20852.

XII. Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule would not, if promulgated, have a significant economic impact on a substantial number of small entities. The companies that possess or transport

spent nuclear fuel do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

XIII. Backfit Analysis

The 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 10 CFR Chapter I. 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 Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC proposes to adopt the following amendments 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, 149, 68 Stat. 930, 948, as amended, sec. 147, 94 Stat. 780 (42 U.S.C. 2073, 2167, 2169, 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, 2297f); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. 109–58, 119 Stat. 594 (2005).

Section 73.1 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

Section 73.37(f) also issued under sec. 301, Pub. L. 96–295, 94 Stat. 789 (42 U.S.C. 5841 note).

Section 73.57 is issued under sec. 606, Pub. L. 99-399, 100 Stat. 876 (42 U.S.C. 2169).

2. Revise § 73.37 is revised to read as follows:

§73.37 Requirements for physical protection of irradiated reactor fuel in transit.

(a) Performance objectives.

(1) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a quantity of irradiated reactor fuel¹ in excess of 100 grams (0.22 lbs) in net weight of irradiated fuel, exclusive of cladding or other structural or packaging material, which has a total external radiation dose rate in excess of 1 Sv (100 rems) per hour at a distance of .91 meters (3 feet) from any accessible surface without intervening shielding, shall establish and maintain, or make arrangements for, and assure the proper implementation of, a physical protection system for shipments of such material that will achieve the following objectives:

(i) Minimize the potential for theft, diversion, or radiological sabotage of spent nuclear fuel shipments; and

* * * * *

(2) To achieve these objectives, the physical protection system shall:

* * * * *

(ii) Delay and impede attempts at theft, diversion, or radiological sabotage of spent nuclear fuel shipments until response forces arrive; and

(iii) Provide for notification to the appropriate response forces of any attempts at theft, diversion, or radiological sabotage of spent nuclear fuel shipment.

(b) General requirements. To achieve the performance objectives of paragraph (a) of this section, a physical protection system established and maintained, or arranged for, by the licensee shall include the following elements:

(1) Preplan and Coordinate Spent Nuclear Fuel Shipments. Each licensee shall:

(i) Ensure that each armed escort is instructed on the use of force sufficient to counter the force directed at the person, including the use of deadly force when the armed escort has a reasonable belief that the use of deadly force is necessary in self-defense or in the defense of others, or any other circumstances, as authorized by applicable Federal and State laws. This requirement does not apply to members of local law enforcement agencies performing escort duties.

(ii) Preplan and coordinate shipment itineraries to ensure that the receiver at the final delivery point is present to accept the shipment.

(iii) Ensure written certification of any transfer of custody.

(iv) Preplan and coordinate shipment information with the governor of a State, or the governor's designee, of a shipment of spent nuclear material through or across the boundary of the State, in order to:

(A) Minimize intermediate stops and delays;

(B) Arrange for State law enforcement escorts;

¹ For purposes of 10 CFR 73.37, the terms "irradiated reactor fuel" and "spent nuclear fuel" are used interchangeably.

C) Arrange for positional information sharing when requested; and

(D) Develop route information, including the identification of safe havens.

(v) Arrange with local law enforcement authorities along the shipment route, including U.S. ports where vessels carrying spent nuclear fuel shipments are docked, for their response to an emergency or a call for assistance.

(vi) Preplan and coordinate with the NRC to obtain advance approval of the routes used for road and rail shipments of spent nuclear fuel, and of any U.S. ports where vessels carrying spent nuclear fuel shipments are scheduled to stop.

(A) For road shipments, the route should include locations of safe havens that have been coordinated with the appropriate State(s).

(B) The NRC approval shall be obtained prior to the 10 day advance notification requirement in § 73.72.

(C) Information to be supplied to the NRC shall include, but is not limited to, the following:

(1) Shipper, consignee, carriers, transfer points, modes of shipment; and

(2) A statement of shipment security arrangements, including, if applicable, points where armed escorts transfer responsibility for the shipment.

(vii) Document the preplanning and coordination activities.

(2) Advance Notifications. Prior to the shipment of spent nuclear fuel outside the confines of the licensee's facility or other place of use or storage, a licensee subject to this section shall provide notification to the NRC, in accordance with § 73.72 of this part, and the governor of the State, or the governor's designee, of the spent nuclear fuel shipment. Contact information for each State, including telephone and mailing addresses of governors

and governors' designees, is available on the NRC website at:

<http://nrc-stp.ornl.gov/special/designee.pdf>. A list of the contact information is also available upon request from the Director, Division of Intergovernmental Liaison and Rulemaking, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The licensee shall comply with the following criteria in regard to each notification:

(i) Procedures for submitting advance notification.

