

From: <Mike_Stephens@doh.state.fl.us>
To: <ANM@nrc.gov>
Date: 9/26/05 3:04PM
Subject: FW: Florida Proposed Cover letter and License ConditionforIncreased Security Requirements of Certai

Michael N. Stephens
Environmental Administrator
Bureau of Radiation Control-Radioactive Materials Section
(850)-245-4545
Fax (850) 921-6364
Visit our Web Site: <http://www.doh.state.fl.us/environment/radiation/>
How are we doing? Please take our survey:
<http://www.doh.state.fl.us/environment/radiation/survey.htm>
Mission: To promote and protect the health and safety of all people in Florida through the delivery of quality public health services and promotion of health care standards.

Please note: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure.

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

From: Stephens, Mike N
Sent: Monday, September 26, 2005 2:57 PM
To: Stephens, Mike N
Subject: RE: Florida Proposed Cover letter and License ConditionforIncreased Security Requirements of Certai

Andrew-

Please find attached revision 2.

This revision addresses clarifies the confusion as to what needs to be protected in IC 6.

Although no changes were requested on the license condition, I have included it for completeness.

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communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure.

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

From: Stephens, Mike N
Sent: Monday, September 26, 2005 10:28 AM
To: 'Andrew Mauer'
Cc: Paul Lohaus (PHL@NRC.GOV); Passetti, Bill A
Subject: RE: Florida Proposed Cover letter and License ConditionforIncreased Security Requirements of Certai

Andrew-

Please find attached Revision 1.

This revision removes Ra, updates the examples in table 1 previously submitted, and includes requested changes to IC 6.

The worksheet is also revised to include IC 6.

Although no changes were requested on the license condition, I have included it for completeness.

Please let me know if these changes are acceptable.

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

From: Andrew Mauer [mailto:ANM@nrc.gov]
Sent: Monday, September 26, 2005 9:33 AM
To: Stephens, Mike N
Subject: RE: Florida Proposed Cover letter and License ConditionforIncreased Security Requirements of Certai

Mike-Please see attached.

Andrew

>>> <Mike_Stephens@doh.state.fl.us> 09/26/05 8:28 AM >>>

Andrew-

Thanks for returning my call.

We do not have any problems dropping Ra-226 from the list at this time. Currently, we do not have any licensees who have radium. Ra was only added to be proactive in not needing to revise FL's Table 1 when NRC includes it in their Table 1.

Please let me know about the other issue. (IC 6.)

Thanks-
MikeS

Michael N. Stephens
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-----Original Message-----

From: Andrew Mauer [mailto:ANM@nrc.gov]
Sent: Monday, September 26, 2005 6:35 AM
To: Stephens, Mike N
Subject: Re: Florida Proposed Cover letter and License Condition for Increased Security Requirements of Certain L

Thanks Mike. Please give me a call to discuss.

Andrew

(301) 415-3962

>>> <Mike_Stephens@doh.state.fl.us> 09/23/05 11:07 AM >>>

Dear Paul/Andrew

Please find attached Florida's proposed cover letter and license condition for the Increased Security requirements of Certain Licensees.

<<FL-AmendmentCoverLetterWithBRCRequirements.doc>>
<<FL-SecurityLicCond.doc>>

Some of the changes from the Drafts are listed below with an explanation.

The basis of our submittal is based on what Arkansas has already had

approved.

Changes:

Cover letter text regarding notice of rights to appeal was removed since this standard language is on every final licensing action.
(The text is included as part of the license condition footer on the last page.)

We wanted to reference one document that specifies all of the requirements with the same date.
Therefore the requirements specified in the cover letter are repeated in an enclosed document (Bureau of Radiation Control - Increased Security Controls Requirements MONTH DD, 2005) of which Attachment 1 and Attachment 2 are a part.
This is the document referenced in the license tie-down condition.

Florida's tie-down license condition gives them six months from the original issued amendment to comply instead of "the issuance of the license amendment".

We gave the licensee 30 days to reply instead of 25 days.

