

September 14, 2012

Matthew McKinley, Administrator
Radiation Health Program
Cabinet for Health and Family Services
275 East Main Street, HS1C-A
Frankfort, KY 40621-0001

Dear Mr. McKinley:

We have reviewed the proposed revisions to the final Kentucky Radiological Health Administrative Regulations, Title 902, Chapter 100 Radiology, received by our office on August 1, 2012. These regulations were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules in 10 CFR Parts 20, 30, 32, 34, 35, 36, 39, 40, 61, 70, 71 and the requirements of the 14 amendments identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with Curt Pendergrass on September 12, 2012.

As a result of our review, we have seven comments that have been identified in the enclosure. Please note that we have limited our review to regulations required for compatibility and/or health and safety. Under our current procedure, a finding that the Kentucky regulations meet the compatibility and health and safety categories of the equivalent NRC regulation may only be made based on a review of the final Kentucky regulations. However, we have determined that if your proposed revisions to the final regulations were adopted, incorporating our comment and without other significant change, they would meet the compatibility and health and safety categories established in the Office of Federal and State Materials and Environmental Management Programs (FSME) Procedure [SA-200](#).

We request that when the proposed revisions to the final regulations are adopted and published, a copy of the "as published" regulations be provided to us for review. As requested in FSME Procedure SA-201, "Review of State Regulatory Requirements," please highlight the final changes, and provide a copy to Division of Materials Safety and State Agreements, FSME.

The State Regulation Status (SRS) Data Sheet summarizes our knowledge of the status of other Kentucky regulations, as indicated. Please let us know if you note any inaccuracies, or have any comments on the information contained in the SRS Data Sheet. This letter, including the SRS Data Sheet, is posted on the FSME website: <http://nrc-stp.ornl.gov/rulemaking.html>.

-2-

If you have any questions regarding the review results, the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact Kathleen Schneider, State Regulation Review Coordinator at (301) 415-2320 (kathleen.schneider@nrc.gov) or Joan Olmstead at (301) 415-2859 (joan.olmstead@nrc.gov).

Sincerely,

/RA K.N. Schneider for/

Pamela J. Henderson, Deputy Director
Division of Materials Safety and State Agreements
Office of Federal and State Materials and
Environmental Management Programs

Enclosures:
As stated

**COMPATIBILITY COMMENTS ON KENTUCKY'S PROPOSED
REVISIONS TO FINAL REGULATIONS**

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	KAR 100:010 Section1(74)	§20.1003	1998-5	<p style="text-align: center;">A</p> <p>Definition: Declared pregnant woman</p> <p>Kentucky's definition of Declared pregnant woman in 100:010 Section 1(74) uses the term "employer" instead of "licensee." 10 CFR §20.1003 specifically requires the woman to voluntarily inform the licensee instead of the employer (unless the employer is also the licensee) to ensure that the entity responsible for work assignments involving radiation exposure is aware of the declaration of pregnancy to facilitate timely and appropriate protective action. Kentucky needs to replace the word "employer" with "licensee" in 100:010 Section 1(74).</p> <p>Kentucky needs to make the above change in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1003 Definition: Declared pregnant woman.</p>
2	KAR 100:010 Section 1(25)(a)	§ 35.2	2002-2	<p style="text-align: center;">B</p> <p>Definition: Authorized nuclear pharmacist</p> <p>Kentucky needs to revise the definition of Authorized nuclear pharmacist to add "or" after "66(1)," in 100:010 Section 1(25)(a).</p> <p>Kentucky needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 35.2 Definition: Authorized nuclear pharmacist.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
3	KAR 100:010 Section 1(26)(a)	§ 35.2	2002-2	B	<p>Definition: Authorized user</p> <p>Kentucky needs to revise the definition of Authorized user to reference KAR 100:072 Section 70(1) by inserting “70(1) after “69(1).”</p> <p>Kentucky needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 35.2 Definition: Authorized user.</p>
4	KAR 100:010 Section 216	§35.2	2002-2	C	<p>Definition: Prescribed dose</p> <p>Kentucky needs to revise the definition of Prescribed dose in KAR 100:010 Section 216(c) by adding the word “manual” before “brachytherapy.” Kentucky also needs to revise KAR 100:010 Section 216 by adding “(d) For remote brachytherapy afterloaders, the total dose and dose per fraction as documented in the written directive.”</p> <p>Kentucky needs to revise the definition in order to meet the Compatibility Category C designation assigned to 10 CFR 35.2 Definition: Prescribed dose.</p>
5	KAR 100:010 Section 1(234)(b)	§ 35.2	2002-2	B	<p>Definition: Radiation safety officer</p> <p>Kentucky needs to revise the definition of Radiation Safety Officer by adding “;or” after “(3)(a)” in 100:010 Section 1(234)(b). Kentucky also needs to add “Is identified as a Radiation Safety Officer on – ” before Section 1(234)(b)(1).</p> <p>Kentucky needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 35.2 Definition: Radiation safety officer.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
6	KAR 100:010 Section 1(262)	§ 35.2	2002-2	B	<p>Definition: Sealed source</p> <p>Kentucky needs to revise the definition of Sealed source by deleting “permanently bonded or fixed in a capsule or matrix” and replacing it with “encased in a capsule” in 100:010 Section 1(262).</p> <p>Kentucky needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 35.2 Definition: Sealed source.</p>
7	KAR 100:010 Section 1	§ 35.2	2002-2	B	<p>Definition: Treatment site</p> <p>Kentucky omits definition of Treatment site in 100:010 Section 1.</p> <p>Kentucky needs to add a definition of treatment site to meet the Compatibility Category C designation assigned to the 10 CFR 35.2 Definition: Treatment site.</p>

