AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

FEDERAL REGISTER

Vol. 78 Monday,
No. 97 May 20, 2013

Part IV

Nuclear Regulatory Commission

10 CFR Part 73
Physical Protection of Irradiated Reactor Fuel in Transit; Final Rule

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: Final rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is amending its security regulations for the transport of irradiated reactor fuel (the terms ''irradiated reactor fuel'' and ''spent nuclear fuel'' are used interchangeably in this rule). This rulemaking establishes generically applicable security requirements similar to the requirements currently imposed by NRC Order EA–02–109, ''Issuance of Order for Interim Safeguards and Security Compensatory Measures for the Transportation of Spent Nuclear Fuel Greater than 100 Grams.'' This rulemaking also establishes performance standards and objectives for the protection of spent nuclear fuel (SNF) shipments from theft, diversion, or radiological sabotage. Additionally, this rulemaking addresses, in part, a 1999 petition for rulemaking from the State of Nevada (PRM–73–10) that requests the NRC to strengthen the regulations governing the security of SNF shipments against malevolent acts. This rule will apply to each NRC licensee who transports, or delivers to a carrier for transport SNF.

DATES: The rule is effective on August 19, 2013.

ADDRESSES: Please refer to Docket ID NRC 2009–0163 when contacting the NRC about the availability of information for this final rule. You can access information and comment submittals to this final rule, which the NRC possesses and is publicly available, by any of the following methods:

- Federal Rulemaking Web site: Go to *http://www.regulations.gov* and search for Docket ID: NRC–2009–0163.
- NRC's Agencywide Documents Access and Management System (ADAMS): You may access publicly available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents,''* and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.
- NRC's PDR: You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

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, email: *Cardelia.Maupin@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Background
II. Discussion
A. What action is the NRC taking?
B. Who will this action affect?
C. Why revise the requirements?
D. When will the rule become effective?
E. Why rescind the orders for SNF in transit?
F. When will the NRC issue guidance on these requirements?
G. What is requested by the State of Nevada in its petition for rulemaking (PRM–73–10)?
H. Why require procedures and training for the security of SNF in transit?
I. Why require a telemetric position monitoring system or an alternative tracking system for continuous monitoring of SNF shipments?
J. Why preplan and coordinate SNF shipments?
K. Why require constant visual surveillance by armed escort?
L. Why require two-way redundant communication capabilities?
M. Why require background investigations?
N. Why enhance SNF shipment notifications to the NRC?
III. Summary and Analysis of Public Comments on the Proposed Rule
IV. Discussion of the Amendments by Section
V. Criminal Penalties
VI. Agreement State Compatibility
VII. Voluntary Consensus Standards
VIII. Environmental Assessment and Finding of No Significant Environmental Impact: Availability
IX. Paperwork Reduction Act Statement
X. Regulatory Analysis
XI. Regulatory Flexibility Certification
XII. Backfitting
XIII. Congressional Review Act
XIV. Plain Writing

I. Background

A. Pre-September 11, 2001

The NRC has long participated in efforts to address radioactive source protection and security. On June 15, 1979, the NRC published in the **Federal Register** (44 FR 34466) an interim final rule that established requirements for the physical protection of irradiated reactor fuel in transit. The interim final rule added a new § 73.37 to Title 10 of the *Code of Federal Regulations* (10 CFR), ''Requirements for physical protection of irradiated reactor fuel in transit.'' The interim rule and related guidance, NUREG–0561, ''Physical Protection of Shipments of Irradiated Reactor Fuel,'' were issued in effective form without the benefit of public comment. At the time of publication, public comments were solicited on the interim regulation and the guidance document. After considering public comments, amendments to the interim final rule and the guidance document were issued on June 3, 1980 (45 FR 37399).

Section 73.37 has changed little since its promulgation in 1980. The current regulation requires that licensees establish a physical protection system for SNF shipments that meets the following objectives: (1) Minimize the possibilities for radiological sabotage of SNF shipments, especially within heavily populated areas; and (2) facilitate the location and recovery of SNF shipments that may have come under the control of unauthorized persons. The regulation also requires that the physical protection system: (1) Provide for the early detection and assessment of attempts to gain unauthorized access to or control over SNF shipments, (2) provide notification to the appropriate response forces of any sabotage events, and (3) impede attempts at radiological sabotage of SNF shipments in heavily populated areas or attempts to illicitly move such shipments into heavily populated areas.

Other NRC regulations also support the protection of SNF in transit. For example, 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 the NRC in advance about shipments of SNF. The regulations in 10 CFR Part 71, ''Packaging and Transportation of Radioactive Material,'' establish requirements for packages used to transport SNF.

In addition, 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 SNF shipments against malevolent acts. The NRC docketed the petition on July 13, 1999, as Docket No. PRM–73–10. The NRC published for public comment a notice of receipt of PRM–73–10 on September 13, 1999 (64 FR 49410). The NRC discontinued its review of this

petition following the terrorist attacks of September 11, 2001. The petition review was resumed in 2008. The NRC addressed the petition, in part, in the ''State of Nevada: Denial of Portions of Petition for Rulemaking, Consideration of the Remaining Portions in the Rulemaking Process,'' December 7, 2009 (74 FR 64012). The aspects of PRM–73–10 not addressed as a part of the December 2009 decision are considered as a part of this rulemaking.

B. Post-September 11, 2001

The terrorist attacks of September 11, 2001, heightened concerns about the use of risk-significant radioactive materials in a malevolent act. In response to the attacks, the NRC determined that additional security measures were needed to enhance the protection of SNF shipments from theft, diversion, or radiological sabotage. Accordingly, the NRC issued EA–02–109, ''Issuance of Order for Interim Safeguards and Security Compensatory Measures for the Transportation of Spent Nuclear Fuel Greater than 100 Grams,'' (67 FR 63167; October 10, 2002), to ensure that SNF is shipped in a manner that protects the common defense and security and the public health and safety. This order was issued to NRC power reactor licensees; non-power reactor licensees; independent spent fuel storage installation (ISFSI) licensees; and special nuclear material licensees, who shipped, received, or planned to ship or receive SNF under the provisions of 10 CFR Part 71. Subsequently, the Commission issued similar security orders during the period October 2003 through December 8, 2010. These orders are collectively referred to as the ''Orders for SNF in Transit'' or ''the Orders.'' All of the Orders were issued as immediately effective under the NRC's authority to protect the common defense and security pursuant to Sections 53, 103, 104, 161b, 161i, 161o, 182, and 186 of the Atomic Energy Act of 1954, as amended (AEA), and the Commission's regulations in § 2.202 and 10 CFR parts 50, 70, 71, and 72.

On July 21, 2010, the Commission authorized the NRC staff to publish a proposed rule to establish security requirements for SNF in transit. The proposed rule, 10 CFR 73.37, ''Physical Protection of Irradiated Fuel in Transit,'' (RIN 3150–AI64, Docket ID: NRC–2009–0163), was published in the **Federal Register** on October 13, 2010 (75 FR 62695). The proposed rule incorporated the security requirements in the Orders as well as lessons learned from implementation of the Orders. The proposed rule provided a 90-day public comment period that was to end on January 11, 2011. After receiving several requests to extend the comment period, the NRC published on January 10, 2011 (76 FR 1376), a notice extending the public comment period until April 11, 2011.

C. Regulatory Framework

For several decades, SNF has been shipped by the Federal government and by the private sector (commercial). The primary objective of these shipments has been to move SNF to interim storage facilities. The Federal agency responsible for government transport of SNF is the U.S. Department of Energy (DOE). The SNF shipments are generally divided into two categories, commercial shipments and DOE-managed shipments. Commercial SNF shipments are from NRC-licensed nuclear power reactors and non-power reactors to another reactor site, which is usually done to consolidate storage. The DOE-managed shipments are from foreign research reactors, DOE-owned research and defense reactors, and nuclear powered U.S. Navy ships, and from NRC-licensed non-power reactors. In addition, on a few rare occasions, DOE has accepted SNF from commercial nuclear power plants; e.g., Three Mile Island Unit 2, for storage at its facilities.

The safe and secure shipment of SNF requires coordination and collaboration between various Federal, State, and local government agencies. These agencies work together to ensure an orderly regulatory pattern for SNF shipments. The following questions and answers provide additional information regarding the roles and responsibilities for SNF shipments.

1. What is the role of the NRC in SNF shipments?

The NRC regulates commercial SNF shipments in terms of both safety and security. Safety involves the protection of public health and safety during transport, while security relates to the protection of shipments against deliberate, malevolent acts. The NRC and the U.S. Department of Transportation (DOT) share Federal regulatory responsibility for SNF transportation safety. The NRC and DOT have signed a memorandum of understanding (MOU) (44 FR 38690; July 2, 1979) that delineates their respective responsibilities for regulating the transport of radioactive materials, which includes SNF shipments. Generally, the NRC regulates the design and construction of SNF shipping containers for domestic and foreign packages used to transport SNF solely within the U.S. 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, the NRC regulates the physical protection of commercial SNF in transit against sabotage or other malicious acts, which are recognized in the MOU and DOT routing regulations in Title 49 of the CFR (49 CFR) 397.101. The NRC requirements in 10 CFR Part 73 are applied to these shipments of SNF. The NRC fact sheet on transportation of radioactive materials can be found at: *http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/transport-spenfuel-radiomats-bg.html.*

2. What is the role of DOT in commercial SNF shipments?

The DOT has the primary responsibilities, in consultation with the NRC, for issuing the safety requirements for the carriers of SNF and for establishing the conditions of transport, such as routing, handling and storage incidental to transport, and vehicle and driver requirements, which are reflected in the MOU. The DOT also regulates the labeling, classification, and marking of all SNF packages and transport vehicles, and carrier-generated transport security plans. A link to the DOT's Web site is provided on the NRC's public Web site at *http://www.nrc.gov/materials/transportation.html.*

3. What are the roles of DOT and NRC in the route selection and approval process for commercial SNF shipments?

The route selection and approval process is also a reflection of a coordinated and orderly regulatory pattern between DOT and NRC requirements. The route for a commercial SNF shipment by highway is selected by the shipper or carrier using the routing criteria specified in the DOT regulations 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 criteria 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 times of 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. No written approval is required by DOT. However, a written route plan must be prepared by the carrier and provided to drivers and shippers.

After the route has been selected by a carrier, the shipper (NRC licensee)

submits the proposed written route plan to the NRC for a security review or vulnerability assessment. The NRC review takes into consideration mileage, transit time, and local law enforcement agency (LLEA) and emergency response contact information, adequacy of safe haven locations, and communications capability along the route. If the proposed route meets NRC security criteria, the route is issued a written route approval. If the NRC requires that the proposed route be changed to comply with its security regulations in 10 CFR part 73, a carrier must modify the proposed route in accordance with specific provisions in the DOT routing criteria (49 CFR 397.101).

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 Highway Route Controlled Quantities (HRCQ). The data is used to analyze safety and security risks along rail routes where those materials are transported, to assess alternative routing options, and to make routing decisions based on those assessments. Rail carriers must assess the available routes ensuring, at a minimum, that 27 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 and local 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 DOT's Federal Railroad Administration (FRA), including the review and inspection of rail carriers' risk analyses and route selections. The FRA does not pre-approve rail routes. If the 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, the 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.

4. What is the role of DOE?

The DOE has broad authority under the AEA to regulate all aspects of activities involving radioactive materials that are undertaken by DOE or on its behalf, including the transportation of SNF. The DOE uses this authority to manage certain SNF shipments which usually involve special circumstances, such as SNF from foreign research reactors, DOE-owned research and defense reactors, nuclear powered U.S. Navy ships, and Three Mile Island Unit 2 to DOE storage facilities. In addition, DOE-manages the shipment of SNF from NRC-licensed non-power reactors to DOE facilities for interim storage because of the lack of a permanent disposal facility for SNF.

The DOE-managed SNF shipments generally fall into two categories: classified and non-classified shipments. The classified national security shipments include rail shipments of naval SNF under the Naval Nuclear Propulsion Program and highway shipment of classified materials. The DOE requirements for classified national security shipments are different from those of the NRC. The DOE conducts classified shipments of SNF using their Office of Secure Transportation (OST). The OST shipments are escorted by armed, specially trained (trained in communications, firearms, tactics, observation, and use of deadly force) active duty U.S. Navy personnel who maintain 24-hour surveillance of the SNF shipment. The OST Transportation Emergency Communications Center monitors, tracks, and provides communication with every shipment.

The majority of the DOE-managed SNF shipments are non-classified. These shipments are subject to regulation by DOT, NRC, and State and local governments, as appropriate. The DOE utilizes commercial carriers that undertake the DOE-managed shipments under the same terms and conditions as shipments between commercial nuclear power plants. These DOE contracted commercial carriers are subject to the same DOT and NRC requirements that are applied to any comparable commercial shipment of SNF. The DOE policy for non-classified SNF shipments is found under the DOE Orders 460.1C, ''Packaging and Transportation Safety,'' and 460.2A, ''Departmental Materials Transportation and Packaging Management.'' The DOE Manual 460.2–1A (DOE Manual), ''Radioactive Material Transportation Practices Manual,'' dated June 4, 2008, provides that SNF shipments from NRC-licensed non-power reactors must comply with the NRC physical protection requirements in 10 CFR part 73. In addition, it is DOE's policy to seek NRC approval of the physical protection measures used for its foreign research reactor SNF shipments.

For shipments from foreign research reactors, and DOE-owned research and defense reactors, DOE is responsible for stakeholder interactions, final route approval, and other applicable safeguards and security requirements. The DOE Manual provides that these shipments will meet or exceed the requirements prescribed by DOT and NRC for comparable commercial transportation.

The DOE also has authority to certify packages for domestic transport of DOE-generated SNF under DOT regulations in 49 CFR 173.7(d). However, this regulation requires DOE-approved packages to meet the NRC's performance criteria in 10 CFR part 71. As a result, DOE established a cost-reimbursable agreement with the NRC for the review of transportation packages for foreign research reactor and naval SNF shipments.

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

As stated in the answer to question 4, given the DOE policy to ''meet or exceed'' the NRC security requirements, the NRC and DOE requirements are similar for non-classified shipments of DOE SNF. Similar to the NRC, the DOE organizations are expected to coordinate with Federal, State, and LLEA regarding SNF shipments, including the determination of whether these agencies are planning to provide escorts for shipments. The DOE also expects drivers and escorts to maintain constant surveillance of the shipment.

One difference between the NRC and DOE requirements deals with the tracking and monitoring of SNF shipments. The DOE requires the use of DOE's Transportation Tracking and Communications System (TRANSCOM). In the final rule, the NRC requires continuous and active monitoring of SNF shipments, but a particular tracking method is not specified.

Another difference between the NRC and DOE requirements is the protection of SNF shipment information. For the NRC, information associated with an SNF shipment (i.e., shipment schedules and security plans) is protected as Safeguards Information (SGI) as specified by the requirements of §§ 73.21 and 73.22. Although DOE does not have the designation SGI, the DOE Manual in Section 6.0, Security provides, ''This information may require protection as Safeguards Information under NRC regulations or as Unclassified Controlled Nuclear Information or Official Use Only under

DOE regulations. Unauthorized disclosure of any of the above levels of information is a violation of the AEA and other legal authorities.'' As such, DOE directs movement control personnel to use NRC's SGI protection or comparable DOE security measures for the protection of SNF shipment information.

6. What are the roles of State and local governments?

State and local officials play an important role in SNF transportation. States have an important responsibility for enforcing the DOT highway safety regulations concerning Federal motor carrier safety and hazardous materials transportation. Highway shipments of SNF are subject to State inspections. State enforcement officials can stop and inspect vehicles for compliance with Federal and State transportation requirements regarding equipment, documentation, and driver fitness. States can also require carriers to obtain special permits to operate these vehicles.[1] State and local governments assist in route planning and provide LLEA personnel as armed escorts. The State and local governments are also responsible for providing the first line of government response to accidents and incidents within their jurisdiction.

II. Discussion

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

The NRC is amending its security regulations for the transport of irradiated reactor fuel. This rulemaking establishes generically applicable security requirements and performance standards and objectives for the protection of SNF shipments from theft, diversion, or radiological sabotage. These new security requirements are similar to those requirements currently imposed by NRC Order EA–02–109. Additionally, this rulemaking addresses, in part, a 1999 petition for rulemaking from the State of Nevada (PRM–73–10) that requests NRC to strengthen the regulations governing the security of SNF shipments against malevolent acts.

B. Who will this action affect?

This rule affects NRC licensees that are authorized to transport or deliver to a carrier to transport SNF. This includes, but is not limited to, nuclear power plant licensees, non-power reactor licensees, special nuclear material licensees and ISFSI licensees 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 Gray (100 rad) per hour at a distance of 1 meter (3.3 feet) from any accessible surface without intervening shielding.

C. Why revise the requirements?

After the attacks of September 11, 2001, the NRC reevaluated its security requirements for SNF in transit. From this effort, additional measures were identified that the NRC determined would enhance the security of SNF in transit. The NRC issued a series of security orders requiring affected licensees to implement the security enhancements. This rulemaking is revising the NRC's regulations in 10 CFR Part 73 to incorporate and make generically applicable to all licensees shipping SNF the security requirements in the NRC Orders for SNF in Transit. These revisions also incorporate additional security requirements developed as a result of lessons learned from implementing the Order. The NRC has determined that including these security requirements in the regulations will enhance regulatory efficiency and effectiveness. In addition, the rulemaking process provided an opportunity for all stakeholders to participate in the development of the proposed security requirements.

D. When will the rule become effective?

The final rule will become effective 90 days after publication in the **Federal Register**. The 90 days will provide licensees time to develop programs and procedures, and conduct training on the new requirements. Most of the final rule provisions are similar to those contained in the Orders for SNF in Transit, and existing NRC security regulations; e.g,. provisions in §§ 73.21, 73.22, 73.56, 73.59, and 73.61. As such, most licensees affected by this rulemaking, (e.g., nuclear power plant licensees, non-power reactor licensees, special nuclear material licensees and ISFSI licensees) have already incorporated similar requirements into their security programs.

E. Why rescind the orders for SNF in transit?

Imposing long-term requirements through orders has not traditionally been the Commission's preferred method of regulation. Orders, unlike rules, do not apply prospectively to applicants for new licenses. The NRC would have to periodically issue new orders to cover new and amended licenses, and perhaps reissue orders periodically to existing licensees if requirements or administrative practices change. In order to make the requirements generically applicable to all present and future licensees, the NRC has determined that the security requirements should be incorporated in the regulations.

The security requirements in the Orders will remain in effect until licensees are notified in writing that the Orders are rescinded. The rule incorporates all the requirements which were contained in the Orders, as well as lessons learned from implementation of the Orders. Once the rule is effective, the NRC will take steps to rescind the Orders for SNF in Transit and will provide notice of the rescission to all NRC licensees subject to the Orders. In addition, the NRC will publish a notice in the **Federal Register**, informing the public of the effective date of the rescission of the Orders. The NRC will also issue letters to all affected categories of licensees, e.g., nuclear power plant licensees, non-power reactor licensees, special nuclear material licensees and ISFSI licensees. The **Federal Register** notice and licensee letters will be made publicly available via the NRC's public Web site and ADAMS.

F. When will the NRC issue guidance on these requirements?

In conjunction with this rulemaking, the NRC is revising NUREG–0561, which provides general guidance to licensees concerning the establishment of an acceptable security program for SNF shipments. On November 3, 2010 (75 FR 67636), the NRC published for public comment a revision to NUREG–0561. In order to allow the public sufficient time to review and comment on the draft revision, the NRC extended the comment period for the draft guidance document from February 11, 2011, until May 11, 2011. The NRC will publish in the **Federal Register** a notice of issuance of the revised NUREG–0561 shortly after the publication of the final rule.

