

May 19, 2011

B. J. Smith, Director  
Division of Radiological Health  
Mississippi State Department of Health  
570 East Woodrow Wilson  
Post Office Box 1700  
Jackson, MS 39215-1700

Dear Mr. Smith:

We have reviewed the proposed changes to the Mississippi regulations sections 100, 300, 400, and 700 received by our office on March 31, 2011. These regulations were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules in 10 CFR Parts 20, 30, 31, 32, 33, 35, 61, 71, 150, and the requirements of the three amendments identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with Robert Goff on May 13, 2011.

As a result of our review, we have four 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 Mississippi 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 Mississippi regulations. However, we have determined that if your proposed 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 Federal and State Materials and Environmental Management Programs (FSME) Procedure SA-200.

We request that when the proposed regulations are adopted and published as final regulations, 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 SRS Data Sheet summarizes our knowledge of the status of other Mississippi 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>.

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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 Kathleen Schneider, State Regulation Review Coordinator at 301-415-2320 ([kathleen.schneider@nrc.gov](mailto:kathleen.schneider@nrc.gov)) or Stephen Poy at 301-415-7135 ([stephen.poy@nrc.gov](mailto:stephen.poy@nrc.gov)).

Sincerely,

*/RA/*

Mark Delligatti, Acting Deputy Director  
Division of Materials Safety and State Agreements  
Office of Federal and State Materials and  
Environmental Management Programs

Enclosures:  
As stated

**[Concurrence Page]**

Enclosures: As stated

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**COMPATIBILITY COMMENTS ON MISSISSIPPI PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	100.02	20.1003 61.2	2007-3	B	<p><b>Definitions</b></p> <p>Mississippi lists the wrong references in 100.2. 100.2 should read under the definition of waste, "Waste means those low-level radioactive wastes containing source, special nuclear, or byproduct material that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level radioactive waste means radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in paragraphs (2), (3), (4), <b>and (5)</b> of the definition of Byproduct material set forth in this section."</p> <p>Mississippi needs to make the above change in order to meet the Category B designation assigned to 10 CFR 20.1003, Waste.</p>
2	Section 400 Appendix B	Part 20 Appendix B	2007-3	A	<p><b>Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage</b></p> <p>Mississippi lists the wrong information for many radionuclides and is missing information for many radionuclides in Appendix B.</p> <p>For Silicon-31 in class W, 3E+4 is in column 2 of Table 1, 1E-5 is in column 3 of Table 1, and 5E-8 is in column 1 of Table 2. In class Y 3E+4 is in column 2 of Table 1, and 1E-5 is in column 3 of Table 1.</p>

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
				<p>For Chlorine-38 in class D, the St wall value of (3E+4) is in column 1 of Table 1. In class W 5E+4 is in column 2 of Table 1, 2E-5 is in column 3 of Table 1, and 6E-8 is in column 1 of Table 2.</p> <p>For Germanium-78 in class D, the St wall value of (2E+4) is in column 1 of Table 1, 3E-4 is in column 2 of Table 2, and 3E-3 is in Table 3.</p> <p>Yttrium-91m needs to be included in Appendix B.</p> <p>For Yttrium-94 in class D, the St wall value of (3E+4) is in column 1 of Table 1, 4E-4 is in column 2 of Table 2, and 4E-3 is in Table 3.</p> <p>For Cesium-125 in class D, the St wall value of (9E+4) is in column 1 of Table 1, 1E-3 is in column 2 of Table 2, and 1E-2 is in Table 3.</p> <p>Cesium-127 needs to be included in Appendix B.</p> <p>Cesium-129 needs to be included in Appendix B.</p> <p>Cesium-130 needs to be included in Appendix B.</p> <p>Cesium-131 needs to be included in Appendix B.</p> <p>Cesium-132 needs to be included in Appendix B.</p> <p>Cesium-134m needs to be included in Appendix B.</p> <p>Cesium-134 needs to be included in Appendix B.</p> <p>Cesium-135m needs to be included in Appendix B.</p>