STATE REGULATION STATUS

State: Kentucky
 [14 amendment(s) reviewed is identified by a ★
 at the beginning of the equivalent NRC requirement.]

Tracking Ticket Number: 12-22
 Date: September 14, 2012

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1991-1	Safety Requirements for Radiographic Equipment Part 34 55 FR 843 (Superceded by 1997-5)	01/10/1994	Final	No Comments 03/15/1996	Kentucky has adopted Final Regulations equivalent to RATS ID: 1997-5.
1991-2	ASNT Certification of Radiographers Part 34 56 FR 11504 (Superceded by 1997-5)	none	Not Required	Not Required	Kentucky has adopted Final Regulations equivalent to RATS ID: 1997-5.
1991-3	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;	01/01/1994	Final	No Comments 04/17/1998	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40, 70 56 FR 64980;	10/15/1994	Final	No Comments 03/15/1996	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superceded by 2002-2)	01/27/1995	Final	No Comments 03/15/1996	
1992-2	Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions Parts 30, 35 57 FR 45566	none	Not Required	Not Required	Kentucky has adopted Final Regulations equivalent to RATS ID: 1997-5.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1993-1	Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites] Parts 30, 40 58 FR 39628	10/25/1996	Final	No Comments 03/15/1996	
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Not Applicable ¹	Not Applicable	Kentucky does not have any licensees subject to these regulations. (See SECY-95-112)
1993-3	Definition of Land Disposal and Waste Site QA Program Part 61 58 FR 33886	07/22/1996	Not Applicable ¹	Not Applicable	Kentucky does not have any licensees subject to these regulations. (See SECY-95-112)
1994-1	Self-Guarantee as an Additional Financial Mechanism Parts 30, 40, 70 58 FR 68726; 59 FR 1618	none	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility.
1994-2	Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards Part 40 59 FR 28220	07/01/1997	Not Applicable	Not Applicable	Kentucky does not have authority to regulate this material under its Agreement.
1994-3	Timeliness in Decommissioning Material Facilities Parts 30, 40, 70 59 FR 36026	08/15/1997	Final	No Comments 04/17/1998	
1995-1	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	01/01/1998	Final	No Comments 04/17/1998	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final	No Comments 04/17/1998	
*1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20, 61 60 FR 15649; 60 FR 25983	03/01/1998	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 (Superceded by 1997-5)	06/30/1998	Final	No Comments 03/15/1996	Kentucky has adopted Final Regulations equivalent to RATS ID: 1997-5.
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19, 20 60 FR 36038	08/14/1998	Final	No Comments 04/17/1998	
*1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40, 70 60 FR 38235	11/24/1998	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
1995-7	Medical Administration of Radiation and Radioactive Materials Parts 20, 35 60 FR 48623 (Superceded by 2002-2 and 2005-2)	10/20/1998			
1996-1	Compatibility with the International Atomic Energy Agency Part 71 60 FR 50248; 61 FR 28724 (Superceded by 2004-1)	04/01/1999	Final	Comments 06/21/2000	Kentucky has not yet adopted Final Regulations equivalent to RATS ID: 2004-1.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1996-2	One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses Parts 30, 40, 70 61 FR 1109	02/15/1999	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility.
1996-3	Termination or Transfer of Licensed Activities: Record keeping Requirements Parts 20, 30, 40, 61, 70 61 FR 24669	06/17/1999	Final	No Comments 06/21/2000	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final	No Comments 04/17/1998	
1997-2	Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State Part 150 62 FR 1662	02/27/2000	Final ML010780156	No Comments 03/30/2001 ML010890409	
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20, 35 62 FR 4120	05/29/2000	Final	No Comments 04/17/1998	
1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 (Superseded by 2004-1)	02/10/2000	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility. (See STP-97-078)
1997-5	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations Parts 30, 34, 71, 150 62 FR 28947	06/27/2000	Final ML010780156	Comments 03/30/2001 ML010890409	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40, 70 62 FR 39057	08/20/2000	Final	No Comments 06/21/2000	
1997-7	Exempt Distribution of a Radioactive Drug Containing One Micro curie of Carbon-14 Urea Part 30 62 FR 63634	01/02/2001	Final	No Comments 04/17/1998	
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71, 150 63 FR 1890; 63 FR 13773	02/12/2001	Final	No Comments 06/21/2000	
1998-2	Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees Parts 30, 40, 70 63 FR 29535	07/01/2001	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility.
1998-3	License Term for Medical Use Licenses Part 35 63 FR 31604 (Superceded by 2002-2)	07/10/2001	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility. (See STP-98-074)
1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Final ML010780156	No Comments 03/30/2001 ML010890409	
*1998-5	Minor Corrections, Clarifying Changes, and a Minor Policy Change Parts 20, 32, 35, 36, 39 63 FR 39477; 63 FR 45393	10/26/2001	R ² ML12213A254	Comments 09/14/2012 ML12234A371	
*1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	Not Applicable	Not Applicable	Kentucky does not have authority to regulate this material under its Agreement.
1999-2	Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information Part 31 64 FR 42269	10/04/2002	Not Required	Not Required	These regulations are not required to be adopted for purposes of Compatibility.
*1999-3	Respiratory Protection and Controls to Restrict Internal Exposure Part 20 64 FR 54543; 64 FR 55524	02/02/2003	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
*2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
*2000-2	New Dosimetry Technology Parts 34, 36, 39 65 FR 63750	01/08/2004	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	Part 36 regulation changes were not adopted by Kentucky because they do not have any licensees. See RATS ID: 1993-2.
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, 32 65 FR 79162	02/16/2004	License Condition ML040550046	Comments 03/16/2004 ML040770705	Part 32.52 (a) & (b) only
*2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
*2002-2	Medical Use of Byproduct Material Parts 20, 32, 35 67 FR 20249	10/24/2005	Final ML12213A254	Comments 09/14/2012 ML12234A371	
*2003-1	Financial Assurance for Materials Licensees Parts 30, 40, 70 68 FR 57327	12/03/2006	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
*2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
*2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
*2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	License Condition ML053180137	No Comments 11/15/2005 ML053190005	
*2006-1	Minor Amendments Parts 20, 30, 32, 35, 40 and 70 71 FR 15005	03/27/2009	R ² ML12213A254	No Comments 09/14/2012 ML12234A371	
2006-2	National Source Tracking System - Serialization Requirements Part 32 with reference to Part 20 Appendix E 71 FR 65685	02/06/2007	Not Applicable	Not Applicable	Kentucky responded on 03/02/2007 to FSME 06-110 stating that they currently have no licensees applicable to this rule ¹ . ML070610044

