

From: "Seiber, Benjamin" <bseiber@state.pa.us>
To: <mlo1@nrc.gov>, <kxs@nrc.gov>
Date: 3/19/2008 1:52:56 PM
Subject: FW: IC and FA Cover Letters

Per your request this morning, see below. Sorry for the delay.

-----Original Message-----

From: Morrison, Richard
Sent: Wednesday, March 19, 2008 11:44 AM
To: Seiber, Benjamin
Cc: Urciuolo, Louis; Hamm, Ronald
Subject: RE: IC and FA Cover Letters

Attached is a copy of the template PADEP IC/Fingerprinting Order, which is ready for review by NRC if they want to go ahead and review it now.

Richard S. Morrison
Bureau of Regulatory Counsel
717-783-8073

-----Original Message-----

From: Seiber, Benjamin
Sent: Wednesday, March 19, 2008 11:25 AM
To: Morrison, Richard
Cc: Urciuolo, Louis; Hamm, Ronald
Subject: RE: IC and FA Cover Letters

I just caught a call from NRC. NRC need to see the template IC / Fingerprint order before the end of April.

Also, all future "legally binding requirements" need to go to Robert Lewis, cc'ing Monica Orendi, Kathy Stenner (SP?), and Duncan White.

-----Original Message-----

From: Morrison, Richard
Sent: Tuesday, March 18, 2008 5:29 PM
To: Urciuolo, Louis
Cc: Seiber, Benjamin; Allard, David; Hamm, Ronald; Hoffman, Carla R
Subject: RE: IC and FA Cover Letters

Attached is suggested form letter for IC licensees to accompany the IC/Fingerprinting Order. Let me know if you have questions.

** Note that we will have to issue a separate IC/Fingerprinting Order and cover letter to the one PA licensee that was included in the second NRC Fingerprinting Order issued in February 2008 on account of the different compliance dates in the second NRC FP Order.

Richard S. Morrison
Bureau of Regulatory Counsel
717-783-8073

-----Original Message-----

From: Urciuolo, Louis

Sent: Friday, February 29, 2008 4:44 PM

To: Morrison, Richard

Cc: Seiber, Benjamin; Allard, David; Hamm, Ronald; Hoffman, Carla R

Subject: IC and FA Cover Letters

Richard

How do these drafts of the Increased Controls and Financial Assurance cover letters look?

CC: "Kim Lukes" <KXK2@nrc.gov>, <ADW@nrc.gov>

Mail Envelope Properties (47E152EE.7F6 : 22 : 55286)

Subject: FW: IC and FA Cover Letters
Creation Date 3/19/2008 1:52:29 PM
From: "Seiber, Benjamin" <bseiber@state.pa.us>

Created By: bseiber@state.pa.us

Recipients

nrc.gov

TWGWPO03.HQGWDO01
 MLO1 (Monica Orendi)

nrc.gov

TWGWPO02.HQGWDO01
 KXS (Kathleen Schneider)

nrc.gov

OWGWPO04.HQGWDO01
 KXK2 CC (Kim Lukes)

nrc.gov

TWGWPO04.HQGWDO01
 ADW CC (Duncan White)

Post Office

TWGWPO03.HQGWDO01
 TWGWPO02.HQGWDO01
 OWGWPO04.HQGWDO01
 TWGWPO04.HQGWDO01

Route

nrc.gov
 nrc.gov
 nrc.gov
 nrc.gov

Files	Size	Date & Time
MESSAGE	1901	3/19/2008 1:52:29 PM
IC-Fingerprinting Order Attachmt C 3-10-08.doc	37376	
IC- Fingerprinting Order final draft 3-10-08.doc	63488	
IC Order Table 1.rtf	42360	
IC-Fingerprinting Order Attachmt B 3-10-08.doc	50688	
Mime.822	270153	

Options

Expiration Date: None
Priority: Standard
ReplyRequested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Junk Mail Handling Evaluation Results

Message is eligible for Junk Mail handling
This message was not classified as Junk Mail

Junk Mail settings when this message was delivered

Junk Mail handling disabled by User
Junk Mail handling disabled by Administrator
Junk List is not enabled
Junk Mail using personal address books is not enabled
Block List is not enabled

