

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-08-225

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

I.

The Licensees identified in Attachment A¹ 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

¹ Attachment A contains sensitive information and will not be released to the public.

determined that certain security measures are required to be implemented by Licensees as prudent, interim measures to address the current threat environment in a consistent manner. Therefore, the Commission is imposing requirements, as set forth in Attachment B² 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.

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.

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

² Attachment B contains some requirements that are SAFEGUARDS INFORMATION, and cannot be released to the public. The remainder of the requirements contained in Attachment B that are not SAFEGUARDS INFORMATION will be released to the public.

of this Order contain Safeguards Information and will not be released to the public as per NRC's "Order Imposing Requirements for the Protection of Certain Safeguards Information" (EA-08-161), 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-08-162). 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-08-162) do not need to be fingerprinted again for purposes of being considered for unescorted access.

This Order also requires that a reviewing official must consider the results of the Federal Bureau of Investigations criminal history records check in conjunction with other applicable requirements to determine whether an individual may be granted or allowed continued unescorted access. The reviewing official may be one that has previously been approved by NRC in accordance with the "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information" (EA-08-162). Licensees may nominate additional reviewing officials for making unescorted access determinations in accordance with NRC Orders EA-08-162. The nominated reviewing officials must have access

to Safeguards Information or require unescorted access to the radioactive material as part of their job duties.

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 **February 17, 2009**, or before the first shipment of radioactive material quantities of concern, whichever is sooner.
- 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.

- C. 1. In accordance with the NRC's "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information" (EA-08-162) only the NRC-approved reviewing official shall review results from an FBI criminal history records check. The licensee may use a reviewing official previously approved by the NRC as its reviewing official for determining access to Safeguards Information or the licensee may nominate another individual specifically for making unescorted access to radioactive material determinations,

using the process described in EA-08-162. The reviewing official must have access to Safeguards Information or require unescorted access to the radioactive material as part of their job duties. 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 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 Atomic Energy Act of 1954, as amended, 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-08-162, 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 **February 17, 2009**.
- 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 specific physical protection or security information considered to be Safeguards Information shall be put in a separate enclosure or attachment and, marked as "SAFEGUARDS INFORMATION - MODIFIED HANDLING" and mailed (no electronic transmittals i.e., no e-mail or FAX) to the NRC.

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 within twenty (20) days of the date of this Order. In addition, the Licensee and any other person adversely affected by this Order may request a hearing of this Order within twenty (20) days of the date of the Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time 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. If the answer includes a request for a hearing, it shall, under oath or affirmation, specifically set forth the matters of fact and law on which the

Licensee relies and the reasons as to why the Order should not have been issued. 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(d).

All documents filed in NRC adjudicatory proceedings, including a request for hearing, a petition for leave to intervene, any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities participating under 10 CFR 2.315(c), must be filed in accordance with the NRC E-Filing rule, which the NRC promulgated in August 2007, 72 Fed. Reg. 49139 (Aug. 28, 2007) and codified in pertinent part at 10 CFR Part 2, Subpart B. The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Participants may not submit paper copies of their filings unless they seek a waiver in accordance with the procedures described below.

To comply with the procedural requirements associated with E-Filing, at least ten (10) days prior to the filing deadline the requestor must contact the Office of the Secretary by e-mail at HEARINGDOCKET@NRC.GOV, or by calling (301) 415-1677, to request (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any NRC proceeding in which it is participating; and/or (2) creation of an electronic docket for the proceeding (even in instances when the requestor (or its counsel or representative) already holds an NRC-issued digital ID certificate). Each requestor will need to download the Workplace Forms Viewer™ to access the Electronic Information Exchange (EIE), a component of the E-Filing system. The Workplace Forms Viewer™ is free and is available at <http://www.nrc.gov/site-help/e-submittals/install->

[viewer.html](#). Information about applying for a digital ID certificate also is available on NRC's public website at <http://www.nrc.gov/site-help/e-submittals/apply-certificates.html>.

Once a requestor has obtained a digital ID certificate, had a docket created, and downloaded the EIE viewer, it can then submit a request for a hearing through EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public website at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the filer submits its document through EIE. To be timely, electronic filings must be submitted to the EIE system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The EIE system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request is filed so that they may obtain access to the document via the E-Filing system.

A person filing electronically may seek assistance through the "Contact Us" link located on the NRC website at <http://www.nrc.gov/site-help/e-submittals.html> or by calling the NRC technical help line, which is available between 8:30 a.m. and 4:15 p.m., Eastern Time, Monday through Friday. The help line number is (800) 397-4209 or locally, (301) 415-4737.

Participants who believe that they have good cause for not submitting documents electronically must file a motion, in accordance with 10 C.F.R. 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format. Such filings must be submitted by (1) first class mail addressed to the Office of the Secretary of the

Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville, Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket which is available to the public at http://ehd.nrc.gov/EHD_Proceeding/home.asp, unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, Participants are requested not to include copyrighted materials in their works.

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 requesting 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 ground 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 21st day of August 2008

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

George Pangburn, Acting 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:
 - a. Use established package tracking systems,
 - b. Implement methods to assure trustworthiness and reliability of personnel associated with the transportation of RAMQC,
 - c. Maintain constant control and/or surveillance during transit, and
 - d. 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," may continue to make trustworthiness and reliability determinations. The licensee may also nominate another individual specifically for making unescorted access determinations using the process identified in the NRC "Order Imposing Fingerprinting and Criminal History Records Check Requirements for Access to Safeguards Information."

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.¹

¹ 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

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.

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.

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

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 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

Radionuclide	Quantity of Concern (TBq) Threshold Limit	Quantity of Concern (Ci) Information Only - Rounded After Conversion
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 ¹	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

¹The 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

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

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) 415-7232, or by e-mail to forms.resource@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 (Note: other fees may apply to obtain fingerprints from your local law enforcement agency). Licensees should submit payments electronically via <http://www.pay.gov>. Payments through Pay.gov can be made directly from the Licensee's credit/debit card. Licensees will need to establish a password and user ID before they can access Pay.gov. To establish an account, Licensee requests must be sent to paygo@nrc.gov. The request must include the Licensee's name, address, point of contact, e-mail address, and phone number. The NRC will forward each request to Pay.gov and someone from Pay.gov will contact the Licensee with all of the necessary account information. Licensees shall make payments for processing before submitting applications to the NRC. Combined payment for multiple applications is acceptable. Licensees shall include the Pay.gov payment receipt(s) along with the application(s). For additional guidance on making electronic payments, contact the Facilities Security Branch, Division of Facilities and Security, at (301) 415-7404.

Alternatively, licensees may also submit payment with the application for processing fingerprints by fingerprints by corporate check, certified check, cashier's check, or money order, made payable to "U.S. NRC." Combined payment for multiple applications is acceptable.

The application fee (currently \$36) 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 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.