We developed a simple checklist to assist the licensee in replying to items 1-3.

We will be assigning an internal tracking number to track whether they have responded timely.

We did include Ra-226 (as did Arkansas) since we both regulate this isotope.
(FYI-We currently do not have any Ra-226 licensees that meet the criteria.)

Please let me know of any changes needed.
Once approved, we anticipate it taking a couple of days to code the cover letter and license condition and into our license document generation software and then a couple of weeks to issue all of the amendments.
Michael N. Stephens
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BEGIN-ANTISPAM-VOTING-LINKS

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BEGIN-ANTISPAM-VOTING-LINKS

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END-ANTISPAM-VOTING-LINKS

Mail Envelope Properties (43384643.799 : 1 : 59289)

Subject: FW: Florida Proposed Cover letter and License ConditionforIncreased
Security Requirements of Certai
Creation Date: 9/26/05 3:04PM
From: <Mike_Stephens@doh.state.fl.us>

Created By: Mike_Stephens@doh.state.fl.us

Recipients

nrc.gov
owfl_po.OWFN_DO
ANM (Andrew Mauer)

Post Office
owfl_po.OWFN_DO

Route
nrc.gov

Files	Size	Date & Time
MESSAGE	8913	09/26/05 03:04PM
FL-SecurityLicCond.doc	42496	
R2FL-AmendmentCoverLetterWithBRCRequirements.doc		128000
Mime.822	245147	

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

STATE OF FLORIDA
DEPARTMENT OF HEALTH
BUREAU OF RADIATION CONTROL

RADIOACTIVE MATERIALS LICENSE
SUPPLEMENTAL SHEET

LICENSEE NAME

Licensee d/b/a Name

Address 1

Address 2

FLCity, FL 99999-9999

With reference to the Department's letter dated date, State of Florida Radioactive Materials License Number 9999-99 is hereby amended.

TO CHANGE CONDITION @@ TO READ:

CONDITIONS

- @@. A. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, 8, and 9 of this license in accordance with statements, representations and procedures contained in the licensee's application dated @, signed by FN LN, Title, and correspondence dated @ and by @.
- @@
- B. The licensee shall comply with all applicable requirements of Chapter 64E-5, Florida Administrative Code, and these regulations shall supersede the licensee's statements in applications or correspondence, unless the statements are more restrictive than the regulations.

License Number: 9999-99
Amendment No.: #
Control Number: yyyyymmdd-####

LICENSEE COPY
Page 1 of 2 Page(s)

Category: [5A]
Expiration Date:MM/DD/YYYY

STATE OF FLORIDA
DEPARTMENT OF HEALTH
BUREAU OF RADIATION CONTROL

RADIOACTIVE MATERIALS LICENSE
SUPPLEMENTAL SHEET

CONDITION @ CONTINUED

- @.** C. The licensee shall comply with the requirements described in the Bureau of Radiation Control – Increased Security Controls Requirements dated MONTH DD, 2005 and its attachments, which are incorporated by reference, entitled "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern" and "Table 1: Radionuclides of Concern" The licensee shall complete implementation of the requirements within six months from the issuance of license amendment number @ or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1, whichever is later. Within 30 days after the implementation of the requirements of this condition, the licensee shall notify the Bureau of Radiation Control in writing that it has completed the requirements of this condition.

Draft

For the Bureau of Radiation Control:

Issuance Date: _____

License Evaluator's Name
License Evaluator's Title
4052 Bald Cypress Way – Bin C21
Tallahassee, FL 32399-1741
(850) 245-4545

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is: Agency Clerk, 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448. A copy of the petition should also be sent to: Bureau Chief, Bureau of Radiation Control, 4052 Bald Cypress Way, BIN # C21, Tallahassee, FL 32399-1741. The Bureau Chief's facsimile number is 850-487-0435. Mediation is not available as an alternative remedy. Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a "final order." Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.