ATTACHMENT C

Specific Requirements Pertaining to Fingerprinting and Criminal History Records Checks

Licensees currently have a program to grant unescorted access to individuals. As required by condition D.1 of the Order, Licensees shall modify its current trustworthiness and reliability program to include the following:

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 Table 1. The Licensee shall review and use the information received from the Federal Bureau of Investigation (FBI) identification and criminal history records check 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 § 73.61, or any person who has been favorably-decided by a U.S. Government program involving fingerprinting and an FBI identification and criminal history records check (e.g. National Agency Check, Transportation Worker Identification Credentials in accordance with 49 CFR part 1572, Bureau of Alcohol Tobacco Firearms and Explosives background checks and clearances in accordance with 27 CFR part 555; Health and Human Services security risk assessments for possession and use of select agents and toxins in accordance with 42 CFR part 73, Hazardous Material security threat assessment for hazardous material endorsement to commercial drivers license in accordance with 49 CFR part 1572, Customs and Border Patrol's Free and Secure Trade Program¹) within the last five (5) calendar years, or any person who has an active federal security clearance (provided in the latter two cases that they make available the appropriate documentation²). Written confirmation from the Agency/employer which granted the federal security clearance or reviewed the FBI criminal history records results based upon a fingerprint identification check must be provided. The Licensee must retain this documentation for a period of three (3) years from the date the individual no longer requires unescorted access to certain radioactive material associated with the Licensee's activities.

¹ The FAST program is a cooperative effort between the Bureau of Customs and Border Patrol and the governments of Canada and Mexico to coordinate processes for the clearance of commercial shipments at the U.S.-Canada and U.S.-Mexico borders. Participants in the FAST program, which requires successful completion of a background records check, may receive expedited entrance privileges at the northern and southern borders.

² This documentation must allow the T&R Official to verify that the individual has fulfilled the unescorted access requirements of Section 149 of the AEA by submitting to fingerprinting and an FBI identification and criminal history records check.

4. All fingerprints obtained by the Licensee pursuant to this Order must be submitted to the NRC for transmission to the FBI. Additionally, the Licensee shall submit a certification of the trustworthiness and reliability of the T&R Official as determined in accordance with paragraph D.2 of this Order.

5. The Licensee shall review the information received from the FBI and consider it, in conjunction with the trustworthiness and reliability requirements of Attachment B to this Order, in making a determination whether to grant unescorted access to certain 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 listed in attachment 2.

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 listed in attachment 2.

Prohibitions

A Licensee shall not base a final determination to deny an individual unescorted access to certain radioactive material 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.

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 identification and criminal history records check after the record is made available for his/her review. The Licensee may make a final unescorted access to certain radioactive material determination 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 certain radioactive material, the Licensee shall provide the individual its documented basis for denial. Unescorted access to certain radioactive material 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 certain radioactive material. 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 check 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 Department to determine compliance with the regulations and laws.

5. The Licensee shall retain all fingerprint and criminal history records from the FBI, or a copy if the individual's file has been transferred, for three (3) years after termination of employment or determination of unescorted access to certain radioactive material (whether unescorted access was approved or denied). 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.

NRC Increased Controls Order

3. On November 14, 2005, NRC issued an Order Imposing Increased Controls (the NRC IC Order) to a group of NRC licensees, which included the Pennsylvania Licensees. The NRC IC Order took effect immediately and was published in the Federal Register on December 1, 2005. See 70 FR 72,128 (Dec. 1, 2005). As a result of an NRC staff confirmatory review of licensees potentially subject to the NRC IC Order, the NRC staff issued the NRC IC Order to an additional 635 NRC licensees that met the criteria for receiving the NRC IC Order but were not included in the November 14, 2005 mailing.

4. The NRC explained its action in the NRC IC Order, in part, as follows:

Prior to the terrorist attacks of September 11, 2001 (9/11), several national and international efforts were underway to address the potentially significant health and safety hazards posed by uncontrolled sources. These efforts recognized the need for increased control of high-risk radioactive materials to prevent inadvertent and intentional unauthorized access, primarily due to the potential health and safety hazards posed by the uncontrolled material. Following 9/11, it was recognized that these efforts should also include a heightened awareness and focus on the need to prevent intentional unauthorized access due to potential malicious acts. These efforts, such as the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) concerning Category 1 and 2 sources, seek to increase the control over sources to prevent unintended radiation exposure and to prevent malicious acts.