G. 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 (the petitioner) submitted a rulemaking petition (docketed as PRM–73–10) requesting that the NRC strengthen its regulations for the physical protection of SNF shipments against radiological sabotage

[1] National Research Council of the National Academies, Committee on Transportation of Radioactive Waste, *Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States,* 2006, pp. 53–54.

and terrorist acts. The NRC published for public comment a notice of receipt of PRM–73–10 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, the State of Nevada requested that the NRC: (1) Clarify the meaning of the term ''hand-carried equipment'' in § 73.1(a)(1)(i)(D); (2) clarify the definition of the term ''radiological sabotage'' in § 73.2 to include actions against SNF shipments that 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 § 73.37(b)(1)(vi) to require shippers and carriers of SNF 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 § 73.37(c); (5) require armed escorts along the entire rail shipment route by eliminating the differential based on population in § 73.37(d); (6) amend § 73.37(b) by adopting additional planning and scheduling requirements for SNF shipments that are similar to those in § 73.26(b); (7) amend § 73.37(d) to require SNF rail shipments in dedicated trains; and (8) conduct a comprehensive assessment of the consequences of terrorist attacks that have the capability of radiological sabotage.

The NRC addressed PRM–73–10, in part, in ''State of Nevada: Denial of Portions of Petition for Rulemaking, Consideration of the Remaining Portions in the Rulemaking Process,'' (74 FR 64012; December 7, 2009), which denied two requests, 1 and 8, namely, clarification of the meaning of the term ''hand-carried equipment'' and the conducting of a comprehensive assessment of the consequences of terrorist attacks that have the capability of radiological sabotage. The remaining aspects of the PRM–73–10 are considered and addressed as a part of this rulemaking. The NRC invited the public to comment on how the NRC addressed the remaining requests in PRM–73–10. The NRC's handling of the remaining petition requests, as a part of this rulemaking, and the public comments associated with these NRC actions are addressed in the following paragraphs.

General Comments on the NRC's Handling of PRM–73–10 in the Rule:

The comments received generally supported the NRC's handling of PRM–73–10. In particular, the State of Nevada endorsed how the NRC addressed its petition in the proposed rule. The State of Nevada indicated that the provisions of the proposed rule, coupled with other NRC regulatory changes since 2001, would incorporate all of the regulatory changes requested in PRM–73–10.

NRC's Response to the General Comments:

The comments expressed overall support of the NRC's handling of PRM–73–10. The NRC appreciates the general support for its handling of PRM–73–10. These comments did not require any change in the rule language.

Request 2 of PRM–73–10: 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.'' In the proposed rule, the NRC determined that the existing definition does not need to be revised. However, the NRC agrees that clarification may be useful. The NRC proposed addressing this petition request by clarifying the definition of radiological sabotage in NUREG–0561, which is the associated regulatory guidance.

Comments on the NRC's Handling of Request 2 of PRM–73–10 in the Rule:

Two comments were received relative to Request 2 of PRM–73–10. Nevada indicated that the NRC's clarification of the definition of radiological sabotage in NUREG/CR–0561 addressed its concerns. A commenter from the transportation industry (Radioactive Material Transportation and Storage Consulting (RAMTASC)) indicated that the State of Nevada's request to redefine radiological sabotage to include acts intended to cause economic or social disruption would be problematic. The RAMTASC indicated that the determination of economic or social disruption is very subjective. The commenter also indicated that the State of Nevada's ''subject matter experts'' placed extraordinarily high estimates on economic impacts that have not received peer review. The RAMTASC also indicated that the Nevada analysis was not supported by the analyses generated through Environmental Impact Statements prepared by DOE for the Yucca Mountain Program, or by studies performed by DOE's National Laboratories. The commenter concluded by indicating satisfaction with NRC's handling of Request 2 of PRM–73–10.

NRC's Response to the Request 2 Comments:

The comments expressed satisfaction with the NRC's handling of Request 2 of PRM–73–10. The comments do not require any change to the rule language, which is discussed further in Section III, Summary and Analysis of Public Comments on the Proposed Rule,'' Issue 2 of this document. However, after further review, the NRC has determined that the information that was provided in the draft guidance document relative to the definition needs further clarification for the following reasons: (1) To emphasize that the definition of ''radiological sabotage'' in 10 CFR 73.2 is not being changed relative to 10 CFR 73.37 or any other 10 CFR part 73 provisions; and (2) to ensure that the clarifying language is consistent with the intent of the rule, which is to establish performance standards and objectives for the protection of SNF shipments from theft, diversion, or radiological sabotage.

The previous amendments to 10 CFR 73.37 did not include requirements for armed escorts throughout the shipment route and did not specifically address protection of SNF shipments from acts of theft and diversion which were the deliberate acts that the petitioner indicated could cause economic or social disruption. The petitioner indicated that the definition of ''radiological sabotage'' should be clarified to address ''theft or diversion.'' The PRM–73–10 indicated that acts of ''theft or diversion'' could lead to economic or social disruption without the release of radiation if a SNF shipment is moved from a low populated area to an urban area since armed escorts were not required in low populated areas.

The deliberate actions which cause, or are intended to cause economic damage or social disruption'' that were described by the petitioner have been addressed in this rulemaking. These deliberate acts are addressed by the inclusion of requirements for the protection of SNF shipments against theft or diversion including the requirements for armed escorts throughout the shipment route. Therefore, the clarifying language in NUREG–0561 does not revise the level of security required for the protection of SNF in transit. Rather, it recognizes that, if the current definition of radiological sabotage and the requirements for the protection of SNF in transit are followed, economic consequences and social disruptions will likely be minimized.

Request 3 of PRM–73–10: Amend the advance route approval requirements in § 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.'' The State of Nevada also requested that the NRC should consider adopting the route selection criteria in NUREG–0561, as part of its regulations, and specifically require shippers and carriers to minimize use of routes which fail to comply with the route selection criteria.

The NRC is addressing the goal of minimizing SNF shipments through heavily populated areas in this rulemaking. The revisions to § 73.37 require licensees to preplan and coordinate their shipments with affected States, which is expected to minimize movement of SNF shipments through heavily populated areas. This issue is discussed in the following paragraph entitled, ''Why Preplan and Coordinate SNF Shipments?''

The PRM–73–10 request for the adoption of routing criteria into NUREG–0561 was considered by the NRC and determined to be not appropriate. The adoption of the routing criteria into the regulations could cause potential misunderstandings relative to the roles of the NRC and DOT. In addition, this action could potentially conflict with the MOU between DOT and NRC, which is discussed in Section I, ''Background,'' of this document.

Comments on the NRC's Handling of Request 3 of PRM–73–10 in the Rule:

The NRC received three comments on request 3 of PRM–73–10. The State of Nevada indicated that the NRC's proposed rule adopted an approach to routing different from their request. However, the State believes that the NRC's approach will achieve the primary objective, ''to minimize movement of SNF through heavily populated areas.'' In addition, the State of Nevada indicated that their concerns about the security of rail shipments through urban areas were addressed by regulations enacted in 2008 by the U.S. Department of Homeland Security's Transportation Security Administration (TSA) (49 CFR Parts 1520 and 1580; 73 FR 72130) and by DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) (49 CFR parts 172, 179, and 209; 73 FR 72182). The State of Nevada further elaborated that the new State preplanning involvement requirements in the NRC's proposed rule, combined with the requirements for State involvement under the new TSA and PHMSA rail security regulations, would allow affected States to address unique local conditions important for physical protection of shipments along rural routes.

A commenter from RAMTASC indicated that request 3 of PRM–73–10 would be problematic. The commenter indicated that the Nevada request could conflict with the railroad's responsibilities under the Rail Safety Improvement Act of 2008, which requires railroads to use objective data as the basis for selecting rail routes that provide for the best overall combination of safety and security. The RAMTASC indicated that specific routing requirements that minimize shipments through populated areas could lead to shipments being transported on lower quality rail tracks that would increase the accident risk. The commenter further elaborated that the trade-off between increasing security from speculative acts of terrorism by decreasing safety is not wise. The RAMTASC agreed with the NRC's decision to not incorporate specific routing requirements into the rule.

A commenter from a State organization (Western Interstate Energy Board (WIEB)) indicated, relative to Request 3 of PRM–73–10, that they agreed that the routing criteria in the proposed rule would generally reduce risk, including the risk of radiological sabotage. However, WIEB indicated that the criteria may cause conflicts in certain situations. For example, WIEB indicated, similar to the RAMTASC's comments, that it may be necessary for SNF rail shipments to go through heavily populated areas in order to reduce travel time and overall risk to the shipment because better quality rail track may go through urban areas.

NRC's Response to the Request 3 Comments:

The comments indicated support for the NRC's approach to request 3 of PRM–73–10, minimize movement of SNF through heavily populated areas. The comments do not require any change to the rule language, which is further discussed in Section III, ''Summary and Analysis of Public Comments on the Proposed Rule,'' Issues 17 and 40 of this document.

Requests 4 and 5 of PRM–73–10: The existing regulations in § 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. The PRM–73–10 requested that the NRC eliminate these differential armed escort requirements based upon population for both road and rail SNF shipments.

Sections 73.37(c) and (d) were revised to reflect these PRM–73–10 requests. The differentiation of security requirements based upon population causes potential areas of vulnerability along the shipment route for theft, diversion, or radiological sabotage. The rule ensures that the same security requirements apply along the entire route for road and rail shipments, and at any U.S. ports where vessels carrying SNF shipments are scheduled to stop.

Comments on the NRC's Handling of Requests 4 and 5 of PRM–73–10 in the Rule:

Three comments addressed requests 4 and 5 of PRM–73–10. The State of Nevada agreed that the proposed rule fully addressed their concerns. A commenter from the RAMTASC indicated that the armed escort requirement for SNF shipments is already part of most transportation security plans, and incorporating this change into the proposed rule ''makes sense.'' Another State organization, the Council of State Governments Midwestern Office (CSG Midwestern), indicated that the Midwestern States agreed with the decision to require the same security measures along the entire route rather than have different requirements for highly populated areas. The commenter further elaborated that the change will eliminate the likelihood of ''potential areas of vulnerability along the shipment route for theft, diversion, or radiological sabotage.''

NRC's Response to the Requests 4 and 5 Comments:

In general, there was overall support from the States and industry for requiring armed escorts for the entire road and rail route. The comments do not require any change to the rule language. Specific comments relative to the inclusion of these new requirements in the proposed rule are discussed further in Section III, Summary and Analysis of Public Comments on the Proposed Rule,'' Issue 40 of this document.

Request 6 of PRM–73–10: Amend § 73.37(b) by adopting additional planning and scheduling requirements for SNF shipments that are similar to those for formula quantities of special nuclear material in § 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 rulemaking. This issue is discussed in the following paragraph titled ''Why Preplan and Coordinate SNF Shipments?''

Comments on the NRC's Handling of Request 6 of PRM–73–10 in the Rule:

One comment specifically addressed request 6 of PRM–73–10 in the context of a petition item. The State of Nevada indicated that the NRC's proposed rule has incorporated the substance of its request by requiring additional planning

and scheduling requirements for SNF shipments. The State of Nevada elaborated that the proposed rule requires licensee preplanning and coordination with corridor States to ensure minimal shipment delays, arrange State law enforcement escort arrangements, and coordinate safe haven locations, requires development of normal operation and contingency procedures (including responses to actual, attempted, or suspicious activities), and the training of all shipment personnel so that they could properly respond to a safety or safeguards event. The State of Nevada concluded by indicating that the proposed rule fully addressed their concerns.

NRC's Response to the Request 6 Comments:

Based upon the comment from the State of Nevada, no changes to the rule language were made. In general, there was strong support from the States and industry on the inclusion of the preplanning and coordination requirements in the rule. Specific comments relative to the preplanning and coordination requirements in the rule are discussed further in Section III, ''Summary and Analysis of Public Comments on the Proposed Rule,'' Issues 7 through 21 of this document.

Request 7 of PRM–73–10: Amend § 73.37(d) to require that all SNF rail shipments be made in dedicated trains. The same NRC security requirements apply to a SNF 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 is required to implement the security measures (both hardware and personnel) contained in the NRC's regulations 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 rule.

Comments on the NRC's Handling of Request 7 of PRM–73–10 in the Rule:

Five commenters specifically addressed Request 7 of PRM–73–10. The State of Nevada indicated that developments since 1999 have eliminated the need for an NRC requirement for mandatory use of dedicated trains. Nevada indicated that in 2004, the Nuclear Energy Institute (NEI) issued a statement supporting use of dedicated trains for rail shipments of SNF, and in 2005, DOE adopted a policy of using dedicated trains for SNF shipments. The commenter indicated that DOE's 2008 Supplemental Environmental Impact Statement provides that it is DOE's policy ''to use dedicated trains for most shipments'' to a repository, and the TSA and PHMSA rail security regulations adopted in 2008 virtually require use of dedicated trains for SNF shipments. The State of Nevada further elaborated that as of 2010, all rail shipments of SNF, except DOE shipments of naval reactor SNF, are expected to use dedicated trains exclusively, and rail carriers may decide to use dedicated trains for naval SNF shipments. The State of Nevada also indicated that the new security requirements included in the proposed rule will make general freight rail shipments of SNF impractical.

A commenter from WIEB indicated that while the NRC does not require the use of dedicated trains for all rail SNF shipments, it does require SNF shipments have armed escorts along the entire route, and that shipments be scheduled to avoid delays and stops (e.g. in classification yards). The WIEB indicated that the net effect of the new § 73.37 requirements, in combination with other safety and cost considerations, is that dedicated trains are required for cross-country SNF transport. According to the commenter, dedicated trains should be required in cross-country SNF rail transport. The WIEB elaborated that a 2006 study of SNF transport published by the National Academies Press found that ''there are clear operational, safety, security, communications, planning, programmatic, and public preference advantages that favor dedicated trains.'' The commenter also indicated that the committee strongly endorses DOE's decision to transport SNF and high-level waste to a Federal repository using dedicated trains.

The CSG Midwestern indicated that although the Midwestern States understand the NRC's rationale for not requiring dedicated trains for SNF shipments, such a requirement would enhance shipment security. A commenter from RAMTASC indicated that since the NRC determined that the same security provisions would be in place regardless of the type of train service, and both mixed use and dedicated train service would have the same security requirements, that it was a ''good call'' by the NRC not to require dedicated trains.

A commenter from the public also agreed that dedicated trains for SNF rail shipments should not be required. The commenter indicated that as the NRC reasoned, as long as the same security measures exist for the single and multi-use trains, then requiring dedicated trains would simply enhance the logistic and economic cost of transport.

NRC's Response to the Request 7 Comments:

Four out of five of the commenters supported the NRC's approach to dedicated trains for SNF shipments. The comments do not require any change to the rule language, which is further discussed in Section III, ''Summary and Analysis of Public Comments on the Proposed Rule,'' Issue 40 of this document.

H. Why require procedures and training for the security of SNF in transit?

Sections 73.37(b)(3)(v) and (b)(4) require that licensees shipping SNF develop normal operating and contingency procedures. These procedures are to cover notifications, communication protocols, loss of communication and responses to actual, attempted, or suspicious activities. The revisions also require drivers, accompanying personnel, railroad personnel and other movement control personnel to be adequately trained in normal operating and contingency procedures. These requirements will ensure that all personnel associated with the shipment are properly trained and prepared to perform their roles and responsibilities relative to the physical protection of SNF in transit. These revisions address, in part, Requests 3 and 6 of PRM–73–10.

I. Why require a telemetric position monitoring system or an alternative tracking system for continuous monitoring of SNF shipments?

The current rule, § 73.37(b)(4), requires that the licensee's physical protection system include a communications center, which is staffed continuously by at least one individual who monitors the progress of the SNF shipment. The revisions reflect the availability of new technology that can provide licensees more active control over the shipment. The revisions in § 73.37(b)(3)(i) replace the term ''communications center'' with the term ''movement control center.'' The term ''movement control center'' is used for consistency with physical protection terminology in other parts of the regulations and to better define the role and responsibilities of the facility. The movement control center is defined in § 73.2. Section 73.37(b)(3)(iii) specifies 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 § 73.71.

In addition, § 73.37(c)(5) and 73.37(d)(4), for road and rail shipments respectively, 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 provides 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. Radiofrequency identification (RFID) and global positioning systems (GPS) are examples of telemetric position monitoring systems. Since the movement control center is required to respond to any actual, attempted, or suspicious activities, the new requirements will mitigate the likelihood of theft, diversion, or radiological sabotage of SNF shipments.

J. Why preplan and coordinate SNF shipments?

The regulations require limited shipment preplanning and coordination with the NRC, States, and LLEAs. For example § 73.37(f) regulation requires an advance notification to the Governor(s) or the Governor's designee(s) by mail to be postmarked at least 7 days before transport of a shipment within or through the State; and requires a messenger-delivered notification to reach the Office of the Governor or Governor's designee at least 4 days before transport of a shipment within or through the State. Some States indicated that the notification requirements were insufficient to adequately plan for a SNF shipment. In addition, § 73.37(b)(7) requires licensees to obtain advance approval from the NRC of the planned road and rail SNF shipment routes, but did not require prior State coordination of the route. The revisions will ensure that the affected States have early and substantial involvement in the management of SNF shipments by participating in the initial stages of the planning, coordination and implementation of the shipment.

Section 73.37(b)(1)(iv) requires licensees prior to transport of SNF within or through a State to preplan and coordinate SNF shipment information with the Governor(s) or Governor's designee(s) of the States through which the shipment will transit 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. These requirements will ensure that no unusual event associated with the shipment goes unnoticed or unreported. These revisions mitigate the risk of theft, diversion, or radiological sabotage of a SNF shipment. These revisions address, in part, Requests 3 and 6 of PRM–73–10.

K. Why require constant visual surveillance by armed escort?

Section 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. The revised § 73.37(b)(3)(vii)(C) will 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 either to perform radiological sabotage in place, or to gain control of the transport to move it to another location are impeded or stopped. Section 73.37(b)(3)(vii)(C) addresses parked or stopped road shipments, rail shipment stops in marshland, and docked U.S. waters shipments. It also requires periodic reports of shipment status to the movement control center by the armed escort. Section 73.37(b)(3)(vii)(C) provides adequate assurance that SNF shipments are protected from theft, diversion, or radiological sabotage when stopped.

L. Why require two-way redundant communication capabilities?

Sections 73.37(c), 73.37(d), and 73.37(e) provide for redundant communication capabilities; however, the requirements were too specific, in that the use of citizens band (CB) radios and radiotelephones were required. In view of the continued advancements in technology, any specific method of two-way communication cited could become obsolete in the near future. Instead of specifying an acceptable communications technology, the revisions describe the performance characteristics of the communications capabilities. This change gives licensees the flexibility to determine the best means of meeting the performance requirement.

Sections 73.37(c)(3), 73.37(d)(3) and 73.37(e)(4) 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 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 as the primary means. 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 provide for continued communication between movement control personnel, which will ensure the prompt reporting of any incident that could lead to theft, diversion, or radiological sabotage.

M. Why require background investigations?

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

Section 73.38 is a new section added to the rule that requires licensees to conduct background investigations of those individuals being considered for unescorted access or access authorization relative to SNF in transit. The main objective of the background investigations is to ensure that those individuals who have unescorted access to SNF in transit and those individuals who have access to Safeguards Information relative to the SNF 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 rule?

Section 149 of the AEA requires that any person who is permitted unescorted access to radioactive materials subject to regulation by the Commission be fingerprinted for Federal Bureau of Investigation (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 of the AEA, the Commission has determined that the transportation of irradiated fuel (SNF) 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 SNF during transit who have direct access and maintain control over the SNF. 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 of the AEA, this rule imposes a requirement for fingerprinting as a prerequisite to granting unescorted access to SNF in transit. The criminal history records check obtained as a result of that fingerprinting will 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?