License Number: 9999-99
Amendment No.: #
Control Number :yyyymmdd-####

LICENSEE COPY
Page 3 of 2 Page(s)

Category: [5A]
Expiration Date:MM/DD/YYYY



Jeb Bush
Governor

M. Rony François, M.D., M.S.P.H., Ph.D.
Secretary, Department of Health

Date

FirstName LastName, RSO

Title

Licensee Name

Licensee d/b/a Name

Address 1

Address 2

FLCity, FL 99999-9999

|||||

Draft

RE: State of Florida Radioactive
Materials License Number 9999-99

Dear Mr. LastName:

Enclosed is amendment number # to the above referenced license. This amendment is assigned control number yyyyymmdd-####.

The U.S. Nuclear Regulatory Commission (NRC) and its Agreement States are in the process of implementing increased controls for licensees that possess certain radioactive materials in quantities of concern. NRC has determined that additional requirements need to be implemented to supplement existing regulatory requirements in 10 CFR Sections 20.1801-1802 [rules similar to Florida's Radiation Hazard Regulations Sections 64E-5.320 – 64E-5.321, Florida Administrative Code (FAC)]. The increased controls are a matter of compatibility with NRC and must be implemented in a time frame desired by the NRC and with essentially identical content to those being used by NRC for its licensees.

Your radioactive material license has been identified as authorizing possession of certain radioactive material in one of the affected categories. Therefore, in accordance with 64E-5.212(2), FAC, your license has been amended to require you to comply with the increased controls detailed in attachment 1. The table of radionuclides of concern (Table 1) is provided as attachment 2. Your newly amended license is attached.

Within thirty (30) days of the issuance date of the attached license amendment:

1 You shall notify this office:

- (a) if you are unable to comply with any of the requirements in attachment 1;
- (b) if compliance with any of the requirements is unnecessary because of your specific circumstances; or
- (c) if implementation of any of the requirements would cause you to be in violation of the provisions of any regulation or your license. The notification shall provide your justification for seeking relief from or variation of any specific requirement.

FirstName LastName,
Date
Page 2

- 2 If you consider that implementation of any of the requirements detailed in attachment 1 would adversely impact safe operation of your facility, you must notify this office, in writing, of the adverse safety impact, the basis for its determination that the requirement would have an adverse safety impact, and either a proposal for achieving the same objectives specified in the attachment 1-requirement in question, or a schedule for modifying the facility to address the adverse safety condition. If neither approach is appropriate, you must supplement your response to paragraph 1 above to identify the condition as a requirement with which you cannot comply, with attendant justifications as required in paragraph 1 above.
3. You shall submit to this office a schedule for completion of each requirement detailed in attachment 1.

Responses to paragraphs 1-3, above, should reference the control number yyyyymmdd#### and shall be submitted to:

Bureau of Radiation Control
Radioactive Materials Program
4052 Bald Cypress Way, Bin C21
Tallahassee, FL 32399-1741

Draft

Your response must be marked as "SECURITY SYSTEM PLAN – Withhold from Public Disclosure Under 119.071(3), Florida Statutes."

The Bureau of Radiation Control may, in writing, relax or rescind any of the above conditions upon your demonstration of good cause.

Please note that the above information and requirements are also contained and repeated in Bureau of Radiation Control – Increased Security Controls Requirements MONTH DD, 2005 which is incorporated as a condition of your license.

In addition be aware that your license condition requires you to complete implementation of the requirements within six months or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1, whichever is later. You are also required to notify the Bureau in writing, within 30 days after the implementation, that you have completed the requirements of your license condition.

AT THIS TIME, ONLY RESPOND TO PARAGRAPHS 1-3 ABOVE WITHIN 30 DAYS. We have provided a worksheet that may be returned to assist you in replying to paragraphs 1-3 above.

