

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
)  
CERTAIN LICENSEES AUTHORIZED TO )  
POSSESS AND TRANSFER ITEMS )  
CONTAINING RADIOACTIVE MATERIAL )  
QUANTITIES OF CONCERN )  
)

EA-07-003

**ORDER IMPOSING ADDITIONAL SECURITY MEASURES  
(EFFECTIVE IMMEDIATELY)**

I.

The Licensees identified in Attachment A<sup>1</sup> to this Order, hold licenses issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) or an Agreement State, in accordance with the Atomic Energy Act of 1954, as amended, and 10 CFR Parts 30, 32, 70 and 71, or equivalent Agreement State regulations. The licenses authorize them to possess and transfer items containing radioactive material quantities of concern. This Order is being issued to all such Licensees who may transport radioactive material quantities of concern under the NRC's authority to protect the common defense and security, which has not been relinquished to the Agreement States. The Orders require compliance with specific additional security measures to enhance the security for transport of certain radioactive material quantities of concern.

II.

On September 11, 2001, terrorists simultaneously attacked targets in New York, NY, and Washington, DC, utilizing large commercial aircraft as weapons. In response to the attacks and intelligence information subsequently obtained, the Commission issued a number of Safeguards and Threat Advisories to Licensees in order to strengthen Licensees' capabilities and readiness to respond to a potential attack on this regulated activity. The Commission has also communicated with other Federal, State and local government agencies and industry representatives to discuss and evaluate the current threat environment in order to assess the adequacy of the current security measures. In addition, the Commission commenced a comprehensive review of its safeguards and security programs and requirements.

As a result of its initial consideration of current safeguards and security requirements, as well as a review of information provided by the intelligence community, the Commission has determined that certain security measures are required to be implemented by Licensees as

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<sup>1</sup> Attachment A contains sensitive information and will not be released to the public.

prudent, interim measures to address the current threat environment in a consistent manner. Therefore, the Commission is imposing requirements, as set forth in Attachment B<sup>2</sup> of this Order, on all Licensees identified in Attachment A of this Order. These additional security measures, which supplement existing regulatory requirements, will provide the Commission with reasonable assurance that the common defense and security continue to be adequately protected in the current threat environment. Attachment C of this Order contains the requirements for fingerprinting and criminal history record checks for individuals when licensee's reviewing official is determining access to Safeguards Information or unescorted access to the radioactive materials. These requirements will remain in effect until the Commission determines otherwise.

The Commission recognizes that Licensees may have already initiated many of the measures set forth in Attachment B to this Order in response to previously issued Safeguards and Threat Advisories or on their own. It is also recognized that some measures may not be possible or necessary for all shipments of radioactive material quantities of concern, or may need to be tailored to accommodate the Licensees' specific circumstances to achieve the intended objectives and avoid any unforeseen effect on the safe transport of radioactive material quantities of concern.

Although the security measures implemented by Licensees in response to the Safeguards and Threat Advisories have been adequate to provide reasonable assurance of

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<sup>2</sup> Attachment B contains some requirements that are SAFEGUARDS INFORMATION, and can not be released to the public, and have therefore been redacted. The remainder of the requirements contained in Attachment B that are not SAFEGUARDS INFORMATION will be released to the public.

adequate protection of common defense and security, in light of the continuing threat environment, the Commission concludes that the security measures must be embodied in an Order, consistent with the established regulatory framework. The Commission has determined that some of the security measures contained in Attachment B of this Order contain Safeguards Information and will not be released to the public as per Order entitled, "Issuance of Order Imposing Requirements for Protecting Certain Safeguards Information," issued specifically to the Licensees identified in Attachment A to this Order. Access to Safeguards Information is limited to those persons who have established a need-to-know the information, are considered to be trustworthy and reliable, have been fingerprinted and undergone a Federal Bureau of Investigation (FBI) identification and criminal history records check in accordance with the NRC's "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information" (EA-06-155). A need-to-know means a determination by a person having responsibility for protecting Safeguards Information that a proposed recipient's access to Safeguards Information is necessary in the performance of official, contractual, or licensee duties of employment. Individuals who have been fingerprinted and granted access to Safeguards Information by the reviewing official under the NRC's "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information" (EA-06-155) do not need to be fingerprinted again for purposes of being considered for unescorted access.

To provide assurance that Licensees are implementing prudent measures to achieve a consistent level of protection to address the current threat environment, all Licensees identified in Attachment A to this Order shall implement the requirements identified in Attachments B and C to this Order. In addition, pursuant to 10 CFR § 2.202, I find that in light of the common

defense and security matters identified above, which warrant the issuance of this Order, the public health and safety require that this Order be immediately effective.