Section 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 § 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 SNF 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 § 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 required by § 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 is required by § 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 § 73.38(d)(5)(iv) requires 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 is required to document the refusal, unwillingness, or inability to respond in the record of investigation. The licensee must also 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. Section 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 will 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 SNF 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. Section 73.38(e) includes a provision for licensees to document their determinations of trustworthiness and reliability. However, as required by section 149c(2)(c) of the AEA, the licensee may not base a final determination to deny an individual unescorted access solely on the basis of information received from the FBI involving: (1) An arrest more than 1 year old for which there is no information of the disposition of the case; or (2) an arrest that resulted in dismissal of the charge or an acquittal. If there is no record on the disposition of the case, it may be that information on a dismissal or acquittal was not recorded.

5. How frequently would a reinvestigation be required?

The rule includes a provision, § 73.38(h), that requires 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 process includes fingerprinting, FBI identification and criminal history records check, local criminal history review and credit history check. The reinvestigation does not include employment verification, education verification, military history verification, or the character and reputation determination.

6. Are licensees required to protect information obtained during a background investigation?

Yes. Sections 73.38(f)(1) and (f)(2) will require licensees to protect the information obtained during a background investigation. Licensees will only be permitted to disclose the information to the subject individual, the individual's representative, those who have a need-to-know to perform their assigned duties to grant or deny unescorted access, or an authorized representative of the NRC. These revisions are consistent with the requirements of § 73.57(f).

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

Yes. Section 73.38(f)(3) includes a provision that a licensee will 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?

Section 73.38(f)(5) requires 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 SNF in transit.

N. Why enhance shipment notifications to the NRC?

The current regulations in § 73.72(a)(4) require a licensee to notify the NRC by phone at least 2 days before the shipment commences. The rule revises § 73.72(a)(4) to require 2 additional notifications of the NRC, one to be made 2 hours before the shipment commences, and the other to be made when the shipment reaches its final destination. These additional notifications allow the NRC to monitor SNF shipments, and to maximize its readiness in case of a safeguards event. The notification of shipment completion allows the NRC to resume normal operations.

To further enhance notification of the NRC, the revision removes the § 73.72(b) notification exemption for short-duration shipments of SNF 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 the NRC. The amendment requires that the NRC be informed of any SNF shipment on a public road so that the NRC is able to monitor SNF shipments and to maximize its readiness in case of a safeguards event. These revisions mitigate the risk of theft, diversion, or radiological sabotage of a shipment.

III. Summary and Analysis of Public Comments on the Proposed Rule

The proposed rule was published on October 13, 2010 (75 FR 62695), for a 90-day public comment period that was to end on January 11, 2011. After receiving several requests to extend the comment period, the NRC published on January 10, 2011 (76 FR 1376), a notice extending the public comment period until April 11, 2011. The NRC received 17 comment letters. The commenters included State organizations, licensees, industry organizations, individuals, and a Federal agency. The following paragraphs include a summary of the comments received and the NRC's response to the comments.

Issue 1: General Comments

Ten commenters provided general comments relative to the proposed rule. In general, there was strong stakeholder support for the rule to enhance the security of SNF in transit. However, some commenters supported the rule and offered comments on areas that could be clarified or improved.

Comment 1: The State of Nevada strongly endorsed the proposed rule. The commenter indicated that the proposed rule was necessary, because there have been significant changes in the threat environment, which affect both current and future SNF shipments. The State of Nevada stated that the proposed rule reflected realistic assessments of changes in the threat environment since the terrorist attacks of September 11, 2001. The State of Nevada elaborated that the proposed rule was necessary because of the greater understanding, achieved since 1999, of the potentially disastrous consequences of successful acts of terrorism or sabotage against SNF shipments. The State of Nevada also indicated that the provisions of the proposed rule, coupled with other NRC actions since 2001, would incorporate all of the regulatory changes requested by the State of Nevada in its 1999 petition for rulemaking (PRM–73–10). The State of Nevada further indicated that their three requests which were denied—changes to the design basis threat, a comprehensive assessment of attack consequences, and the mandatory use of dedicated trains—have been largely satisfied by other developments subsequent to the events of September 11, 2001.

Comment 2: The Minnesota Homeland Security and Emergency Management agency (MNHSEM) generally supported the overall rulemaking.

Comment 3: The Michigan State Police Emergency Management & Homeland Security Division and the Traffic Safety Division (MISP) supported the general intention of the proposed rule.

Comment 4: The Missouri Department of Natural Resources (MODNR) commended the NRC for its decision to establish by rule ''acceptable performance standards and objectives for the protection of SNF shipments from theft, diversion, or radiological sabotage,'' as the current regulation solely addresses potential radiological sabotage of SNF shipments. The commenter indicated that this was an appropriate post-September 11, 2011, change.

Responses to Comments 1–4: The NRC appreciates the support for the rulemaking. These comments do not require any change in the rule language.

Comment 5: The NEI commended the NRC for proactively addressing the security of SNF transportation and indicated that there were several positive attributes to the rule. The commenter indicated that through this rulemaking, the NRC was ensuring a sound and predictable regulatory framework for the anticipated significant number of future SNF shipments. However, the commenter indicated that considerable additional work was needed on the proposed rule, and that the NRC should take measures to re-propose the rule, including the holding of a series of public meetings to obtain stakeholder views. The NEI identified three general areas in which improvements were recommended. These areas were: (1) To clarify that the design basis threat for protecting the SNF shipment against malevolent groups is a shared responsibility between licensees and law enforcement authorities, especially relative to armed escorts; (2) to clearly delineate the roles of DOT and NRC in the protection of SNF in transit; and (3) to clarify that route selection is based upon the performance of a vulnerability assessment by the NRC. The NEI also recommended that the NRC convene a series of stakeholder workshops in view of the events at the Fukushima Daiichi nuclear power plant in Japan. The commenter further indicated that events at the Japan Fukushima Daiichi nuclear power plant would increase stakeholder interest relative to the proposed rule. Nevertheless, the commenter's final general comment was that the rule's reliance on preplanning and coordination between entities involved in shipments provides desirable flexibility within which reactor licensees, common carriers, along with Federal, State and local authorities, can work together to develop effective plans and protocols to assure the security of irradiated reactor fuel in transit. The commenter further indicated that this flexibility should be preserved in the rule.

Response to Comment 5: The NRC appreciates the comments of support for this rulemaking. With regards to re-proposing the rule, the NRC agrees that clarifications and improvements could be made to the proposed rule. The areas NEI identified as needing clarification have been incorporated into the final rule, as appropriate, and are specifically discussed under Issues 7, 8, 10, 13, 20, 27, 29, 32, and 47. The NRC disagrees that these changes are significant

enough to warrant the re-proposing of the rule as suggested by NEI.

The NRC has taken significant measures to obtain stakeholder views on this rulemaking and does not believe that a series of stakeholder workshops is necessary. The NRC has participated in 10 public meetings and Webinars to ensure stakeholder participation. Two of these meetings were hosted by NEI. The NRC normally has a 75-day public comment period for proposed rules, whereas, the comment period for the SNF in transit proposed rule was 180 days.

In addition, with regard to the assumption that the Japan Fukushima Daiichi nuclear power plant events would create more interest in the proposed rulemaking, this assertion is not supported. The tragic events in Japan began in early March 2011 and the comment period ended on April 11, 2011. There were not a significant number of comments received subsequent to the Japan events. In fact, NEI was the only commenter that mentioned Japan Fukushima Daiichi nuclear power plant events.

Comment 6: The California Highway Patrol (CHP) supported enhancing the security requirements that apply to the transportation of SNF and appreciated the opportunity to comment on the proposed rulemaking before final implementation. The CHP indicated that updating and improving the existing regulations is a step in the right direction since the consequences of this type of shipment falling into the wrong hands could be devastating to not only California, but to the country as a whole. The commenter also indicated that the protection of the public is of the utmost concern to them, and that the safe and secure shipment of SNF requires coordination and cooperative collaboration between various Federal, State, and local government agencies. The CHP further elaborated that it is important for our organizations to work together to create a safe and secure environment for transportation of SNF shipments. The commenter also indicated that there are some points within the proposed rule that it believed warranted further clarification.

Comment 7: The WIEB indicated that they strongly supported the purposes of the proposed rule, but had concerns regarding several of its elements.

Comment 8: The Private Citizen-Hardin supported the proposed rule updating SNF transportation security requirements and recommended publication of a final rule subject to comments.

Responses to Comments 6–8: The NRC is responding to the general statements made by the commenters. The NRC agrees that clarifications and improvements should be made to the proposed rule and has incorporated changes into the final rule, as needed. These comments have been divided into various issues. The CHP's comments are discussed and addressed under Issues 4, 8, 11, 38 and 53. The WIEB's comments are discussed and addressed under Issues 19, 20, 32, and 40. The Private Citizen-Hardin's comments are discussed under Issues 3, 8, 34, 39, 42, 43, 44, 49, and 50.

Comment 9: The RAMTASC stated that they were hopeful that the final rule would ensure objective security and safety criteria for SNF shipments, and that it would ensure that political influence on route selection would be minimized.

Comment 10: Nuclear Infrastructure Council indicated that they were hopeful that the final revised rule will support increased security without negative effects on safety, or unnecessary constraints on industry operations. They were also hopeful that the final rule will ensure that objective security and safety criteria are used for routing decisions and that political influence on route selection is minimized.

Responses to Comments 9–10: The NRC agrees that the final rule would support increased security of SNF in transit. The NRC also agrees that the rule's provisions, especially those relative to preplanning and coordination, provides a framework within which licensees, common carriers, along with Federal, State and local authorities can work together to develop effective plans and protocols to assure the security of SNF in transit.

Issue 2: Radiological Sabotage Definition § 73.2

Comment: One commenter from RAMTASC stated that the NRC did not specifically address economic or social disruption, but did expand the definition of radiological sabotage to include theft and diversion in the guidance document for the rule. The commenter indicated that caution would be needed in the way protection against theft or diversion of shipments is pursued; that the security role should remain the province of specially trained security escorts required for all shipments; and that security response training of other shipment personnel should be limited to ensuring they understand the authority and responsibility of the armed escorts and support them as required.

Response: The NRC agrees with this comment and has added clarifying language to the rule to address these comments. The following clarifying changes were made: (1) In § 73.37(a)(1)(i), a reference to the definition of ''armed escort'' in § 73.2 was added; (2) in § 73.37(b)(3)(i), a reference to the definition of ''movement control center'' in § 73.2 was added; and (3) in § 73.37(b)(3)(v), the language was revised to clearly indicate that the transportation security procedures should address the roles and responsibilities of all personnel involved in the planning, monitoring and execution of the physical protection of SNF in transit. In addition, the accompanying guidance document clearly delineates the roles and responsibilities of all these personnel, especially armed escorts.

Issue 3: Metric System § 73.37(a)(1)

Comment 1: The State of Nevada supported the revisions of the section to include both the metric and English units, and the clarification that the term ''irradiated reactor fuel'' means ''SNF.''

Response to Comment 1: The comment expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: One commenter (Private Citizen—Hardin) recommended that the proposed language ''. . . total external radiation dose rate in excess of 1 Sv (100 rems) per hour at a distance of 0.91 meters (3 feet) from any accessible surface without intervening shielding'' be changed to ''total external radiation level greater than 1 Gray (100 rad) per hour at a distance of 1 meter (3.28 feet) from any accessible surface, without regard to any intervening shielding.''

Response to Comment 2: The NRC agrees with this comment and notes that the International Atomic Energy Agency (IAEA) standard for physical protection of nuclear material, INFCIRC 225/rev. 5, specifies a ''radiation level'' in units of Gray/hr (rad/hr) in applying the self-protecting standard. In order to maintain consistency with the IAEA, all references to the self-protecting standard will use Gray (rad) as the units. Additionally, the phrase ''0.91 meters (3 feet)'' has been changed to ''1 meter (3.3 feet).''

Issue 4: Removal of Distinction Between Heavily Populated and Other Areas § 73.37(a)(1)

Comment: Four comments were received on this issue, three from State organizations (State of Nevada, CHP, and the CSG Midwestern) and one from the transportation industry (RAMTASC). There was overall support from the States and industry for requiring armed escorts for the entire

road and rail route. The State of Nevada supported the proposed rule revisions, which removed the distinction for armed guard requirements between heavily populated areas and other areas through or across which a SNF shipment may pass. The State of Nevada agreed that these revisions would address Requests 4 and 5 of PRM–73–10.

One State commenter (CHP) indicated that the removal of the distinction between heavily populated areas and other areas would provide consistency in the level of protection of the shipment for the entire route. The CSG Midwestern agreed with the decision to require the same security measures along the entire route rather than have different requirements for highly populated areas. The State commenter indicated that the change will eliminate the likelihood of potential areas of vulnerability along the shipment route for theft, diversion, or radiological sabotage. A commenter from industry (RAMTASC) indicated that an armed escort for the entire route was already incorporated in most SNF shipments plans, and incorporating that change into the rule was sensible.

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 5: Performance Objectives § 73.37(a)(2)

Comment: The State of Nevada supported all aspects of the revisions to § 73.37(a)(2), ''Performance Objectives.''

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 6: Performance Objectives: Recommended Language § 73.37(a)(2)(ii)

Comment: The DOE Naval Reactors Program (DOE NRP) recommended that the language in proposed § 73.37(a)(2)(ii) be changed to include the highlighted text and would read as follows: ''Delay and impede attempts at theft, diversion, or radiological sabotage of SNF shipments as appropriate considering threat characteristics, shipment characteristics, and the primary requirement for personnel to provide for their own safety until adequate response forces arrive.''

Response: To provide clarity, the NRC will strike ''until response forces arrive'' from § 73.37(a)(2)(ii) and will add language to the guidance document stating that armed escorts are neither required nor expected to take offensive action against aggressors (e.g., actively pursuing and/or apprehending suspected aggressors), but rather are expected to assume a defensive posture in order to delay and impede attempts at theft and diversion in addition to attempts at radiological sabotage of SNF shipments as appropriate, considering threat characteristics, shipment characteristics, and the primary requirement for personnel to provide for their own safety. The NRC will also add language to the guidance document stressing that it is imperative for armed escorts, drivers or other accompanying personnel to contact response personnel without delay as soon as they detect a threat to the shipment or themselves, but not to exceed 15 minutes after discovery. In addition, in § 73.37(a)(1)(i), a reference to the definition of ''armed escort'' in § 73.2 was added for clarity.

Issue 7: Preplan and Coordinate §§ 73.37(b) and (b)(1)

The Commission specifically requested input from the States on the rule language regarding preplanning and coordination with States on SNF shipments. Five comments were received on this issue: four from State organizations and one from the nuclear industry. There was strong support for inclusion of the preplan and coordinate section in the rule.

Comment 1: The Illinois Emergency Management Agency (IEMA) thanked the NRC for its efforts to recognize States as co-regulators in the transportation of SNF and other high activity shipments. The commenter indicated that States like Illinois who are active in the regulation of radioactive material shipments offer practical experience and background knowledge that will help the NRC with its goal of ensuring the safe and secure transport of SNF. The commenter applauded the NRC for their efforts to bring shipment planning to the forefront and for recognizing that early coordination with States on issues like routing, identification of safe havens and other important aspects of shipping is paramount to the success of any SNF campaign.

Comment 2: The CSG Midwestern indicated that States particularly supported the inclusion of a new section 73.37(b)(1)(iv), requiring licensees to ''preplan and coordinate shipment information with the Governor of a State, or the Governor's designee.''

Comment 3: The MODNR stated that it supported inclusion of a new section 73.37(b)(1)(iv), which requires licensees to ''preplan and coordinate shipment information with the Governor of a State, or the Governor's designee.'' The commenter indicated that this requirement provides the mandate needed for licensees to discuss sensitive information with State and local officials, planners, and emergency responders who play a role in the safe and secure shipment of SNF through their jurisdictions.

Comment 4: The State of Nevada specifically endorsed the requirements for licensees to preplan and coordinate SNF shipments with States. The commenter supported the intended goal of the proposed amendments, which is to ensure that States have early and substantial involvement in the management of SNF shipments by participating in the initial stages of the planning, coordination, and implementation of the shipments.

Comment 5: One commenter from the nuclear industry, NEI, indicated that the rule's reliance on preplanning and coordination between entities involved in shipments, provides desirable flexibility within which reactor licensees, common carriers, along with Federal, State and local authorities, can work together to develop effective plans and protocols to assure the security of irradiated reactor fuel in transit. The commenter further indicated that this flexibility should be preserved in the rule.

Response to Comments 1–5: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 8: Deadly Force Training § 73.37(b)(1)(i)

Comment 1: The NEI indicated that a Federal use-of-force law needs to be implemented, as State statutes vary greatly. The commenter also indicated that it is not reasonable to train armed escorts to legal requirements in each jurisdiction through which a shipment passes when those requirements may vary.

Response to Comment 1: The NRC recognizes that State laws on the use of force are not uniform and that there is no Federal statute that explicitly governs the use of force by NRC licensees. However, the diverse laws provide adequate authority for armed escorts to act effectively, including the use of necessary force. In order to comply with these diverse Federal and State laws, licensees are responsible for training their armed escorts on the legal requirements regarding the use of necessary force.

The NRC disagrees that it is unreasonable for armed escorts to be trained in the use of deadly force laws in each applicable jurisdiction. The new

requirements enable licensees to preplan and coordinate shipments, and properly train non-LLEA escorts. The NEI commented that the rule's reliance on preplanning and coordination between entities involved in shipments, provides desirable flexibility within which reactor licensees, common carriers, along with Federal, State and local authorities, can work together to develop effective plans and protocols to assure the security of irradiated reactor fuel in transit. The NRC is confident that early preplanning and coordination with States will enable licenses to know well in advance which State(s) are not providing LLEA escorts, and to ensure non-LLEA armed escorts are available and properly trained in the deadly force laws of those jurisdictions. Non-LLEA armed escorts will only have to be trained on particular State laws when a State is not providing LLEA personnel as armed escorts of the shipment crossing its boundary, and the licensee will be made fully aware of this during preplanning and coordination with State and/or local authorities.

Comment 2: The NEI indicated that it was unclear whether the armed escorts provided by the licensee or LLEA are considered Hazmat Employees (49 CFR 171.8) and require DOT training (49 CFR Part 172, Subpart H) including § 172.704(a)(5), ''In-depth security training.'' The commenter further indicated that this issue can only be addressed if there is a clear understanding of the roles and responsibilities of all involved in the shipment which, in turn, requires careful coordination between licensees, shippers, Federal, and State authorities.

Response to Comment 2: The NRC is not responsible for interpreting DOT regulations. The commenter may wish to consult with the DOT for further clarification on whether an armed escort is considered a hazmat employee.

The NRC agrees with the comments concerning the need for a clear understanding of the roles and responsibilities of all involved in the shipment. As such, as discussed under Issue 2, the following clarifying changes were made: (1) In § 73.37(a)(1)(i), a reference to the definition of ''armed escort'' in § 73.2 was added; (2) in § 73.37(b)(3)(i), a reference to the definition of ''movement control center'' in § 73.2 was added; and (3) in § 73.37(b)(3)(v), the language was revised to clearly indicate that the transportation security procedures should address the roles and responsibilities of all personnel involved in the planning, monitoring and execution of the physical protection of SNF in transit. In addition, the accompanying guidance document clearly delineates the roles and responsibilities of all of these personnel, especially armed escorts.

Comment 3: A commenter (Private Citizen-No name) raised concerns about the § 73.37(b)(1) provisions that will require non-LLEA armed escorts to be instructed on the use of deadly force compatible with State and local laws and to complete a training program. The commenter suggested that implementation of this provision would be enhanced if the NRC would compile a digest of State laws concerning the use of force and the transportation of SNF, and require guards to pass a written test based on that information.

