

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](mailto:PDR.Resource@nrc.gov). The draft Part 37 implementation guidance is available electronically under ADAMS Accession Number ML101470684.

**Federal Rulemaking Web site:** Public comments and supporting materials related to the implementation guidance, including the draft implementation guidance, can be found at <http://www.regulations.gov> by searching on Docket ID NRC-2010-0194. Documents related to the proposed rule can be found by searching on Docket ID NRC 2008-0120.

## Discussion

The NRC published a proposed rule that would place the security requirements for use of Category 1 and Category 2 quantities of radioactive material into a new Part 37 of Title 10 of the Code of Federal Regulations. The proposed rule was published on June 15, 2010 (75 FR 33902) and the public comment period runs through October 13, 2010. The public comment period for the proposed rule is being extended to January 18, 2011, by separate notice. Documents related to the proposed rule can be found at <http://www.regulations.gov> by searching on Docket ID NRC 2008-0120.

In conjunction with the proposed rule, the NRC has developed implementation guidance. The implementation document provides guidance to a licensee or applicant for implementation of proposed 10 CFR Part 37, "Physical Protection of Byproduct Material," specifically Category 1 and Category 2 quantities of radioactive material. It is intended for use by applicants, licensees, Agreement States, and NRC staff. The document describes methods acceptable to the NRC staff for implementing proposed 10 CFR Part 37. The approaches and methods described in the document are provided for information only. Methods and solutions different from those described in the document are acceptable if they meet the requirements in proposed 10 CFR Part 37. The guidance is provided in the form of questions and answers on the provisions of the proposed rule. The draft implementation guidance document for proposed 10 CFR Part 37 is available electronically under ADAMS Accession

Number ML101470684, and can also be found at <http://www.regulations.gov> by searching on Docket ID: NRC-2010-0194.

On July 14, 2010 (75 FR 40756), the NRC noticed the availability of the implementation guidance for public comment. The public comment period for this guidance was to have expired on November 12, 2010. The NRC received several requests to extend the comment period to January 15, 2011. Due to the size and complexity of the draft implementation guidance and the associated proposed rule, the NRC has decided to extend the comment period until January 18, 2011.

Dated at Rockville, Maryland, this 29th day of September 2010.

For the Nuclear Regulatory Commission.

**Mark Thaggard,**

*Deputy Director, Division of Intergovernmental Liaison and Rulemaking, Office of Federal and State Materials and Environmental Management Programs.*

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## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 73

**RIN 3150-AI64**

**[NRC-2009-0163]**

### Physical Protection of Irradiated Reactor Fuel in Transit

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** 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" (SNF) are used interchangeably). This proposed rule 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 rule 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 NRC

strengthen the regulations governing the security of spent nuclear fuel shipments against malevolent acts.

**DATES:** The comment period expires January 11, 2011. Submit comments specific to the information collection aspects of this rule by November 12, 2010. 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:** Please include Docket ID: NRC-2009-0163 in the subject line of your comments. For instructions on submitting comments and accessing documents related to this action, see Section I, "Submitting Comments and Accessing Information" in the **SUPPLEMENTARY INFORMATION** section of this document. You may submit comments by any one of the following methods.

**Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for documents filed under Docket ID: NRC-2009-0163. Address questions about the NRC dockets to Carol Gallagher 301-492-3668; e-mail [Carol.Gallagher@nrc.gov](mailto: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](mailto: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) 415-1966.

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

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

**FOR FURTHER INFORMATION CONTACT:** Cardelia Maupin, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Telephone 301-415-2312, e-mail: [Cardelia.Maupin@nrc.gov](mailto:Cardelia.Maupin@nrc.gov).

### SUPPLEMENTARY INFORMATION:

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### I. Submitting Comments and Accessing Information

Comments submitted in writing or in electronic form will be posted on the NRC Web site and on the Federal rulemaking Web site <http://www.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.

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, Room O-1 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 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 the 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.

**Federal Rulemaking Web site:** 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.

Document	PDR	ADAMS	Web
Environmental Assessment .....	X	ML092710448 .....	X
Regulatory Analysis .....	X	ML102710278 .....	X
PRM-73-10 .....	X	ML092540603 .....	X

## II. Background

### A. Pre-September 11, 2001

On June 15, 1979 (44 FR 34466), NRC published an interim final rule in the **Federal Register** 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 § 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 NRC regulations support the protection of spent nuclear fuel in transit. The regulations in § 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 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 rule 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 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. The petition was denied, in part, by the NRC on December 7, 2009 (74 FR 64012). This proposed rulemaking would consider and address the remaining requests for the NRC rulemaking made in PRM-73-10.

### B. Post-September 11, 2001

Although the current § 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 shipped or received, or were planning to ship or receive, spent nuclear fuel. The orders were issued as immediately effective under the NRC's authority to protect the common defense and security under the Atomic Energy Act of 1954, as amended (AEA). The requirements established 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.

### C. Current Regulatory Framework

About two thousand NRC regulated shipments of spent nuclear fuel have been made throughout the United States since the 1970s. The primary objective of these shipments has been to move spent nuclear fuel to interim storage. These spent fuel shipments are generally divided into two categories: commercial shipments or DOE managed spent nuclear fuel shipments. Commercial spent nuclear fuel shipments are from the NRC-licensed facilities such as commercial nuclear power reactors, research and test reactors, and facilities for non-destructive testing and analysis of spent nuclear fuel. The DOE-managed shipments involve shipments to DOE owned interim spent nuclear fuel storage facilities.

The safe and secure shipment of spent nuclear fuel requires coordination and collaboration between various Federal, State, Tribal and local government agencies. These organizations work together to create an orderly pattern for shipments of spent nuclear fuel.

1. *What is the role of NRC in spent nuclear fuel transit?* Generally, the NRC regulates the design and construction of spent nuclear fuel shipping containers for domestic and foreign packages used to transport spent nuclear fuel solely within the United States. Although DOT is the lead government agency responsible for the approval of export and import packages, it relies on the NRC's evaluation as the basis for approval of these packages. In addition, NRC regulates the physical protection of commercial spent nuclear fuel in transit against sabotage or other malicious acts, which is recognized in the DOT routing regulations in 49 CFR 397.101. The NRC requirements in 10 CFR Part 73 are applied to shipments of spent nuclear fuel from the NRC licensees.

