

**From:** "Jared Thompson" <jwthompson@HealthyArkansas.com>  
**To:** <anm@nrc.gov>  
**Date:** 9/7/05 2:09PM  
**Subject:** License Condition for Increased Control Implementation

Andrew,

Attached are the Arkansas letter and license condition for the implementation of increased controls for Groups 1 -4 licensees for review and approval by NRC. We will be using the Final Increase Control document that was provided by email today as part of the licensing package for the affected licensees. The licensing language is on page 12 of the attached license.

Upon review and approval by NRC, we will begin license amendments to these licensees with 10 working days.

If you have any questions regarding the licensing language or the cover letter, please contact Kim Wiebeck or me at 501-661-2173.

Sincerely,

Jared W. Thompson, Health Physics Supervisor  
Arkansas Department of Health and Human Services  
Radioactive Materials Program  
4815 W. Markham, Mail Slot 30H  
Little Rock, Arkansas 72205  
501-661-2173  
501-661-2849 (fax)

Do not mistake for conspiracy and intrigue what can best be explained by stupidity and incompetence.

**CONFIDENTIALITY NOTICE:**

The information contained in this e-mail message and any attachment is the property of the State of Arkansas and may be protected by state and federal laws governing disclosure of private information. It may contain information that is privileged, confidential, or otherwise protected from disclosure. It is intended solely for the use of the addressee. If you are not the intended recipient, you are hereby notified that reading, copying or distributing this e-mail or the information herein by anyone other than the intended recipient is **STRICTLY PROHIBITED**. The sender has not waived any applicable privilege by sending the accompanying transmission. If you have received this transmission in error, please notify the sender by reply e-mail immediately, and delete this message and attachments from your computer.

**CC:** <phi@nrc.gov>, "Bernard Bevill" <brbevill@HealthyArkansas.com>, "Katia Gray (E-mail)" <kdgray@HealthyArkansas.com>, "Kim Wiebeck" <kwiebeck@HealthyArkansas.com>, "Kimberly Turner" <kturner@HealthyArkansas.com>, "Steve Mack" <smack@HealthyArkansas.com>, "Susan dooley" <sdooley@healthyarkansas.com>

**Mail Envelope Properties (431F2CB4.F4E : 0 : 3918)**

**Subject:** License Condition for Increased Control Implementation  
**Creation Date:** 9/7/05 2:03PM  
**From:** "Jared Thompson" <jwthompson@HealthyArkansas.com>

**Created By:** jwthompson@HealthyArkansas.com

**Recipients**

nrc.gov  
owf1\_po.OWFN\_DO  
ANM (Andrew Mauer)

nrc.gov  
twf1\_po.TWFN\_DO  
PHL CC (Paul Lohaus)

healthyarkansas.com  
sdooley CC (Susan dooley)  
smack CC (Steve Mack)  
kturner CC (Kimberly Turner)  
kwiebeck CC (Kim Wiebeck)  
kdgray CC (Katia Gray (E-mail))  
brbevill CC (Bernard Bevill)

**Post Office**

owf1\_po.OWFN\_DO  
twf1\_po.TWFN\_DO

**Route**

nrc.gov  
nrc.gov  
healthyarkansas.com

Files	Size	Date & Time
MESSAGE	1810	09/07/05 02:03PM
TEXT.htm	3898	
UAMSicltr.doc	24064	
uams2.doc	108544	
Mime.822	190320	

**Options**

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

**Concealed Subject:** No  
**Security:** Standard

**From:** "Jared Thompson" <jwthompson@HealthyArkansas.com>  
**To:** "Andrew Mauer" <ANM@nrc.gov>  
**Date:** 9/7/05 3:20PM  
**Subject:** RE: License Condition for Increased Control Implementation

Let me try again with the Arkansas stuff. I believe I have in a suitable format for your review.

Jared W. Thompson  
Arkansas Department of Health and Human Services  
501-661-2173

**CONFIDENTIALITY NOTICE:**

The information contained in this e-mail message and any attachment is the property of the State of Arkansas and may be protected by state and federal laws governing disclosure of private information. It may contain information that is privileged, confidential, or otherwise protected from disclosure. It is intended solely for the use of the addressee. If you are not the intended recipient, you are hereby notified that reading, copying or distributing this e-mail or the information herein by anyone other than the intended recipient is **STRICTLY PROHIBITED**. The sender has not waived any applicable privilege by sending the accompanying transmission. If you have received this transmission in error, please notify the sender by reply e-mail immediately, and delete this message and attachments from your computer.

**Mail Envelope Properties** (431F3D8A.8D5 : 14 : 6357)

**Subject:** RE: License Condition for Increased Control Implementation  
**Creation Date:** 9/7/05 3:20PM  
**From:** "Jared Thompson" <[jwthompson@HealthyArkansas.com](mailto:jwthompson@HealthyArkansas.com)>

**Created By:** [jwthompson@HealthyArkansas.com](mailto:jwthompson@HealthyArkansas.com)

**Recipients**

nrc.gov  
 owf1\_po.OWFN\_DO  
 ANM (Andrew Mauer)

**Post Office**

owf1\_po.OWFN\_DO

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1030	09/07/05 03:20PM
Arkansas LC License Condition.doc		19456
FINAL INCREASED CONTROLS.wpd		51200
Arkansas cover letter.doc	23552	
Mime.822	132562	

**Options**

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

**Concealed Subject:** No  
**Security:** Standard

**From:** "Jared Thompson" <jwthompson@HealthyArkansas.com>  
**To:** "Andrew Mauer" <ANM@nrc.gov>  
**Date:** 9/7/05 5:15PM  
**Subject:** RE: License Condition for Increased Control Implementation

Arkansas will be using the table provided in the NRC letter dated September 2, 2005.