A licensee's loss of control of high-risk radioactive sources, whether it be inadvertent or through a deliberate act, has a potential to result in significant adverse health impacts and could reasonably constitute a threat to the public health and safety. In this regard, the Commission has determined that certain additional controls are required to be implemented by Licensees to supplement existing regulatory requirements in 10 CFR § 20.1801 and 10 CFR § 20.1802, in order to ensure adequate protection of, and minimize danger to, the public health and safety. Therefore, the Commission is imposing the requirements set forth in Attachment B on radioactive materials licensees who possess, or have near term plans to possess, radionuclides of concern at or above threshold limits, identified in Table 1. These requirements . . . will provide the Commission with reasonable assurance that the public health and safety continues to be adequately protected.

70 FR at 72,128-29.

5. The NRC recognized that licensees subject to its order may already have initiated many controls set forth in the NRC IC Order in response to previously-issued advisories or on their own. It was also recognized that some controls may not be possible or necessary at some sites, or may need to be tailored to accommodate a licensee's specific circumstances to achieve the intended objectives and avoid any unforeseen adverse effect on the safe use and storage of the sealed sources. The NRC stated further that although the additional controls implemented by

licensees in response to Safeguards and Threat Advisories have been adequate to provide reasonable assurance of adequate protection of public health and safety, the NRC concluded that additional controls must be imposed by an order, consistent with the established regulatory framework. 70 FR at 72,129.

6. Accordingly, to provide assurance that licensees are implementing prudent measures to achieve a consistent level of control, the NRC ordered that all those who hold licenses issued by the NRC authorizing possession of radioactive material quantities of concern must implement the requirements identified in attachment B to the NRC IC Order. Compliance was required by May 13, 2006 for those licensees who received the November 14, 2005 mailing of the NRC IC Order, by June 2, 2006 for those licensees who received the December 22, 2005 mailing of the NRC IC Order, or by the first day that radionuclides of concern are possessed at or above threshold limits. Because of the potentially significant adverse health impacts associated with failure to control high risk radioactive sources, the NRC found that the public health, safety, and interest required that the NRC IC Order be effective immediately, and that the requirements imposed by the NRC remain in effect until the NRC modifies its regulations to reflect increased controls. 70 FR at 72,129.

NRC Fingerprinting and Criminal History Records Check Order

7. Section 652 of The Energy Policy Act of 2005, which became law on August 8, 2005, amended Section 149 of the AEA to require fingerprinting and a Federal Bureau of Investigation identification and criminal history records check for “any individual who is permitted unescorted access to radioactive material or other property subject to regulation by the [NRC] that the [NRC] 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.” 42 U.S.C. § 2169(a)(1). Section 149 of the AEA also requires that “all fingerprints obtained by a licensee or applicant . . . shall be submitted to the Attorney General of the United States through the Commission for identification and a criminal history records check.” 42 U.S.C. § 2169(a)(2). NRC decided to implement this requirement, prior to completion of a final rulemaking, through issuance of an order to licensees authorized to possess radioactive material quantities of concern. *See* 72 FR 70,901 (Dec. 13, 2007).

8. On December 5, 2007, NRC issued an Order Imposing Fingerprinting and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material (the NRC Fingerprinting Order) to a group of NRC licensees, which included the Pennsylvania Licensees. The NRC Fingerprinting Order took effect immediately and was published in the Federal Register on December 13, 2007. 72 FR 70,901 (Dec. 13, 2007).

9. The NRC Fingerprinting Order supplemented, and partially superseded, the NRC IC Order. *See* 72 FR at 70,902.

10. The NRC IC Order stated that, to effect nationwide implementation, the measures imposed by the NRC IC Order have been determined by the NRC to be an immediate mandatory Category “B” matter of compatibility for Agreement States. *See* 62 FR 46,517 (Sept. 3, 1997)

(Statement of Principles and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs). Accordingly, the NRC IC Order provided that, in parallel with the NRC's issuance of the NRC IC Order, each Agreement State is required to issue legally binding requirements to put essentially identical measures in place for licensees under their regulatory jurisdiction. 70 FR at 72,129.