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
				<p>Cesium-135 needs to be included in Appendix B.</p> <p>Cesium-136 needs to be included in Appendix B.</p> <p>Cesium-137 needs to be included in Appendix B.</p> <p>Cesium-138 needs to be included in Appendix B.</p> <p>Barium-126 needs to be included in Appendix B.</p> <p>Barium-128 needs to be included in Appendix B.</p> <p>Barium-131m needs to be included in Appendix B.</p> <p>Barium-131 needs to be included in Appendix B.</p> <p>Barium-133m needs to be included in Appendix B.</p> <p>Barium-133 needs to be included in Appendix B.</p> <p>Barium-135m needs to be included in Appendix B.</p> <p>Barium-139 needs to be included in Appendix B.</p> <p>Barium-140 needs to be included in Appendix B.</p> <p>Barium-141 needs to be included in Appendix B.</p> <p>Barium-142 needs to be included in Appendix B.</p> <p>For Gadolinium-152 in class W, Bone surf (8E-2) is in column 2 of Table 1, and 1E-13 is in column 1 of Table 2.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>For Radon-222 in the class with daughters present, 1E+2 (or 4 working level months) is in column 2 of Table 1, and 3E-8 (or 0.33 working level) is in column 3 of Table 1.</p> <p>For Thorium-226 in class Y, 1E+2 is in column 2 of Table 1, 6E-8 is in column 3 of Table 1, and 2E-10 is in column 1 of Table 2.</p> <p>Neptunium-240 needs to be included in Appendix B.</p> <p>For Californium-253 in class W, Bone surf(4E+2) is in column 1 of Table 1.</p> <p>In the Notes section to Appendix B, the headings need to be included for the table provided under Note 2.</p> <p>Mississippi needs to make the above changes in order to meet the Category A designation assigned to Appendix B.</p>
3	300.08(9)	30.32(j)	2007-3	B	<p><b>Application for specific licenses</b></p> <p>Mississippi lists the wrong references in 300.08(9). 300.08(9)(c) should read,  “Identification of individual(s) authorized to prepare the PET radioactive drugs if the applicant is a pharmacy, and documentation that each individual meets the requirements of an authorized nuclear pharmacist as specified in 300.12(10)(b)(ii) of this section.</p> <p>Mississippi needs to make the above change in order to meet the Category B designation assigned to 10 CFR 30.32(j).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
4	Section 300 Appendix C	30.72	2007-3	H&S	<p><b>Schedule C – Quantities of radioactive material requiring consideration of the need for an emergency plan for responding to a release</b></p> <p>For Packaged mixed waste, beta-gamma the quantity listed is 10,000 curies.</p> <p>Mississippi needs to make the above change in order to meet the Category H&amp;S designation assigned to 10 CFR 30.72.</p>



**STATE REGULATION STATUS**

State: Mississippi

Tracking Ticket Number: 11-8  
Date: May 19, 2011

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

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 (Superseded by 1997-5)	01/10/1994	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	Mississippi has adopted Final Regulations equivalent to RATS ID: 1997-5.
1991-2	ASNT Certification of Radiographers Part 34 56 FR 11504 (Superseded by 1997-5)	none	Not Required	Not Required	Mississippi 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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40, 70 56 FR 64980;	10/15/1994	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superseded by 2002-2)	01/27/1995	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	Mississippi has adopted Final Regulations equivalent to RATS ID: 2002-2.
1992-2	Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions Parts 30, 35 57 FR 45566	none	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility.
1993-1	Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites] Parts 30, 40 58 FR 39628	10/25/1996	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1993-3	Definition of Land Disposal and Waste Site QA Program Part 61 58 FR 33886	07/22/1996	Not Applicable <sup>2</sup>	Not Applicable	Mississippi 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	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	These regulation changes 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	Mississippi 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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
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			
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20, 61 60 FR 15649; 60 FR 25983	03/01/1998	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 <b>(Superseded by 1997-5)</b>	06/30/1998	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	Mississippi 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
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19, 20 60 FR 36038	08/14/1998	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40, 70 60 FR 38235	11/24/1998	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1995-7	Medical Administration of Radiation and Radioactive Materials Parts 20, 35 60 FR 48623 <b>(Superseded by 2002-2 and 2005-2)</b>	10/20/1998			Mississippi has not yet adopted Final Regulations equivalent to RATS ID: 2005-2.
1996-1	Compatibility with the International Atomic Energy Agency Part 71 60 FR 50248; 61 FR 28724 <b>(Superseded by 2004-1)</b>	04/01/1999	Final ML091540220	No Comments 07/21/2009 ML091670024	Mississippi has not yet adopted Final Regulations equivalent to RATS ID: 2004-1.
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 regulation changes 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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1997-3	Criteria for the Release of Individuals Administered	05/29/2000	Final <sup>1</sup>	No Comments	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
	Radioactive Material Parts 20, 35 62 FR 4120		ML010590507	11/16/2001 ML013230431	
1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 <b>(Superseded by 2004-1)</b>	02/10/2000	Not Required	Not Required	These regulation changes 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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40, 70 62 FR 39057	08/20/2000	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
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 <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71, 150 63 FR 1890; 63 FR 13773	02/12/2001	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
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 regulation changes are not required to be adopted for purposes of Compatibility.
1998-3	License Term for Medical Use Licenses Part 35 63 FR 31604 <b>(Superseded by 2002-2)</b>	07/10/2001	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility. (See STP-98-074) Mississippi has adopted Final Regulations equivalent to RATS ID: 2002-2.
1998-4	Licenses for Industrial Radiography and Radiation Safety	07/09/2001	Final	No Comments	