Response to Comment 3: As a part of preplanning and coordination with States, licensees will be apprised of whether the State will be providing LLEA personnel as escorts of the shipment. In the event the State(s) will not be providing LLEA personnel to escort the shipment, the licensee will have sufficient time to plan for obtaining private armed escorts and to ensure they are properly trained. This is especially important because States routinely revise and update their laws. Therefore, it would not be appropriate for the NRC to compile a digest of State laws concerning the use of deadly force and the transportation of SNF, and require armed escorts to pass a written test based on that information. The burden is on the licensee to ensure that the training requirements in § 73.37(b)(1)(i) are satisfied. The licensee is responsible for developing a training program to ensure that armed escorts are knowledgeable about the applicable laws that apply regarding the use of deadly force when providing physical protection of SNF in transit.

Comment 4: One commenter from a State organization (CHP) indicated that non-LLEA armed escorts are required to be knowledgeable of the statutes on deadly force for the States the shipment will pass through, which is consistent with the legal requirements of other private armed guards in State and local jurisdictions. The commenter further indicated that the training requirements for these non-LLEA armed guards covered in Appendix D to 10 CFR Part 73, are generic in nature, and do not address the State and local deadly force requirements for each jurisdiction the SNF shipment will potentially pass through.

One commenter from a State organization (CSG Midwestern) suggested that § 73.37(b)(1)(iv) be expanded to include a new part E: ''Confirm information on State statutes applicable to private armed guards, including the use of deadly force.'' The commenter indicated that this section was needed to require licensees to ensure that armed guards are knowledgeable of the Federal and State deadly force statutes.

Response to Comment 4: An additional provision relative to State and local deadly force requirements is unnecessary, since there is already a requirement for licensees to ensure that their armed escorts are trained in the proper use of force. Section 73.37(b)(1)(i) requires licensees to ensure that each armed escort (with the exception of LLEA personnel) is instructed on the use of force sufficient to counter the force directed at that person, including the use of deadly force. As such, licensees are responsible for assuring accurate information is provided on all applicable laws, including those laws dealing with the use of deadly force. Licensees are required to comply with the training requirements in Appendix D of 10 CFR Part 73. Appendix D specifically states that licensees are required to assure that armed individuals serving as shipment escorts, other than members of LLEAs, have completed a weapons training and qualifications program equivalent to that required of guards, as described in sections III and IV of Appendix B of 10 CFR Part 73. These training requirements ensure that each such individual is fully qualified to use weapons assigned to him or her.

Issue 9: Coordination Between Non-LLEA and LLEA Armed Escorts § 73.37(b)(1)(i)

Comment: One commenter (Private Citizen-No Name) expressed concern that there is a possibility that a mixed set of armed escorts (some LLEA personnel and some non-LLEA) could be tasked with protecting the SNF shipments at the same time, which could result in different members of the escort group operating under different understandings about what the State law on use of deadly force allows. The commenter stated that this may create confusion if the transport is attacked. The commenter suggested that information should be added to the rule to facilitate coordination between LLEA and non-LLEA armed escorts. The commenter recommended that, along with the advance notice provided to the State of an impending shipment, the licensee could include a memo summarizing the applicable laws of which they are aware, describing how they interpret these laws, and certifying that they have instructed non-LLEA armed escorts according to the guidelines in the document.

Response: The licensee is responsible for ensuring that shipments of SNF are properly escorted. Operating history indicates that there has never been a mix of LLEA personnel and non-LLEA armed escorts accompanying an SNF shipment at the same time. In the event that such a circumstance were to occur, the licensee is already responsible for ensuring that the armed escorts properly carry out their responsibilities. The licensee is free to choose the manner that it feels best achieves coordination between LLEA personnel and non-LLEA armed escorts to ensure that shipments of SNF are properly escorted. The NRC anticipates that planning and coordination with LLEAs will provide the opportunity to clarify roles and responsibilities and address any concerns or issues that either the licensee or the LLEAs might have.

Issue 10: No Technical Basis for Deadly Force/Design Basis Threat § 73.37(b)(1)(i)

Comment: One commenter (DOE NRP) expressed concern that the NRC requirement for escorts to delay or impede attempted acts of theft, diversion, or radiological sabotage could be interpreted as requiring escorts to assume an offensive combatant role and aggressively defend the shipment, regardless of the characteristics of the threat or the shipment and regardless of the threat to the escorts' safety. The commenter went on to say that they believe this interpretation would be inappropriate in consideration of the minimal risk to public health and safety from attempted acts of theft, diversion, or radiological sabotage of robust Type B SNF shipping containers in comparison to the risk to escort personnel whose standing orders require proactive engagement of any suspected security threats; and that the risk to the escorts and response forces could quickly become much greater than the risk to public health and safety, owing to the safety inherent to Type B SNF containers. The commenter also stated that they had evaluated the risks associated with transportation of naval SNF in two Environmental Impact Statements; that the statements used well established transportation impact analysis methodology, and they included specific evaluations of the potential impacts of terrorist attacks using shaped charge weapons. The statements concluded that the impacts associated with terrorist attacks are bounded, with significant margin, by the impacts of transportation accidents. Another commenter (NEI) stated that the Design Basis Threat (DBT) needs to be clearly defined to ensure that armed escorts are adequately able to counter the force directed at them; that what is proposed currently does not address this need; and that the definition of the DBT should recognize that the protection against malevolent groups is a shared responsibility between licensees and law enforcement authorities.

Response: The requirements placed on armed escorts are consistent with the definitions for ''armed escort'' and ''armed response personnel'' found in § 73.2 and are similar to language found elsewhere in 10 CFR part 73. Armed escorts are neither required nor expected to take offensive action against aggressors (e.g., actively pursuing and/or apprehending suspected aggressors). Rather, armed escorts are expected to assume a defensive posture in order to delay and impede attempts at theft and diversion in addition to attempts at radiological sabotage of SNF shipments. The NRC does not disagree with the commenter's conclusions with respect to the impact of terrorist attacks on shipments of naval SNF. However, due to the differences in design and radionuclide composition between naval SNF and commercial SNF (the latter of which is the subject of this rule), it is not relevant to use the results of studies on naval SNF to justify physical protection placed on transportation of commercial SNF. Due to national security considerations, these differences cannot be discussed further in this public forum.

The NRC does not agree that the protection of shipments of SNF is a shared responsibility between licensees and law enforcement authorities. Licensees are responsible for ensuring the safety of shipments of SNF. In carrying out this responsibility, licensees must preplan and coordinate shipments of SNF, which may include arrangements with local law enforcement agencies for their response to an emergency or a call for assistance along the route or escorting the shipment. Both the current rule and the proposed rule provide for the armed escort role to be filled either by private security personnel procured by the licensee or local law enforcement personnel. The escort responsibility is not ''shared'' as suggested by the commenter.

Issue 11: Definition of ''LLEA'' § 73.37(b)(1)(i)

Comment 1: The commenter from a State organization (CHP) indicated that the section exempts LLEA personnel from the armed escort training requirements because they should have received sufficient training on the Federal and State restrictions regarding the use of deadly force. However, the term ''LLEA'' is not defined to clarify the inclusion of county and State agencies, such as the CHP, in the exemption.

Response to Comment 1: The NRC has defined ''LLEA'', in NUREG–0561, ''Physical Protection of Shipments of Irradiated Reactor Fuel.'' Consistent with that definition, ''LLEA'' shall mean any State, county or municipal agency that has law enforcement authority within the locality or jurisdiction through which the shipment of SNF may pass. The term is usually limited to the particular law enforcement agencies that have responsibility for responding to calls for assistance by escorts, such as county or municipal police forces, port authority police, or highway patrol. An *escort* is a person with similar duties to that of an ''armed escort,'' as defined in § 73.2, but who may or may not be armed. If unarmed, the escort is not expected to actively prevent or impede acts of radiological sabotage when met by armed adversaries. As such, the CHP and similar organizations are included in the definition of ''LLEA''.

Comment 2: One commenter from a State organization (CHP) indicated that the proposed rule should clarify the training requirements for any accredited law enforcement agency at the Federal, State, or local level.

Response to Comment 2: The NRC disagrees that clarification is needed to address the training requirements for LLEA personnel. The NRC understands that all accredited law enforcement training programs provide instructions on the appropriate use of force, including deadly force. It is NRC's position that members of LLEAs are exempt from the training requirements set forth in Appendix D to 10 CFR Part 73. The NRC anticipates that planning and coordination with LLEAs will provide the opportunity to clarify roles and responsibilities and address any concerns or issues that either the licensee or the LLEAs might have.

Issue 13: Certification of Transfer § 73.37(b)(1)(iii)

Comment: A commenter from the nuclear industry (NEI) indicated that the regulation as proposed leaves it up to the preplanning activities to define the type of written certification required. The commenter indicated that this was another positive example of the flexibility of the proposed rulemaking.

Response: The comments expressed agreement with the proposed revisions. As such, no changes to the rule language is required.

Issue 14: Preplanning With States § 73.37(b)(1)(iv)

Comment 1: Two commenters from State organizations (CSG Midwestern and MODNR) recommended that adding a minimum timeframe for preplanning and coordinating shipments with States would be helpful to ensure that States have early and substantial involvement in the management of SNF shipments.

Response to Comment 1: The NRC agrees that a minimum timeframe for preplanning and coordinating shipments with States would be helpful. The rule text and the guidance document were changed to recommend that States be contacted for preplanning purposes no later than 2 weeks prior to a shipment or prior to the first shipment in a series of shipments.

Comment 2: Two commenters from State organizations (CSG Midwestern and MODNR) recommended that preplanning and coordination include offsite response teams (e.g., hazmat teams).

Response to Comment 2: The NRC does not agree with the recommendation to add hazmat teams in the preplanning and coordination activities. The NRC and DOT have strict requirements that licensees and carriers must follow to ensure the safe transport of SNF. The NRC does not have regulatory authority to require the DOT to include hazmat teams in licensee security preplanning and coordination efforts.

Issue 15: Delays and Stops § 73.37(b)(1)(iv)(A)

Comment: Three comments from State organizations (IEMA, CSG Midwestern and MODNR) expressed concern that the emphasis in the proposed rule on minimizing stops and delays will lead shippers and carriers to believe they can use this requirement to avoid State mandated inspections and that it may also impact negotiations for stopping points during the planning phase. Two commenters (IEMA and CSG Midwestern) requested that the NRC encourage State participation in the Commercial Vehicle Safety Alliance (CVSA) North American inspection standard and process for highway shipments of SNF as a way to reduce the time necessary for stops at State borders, and that the NRC should, therefore, engage with the States and other Federal agencies to establish a reciprocal inspection program for rail shipments. One commenter (MODNR) suggested the addition of language that clarifies that the purpose of minimizing stops and delays is not to eliminate inspections by the various States. The commenter further requested that the proposed rule and guidance document clarify that the language ''minimize intermediate stops and delays'' should allow for inspections by the States at the first secure location upon entry into the State by road, or at an appropriate predetermined location for rail shipments.

Response: Licensees that ship SNF by highway or rail must abide by all applicable Federal and State requirements, including requirements imposed by DOT. Neither the rule nor the guidance document grants licensees the authority to bypass mandatory State or Federal inspections. The request that the NRC encourage State participation in the CVSA inspection standard and process is outside the scope of this rulemaking.

Issue 16: Arrange for Positional Information Sharing When Requested § 73.37(b)(1)(iv)(C)

Comment: One commenter (CSG Midwestern) asked if the NRC intended for licensees to use a telemetric position monitoring system that is accessible to the States and the NRC.

Response: The NRC does not require licensees to use a telemetric position monitoring system that is accessible to the States and the NRC. During the preplanning and coordination phase of a shipment, licensees are required to discuss with the Governor, or the Governor's designee, of each State through which the shipment will pass, an arrangement for sharing positional information about a shipment when requested by a State. If positional information is requested by a State along the route, the licensee should coordinate with the State as to the frequency and method for providing such information as a part of the preplanning and coordination activities.

Issue 17: Safe Havens §§ 73.37(b)(1)(iv)(D) and 73.37(b)(1)(vi)(A)

Comment: Two comments (CSG Midwestern and IEMA) were related to safe havens. One comment (IEMA) requested clarification with respect to who has the final determination regarding the location of safe havens, indicating that States should have the final determination on the location of safe havens within its borders, as the State has the best working knowledge of its infrastructure, emergency response coordination and local law enforcement capabilities. Another comment (CSG Midwestern) expressed concern that the requirement for licensees to ''develop route information, including the identification of safe havens'' does not sufficiently capture the intent of ''minimizing movement . . . through heavily populated areas'' and recommended that the guidance document be revised so that licensees understand that preplanning and coordinating with States on route selection is intended to keep shipments out of heavily populated areas.

Response: The NRC agrees that each State has the best working knowledge of its infrastructure, emergency response coordination and local law enforcement capabilities within its borders. However, the identification of acceptable safe havens along a proposed shipment route is the responsibility of the licensee, who should preplan and coordinate the safe havens in conjunction with the States during the route planning phase. In addition, depending on the departure and arrival destinations of a shipment, highway construction along the preplanned route, detours, etc., it is not always possible for shipment routes to completely avoid heavily populated areas. However, the guidance document was amended to include the concept of minimizing movement through heavily populated areas as much as practicable.

Issue 18: Shortest Route § 73.37(b)(1)(v)

Comment: One comment (MNHSEM) recommended that the rule language be strengthened to ensure licensees are required to preplan and coordinate with State, local, and Tribal agencies well in advance of any shipments, to ensure that the shortest most direct route is used for all shipments and to prohibit the avoidance of States that impose fees for transportation of radioactive materials.

Response: The NRC agrees that licensees should preplan and coordinate with State Governors or the Governor's designee in advance of any shipments and that the shortest most direct route should be used for all shipments when feasible. However, depending on the departure and arrival destinations of a shipment, highway construction along the preplanned route, detours, etc., it is not always possible for shipment routes to travel the shortest and most direct route. The preplan and coordinate requirements are sufficiently flexible to address these issues.

The NRC also agrees with the statement that the rule could be strengthened to ensure that licensees preplan and coordinate. The rule text and guidance document were changed to recommend that States be contacted for preplanning purposes no later than 2 weeks prior to a shipment or prior to the first shipment in a series of shipments.

In terms of the notification of Tribal agencies, this issue was addressed as a part of a separate rulemaking entitled, ''Advance Notification to Native American Tribes of Transport of Certain Types of Nuclear Waste,'' which was approved by the Commission on January 30, 2012, and was published as a final rule on June 11, 2012 (77 FR 34194). Therefore, this portion of the comment is outside the scope of this rulemaking.

Issue 19: Arrangements With LLEA § 73.37(b)(1)(v)

Comment 1: One comment (University of Missouri Research Reactor (MURR)) indicated that advance arrangements for response by LLEA to an emergency or a call for assistance during the shipment are typically made through the State Governor's Designees and not individually with local entities, and recommended adding State Governor's Designees as an option for arranging emergency response.

Response to Comment 1: The NRC agrees with these comments. The guidance document was changed by adding the State Governor's Designee as an option for arranging emergency response.

Comment 2: Another comment (CSG Midwestern) recommended adding ''security-related emergency,'' to § 73.37(b)(1)(v) to avoid confusion with other emergencies that would require the assistance of emergency response authorities in the States.

Response to Comment 2: The NRC agrees with these comments. Section 73.37(b)(1)(v) was revised to insert ''security-related'' before ''emergency.''

Issue 20: NRC Route Approval § 73.37(b)(1)(vi)

Comment 1: A commenter from NEI indicated that the proposed rule needs to clearly delineate the relationship between the roles of NRC and DOT in the protection of SNF in transit; that it is important that the NRC not make new requirements that could potentially conflict with DOT responsibilities concerning approval of routes; and that the proposed rule's ability to appropriately address the selection of shipping routes would be significantly enhanced by specifying route selection based on a vulnerability assessment.

Response to Comment 1: The NRC agrees with this comment. The discussion in the final rule on the NRC's and DOT's responsibilities was revised to provide clarification.

Comment 2: A commenter from WIEB agreed that the NRC routing criteria in the proposed rule would generally reduce risk, including the risk of radiological sabotage. However, WIEB indicated that the criteria may cause conflicts in certain situations. For example, WIEB indicated that it may be necessary for SNF rail shipments to go through heavily populated areas in order to reduce travel time and overall risk to the shipment because better quality rail track may go through urban areas. The commenter further elaborated that given the conflicts of criteria and the lack of relevant information, the NRC may not be able to pre-approve rail routes. The WIEB indicated that the NRC would not have all the relevant information and the tools needed to apply the criteria and resolve the conflicts. The commenter suggested that a better approach may be to specify the criteria that generally improve safety and reduce the risk of theft, diversion and radiological sabotage, but then to empower licensees or DOE, in consultation with States, to apply the criteria to particular shipments or shipment campaigns, using state-of-the-art assessment tools and information resources.

The WIEB also expressed concern that the implementation of DOT rules on rail route selection would not allow the NRC to pre-approve rail routes and does not support shipment preplanning in coordination with the NRC, States and LLEAs. The commenter stated that DOT rules must be revised as they apply to rail transport of SNF; that the current DOT's FRA process should be made available for review and critique by the NRC and States; and that if suitable revisions are not forthcoming, DOT's FRA process, as it applies to SNF/high level waste transport, should be revised. The WIEB commenter also expressed concern that since 10 CFR Part 73 would not apply to DOE shipments under the Nuclear Waste Policy Act of 1982 (NWPA), a significant gap in security regulation exists for what potentially would be by far the largest number of prospective shipments in the future.

Response to Comment 2: The NRC does not agree with these comments. The NRC conducted significant outreach and coordination with DOT in the development of this rule. As long as there is coordination among the licensee, the commercial carrier and the States of passage, the NRC has determined that SNF shipment primary and alternate routes for highway and rail can be developed that satisfy both DOT and the NRC requirements and guidelines. Ultimately, it is the responsibility of the licensee to ensure that both DOT and the NRC route selection criteria requirements are met, as is explicitly stated in the guidance document and as required by § 71.5. In addition, licensees should weigh the criteria for route selection contained in the rule and the guidance document against actual route conditions both during the development of the route and prior to using the route, especially if there is a long delay between approval and usage. Any perceived conflicts in the criteria will be discussed with the licensee and resolved during the NRC's route approval process. The NRC recognizes that licensees will have to work closely with rail carriers in the development of proposed rail routes for SNF shipments. In fact, licensees will rely heavily on rail carriers' knowledge and expertise during this process. Licensees will still be expected to apply the selection criteria as it applies to rail routes. Discussions on the suitability of and possible revisions to DOT rules for rail route selection criteria and discussions on the security of DOE shipments and NWPA are beyond the scope of this rulemaking.

Issue 21: Documenting Preplanning and Coordination § 73.37(b)(1)(vii)

Comment: One commenter (CSG Midwestern) expressed concern about the requirement for licensees to ''document the preplanning and coordination activities'' (§ 73.37(b)(1)(vii)), stating that the proposed rule does not adequately convey the type of documentation expected, nor does the guidance document provide sufficient information to help a licensee understand what type of actions are expected and when. The commenter suggested adding examples of what constitutes ''acceptable documentation,'' including but not limited to timelines for outreach to States (e.g., meetings, teleconferences), summaries of planning meeting discussions, and lists of people contacted.

Response: The NRC agrees with this comment. Examples of acceptable documentation were added to the guidance document.

Issue 22: Advance Notification Receipt by Governor § 73.37(b)(2)

Comment 1: The State of Nevada supported the proposed rule revisions in § 73.37(b)(2) regarding advance notification information for State Governors and Governors' designees.