II

11. Effective March 31, 2008, the Commonwealth of Pennsylvania and the NRC entered into an agreement, pursuant to section 274 of the AEA, 42 U.S.C. § 2021, and section 201 of the Pennsylvania Radiation Protection Act (RPA), 35 P.S. § 7110.201 (the Agreement).

12. The Agreement provides for discontinuance of the regulatory authority of the NRC within the Commonwealth under the AEA with respect to byproduct materials as defined in Sections 11e.(1), (3) and (4) of the AEA, source materials, and special nuclear materials in quantities not sufficient to form a critical mass, as well as with respect to the regulation of the land disposal of all waste byproduct, source and special nuclear materials covered by the Agreement. Pennsylvania thereby became an Agreement State effective March 31, 2008, and the Commonwealth assumed regulatory authority as prescribed by the Agreement.

13. Each of the Pennsylvania Licensees has a specific license issued by the NRC for a radioactive material covered by the Agreement. Upon Pennsylvania becoming an Agreement State, the Pennsylvania Licensees are deemed to possess a like license issued under the RPA and 25 Pa. Code Chapter 217. *See* 25 Pa. Code § 217.133. Accordingly, the Pennsylvania Licensees now hold licenses issued in accordance with the RPA and its implementing regulations.

14. As an Agreement State, in order to be compatible with the NRC IC Order and the NRC Fingerprinting Order Pennsylvania must issue legally binding requirements to put identical measures in place for licensees under its regulatory jurisdiction as those which are set forth in the NRC IC Order and the NRC Fingerprinting Order. Consequently, the Department is issuing this Order Modifying Licenses to Impose Increased Controls and Imposing Fingerprinting and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material (PADEP IC/Fingerprinting Order). This Order will put in place for licensees now under Pennsylvania's jurisdiction as an Agreement State identical measures as those set forth in the two NRC orders.

15. The requirements set forth in Attachment B to this PADEP IC/Fingerprinting Order are essentially identical to those set forth in Attachment B to the NRC IC Order; the only changes made by Pennsylvania concern the persons who must be identified in paragraphs IC.2.d and IC.3.a.4. Attachment B, Table 1 in this order is identical to Attachment B, Table 1 in the NRC IC Order (as amended by the NRC Fingerprinting Order). Finally, Attachment C to this PADEP IC/Fingerprinting Order is identical to Attachment 3 to the NRC Fingerprinting Order.

16. The Department is the agency with the duty and authority to administer and enforce the RPA, section 1917-A of the Administrative Code of 1929, 71 P.S. § 510-17, and the

regulations promulgated thereunder.

17. Pennsylvania regulations incorporate 10 CFR §§ 20.1801 and 1802 by reference, see 25 Pa. Code §§ 215.1 and 219.5. In addition, 25 Pa. Code § 219.131 requires licensees to secure from unauthorized removal or access radiation sources that are in storage, and § 219.132 requires licensees to maintain control of radiation producing machines that are not in storage.

III

Accordingly, pursuant to Sections 301(c)(4), 301(c)(15), 303(d) and 304 of the Radiation Protection Act, 35 P.S. §§ 7110.301(c)(4), 7110.301(c)(15), 7110.303(d) and 7110.304, and the Department's regulations in 25 Pa. Code Chapters 217 and 219, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT THE LICENSES OF ALL THE LICENSEES IDENTIFIED IN ATTACHMENT A ARE HEREBY MODIFIED ACCORDING TO THE TERMS OF THIS PADEP IC/FINGERPRINTING ORDER AND THAT ALL LICENSEES IDENTIFIED IN ATTACHMENT A SHALL COMPLY WITH THE REQUIREMENTS OF THIS ORDER AS FOLLOWS:

A. The licensee must comply with the requirements in Attachment B to this PADEP IC/Fingerprinting Order. Unless properly granted an extension of time to comply or other relief by the NRC or the Department, the licensee shall have completed implementation by no later than June 2, 2006 or the first day that radionuclides of concern at or above threshold limits, as identified in Table 1, were possessed.