2. *What is the role of DOT in spent nuclear fuel transit?* The DOT regulates the transportation of hazardous materials, including spent nuclear fuel in interstate and intrastate commerce. Generally, DOT regulates in consultation with NRC the carriers of spent nuclear fuel and the conditions of transport, such as routing, handling and storage incident to transport, and vehicle and driver requirements. The DOT also regulates the labeling, classification, and marking of all spent nuclear fuel packages and transport vehicles.

3. *What is the role of DOE?* For over 50 years, DOE has transported spent nuclear fuel to interim storage facilities. These spent nuclear fuel shipments have originated from the following: (1) Foreign research reactors; (2) DOE-owned research and defense reactors, and (3) nuclear powered U.S. Navy ships. In addition, on a few rare occasions, the DOE has accepted some spent nuclear fuel from commercial nuclear power plants, e.g., Three Mile Island Unit 2, for storage at its facilities.

The DOE managed shipments of spent nuclear fuel, unless designated as a national security shipment, are conducted under requirements equivalent to those of DOT and NRC. The DOE complies with the DOT highway section criteria and carrier safety provisions. The DOE spent nuclear fuel packages are required to meet the NRC design and performance criteria in 10 CFR part 71, which is also stated in the DOT regulations in 49 CFR 173.7(d). Spent nuclear fuel shipments made by DOE or the DOE contractors are not subject to the NRC physical protection requirements because DOE is not a NRC licensee. DOE's policy, however, is that DOE managed spent nuclear fuel shipments meet or exceed NRC physical protection requirements.

4. *What is the role of State, local, and Tribal governments?* State, local and Tribal governments play an important role in the safe and secure transport of spent nuclear fuel. They assist in route planning and, for many shipments, provide armed escorts. They enforce the DOT highway safety regulations, including the performance of shipment inspections. State, local, and Tribal governments are also responsible for providing the first line of government response to accidents and incidents within their jurisdiction.

## III. Discussion

### A. What action is NRC taking in this rule?

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 the 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, 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, and insights gained by performing security assessments of potential security vulnerabilities associated with spent nuclear fuel transportation. The proposed revisions also reflect portions of the State of Nevada's Petition for Rulemaking (PRM-73-10). The NRC intends to rescind the security orders provided the final rule adequately addresses the security requirements set forth in those orders. Rescission will be addressed in the notice of final rulemaking.

### 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 NRC initiates 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 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)(1)(vi) 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. Rulemaking on the first and eighth items of PRM-73-10 was denied by the NRC on December 7, 2009 (74 FR 64012). The remaining items are addressed below:

*PRM-73-10, Item 2:* Clarify the definition of the term "radiological sabotage" in § 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 NRC considers that the existing definition already encompasses actions of the type described by the Petitioner. However, 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, *Physical Protection of Shipments 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.

The NRC considered incorporating the route selection criteria of NUREG-0561 into the proposed rule, but determined that implementing such criteria may cause conflicts with the DOT requirements. Sections D through F below provide additional information about the differences between DOT and NRC routing criteria. The PRM-73-10 request for the adoption of routing criteria from NUREG-0561 was considered by the NRC and determined to be not appropriate.

The PRM-73-10 also requested that NRC amend its regulations to minimize highway and rail shipments through heavily populated areas. 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 include 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, § 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 NRC eliminate these differential armed escort requirements based upon population for both road and rail spent nuclear fuel shipments.

Proposed §§ 73.37(c) and (d) include 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 § 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 § 73.26(b). The regulations in § 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 § 73.37(d) to require that all spent nuclear fuel rail shipments 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 rule.

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** Web site, <http://www.gpoaccess.gov/fr/index.html>.

*D. What are the DOT routing requirements for spent nuclear fuel shipments?*

The DOT has various terms to define and categorize radioactive material within the Title 49 of the Code of Federal Regulations. Within their definitions, DOT includes a category for highway route controlled quantity (HRCQ) which is defined as a quantity of radioactive material within a single package that exceeds: (a) 3,000 times the  $A_1$  value of the radionuclides for special form material or 3,000 times the  $A_2$  values of the radionuclides for normal form material; or (b) 1,000 TBq (27,000 curies), whichever is less. The HRCQ shipments can be made by all modes of transport. Spent nuclear fuel shipments fall under the DOT's definition of HRCQ.

For shipments by road, the DOT requirements for routing radioactive material are found in 49 CFR Parts 172 (Subpart I—Safety and Security Plans) and 397 (Subpart D—Routing of Class 7 (Radioactive) Materials). The DOT highway routing requires carriers to (1) Ensure routes are chosen based on minimizing radiological risk; (2) consider available information on accident rates, transit time, population density and activities, and the time of the day and the day of the week during which transportation will occur to determine the level of radiological risk; and (3) instruct the driver about the route and the hazards of the shipment. Furthermore, under the DOT requirements, HRCQ are transported only over preferred routes (*i.e.*, the Interstate Highway System, an alternative route designated by a State routing agency, or both), or an Interstate Highway System bypass or beltway around a city when available, unless a State routing agency has designated an alternative route. Routes can only be designated after substantive consultation with affected local jurisdictions and with any other affected States to ensure consideration of all impacts and continuity of affected routes. A written route plan is to be prepared by the carrier and provided to drivers and shippers.

The DOT allows motor carriers and drivers some deviation from the preferred route when picking up or delivering material, making necessary rest, fuel or motor vehicle repair stops, or because emergency conditions make continued use of the preferred route unsafe or impossible. In addition, a person may transport irradiated reactor

fuel only in compliance with a plan that will ensure the physical security of the material. The DOT permits variation for security purposes from the routing requirements of 49 CFR 397.101 only so far as necessary to meet the requirements imposed under such a plan, or otherwise imposed by NRC in 10 CFR Part 73.

