Bernard R. Bevill, Team Leader
Division of Radiation Control and
Emergency Management
Department of Health
4815 West Markham Street, Slot 30
Little Rock, AR 72295-3867

#### Dear Mr. Bevill:

We have reviewed the final revisions to the Arkansas Department of Health's "Rules and Regulations for Control of Sources of Ionizing Radiation", received by this office on February 20, 2003, and with clarifying material arriving on March 28, 2003. Our review and comments are in response to the State's request for NRC evaluation of the changes to Arkansas' radiation control rules that incorporated the amendments identified on the enclosed State Regulation Status Data Sheet (SRS). Ten of the amendments submitted for review were not included in the State's submission of proposed rules, documented in the letter from Arkansas, dated January 21, 2001. The submitted final regulations were reviewed by comparison to the equivalent NRC regulations in 10 CFR Parts 19, 20, 30, 32, 34, 35, 36, 39, 61, 71, 150 and the requirements of the 29 amendments identified on the SRS Data Sheet. We discussed our review of the regulations, with Jared Thompson and yourself, during a March 25, 2003 teleconference.

As a result of our review, we have 33 comments and one editorial suggestion that have been identified in the enclosure. As requested, the comments on your medical regulations have been listed separately for your evaluation. If there are any comments which Arkansas believes are in error, the State should identify the section of their regulations that meets the designated compatibility category for the area in question and submit them to the NRC for review. We understand that you may not be able to implement these changes to your regulations immediately, especially in the case of your medical rules. As discussed during the teleconference, incorporation of these comments and should you choose, the new Part 35, may be completed during your next routine regulation amendment cycle. As established during your 2002 IMPEP, your program was found adequate to protect public health and safety and was compatible with NRC's program. These comments do not affect that finding.

Please note that we have limited our review to regulations required for compatibility and/or health and safety. However, we have determined that if your regulations were adopted incorporating our comments and without other significant change, they would meet the compatibility and health and safety categories established in the Office of State and Tribal Programs (STP) Procedure SA-200.

We request that when you amend your rules, a copy of the proposed regulations be provided to us for review. As requested in STP Procedure SA-201, <u>Review of State Regulations</u> (November 10, 1998), please highlight the final changes and identify where each comment has been addressed.

The SRS Data Sheet summarizes our knowledge of the status of other Arkansas regulations as indicated. This letter, including the SRS Data Sheet, is posted on the STP Web Site: http://www.hsrd.ornl.gov/nrc/rulemaking.htm

If you have any questions regarding the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact me, or John Zabko of my staff at 301-415-2308 or e-mail at JGZ@NRC.GOV.

Sincerely,

/RA by Josephine Piccone/

Josephine Piccone, Deputy Director Office of State and Tribal Programs

Enclosures: As stated The SRS Data Sheet summarizes our knowledge of the status of other Arkansas regulations as indicated. This letter, including the SRS Data Sheet, is posted on the STP Web Site: http://www.hsrd.ornl.gov/nrc/rulemaking.htm

If you have any questions regarding the comments, the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact me, or John Zabko at (301) 415-2308 or JGZ@NRC.GOV.

Sincerely,

/RA by Josephine Piccone/

Josephine Piccone, Deputy Director Office of State and Tribal Programs

Enclosures: As stated

Distribution:
DIR RF (3-40)
AMauer ASPO
VCampbell, RSAO R-IV
Arkansas File

DCD SP08 PDR YES BUsilton

Response to incoming: ML031270002

DOCUMENT NAME: I:\Regs\ARK 3-403.wpd

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	STP	STP	OGC	STP:DD
NAME AMauer		JZabko	STreby	JPiccone
DATE	04/02/03*	04/09/03*	04/28/03*	04/30/03*

ML031220523

**OFFICIAL RECORD COPY** 

## **COMPATIBILITY COMMENTS ON ARKANSAS FINAL REGULATIONS**

ST	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	RH-2803	§19.12(a)	1995-5	С	Instruction to Workers
					The State has not included an equivalent regulation to 10 CFR 19.12(a).
					The State needs to indicate at which level of exposure these instructions apply.
2	RH-3302(d) and	71.13	1996-1	B- paragraphs (a) & (b)	Previously Approved Package
	3303			NRC- paragraphs (c) & (d)	The State has omitted the requirements of 71.13 (a)(3) regarding a unique serial number for packaging.
					The State needs to add these requirements to achieve compatibility.
3	RH-3401 and 3100	71.47	1996-1	В	External radiation Standards for all packages
					The State omits the requirement for written instructions as stated in 71.47 (b)(4)(c)and (d)
					The State needs to add these requirements to achieve compatibility.
4	None	71.83	1996-1	В	Assumptions as to unknown properties
					The State has omitted the requirements of 71.83 regarding assumptions for unknown quantities of fissile material.
					The State needs to add these requirements to achieve compatibility.
5	None	71.85	1996-1	В	Preliminary determinations
					The State has omitted the requirements of section 71.85 regarding the preliminary determinations for packages.
					The State needs to add these requirements to achieve compatibility.