(A) The notification must be in writing and sent to the office of each appropriate governor or the governor's designee.

(B) A notification delivered by mail must be postmarked at least 7 days before transport of a shipment within or through the State.

(C) A notification delivered by any other method must reach the office of the governor or the governor's designee at least 4 days before transport of a shipment within or through the State.

(ii) Information to be furnished in advance notification of shipment. The notification must include the following information:

(A) The name, address, and telephone number of the shipper, carrier and receiver of the shipment and the license number of the shipper and receiver.

(B) A description of the shipment as specified by the DOT in 49 CFR 172.202 and 172.203(d).

(C) A listing of the routes to be used within the State.

(iii) Separate Enclosure. The licensee shall provide the following information, in accordance with § 73.22(f)(1), in a separate enclosure to the written notification:

(A) The estimated date and time of departure from the point of origin of the shipment;

(B) The estimated date and time of entry into the State;

(C) The estimated date and time of arrival of the shipment at the destination;

(D) For the case of a single shipment whose schedule is not related to the schedule of any subsequent shipment, a statement that schedule information must be protected in accordance with the provisions of §§ 73.21 and 73.22 until at least 10 days after the shipment has entered or originated within the State; and

(E) For the case of a shipment in a series of shipments whose schedules are related, a statement that schedule information must be protected in accordance with the provisions of §§ 73.21 and 73.22 until 10 days after the last shipment in the series has entered or originated within the State, and an estimate of the date on which the last shipment in the series will enter or originate within the State.

(iv) Revision notice. A licensee shall notify by telephone a responsible individual in the office of the governor or in the office of the governor's designee of any schedule change that differs by more than 6 hours from the schedule information previously furnished in accordance with § 73.37(b)(2)(iii), and shall inform that individual of the number of hours of advance or delay relative to the written schedule information previously furnished.

(v) Cancellation notice. Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to the governor or to the governor's designee of each State previously notified and to the NRC's Director, Division of Security Policy, Office of Nuclear Security and Incident Response. The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being canceled.

(vi) Records. The licensee shall retain a copy of the preplanning and coordination activities, advance notification, and any revision or cancellation notice as a record for 3 years in accordance with § 73.70.

(3) Transportation Physical Protection System.

(i) The physical protection system established in accordance with § 73.37(a)(1) shall include armed escorts to protect spent nuclear fuel shipments and a movement control center staffed and equipped to monitor and control spent nuclear fuel shipments, to communicate with local law enforcement authorities, and to respond to safeguards contingencies.

(ii) The movement control center must be staffed continuously by at least one individual who will actively monitor the progress of the spent nuclear fuel shipment and who has the authority to direct the physical protection activities.

(iii) The movement control center personnel must monitor the shipment continuously, i.e., 24-hours per day, from the time the shipment commences, or if delivered to a carrier for transport, from the time of delivery of the shipment to the carrier, until safe delivery of the shipment at its final destination, and must immediately notify the appropriate agencies in the event of a safeguards event in accordance with the provisions of § 73.71.

(iv) The movement control center personnel and the armed escorts must maintain a written log for each spent nuclear fuel shipment, which will include information describing the shipment and significant events that occur during the shipment. The log must be available for review by authorized NRC personnel for a period of at least 3 years following completion of the shipment.

(v) The licensee shall develop, maintain, revise and implement written transportation physical protection procedures which address the following:

(A) Access controls to ensure no unauthorized persons have access to the shipment and safeguards information;

(B) Duties of the movement control center personnel, drivers, armed escorts and other individuals responsible for the security of the shipment;

(C) Reporting of safeguards events in accordance with § 73.71;

(D) Communications protocols that include a strategy for the use of authentication and duress codes, the management of refueling or other stops, detours, and the loss of communications, temporarily or otherwise; and

(E) Normal conditions operating procedures.

(vi) The licensee shall retain as a record the transportation physical protection procedures for 3 years after the close of period for which the licensee possesses the spent nuclear fuel.