III.

Accordingly, pursuant to Sections 53, 63, 81, 147, 149, 161b, 161i, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR § 2.202 and 10 CFR Parts 30, 32, 70 and 71, IT IS HEREBY ORDERED, **EFFECTIVE IMMEDIATELY**, THAT ALL LICENSEES IDENTIFIED IN ATTACHMENT A TO THIS ORDER SHALL COMPLY WITH THE FOLLOWING:

- A. All Licensees shall, notwithstanding the provisions of any Commission or Agreement State regulation or license to the contrary, comply with the requirements described in Attachments B and C to this Order. The Licensees shall immediately start implementation of the requirements in Attachments B and C to the Order and shall complete implementation by **November 18, 2007**, or before the first shipment of radioactive material quantities of concern, whichever is sooner. This Order supersedes the additional transportation security measures prescribed in Attachment 2, Section 7.d. of the Manufacturer and Distributor Order issued January 12, 2004.
- B. 1. All Licensees shall, within **twenty (20) days** of the date of this Order, notify the Commission, (1) if they are unable to comply with any of the requirements described in Attachments B or C, (2) if compliance with any of the requirements is unnecessary in their specific circumstances, or (3) if implementation of any of the requirements would cause the Licensee to be in violation of the provisions of any Commission or Agreement State regulation or its license. The notification

shall provide the Licensees' justification for seeking relief from or variation of any specific requirement.

2. Any Licensee that considers that implementation of any of the requirements described in Attachments B or C to this Order would adversely impact the safe transport of radioactive material quantities of concern must notify the Commission, within **twenty (20) days** of this Order, of the adverse safety impact, the basis for its determination that the requirement has an adverse safety impact, and either a proposal for achieving the same objectives specified in the Attachments B or requirement in question, or a schedule for modifying the activity to address the adverse safety condition. If neither approach is appropriate, the Licensee must supplement its response to Condition B.1 of this Order to identify the condition as a requirement with which it cannot comply, with attendant justifications as required in Condition B.1.
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- C.
    1. In accordance with the NRC's "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information" (EA-06-155) issued on August 21, 2006, only the NRC-approved reviewing official shall review results from an FBI criminal history records check. The reviewing official shall determine whether an individual may have, or continue to have, unescorted access to radioactive materials that equal or exceed the quantities listed in Attachment B to this Order. Fingerprinting and the FBI identification and criminal history records check are not required for individuals exempted from fingerprinting requirements under 10 CFR 73.61 [72 Fed. Reg. 4945 (February 2, 2007)]. In addition, individuals who have a favorably decided

U.S. Government criminal history records check within the last five (5) years, or have an active federal security clearance (provided in each case that the appropriate documentation is made available to the Licensee's reviewing official), have satisfied the Energy Policy Act of 2005 fingerprinting requirement and need not be fingerprinted again for purposes of being considered for unescorted access.

2. No person may have access to Safeguards Information or unescorted access to radioactive materials if the NRC has determined, in accordance with its administrative review process based on fingerprinting and an FBI identification and criminal history records check, either that the person may not have access to Safeguards Information or that the person may not have unescorted access to a utilization facility, or radioactive material or other property subject to regulation by the NRC.
- D. Fingerprints shall be submitted and reviewed in accordance with the procedures described in Attachment C to this Order. Individuals who have been fingerprinted and granted access to Safeguards Information by the reviewing official under Order EA-06-155 do not need to be fingerprinted again for purposes of being considered for unescorted access.
- E. The Licensee may allow any individual who currently has unescorted access to radioactive materials, in accordance with this Order, to continue to have unescorted access without being fingerprinted, pending a decision by the reviewing official (based on fingerprinting, an FBI criminal history records check and a trustworthy and reliability determination) that the individual may continue to have unescorted access to radioactive

materials that equal or exceed the quantities listed in Attachment B to this Order. The licensee shall complete implementation of the requirements of Attachments B and C to this Order by **November 18, 2007**.

- F. 1. The Licensee shall, **within twenty (20) days** of the date of this Order, submit to the Commission a schedule for completion of each requirement described in Attachments B and C.
  - 2. The Licensee shall report to the Commission when they have achieved full compliance with the requirements described in Attachments B and C.
- G. Notwithstanding any provisions of the Commission's or an Agreement State's regulations to the contrary, all measures implemented or actions taken in response to this Order shall be maintained until the Commission determines otherwise.

Licensee responses to Conditions B.1, B.2, F.1, and F.2 above shall be submitted to the Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555. In addition, Licensee submittals that contain Safeguards Information shall be properly marked and handled in accordance with Licensees' Safeguards Information or Safeguards Information - Modified Handling program.