ST	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
6	None	71.87	1996-1	В	Routine determinations
					The State has omitted the requirements of section 71.87 regarding determinations for routine determinations packages.
					The State needs to add these requirements to achieve compatibility.
7	RH-1100	20.1003	None	Α	Byproduct material
					The State has omitted the second part of the definition" Byproduct Material" "the tailings".
					The State needs to add this section to achieve compatibility.
8	None	20.1003	1999-3	В	<b>Definitions</b> : Fit factor
					The State has omitted this definition.
					The State needs to include this definition to achieve compatibility.
9	None	20.1003	1999-3	В	Definitions: Fit test
					The State has omitted this definition.
					The State needs to include this definition to achieve compatibility.
10	None	20.1003	1999-3	В	<b>Definitions</b> : Filtering facepiece (dust mask)
					The State has omitted this definition.
					The State needs to include this definition to achieve compatibility.
11	None	20.1003	1993-3	В	<b>Definitions</b> : Qualitative fit test (QLFT)
					The State has omitted this definition.
					The State needs to include this definition to achieve compatibility.

ST	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
12	1302	20.1502	None	H&S	Conditions requiring individual monitoring of external and internal occupational dose
					The State has grouped Minors and Pregnant women in the same time requirement of one year. This means the fetal dose would be calculated over 12 months not 9 and lead to an incorrect dose assessment.
					The State needs to separate these two categories as in 20.1502 (2) and (3) so that minors are calculated over a year and declared pregnant women are calculated over 9 months. The State needs to correct this in both 1302 (a) and (b). The Suggested State Regulations have recently been amended to correct this also.
13	1308	20.1801	None	H&S	Security of stored material
					The State has omitted this requirement.
					The State needs to add these requirements to achieve compatibility.
14	None	20.1904	None	А	Labeling containers
					The State has omitted this requirement.
					The State needs to add these requirements to achieve compatibility.
15	None	20.1905	None	А	Exceptions to labeling requirements
					The State has omitted this requirement.
					The State needs to add these requirements to achieve compatibility.
16	1406	Part 20 Appendix G	1998-6	В	Transfer for disposal and manifests
					The State makes reference to appendix F from 10 CFR Part 20. This appendix has been removed and appendix G has been issued in its place.
					The State need to remove reference to Appendix F to Part 20.

ST	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
17	Арр. F	Appendix A	1999-3	В	Protection Factors for Respirators  The State did not update this Appendix to reflect the new respiratory equipment as shown in Appendix A to Part 20.  The State needs to update this section of its rules to achieve compatibility.
18	Арр. G	Part 20 Appendix G	1998-6	В	Requirements for Low-level Waste Transfer for disposal at land disposal facilities and Manifest  The State has not amended its regulations to comply with the requirements of Appendix G of Part 20.  The State needs to add requirement.
19	RH-2700 Appendix c	Part 71 Appendix A	1996-1	В	Determination of A <sub>1</sub> and A <sub>2</sub> The State equivalent section to Appendix A in Part 71 does not contain the required language and the equations are incorrect.  The State needs to adopt an appendix comparable to Appendix A or show how the State's Appendix C is compatible.
20	RH2790 Appendix E	Part 20 Appendix A	1993-3	В	Appendix A to Part 20 Protection Factors for Respirators  The State version of this appendix is out of date.  The State needs to update this appendix to reflect the information in the current Appendix A to Part 20.

# COMPATIBILITY COMMENTS ON ARKANSAS REGULATIONS RELATED TO PART 35

NOTE: Comments are related to changes required by amendments 1995-1 and 1998-5

STA	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	RH200 RH1100	35.32	1995-1	С	Definition: Medical Use
	1111100				The State is missing this definition.
					The State needs to include this definition to achieve compatibility.
2	None	35.32	1995-1	H&S -	Quality management program
				paragraphs (a), (b) and (c)	The State is missing this section.
				D- paragraphs (d), (e) and (f)	The State needs to include this section to achieve compatibility.
3	None	35.33	1995-1	С	Notifications
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
4	None	35.52	1995-1	D H&S	Possession, use, calibration, and check of instruments to measure dosages of alpha- or beta-emitting radionuclides
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
5	None	35.53	1995-1	H&S - paragraphs (a)& (b) D- paragraph (c)	Measurements of dosages of unsealed by-product material for medical use  The State is missing this section.  The State needs to include this section to achieve compatibility.
6	None	35.100	1995-1	H&S	Use of unsealed byproduct material for uptake, dilution, and excretion studies  The State is missing this section.  The State needs to include this section to achieve compatibility.