B. 1. The licensee shall in writing, within fifteen (15) days of the date of this PADEP IC/Fingerprinting Order, notify the Department: (1) that the licensee is currently in compliance with the requirements described in Attachment B or that the licensee has been granted an extension of time for compliance by the NRC; (2) that the Licensee recognizes that it is now subject to Pennsylvania jurisdiction with respect to the materials covered by the Agreement; (3) if compliance with any of the requirements is unnecessary in its specific circumstances; (4) if implementation of any of the requirements would cause the licensee to be in violation of the provisions of any Department regulation or its license. The notification shall provide the licensee's justification for seeking relief from or variation of any specific requirement.

B. 2. If the licensee considers that implementation of any of the requirements described in Attachment B would adversely impact safe operation of the facility, the licensee must notify the Department, in writing, within fifteen (15) days of this PADEP IC/Fingerprinting 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 Attachment B requirement in question, or a schedule for modifying the facility 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. The licensee's notification submitted pursuant to Condition B.1(1) shall include a

certification that the licensee completed each requirement in Attachment B in response to the NRC IC Order and currently remains in compliance with the requirements in Attachment B to this Order, or, a schedule for completion of each requirement described in Attachment B.

C. 2. For those licensees granted an extension of time to comply with the requirements in Attachment B, the licensee shall report to the Department when they have achieved full compliance with the requirements in Attachment B.

D. 1. By no later than February 26, 2008 the Licensee shall have established, and the Licensee subsequently shall continue to maintain, a fingerprinting program that meets the requirements of Attachment C to this Order for individuals that require unescorted access to certain radioactive materials.

2. By no later than February 26, 2008, the Licensee shall have provided to the NRC under oath or affirmation, a certification that the Trustworthiness and Reliability (T&R) Official (an individual with the responsibility to determine the trustworthiness and reliability of another individual requiring unescorted access to the radioactive materials identified in Table 1) is deemed trustworthy and reliable by the Licensee as required in paragraph E.2 of this Order.

3. Within fifteen (15) days of the date of this Order, the Licensee shall, in writing, notify the Department: (1) that the licensee is currently in compliance with the requirements described in paragraphs D.1 and D.2 and Attachment C, or that the licensee has been granted an extension of time for compliance by the NRC; (2) that the Licensee recognizes that it is now subject to Pennsylvania jurisdiction with respect to the materials covered by the Agreement; (3) if it is unable to comply with any of the requirements described in paragraphs D.1 and D.2 or in Attachment C; (4) if compliance with any of the requirements is unnecessary in its specific circumstances; or (5) if implementation of any of the requirements would cause the Licensee to be in violation of the provisions of any Department regulation or its license. The notification shall provide the Licensee's justification for seeking relief from or variation of any specific requirement.

4. The Licensee shall complete implementation of the program established in accordance with paragraph D.1 of this Order by June 2, 2008. In addition to the notifications in paragraphs D.2 and D.3 above, the Licensee shall notify the Department's Bureau of Radiation Protection within twenty-five (25) days after they have achieved full compliance with the requirements described in Attachment C to this Order. If by June 2, 2008, the Licensee is unable, due to circumstances beyond its control, to complete implementation of paragraphs D.1 and D.2 and Attachment C to this Order, the Licensee shall submit a written request to the Department explaining the need for an extension of time to implement the requirements. The request shall provide the Licensee's justification for seeking more time to comply with these requirements.

5. Licensees shall notify the Director of the Department's Bureau of Radiation Protection at 717-787-2480 within 24 hours if the results from an FBI identification and criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.

E. 1. Except as provided in paragraph H for individuals who are currently approved for unescorted access, the Licensee shall grant access to radioactive material listed in Table 1 in accordance with the requirements of Attachment B, paragraph IC.1 of this Order.

2. The T&R Official, if he/she does not require unescorted access, must be deemed trustworthy and reliable by the Licensee in accordance with the requirements of Attachment B, paragraph IC.1 before making a determination regarding the trustworthiness and reliability of another individual. If the T&R Official requires unescorted access, the Licensee must consider the results of fingerprinting and the review of an FBI identification and criminal history records check as a component in approving a T&R Official.