(vii) The transportation physical protection system shall:

(A) Provide that escorts (other than members of local law enforcement agencies, or ship's officers serving as unarmed escorts) have successfully completed the training required by Appendix D of this part, including the equivalent of the weapons training and qualifications program required of guards, as described in sections III and IV of Appendix B of this part, to assure that each such individual is fully qualified to use the assigned weapons;

(B) Provide that shipment escorts make calls to the movement control center at random intervals, not to exceed 2 hours, to advise of the status of the shipment for road and rail shipments, and for sea shipments while shipment vessels are docked at U.S. ports; and

(C) Provide that at least one armed escort remains alert at all times, maintains constant visual surveillance of the shipment, and periodically reports to the movement control center at regular pre-set intervals during periods when the shipment vehicle is stopped, or the shipment vessel is docked.

(4) Contingency and Response Procedures.

(i) In addition to the procedures established in accordance with § 73.37(b)(3)(v), the licensee shall establish, maintain, and follow written contingency and response procedures to

address threats, thefts, and radiological sabotage related to spent nuclear fuel in transit.

(ii) The licensee shall ensure that personnel associated with the shipment shall be appropriately trained regarding contingency and response procedures.

(iii) The licensee shall retain the contingency and response procedures as a record for 3 years after the close of period for which the licensee possesses the spent nuclear fuel.

(iv) The contingency and response procedures must direct that, upon detection of the abnormal presence of unauthorized persons, vehicles, or vessels in the vicinity of a spent nuclear fuel shipment or upon detection of a deliberately induced situation that has the potential for damaging a spent nuclear fuel shipment, the armed escort will:

(A) Determine whether or not a threat exists;

(B) Assess the extent of the threat, if any;

(C) Implement the procedures developed in accordance with § 73.37(b)(4)(i);

(D) Take the necessary steps to delay or impede threats, thefts, or radiological sabotage of spent nuclear fuel, and

(E) Inform local law enforcement agencies of the threat and request assistance.

(c) Shipments by road. In addition to the provisions of paragraph (b), the physical protection system for any portion of a spent nuclear fuel shipment by road shall provide that:

(1) The transport vehicle is:

(i) Occupied by at least 2 individuals, 1 of whom serves as an armed escort, and escorted by an armed member of the local law enforcement agency in a mobile unit of such agency; or

(ii) Led by a separate vehicle occupied by at least 1 armed escort, and trailed by a third vehicle occupied by at least 1 armed escort.

(2) As permitted by law, all armed escorts are equipped with a minimum of 2 weapons.

This requirement does not apply to local law enforcement agency personnel who are performing escort duties.

(3) The transport vehicle and each escort vehicle are equipped with redundant communication abilities that provide for 2-way communications between the transport, the escort vehicle(s), the movement control center, local law enforcement agencies, and one another at all times. Alternate communications should not be subject to the same failure modes as the primary communication.

(4) The transport vehicle is equipped with NRC-approved features that permit immobilization of the cab or cargo-carrying portion of the vehicle.

(5) The transport vehicle driver has been familiarized with, and is capable of implementing, transport vehicle immobilization, communications, and other security procedures.

(6) Shipments are continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system reporting to a movement control center. A movement control center shall provide positive confirmation of the location, status, and control over the shipment. The movement control center shall implement preplanned procedures in response to deviations from the authorized route or a notification of actual, attempted, or suspicious activities related to the theft, loss, diversion, or radiological sabotage of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate local law enforcement agency along the shipment route.

(d) Shipments by rail. In addition to the provisions of paragraph (b), the physical protection system for any portion of a spent nuclear fuel shipment by rail shall provide that:

(1) A shipment car is accompanied by 2 armed escorts (who may be members of a local law enforcement agency), at least 1 of whom is stationed at a location on the train that will permit observation of the shipment car while in motion.

(2) As permitted by law, all armed escorts are equipped with a minimum of 2 weapons. This requirement does not apply to local law enforcement agency personnel who are performing escort duties.

(3) The transport vehicle and each escort are equipped with redundant communication abilities that provide for 2-way communications between the transport, the escort vehicle(s), the movement control center, local law enforcement agencies, and one another at all times. Alternate communications should not be subject to the same failure modes as the primary communication.

(4) Rail shipments are monitored by a telemetric position monitoring system or an alternative tracking system reporting to the licensee, third-party, or railroad movement control center. The movement control center shall provide positive confirmation of the location of the shipment and its status. The movement control center shall implement preplanned procedures in response to deviations from the authorized route or to a notification of actual, attempted, or suspicious activities related to the theft, diversion, or radiological sabotage of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate local law enforcement agency along the shipment route.