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: The CSG Midwestern indicated that it was understandable why the NRC changed the wording to specify that licensees are required to

provide advance notification ''prior to the shipment of SNF outside the confines of the licensee's facility or other place of use or storage.'' The commenter indicated that the revised wording, however, leaves out an important reference to ''the transport of SNF within or through a State,'' which should be reinserted in the rule text and in the guidance document. The commenter further elaborated that absent this language in the rule text and guidance document, licensees could interpret this section as requiring notification only to the Governor or Governor's Designee of the State in which ''the licensee's facility or other place of use or storage'' is located.

Response to Comment 2: The NRC agrees with this comment. The rule text and guidance document were revised to include the wording that was inadvertently omitted.

Comment 3: One commenter (IEMA) requested that the NRC reconsider the existing time line for advance notification to the States. The commenter recommended that the advanced notification to the States should be postmarked at least 10 days prior to the commencement of a shipment and arrive on the Governor's or his/her designees' desk a minimum of 7 days before a shipment is scheduled to depart. Another commenter (MODNR) requested a change to the advance notification provision so that notifications to the States and NRC, regardless of the delivery mode, should be received 10 days prior to the shipment. Both commenters indicated that the additional time would reduce the coordination and staffing burden on States and provide an additional ''cushion'' for State agencies tasked with providing safeguards communications to other State agencies with a need-to-know or who may be participating in inspection or security operations.

Response to Comment 3: The NRC agrees with the comments suggesting that a minimum 10-day notification to the Governor or his/her designee for notifications by mail. The rule text and guidance document were changed to provide that the advance notification by mail to the Governor or Governor's designee should be postmarked at least 10 days prior to the commencement of a shipment. With regard to the comment that all other delivery methods also are given 10 days for receipt by the State, the NRC does not agree with this comment fully. However, in the rule text and guidance document, the minimum timeframe for all other modes of delivery of the notification was increased from 4 days to 7 days for arrival to the Governor or the Governor's designee.

Comment 4: One commenter (CSG Midwestern) noted that § 73.37(f) would require licensees to immediately conduct an investigation of a shipment that is lost or unaccounted for after the designated no-later-than arrival time in the advance notification. The commenter also noted that the section on advance notification (§ 73.37(b)(2)), however, does not refer to a ''designated no-later-than arrival time,'' and that if the ''estimated date and time of arrival of the shipment at the destination'' in § 73.37(b)(2)(iii)(C) is intended to be the ''designated no-later-than arrival time,'' it should be so stated.

Response to Comment 4: The NRC does not agree with this statement. The only arrival time mentioned in § 73.37(b)(2) is the estimated time of arrival; we consider this to be synonymous with the no-later-than-arrival time referred to in § 73.37(f).

Issue 23: Advance Notification Postponement and Cancellation § 73.37(b)(2)(iv)

Comment: Two comments (IEMA and CSG Midwestern) were received on the requirements for revisions and cancellation notices for SNF. The commenters noted that allowing licensees open ended delays or an unlimited number of revisions prior to cancelling a shipment impacts a State's ability to adequately manage its resources to complete the inspections required by DOT and provide escorts on a timely basis.

Response: Section 73.37(b)(1)(iv) of the rule requires NRC licensees to preplan and coordinate shipments with States. The purpose of preplanning and coordinating shipments is to allow States to allocate their resources in an efficient manner. Preplanning and coordination could be used to eliminate or make States aware of potential shipment delays on a schedule that would allow States time to efficiently deploy or redeploy its resources. It is anticipated that States would share ''best practices'' acquired during the preplanning and coordination of shipments among States and with NRC licensees to encourage shipment practices that might minimize delays and unnecessary stops as shipments transit multiple States. Section 73.37(b)(1)(iv) allows flexibility for both States and licensees to plan shipments to occur within a specific shipment window, with the mutual understanding that shipments delayed beyond that window would need additional coordination or planning. The NRC believes that the issue of the multiple delays should be addressed through the preplanning and coordination process.

Issue 24: Advance Notification Cancellation Notice § 73.37(b)(2)(v)

Comment: Two comments (MISP and CSG Midwestern) were received on the requirement to send shipment cancellation notices to the Governor or the Governor's designee. One comment (MISP) requested that the notification process and detail be specified (i.e., how the notification is to be delivered, time line (pre-event or post-event), information to be conveyed (reasons for cancellation), rescheduling (if known), etc.). The CSG Midwestern also requested that the cancellation notice requirement include the words ''as soon as possible'' or similar language so that licensees will understand the sense of urgency that cancellation notices must be timely in order to avoid situations in which State resources are committed unnecessarily.

Response: The NRC agrees with these comments. The guidance document will be changed to provide specific information relative to implementing this requirement.

Issue 25: Transportation Physical Protection System General § 73.37(b)(3)

Comment 1: The State of Nevada fully supported the new requirements in the proposed transportation physical protection in § 73.37(b)(3).

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: The DOE NRP supported the following rule requirements relative to armed escorts: (1) They should be properly vetted for access authorization; (2) they should maintain continuous surveillance of the shipment; (3) they should be independent of the carrier's organization; and (4) they should have multiple communications capabilities to call for help in response to suspicious activity by anyone, including carrier personnel. The commenter indicated that escorts for naval reactor SNF shipments currently meet all these new requirements, and considered these requirements appropriate for armed escorts.

Response to Comment 2: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 26: Armed Escort Function Recommended Language § 73.37(b)(3)(i)

Comment: The DOE NRP recommended that § 73.37(b)(3)(i) be revised to indicate that armed escorts

will ''guard'' as opposed to ''protect'' the SNF shipment.

Response: The requirements placed on armed escorts are consistent with the definitions for ''armed escort'' and ''armed response personnel'' found in § 73.2, and are similar to language found elsewhere in 10 CFR Part 73. Section 73.2 provides the following definition, ''*Armed escort* means an armed person, not necessarily uniformed, whose primary duty is to accompany shipments of special nuclear material for the protection of such shipments against theft or radiological sabotage.'' The NRC declined to make this change.

Issue 27: LLEA and Movement Control Center § 73.37(b)(3)(ii)

Comment: Three comments, one from NEI and two from the transportation industry (Secured Transport Services, LLC (STS) and RAMTASC), were received that related to the duties of the movement control center. All three expressed concern that communications personnel located in a remote facility are not in the position to effectively ''direct physical protection activities,'' that this function is best served by the commander of the private escort force/LLEA escorts with direct knowledge of the events as they unfold on the scene of the incident.

Response: The NRC agrees with the comments that the movement control center should coordinate and not direct the physical protection activities. The wording of § 73.37(b)(3)(ii) was revised to reflect this change. The language in § 73.37(b)(3)(ii) was changed to read: ''The movement control center must be staffed continuously by at least one individual who has the authority to coordinate the physical protection activities.''

Issue 28: Training for Movement Control Personnel § 73.37(b)(3)(ii)

Comment 1: One commenter (CHP) expressed concern that the proposed rule did not address the training requirements of the movement control personnel. The commenter further elaborated that the addition of §§ 73.37(b)(3)(v), and (b)(3)(vii), will require the licensees to develop, maintain, and implement written procedures for the duties of the different personnel, but does not outline the training requirements of those personnel specific to their duties and responsibilities.

Response to Comment 1: The NRC does not agree with these comments. The licensee is required to ensure that all personnel involved in the SNF shipment are trained, including movement control center personnel, and are to ensure that this training is consistent with their assigned duties.

Comment 2: Another commenter (RAMTASC) stated that the proposed rule is intended to ensure that all personnel associated with the shipment are prepared to prevent the theft, diversion, or radiological sabotage of SNF shipments; that this is a significant expansion of current responsibilities for carriers, especially considering the presence of armed escorts with each shipment. The commenter stated that with the significant turnover in rail personnel during the conduct of a shipment across the country, it is not practicable to effectively train all of these people to prevent theft, diversion, or sabotage of these shipments; that the security role should remain the province of specially trained security escorts; and that the training for shipment personnel should be limited to ensuring they understand the authority and responsibilities of the armed escorts and support them as required.

Response to Comment 2: The NRC does not fully agree with this comment. While all personnel mentioned in § 73.37(b)(3)(v)(C) are involved one way or another in the physical protection system, not all personnel will have the same level of involvement in ensuring the security of the shipment. Thus, personnel with unescorted access to SNF rail shipments are neither required nor expected to prevent the theft, diversion, or radiological sabotage of SNF shipments. Only the armed escorts accompanying a rail shipment of SNF are expected to delay and impede threats, theft or radiological sabotage of SNF and to inform LLEA of the threat and request assistance.

As such, the NRC agrees that the rule should be clarified relative to armed escorts and other movement control personnel roles and responsibilities, and added clarifying language to the rule to address these comments. The following clarifying changes were made: (1) In § 73.37(a)(1)(i), a reference to the definition of ''armed escort'' in § 73.2 was added; (2) in § 73.37(b)(3)(i), a reference to the definition of ''movement control center'' in § 73.2 was added; and 3) in § 73.37(b)(3)(v), the language was revised to clearly indicate that the transportation security procedures should address the roles and responsibilities of all personnel involved in the planning, monitoring and execution of the physical protection of SNF in transit. In addition, the accompanying guidance document clearly delineates the roles and responsibilities of all these personnel, especially armed escorts.

Issue 29: Shipment Commencement §§ 73.37(b)(3)(iii) and 73.72(a)(4)

Comment: One comment (NEI) expressed concern that the term ''shipment commences'' is too vague and recommend that within § 73.72(a)(4) ''start of shipment'' and ''shipment delivery/arrival'' be specifically defined.

Response: The NRC does not agree with this comment. The plain meaning of the terms used in §§ 73.37(b)(3)(iii) and 73.72(a)(4) adequately conveys when monitoring of the shipment and providing notification of the shipment are required.

Issue 30: Maintaining Written Logs § 73.37(b)(3)(iv)

Comment: One comment (MURR) related to the requirement for movement control center personnel and armed escorts to maintain a written log for each SNF shipment. The MURR indicated that LLEA escorts reported that keeping a log of the shipment is a major distraction that takes away from their primary function of driving and observing the shipment.

Response: The NRC does not agree with this comment. This is not a new requirement. It has been a requirement since the June 1980 amendments to 10 CFR Part 73. The intent of this requirement is that a single written log be maintained and that the entries in the log be coordinated between the armed escorts and the movement control personnel monitoring the shipment. It is the responsibility of the licensee to determine the means and methods used to maintain this log.

Issue 31: Calls to Movement Control Center § 73.37(b)(3)(vii)(B)

Comment: Two comments (STS and MURR) related to the following language in § 73.37 (b)(3)(vii)(B): ''Provide that the 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 . . .'' One commenter (STS) requested that the NRC consider changing the language to allow contact with the movement control center by persons other than the escort and by means other than calls. An example provided by the commenter was where team drivers are used, the resting driver may be able to make contact with the movement control center rather than the escort. Additionally, the commenter stated that the ''call'' can be a satellite message rather than voice communications; and that a ''macro'' message sent via satellite is safer and more secure than voice exchanges, as it

gives exact locations without being overheard, and it's a single push of a button versus dialing a phone.

Another commenter (MURR) stated that all communications between the movement control center and LLEA personnel acting as armed escorts are currently handled through the respective State Emergency Management Agency or the Governor's Designee. However, non-LLEA escorts, i.e. private armed escorts, should be required to make calls to the movement control center as stated.

Response: The NRC has revised the proposed rule to address these comments. It was not the intent of the proposed § 73.37(b)(3)(vii)(B) to prevent or require a specific method of communication between the escorts and movement control center, or prevent an intermediary (i.e., a State's emergency management agency, a State Governor's designee or other personnel accompanying the shipment) from handling and forwarding communications to and from the escorts and movement control center. It is important that the duties and responsibilities of personnel involved with SNF shipments be clear and unambiguous. It is imperative that these types of details be discussed and agreed upon in advance during the preplanning and coordination phase, and that they be documented and understood by all personnel responsible for the security of the SNF shipment. As such, although the NRC viewed ''call'' as a generic term that can include any number of communication methods, a change was made to the proposed rule. For clarity, § 73.37(b)(3)(vii)(B) was revised, replacing the words ''make calls to'' with ''communicates with.''

Issue 32: Technology Security §§ 73.37(c)(3), 73.37(d)(3), and 73.37(e)(4)

Comment 1: One commenter from NEI indicated that elimination of a mandatory CB radio requirement is an improvement given the present vastly improved state of communication capabilities in the U.S. In general, the commenter indicated that they agreed with the use of general performance requirements in lieu of prescribing the use of specific equipment which may be obsolete in the relatively near future, and that this is an example of the type of flexibility that should be broadly preserved in this rulemaking.

A commenter from WIEB indicated that the NRC was correct in noting the rapid obsolescence in the field of telemetric monitoring and tracking, and the need for performance criteria rather than specific systems specification.

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such no change to the rule language is required.

Comment 2: One comment (IEMA) suggested that the rule include a requirement that licensees acting as shippers perform an Operational Security (OPSEC) assessment with regards to smart and cyber technology, which includes identifying those actions that can be observed by adversary intelligence systems, determining indicators that hostile intelligence systems could use to derive critical intelligence, and implementing measures that eliminate or reduce the vulnerabilities of friendly actions to adversary exploitation. The commenter expressed concern that the use of smart phones, smart media, and social networking to communicate creates vulnerabilities. The commenter further elaborated that it would be prudent for the NRC to require licensees and their contractors involved in the transport of SNF to evaluate these technologies and reduce the release of critical geographical information associated with SNF shipments.

Another commenter (WIEB) noted that the distinctions in systems needed for preplanning and route assessment and the systems needed for tracking and monitoring in operations are rapidly converging and recommended that the NRC, in coordination with DOE should consider a set of performance requirements that will spur development and deployment of advanced tracking and monitoring of SNF transport equipment, cargo, route conditions and route environs, selecting and communicating relevant information to relevant officials in highly accessible formats, and encouraging continual adoption and updating by planners and operators.

Response to Comment 2: The NRC does not agree with these comments. Requiring OPSEC assessments and encouraging the development of advanced tracking and monitoring systems are activities beyond the scope of this rulemaking. NRC regulations do not require licensees to protect SNF shipments in this fashion. In addition, § 73.37(g) requires that Safeguards Information, including information related to the shipment schedule and shipment location, be protected against unauthorized disclosure. This requirement applies to the licensee, State officials, State employees and any other individuals with access to such information. It is the responsibility of the holder of such information to develop the means and methods required to protect this information.

Comment 3: A commenter (CSG Midwestern) wanted to know how the NRC will ''track and actively monitor'' shipments that are in transit, and whether the NRC will have direct access to the same ''telemetric position monitoring system'' that the licensee uses. The commenter recommended that the rule should require licensees to use a telemetric position monitoring system for shipments by sea as well as those by road or rail; that shipments of SNF might travel by barge on the Great Lakes or rivers in the Midwest, and it is important, therefore, for Midwestern State agencies to be able to get accurate information on the location and status of such shipments.

Response to Comment 3: The NRC does not routinely track or monitor SNF shipments. This is the responsibility of the licensee, via the movement control center. With regards to the requirements for continuous monitoring of sea shipments within U.S. territorial waters; i.e., travel by barge on the Great Lakes or rivers, this requirement is included under § 73.37(b)(3). Nevertheless, this comment points out that further clarification is needed relative to § 73.37(e). The title of this section is changed from ''Shipments by sea'' to ''Shipments by U.S. waters.'' In addition, in the first paragraph, the phrase ''is by sea'' is being replaced with ''traveling on U.S. waters.'' This will ensure that licensees understand that the security of all waterborne SNF shipments must meet the general provisions of § 73.37(b) as well as the specific requirements in § 73.37(e). Appropriate changes will also be made to the guidance document.

This change is consistent with language used by the U.S. Coast Guard to describe U.S. oceanic and coastal waters (33 CFR 329.12). Security of sea shipments between 3 and 12 nautical miles out is the responsibility of the Coast Guard, which also publishes detailed security requirements pertaining to U.S. ports (33 CFR Subpart H, Maritime Security). Replacing ''sea'' with ''U.S. waters'' in § 73.37(e) clarifies that it is the NRC's intent to ensure it has visibility of, and that licensees provide a level of protection for SNF waterborne domestic shipments, and for exports and imports, from the time the import enters the 3-mile zone until it arrives at a U.S. port, and from the time the export departs a U.S. port until it leaves the 3-mile zone.

Comment 4: A commenter (NEI) indicated that the requirement specified in § 73.37(c)(3) that requires redundant communication capability ''at all times'' is overly prescriptive. The commenter indicated that it has the potential to

overly complicate plans to mitigate a loss of communications equipment and it should be changed to require ''reasonable assurance'' of redundancy.

Response to Comment 4: The NRC has determined that clarification of this rule language is needed to address the comment. It was not the intent of § 73.37(c)(3) to require redundant communication capability ''at all times'' as suggested by the commenter. Section 73.37(c)(3) requires that two-way communication between the movement control center, the transport vehicle, the escort vehicle and LLEA is provided or available at all times. Given the current advancements in communications technology, requiring redundant communication ability not subject to the same failure modes as the primary communication such that two-way communication is possible at all times is not overly prescriptive. However, a review of the relevant sections reveals that the clarification is needed. Therefore, §§ 73.37(c)(3), (d)(3) and e(4) were revised to improve understanding of the intent by adding the following phrase to the rule text. ''To ensure that 2-way communication is possible at all times, alternate communications should not be subject to the same failure modes as the primary communication.''

Issue 33: Contingency and Response Procedures § 73.37(b)(4)

Comment: The State of Nevada fully supported the provisions on contingency and response procedures in § 73.37(b)(4).

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 34: Contingency Response § 73.37(b)(4)(iv)

Comment: One comment (Private Citizen-Hardin) recommended that a new paragraph (F) be added after § 73.37(b)(iv)(E) to require licensees (or their monitoring center) to notify the NRC of transportation safeguards events in accordance with § 73.71.

Response: The NRC does not agree with this comment. The revisions suggested are already included in the rule. Sections 73.37(b)(3)(iii) and 73.37(b)(3)(v)(C) require reporting of safeguards events under the provisions of § 73.71.

Issue 35: Deadly Force: Recommended Language § 73.37(b)(4)(iv)(D)

Comment: One comment (DOE NRP) suggested revising the language of § 73.37(b)(4)(iv)(D) to read: ''Take necessary steps to delay and/or impede threats, thefts, or radiological sabotage of SNF as appropriate considering threat characteristics, shipment characteristics, and the primary requirement for personnel to provide for their own safety until response forces arrive, and . . .''

Response: The NRC agrees with this comment in part. The requirements placed on armed escorts are consistent with the definitions for ''armed escort'' and ''armed response personnel'' found in § 73.2, and are similar to language found elsewhere in 10 CFR Part 73. However, to provide clarity, the NRC will strike ''until response forces arrive'' from § 73.37(a)(2)(ii), and will add language to the guidance document stating that armed escorts are neither required nor expected to take offensive action against aggressors (e.g., actively pursuing and/or apprehending suspected aggressors), but rather are expected to assume a defensive posture in order to delay and impede attempts at theft and diversion in addition to attempts at radiological sabotage of SNF shipments as appropriate, considering threat characteristics, shipment characteristics, and the primary requirement for personnel to provide for their own safety. The NRC will also add language to the guidance document stressing that it is imperative for armed escorts, drivers or other accompanying personnel to contact response personnel without delay as soon as they detect a threat to the shipment or themselves, but not to exceed 15 minutes after discovery.

Issue 36: General: Shipments by Road § 73.37(c)

Comment: The State of Nevada endorsed all aspects of § 73.37(c).

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 37: Shipments by Road: Transport Vehicle Armed Escorts § 73.37(c)

Comment: One commenter (MURR) stated that the requirements of § 73.37(c)(1)(i) and (ii) could not be met because the second driver of the transport vehicle cannot be armed. The commenter indicated that research reactors use commercial carriers which do not use armed drivers. In addition, the commenter indicated that States cannot provide two armed escorts (one in front and one in the back) for the shipment as an option.