F. Prior to requesting fingerprints from any individual, the Licensee shall provide a copy of this Order to that person.

G. Upon receipt of the results of FBI identification and criminal history records checks, the Licensee shall control such information as specified in the "Protection of Information" section of Attachment C of this Order and in requirement IC.5 of Attachment B to this Order.

H. The Licensee shall make determinations on continued unescorted access for persons currently granted unescorted access, by June 2, 2008, based upon the results of the fingerprinting and FBI identification and criminal history records check. The Licensee may allow any individual who currently has unescorted access to certain radioactive materials in accordance with the NRC IC Order to continue to have unescorted access, pending a decision by the T&R Official. After June 2, 2008 no individual may have unescorted access to radioactive materials without a determination by the T&R Official (based upon fingerprinting, an FBI identification and criminal history records check and a previous trustworthiness and reliability determination) that the individual may have unescorted access to such materials.

I. Notwithstanding any provisions of the Department regulations to the contrary, all measures implemented or actions taken in response to this PADEP IC/Fingerprinting Order shall be maintained until the Department modifies its regulations to reflect increased controls.

J. Licensee responses to Conditions B.1, B.2, C.1, C.2, D.3 and D.4 above shall be submitted to the Director, Bureau of Radiation Protection, Pennsylvania Department of Environmental Protection, Rachel Carson State Office Building, P.O. Box 8469, Harrisburg, PA 17105-8469. Licensee's responses shall be marked as "Confidential—Security-Related Information."

K. The Director of the Bureau of Radiation Protection may, in writing, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause.

IV

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Board Secretary at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you want to challenge this action, your appeal must reach the Board within 30 days. You do not need a lawyer to file an appeal with the Board. Important legal rights are at stake, however, so you should show this document to a lawyer at once. If you cannot afford a lawyer, you may qualify for free pro bono representation. Call the Board Secretary (717-787-3483) for more information.

FOR THE DEPARTMENT

David Allard, Director
Bureau of Radiation Protection

Dated: March 31, 2008

Table 1: 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	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 ³	See Footnote Below ⁴	

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 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.

⁴ 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. $[(\text{aggregated source activity for radionuclide A}) \div (\text{quantity of concern for radionuclide A})] + [(\text{aggregated source activity for radionuclide B}) \div (\text{quantity of concern for radionuclide B})] + \text{etc.} \geq 1$

Use the following method to determine which sources of radioactive material require increased controls (ICs):

- Include any single source equal to or greater than the quantity of concern in Table 1
- 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: $[(\text{amount of radionuclide A}) \div (\text{quantity of concern of radionuclide A})] + [(\text{amount of radionuclide B}) \div (\text{quantity of concern of radionuclide B})] + \text{etc.} \dots \geq 1$

Guidance for Aggregation of Sources

NRC supports the use of the IAEA's source categorization methodology as defined in TECDOC-1344, "Categorization of Radioactive Sources," (July 2003) (see http://www-pub.iaea.org/MTCD/publications/PDF/te_1344_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.). Increased controls 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 increased controls. 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 increased controls.

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); Co60, 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 increased controls.

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 increased controls, 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 increased controls 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 increased controls for each location.

ATTACHMENT B

INCREASED CONTROLS FOR LICENSEES THAT POSSESS SOURCES CONTAINING RADIOACTIVE MATERIAL QUANTITIES OF CONCERN

The purpose of the increased controls (IC) for radioactive sources is to enhance control of radioactive material in quantities greater than or equal to values described in Table 1, to reduce the risk of unauthorized use of radioactive materials, through access controls to aid prevention, and prompt detection, assessment, and response to mitigate potentially high consequences that would be detrimental to public health and safety. These increased controls for radioactive sources are established to delineate licensee responsibility to maintain control of licensed material and secure it from unauthorized removal or access. The following increased controls apply to licensees which, at any given time, possess radioactive sources greater than or equal to the quantities of concern of radioactive material defined in Table 1.