The Director, Office of Federal and State Materials and Environmental Management Programs, may, in writing, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause.



#### IV.

In accordance with 10 CFR § 2.202, the Licensee must, and any other person adversely affected by this Order may, submit an answer to this Order, and may request a hearing on this Order, within **twenty (20) days** of the date of this Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time in which to submit an answer or request a hearing must be made in writing to the Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and include a statement of good cause for the extension. The answer may consent to this Order. Unless the answer consents to this Order, the answer shall, in writing and under oath or affirmation, specifically set forth the matters of fact and law on which the Licensee or other person adversely affected relies and the reasons as to why the Order should not have been issued. Any answer or request for a hearing shall be submitted to the Secretary, Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, ATTN: Rulemakings and Adjudications Staff, Washington, DC 20555. Copies also shall be sent to the Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555, to the Assistant General Counsel for Materials Litigation and Enforcement, to the Office of Enforcement at the same address, to the Regional Administrator for NRC Region I, II, III, or IV, at the respective addresses specified in Appendix A to 10 CFR Part 73, appropriate for the specific facility, and to the Licensee if the answer or hearing request is by a person other than the Licensee. Because of possible delays in delivery of mail to United States Government offices, it is requested that answers and requests for hearing be transmitted to the Secretary of

the Commission either by means of facsimile transmission to 301-415-1101 or by e-mail to [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov) and also to the Office of the General Counsel either by means of facsimile to 301-415-3725 or by e-mail to [OGCMailCenter@nrc.gov](mailto:OGCMailCenter@nrc.gov). If a person other than the Licensee requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR § 2.309.

If a hearing is requested by the Licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

Pursuant to 10 CFR § 2.202(c)(2)(I), the Licensee, may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the grounds that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section III above shall be final **twenty (20) days** from the date of this Order without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section III shall be final when the extension expires if a hearing request has not been received. AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

Dated this 22<sup>nd</sup> day of May 2007

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Charles L. Miller, Director  
Office of Federal and State Materials  
and Environmental Management Programs

## **Attachment A: List of Licensees – Redacted**

## **Attachment B: Additional Security Measures for Transportation of Radioactive Material Quantities of Concern - Revision 2**

### A. General Basis Criteria

These Additional Security Measures (ASMs) are established to delineate licensee responsibility in response to the current threat environment. The following security measures apply to Nuclear Regulatory Commission (NRC) and Agreement States licensees, who ship Radioactive Material Quantities of Concern (RAMQC) as defined in Section A .1. Shipments of RAMQC that do not fall within the NRC's jurisdiction under the Atomic Energy Act of 1954, as amended, are not subject to the provisions of these ASMs.

1. Licensees who are subject to this Order shall ensure that the requirements listed in Section B below are in effect when they ship radioactive materials that meet the following criterion:
  - a. Radionuclides listed in Table A, greater than or equal to the quantities specified,
  - b. For mixtures of radionuclides listed in Table A, the sum of the fractions of those radionuclides if greater than or equal to 1, or
  - c. For shipments of spent nuclear fuel containing greater than or equal to 1000 Terabecquerels (TBq) (27,000 Curies) but less than or equal to 100 grams of spent nuclear fuel.

For shipments containing greater than 100 grams of spent nuclear fuel, licensees shall follow the ASMs for "Transportation of Spent Nuclear Fuel Greater than 100 Grams," dated October 3, 2002.

These ASMs supercede Safeguards Advisories SA-01-01, Rev. 1, and SA-03-02. For radioactive materials shipments containing radionuclides not addressed by this ASM guidance will be provided by Safeguards Advisory.

2. The requirements of these ASMs apply to a conveyance (i.e., the requirements apply irrespective of whether the RAMQC is shipped in a single package or in multiple packages in a single conveyance).
3. Licensees are not responsible for complying with the requirements of these ASMs if a carrier aggregates, during transport or storage incident to transport, radioactive material from two or more conveyances from separate licensees which individually do not exceed the limits of Paragraph A.1. but which together meet or exceed any of the criteria in Paragraph A.1.
4. The requirements of these ASMs only apply to RAMQC shipments using highway or rail modes of transportation. For multi-mode shipments, the requirements of these ASMs apply only to the portion of shipments that are made using highway or rail modes of transportation, as appropriate.
5. For domestic highway and rail shipments of materials in quantities greater than or equal to the quantities in Paragraph A.1, per conveyance, the licensee shall ensure that:

- a. Only carriers are used which:
    - (1) Use established package tracking systems,
    - (2) Implement methods to assure trustworthiness and reliability of personnel associated with the transportation of RAMQC,
    - (3) Maintain constant control and/or surveillance during transit, and
    - (4) Have the capability for immediate communication to summon appropriate response or assistance.
  
