

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

HOLDERS OF MATERIAL LICENSES)	EA-06-250
AUTHORIZED TO MANUFACTURE OR)	
DISTRIBUTE ITEMS CONTAINING)	
RADIOACTIVE MATERIAL OF CONCERN)	

**ORDER IMPOSING FINGERPRINTING
AND CRIMINAL HISTORY RECORDS CHECK
REQUIREMENTS FOR UNESCORTED ACCESS
TO CERTAIN RADIOACTIVE MATERIAL
AND MODIFICATION OF THE ADDITIONAL SECURITY MEASURES
(EFFECTIVE IMMEDIATELY)**

The Licensees identified in Attachment 1¹ to this Order hold licenses issued in accordance with the Atomic Energy Act (AEA) of 1954, as amended, by the U.S. Nuclear Regulatory Commission (NRC or Commission) or Agreement States, authorizing them to manufacture or initially transfer items containing radioactive materials for sale or distribution. On August 8, 2005, the Energy Policy Act of 2005 (EPAAct) was enacted. Section 652 of the EPAAct amended Section 149 of the AEA to require fingerprinting and a Federal Bureau of Investigation (FBI) identification and criminal history records check of any person who is permitted unescorted access to radioactive materials subject to regulation by the Commission, and which the Commission determines to be of such significance to the public health and safety or the common defense and security as to warrant fingerprinting and background checks. NRC has decided to implement this requirement, in part, prior to the completion of the rulemaking to implement the provisions under the EPAAct, which is underway, because a deliberate malevolent act by an individual with unescorted access to these radioactive materials has a potential to result in significant adverse impacts to the public health and safety or the common defense and security. Those exempted from fingerprinting requirements under 10 CFR 73.59 (71 Fed. Reg. 33,989 (June 13, 2006)) for access to Safeguards Information² (SGI) are also exempt from the fingerprinting requirements

¹

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

²

Safeguards Information is a form of sensitive, unclassified, security-related information that the Commission has the authority to designate and protect under section 147 of the AEA.

under this Order. In addition, individuals who have a favorably-decided U.S. Government criminal history record check within the last five (5) years, or individuals who have an active federal security clearance (provided in each case that they make available the appropriate documentation), have satisfied the EAct fingerprinting requirement and need not be fingerprinted again. Individuals who have been fingerprinted and granted access to SGI by the reviewing official under Order EA-06-155 do not need to be fingerprinted again.

II

Subsequent to the terrorist events of September 11, 2001, the NRC issued a security Order requiring certain Manufacturing and Distribution (M&D) Licensees to implement Additional Security Measures (ASMs) for certain radioactive materials. The requirements imposed by that Order (M&D Order), and measures licensees have developed to comply with that Order, were designated by the NRC as Safeguards Information (SGI) and were not released to the public. One specific ASM, imposed by the M&D Order, required licensees to conduct local background checks to determine the trustworthiness and reliability of individuals needing unescorted access to radioactive materials. "Access," to these radioactive materials means that an individual could exercise some physical control over the material or device. At that time, the NRC did not have the authority, except in the case of power reactor licensees, to require licensees to submit fingerprints for an FBI criminal history records checks of individuals being considered for unescorted access to radioactive materials subject to NRC regulations. Therefore, in accordance with Section 149 of the AEA, as amended by the EAct, the Commission is imposing the FBI criminal history records check requirements, as set forth in this Order, including Attachment 2 to this Order, on all Licensees identified in Attachment 1 to this Order, who possess risk-significant radioactive materials equal to or greater than the quantities listed in Attachment 3 to this Order. These requirements will remain in effect until the Commission

determines otherwise.

This Order also modifies the M&D Order (EA-03-225 or EA-05-126M), to reflect recent Commission regulatory actions. The ASMs for M&D Licensees are modified to be consistent with (1) the “Order Imposing Additional Security Measures on the Transportation of Radioactive Materials Quantities of Concern” (EA-05-006), (2) the final rule on the Export and Import of Radioactive Material: Security Policies (70 Fed. Reg. 37985 and 46066), dated July 1, 2005, (3) the Order Imposing Increased Controls (EA-05-090), and (4) the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources.

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, safety, and interest require that this Order be effective immediately.

III

Accordingly, pursuant to Sections 81, 149, 161b, 161i, 161o, 182, and 186 of the AEA of 1954, as amended, and the Commission's regulations in 10 CFR 2.202, 10 CFR Part 30, and 10 CFR Part 32, IT IS HEREBY ORDERED, **EFFECTIVE IMMEDIATELY**, THAT ALL LICENSEES IDENTIFIED IN ATTACHMENT 1 TO THIS ORDER SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THIS ORDER.