(e) Shipments by sea. In addition to the provisions of § 73.37(b), the physical protection system for any portion of a spent nuclear fuel shipment that is by sea shall provide that:

(1) A shipment vessel, while docked at a U.S. port is protected by:

(i) Two armed escorts stationed on board the shipment vessel, or stationed on the dock at a location that will permit observation of the shipment vessel; or

(ii) A member of a local law enforcement agency, equipped with normal local law enforcement agency radio communications, who is stationed on board the shipment vessel, or on the dock at a location that will permit observation of the shipment vessel.

(2) As permitted by law, all armed escorts are equipped with a minimum of 2 weapons. This requirement does not apply to local law enforcement agency personnel who are performing escort duties.

(3) A shipment vessel while within U.S. territorial waters shall be accompanied by an individual, who may be an officer of the shipment vessel's crew, who will assure that the shipment is unloaded only as authorized by the licensee.

(4) Each armed escort is equipped with redundant communication abilities that provide for 2-way communications between the vessel, the movement control center, local law enforcement agencies, and one another at all times. Alternate communications should not be subject to the same failure modes as the primary communication.

(f) Investigations. Each licensee who makes arrangements for the shipment of spent nuclear fuel shall immediately conduct an investigation, in coordination with the receiving licensee, of any shipment that is lost or unaccounted for after the designated no-later-than arrival time in the advance notification.

(g) State officials, State employees, and other individuals, whether or not licensees of the Commission, who receive information of the kind specified in § 73.32(b)(2)(iii) shall protect that that information against unauthorized disclosure as specified in §§ 73.21 and 73.22.

3. A new § 73.38 is added to read as follows:

§ 73.38 Background Investigation requirements for unescorted access to irradiated reactor fuel in transit.

(a) Initial Investigation. Before allowing an individual to have unescorted access to spent nuclear fuel² in transit the licensees shall complete a background investigation of the individual seeking to have unescorted access. The scope of the investigation must encompass at least the past 10 years. The background investigation must include at a minimum:

(1) Fingerprinting and an FBI identification and criminal history records check in accordance with § 73.57.

(2) Verification of true identity. Licensees shall verify the true identity of an individual who is applying to have unescorted access to ensure that the applicant is who they claim to be. A licensee shall review official identification documents (e.g., driver's license, passport, government identification, State, province, or country of birth issued certificate of birth) and compare the documents to personal information data provided by the individual to identify any discrepancy in the information. Licensees shall document the type, expiration, and identification number of the identification, or maintain a photocopy of identifying documents on file in accordance with § 73.38(c). Licensees shall certify and affirm in writing that the identification was properly reviewed and maintain the certification and all related documents for review upon inspection.

(3) Employment history evaluation. Licensees shall verify the individual's employment with each previous employer for the most recent 10 years before the date of application.

(4) Verification of education. Licensees shall verify the individual participated in the education process during the claimed period.

(5) Military history verification. Licensees shall verify the individual was in the military during the claimed period.

² For purposes of 10 CFR 73.38, the terms "irradiated reactor fuel" as described in 10 CFR 73.37 and "spent nuclear fuel" are used interchangeably.

(6) Credit history evaluation. Licensees shall ensure that the full credit history of any individual who is applying for unescorted access to spent nuclear fuel in transit is evaluated. A full credit history evaluation must include, but is not limited to, an inquiry to detect potential fraud or misuse of social security numbers or other financial identifiers, and a review and evaluation of all of the information that is provided by a national credit-reporting agency about the individual's credit history. For foreign nationals and United States citizens who have resided outside the United States and do not have established credit history that covers at least the most recent 7 years in the United States, the licensee must document all attempts to obtain information regarding the individual's credit history and financial responsibility from some relevant entity located in that other country or countries.

(7) Criminal history review. The licensee shall evaluate the entire criminal history record of an individual who is applying for unescorted access to spent nuclear fuel in transit to determine whether the individual has a record of criminal activity that may adversely impact his or her trustworthiness and reliability. The scope of the applicant's criminal history review must cover all residences of record for the 10 year period preceding the date of application for unescorted access authorization.

(8) Character and reputation determination. Licensees shall ascertain the character and reputation of an individual who has applied for unescorted access to spent nuclear fuel in transit by conducting reference checks. Reference checks may not be conducted with any person who is known to be a close member of the individual's family, including but not limited to, the individual's spouse, parents, siblings, or children, or any individual who resides in the individual's permanent household. The reference checks must focus on the individual's reputation for trustworthiness and reliability.

(9) The licensee shall also, to the extent possible, obtain independent information to

corroborate that provided by the individual (e.g., seek references not supplied by the individual).