Should you require assistance in addressing this letter, please call us at (850) 245-4545

Sincerely,

Michael N. Stephens
Environmental Administrator

Enclosure

- Bureau of Radiation Control – Increased Security Controls Requirements
 - Increased Controls
 - Table 1
 - License Amendment
- cc: HSERI-FIELD OFFICE Field Office

**Bureau of Radiation Control – Increased Security Controls Requirements
MONTH DD, 2005**

The U.S. Nuclear Regulatory Commission (NRC) and its Agreement States are in the process of implementing increased controls for licensees that possess certain radioactive materials in quantities of concern. NRC has determined that additional requirements need to be implemented to supplement existing regulatory requirements in 10 CFR Sections 20.1801-1802 [rules similar to Florida's Radiation Hazard Regulations Sections 64E-5.320 – 64E-5.321, Florida Administrative Code (FAC)]. The increased controls are a matter of compatibility with NRC and must be implemented in a time frame desired by the NRC and with essentially identical content to those being used by NRC for its licensees.

Your radioactive material license has been identified as authorizing possession of certain radioactive material in one of the affected categories. Therefore, in accordance with 64E-5.212(2), FAC, your license has been amended to require you to comply with the increased controls detailed in attachment 1. The table of radionuclides of concern (Table 1) is provided as attachment 2. Your newly amended license attached

Within thirty (30) days of the issuance date of the attached license amendment:

1. You shall notify this office:
 - (a) if you are unable to comply with any of the requirements in attachment 1;
 - (b) if compliance with any of the requirements is unnecessary because of your specific circumstances' or
 - (c) if implementation of any of the requirements would cause you to be in violation of the provisions of any regulation or your license. The notification shall provide your justification for seeking relief from or variation of any specific requirement.
2. If you consider that implementation of any of the requirements detailed in attachment 1 would adversely impact safe operation of your facility, you must notify this office, in writing, of the adverse safety impact, the basis for its determination that the requirement would have an adverse safety impact, and either a proposal for achieving the same objectives specified in the attachment 1-requirement in question, or a schedule for modifying the facility to address the adverse safety condition. If neither approach is appropriate, you must supplement your response to paragraph 1 above to identify the condition as a requirement with which you cannot comply, with attendant justifications as required in paragraph 1 above.
3. You shall submit to this office a schedule for completion of each requirement detailed in attachment 1.

Responses to paragraphs 1-3, above, **should reference the control number yyyyymmdd-#### and shall be submitted to:**

Bureau of Radiation Control
Radioactive Materials Program
4052 Bald Cypress Way, Bin C21
Tallahassee, FL 32399-1741

In addition, your response shall be marked as **"SECURITY SYSTEM PLAN – Withhold from Public Disclosure Under 119.071(3), Florida Statutes."**

The Bureau of Radiation Control may, in writing, relax or rescind any of the above conditions upon your demonstration of good cause.

Should you require assistance in addressing these requirements, please call us at (850) 245-4545

Attachment 1. Increased Controls for Licensees that Possess Sources Containing Radioactive Materials Quantities of Concern

Attachment 2. Table 1: Radionuclides of Concern

Draft

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

The purpose of the increased controls (ICs) 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 malevolent 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 ICs 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 ICs apply to licensees who, at any given time, possess radioactive sources greater than or equal to the quantities of concern of radioactive material defined in Table 1.

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, and personal references. 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.
 - c. Service providers shall be escorted unless determined to be trustworthy and reliable by an NRC-required background investigation as an employee of a manufacturing or distribution (M&D) licensee. Written verification attesting to or certifying the person's trustworthiness and reliability shall be obtained from the manufacturing/distribution licensee providing the service.
 - d. The licensee shall document the basis for concluding that there is reasonable assurance an individual granted unescorted access is trustworthy and reliable, and does not constitute an unreasonable risk for malevolent use of radioactive material quantities of concern. The licensee shall maintain a list of persons approved for access to such radioactive material and device(s) by the licensee.

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

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 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 Bureau of Radiation Control at (407) 297-2095.
 - e. The licensee shall maintain documentation describing each instance of unauthorized access and any necessary corrective actions to prevent future instances of unauthorized access.
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 Bureau of Radiation Control at (407) 297-2095]. 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 Bureau of Radiation Control at (407) 297-2095.