  - b. The licensee shall verify and document that the carrier employs the measures listed above.
6. The preplanning, coordination, and tracking requirements of these ASMs are intended to reduce unnecessary delays and shipment duration and to facilitate the transfer of the RAMQC shipment and any escorts at State borders.
7. Unless specifically noted otherwise, the requirements of these ASMs do not apply to local law enforcement agencies (LLEA) personnel performing escort duties.
8. The requirements of these ASMs apply to RAMQC domestic shipments within the United States (U.S.), imports into the U.S., or exports from the U.S. The requirements of these ASMs do not apply to transshipments through the U.S. Licensees are responsible for complying with the requirements of Section B for the highway and rail shipment portion of an import or export which occurs inside of the U.S.

For import and export RAMQC shipments, while located at the port or shipments on U.S. navigable waterways, the U.S. Coast Guard Maritime Transportation security regulations will be in effect and these ASMs are not applicable. For RAMQC shipments while located at the air freight terminal, security requirements will be performed in accordance with the Transportation Security Administration security regulations.

For import and export RAMQC shipments, the licensee shall ensure that the requirements of these ASMs are implemented after the transportation package has been loaded onto the highway or rail vehicle (except for the advance notification requirements in section B.4) and the package begins the domestic portion of the shipment to or from the U.S. port of entry [i.e., the package(s) departs for or from the port of entry facility or the airfreight terminal].

## B. Specific Requirements

Licensees who ship RAMQC in quantities that meet the criteria of Paragraph A.1. shall ensure that carriers used have developed and implemented transportation security plans that embody the additional security measures imposed by this Order.

### 1. Licensee Verification

Before transfer of radioactive materials in quantities which meet the criterion of Paragraph A.1, per conveyance, the licensee shall:

- a. For new recipient(s), verify that the intended recipient's license authorizes receipt of the regulated material by direct contact with the regulatory

authority that issued the license (NRC Region or Agreement State) prior to transferring the material,

- b. Verify the validity of unusual orders or changes (if applicable) that depart from historical patterns of ordering by existing recipients,
- c. Verify the material is shipped to an address authorized in the license and that the address is valid,
- d. Verify the address for a delivery to a temporary job site is valid,
- e. Document the verification and validation process, and
- f. Coordinate departure and arrival times with the recipient.

## 2. Background Investigations

- a. Background investigations are intended to provide high assurance that individuals performing assigned duties associated with the transport of RAMQC, are trustworthy and reliable, and do not constitute an unreasonable risk to the common defense and security, including the potential to commit radiological sabotage.
- b. For highway shipments only, the licensee shall ensure background investigations for all drivers, accompanying individuals, communications center managers, and other appropriate communications center personnel have been performed. The NRC only has the authority to impose a Federal Bureau of Investigation (FBI) criminal history check, which includes fingerprinting, on those individuals who seek access to Safeguards Information (SGI) or unescorted access to licensed material.



- c. For rail shipments, the licensee shall ensure background investigations for employees filling the positions of communications center managers and other appropriate communications center personnel have been performed. The NRC only has the authority to impose a Federal Bureau of Investigation (FBI) criminal history check, which includes fingerprinting, on those individuals who seek access to SGI or unescorted access to licensed material.
- d. Licensees shall document the basis for concluding that there is high assurance that individuals granted access to safeguards information or unescorted access to licensed material are trustworthy and reliable, and do not constitute an unreasonable risk for malevolent use of the regulated material. "Access" means that an individual could exercise some physical control over the material or device containing radioactive material.
  - (1) The trustworthiness, reliability, and verification of an individual's true identity shall be determined based on a background investigation. The background investigation shall address at least the past three (3) years, and as a minimum, include fingerprinting and an FBI criminal history check, verification of employment history, education, employment eligibility, and personal references . If an individual's employment has been less than the required three (3) years period, educational references may be used in lieu of employment history.
  - (2) Fingerprints shall be submitted and reviewed in accordance with the procedures described in Attachment C to this Order.