STA	ATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
7	None	35.200	1995-1	H&S	Use of unsealed byproduct material for imaging and localization studies
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
8	None	35.300	1995-1	H&S	Use of unsealed byproduct material for therapeutic administration
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
9	None	35.406	1995-1	D, except	Brachytherapy sources inventory
				paragraphs (a) & (c) are	The State is missing this section.
				H&S	The State needs to include this section to achieve compatibility.
10	None	35.610	1995-1	H&S	Safety instructions
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
11	None	35.615	1995-1	H&S	Safety precautions
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
12	None	35.641	1998-5	H&S	Radiation surveys for teletherapy facilities
					The State is missing this section.
					The State needs to include this section to achieve compatibility.
13	None	35.643	1998-5	H&S	Modification of teletherapy unit or room before beginning a treatment program
					The State is missing this section.
					The State needs to include this section to achieve compatibility.

### **EDITORIAL SUGGESTIONS**

1.	In RH1100(bj) (p.162) - The State should remove "or unrestricted area" from definition of "Member of the public." It appears to be a misprint.

### **STATE REGULATION STATUS**

State: Arkansas Tracking Ticket Number: 3-40

[29 proposed amendments reviewed are Date: April 30, 2003

Identified by a i	at the beginning of each equivalent NRC regulation.]

		•	l		
NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
i Standards for Protection Against Radiation-Part 20	56 FR 23360 56 FR 61352 57 FR 38588 57 FR 57877 58 FR 67657 59 FR 41641 60 FR 20183 (1/1/94)	1991-3	F ML031270002	(N)04/30/2003 ML031220523	
i Safety Requirements for Radiographic Equipment-Part 34	55 FR 843 (1/10/94)	1991-1	F ML031270002	(N) 04/30/03 ML031220523	
i ASNT Certification of Radiographers-Part 34	56 FR 11504 (none)	1991-2	F ML031270002	(N) 04/30/03 ML031220523	
i Notification of Incidents-Parts 20, 30, 31, 34, 39, 40, 70	56 FR 64980 (10/15/94)	1991-4	F ML031270002	(N) 04/30/03 ML031220523	
i Quality Management Program and Misadministrations- Part 35	56 FR 34104 (1/27/95)	1992-1	F ML031270002	(N) 04/30/03 ML031220523	
Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions-Parts 30,35	57 FR 45566 (none)	1992-2			Not required <sup>3</sup>
Licensing and Radiation Safety Requirements for Irradiators-Part 36	58 FR 7715 (7/1/96)	1993-2			Not applicable SECY-95- 112 <sup>3</sup>
i Definition of Land Disposal and Waste Site QA Program-Part 61	58 FR 33886 (7/22/96)	1993-3	F ML031270002	(Y) 04/30/03 ML031220523	Not applicable SECY-95-112 <sup>4</sup>
i Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites]- Parts 30, 40	58 FR 39628 (10/25/96)	1993-1	F ML031270002	(N) 04/30/03 ML031220523	
Self-Guarantee as an Additional Financial Mechanism- Parts 30, 40, 70	58 FR 68726 59 FR 1618 (none)	1994-1			Not required <sup>3</sup>

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation¹ (Effective Date)
Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards-Part 40	59 FR 28220 (7/1/97)	1994-2			Not applicable to Arkansas
i Timeliness in Decommissioning Material Facilities- Parts 30, 40, 70	59 FR 36026 (8/15/97)	1994-3	F ML031270002	(N) 04/30/03 ML031220523	
i Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use-Parts 30, 32, 35	59 FR 61767 59 FR 65243 60 FR 322 (1/1/98)	1995-1	F ML031270002	(Y) 04/30/03 ML031220523	
i Frequency of Medical Examinations for Use of Respiratory Protection Equipment- Part 20	60 FR 7900 (3/13/98)	1995-2	F ML031270002	(N ) 04/30/03 ML031220523	
i Low-Level Waste Shipment Manifest Information and Reporting-Parts 20, 61	60 FR 15649 60 FR 25983 (3/1/98)	1995-3	F ML031270002	(N) 04/30/03 ML031220523	
i Performance Requirements for Radiography Equipment- Part 34	60 FR 28323 (6/30/98)	1995-4	F ML031270002	(N) 04/30/03 ML031220523	
i Radiation Protection Requirements: Amended Definitions and Criteria-Parts 19, 20	60 FR 36038 (8/14/98)	1995-5	F ML031270002	(Y) 04/30/03 ML031220523	
i Clarification of Decommissioning Funding Requirements-Parts 30, 40, 70	60 FR 38235 (11/24/98)	1995-6	F ML031270002	(N) 04/30/03 ML031220523	
i Medical Administration of Radiation and Radioactive Materials- Parts 20, 35	60 FR 48623 (10/20/98)	1995-7	F ML031270002	(N) 04/30/03 ML031220523	
i 10 CFR Part 71: Compatibility with the International Atomic Energy Agency-Part 71	60 FR 50248 61 FR 28723 (4/1/99)	1996-1	F ML031270002	(Y) 04/30/03 ML031220523	