Response: The NRC does not agree with this comment. The rule does not require that the driver be armed. It only requires that an escort in the cab be armed.

Issue 38: Two Weapons § 73.37(c)(2), 73.37(d)(2), and 73.37(e)(2)

Comment: Two commenters (CHP and STS) requested that clarification of the types of weapons that armed escorts are required to carry be added to § 73.37(c)(2), 73.37(d)(2), and 73.37(e)(2).

Response: The NRC included the requested clarification in the rule guidance document. In the guidance document (NUREG–0561, Revision 2), the NRC provides recommendations relative to each weapon's separate and distinct response capabilities (e.g., a handgun and a rifle and/or a shotgun).

Issue 39: Movement Center § 73.37(c)(6) and (d)(4)

Comment: One comment (Private Citizen–Hardin) recommended that new subparagraphs (c)(7) and (d)(5) be added to require licensees (or their monitoring center) to notify the NRC of transportation safeguards events in accordance with § 73.71.

Response: The NRC does not agree with this comment. Sections 73.37(b)(3)(iii) and 73.37(b)(3)(v)(C) already require reporting of safeguards events under the provisions of § 73.71.

Issue 40: Shipments by Rail: § 73.37(d) and 73.37(d)(1)

Comment 1: The State of Nevada supported the revisions in § 73.37(d) regarding rail shipment of SNF. The commenter specifically identified support for elimination of the distinction between heavily populated areas and other areas along rail shipment routes regarding the armed escort requirements; weapons requirements for armed escorts; eliminating specific types of communications technology, and supported the use of a telemetric position monitoring system or an alternative tracking system. One industry commenter supported the NRC's decision not to require dedicated trains for the shipment of SNF and thought it was a good decision.

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: One commenter (RAMTASC) expressed concern that avoiding populated areas could require shipments on lower quality rail tracks which would increase the accident risk. While the commenter agrees with the NRC's decision to not incorporate specific routing requirements into the rulemaking, they questioned whether the required planning with States would not have the same result. The

commenter stated that the specific roles of States versus the railroads versus the shipper of record were not well defined, and if consensus were required on shipment routes, that would potentially allow States to block shipments along the safest routes by refusing to approve routes recommended by the railroads, which would serve to undo the carefully crafted responsibilities in the Rail Safety Improvement Act of 2008. The commenter indicated that this Act requires railroads to use objective data as the basis for selecting rail routes that provide the best overall combination of safety and security. The commenter further indicated that the role of States needed to be limited to an advisory role to preclude politicizing the route selection process. The commenter concluded by recommending that the NRC rule should simply defer to the DOT final rulemaking for balanced consideration of safety and security data in consultation with States.

Response to Comment 2: The NRC does not agree with this comment. It is the licensee's responsibility to preplan and coordinate SNF rail shipments with the Governor of each State through which the shipment will pass and with the rail carrier(s). As mentioned elsewhere in the response to comments, licensees are also required to comply with all DOT safety and security requirements pertaining to SNF shipments, which would include any requirements imposed on rail shipments of SNF. None of the proposed requirements in this rulemaking would supersede or vacate the provisions in the Rail Safety Improvement Act of 2008.

Comment 3: Two commenters (WIEB and CSG Midwestern) stated that dedicated trains should be required in cross-country rail transport of SNF shipments. One commenter (WIEB) cited a 2006 National Academies' study of SNF transport which the commenter said found that ''there are clear operational, safety, security, communications, planning, programmatic, and public preference advantages that favor dedicated trains. The committee strongly endorsed DOE's decision to transport SNF and high-level waste to a Federal repository using dedicated trains.'' Another commenter (RAMTASC) indicated that since both mixed use, and dedicated train service would have the same security requirements, the NRC declining to require dedicated trains was a good call.

Response to Comment 3: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 4: One commenter (MODNR) recommended the following revision: ''A shipment car is accompanied by two armed escorts or two special agents/police officers of the host railroad if the railroad agrees to provide them.'' The commenter stated that local law enforcement may not be the most practical escorts to have on a train that will traverse multiple States and that this change would allow, but not require, the railroad to provide their own armed escorts if they desire. The commenter concluded by stating that some railroads would prefer to utilize their own employees, who would be familiar with rail policies and procedures. The same commenter stated that inspections of rail shipments by States have been a contentious issue in the past, as railroads do not plan stops near State borders. The commenter recommended that § 73.37(d) be clarified to address this issue by adding a statement similar to the following: ''Physical inspections of rail shipments by representatives of individual States, if they are requested by State representatives, may occur at places other than at the State line if agreed to by the representatives of the various States and the railroad.'' The commenter stated that a State line is usually an inconvenient place to inspect a train, as there might be no highway access or crossings and a State line could be located where the only way to reach the border is to walk miles down the railroad track. The commenter expressed concern that an inspection at a State border may also affect the railroad's operations, because there may not be a siding available at the State's border, resulting in blocking trains in both directions. The commenter recommended that licensees coordinate with the States and the railroads to confirm a safe location for inspections; the result may be that several States in a region will inspect a shipment in one location, rather than in each individual State.

Response to Comment 4: No changes to the rule were made in response to these comments. It is the licensee's responsibility to preplan and coordinate SNF rail shipments with State Governors through which the shipment will pass and with the rail carrier(s). Nothing in the rule would require or prohibit the use of armed escorts provided by the rail carrier if they met NRC requirements for filling such a position. Discussion of State inspections of rail shipments is beyond the scope of this rulemaking.

Issue 41: Shipments by Sea: General § 73.37(e)

Comment: The State of Nevada supported the rule revisions in § 73.37(e) regarding advance notification information for State Governors and Governors' designees.

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 42: Shipments by Sea: Movement Control Center § 73.37(e)

Comment: One commenter (Private Citizen-Hardin) recommended that § 73.37(e) be changed to require telemetric position monitoring for sea mode SNF shipments within U.S. territorial waters but permit import and export SNF shipments to be tracked by vessel monitoring systems or by U.S. Coast Guard monitoring and response capabilities. The commenter also recommended that requirements for a movement monitoring center similar to the language in § 73.37(c) and (d) be specified for sea shipments and that language to require licensees (or their monitoring center) to notify the NRC of transportation safeguards events in accordance with § 73.71 be added.

Response: Continuous monitoring of SNF shipments, including sea shipments while within U.S. territorial waters is already addressed in § 73.37(b)(3). For sea shipments, licensees may utilize a telemetric position monitoring system or some other system to achieve compliance with this performance objective. Nevertheless, this comment points out that further clarification is needed relative to § 73.37(e). The title of this section is changed from ''Shipments by sea'' to ''Shipments by U.S. waters.'' In addition, in the first paragraph, the phrase ''is by sea'' is being replaced with ''traveling on U.S. waters.'' Replacing ''sea'' with ''U.S. waters'' in § 73.37(e) clarifies that it is the NRC's intent to ensure that NRC has visibility of, and that licensees provide a level of protection for SNF waterborne domestic shipments, and for exports and imports, from the time the import enters the 3-mile zone until it arrives at a U.S. port, and from the time the export departs a U.S. port until it leaves the 3-mile zone.

In addition, the guidance document was revised to clarify requirements for sea shipments within U.S. waters. With regard to the reporting of transportation safeguards events, this request is already addressed in § 73.37(b)(3)(iii) and 73.37(b)(3)(v)(C), which require reporting of safeguards events under the provisions of § 73.71.

Issue 43: Investigations § 73.37(f)

Comment 1: The State of Nevada supported the new requirement for an immediate investigation if a shipment is lost or unaccounted for after the designated no-later-than arrival time.

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: One commenter (MISP) requested that more detail be added to this section with respect to the specifics of an investigation.

Response to Comment 2: The NRC does not agree with this comment. The specifics of an investigation are developed by the licensee. Under § 73.37(b)(4), licensees must establish, maintain and follow written contingency and response procedures, which would include procedures for responding to lost or unaccounted for SNF shipments. These written procedures must be made available for inspection by the NRC upon request.

Comment 3: One commenter (Private Citizen-Hardin) recommended the deletion of § 73.37(f), and that any investigation of lost or unaccounted SNF is completed in accordance with the NRC's proposed revisions to § 73.71.

Response to Comment 3: The NRC does not agree with this comment. The NRC has determined that the protection of SNF from theft, sabotage, or diversion is vital to public health and safety and the common defense and security. As such, the NRC has instituted coordinated and correlated protective measures systems to ensure prompt notification of any safeguards event relative to SNF in transit. The NRC has determined that the investigative requirements in § 73.37(f) to be an important part of the protective measures system for SNF in transit. In addition to the requirements of § 73.37(f), § 73.37(b)(3)(iii) and 73.37(b)(3)(v)(C) require licensees to notify the NRC of lost or unaccounted SNF shipments under § 73.71.

Issue 44: Safeguards Information §§ 73.37(g) and 73.38(c)(iv)

Comment 1: The State of Nevada expressed support for the proposed requirements for the protection of Safeguards Information in § 73.37(g).

Response to Comment 1: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 2: Two comments (IEMA and Private Citizen—No name) were related to protection of shipment information. The IEMA recommended that the NRC further examine those plans, documents and communications that should be classified as Safeguards Information to ensure that information security is maintained at the highest level necessary and those individuals responsible for maintaining the appropriate controls on Safeguards Information are properly trained.

Another commenter (Private Citizen-No name) expressed concern that there seemed to be very little in the rule regarding the protection of sensitive information relative to SNF in transit. The commenter indicated that controlling the available information about the shipments could go a long way to preventing attacks. The commenter also recommended that a section be added that requires that information only be given to certain individuals. In addition, the commenter suggested that it be required that individuals who are only accompanying a shipment for a certain part of the shipment only be given information about the segment, and not for the entire trip.

Response to Comment 2: The NRC agrees that additional clarifying information could be added to the rule to address these comments. A new section § 73.37(b)(1)(vii) was added to reflect the requirements of § 73.22, which address Safeguards Information relative to SNF shipments. The requirement in § 73.22 addresses the restricting of Safeguards Information to those with a ''need to know.''

Issue 45: Implementation of Rule § 73.38(a)(3)

Comment: One commenter (MURR) indicated that an implementation date of 30 days after the final rule is published in the **Federal Register** is too restrictive on licensees. The commenter suggested that licensees should have the flexibility to implement the new requirements through either their physical security plan or their transportation security plan. In addition, the commenter suggests that in light of the burden to implement the new requirements with limited resources, that a 90-day period for implementation should be used instead of a 30-day period.

Response: The NRC agrees with the comment and has revised the rule text to indicate that the requirements can be implemented either by the licensee's physical security plan or transportation security plan. With regards to the implementation date for licensees, the rule was revised to provide an effective date of 90 days after publication in the **Federal Register** as suggested by the commenter.

Issue 46: General: Background Investigation Requirements § 73.38

Comment 1: The State of Nevada supported the new requirements regarding personnel access authorization, and licensee responsibilities for establishing and maintaining an effective access authorization program. The commenter endorsed the background investigation requirements.

Comment 2: The DOE NRP commenter supported the background investigation requirements for private armed escorts, and indicated that escorts for naval reactors shipments currently meet all these new requirements, and considered the requirements appropriate for these escorts.

Response to Comments 1 and 2: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 47: Persons Subject to Background Investigation Requirements: § 73.38(a)

Several comments were raised relative to whom the background investigation requirements should apply.

Comment 1: The DOE NRP indicated that the proposed access authorization program with requisite background checks could lead to significant operational and cost impacts from commercial carriers handling shipments. The commenter indicated that carriers are already subject to basic personnel security measures in their hazardous materials security plans in accordance with DOT regulations (49 CFR 172.802(a)(1)). The commenter indicated that the proposed NRC requirements go far beyond the current DOT requirements. The DOE NRP questioned whether the railroads' personnel policies would support such extensive security requirements, and if not, the impact on shipment operations and the cost to institute such extensive personnel security requirements just for SNF shipments could be difficult to overcome. The commenter also indicated that it is not clear that the security benefit gained from imposing such personnel security requirements on carriers is worth the cost. The commenter suggested that the NRC review the proposed requirements relative to rail and highway carriers. The commenter also indicated if these access authorization requirements are added to the regulations, railroads may decide to only perform the requisite background checks on a minimal number of their personnel. These circumstances could result in delaying SNF shipments.

Comment 2: A commenter from a State organization (MODNR) indicated that the rule should clarify whether requirements for background investigations apply to State railroad inspectors, as they may need to be in proximity to the shipment in order to conduct an inspection, but will not need unescorted access to the shipment. The rule states, ''The background investigation does not apply to Federal, State or local law enforcement personnel who are performing escort duties.'' The commenter recommended that State railroad inspectors be added to this exemption for State personnel, or that language similar to the following be added to address this issue: ''All background checks shall be waived for State rail inspectors seeking to inspect shipments by rail who are currently in good standing and certified by the Federal Railroad Administration as an inspector in any discipline for which the Federal Railroad Administration has current responsibility in enforcing.''

Comment 3: An industry commenter (NEI) indicated that the proposed regulations make the NRC licensee responsible for background investigation. The commenter indicated that it may not be possible for licensees to ensure investigations are conducted for common carrier's and LLEA's employees or for Federal/State inspectors. The commenter indicated that the regulation should provide flexibility for this to be worked out cooperatively between the carrier and the customer. For example, carriers could conduct investigations with licensees verifying that the background investigations were properly done.

The NEI also asked whether an inspection of an SNF shipment by a State or Federal DOT inspector is considered unescorted access. The commenter indicated that clearly they must have direct access to the shipment, but they will not have control of the shipment nor would armed escorts be expected to leave their post during an inspection. The commenter further indicated that some inspectors may view an armed escort overseeing their inspections as a form of intimidation. The NEI indicated that the subject of those who might have access to a shipment other than armed escorts should be specifically addressed and background check requirements set accordingly.

Comment 4: An NRC licensee (MURR) indicated that licensees have no control over background checks performed for State employees (e.g., non-LLEA personnel) who have access to the shipment during transit, and hence, the regulations must state that licensees are not responsible for these background checks. This responsibility should be deferred to the State Governor's Designees.

Comment 5: One commenter from an industry organization wondered whether LLEA personnel were subject to the new requirements.

Comment 6: The IEMA agrees with the NRC's proposal regarding background checks for licensees as set forth in § 73.38, ''Personnel access authorization requirements for irradiated reactor fuel in transit.'' However, the IEMA believes that the requirement for background checks should include all entities that are involved with SNF shipments including Governor's designee and any State or Tribal entity that is entrusted with Safeguards Information, aids in the planning and coordination of an SNF shipment or has unescorted access to an SNF shipment. The LLEA personnel would continue to be exempted since they require a pre-employment background check. Under the proposed rule, all other entities involved with the totality of an SNF shipment should be required to comply with the background investigation requirement. The IEMA believes by requiring State and Tribal personnel to be held to the same access authorization requirements as licensees, an increased level of shipment security will be achieved.

Response to Comments 1–6: The NRC agrees that further clarification is needed relative to the persons subject to background investigations. Common carriers have no direct responsibilities under § 73.38. The licensee is responsible for assuring that all individuals who have access to Safeguards Information pertaining to a SNF shipment or unescorted access to the SNF shipment have undergone a background investigation (or fall under one of the categories for relief in §§ 73.59 or 73.61), have been determined to be trustworthy and reliable, and have a need to know. With regard to the receipt of Safeguards Information by Native American Tribes, this issue was addressed as a part of a separate rulemaking entitled, ''Advance Notification to Native American Tribes of Transport of Certain Types of Nuclear Waste,'' which was approved by the Commission on January 30, 2012, and published as a final rule on June 11, 2012 (77 FR 34194).

The NRC acknowledges that the licensee does not directly control a common carrier used to ship SNF or control whom the carrier employs. However, as noted in the comments, carriers are subject to DOT regulations that require fingerprinting and an FBI criminal history check for drivers transporting hazardous material. Spent nuclear fuel is considered to be a hazardous material under DOT regulations. The vehicle driver and accompanying personnel were included in part because they have access to SGI information pertaining to the SNF shipment. Whether these individuals come under the § 73.38 access authorization program or not, they would still need to be fingerprinted and determined to be trustworthy and reliable under the requirements of § 73.22(b). However, the NRC has revised § 73.38 to reflect that those individuals who have already completed an equivalent separate Federal background investigation program, and can provide documentation indicating that they are in good standing, could meet the requirements of § 73.38.

The NRC also agrees that further clarification is needed relative to the application of the provision to Federal and State inspectors and has added clarifying language. In response to the comments concerning background investigations for Governor's designees and LLEA personnel, § 73.59 relieves these persons from the background investigation requirements for access to Safeguards Information and § 73.61 relieves these persons from background investigation for unescorted access to SNF in transit. This section was revised to include a reference to § 73.61.

With regards to persons who receive Safeguards Information, all persons are required to obtain a background investigation unless they fall under one of the categories for relief in § 73.59. The rule has been revised to reflect the provisions in § 73.59(k) which relieves from a background investigation, ''Any agent, contractor, or consultant of the aforementioned persons who has undergone equivalent criminal history records and background checks to those required by § 73.22(b) or § 73.23(b).'' Based upon the aforementioned discussion, § 73.38 (2)(a) was revised.

Issue 48: Reinvestigations: § 73.38(h)

Comment: The MURR indicated that it feels that research reactors should have relief from this requirement since it will cause a financial burden to the facility with minimal gain. The MURR indicated that credit history evaluations should only be performed if the results obtained during the fingerprinting and FBI identification and criminal history records check and criminal history review are inconsistent, and should not be routinely required.

Response: The NRC does not agree with this comment. The reinvestigation

requirement in the rule is consistent with similar requirements contained elsewhere in 10 CFR part 73.

Issue 49: Advance Notification Editorial Correction: § 73.72

Comment 1: Two editorial comments were received (CSG Midwestern and Private Citizen-Hardin). The comments indicated that the section ''Requirements for advance notice of shipment of formula quantities of strategic special nuclear material . . .'' was incorrectly labeled as ''§ 73.71'' and it should be referenced as ''§ 73.72.''

Response to Comment 1: The NRC agrees with this editorial comment. The section was changed from ''§ 73.71'' to ''§ 73.72.''

Comment 2: The CSG Midwestern also indicated that §§ 73.72(a)(4) and 73.72(a)(5) include the statement, ''Classified notifications shall be made by secure telephone,'' and that the draft guidance document, however, refers to ''SGI notifications'' (pg. 16). In addition, the commenter indicated that the proposed rulemaking stated that ''The NRC does not regulate classified shipments of spent nuclear fuel.'' To avoid confusion, the commenter recommended that the rule should refer to ''SGI notifications,'' not ''classified notifications.''

Response: The NRC agrees with this comment. Sections 73.72(a)(1), (a)(4), and (a)(5) were changed to read: ''Classified and SGI notifications.''

Issue 50: Mode of Notification: § 73.72(a)(1)

Comment: One comment (Private Citizen–Hardin) was related to the mode required for advance notifications of shipments and recommended that—the NRC revise § 73.72(a)(1) to require secure electronic transmission of advance notifications made under this section; that secure notifications should be sent to the email addresses specified in 10 CFR part 73, Appendix A, for the NRC Headquarters Operations Center; that NRC should provide an exception to this new requirement permitting the use of written notifications (sent by U.S. mail or private courier service) only if secure electronic communications methodologies are inoperable or unavailable; and should specify acceptable encryption methods (both networks and internet emails) in regulatory guidance to achieve greater consistency and ease of use across the range of recipients.

The commenter stated that the NRC should specify in the supporting guidance documents the specific methodology licensees should use to meet the Federal Information Processing Standards (FIPS) in publication 140–2 of the National Security Agency (NSA) standards to communicate Safeguards Information or classified information, respectively. The commenter stated that the NRC should also specify the email addresses to send these notifications (both intranet and secure networks), and that this should include use of secure electronic networks or the use of encrypted emails transmitted over the internet.