- (3) A reviewing official that the licensee nominated and has been approved by the NRC, in accordance with NRC “Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information,” is the only individual that may make trustworthiness and reliability determinations.
- e. Licensees background investigation requirements may also be satisfied for an individual that has:
  - (1) current access authorization permitting unescorted access to a power reactor facility or access to Safeguards Information,
  - (2) current U.S. government-issued security clearance (based upon a national agency check, at a minimum), or
  - (3) satisfactorily completed a background investigation under an NRC-approved access authorization program.
- f. Individuals shall not perform assigned duties associated with the transport of RAMQC until the licensee has confirmed that a determination of trustworthiness and reliability, based on the appropriate background investigation requirements in B.2.d. and B.2.e., has been performed and documented.

### 3. Preplanning and Coordination

- a. As part of the shipment planning process, the licensee shall ensure that appropriate security information is provided to and is coordinated with affected States through which the shipment will pass to ensure minimal delays. These

discussions shall include whether a State intends to provide escorts for a shipment.

- b. The licensee shall ensure States are provided with position information on a shipment (see Paragraph B. 5.a), if requested and practical.
- c. For shipments by highway, the licensees's coordination required in Paragraph B.3.a. shall include identification of Highway Route Controlled Quantity (HRCQ) shipments of material and safe havens.<sup>3</sup>

#### 4. Notifications

- a. The licensee shall ensure an advance notification of a shipment is provided, or of a series of shipments, of RAMQC to the NRC. The licensee shall ensure the notification is submitted sufficiently in advance to ensure it is received by NRC at least seven (7) days, where practicable, before the shipment commences physically within the U.S.

For written notifications, the notice should be addressed to: (10CFR 2.390)

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<sup>3</sup> In general, a safe haven is a readily recognizable and readily accessible site at which security is present or from which, in the event of an emergency, the transport crew can notify and wait for the local law enforcement authorities (LLEA). The following criteria are used by the NRC to determine the safe haven sites and licensees should use these criteria in identifying safe havens for shipments subject to this Order:

- Close proximity to the route, i.e., readily available to the transport vehicle.
- Security from local, State, or Federal assets is present or is accessible for timely response.
- Site is well lit, has adequate parking, and can be used for emergency repair or wait for LLEA response on a 24-hours-a-day basis.
- Have additional telephone facilities should the communications system of the transport vehicle not function properly.
- Possible safe haven sites include:
  - Military installations and other Federal sites having significant security assets; secure company terminals; State weigh stations; truck stops with secure areas; and LLEA sites, including State police barracks.

U.S. Nuclear Regulatory Commission  
ATTN: Director, Division of Nuclear Security  
M/S: T-4-D-8  
Office of Nuclear Security and Incident Response  
11555 Rockville Pike  
Rockville, MD 20852-2738

Notifications may also be submitted electronically via e-mail to [RAMQC\\_SHIPMENTS@nrc.gov](mailto:RAMQC_SHIPMENTS@nrc.gov) or via fax to (301) 816-5151. (10CFR 2.390)

- b. The advance notification shall contain the following information:
- (1) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (2) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (3) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (4) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (5) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (6) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
  - (7) **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**

Refer to Paragraph B.7.c. for determination of information designation of advance notifications during preplanning, coordinating, and reporting information activities.

- c. The licensee shall ensure the information required by Paragraph B.4.b. is provided to each State through which the shipment will pass. The licensee shall ensure that the notification is received at least seven (7) days, where practicable, before the U.S. highway or railroad portion of a shipment commences.
  
- d. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**

## 5. Communications

- a. (1) For highway shipments, monitor each RAMQC shipment with a telemetric position monitoring system that communicates with a communication center or is equipped with an alternative tracking system that communicates position information to a communications center.
- (2) For rail shipments, monitor each RAMQC shipment with either: (i) a telemetric position monitoring system that communicates with a licensee or third-party communication center, (ii) a railroad track-side car location monitoring systems tracking system that relays a car's position to a railroad communications center (which can provide position information to any separate licensee communications center per Paragraph B.5.b), or (iii) alternate licensee monitoring system. Additionally, licensees may use

a railroad communications center to monitor the rail portion of a shipment, in lieu of using a separate communications center.

- b. (1) For highway shipments, provide for a communication center that has the capability to continuously and actively monitor in-progress shipments to ensure positive confirmation of the location, status, and control over the shipment and implement pre-planned procedures in response to deviations from the authorized route or notification of actual, attempted, or suspicious activities related to theft, loss, diversion, or radiological sabotage of a shipment. These procedures shall include identification of the designated LLEA contact(s) along the shipment route.
- (2) For rail shipments, provide for a communication center that has the capability to periodically monitor in-progress shipments to ensure positive confirmation of the location of the shipment and implement pre-planned procedures in response to notification of actual, attempted, or suspicious activities related to theft, loss, diversion, or radiological sabotage of a shipment. These procedures shall include identification of the designated LLEA contact(s) along the shipment route. Licensees may use a railroad communications center in lieu of establishing a separate communications center.
- c. (1) For highway shipments, ensure that a two-way telecommunication capability is available for the transport and any escort vehicles allowing them to communicate with each other with the communications center, and with designated LLEAs along the route. The communications center

must be capable of contacting the designated authorities along the shipment route.