- IC 1. In order to ensure the safe handling, use, and control of licensed material in use and in storage each licensee shall control access at all times to radioactive material quantities of concern and devices containing such radioactive material (devices), and limit access to such radioactive material and devices to only approved individuals who require access to perform their duties.
- a. The licensee shall allow only trustworthy and reliable individuals, approved in writing by the licensee, to have unescorted access to radioactive material quantities of concern and devices. The licensee shall approve for unescorted access only those individuals with job duties that require access to such radioactive material and devices. Personnel who require access to such radioactive material and devices to perform a job duty, but who are not approved by the licensee for unescorted access, must be escorted by an approved individual.
 - b. For individuals employed by the licensee for three years or less, and for non-licensee personnel, such as physicians, physicists, house-keeping personnel, and security personnel under contract, trustworthiness and reliability shall be determined, at a minimum, by verifying employment history, education, personal references, and fingerprinting and the review of an FBI identification and criminal history records check. The licensee shall also, to the extent possible, obtain independent information to corroborate that provided by the employee (i.e., seeking references not supplied by the individual). For individuals employed by the licensee for longer than three years, trustworthiness and reliability shall be determined, at a minimum, by a review of the employees' employment history with the licensee and fingerprinting and an FBI identification and criminal history records check
 - c. Service providers shall be escorted unless determined to be trustworthy and reliable by an NRC-required background investigation. Written verification attesting to or certifying the person's trustworthiness and reliability shall be obtained from the licensee providing the service.

- d. The licensee shall document the basis for concluding that there is reasonable assurance that an individual granted unescorted access is trustworthy and reliable, and does not constitute an unreasonable risk for unauthorized use of radioactive material quantities of concern. The licensee shall maintain a list of persons approved for unescorted access to such radioactive material and devices by the licensee.

IC 2. In order to ensure the safe handling, use, and control of licensed material in use and in storage, each licensee shall have a documented program to monitor and immediately detect, assess, and respond to unauthorized access to radioactive material quantities of concern and devices. Enhanced monitoring shall be provided during periods of source delivery or shipment, where the delivery or shipment exceeds 100 times the Table 1 values.

- a. The licensee shall respond immediately to any actual or attempted theft, sabotage, or diversion of such radioactive material or of the devices. The response shall include requesting assistance from a Local Law Enforcement Agency (LLEA).
- b. The licensee shall have a pre-arranged plan with LLEA for assistance in response to an actual or attempted theft, sabotage, or diversion of such radioactive material or of the devices which is consistent in scope and timing with realistic potential vulnerability of the sources containing such radioactive material. The pre-arranged plan shall be updated when changes to the facility design or operation affect the potential vulnerability of the sources. Pre-arranged LLEA coordination is not required for temporary job sites.
- c. The licensee shall have a dependable means to transmit information between, and among, the various components used to detect and identify an unauthorized intrusion, to inform the assessor, and to summon the appropriate responder.
- d. After initiating appropriate response to any actual or attempted theft, sabotage, or diversion of radioactive material or of the devices, the licensee shall, as promptly as possible, notify the Pennsylvania Bureau of Radiation Protection through the Pennsylvania Emergency Management Agency (PEMA) at (717)-651-2001.
- e. The licensee shall maintain documentation describing each instance of unauthorized access and any necessary corrective actions to prevent future instances of unauthorized access.

IC 3. a. In order to ensure the safe handling, use, and control of licensed material in transportation for domestic highway and rail shipments by a carrier other than the licensee, for quantities that equal or exceed those in Table 1 but are less than 100 times Table 1 quantities, per consignment, the licensee shall:

1. Use carriers which:
 - A. Use package tracking systems,
 - B. Implement methods to assure trustworthiness and reliability of drivers,
 - C. Maintain constant control and/or surveillance during transit, and
 - D. Have the capability for immediate communication to summon appropriate response or assistance.

The licensee shall verify and document that the carrier employs the measures listed above.