The commenter also stated that with the widespread use of 20th [*sic*] century technology, the NRC should take advantage of the encryption, authentication, and non-repudiation features found in secure electronic communications to provide greater timeliness and security over SNF shipment notifications made to the NRC under this section. The commenter went on to say that both the NRC and NRC licensees possessing SNF send secure electronic communications containing Safeguards Information to and from each other on a routine basis, and that these capabilities should also be used for SNF shipment notifications, with written communications reserved for a backup role (i.e., secure electronic communications are inoperable).

Response: The NRC does not agree with this comment. The purpose of this rulemaking is to enhance the security of SNF shipments by incorporating the security requirements in applicable NRC orders as well as new requirements developed as a result of lessons learned by implementing the security orders. The actions requested by the commenters are beyond the scope of this rulemaking.

Issue 51: Notifications: § 73.72(a)(4)(ii) and (iii)

Comment 1: The State of Nevada supports the new requirements in § 73.72(a)(4), which requires licensees to notify the NRC 2 hours before the commencement of the shipment, and notify the NRC when the shipment arrives at its final destination

Comment 2: The MODNR indicated that the addition of notifications to the States 2 hours before commencement of the shipment and again once the shipment has reached its destination is very helpful. The commenter indicated that the 2-hour notification provides time for staff to reach their staging position, without unnecessary time spent in waiting for shipment arrival. The commenter further elaborated that the final notification that the shipment has reached its destination would alert the States that communications regarding the shipment can be sent without compromising the shipment's safety.

Response to Comments 1 and 2: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 52: Clarification in § 73.72(a)(5)

Comment: The State of Nevada supported the provision clarifying notification for schedule changes of more than 6 hours in § 73.72(a)(5).

Response: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Issue 53: Removal of Exemption: § 73.72(b)

Comment 1: The State of Nevada supported the § 73.72(b) requirements that licensees inform the NRC of any SNF shipment on a public road, even those of short duration, to ensure that the NRC is prepared to respond to any emergency or safeguards event. The commenter indicated that this provision is important at reactor sites that might ship SNF casks to off-site storage facilities, or utilize trucks for intermodal transfer of shipping casks to off-site rail or barge facilities.

Comment 2: The CSG Midwestern indicated that the Midwestern States agree with the change to § 73.72 that exempts a licensee from providing advance notice for an onsite SNF shipment that ''does not travel upon or cross a public highway.''

Response to Comments 1 and 2: The comments expressed agreement with the proposed revisions. As such, no change to the rule language is required.

Comment 3: The CHP agreed with the removal of the § 73.72(b) exemption that indicated that advance notification does not have to occur for shipments or transfers of SNF as long as the one-way transit time is 1 hour or less. The commenter indicated that § 73.72 notifications only apply to the NRC.

Response to Comment 3: The NRC does not fully agree with this comment. Section 73.37(b)(2) states that the licensee must provide advance notice of shipments to both the NRC and to the Governor or the Governor's designee. Under § 73.72(b), licensees would also now be required to provide advance notice for short-duration (1 hour or less) shipments to the NRC and the State(s).

Issue 54: Regulatory Consistency and Certainty

Comment 1: One commenter (CSG Midwestern) expressed concerns about the lack of consistency between terminology used by the NRC and other agencies, i.e., DOE. The commenter

suggested that the rule would benefit from Federal agencies adopting uniform terminology in connection with safeguards and security, which would be consistent with President Obama's Executive Order 13556 on Controlled Unclassified Information.

Response to Comment 1: The NRC does not have the authority to determine what terminology other Federal agencies use when discussing safeguards and security events. This issue is outside of the scope of this rulemaking.

Comment 2: The commenter (CSG Midwestern) stated that the Blue Ribbon Commission on America's Nuclear Future has called attention to the distinction between NRC-regulated shipments of SNF and those conducted by DOE, and that the commenter is interested in learning whether the NRC requirements would apply to shipments of SNF to regional storage facilities, should the Blue Ribbon Commission recommend the siting of such facilities.

Private Citizen-Hardin recommended that the NRC clarify in the preamble to the final rule that the NRC regulates SNF shipments from NRC-regulated facilities to DOE facilities. The commenter also recommended the revision of § 73.6(d) to remove the exemption for shipments made using DOE's OST (to or from NRC licensed facilities) from NRC's recordkeeping and advance notification requirements. The commenter stated that while DOE has independent authority to establish transportation security requirements under the AEA, this is not true in all circumstances, citing the example that the NRC regulates a small number of DOE-operated facilities (two independent SNF storage installations (ISFSIs) in Idaho and one in Colorado; and a mixed-oxide fabrication facility in South Carolina). The commenter stated that shipments of SNF to or from these ISFSIs are fully subject to NRC's oversight, especially regarding advance shipment notifications and safeguards event notifications of actual or imminent hostile actions. The commenter indicated that the current language in § 73.6(d) exempts shipments made using DOE's OST (to or from NRC licensed facilities) from NRC's recordkeeping and advance notification requirements, but that this is inappropriate. The commenter elaborated that DOE's voluntary compliance with NRC's regulations for shipments made under DOE's auspices, is not the same as NRC's independent regulatory oversight of the DOE shipments that fall under the NRC's regulatory purview. The commenter further indicated that the DOE shipments that fall under the NRC's regulatory authority should be subject to the NRC's regulatory oversight, including the NRC's inspection program, and recordkeeping and advance notification requirements.

Response to Comment 2: The NRC cannot speculate on any actions that might be taken by the Blue Ribbon Commission. Therefore, it would be premature to comment on any recommendations resulting from the Blue Ribbon Commission.

The NRC agrees with the comments that licensees shipping SNF from NRC licensed facilities to DOE facilities for storage are required to comply with NRC's regulations. This is discussed in Section I, Background, subsection C, of this notice. The NRC does not agree with the commenters' suggestion that § 73.6(d) be revised to remove an exemption from certain NRC regulations for special nuclear material shipped using the DOE transportation system. This rulemaking deals with security enhancements for the shipping of SNF not special nuclear material. The § 73.6 exemptions do not apply to SNF shipments. They apply only to certain shipments of special nuclear material. Therefore, the commenter's suggestion that § 73.6 be revised is beyond the scope of this rulemaking.

Issue 55: Editorial Comment: Footnote 1

Comment: A commenter from CSG Midwestern indicated that the footnote explains that 'irradiated reactor fuel'' and ''spent nuclear fuel'' are used interchangeably, which is appropriate. The commenter further elaborated that the proposed rule also uses the term ''spent nuclear material'' in two instances, §§ 73.37(b)(1)(iv) and 73.38(j)(3)). The commenter indicated that these references should be changed to ''spent nuclear fuel'' or the rule should explain how the term is distinct from the other two terms.

Response: The NRC agrees with this comment. The terms ''spent nuclear material'' were replaced in the rule with ''spent nuclear fuel.''

IV. Discussion of the Amendments by Section

A. § 73.8(b)

The rule amends § 73.8 (b) to include the new information collection requirements resulting from the addition of the new § 73.38.

B. § 73.37(a)(1)

The rule amends § 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 rule also adds a footnote to clarify that the term ''irradiated reactor fuel,'' as used in § 73.37 means ''spent nuclear fuel.''

C. § 73.37(a)(1)(i)

The language in the current regulation solely addresses potential radiological sabotage of SNF shipments. The rule revises § 73.37(a)(1)(i) to clarify that any attempted theft or diversion of SNF shipments is also covered by this regulation. The rule also revises § 73.37(a)(1)(i) and (a)(2)(iii) to remove the distinction between heavily populated areas and other areas through or across which an SNF shipment may pass. The differentiation of security requirements based upon population densities creates potential vulnerabilities in the physical security of the shipment. The requirement of armed escorts throughout the shipment route minimizes the risk of theft, diversion, or radiological sabotage. These revisions also address Requests 4 and 5 of PRM–73–10.

D. § 73.37(a)(2)

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

The amendment renumbers the paragraphs in § 73.37(a)(2). The current § 73.37(a)(2)(ii) becomes § 73.37(a)(2)(iii), and the current § 73.37(a)(2)(iii) becomes § 73.37(a)(2)(ii). The rule revises 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 SNF shipments. In addition, § 73.37(a)(2)(ii) was revised to remove the phrase ''until response forces arrive.''

E. § 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 SNF shipments that is more user-friendly.

F. § 73.37(b)(1)

The rule adds a new section entitled, ''*Preplan and Coordinate Spent Nuclear Fuel Shipments*,'' which is explained further in the following paragraphs. The amendment moves and incorporates the current § 73.37(b)(1) into a new § 73.37(b)(2).

The rule adds a new § 73.37(b)(1)(i) which requires that licensees instruct armed escorts on the use of deadly force. In addition, in response to comments on the proposed rule, this section includes a reference to the definition of ''armed escort'' in § 73.2, which ensures a clear understanding of their security role. The existing provisions of § 73.37 provide performance objectives to be achieved by the physical protection system for SNF 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). The revision is not authorizing the use of deadly force, but instead is ensuring that the armed escorts 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 acting as 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 rule adds 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 requirements will reduce the risk of theft, diversion, or radiological sabotage of the SNF.

The rule re-designates § 73.37(b)(8) as § 73.37(b)(1)(iv) and revises it to include requirements for licensees to preplan and coordinate SNF shipments with States. The preplanning and coordination 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. In addition, in response to comments on the proposed rule, a minimum timeframe for preplanning and coordinating was inserted into the rule. The rule requires licensees to contact States for preplanning and coordination no later than 2 weeks prior to a shipment or prior to the first shipment in a series of shipments. These amendments ensure that States have early and substantial involvement in the management of SNF shipments by participating in the initial stages of the planning, coordination, and implementation of the shipment.

The rule re-designates § 73.37(b)(6) as § 73.37(b)(1)(v) and revises it to make minor editorial changes. In addition, in response to comments on the proposed rule, the term ''security-related'' was inserted in front of the word ''emergency'' to read as ''security-related emergency''. This was done to avoid confusion with other emergencies that would require the assistance of emergency response personnel in the State.

The rule re-designates § 73.37(b)(7) as § 73.37(b)(1)(vi) and revises it to expand the requirements for preplanning and coordination with the NRC. Section 73.37(b)(1)(vi) requires the following: (1) The identification of safe havens along road shipment routes, (2) NRC route approval prior to the 10-day advance notice required by § 73.72(a)(2), and (3) the providing of specific information to the NRC regarding the shipment (e.g., shipper, consignee, carriers, transfer points, modes of shipment, and shipment security arrangements). In addition, § 73.37(b)(1)(vi) provides that licensees must also comply with applicable DOT routing requirements. In addition, the § 73.37(b)(1)(vi)(A) proposed rule language, ''. . . the route should include locations of safe havens . . .'' was changed to ''. . . the route shall include locations of safe havens . . .'' This change was made to incorporate language consistent with NRC's Enforcement Policy.

The rule adds a new § 73.37(b)(1)(vii), which requires the documentation of preplanning and coordination activities. In addition, the rule adds a new § 73.37(b)(1)(viii). This section was added in response to comments on the proposed rule that indicated that the NRC should clearly identify what SNF shipment information is considered Safeguards Information, and should be protected. Under § 73.22(a), information to be protected as Safeguards Information in § 73.37 includes: (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) through (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 (4) 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.

G. § 73.37(b)(2)

The rule re-designates § 73.37(f), the advance notifications provision, as § 73.37(b)(2). This section was revised to reflect the final rule ''Advance Notification to Native American Tribes of Transport of Certain Types of Nuclear Waste,'' which was approved by the Commission on January 30, 2012, published as a final rule on June 11, 2012 (77 FR 34195), with an effective date of August 10, 2012, and a compliance date of June 11, 2013. In addition, the rule revisions include: (1) A reference to the NRC Web site listing contact information for State Governors and Governors' designees and Tribal official or Tribal official's designee, which will be available after the June 11, 2013 compliance date; (2) a requirement to include within the notification the license number of the shipper and receiver; and (3) a requirement to provide the estimated date and time of arrival of the shipment at the destination. Section 73.37(b)(2) also includes new recordkeeping and shipment cancellation notification requirements. In addition, in response to comments on the proposed rule, the phrase ''moving through or across the boundary of any State,'' was inserted on the first line after ''spent nuclear fuel.'' This phrase was inadvertently omitted in the proposed rule text. In addition, in response to comments on the proposed rule, § 73.37(b)(2)(i)(B) and 73.37(b)(2)(i)(C) were revised. In response to comments on the proposed rule, the § 73.37(b)(2)(i)(B) requirement that the advanced notification by mail be postmarked at least 7 days prior to the commencement of a shipment was changed to 10 days. In response to comments on the proposed rule, the § 73.37(b)(2)(i)(C) requirement that the

advanced notification by any other method must reach the office of the Governor or the Governor's designee at least 4 days before commencement of a shipment was changed to 7 days.

H. § 73.37(b)(3)

The rule adds a new § 73.37(b)(3) entitled, ''*Transportation Physical Protection Program*.'' Section 73.37(b)(3) streamlines and combines existing requirements in § 73.37(b)(3) through (5) and 73.37(b)(9) through (11).

Section 73.37(b)(3)(i) introduces 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 in § 73.2 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. In addition, in response to comments on the proposed rule, this section includes a reference to the definition of ''movement control center'' in § 73.2, which ensures a clear understanding of their security role.

The rule re-designates § 73.37(b)(4) as § 73.37(b)(3)(ii) and revises it to reflect that the movement control center personnel will have the authority to coordinate physical protection activities. The rule also adds a new § 73.37(b)(3)(iii), which clarifies the duties of the movement control center personnel. The rule re-designates § 73.37(b)(5) as § 73.37(b)(3)(iv) with minor editorial changes. The rule adds a new § 73.37(b)(3)(v), which requires licensees to develop, maintain, and implement written physical protection procedures. These procedures must address the following: (1) The shipment access controls, (2) the roles and responsibilities of the individuals responsible for the shipment, (3) the reporting of safeguards events, (4) communications protocols, and (5) normal conditions operating procedures.

The rule adds a new § 73.37(b)(3)(vi), which incorporates the recordkeeping requirements of the current § 73.37(b)(2) and (3). The rule re-designates § 73.37(b)(10) as § 73.37(b)(3)(vii)(A). It also includes the 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 provisions in § 73.37(b)(10) referred to the training requirements in 10 CFR Part 73, Appendix D, and Appendix D, in turn, referred to requirements in 10 CFR Part 73, Appendix B, Sections III and IV. For clarity, the amendment adds a direct reference to Appendix B.

The rule re-designates § 73.37(b)(11) as § 73.37(b)(3)(vii)(B). This section changes the escort's time requirements for contacting the movement control center. It is changed from ''at least every 2 hours'' to ''random intervals, not to exceed 2 hours.'' This provision also replaces the term ''communications center'' with ''movement control center.'' In addition, in response to comments on the proposed rule, § 73.37(b)(3)(vii)(B) was revised, replacing the words ''make calls to'' with ''communicates with.''

The rule re-designates the current § 73.37(b)(9) as § 73.37(b)(3)(vii)(C). It also clarifies the armed escort's responsibilities when the shipment vehicle is stopped, or the shipment vessel is docked. These revisions ensure that when a shipment is stationary at least one armed escort maintains constant visual surveillance. The rule also provides for periodic reports of shipment status to the movement control center by the armed escort.

I. § 73.37(b)(4)

The rule re-designates § 73.37(b)(2) as § 73.37(b)(4)(i)–(iii), ''*Contingency and Response Procedures*,'' and adds additional requirements. The rule adds new § 73.37(b)(4)(i) and 73.37(b)(4)(ii). These sections require licensees to develop and implement contingency and response procedures, and require licensees to train personnel in these procedures. The current requirements in § 73.37(b) did not specifically require personnel training. They only required escorts to receive instructions. The rule expressly requires 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. A response to a safeguards event must be initiated without delay in order to have a high probability of success in protecting the shipment. The response is more likely to be effective if individuals are adequately trained in their roles and responsibilities.

The rule also adds a new § 73.37(b)(4)(iii), which incorporates the current § 73.37(b)(2) recordkeeping requirements. The rule re-designates § 73.37(b)(3) as § 73.37(b)(4)(iv). The revisions include the requirement that armed escorts take the necessary steps to delay or impede theft, diversion, or radiological sabotage of SNF in transit.

J. § 73.37(c)

The rule revises § 73.37(c)(1) by removing the phrase ''within a heavily populated area,'' after ''transportation vehicle,'' and deletes the current § 73.37(c)(2) to eliminate the distinction between heavily populated areas and other areas through which a shipment of SNF shipment may pass. A new § 73.37(c)(2) requires 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 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, § 73.37(c)(3) describes the performance characteristics of the communications capabilities.

The rule adds a new § 73.37(c)(6), which requires continuous and active monitoring of the shipment by a telemetric position monitoring system or an alternative tracking system. The revisions ensure that shipments are continuously and actively monitored by a tracking system that communicates continuous position information to a movement control center. This requirement allows the movement control center to receive positive confirmation of the location, status, and control of the shipment. These requirements ensure immediate detection of any deviations from the authorized route, which will provide a prompt notification of any emergency or safeguards event. These revisions will facilitate a more timely and effective response. In addition, the § 73.37(c)(6) proposed rule language, ''. . . These procedures will include . . .'' was changed to ''. . . These procedures shall include . . .'' This change was made to incorporate language consistent with NRC's Enforcement Policy.

K. § 73.37(d)

The rule revises § 73.37(d)(1) by removing the phrase ''within a heavily populated area,'' after ''shipment car,'' and deletes the current § 73.37(d)(2) to eliminate the distinction between heavily populated areas and other areas through which a shipment of SNF may pass. The rule adds a new § 73.37(d)(2) to require a minimum of two weapons for non-LLEA armed escorts. The rule

revises § 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, § 73.37(d)(3) describes the performance characteristics of the communication capabilities. The rule also adds a new § 73.37(d)(4), which addresses continuous and active monitoring of the shipment by a telemetric position monitoring system or an alternative tracking system. In addition, § 73.37(d)(4) proposed rule language, ''. . . These procedures will include . . .'' was changed to ''. . . These procedures shall include . . .'' This change was made to incorporate language consistent with NRC's Enforcement Policy.

L. § 73.37(e)

The title of this section is changed from ''Shipments by sea'' to ''Shipments by U.S. waters.'' In the first paragraph, the phrase ''is by sea'' is replaced with ''traveling on U.S. waters.'' The rule revises § 73.37(e)(1) by removing the phrase ''within a heavily populated area,'' after ''while docked at a U.S. port,'' and deletes the current § 73.37(e)(2) to eliminate the distinction between heavily populated areas and other areas for shipments of SNF traveling on U.S. waters. The rule adds a new § 73.37(e)(2) to require a minimum of two weapons for non-LLEA armed escorts. The rule revises § 73.37(e)(3) to eliminate the listing of communication devices. Instead of specifying acceptable communication technology, § 73.37(e)(3) describes the performance characteristics of the communication capabilities.

M. § 73.37(f)

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

N. § 73.37(g)

The rule deletes the reference to § 73.37(f)(3) and inserts the reference to § 73.37(b)(2)(iii) to reflect the reorganization of § 73.37.

O. § 73.38

This rule adds a new § 73.38, ''Personnel access authorization requirements for irradiated reactor fuel in transit.'' Section 73.38 establishes the personnel access authorization requirements for granting an individual unescorted access or access authorization relative to SNF in transit. Section 73.38(a)(1) specifies the licensees subject to the requirements in the section. Section 73.38(a)(2) provides that licensees are required to establish, implement, and maintain the overall effectiveness of the access authorization program. Section 73.38(a)(3) provides that licensees should establish an access authorization program for SNF in transit in their physical security plan or transportation security plan. Section 73.38(b) establishes the general performance objective to ensure that the individuals subject to the access authorization program are trustworthy and reliable. Section 73.38(c)(1) specifies the individuals subject to the access authorization program. Section 73.38(c)(2) clarifies that individuals listed in §§ 73.59 and 73.63 that are relieved of the investigative elements of the SNF access authorization program.