- (2) For rail shipments, ensure that a two-way telecommunication capability is available between the train and the communications center and between any escort vehicles and the communications center. The communications center must be capable of contacting the designated authorities along the shipment route.

- d. A licensee may utilize a carrier or third-party communications center in lieu of establishing such a facility itself. A commercial communications center must have the capabilities, necessary procedures, training, and personnel background investigations to meet the applicable requirements of these ASMs.

- e. (1) For highway shipments, provide a backup means for the transport and any escort vehicle to communicate with the communications center, using a diverse method not subject to the same interference factors as the primary capability selected for compliance with Paragraph B.5.c. (e.g., two-way radio or portable telephone).

- (2) For rail shipments, provide a backup means for the train to talk with the communications center, using a diverse method not subject to the same interference factors as the primary capability selected for compliance with Paragraph B.5.c. (e.g., two-way radio or portable telephone).

- f. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**

- (1) Not later than one hour after the time when, through the course of the investigation, it is determined the shipment is lost or stolen, the licensee shall ensure the appropriate local law enforcement agency, the NRC Operations Center at (301) 816-5100, and the appropriate Agreement State regulatory agency, if any, are notified.
- (2) If after 24 hours of initiating the investigation, the radioactive material cannot be located, licensee shall ensure the NRC Operations Center and, for Agreement State licensees, the appropriate Agreement State regulatory agency are immediately notified.

g. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**

6. Drivers and Accompanying Individuals

- a. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
- b. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
- c. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**
- d. **[This paragraph contains SAFEGUARDS INFORMATION and will not be publicly disclosed.]**



## 7. Procedures, Training, and Control of Information

- a. (1) For highway shipments the licensee shall ensure that normal and contingency procedures have been developed, including, for example: notifications, communications protocols, loss of communications, and response to actual, attempted, or suspicious activities related to theft, loss, diversion, or radiological sabotage of a shipment. Communication protocols must include a strategy for use of authentication and duress codes, provision for refueling or other stops, detours, and locations where communication is expected to be temporarily lost.
- (2) For rail shipments, the licensee shall ensure that normal and contingency procedures have been developed, including, for example: notifications, communications protocols, loss of communications, and response to actual, attempted, or suspicious activities related to theft, loss, diversion, or radiological sabotage of a shipment. Communication protocols must include a strategy for use of authentication and duress codes, provision for stops, and locations where communication is expected to be temporarily lost.
- b. (1) For highway shipments, the licensee shall ensure that personnel, including drivers, accompanying individuals, responsible communication center managers, and other appropriate communication center personnel are trained in and understand the normal and contingency procedures.
- (2) For rail shipments, the licensee shall ensure that personnel, including the appropriate train crew members and responsible railroad communication center managers, and other appropriate railroad communication center

personnel are trained in and understand the normal and contingency procedures.

c. Information to be protected as Safeguards Information - Modified Handling, shall include, but is not limited to:

- (1) Integrated transportation physical security plans.
- (2) Schedules and itineraries for shipments. For shipments that are not inherently self disclosing, schedule and itineraries information may be decontrolled 2 days after a shipment is completed. For shipments that are inherently self disclosing, schedule may be released as necessary after departure.
- (3) Details of alarm and communications systems, communication protocols and duress codes, and security contingency response procedures.
- (4) Arrangements with designated LLEA (i.e., Federal, State Police, and/or local police departments) and information on whether a State intends to provide armed escorts for a shipment.

For preplanning; coordinating, for example with States' organizations and carriers; reporting information as described in B.1., B.4., and B.5. related to shipments of radioactive material, and the radionuclides identified in Paragraph A.1, the licensee shall ensure the information is protected at least as sensitive information (for example, proprietary or business financial information). Licensees shall ensure access is restricted to this information to those licensee and contractor personnel with a need to

know. Licensees shall ensure all parties receiving this information protect it similarly. Information may be transmitted either in writing or electronically and shall be marked as “Sensitive Information - Not for Public Disclosure.”

C. Implementation Schedule

1. Licensees shall implement the requirements of this ASM within 180 days of the date of issuance of the Order or before the first shipment of RAMQC, whichever is sooner.