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	License Condition ML083180064	No Comments 12/17/2008 ML083220486	
2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010			
2007-2	Exemptions From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements Parts 30, 31, 32, 150 72 FR 58473	12/17/2010			
2007-3	Requirements for Expanded Definition of Byproduct Material Parts 20, 30, 31, 32, 33, 35, 61, 150 72 FR 55864	11/30/2010			
2007-4	Order Imposing Fingerprinting Requirements and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material NRC Order EA-07-305 72 FR 70901	06/05/2008	License Condition ML080990413	No Comments 05/02/2008 ML081220993	
2008-1	Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19, 20 72 FR 68043	02/15/2011			
2009-1	Medical Use of Byproduct Material – Authorized User Clarification Part 35 74 FR 33901	09/28/2012			

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
2011-1	Decommissioning Planning Parts 20, 30, 40, 70 76 FR 35512	12/17/2015			
2011-2	Licenses, Certifications, and Approvals for Materials Licensees Parts 30, 36, 39, 40, 70, and 150 76 FR 56951	11/14/2014			
2012-1	Change of Compatibility of 10 CFR 31.5 and 31.6 (See RATS ID: 2001-1 for Rule text) 77 FR 3640	01/25/2015			
2012-2	Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste Part 71 77 FR 34194	08/10/2015			
2012-3	Technical Corrections Part 30, 34, 40 and 70 77 FR 39899	08/06/2015			
2012-4	Requirements for Distribution of Byproduct Material Parts 30, 31, 32, 40 and 70 77 FR 43666	10/23/2015			

¹ IMPEP Team: verify that Kentucky does not have any licensees subject to these regulations during each review.

² R means proposed revision to a final rule