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

3. 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 NRC*, 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.
 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 a M&D licensee to take possession 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 (because the M&D licensee will have to comply with equivalent requirements).
- 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 originating licensee 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 originating licensee and assist in any investigation.
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.

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

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

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.
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 protect its sensitive information from unauthorized disclosure and control access to its sensitive information to those persons for whom the licensee has established the need-to-know the information, and are considered to be trustworthy and reliable;
 - b. The licensees shall develop, maintain and implement policies and procedures for controlling access to, and proper handling and protection against unauthorized disclosure of, its sensitive information for radioactive material covered by these requirements. These 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.

Draft

Table 1: Radionuclides of Concern

Radionuclide	Quantity of Concern ¹ (TBq)	Quantity of Concern ² (Ci)
Am-241 or 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
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. $[(\text{aggregated source activity for radionuclide A}) \div (\text{quantity of concern for radionuclide A})] + [(\text{aggregated source activity for radionuclide B}) \div (\text{quantity of concern for radionuclide B})] + \text{etc.} \geq 1$

Guidance for Aggregation of Sources

The 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.pdf>). The Code defines a three-tiered source categorization scheme. Category 1 corresponds to the largest source strength (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 (ICs) apply to sources that are greater than the quantity of concern values listed in Table 1, plus aggregations of smaller sources that add up to greater than the quantities in Table 1. Aggregation only applies to sources that are co-located.

Licensees who possess sources in total quantities that exceed the Table 1 quantities are required to implement ICs. Where there are many small (less than the quantity of concern values) co-located sources whose total aggregate activity exceeds the Table 1 values, licensees are to implement ICs.

Some source handling or storage activities may cover several buildings, or several locations within specific buildings. The question then becomes: When are sources considered co-located for purposes of aggregation? For purposes of the ICs, sources are considered co-located 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 co-located. 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 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 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.

Draft

Worksheet for Paragraphs 1-3
Bureau of Radiation Control – Increased Security Controls Requirements
MONTH DD, 2005

Radioactive Materials License #: 9999-99

Reminder Reply due ~ 30 days from Date

Licensee Name: _____

Control Number: yyyymmdd-####

1.(a)	Are you able to comply with the requirements in Attachment 1	<input type="checkbox"/> Yes <input type="checkbox"/> No	Need to complete only if answer is NO
1.(b)	ALL sections of Attachment 1 apply to my circumstances	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NONE of Attachment 1 Applies	Need to complete only if answer is NO or NONE Please justify if NONE of the sections apply
1.(b)	(If 1(b) is NO) The following Checked Sections of Attachment 1 DO NOT apply to my circumstances. (Justification Provided)	1.a__ b__ c__ d__ 2.a__ b__ c__ d__ e__ 3.a.1__ a.2__ a.3__ a.4__ 3.b.1__ b.2__ 3.c. __ d.1__ d.2__ 4.a. __ b.1__ b.2__ c__ 5.a__ b__ c__ d__ e__ 6.a. __ b.1__ b.2__ b.3__ b.4__ b.5__ b.6__ b.7__	Need to complete only if answer is NO or NONE Provide justification for each checked item. ____ (Y/N) See Attached
1.(c)	Implementation of Attachment 1 Causes me to be in violation of my license or regulations.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Need to complete only if answer is YES If Yes- provide justification to seek relief or variation of the requirement.
2.	Implementation of Attachment 1 Adversely Impacts safe Operations of your Facility.	<input type="checkbox"/> Yes <input type="checkbox"/> No	Need to Complete only if answer Is YES. Then Submit in writing: The adverse safety impact, The basis for its determination, Either A proposal for achieving the same objectives specified in the attachment 1-requirement in question, OR A schedule for modifying the facility to address the adverse safety condition.
3.	Schedule for Completion of each Requirement in Attachment 1	Verify attached schedule is enclosed with reply	MUST COMPLETE

Please include a cover letter signed and dated by an individual authorized to make legally binding statements for the licensee. If this worksheet is used, you may include it with your attachments.

NOTE- Items 1 and 2 may not require a response. A response to item 3 is required.