2. Contact the recipient to coordinate the expected arrival time of the shipment;
 3. Confirm receipt of the shipment; and
 4. Initiate an investigation to determine the location of the licensed material if the shipment does not arrive on or about the expected arrival time. When, through the course of the investigation, it is determined the shipment has become lost, stolen, or missing, the licensee shall immediately notify the Pennsylvania Bureau of Radiation Protection through PEMA at (717)-651-2001. If, after 24 hours of investigating, the location of the material still cannot be determined, the radioactive material shall be deemed missing and the licensee shall immediately notify the Pennsylvania Bureau of Radiation Protection through PEMA at (717)-651-2001.
- b. For domestic highway and rail shipments, prior to shipping licensed radioactive material that exceeds 100 times the quantities in Table 1 per consignment, the licensee shall:
1. Notify the NRC¹, in writing, at least 90 days prior to the anticipated date of shipment. The NRC will issue the Order to implement the Additional Security Measures (ASMs) for the transportation of Radioactive Material Quantities of Concern (RAM QC). The licensee shall not ship this material until the ASMs for the transportation of RAM QC are implemented or the licensee is notified otherwise, in writing, by NRC.

¹ Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

2. Once the licensee has implemented the ASMs for the transportation of RAM QC, the notification requirements of 3.b.1 shall not apply to future shipments of licensed radioactive material that exceed 100 times the Table 1 quantities. The licensee shall implement the ASMs for the transportation of RAM QC.
- c. If a licensee employs an M&D licensee to take possession at the licensee's location of the licensed radioactive material and ship it under its M&D license, the requirements of 3.a. and 3.b above shall not apply.
 - d. If the licensee is to receive radioactive material greater than or equal to the Table 1 quantities, per consignment, the licensee shall coordinate with the originator to:
 1. Establish an expected time of delivery; and
 2. Confirm receipt of transferred radioactive material. If the material is not received at the expected time of delivery, notify the originator and assist in any investigation.
- IC 4. In order to ensure the safe handling, use, and control of licensed material in use and in storage each licensee that possesses mobile or portable devices containing radioactive material in quantities greater than or equal to Table 1 values, shall:
- a. For portable devices, have two independent physical controls that form tangible barriers to secure the material from unauthorized removal when the device is not under direct control and constant surveillance by the licensee.
 - b. For mobile devices:
 1. that are only moved outside of the facility (e.g., on a trailer), have two independent physical controls that form tangible barriers to secure the material from unauthorized removal when the device is not under direct control and constant surveillance by the licensee.
 2. that are only moved inside a facility, have a physical control that forms a tangible barrier to secure the material from unauthorized movement or removal when the device is not under direct control and constant surveillance by the licensee.
 - c. For devices in or on a vehicle or trailer, licensees shall also utilize a method to disable the vehicle or trailer when not under direct control and constant surveillance by the licensee.

- IC 5. The licensee shall retain documentation required by these increased controls for three years after they are no longer effective:
- a. The licensee shall retain documentation regarding the trustworthiness and reliability of individual employees for three years after the individual's employment ends.
 - b. Each time the licensee revises the list of approved persons required by 1.d., or the documented program required by 2, the licensee shall retain the previous documentation for three years after the revision.
 - c. The licensee shall retain documentation on each radioactive material carrier for three years after the licensee discontinues use of that particular carrier.
 - d. The licensee shall retain documentation on shipment coordination, notifications, and investigations for three years after the shipment or investigation is completed.
 - e. After the license is terminated or amended to reduce possession limits below the quantities of concern, the licensee shall retain all documentation required by these increased controls for three years.
- IC 6. Detailed information generated by the licensee that describes the physical protection of radioactive material quantities of concern, is sensitive information and shall be protected from unauthorized disclosure.
- a. The licensee shall control access to its physical protection information to those persons who have an established need to know the information, and are considered to be trustworthy and reliable.
 - b. The licensee shall develop, maintain and implement policies and procedures for controlling access to, and for proper handling and protection against unauthorized disclosure of, its physical protection information for radioactive material covered by these requirements. The policies and procedures shall include the following:
 1. General performance requirement that each person who produces, receives, or acquires the licensee's sensitive information, protect the information from unauthorized disclosure,
 2. Protection of sensitive information during use, storage, and transit,
 3. Preparation, identification or marking, and transmission,
 4. Access controls,

5. Destruction of documents,
6. Use of automatic data processing systems, and
7. Removal from the licensee's sensitive information category.