For shipments by rail, the DOT requirements for routing radioactive material are found within 49 CFR parts 172, 174 and 209. The DOT requires rail carriers to compile annual data on certain shipments of hazardous materials, including HRCQ. The data is used to analyze safety and security risks along rail routes where those materials are transported; assess alternative routing options; and make routing decisions based on those assessments. Rail carriers must assess the available routes ensuring, at a minimum, that 27 specific factors are considered. These 27 factors include, but are not limited to, consideration of rail traffic density, transit times, number and types of grade crossings, proximity to iconic targets, population densities and venues along the route.

Rail carriers must also seek relevant information from State, local, and Tribal officials, as appropriate, regarding security risks to high-consequence targets along or in proximity to a route used by a rail carrier to transport security-sensitive materials. Oversight is provided by the DOT Federal Railroad Administration (FRA), which includes review and inspection of rail carrier's risk analyses and route selection, but FRA does not pre-approve rail routes. If FRA determines that a carrier's route selection documentation and underlying analyses are deficient, the carrier may be required to revise the analyses or make changes in the route selection. In addition, if it is determined by DOT that a particular route chosen by the railroad is not the safest and most secure practicable route available, FRA can require the use of an alternative route until such time as the identified deficiencies for the originally chosen route are corrected by the railroad.

*E. What are the NRC routing requirements for spent nuclear fuel shipments?*

For spent fuel in quantities greater than 100 grams and exceeding 1 Sv (100 rems) per hour at a distance of 0.91 meters (3 feet) from any accessible surface without intervening shielding, licensees are required to transport such spent nuclear fuel along routes that have been pre-approved by NRC. Furthermore, the proposed rule text of § 73.37(b)(1) requires licensees to

preplan and coordinate their routes with the States, including identification of safe havens.

The proposed rule does not include specific routing criteria for licensees to use when developing routes. However, the objective of § 73.37 is to minimize the potential for theft, diversion, or radiological sabotage for shipments of spent nuclear fuel. Licensees are expected to develop routes by considering criteria including, but not limited to: the DOT routing criteria, minimizing transit time, likelihood of swift response by local law enforcement, availability of safe havens (for road shipments), avoidance of tactically disadvantageous positions, availability of appropriate rest and refueling stops (for road shipments), and availability of good transportation safety features. When selecting a route by road, licensees are also expected to conduct surveys of the proposed route. The objective of these surveys is to locate safe havens, evaluate communications capability along the route, develop local law enforcement contacts, identify food and fuel stops for the carrier, and identify potential driving problems along the route.

Once a spent nuclear fuel shipment route request is received, the NRC reviews it closely. The NRC conducts a detailed review, considering route length and minimizing transit time, local law enforcement and emergency response contact information, adequacy of safe haven locations, and communications capability along the route. NUREG-0561, "Physical Protection of Shipments of Irradiated Reactor Fuel" provides guidance to licensees seeking the NRC-approval of a spent nuclear fuel shipping route.

*F. Why do the NRC and DOT routing requirements differ for spent nuclear fuel shipments?*

The objective of § 73.37 is to minimize the potential for theft, diversion or radiological sabotage of spent nuclear fuel shipments; facilitate the location and recovery of spent fuel shipments that may have come under the control of unauthorized persons; and delay and impede attempts at theft, diversion or radiological sabotage of spent nuclear fuel shipments until response forces arrive. With this in mind, NRC expects licensees to route shipments according to the DOT requirements, and to consider the adequacy of the route to meet the objectives of § 73.37. This includes considering the availability and adequacy of safe havens along the route and the communications capabilities among the transport vehicle, escort

vehicle, communications center, and local law enforcement agencies (LLEAs) for the entire route.

The DOT HRCQ routing regulations for road shipments are based on minimizing radiological risk to the public (49 CFR 397). The HRCQ are to be transported over preferred routes which are described in more detail in question D above. Carriers are permitted to deviate from preferred routes for certain conditions including, but not limited to: security reasons (*e.g.*, as imposed by NRC in 10 CFR Part 73) and emergencies. The DOT rail routing requirements for HRCQ require carriers to consider both safety and security of the public when selecting a route (49 CFR 172 and 209). The DOT requires rail carriers to select routes based on the criteria described above in question D. Rail carriers must assess the available routes using, at a minimum, 27 factors that address both safety and security of the transport.

As long as there is coordination among the licensee, the commercial carrier and the States of passage, NRC determined that spent nuclear fuel shipment primary and alternate routes for highway and rail can be developed that satisfy both the DOT and NRC requirements and guidelines. The NRC invites comments on the challenges of selecting routes for spent nuclear fuel that meets both the DOT and NRC requirements and guidance.

*G. 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).

*H. Why require a telemetric position monitoring system or an alternative tracking system for continuous monitoring of spent nuclear fuel shipments?*

The current rule, at § 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)(i) 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 under the provisions of § 10 CFR 73.71.

In addition, the proposed §§ 73.37(c)(5) and 73.37(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.

*I. Why pre-plan and coordinate spent nuclear fuel shipments?*

The current regulations require limited shipment preplanning and coordination with NRC, States, and LLEAs. For example, the current § 73.37(f) regulation requires 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. Some States have indicated that the current notification requirements are insufficient to adequately plan for a spent nuclear fuel shipment. In addition, the current § 73.37(b)(7) regulation requires licensees to obtain the 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.

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: (1) Ensure minimal shipment delays; (2) arrange for State law enforcement escorts; (3) coordinate movement control information, as needed; (4) coordinate safe haven locations; and (5) 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.

*J. Why require constant visual surveillance by armed escort?*

Existing § 73.37(b)(9) requires constant visual surveillance by an escort when a shipment is stopped. It does not specify whether the escort should be armed. Proposed § 73.37(b)(3)(vii)(C) would ensure that when a shipment is stopped, at least one armed escort maintains constant visual surveillance. The 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 adequate assurance that spent nuclear fuel shipments are protected from theft, diversion, or radiological sabotage when stopped.

*K. Why require two-way redundant communication capabilities?*

The regulations in the current §§ 73.37(c), 73.37(d), and 73.37(e) provide for redundant communication capabilities; 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.

Proposed §§ 73.37(c)(3), 73.37(d)(3) and 73.37(e)(4) would require the establishment of two-way communication capabilities for the transport vehicle and escorts to ensure contact between the movement control center and LLEAs at all times. The revisions would also require the establishment of alternate capabilities for the transport vehicle 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.