(10) If a previous employer, educational institution, or any other entity with which the individual claims to have been engaged fails to provide information or indicates an inability or unwillingness to provide information within 10 business days of the request, the licensee shall:

(i) Document the refusal, unwillingness, or inability in the record of investigation; and

(ii) Obtain a confirmation of employment, educational enrollment and attendance, or other form of engagement claimed by the individual from at least 1 alternate source that has not been previously used.

(b) Determination of Trustworthiness and Reliability; Documentation. After obtaining and evaluating the information for the background investigation listed above in (a)(1)-(10), the licensee shall determine whether the individual is trustworthy and reliable and, if the licensee determines that the individual is trustworthy and reliable, the licensee shall document its determination and the basis therefore. The licensee shall maintain records of trustworthiness and reliability determinations in accordance with § 73.38(c) for 5 years from the date the individual no longer requires access to spent nuclear fuel.

(c) Protection of Information

(1) Licensees shall protect background investigation information from unauthorized disclosure.

(2) Licensees may not disclose the background investigation information collected and maintained to persons other than the subject individual, his/her representative, or to those who have a need to know in performing assigned duties related to the process of granting or denying unescorted access to spent nuclear fuel in transit. No individual authorized to have access to the information may re-disseminate the information to any other individual who does

not have a need to know.

(3) The personal information obtained on an individual from a background investigation may be transferred to another licensee:

(i) Upon the individual's written request to the licensee holding the data to re-disseminate the information contained in his/her file; and

(ii) The acquiring licensee verifies information such as name, date of birth, social security number, sex, and other applicable physical characteristics for identification.

(4) The licensee shall make background investigation records obtained under this section available for examination by an authorized representative of the NRC to determine compliance with applicable laws and regulations.

(5) The licensee shall retain all fingerprint and criminal history records received from the FBI, or a copy if the file has been transferred, on an individual (including data indicating no record) for 5 years after termination or from the date the individual no longer requires unescorted access to spent nuclear fuel in transit.

(d) For purposes of this section, licensees are not required to obtain the fingerprints of any person who has been fingerprinted, pursuant to an NRC order or regulation, for an FBI identification and criminal history records check within the 5 years of the effective date of this rule.

(e) Reinvestigations. Licensees shall conduct fingerprinting and FBI identification and criminal history records check, a criminal history review, and credit history re-evaluation every 10 years for any individual who has unescorted access authorization to spent nuclear fuel in transit. The reinvestigations must be completed within 10 years of the date on which these elements were last completed and should address the 10 years following the previous

investigation.

4. Revise paragraphs (a), (a)(1), (a)(4), (a)(5) and (b) of § 73.72 to read as follows:

§ 73. 72 Requirement for advance notice of shipment of formula quantities of strategic special nuclear material, special nuclear material of moderate strategic significance, or irradiated reactor fuel.

(a) A licensee, other than one specified in paragraph (b) of this section, who, in a single shipment, plans to deliver to a carrier for transport, to take delivery at the point where a shipment is delivered to a carrier for transport, to import, to export, or to transport a formula quantity of strategic special nuclear material, special nuclear material of moderate strategic significance, or irradiated reactor fuel³ required to be protected in accordance with § 73.37, shall:

(1) Notify in writing the Director, Division of Security Policy, Office of Nuclear Security and Incident Response, using any appropriate method listed in § 73.4. Classified notifications shall be sent to the NRC headquarters classified mailing address listed in appendix A to this part.

* * * * *

(4) The NRC Headquarters Operations Center shall be notified about the shipment status by telephone at the phone numbers listed in appendix A to this part. Classified notifications shall be made by secure telephone. The notifications shall take place at the following intervals:

(i) At least 2 days before commencement of the shipment;

³ For purposes of 10 CFR 73.72, the terms “irradiated reactor fuel” as described in 10 CFR 73.37 and “spent nuclear fuel” are used interchangeably.

(ii) Two hours before commencement of the shipment; and

(iii) Once the shipment is received at its destination.

(5) The NRC Headquarters Operations Center shall be notified by telephone of schedule changes of more than 6 hours at the phone numbers listed in Appendix A to this part.

Classified notifications shall be made by secure telephone.

(b) A licensee who conducts an on-site transfer of spent nuclear fuel that does not travel upon or cross a public highway is exempt from the requirements of this section for that transfer.

Dated at Rockville, Maryland, this _____ day of _____, 2009.

For the Nuclear Regulatory Commission.

Annette Vietti-Cook,
Secretary of the Commission.