Jared

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

**From:** Andrew Mauer [mailto:ANM@nrc.gov]  
**Sent:** Wednesday, September 07, 2005 3:43 PM  
**To:** Jared Thompson  
**Subject:** RE: License Condition for Increased Control Implementation

Thanks Jared. Please confirm (or send) that you are using the table provided in our letter of 9/2/05.

>>> "Jared Thompson" <jwthompson@HealthyArkansas.com> 09/07/05 3:20 PM >>>  
Let me try again with the Arkansas stuff. I believe I have in a suitable format for your review.

Jared W. Thompson  
Arkansas Department of Health and Human Services  
501-661-2173

**CONFIDENTIALITY NOTICE:**

The information contained in this e-mail message and any attachment is the property of the State of Arkansas and may be protected by state and federal laws governing disclosure of private information. It may contain information that is privileged, confidential, or otherwise protected from disclosure. It is intended solely for the use of the addressee. If you are not the intended recipient, you are hereby notified that reading, copying or distributing this e-mail or the information herein by anyone other than the intended recipient is STRICTLY PROHIBITED. The sender has not waived any applicable privilege by sending the accompanying transmission. If you have received this transmission in error, please notify the sender by reply e-mail immediately, and delete this message and attachments from your computer.

**Mail Envelope Properties (431F585C.504 : 8 : 9476)**

**Subject:** RE: License Condition for Increased Control Implementation  
**Creation Date:** 9/7/05 5:14PM  
**From:** "Jared Thompson" <jwthompson@HealthyArkansas.com>

**Created By:** jwthompson@HealthyArkansas.com

**Recipients**

nrc.gov  
owf1\_po.OWFN\_DO  
ANM (Andrew Mauer)

**Post Office**  
owf1\_po.OWFN\_DO

**Route**  
nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1503	09/07/05 05:14PM
Mime.822	3020	

**Options**

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

**Concealed Subject:** No  
**Security:** Standard

DATE

RE: Arkansas Radioactive Materials License, ARK-

Dear :

The U.S. Nuclear Regulatory Commission (NRC) and its Agreement States are in the process of implementing increased controls (ICs) 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 §§ 20.1801-1802 [rules similar to Arkansas State Board of Health (ASBH) Rules and Regulations for Control of Sources of Ionizing Radiation, Paragraph RH-1306.a.]. 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 ASBH Rules and Regulations for Control of Sources of Ionizing Radiation, Paragraph RH-416.a. 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 at Attachment 2. Your newly amended license, ARK-001-INC-11-09, Amendment Number 2, is provided at Attachment 3.

Within thirty (30) days of the date of this letter:

1. You shall notify this office
  - (1) if you are unable to comply with any of the requirements in Attachment 1,
  - (2) if compliance with any of the requirements is unnecessary because of your specific circumstances, or
  - (3) 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, shall be submitted to Jared Thompson, Health Physics Supervisor, Radioactive Material Program, Division of Health, P.O. Box 1437, Slot H-30, Little Rock, Arkansas 72203-1437. In addition, your response shall be marked as "**Withhold from Public Disclosure Under RH-4040.**"

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

Should you require assistance in addressing this letter, please call Kim Wiebeck, Health Physicist or myself at (501) 661-2173.

Sincerely,

Jared W. Thompson, Health Physics Supervisor  
Radioactive Materials Program

**3 Attachments**

1. Increased Controls
2. Table 1
3. License Amendment

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

The purpose of the increased controls 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.
  - 1.1 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.
  - 1.2 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 and distribution (M&D) licensee. Written verification attesting to or certifying the person's trustworthiness and reliability shall be obtained from the manufacturing and distribution 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.
- 1.3 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.
- 1.4 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 Arkansas Department of Health and Human Services, Radioactive Materials Program at 1-800-633-1735.
- 1.5 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:

5.1 Use carriers which:

5.2

- 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.

5.3 Contact the recipient to coordinate the expected arrival time of the shipment;

5.4 Confirm receipt of the shipment; and

1.6 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 Arkansas Department of Health and Human Services, Radioactive Materials Program at 1-800-633-1735. 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 Arkansas Department of Health and Human Services, Radioactive Materials Program at 1-800-633-1735.

1.7

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<sup>1</sup>, 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

---

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

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 an 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.
  - 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:
    - 7.1 Establish an expected time of delivery; and
    - 7.2 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.
- 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.

## Arkansas Security License Condition

18. The licensee shall comply with the requirements described in the Department letter dated (\_\_\_\_\_) and attached document entitled "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern." The licensee shall complete implementation of said requirements within 6 months from the issuance of the license amendment or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1 of the attachment, whichever is later. Within 30 days after the implementation of the requirements of this condition, the licensee shall notify Radiation Control in writing that it has completed the requirements of this condition.