*L. Why require background investigations?*

1. What is the objective of the background investigations requirements for those with unescorted access and access authorization relative to spent nuclear fuel in transit?

The proposed rule would add a new § 73.38 that would require licensees to conduct background investigations of those individuals being considered for unescorted access or access authorization relative to spent nuclear fuel in transit. The main objective of the background investigations is to ensure that those individuals who have unescorted access to spent nuclear fuel in transit and those individuals who have access to safeguards information relative to the spent nuclear fuel shipment, including but not limited to armed escorts, drivers, and movement control personnel 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 nuclear power reactor in § 73.56(d), Background Investigation.

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 armed escorts and movement control center personnel.

Therefore, under the authority granted by Section 149, this rule 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?

Proposed § 73.38(d) lists the requirements for a background investigation, including: informed consent, 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 proposed § 73.38(e), it is the licensee’s responsibility to make a trustworthiness and reliability determination of an individual who has unescorted access or access authorization relative 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(d)(6), reflects the NRC’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 NRC recognizes that some countries may not have routinely accepted credit reporting mechanisms, and therefore, the NRC allows multiple sources of credit history that could potentially provide information about a foreign national’s financial record and responsibility.

Fingerprinting an individual for an FBI criminal history records check, as would be required by the proposed § 73.38(d)(3), 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(d)(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(d)(5)(iv) would require licensees to document any refusals by outside entities to provide information on an individual. If local law enforcement, a previous employer, 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(d)(10) is patterned after the requirements of § 73.56(d)(4)(iv).

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(e) 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(h), 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(f)(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 NRC. This proposed revision is consistent with the requirements of § 73.57(f).

7. Could a licensee transfer personal information obtained during an investigation to another licensee?

Yes. The proposed § 73.38(f)(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. Which records are required to be maintained?

The proposed § 73.38(f)(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.

*M. Why enhance shipment notifications to NRC?*

The current regulations in § 73.72(a)(4) require 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 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 NRC to monitor spent nuclear fuel shipments, and to maximize its readiness in case of a safeguards event. The notification of

shipment completion allows NRC to resume normal operations.

To further enhance notification of NRC, the proposed revision would remove the § 73.72(b) exemption for shipments of spent nuclear fuel that are transported on public roads. Currently, the requirements of § 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 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.

*N. Which type of spent nuclear fuel does DOE ship?*

The DOE spent nuclear fuel shipments generally fall into two categories: Classified and non-classified shipments of spent nuclear fuel. Classified shipments are those shipments which involve national security. Classified shipments of spent nuclear fuel typically consist of spent fuel from the U.S. Navy. The DOE has broad authority under the Atomic Energy Act of 1954, as amended (AEA), to regulate all aspects of activities involving radioactive materials that are undertaken by DOE or on its behalf, including the transportation of radioactive materials. The DOE conducts classified shipments of spent nuclear fuel using their Office of Secure Transport (OST). The OST shipments are escorted full-time by armed, specially trained (trained in communications, firearms, tactics, observation, and use of deadly force) active duty Navy personnel who maintain 24-hour surveillance. The OST Transportation Emergency Communications Center monitors, tracks, and provides communication with every shipment. The NRC does not regulate classified shipments of spent nuclear fuel.

*O. What is a non-classified shipment of spent nuclear fuel and what are the DOE requirements for this type of shipment?*

Non-classified shipments of spent nuclear fuel typically consist of spent fuel from commercial nuclear power reactors and research and test reactors. The DOE policy for non-classified spent nuclear fuel shipments are found under the DOE Orders 460.1C, *Packaging and Transportation Safety* and 460.2A,



*Departmental Materials Transportation and Packaging Management.* As a matter of policy, the DOE non-classified spent nuclear fuel shipments are conducted under the requirements and standards applicable to comparable commercial shipments, i.e., the NRC requirements, except if there is a determination that national security or another critical interest requires different action.

The DOE requirements are set forth in the DOE Manual 460.2-1A, *Radioactive Material Transportation Practices Manual*. In this manual, it states that “Security will be provided in compliance with the NRC requirements in 10 CFR Part 73 for shipments subject to a NRC license. Other DOE shipments will be undertaken in a manner that meets or exceeds the NRC security requirements.” The DOE organizations and contractors ensure that in-transit requirements are addressed, including developing security plans, implementing information and physical security access controls, training, escorts, inspections, tracking, communications, and employee background checks.

*P. How are the NRC and DOE requirements similar and how are they different?*

As stated in O above, given the DOE policy to “meet or exceed” the NRC security requirements, the NRC and DOE requirements are similar. Similar to the NRC requirements, the DOE program organizations are expected to liaison with Federal, State, local and Tribal law enforcement/security officials regarding such shipments. This liaison should include a determination as to whether the State, Tribal or local jurisdictions are planning to provide escorts for the shipment. The DOE also expects drivers and escorts to maintain constant surveillance of the shipment.

One major difference between the NRC and DOE requirements deals with the tracking and monitoring of spent nuclear fuel shipments. The DOE requires the use of their Transportation Tracking and Communications System (TRANSCOM). In the proposed rule, NRC requires continuous and active monitoring of spent nuclear fuel shipments, but, a particular tracking method is not specified. The NRC determined that providing the performance objectives for continuous and active monitoring, rather than specifying a particular system gives a licensee flexibility to choose a system that works with their shipping situation.

Another difference between the NRC and DOE requirements is the protection of information. For NRC, information

associated with a spent fuel shipment (i.e., shipment schedules and security plans) are protected as safeguards information (SGI) as specified by the requirements of §§ 73.21 and 73.22. The DOE does not have a system of information protection comparable to SGI. Shipment information for the DOE non-classified spent nuclear fuel shipment is official use only, unless there is a reason to designate it as classified.

*Q. Who would this action affect?*

The proposed amendments affect all the 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.

*R. Does NRC plan to issue guidance on these proposed requirements?*

In conjunction with this the proposed rulemaking, NRC is revising NUREG-0561, “Physical Protection of Shipments 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.

*S. 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 VII of the preamble for the request for comments on the use of plain language and Section XII for the request for comments on the draft regulatory analysis.