<b>RATS ID</b>	<b>NRC Chronology Identification</b>	<b>Date Due for State Adoption</b>	<b>Incoming Package</b>	<b>Outgoing Package</b>	<b>Notes</b>
	Requirements for Industrial Radiographic Operations Part 34 63 FR 37059		ML091540220	07/21/2009 ML091670024	
1998-5	Minor Corrections, Clarifying Changes, and a Minor Policy Change Parts 20, 35, 36 63 FR 39477; 63 FR 45393	10/26/2001	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	Not Required	Not Required	Mississippi does not have the 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 regulation changes 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	Final <sup>1</sup> ML010590507	No Comments 11/16/2001 ML013230431	
2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	Final ML040290385	No Comments 02/03/2004 ML040340553	
2000-2	New Dosimetry Technology Parts 34, 36, 39 65 FR 63750	01/08/2004	Final ML040290385	No Comments 02/03/2004 ML040340553	

<b>RATS ID</b>	<b>NRC Chronology Identification</b>	<b>Date Due for State Adoption</b>	<b>Incoming Package</b>	<b>Outgoing Package</b>	<b>Notes</b>
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, 32 65 FR 79162	02/16/2004	Final <sup>2</sup> ML091540220	Comments 07/21/2009 ML091670024	Mississippi does not have any licensees subject to 32.51(a)(a) and (b). A license condition will be used to address this regulation when needed. <sup>2</sup>
2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	Final ML051380417	No Comments 06/15/2005 ML051660091	
2002-2	Medical Use of Byproduct Material Parts 20, 32, 35 67 FR 20249	10/24/2005	Final ML051380417	No Comments 06/15/2005 ML051660091	
2003-1	Financial Assurance for Materials Licensees Parts 30, 40, 70 68 FR 57327	12/03/2006	Proposed ML083260435	No Comments 01/26/2009 ML083530751	
*2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	R <sup>3</sup> ML110910013	No Comments 05/19/2011 ML111170191	
2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	Final ML091540220	No Comments 07/21/2009 ML091670024	
2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	Final ML091540220	No Comments 07/21/2009 ML091670024	
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	License Condition ML053110130	No Comments 11/07/2005 ML053120172	
2006-1	Minor Amendments Parts 20, 30, 32, 35, 40 and 70 71 FR 15005	03/27/2009	Final ML091540220	No Comments 07/21/2009 ML091670024	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
2006-2	National Source Tracking System - Serialization Requirements Part 32 with reference to Part 20 Appendix E 71 FR 65685	02/06/2007	Final ML091540220	No Comments 07/21/2009 ML091670024	
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	Final ML091540220  License Condition ML083460151	No Comments 07/21/2009 ML091670024  No Comment 12/30/2008 ML083530040	
2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010	Final ML091540220	No Comments 07/21/2009 ML091670024	
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	Final ML091540220	No Comments 07/21/2009 ML091670024	
*2007-3	Requirements for Expanded Definition of Byproduct Material Parts 20, 30, 31, 32, 33, 35, 61, 150 72 FR 55864	11/30/2010	Proposed ML110910013	Comments 05/19/2011 ML111170191	
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 ML081090337	No Comments 05/01/2008 ML081220282	
2008-1	Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19, 20 72 FR 68043	02/15/2011	Final ML091540220	No Comments 07/21/2009 ML091670024	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
*2009-1	Medical Use of Byproduct Material – Authorized User Clarification Part 35 74 FR 33901	09/28/2012	Proposed ML 110910013	No Comments 05/19/2011 ML 111170191	

<sup>1</sup> Mississippi submitted a final version of these regulations during the time frame in which the proposed version of these regulations was being reviewed. Staff then continued the review with the submitted final regulations. The outgoing letter (ML013230431) incorrectly states that only the proposed regulations were reviewed.

<sup>2</sup> IMPEP Team: verify that Mississippi does not have any licensees subject to these regulations during each review.

<sup>3</sup> R Means proposed revisions to final rule.