Section 73.38(d) establishes the background investigation requirements for individuals seeking unescorted access or access authorization relative to SNF in transit. For an individual seeking unescorted access or access authorization relative to SNF in transit, § 73.38(d)(1) through (9) 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. Section 73.38(d)(10) allows 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. Section 73.38(d)(10) is patterned after § 73.56(d)(4)(iv)(B).

Section 73.38(e) requires licensees to make and document trustworthiness and reliability determinations after obtaining and evaluating the information required by § 73.38(d)(1) through (9). Licensees will 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 SNF shipments.

Section 73.38(f) requires licensees to protect the information obtained during 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. Section 73.38(f) allows 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.

Many individuals who will be subject to the background investigation portion of this rule may have recently satisfied similar requirements under the prior NRC orders. For such individuals, it would be unnecessary to re-fingerprint them. Thus, § 73.38(g) permits licensees 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 will 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 access authorization pertaining to SNF in transit, including subjecting the person to all other applicable requirements of the background investigation that are required by § 73.38(d).

Section 73.38(h) establishes the requirements for reinvestigation of individuals with unescorted access to SNF in transit. Section 73.38(h) establishes completion of reinvestigations within 10 years of the last investigation. The scope of the investigation will be the past 10 years. It will consist of fingerprinting; an FBI identification and criminal history records check; criminal history review; and credit history re-evaluation. Section 73.38(i) establishes 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 provision 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.

Section 73.38(j) establishes the requirements that licensees are required to develop, implement, and maintain written procedures for conducting the background investigations for persons applying for unescorted access or access

authorization relative to SNF 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 also provide for the review of the information by the affected individuals. It ensures that individuals who have been denied unescorted access or access authorization are not allowed unescorted access to SNF or access to Safeguards Information pertaining to the shipment. These individuals could be escorted by an approved individual.

Section 73.38(k) establishes 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 include direct application by the individual challenging the criminal history records to the law enforcement agency that contributed the questioned information. Section 73.38(l) establishes 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 rule also requires that corrected or new information be actively communicated by the recipient to other licensees.

P. § 73.72(a)

The rule revises § 73.72(a) to insert a footnote that provides, ''For purposes of § 73.72, the terms 'irradiated reactor fuel' as described in § 73.37 and 'spent nuclear fuel' are used interchangeably.

Q. § 73.72(a)(1)

The rule revises § 73.72(a)(1) to insert ''and safeguards notifications'' after ''Classified.''

R. § 73.72(a)(4)

The rule revises § 73.72(a)(4) to insert ''and safeguards notifications'' after ''Classified.'' The rule revises §§ 73.72(a)(4)(ii) and 73.72(a)(4)(iii) to require two additional notifications of the NRC. Section 73.72(a)(4)(ii) provides that a notification is made 2 hours before the commencement of the shipment and § 73.72(a)(4)(iii) provides that a notification is made when the shipment reaches its final destination. The current requirements only provided for notification of the NRC 2 days before the shipment commenced.

S. § 73.72(a)(5)

The rule revises § 73.72(a)(5) to insert ''and safeguards notifications'' after ''Classified.'' The rule revises § 73.72(a)(5) to clarify the meaning of the language ''greater than ± 6 hours.'' The revision deletes ''greater'' and inserts ''more,'' and deletes the symbol ''±.''

T. § 73.72(b)

The current provisions in § 73.72(b) exempted from NRC advance notification requirements road shipments or transfers that were one-way and had transit times of 1 hour or less. This amendment removes this exemption from the regulations. The exemption has been changed to apply only to an on-site transfer by the licensee that does not travel upon public roads. This revision ensures that the NRC is informed of any SNF shipment on a public road, even those of short duration, and the NRC is prepared to respond to an emergency or safeguards event. It will mitigate the risk of theft, diversion, or radiological sabotage of a shipment.

TABLE 1—CROSS REFERENCE BETWEEN AMENDMENTS AND EXISTING REGULATIONS

The amendments	Existing regulation
73.8(b)	73.8(b).
73.37(a)(1)	73.37(a)(1).
73.37(a)(2)	73.37(a)(2).
73.37(b)(1)(i) through (iv)	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)(1).
73.37(b)(1)(vi)(C)	73.37(b)(1).
73.37(b)(1)(vii)	New (no existing equivalent).
73.37(b)(1)(viii)	New (no existing equivalent).
73.37(b)(2)	73.37(b)(1) and 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)	73.37(b)(2).
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) through (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).

TABLE 1—CROSS REFERENCE BETWEEN AMENDMENTS AND EXISTING REGULATIONS—Continued

The amendments	Existing regulation
—(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)(2)	New (no existing equivalent).
73.37(d)(3)	73.37(d)(3).
73.37(d)(4)	New (no existing equivalent).
73.37(e)	Title changed to Shipments by U.S. waters.
73.37(e)	73.37(4).
73.37(e)(1)	73.37(e)(1).
(none—for first half of provision—second part of provision retained in 73.37(e)(3)).	73.37(e)(2).
73.37(e)(2)	New (no existing equivalent).
73.37(e)(3)	Second part of 73.37(e)(2)—". . . an officer of the shipment vessel's crew, who will assure that the shipment is unloaded only as authorized by the licensee."
73.37(e)(4)	73.37(e)(3).
73.37(f)	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) through (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 amending 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 States Programs,'' approved by the Commission on June 20, 1997, and published in the **Federal Register** (62 FR 46517; September 3, 1997), this rule is classified as compatibility Category ''NRC''; and 10 CFR part 73 in its entirety is designated as Category ''NRC.'' Agreement State Compatibility is not required for Category ''NRC'' regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the AEA, or the provisions of 10 CFR. Thus, States should not adopt these program elements.

VII. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104–113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, the NRC amends § 73.37, which is the requirements for the physical protection of SNF in transit; adds a new § 73.38, which establishes the requirements for a background investigation of individuals applying for access authorization to SNF shipments or SGI information pertaining to SNF shipments; and will amend § 73.72, which contains the requirements for the advance notification to the NRC of SNF along with other special nuclear material. This action does not constitute the establishment of a standard that establishes generally applicable requirements.

VIII. Environmental Assessment and Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the NRC regulations in Subpart A of 10 CFR part 51, the NRC has determined that this rule is not a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required for this rulemaking. However, 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 security rule requirements will not result in significant changes to the licensees' facilities, nor will such implementation result in any significant increase in effluents released to the environment.

Similarly, the implementation of the security rule requirements will not affect occupational exposure. No construction of new structures or other earth disturbing activities, on the part of affected licensees, is anticipated in connection with licensees' implementation of the rule's requirements. The NRC has determined that the implementation of this rule will be procedural.

The determination of this environmental assessment is that there will be no significant impact to the public from this action. This conclusion was published in the environmental assessment that was posted to the Federal Rulemaking Web site, *http://www.regulations.gov,* for 180 days after publication of the proposed rule. The NRC invited comments on the environmental assessment. No comments were received on the content of the environmental assessment.

IX. Paperwork Reduction Act Statement

This final 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.). These requirements were approved by the Office of Management and Budget (OMB), approval number 3150–0002.

The burden to the public for these information collections is estimated to average 2.7 hours per response. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments on any aspect of these information collections, including suggestions for reducing the burden, to the Information Services Branch (T–5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, or by Internet electronic mail to *INFOCOLLECTS.RESOURCE@NRC.GOV;* and to the Desk Officer, Chad Whiteman, Office of Information and Regulatory Affairs, NEOB–10202, (3150–0002), Office of Management and Budget, Washington, DC 20503.

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.

X. Regulatory Analysis

The NRC has prepared a regulatory analysis on this regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. The analysis is available for inspection in the NRC's Public Document Room, 11555 Rockville Pike, Rockville, MD 20852. The analysis may also be viewed and downloaded electronically at *http://www.regulations.gov* by searching on Docket ID NRC–2009–0163.

XI. Regulatory Flexibility Certification

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. The companies that possess or transport SNF do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the size standards established by the NRC (§ 2.810).

XII. Backfitting

The NRC has determined that the Backfit Rule does not apply to this rule, because this amendment does not add or modify any regulations to impose backfits as defined in § 50.109 or § 72.62. The regulations in Part 50.109(a)(1) defines backfitting as the modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility. The definition in § 72.62 is similar in relevant part to the definition in 10 CFR part 50. This rulemaking will impose new requirements to enhance the security of SNF in transit. It will not make any modification or addition to any systems, structures or components or the design of a facility, affect the design approval or manufacturing license of a facility, or affect the procedures or organization required to design, construct or operate a facility. Therefore, it is the NRC's determination that a backfit analysis is not required.

XIII. Congressional Review Act

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

XIV. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, and well-organized manner. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, ''Plain Language in Government Writing,'' published June 10, 1998 (63 FR 31883).

List of Subjects in 10 CFR Part 73

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

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC is adopting 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: Atomic Energy Act secs. 53, 147, 161, 223, 234, 1701 (42 U.S.C. 2073, 2167, 2169, 2201, 2273, 2282, 2297(f), 2210(e)); Energy Reorganization Act sec. 201, 204 (42 U.S.C. 5841, 5844); Government Paperwork Elimination Act 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 Nuclear Waste Policy Act secs. 135, 141 (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).

■ 2. Section 73.8(b) is revised to read as follows:

§ 73.8 Information collection requirements: OMB approval.

* * * * *

(b) The approved information collection requirements contained in this part appear in §§ 73.5, 73.20, 73.21, 73.24, 73.25, 73.26, 73.27, 73.37, 73.38, 73.40, 73.45, 73.46, 73.50, 73.54, 73.55, 73.56, 73.57, 73.58, 73.60, 73.67, 73.70, 73.71, 73.72, 73.73, 73.74, and appendices B, C, and G to this part.

* * * * *

■ 3. 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 [1] 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 Gy (100 rad) per hour at a distance of 1 meter (3.3 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 nuclear fuel shipments that may have come under the control of unauthorized persons.

(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 nuclear fuel shipments;

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

(ii) Delay and impede attempts at theft, diversion, or radiological sabotage of spent nuclear fuel shipments; 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, as defined in § 73.2, 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 deadly force training requirement does not apply to members of local law enforcement agencies (LLEAs) performing escort duties for spent nuclear fuel shipments.

(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 no later than 2 weeks prior to the shipment or prior to the first shipment of a series of shipments with the governor of a State, or the governor's designee, of a shipment of spent nuclear fuel 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 a security-related emergency or a call for assistance.

(vi) Preplan and coordinate with the NRC to obtain advance approval of the routes used for road and rail shipments of spent nuclear fuel, and of any U.S. ports where vessels carrying spent nuclear fuel shipments are scheduled to stop. 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 Title 49 of the *Code of Federal Regulations* (49 CFR), in particular those identified in § 71.5 of this chapter. The advance approval application shall provide:

(A) For road shipments, the route shall 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 the NRC shall include, but is not limited to, the following:

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

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

(vii) Document the preplanning and coordination activities.

(viii) Ensure the protection of Safeguards Information relative to spent nuclear fuel in transit in accordance with §§ 73.21 and 73.22 of this part, especially the information described in § 73.22(a)(2), which would include, at a minimum, the protection of the following information:

(A) The preplanning and coordination activities;

(B) Transportation physical security plan;

(C) Schedules and itineraries for specific spent nuclear fuel shipments until the information is no longer controlled as Safeguards Information, that is until at least 10 days after the shipment has entered or originated within the state; or for the case of a shipment in a series of shipments whose schedules are related, a statement that schedule information must be protected 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;

(D) Vehicle immobilization features, intrusion alarm devices, and communications;

(E) Arrangements with and capabilities of local police response forces, and locations of safe havens identified along the transportation route;

(F) Limitations of communications during transport;

(G) Procedures for response to security contingency events;

(H) Information concerning the tactics and capabilities required to defend against attempted sabotage, or theft and diversion of irradiated reactor fuel, or related information; and

(I) Engineering or safety analyses, security-related procedures or scenarios and other information related to the protection of the transported material if the unauthorized disclosure of such analyses, procedures, scenarios, or other information could reasonably be expected to have a significant adverse effect on the health and safety of the public or the common defense and security by significantly increasing the likelihood of theft, diversion, or sabotage of spent nuclear fuel in transit.

(2) *Advance notifications.* Prior to the shipment of spent nuclear fuel moving through or across the boundary of any State, outside the confines of the licensee's facility or other place of use or storage, a licensee subject to this section shall provide notification to the NRC, under § 73.72 of this part, and the governor of the State(s), or the governor's designee(s), of the spent nuclear fuel shipment. After June 11, 2013, the compliance date of the Tribal notification final rule, a licensee subject to this section shall notify the Tribal official or Tribal official's designee of each participating Tribe referenced in § 71.97(c)(3) of this chapter prior to the transport of spent fuel within or across the Tribal reservation. Contact information for each State, including telephone and mailing addresses of governors and governors' designees, and participating Tribes, including telephone and mailing addresses of Tribal officials and Tribal official's 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 and each appropriate Tribal official or the Tribal official's designee.

(B) A notification delivered by mail must be postmarked at least 10 days before transport of a shipment within or through the State or Tribal reservation.

(C) A notification delivered by any other method must reach the office of the governor or the governor's designee and any Tribal official or Tribal official's designee at least 7 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 or Tribal reservation.

(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 or Tribal reservation;

(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 or Tribal reservation; 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 of this part until 10 days after the last shipment in the series has entered or originated within the State or Tribal reservation, and an estimate of the date on which the last shipment in the series will enter or originate within the State or Tribal reservation.

(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 and the office of the Tribal official or in the office of the Tribal official's designee of any schedule change that differs by more than 6 hours from the schedule information previously furnished under paragraph (b)(2)(iii) of this section, 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, each Tribal official or the Tribal official's designee previously notified, and to the NRC's Director, Division of Security Policy, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 20555. 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 of this part.

(3) *Transportation physical protection program.* (i) The transportation physical protection program established under paragraph (a)(1) of this section shall include armed escorts to protect spent nuclear fuel shipments and a movement control center, as defined in § 73.2 of this part, 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 coordinate 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 of this part.

(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) Roles and responsibilities of the movement control center personnel, drivers, armed escorts and other individuals relative to the security of the shipment;

(C) Reporting of safeguards events under § 73.71 of this part;

(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 program shall:

(A) Provide that escorts (other than members of local law enforcement agencies serving as armed escorts, 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 communicate with 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 two individuals, one 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 one armed escort, and trailed by a third vehicle occupied by at least one armed escort.

(2) As permitted by law, all armed escorts are equipped with a minimum of two 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 2-way communications between the transport vehicle, the escort vehicle(s), the movement control center, local law enforcement agencies, and one another. To ensure that 2-way communication is possible at all times, alternate communications should not be subject to the same failure modes as the primary communication.

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

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

(6) Shipments are continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system reporting to a movement control center. A movement control center shall provide positive confirmation of the location, status, and control over the shipment. The movement control center shall implement preplanned procedures in response to deviations from the authorized route or a notification of actual, attempted, or suspicious activities related to the theft, loss, diversion, or radiological sabotage of a shipment. These procedures shall 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 two armed escorts (who may be members of a local law enforcement agency), at least one 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 two 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 2-way communications between the transport, the escort vehicle(s), the movement control center, local law enforcement agencies, and one another. To ensure that 2-way communication is possible 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 shall 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 U.S. waters.* In addition to the provisions of paragraph (b) of this section, the physical protection system for any portion of a spent nuclear fuel shipment traveling on U.S. waters 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 two 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 2-way communications between the vessel, the movement control center, local law enforcement agencies, and one another. To ensure that 2-way communication is possible 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, Tribal officials, Tribal employees, and other individuals, whether or not licensees of the NRC, 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) of this part shall protect that information against unauthorized disclosure as specified in §§ 73.21 and 73.22 of this part.

■ 4. Section 73.38 is added 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) of this part 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 prompt 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 August 19, 2013, each licensee that is subject to this provision shall implement the requirements of this section through revisions to its physical security plan or transportation 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) Fingerprinting, and the identification and criminal history records checks required by Section 149 of the Atomic Energy Act of 1954, as amended, and other elements of the background investigation are not required for the following individuals prior to granting access authorization relative to spent nuclear fuel in transit:

(i) Persons identified in §§ 73.59 and 73.61 of this part;

(ii) Federal, State, and local officials, including inspectors, whose occupational status are consistent with the promotion of common defense and security and the protection of public health and safety relative to spent nuclear fuel in transit;

(iii) Emergency response personnel who are responding to an emergency;

(iv) An individual who has had a favorably adjudicated U.S. Government criminal history records check within the last 5 years, under a comparable U.S. Government program involving fingerprinting and an FBI identification and criminal history records check (e.g. National Agency Check, Transportation Worker Identification Credentials (TWIC) under 49 CFR part 1572, Bureau of Alcohol Tobacco Firearms and Explosives background check and clearances under 27 CFR part 555, Health and Human Services security risk assessments for possession and use of select agents and toxins under 42 CFR part 73, Hazardous Material security threat assessment for hazardous material endorsement to commercial drivers license under 49 CFR part 1572, Customs and Border Patrol's Free and Secure Trade (FAST) Program) provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that granted the Federal security clearance or reviewed the criminal history records check must be provided to the licensee. The licensee shall retain this documentation for a period of 3 years from the date the individual no longer requires access authorization relative to spent nuclear fuel in transit; and

(v) Any individual who has an active Federal security clearance, provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that granted the Federal security clearance or reviewed the criminal history records check must be provided to the licensee. The licensee shall retain this documentation for a period of 3 years from the date the individual no longer requires access authorization relative to spent nuclear fuel in transit.

(d) *Background investigation.* Before allowing an individual to have unescorted access or access authorization relative to spent nuclear fuel [2] in transit the licensees shall complete a background investigation as defined in § 73.2 of this part 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.

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

(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) *Criminal history.* Fingerprinting and an FBI identification and criminal history records check under § 73.57 of this part.

(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 email. 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 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 U.S. citizens who have resided outside the U.S. and do not have established credit history that covers at least the most recent 7 years in the U.S., 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) *Corroboration.* 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 the NRC to determine compliance with applicable laws and regulations.

(5) The licensee shall retain all fingerprint and criminal history records received from the FBI, or a copy if the file has been transferred, on an individual (including data indicating no record) for 5 years 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 fuel 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 shall 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 and shall share this information 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.

§ 73.71 [Amended]

■ 5. In § 73.71, paragraph (a)(1), redesignate footnote 1 as footnote 3.

■ 6. In § 73.72, paragraphs (a) introductory text, (a)(1), (a)(4), (a)(5), and (b) are revised to read as follows:

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

(a) A licensee, other than one specified in paragraph (b) of this section, who, in a single shipment, plans to deliver to a carrier for transport, to take delivery at the point where a shipment is delivered to a carrier for transport, to import, to export, or to transport a formula quantity of strategic special nuclear material, special nuclear material of moderate strategic significance, or irradiated reactor fuel [4] 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, U.S. Nuclear Regulatory Commission, Washington, DC 20555, using any appropriate method listed in § 73.4 of this part. Classified and safeguards 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 and safeguards 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 and safeguards notifications shall be made by secure telephone.

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

Dated at Rockville, Maryland, this 10th day of May, 2013.

For the Nuclear Regulatory Commission.

Andrew L. Bates,

Acting Secretary of the Commission.

[FR Doc. 2013–11717 Filed 5–17–13; 8:45 am]

BILLING CODE 7590–01–P

[4] 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.