#### **IV. Discussion of the Proposed Amendments by Section**

##### *A. 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 under 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 fn.1, means “spent nuclear fuel.”

##### *B. 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. 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. 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. 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 § 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). 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 the jurisdiction in which 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 that 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 § 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 the NRC route approval prior to the 10-day advance notice required by § 73.72(a)(2), and provide specific information to NRC, such as identification of the shipper, consignee, carriers, transfer points, modes of shipment, and a description of shipment security arrangements. In addition the proposed § 73.37(b)(1)(vi) reminds licensees that they must also comply with the applicable DOT routing requirements.

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

#### *F. 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 Web site 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. 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).

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 § 73.37. The current § 73.37(b)(10) refers to training requirements in 10 CFR part 73, Appendix D. Appendix D, in turn, refers to requirements in 10 CFR part 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 the 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. 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 § 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. 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. 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 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. 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. 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. 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, proposed § 73.37(e)(3) would describe the performance characteristics of the communication capabilities.

#### *L. Proposed § 73.37(f)*

The proposed rule would re-designate the current § 73.37(f) as § 73.37(b)(2). A newly 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. 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. It would also ensure that the final rule for the "Protection of Safeguards Information"

(October 24, 2008, 73 FR 63546) is reflected in the proposed rulemaking. Under § 73.22(a), information to be protected as safeguards information in the proposed § 73.37 would include: (1) Schedules, itineraries, arrangements with LLEA, and locations of safe havens, which is the information described in § 73.37(b)(1), and §§ 73.37(b)(2)(iii)–(b)(2)(v); (2) the physical security plan, which is the information described in § 73.37(b)(3); (3) the procedures for response to security contingency events, and the tactics and capabilities required to defend against attempted theft, diversion, or sabotage, which is the information described in § 73.37(b)(4); and portions of inspection reports, evaluations, audits, or investigations that contain details of a licensee's or applicant's physical security system, which is the information described in § 73.37(f). In addition, according to § 73.22(a), vehicle immobilization features, intrusion alarm devices, and communications systems, including communication limitations, are also considered safeguards information.

#### *N. Proposed § 73.38*

Proposed § 73.38 would establish the personnel access authorization requirements for granting an individual unescorted access or access authorization relative to spent nuclear fuel in transit. Proposed § 73.38(a)(1) would specify the licensees subject to the requirements in the proposed section. Proposed § 73.38(a)(2) would provide that licensees are required to establish, implement, and maintain the overall effectiveness of the access authorization program. Proposed § 73.38(b) would establish the general performance objective to ensure that the individuals subject to the access authorization program are trustworthy and reliable. Proposed § 73.38(c)(1) would specify the individuals that would be subject to the access authorization program. Proposed § 73.38(c)(2) would indicate that individuals listed in § 73.59 are not subject to the investigative elements of the access authorization program.

Proposed § 73.38(d) would establish the background investigation requirements for individuals seeking unescorted access or access authorization relative to spent nuclear fuel in transit. For an individual seeking unescorted access or access authorization relative to spent nuclear fuel in transit, proposed §§ 73.38(d)(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. Proposed § 73.38(d)(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. Proposed § 73.38(d)(10) is patterned after § 73.56(d)(4)(iv)(B).

Proposed § 73.38(e) would require licensees to make and document trustworthiness and reliability determinations after obtaining and evaluating the information required by §§ 73.38(d)(1)–(9). Licensees would be required to maintain records of trustworthiness and reliability for 5 years from the date the individual no longer requires unescorted access or access authorization relative to spent nuclear fuel shipments.

Proposed § 73.38(f) 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. Proposed § 73.38(f) 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 the prior NRC orders. For such individuals, it would be an unnecessary use of resources to re-fingerprint them. Thus, proposed § 73.38(g) 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(d).

Proposed § 73.38(h) would establish the requirements for reinvestigation of individuals with unescorted access to spent nuclear fuel in transit. Proposed § 73.38(h) 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. Proposed § 73.38(i) would establish the requirements for individuals to self-report legal actions taken by a law enforcement authority or court of law to which the individual has been subject that could result in incarceration or a court order or that requires a court appearance. This paragraph requires the recipient of the report, if the recipient is not the reviewing official, to promptly convey the report to the reviewing official who will then evaluate the implications of those actions with respect to the individual's trustworthiness and reliability.

Proposed § 73.38(j) would establish the requirements that licensees would be required to develop, implement, and maintain written procedures for conducting the background investigations for persons applying for unescorted access or access authorization relative to spent nuclear fuel in transit. The procedures should address notification of individuals denied unescorted access or access authorization, including the basis for the denial or termination. The procedures should also provide for the review of the information by the affected individuals. It should also ensure that individuals who have been denied unescorted access or access authorization are not allowed unescorted access to spent nuclear fuel. These individuals could be escorted by an approved individual. These individuals should not receive access to safeguards information relative to spent nuclear fuel in transit.

Proposed § 73.38(k) would establish the requirements that an individual has the right to correct his or her criminal history records before any final adverse determination is made. If the individual believes that his or her criminal history records are incorrect or incomplete in any respect, he or she can initiate challenge procedures. These procedures would include direct application by the individual challenging the criminal history records to the law enforcement agency that contributed the questioned

information. Proposed § 73.38(l) would establish the requirements that licensees retain documentation relative to the trustworthiness and reliability determination for 5 years after the individual no longer requires unescorted access or access authorization. The proposed rule would also require that corrected or new information be actively communicated by the recipient to other licensees.

*O. Proposed § 73.72(a)(4)*

The proposed rule would revise § 73.72(a)(4) to require 2 additional notifications of 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 § 73.72 require notification 2 days before the shipment commences, but not 2 hours before the shipment begins or when it ends.

*P. Proposed § 73.72(a)(5)*

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

*Q. 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 NRC. The proposed amendment would remove this exemption from the regulations. This proposed revision would ensure that NRC is informed of any spent nuclear fuel shipment on a public road, even those of short duration, and 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).
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).

TABLE 1—CROSS REFERENCE OF PROPOSED REGULATIONS WITH EXISTING REGULATIONS—Continued

The proposed regulation	Existing regulation
73.37(e)(4) .....	73.37(e)(3).
73.37(f) .....	New—incorporates 73.71 reporting provisions.
73.37(g) .....	73.37(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).