A. All licensees identified in Attachment 1 to this Order shall comply with the following requirements:

1. The Licensee shall, within **twenty (20) days** of the date of this Order, establish and maintain a fingerprinting program that meet the requirements of Attachment 2 to this Order, for unescorted access to radioactive materials that equal or exceed the quantities

listed in Attachment 3 to this Order.

2. The Licensee shall, in writing, within **twenty (20) days** of the date of this Order, notify, the Commission, (1) receipt and confirmation that compliance with the Order will be achieved, or (2) if it is unable to comply with any of the requirements described in Attachment 2, or (3) if compliance with any of the requirements is unnecessary in its specific circumstances. The notification shall provide the Licensee's justification for seeking relief from or variation of any specific requirement.

- B. In accordance with the NRC's "Order Imposing Fingerprinting and Criminal History 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 3 to this Order. Fingerprinting and the FBI identification and criminal history records check are not required for individuals that are exempted from fingerprinting requirements under 10 CFR 73.59 [71 Fed. Reg. 33,989 (June 13, 2006)] for access to SGI. In addition, individuals who have a favorably decided U.S. Government criminal history records check within the last five (5) years, or individuals who 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 EPA's fingerprinting requirement and need not be fingerprinted again.
- C. Fingerprints shall be submitted and reviewed in accordance with the procedures described in Attachment 2 to this Order. Individuals who have been fingerprinted and granted access to SGI by the reviewing official under Order EA-06-155 do not need to be fingerprinted again.
- D. The Licensee may allow any individual who currently has unescorted access to radioactive materials, in accordance with the M&D 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 3 to this Order. The licensee shall complete implementation of the requirements of Attachment 2 to this Order by **January 15, 2007**.

E. The ASMs of the M&D Order are modified as follows:

1. ASM 7.d. is superseded in its entirety by Order EA-05-006.
2. ASM 8. is superseded by 10 CFR Part 110 - Export and Import of Nuclear Equipment and Material [see also Final Rule 10 CFR Part 110, dated July 1, 2005 (70 FR 37985 and 46066) - Export and Import of Radioactive Material: Security Policies].
3. "Table 1: Radionuclides of Concern" is superseded by Attachment 3 to this Order.
4. The requirement for a local criminal history check in ASM 5.a. is superseded by the FBI criminal history records check. All other requirements in ASM 5.a. are still applicable.

Licensee responses to Condition A.2. 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 responses shall be marked as "Security-Related Information - Withhold Under 10 CFR 2.390."

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 of good cause by the Licensee.

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, 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 at the same address, 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 and also to the Office of the General Counsel either by means of facsimile transmission to (301) 415-3725 or by e-mail to 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/her 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 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 as specified above in Section III 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 as specified above 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 17th day of October 2006

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Charles L. Miller, Director

Office of Federal and State Materials

and Environmental Management Programs

Attachment 1: List of Applicable Materials Licensees

Redacted

Attachment 2: Requirements for Fingerprinting and Criminal History Checks of Individuals When Licensee's Reviewing Official is Determining Unescorted Access to Radioactive Material Subject to EA-06-250

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 unescorted access to risk significant radioactive materials equal to, or greater than, the quantities listed in Attachment 3 to EA-06-250. The Licensee shall review and use the information received from the Federal Bureau of Investigation (FBI) and ensure that the provisions contained in the subject 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 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 Safeguards Information, 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 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 the M&D Order, in making a determination whether to grant, or continue to allow, 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 unescorted access to risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250.
7. The Licensee shall document the basis for its determination whether to grant, or continue to allow, unescorted access to risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250.

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 unescorted access to the risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250, 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. Practicable alternative formats are set forth in 10 CFR Part 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 unescorted access to risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250, 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 unescorted access to risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250, the Licensee shall provide the individual its documented basis for denial. Unescorted access to risk-significant radioactive materials equal to or greater than the quantities used in Attachment 3 to EA-06-250, 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 unescorted access to risk-significant radioactive materials equal to or greater than the quantities listed in Attachment 3 to EA-06-250. 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 unescorted access to risk-significant radioactive materials equal to or greater than the quantities listed in Attachment 3 to EA-06-250. 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.

ATTACHMENT 3: Radionuclides of Concern

Table A: Radionuclides of Concern

Radionuclide	Quantity of Concern ¹ (TBq)	Quantity of Concern ² (Ci)
Am-241	0.6	16
Am-241/Be	0.6	16
Cf-252	0.2	5.4
Cm-244	0.5	14
Co-60	0.3	8.1
Cs-137	1	27
Gd-153	10	270
Ir-192	0.8	22
Pm-147	400	11,000
Pu-238	0.6	16
Pu-239/Be	0.6	16
Ra-226 ³	0.4	11
Se-75	2	54
Sr-90 (Y-90)	10	270
Tm-170	200	5,400
Yb-169	3	81
Combinations of radioactive materials listed above ⁴	See Footnote Below ⁵	

¹ The aggregate activity of multiple, collocated sources of the same radionuclide should be included when the total activity equals or exceeds the quantity of concern.