**TABLE A: Radionuclides of Concern**

<b>Radionuclide</b>	<b>Quantity of Concern (TBq) Threshold Limit</b>	<b>Quantity of Concern (Ci) Information Only - Rounded After Conversion</b>
Am-241	60	1,600
Am-241/Be	60	1,600
Cf-252	20	540
Cm-244	50	1,400
Co-60	30	810
Cs-137	100	2,700
Gd-153	1,000	27,000
Ir-192	80	2,200
Pm-147	40,000	1,100,000
Pu-238	60	1,600
Pu-239/Be	60	1,600
Ra-226 <sup>1</sup>	40	1,100
Se-75	200	5,400
Sr-90 (Y-90)	1000	27,000
Tm-170	20,000	540,000
Yb-169	300	8,100

<sup>1</sup>The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC is in the process of amending its regulations for discrete sources of Ra-226.

**NOTES:**

1. The regulatory standard values to be used are given in Terabecquerels (TBq). Curie (Ci) values are provided for practical usefulness only and are rounded after conversion.
2. If several radionuclides are present, the sum of the fractions of the activity of each radionuclide must be determined. Using the equation below calculate the ratio by inserting the actual activity of each radionuclide as the numerator and the corresponding activity limit in Table A as the denominator. Ensure the numerator and the denominator are in Terabecquerels.

$R_1$  = activity for radionuclide number 1

$R_2$  = activity for radionuclide number 2

$R_3, R_4, R_5, \dots$  etc

$AR_1$  = activity limit for radionuclide number 1

$AR_2$  = activity limit for radionuclide number 2

$AR_3, AR_4, AR_5, \dots$  etc

$$\frac{R_1}{AR_1} + \frac{R_2}{AR_2} + \frac{R_3}{AR_3} + \frac{R_n}{AR_n} \geq 1$$

**Attachment C: Requirements for Fingerprinting and Criminal History Checks of Individuals When Licensee's Reviewing Official is Determining Access to Safeguards Information or Unescorted Access to Radioactive Materials**

**General Requirements**

Licensees shall comply with the following requirements of this attachment.

1. Each Licensee subject to the provisions of this attachment shall fingerprint each individual who is seeking or permitted access to safeguards information (SGI) or unescorted access to RAMQC. The Licensee shall review and use the information received from the Federal Bureau of Investigation (FBI) and ensure that the provisions contained in this Order and this attachment are satisfied.
2. The Licensee shall notify each affected individual that the fingerprints will be used to secure a review of his/her criminal history record and inform the individual of the procedures for revising the record or including an explanation in the record, as specified in the "Right to Correct and Complete Information" section of this attachment.
3. Fingerprints for access to SGI or unescorted access need not be taken if an employed individual (e.g., a Licensee employee, contractor, manufacturer, or supplier) is relieved from the fingerprinting requirement by 10 CFR 73.59 for access to SGI or 10 CFR 73.61 for unescorted access, has a favorably-decided U.S. Government criminal history check within the last five (5) years, or has an active federal security clearance. Written confirmation from the Agency/employer which granted the federal security clearance or reviewed the criminal history check must be provided for either of the latter two cases. The Licensee must retain this documentation for a period of three (3) years from the date

the individual no longer requires access to SGI or unescorted access to radioactive materials associated with the Licensee's activities.

4. All fingerprints obtained by the Licensee pursuant to this Order must be submitted to the Commission for transmission to the FBI.
5. The Licensee shall review the information received from the FBI and consider it, in conjunction with the trustworthy and reliability requirements of this Order, in making a determination whether to grant, or continue to allow, access to SGI or unescorted access to radioactive materials.
6. The Licensee shall use any information obtained as part of a criminal history records check solely for the purpose of determining an individual's suitability for access to SGI or unescorted access to RAMQC.
7. The Licensee shall document the basis for its determination whether to grant, or continue to allow, access to SGI or unescorted access to RAMQC.

### **Prohibitions**

A Licensee shall not base a final determination to deny an individual access to radioactive materials solely on the basis of information received from the FBI involving: an arrest more than one (1) year old for which there is no information of the disposition of the case, or an arrest that resulted in dismissal of the charge or an acquittal.

A Licensee shall not use information received from a criminal history check obtained pursuant to this Order in a manner that would infringe upon the rights of any individual under the First Amendment to the Constitution of the United States, nor shall the Licensee use the

information in any way which would discriminate among individuals on the basis of race, religion, national origin, sex, or age.