## V. Criminal Penalties

For the purpose of Section 223 of the AEA, the NRC 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.

## VI. 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 analyzed the proposed rule under the procedure established within Part III, “Categorization Process for the NRC Program Elements,” of Directive Handbook 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 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 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.

## VII. 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.

## VIII. 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 (1) Amend § 73.37, which contains the requirements for the physical protection of spent nuclear fuel in transit; (2) add a new § 73.38, which establishes the requirements for a background investigation of individuals applying for unescorted access to spent nuclear fuel shipments; and (3) amend § 73.72, which contains the requirements for the advance notification of 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.

## IX. 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, 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 NRC 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 NRC welcomes public participation. Comments on any aspect of the environmental assessment may be submitted to NRC as indicated under the **ADDRESSES** heading in this document.

The NRC will send a copy of the environmental assessment and this proposed rule to every State Liaison Officer, and will request their comments on the environmental assessment. The environmental assessment may be examined at the NRC Public Document Room, O–1 F21, 11555 Rockville Pike, Rockville, MD 20852.

## X. 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 part 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:* 360 (342 responses + 18 recordkeepers).

*The estimated number of annual respondents:* 18.

*An estimate of the total number of hours needed annually to complete the requirement or request:* 1,058 (59 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 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 November 12, 2010 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](mailto: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.

## XI. 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.

## XII. Regulatory Analysis

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

The NRC requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to NRC as indicated under the **ADDRESSES** heading. The analysis is available for inspection in the NRC Public Document Room, 11555 Rockville Pike, Room O-1 F21, Rockville, MD 20852.

## XIII. Regulatory Flexibility Certification

Under 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 NRC (10 CFR 2.810).

## XIV. 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. 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. Section 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 fuel <sup>1</sup> 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
- (ii) Facilitate the location and recovery of spent fuel shipments that may have come under the control of unauthorized persons.

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



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

(i) Provide for early detection and assessment of attempts to gain unauthorized access to, or control over, spent fuel shipments;

(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 a 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;

(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 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. In addition to the requirements of this section, routes used for shipping spent nuclear fuel shall comply with the applicable requirements of the DOT regulations in 49 CFR in particular those identified in § 71.5. The advance approval application shall provide:

(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 of this part.

(C) Information to be supplied to 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 NRC, under § 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 Web site 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 DOT in 49 CFR 172.202 and 172.203(d); and

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

(iii) *Separate Enclosure.* The licensee shall provide the following information, under § 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 under 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 under 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 under § 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 under § 73.70.

(3) *Transportation Physical Protection System.* (i) The physical protection system established under § 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 under 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 under § 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 intervals not to exceed 30 minutes 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 under paragraph (b)(3)(v) of this section, 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 under paragraph (b)(4)(i) of this section;

(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 without delay, but not to exceed 15 minutes after discovery.

(c) *Shipments by road.* In addition to the provisions of paragraph (b) of this section, 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 vehicle, 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 the 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) of this section, 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 train operator(s) 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 paragraph (b) of this section, 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 paragraph (b)(2)(iii) of this section and any other safeguards information as defined in § 73.22(a) shall protect that information against unauthorized disclosure as specified in §§ 73.21 and 73.22 of this part.

3. Add § 73.38 to read as follows:

**§ 73.38 Personnel access authorization requirements for irradiated reactor fuel in transit.**

(a) *General.* (1) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a quantity of spent nuclear fuel as described in § 73.37 (a)(1) shall comply with the requirements of this section, as appropriate, before any spent nuclear fuel is transported or delivered to a carrier for transport.

(2) Each licensee shall establish, implement, and maintain its access authorization program under the requirements of this section.

(i) Each licensee shall be responsible for the continuing effectiveness of the access authorization program.

(ii) Each licensee shall ensure that the access authorization program is reviewed at an appropriate frequency to confirm compliance with the requirements of this section and that comprehensive actions are taken to

correct any noncompliance that is identified.

(iii) The review shall evaluate all program performance objectives and requirements.

(iv) Each review report must document conditions that are adverse to the proper performance of the access authorization program, the cause of the condition(s), and when appropriate, recommended corrective actions, and corrective actions taken. The licensee shall review the audit findings and take any additional corrective actions necessary to preclude repetition of the condition, including reassessment of the deficient areas where indicated.

(3) By (30 days after date the final rule is published in the **Federal Register**), each licensee that is subject to this provision on (effective date of final rule) shall implement the requirements of this section through revisions to its physical security plan.

(b) *General performance objective.* The licensee's access authorization program must ensure that the individuals specified in paragraph (c) of this section are trustworthy and reliable such that they do not constitute an unreasonable risk to public health and safety or the common defense and security.

(c) *Applicability.* (1) Licensees shall subject the following individuals to an access authorization program:

(i) Any individual to whom a licensee intends to grant unescorted access to spent nuclear fuel in transit, including employees of a contractor or vendor;

(ii) Any individual whose duties and responsibilities permit the individual to take actions by physical or electronic means that could adversely impact the safety, security, or emergency response to spent nuclear fuel in transit (*i.e.*, movement control personnel, vehicle drivers, or other individuals accompanying spent nuclear fuel shipments)

(iii) Any individual whose duties and responsibilities include implementing a licensee's physical protection program under § 73.37, including but not limited to, non-LLEA armed escorts;

(iv) Any individual whose assigned duties and responsibilities provide access to spent nuclear fuel shipment information that is considered to be Safeguards Information under § 73.22(a)(2); and

(v) The licensee access authorization program reviewing official.

(2) Persons identified in § 73.59 are not subject to the investigative elements of the access authorization program.

(d) *Background Investigation.* Before allowing an individual to have unescorted access or access

authorization relative to spent nuclear fuel<sup>2</sup> in transit the licensees shall complete a background investigation as defined in § 73.2 of the individual seeking to have unescorted access or access authorization. The scope of the investigation must encompass at least the past 10 years, or if 10 years of information is not available then as many years in the past that information is available. The background investigation does not apply to Federal, State or local law enforcement personnel who are performing escort duties. The background investigation must include, but is not limited to, the following elements:

(1) *Informed consent.* Licensees shall not initiate any element of a background investigation without the informed and signed consent of the subject individual. This consent shall include authorization to share personal information with appropriate entities. The licensee to whom the individual is applying for access authorization shall inform the individual of his or her right to review information collected to assure its accuracy, and provide the individual with an opportunity to correct any inaccurate or incomplete information that is developed by the licensee.