² The primary values used for compliance with this Order are TBq. The curie (Ci) values are rounded to two significant figures for informational purposes only.

³ 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.

⁴ Radioactive materials are to be considered aggregated or collocated if breaching a common physical security barrier (e.g., a locked door at the entrance to a storage room) would allow access to the radioactive material or devices containing the radioactive material.

⁵ If several radionuclides are aggregated, the sum of the ratios of the activity of each source, i of radionuclide, n , $A_{(i,n)}$, to the quantity of concern for radionuclide n , $Q_{(n)}$, listed for that radionuclide equals or exceeds one. [(aggregated source activity for radionuclide A) ÷ (quantity of concern for radionuclide A)] + [(aggregated source activity for radionuclide B) ÷ (quantity of concern for radionuclide B)] + etc... ≥ 1

Guidance for Aggregation of Sources

NRC supports the use of the International Atomic Energy Association's (IAEA) source categorization methodology as defined in IAEA Safety Standards Series No. RS-G-1.9, "Categorization of Radioactive Sources," (2005) (see http://www-pub.iaea.org/MTCD/publications/PDF/Pub1227_web.pdf) and as endorsed by the agency's Code of Conduct for the Safety and Security of Radioactive Sources, January 2004 (see http://www-pub.iaea.org/MTCD/publications/PDF/Code-2004_web.pdf). The Code defines a three-tiered source categorization scheme. Category 1 corresponds to the largest source strength (equal to or greater than 100 times the quantity of concern values listed in Table 1.) and Category 3, the smallest (equal or exceeding one-tenth the quantity of concern values listed in Table 1.). Additional security measures apply to sources that are equal to or greater than the quantity of concern values listed in Table 1, plus aggregations of smaller sources that are equal to or greater than the quantities in Table 1. Aggregation only applies to sources that are collocated.

Licensees who possess individual sources in total quantities that equal or exceed the Table 1 quantities are required to implement additional security measures. Where there are many small

(less than the quantity of concern values) collocated sources whose total aggregate activity equals or exceeds the Table 1 values, licensees are to implement additional security measures.

Some source handling or storage activities may cover several buildings, or several locations within specific buildings. The question then becomes, "When are sources considered collocated for purposes of aggregation?" For purposes of the additional controls, sources are considered collocated if breaching a single barrier (e.g., a locked door at the entrance to a storage room) would allow access to the sources. Sources behind an outer barrier should be aggregated separately from those behind an inner barrier (e.g., a locked source safe inside the locked storage room). However, if both barriers are simultaneously open, then all sources within these two barriers are considered to be collocated. This logic should be continued for other barriers within or behind the inner barrier.

The following example illustrates the point: A lockable room has sources stored in it. Inside the lockable room, there are two shielded safes with additional sources in them. Inventories are as follows:

The room has the following sources outside the safes: Cf-252, 0.12 TBq (3.2 Ci); Co-60, 0.18 TBq (4.9 Ci), and Pu-238, 0.3 TBq (8.1 Ci). Application of the unity rule yields: $(0.12 \div 0.2) + (0.18 \div 0.3) + (0.3 \div 0.6) = 0.6 + 0.6 + 0.5 = 1.7$. Therefore, the sources would require additional security measures.

Shielded safe #1 has a 1.9 TBq (51 Ci) Cs-137 source and a 0.8 TBq (22 Ci) Am-241 source. In this case, the sources would require additional security measures, regardless of location, because they each exceed the quantities in Table 1.

Shielded safe #2 has two Ir-192 sources, each having an activity of 0.3 TBq (8.1 Ci). In this case, the sources would not require additional security measures while locked in the safe. The combined activity does not exceed the threshold quantity 0.8 TBq (22 Ci).

Because certain barriers may cease to exist during source handling operations (e.g., a storage location may be unlocked during periods of active source usage), licensees should, to the extent practicable, consider two modes of source usage — “operations” (active source usage) and “shutdown” (source storage mode). Whichever mode results in the greatest inventory (considering barrier status) would require additional security measures for each location.

Use the following method to determine which sources of radioactive material require implementation of the Additional Security Measures (ASMs):

- Include any single source equal to or greater than the quantity of concern in Table A
- Include multiple collocated sources of the same radionuclide when the combined quantity equals or exceeds the quantity of concern

- For combinations of radionuclides, include multiple collocated sources of different radionuclides when the aggregate quantities satisfy the following unity rule: [(amount of radionuclide A) ÷ (quantity of concern of radionuclide A)] + [(amount of radionuclide B) ÷ (quantity of concern of radionuclide B)] + etc..... ≥ 1