### **Procedures for Processing Fingerprint Checks**

For the purpose of complying with this Order, Licensees shall, using an appropriate method listed in 10 CFR 73.4, submit to the NRC's Division of Facilities and Security, Mail Stop T-6E46, one completed, legible standard fingerprint card (Form FD-258, ORIMDNRCOOOZ) or, where practicable, other fingerprint records for each individual seeking access to SGI or unescorted access to RAMQC, to the Director of the Division of Facilities and Security, marked for the attention of the Division's Criminal History Check Section. Copies of these forms may be obtained by writing the Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, by calling (301) 415-5877, or by e-mail to [forms@nrc.gov](mailto:forms@nrc.gov). Practicable alternative formats are set forth in 10 CFR 73.4. The Licensee shall establish procedures to ensure that the quality of the fingerprints taken results in minimizing the rejection rate of fingerprint cards due to illegible or incomplete cards.

The NRC will review submitted fingerprint cards for completeness. Any Form FD-258 fingerprint record containing omissions or evident errors will be returned to the Licensee for corrections. The fee for processing fingerprint checks includes one re-submission if the initial submission is returned by the FBI because the fingerprint impressions cannot be classified. The one free re-submission must have the FBI Transaction Control Number reflected on the re-submission. If additional submissions are necessary, they will be treated as initial submittals and will require a second payment of the processing fee.

Fees for processing fingerprint checks are due upon application. Licensees shall submit payment with the application for processing fingerprints by corporate check, certified check, cashier's check, money order, or electronic payment, made payable to "U.S. NRC." [For guidance on making electronic payments, contact the Facilities Security Branch, Division of

Facilities and Security, at (301) 415-7404]. Combined payment for multiple applications is acceptable. The application fee (currently \$27) is the sum of the user fee charged by the FBI for each fingerprint card or other fingerprint record submitted by the NRC on behalf of a Licensee, and an NRC processing fee, which covers administrative costs associated with NRC handling of Licensee fingerprint submissions. The Commission will directly notify Licensees who are subject to this regulation of any fee changes.

The Commission will forward to the submitting Licensee all data received from the FBI as a result of the Licensee's application(s) for criminal history checks, including the FBI fingerprint record.

### **Right to Correct and Complete Information**

Prior to any final adverse determination, the Licensee shall make available to the individual the contents of any criminal records obtained from the FBI for the purpose of assuring correct and complete information. Written confirmation by the individual of receipt of this notification must be maintained by the Licensee for a period of one (1) year from the date of the notification.

If, after reviewing the record, an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, or update the alleged deficiency, or to explain any matter in the record, the individual may initiate challenge procedures. These procedures include either direct application by the individual challenging the record to the agency (i.e., law enforcement agency) that contributed the questioned information, or direct challenge as to the accuracy or completeness of any entry on the criminal history record to the Assistant Director, Federal Bureau of Investigation Identification Division, Washington, DC 20537-9700 (as set forth in 28 CFR Part 16.30 through 16.34). In the latter case, the FBI forwards the challenge to the agency that submitted the data and requests that agency to verify or correct the challenged entry. Upon receipt of an official communication directly from the agency that contributed the original information, the FBI Identification Division makes any changes necessary in accordance with the



information supplied by that agency. The Licensee must provide at least ten (10) days for an individual to initiate an action challenging the results of an FBI criminal history records check after the record is made available for his/her review. The Licensee may make a final determination on access to SGI or unescorted access RAMQC based upon the criminal history record only upon receipt of the FBI's ultimate confirmation or correction of the record. Upon a final adverse determination on access to SGI or unescorted access to RAMQC, the Licensee shall provide the individual its documented basis for denial. Access to SGI or unescorted access to RAMQC shall not be granted to an individual during the review process.

### **Protection of Information**

1. Each Licensee who obtains a criminal history record on an individual pursuant to this Order shall establish and maintain a system of files and procedures for protecting the record and the personal information from unauthorized disclosure.

2. The Licensee may not disclose the record or personal information collected and maintained to persons other than the subject individual, his/her representative, or to those who have a need to access the information in performing assigned duties in the process of determining access to SGI or unescorted access to RAMQC. 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 criminal history record check may be transferred to another Licensee if the Licensee holding the criminal history record receives the individual's written request to re-disseminate the information contained in his/her file, and the gaining Licensee verifies information such as the individual's name, date of birth, social security number, sex, and other applicable physical characteristics for identification purposes.

4. The Licensee shall make criminal history records, obtained under this section, available for examination by an authorized representative of the NRC to determine compliance with the regulations and laws.

5. The Licensee shall retain all fingerprint and criminal history records received from the FBI, or a copy if the individual's file has been transferred, for three (3) years after termination of employment or denial to access SGI or unescorted access to RAMQC. After the required three (3) year period, these documents shall be destroyed by a method that will prevent reconstruction of the information in whole or in part.