(i) The subject individual may withdraw his or her consent at any time. Licensees shall inform the individual that:

(A) Withdrawal of his or her consent will remove the individual's application for access authorization under the licensee's access authorization program; and

(B) Other licensees shall have access to information documenting the withdrawal.

(ii) If an individual withdraws his or her consent, licensees may not initiate any elements of the background investigation that were not in progress at the time the individual withdrew his or her consent, but shall complete any background investigation elements that are in progress at the time consent is withdrawn. The licensee shall record the status of the individual's application for access authorization. Additionally, licensees shall collect and maintain the individual's application for access authorization; his or her withdrawal of consent for the background investigation; the reason given by the individual for the withdrawal; and any pertinent information collected from the background investigation elements that were completed. This information must

be shared with other licensees under paragraph (l)(4) of this section.

(iii) Licensees shall inform, in writing, any individual who is applying for access authorization that the following actions are sufficient cause for denial or unfavorable termination of access authorization status:

(A) Refusal to provide a signed consent for the background investigation;

(B) Refusal to provide, or the falsification of, any personal history information required under this section, including the failure to report any previous denial or unfavorable termination of access authorization;

(C) Refusal to provide signed consent for the sharing of personal information with other licensees under paragraph (d)(5)(v) of this section; or

(D) Failure to report any arrests or legal actions specified in paragraph (f) of this section.

(2) *Personal history disclosure.* Any individual who is required to have a background investigation under this section shall disclose the personal history information that is required by the licensee's access authorization program for the reviewing official to make a determination of the individual's trustworthiness and reliability. Refusal to provide, or the falsification of, any personal history information required by this section is sufficient cause for denial or termination of access authorization.

(3) *Fingerprinting.* Fingerprinting and an FBI identification and criminal history records check under § 73.57.

(4) *Verification of true identity.* Licensees shall verify the true identity of an individual who is applying to have access authorization 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 under § 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.

(5) *Employment history evaluation.* Licensees shall ensure that an employment history evaluation has been completed on a best effort basis, by

questioning the individual's present and former employers, and by determining the activities of the individual while unemployed.

(i) For the claimed employment period, the individual must provide the reason for any termination, eligibility for rehire, and other information that could reflect on the individual's trustworthiness and reliability.

(ii) If the claimed employment was military service the individual shall provide a characterization of service, reason for separation, and any disciplinary actions that could affect a trustworthiness and reliability determination.

(iii) If education is claimed in lieu of employment, the individual shall provide any information related to the claimed education that could reflect on the individual's trustworthiness and reliability and, at a minimum, verify that the individual was registered for the classes and received grades that indicate that the individual participated in the educational process during the claimed period.

(iv) 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 3 business days of the request, the licensee shall:

(A) Document this refusal or unwillingness in the licensee's record of the investigation; and

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

(v) When any licensee is seeking the information required for an access authorization decision under this section and has obtained a signed release from the subject individual authorizing the disclosure of such information, other licensees shall make available the personal or access authorization information requested regarding the denial or unfavorable termination of an access authorization.

(vi) In conducting an employment history evaluation, the licensee may obtain information and documents by electronic means, including, but not limited to, telephone, facsimile, or e-mail. Licensees shall make a record of the contents of the telephone call and shall retain that record, and any documents or electronic files obtained electronically, under paragraph (l) of this section.

(6) *Credit history evaluation.* Licensees shall ensure the evaluation of

<sup>2</sup> 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.

the full credit history of any individual who is applying for access authorization relative to spent nuclear fuel in transit. 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 access authorization 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 access authorization.

(8) *Character and reputation determination.* Licensees shall ascertain the character and reputation of an individual who has applied for access authorization relative 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) *Obtain independent Information.* 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).

(e) *Determination of Trustworthiness and Reliability; Documentation.* (1) The licensee shall determine whether to grant, deny, unfavorably terminate, maintain, or administratively withdraw an individual's access authorization based on an evaluation of all of the information required by this section. The licensee may terminate or administratively withdraw an

individual's access authorization based on information obtained after the background investigation has been completed and the individual granted access authorization.

(2) The licensee may not permit any individual to have unescorted access or access authorization until all of the information required by this section has been evaluated by the reviewing official and the reviewing official has determined that the individual is trustworthy and reliable. The licensee may deny unescorted access or access authorization to any individual based on disqualifying information obtained at any time during the background investigation.

(f) *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 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 from the date the individual no longer requires unescorted access or access authorization relative to spent nuclear fuel in transit.

(g) *Grandfathering.* 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.

(h) *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.

(i) *Self-reporting of legal actions.* (1) Any individual who has applied for an access authorization or is maintaining an access authorization under this section shall promptly report to the reviewing official, his or her supervisor, or other management personnel designated in licensee procedures any legal action(s) taken by a law enforcement authority or court of law to which the individual has been subject that could result in incarceration or a court order or that requires a court appearance, including but not limited to an arrest, an indictment, the filing of charges, or a conviction, but excluding minor civil actions or misdemeanors such as parking violations or speeding tickets. The recipient of the report shall, if other than the reviewing official, promptly convey the report to the reviewing official. On the day that the report is received, the reviewing official shall evaluate the circumstances related to the reported legal action(s) and re-determine the reported individual's access authorization status.

(2) The licensee shall inform the individual of this obligation, in writing, prior to granting unescorted access or certifying access authorization.

(j) *Access Authorization Procedures.*

(1) Licensees shall develop, implement, and maintain written procedures for conducting background investigations for persons who are applying for unescorted access or access authorization for spent nuclear fuel in transit.

(2) Licensees shall develop, implement, and maintain written procedures for updating background investigations for persons who are applying for reinstatement of unescorted access or access authorization.