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation¹ (Effective Date)
One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses-Parts 30, 40, 70	61 FR 1109 (none)	1996-2			Not required <sup>3</sup>
i Termination or Transfer of Licensed Activities: Recordkeeping Requirements-Parts 20, 30, 40, 61, 70	61 FR 24669 (6/17/99)	1996-3	F ML031270002	(N) 04/30/03 ML031220523	
i Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act-Part 20	61 FR 65120 (1/9/00)	1997-1	F ML031270002	(N) 04/30/03 ML031220523	
Fissile Material Shipments and Exemptions-Part 71	62 FR 5907 (none)	1997-4			Not required <sup>3</sup>
i Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State-Part 150	62 FR 1662 (2/27/00)	1997-2	F ML031270002	(N) 04/30/03 ML031220523	
i Criteria for the Release of Individuals Administered Radioactive Material- Parts 20, 35	62 FR 4120 (5/29/00)	1997-3	F ML031270002	(N) 04/30/03 ML031220523	
i Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations-Parts 30, 34, 71, 150	62 FR 28948 (6/27/00)	1997-5	F ML031270002	(N) 04/30/03 ML031220523	
i Radiological Criteria for License Termination- Parts 20, 30, 40, 70	62 FR 39058 (8/20/00)	1997-6	F ML031270002	(N) 04/30/03 ML031220523	
i Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon- 14 Urea-Part 30	62 FR 63634 (1/02/01)	1997-7	F ML031270002	(N) 04/30/03 ML031220523	

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
i Deliberate Misconduct by Unlicensed Persons- Parts 30, 40, 61, 70, 150	63 FR 1890 63 FR 13773 (2/12/01)	1998-1	F ML031270002	(N) 04/30/03 ML031220523	
Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees- Parts 30, 40, 70	63 FR 29535 (none)	1998-2			Not required <sup>3</sup>
License Term for Medical Use Licenses- Part 35	63 FR 31604 (none)	1998-3			Not required <sup>3</sup>
i Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations-Part 34	63 FR 37059 (7/9/01)	1998-4	F ML031270002	(N) 04/30/03 ML031220523	
i Minor Corrections, Clarifying Changes, and a Minor Policy Change-Parts 20, 35, 36	63 FR 39477 63 FR 45393 (10/26/01)	1998-5	F ML031270002	(Y) 04/30/03 ML031220523	
i Transfer for Disposal and Manifests: Minor Technical Conforming Amendment-Part 20	63 FR 50127 (11/20/01)	1998-6	F ML031270002	(Y)04/30/03 ML031220523	
Radiological Criteria for License Termination of Uranium Recovery Facilities-Part 40	64 FR 17506 (6/11/02)	1999-1			Not applicable to Arkansas
Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information-Part 31	64 FR 42269 (none)	1999-2			Not required <sup>3</sup>
i Respiratory Protection and Controls to Restrict Internal Exposure - Part 20	64 FR 54543 64 FR 55525 (2/2/03)	1999-3	F ML031270002	(Y) 04/30/03 ML031220523	

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F)¹ Rule¹ / ML #⁵	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
i Energy Compensation Sources for Well Logging and Other Regulatory Clarifications - Part 39	65 FR20337 (5/17/03)	2000-1	F ML031270002	(N) 04/30/03 ML031220523	
New Dosimetry Technology-Parts 34, 36, 39	65 FR 63749; (1/8/04)	2000-2			
Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material- Parts 30, 31, 32	65 FR 79162; (2/16/04)	2001-1			
Revision of the Skin Dose Limit-Part 20	67 FR 1629; (4/5/05)	2002-1			
Medical Use of Byproduct Material- Parts 20, 32, 35	67 FR 20249; (4/24/05)	2002-2			

- 1. Or other generic Legally Binding Requirements.
- 2. (Y/N) Y means "Yes," there are comments in the review letter that the State needs to address. N means "No," there are no comments in the review letter.
- 3. Not required means a State is not required to have this item for compatibility.
- 4. A State need not adopt a specific regulation if the State has no licensees that would be subject to that regulation. See: "Final Policy Statement on Adequacy and Compatibility of Agreement State Programs," III.1. Time Frame for Adoption of Compatible State Regulations, p. 6, SECY-95-112, May 3, 1995.
- 5. ADAMS Tracking number