(3) Licensees shall develop, implement, and maintain written procedures to ensure that persons who have been denied unescorted access or access authorization are not allowed access to spent nuclear fuel in transit or

information relative to spent nuclear material in transit.

(4) Licensees shall develop, implement, and maintain written procedures for the notification of individuals who are denied unescorted access or access authorization for spent nuclear fuel in transit. The procedures must include provisions for the review, at the request of the affected individual, of a denial or termination of unescorted access or access authorization. The procedure must contain a provision to ensure that the individual is informed of the grounds for the denial or termination of unescorted access or access authorization and allow the individual an opportunity to provide additional relevant information.

(k) *Right to correct and complete information.* (1) Prior to any final adverse determination, licensees shall provide each individual subject to this section with the right to complete, correct, and explain information obtained as a result of the licensee's background investigation. Confirmation of receipt by the individual of this notification must be maintained by the licensee for a period of 1 year from the date of the notification.

(2) If after reviewing their criminal history record an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, update, or explain anything in the record, the individual may initiate challenge procedures.

(l) *Records.* (1) The licensee shall retain documentation regarding the trustworthiness and reliability of individual employees for 5 years from the date the individual no longer requires unescorted access or access authorization relative to spent nuclear fuel in transit.

(2) The licensee shall retain a copy of the current access authorization program procedures as a record for 5 years after the procedure is no longer needed or until the Commission terminates the license, if the license is terminated before the end of the retention period. If any portion of the procedure is superseded, the licensee shall retain the superseded material for 5 years after the record is superseded.

(3) The licensee shall retain the list of persons approved for unescorted access or access authorization and the list of those individuals that have been denied unescorted access or access authorization for 5 years after the list is superseded or replaced.

(4) Licensees who have been authorized to add or manipulate data that is shared with licensees subject to this section shall ensure that data linked to the information about individuals

who have applied for unescorted access or access authorization, which is specified in the licensee's access authorization program documents, is retained.

(i) If the shared information used for determining individual's trustworthiness and reliability changes or new or additional information is developed about the individual, the licensees that acquire this information shall correct or augment the data and ensure it is shared with licensees subject to this section. If the changed, additional or developed information has implications for adversely affecting an individual's trustworthiness and reliability, licensees who discovered or obtained the new, additional or changed information, shall, on the day of discovery, inform the reviewing official of any licensee access authorization program under which the individual is maintaining his or her unescorted access or access authorization status of the updated information.

(ii) The reviewing official shall evaluate the shared information and take appropriate actions, which may include denial or unfavorable termination of the individual's unescorted access or access authorization. If the notification of change or updated information cannot be made through usual methods, licensees shall take manual actions to ensure that the information is shared as soon as reasonably possible. Records maintained in any database(s) must be available for the NRC review.

(5) If a licensee administratively withdraws an individual's unescorted access or access authorization status caused by a delay in completing any portion of the background investigation or for a licensee initiated evaluation, or re-evaluation that is not under the individual's control, the licensee shall record this administrative action to withdraw the individual's unescorted access or unescorted access authorization with other licensees subject to this section. However, licensees shall not document this administrative withdrawal as denial or unfavorable termination and shall not respond to a suitable inquiry conducted under the provisions of 10 CFR part 26, a background investigation conducted under the provisions of this section, or any other inquiry or investigation as denial nor unfavorable termination. Upon favorable completion of the background investigation element that caused the administrative withdrawal, the licensee shall immediately ensure that any matter that could link the individual to the administrative action is eliminated from the subject

individual's access authorization or personnel record and other records, except if a review of the information obtained or developed causes the reviewing official to unfavorably terminate or deny the individual's unescorted access.

4. In § 73.71, paragraphs (a) introductory text, (a)(1), (a)(4), (a)(5) and (b) are revised to read as follows:

**§ 73.71 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 fuel<sup>3</sup> 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;

(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.

<sup>3</sup> 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.

Dated at Rockville, Maryland, this 1st day of October 2010.

For the Nuclear Regulatory Commission.

**Annette Vietti-Cook,**

*Secretary of the Commission.*

[FR Doc. 2010-25392 Filed 10-12-10; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2010-1021; Directorate Identifier 2010-CE-053-AD]

RIN 2120-AA64

#### **Airworthiness Directives; Pacific Aerospace Limited Model FU24-954 and FU24A-954 Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above that would supersede two existing ADs. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

To prevent possible in-flight failure of the vertical stabiliser, leading to loss of control of the aircraft \* \* \*

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** We must receive comments on this proposed AD by November 29, 2010.

**ADDRESSES:** You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Fax:* (202) 493-2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Karl Schletzbaum, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4146; fax: (816) 329-4090.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2010-1021; Directorate Identifier 2010-CE-053-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

##### **Discussion**

On February 4, 2004, we issued AD 2004-03-29, Amendment 39-13473 (69 FR 6553; February 11, 2004) and on June 30, 2008, we issued AD 2008-14-12, Amendment 39-15607 (73 FR 40951; July 17, 2008). Those ADs required actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2008-14-12, Pacific Aerospace Limited has developed a new vertical stabilizer design to eliminate the cracking in the vertical stabilizer that occurred with the original design. The new vertical stabilizer design incorporates a forward spar and is a failsafe structure.

The Civil Aviation Authority (CAA), which is the aviation authority for New Zealand, has issued AD DCA/FU24/178,

dated April 30, 2009 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

To prevent possible in-flight failure of the vertical stabiliser, leading to loss of control of the aircraft \* \* \*

Replace the vertical stabiliser with P/N 08-32005-2 by accomplishing modification PAC/FU/0345 in accordance with the instructions in Pacific Aerospace Limited Mandatory SB No. PACSB/FU/094 issue1 dated 14 August 2008 \* \* \*

The MCAI requires replacement of the vertical stabilizer with a new design that incorporates a forward spar and is a failsafe structure. You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

Pacific Aerospace Limited has issued Mandatory Service Bulletin PACSB/FU/094, Issue 1, dated August 14, 2008. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA's Determination and Requirements of the Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **Differences Between This Proposed AD and the MCAI or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have proposed different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a Note within the proposed AD.

#### **Costs of Compliance**

We estimate that this proposed AD will affect 3 products of U.S. registry.