

July 9, 2013

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 final revision to the Mississippi regulations Subchapters 1, 3, 4, 5, 7, 10, 12, 13 and 14, received by our office on September 28, 2012. These regulations were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules in 10 CFR Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, 71 and 150 and the requirements of the seven amendments identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with you on July 8, 2013.

As a result of our review, we have 53 comments including 2 standing comments from previous reviews 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. We have determined that if these regulations are revised, 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, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."

We request that when you revise your regulations to address our comments, 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 location of any changes made by Mississippi, in response to our comments, 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>.

B. J. Smith

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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)

Sincerely,

/RA/

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

Enclosures:

1. Compatibility Comments
2. Mississippi SRS Data Sheet

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COMPATIBILITY COMMENTS ON MISSISSIPPI FINAL REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	1.1.2(69)	20.1003	N/A	A	<p>Definitions: Monitoring</p> <p>Mississippi uses the term “surface area activities” instead of “surface area concentrations.” Mississippi needs to change the word “activities” to “concentrations.”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1003 Definitions: Monitoring.</p>
2	1.1.2(115)	20.1003	N/A	A	<p>Definitions: Survey</p> <p>Mississippi’s rule is different in the last sentence of this regulation. Mississippi’s regulation states “...but is not limited to, tests, physical examinations, and measurements of levels of radiation or concentrations of radioactive material present.” NRC’s definition of survey is “...includes a physical survey of the location of radioactive material and measurements or calculations of levels of radiation or concentrations or quantities of radioactive material present.” Mississippi does not allow for calculations of levels of radiation.</p> <p>Mississippi needs to include the provision to allow for calculations of levels of radiation in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1003 Definitions: Survey.</p>
3	1.1.2(122)	20.1003	N/A	A	<p>Definitions: Unrestricted area</p> <p>Mississippi’s rule is not essentially identical to NRC’s definition of</p>

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					<p>“unrestricted area.” Mississippi’s definition includes any area used for residential quarters as an unrestricted area. Mississippi needs to remove the provision “...and any area used for residential quarters” from its definition of unrestricted area.</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1003 Definitions: Unrestricted area.</p>
4	1.1.2(124)	20.1003	N/A	B	<p>Definitions: Waste</p> <p>In Mississippi’s definition of “waste,” Mississippi references “byproduct material as defined in paragraphs (2), (3), (4), and (5) of the definition of byproduct material set forth in this section.”</p> <p>Mississippi’s definition of byproduct material uses the nomenclature of b., c., d., and e. Mississippi needs to revise this definition to change “(2), (3), (4), and (5)” to “b., c., d., and e.”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 20.1003 Definitions: Waste.</p> <p>This is a revised comment from the comment letter dated May 19, 2011.</p>
5	1.1.15	20.1004	N/A	A	<p>Units of radiation dose</p> <p>In Table II, in 1.1.15, the units for the two columns for the “Fluence per Unit Dose Equivalent” are reversed. The units of “neutrons cm⁻² Sv⁻¹” is actually “neutrons cm⁻² rem⁻¹” and vice versa.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Mississippi needs to make the above change in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1004.
6	1.4.65	20.1403	N/A	C	<p>Criteria for license termination under restricted conditions</p> <p>Mississippi's 1.4.65(5)(b)(iii) references acceptable financial assurance mechanisms in 1.4.65(2). This reference should be 1.4.65(3).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 20.1403.</p>
7	1.4.66	20.1404	N/A	C	<p>Alternate criteria for license termination</p> <p>In the opening paragraph of 1.4.66(1), the references to 1.4.65(4)(a)(ii) should be 1.4.65(4)(a)(i)(i).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 20.1404.</p>
8	1.4.19	20.1601	N/A	H&S	<p>Control of access to high radiation areas</p> <p>In 1.4.19(7), Mississippi needs to change the reference in "Subchapter 14 for therapeutic radiation machines" to "Subchapter 15 for therapeutic radiation machines."</p> <p>Mississippi needs to make the above change in order to meet the Category H&S designation assigned to 10 CFR 20.1601.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
9	1.14.20	20.1602	N/A	H&S	<p>Control of access to very high radiation areas</p> <p>In 1.4.20(2), Mississippi needs to change the reference in “Subchapter 14 for therapeutic radiation machines” to “Subchapter 15 for therapeutic radiation machines.”</p> <p>Mississippi needs to make the above change in order to meet the Category H&S designation assigned to 10 CFR 20.1602.</p>
10	1.4.24	20.1703	N/A	H&S	<p>Use of individual respiratory protection equipment</p> <p>In 1.4.24(1)(c)(iv), Mississippi did not include the following in its requirements for written procedures: breathing air quality; inventory and control [10 CFR 20.1703(c)(4)(v) and (vi)]; storage; repair; and quality assurance [10 CFR 20.1703(c)(4)(vii)].</p> <p>Mississippi needs to include the above provisions in order to meet the Category H&S designation assigned to 10 CFR 20.1703.</p>
11	1.4.26	20.1705	N/A	B	<p>Application for use of higher assigned protection factors</p> <p>In 1.4.26, revise the phrase “...in Appendix A of this section of this section” to “...in Appendix A of this Subchapter.”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 20.1705.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
12	1.4.33	20.1905	N/A	A	<p>Exceptions to labeling requirements</p> <p>In 1.4.33(1), (2) and (3), Mississippi needs to replace “of this section” with “of this Subchapter.”</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1905.</p>
13	1.4.34	20.1906	N/A	H&S	<p>Procedures for receiving and opening packages</p> <p>In 1.4.34(2)(a), footnote 24, the citation of CFR 172.436.440 should be 172.436-440.</p> <p>In 1.4.34(2)(b), the footnote 6 referenced should be footnote 24.</p> <p>Mississippi needs to make the above changes in order to meet the Category H&S designation assigned to 10 CFR 20.1906.</p>
14	1.4.37	20.2003 (a)(2) & (a)(3)	N/A	A	<p>Disposal by release into sanitary sewerage</p> <p>Mississippi’s regulations, in 1.4.37(1)(b) and 1.4.37(1)(c)(i), references Table III of Appendix B of this section. “Of this section” should be replaced with “of this Subchapter.”</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category A designation assigned to 10 CFR 20.2003(a)(2) and (3).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
15	1.4.40	20.2006	N/A	B	<p>Transfer for disposal and manifests</p> <p>“Appendix D of this section” is referenced in several locations in Mississippi’s 1.4.40. This reference should be “Appendix D of this Subchapter.”</p> <p>In 1.4.40(5), the regulation references to paragraphs “(3), (4), and (5)” of the definition of byproduct material as defined in 1.1.2 should be changed to paragraphs “c, d, and e.”</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 20.2006.</p>
16	1.4.42	20.2008	N/A	B	<p>Disposal of certain byproduct material</p> <p>In 1.4.42(1), Mississippi’s regulation references paragraphs “(3), (4), and (5)” of the definition of byproduct material set forth in 1.1.2 should be changed to “c, d, and e.”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 20.2008.</p>
17	1.4.49	20.2106 (a) & (e)	N/A	C	<p>Records of individual monitoring results</p> <p>In 1.4.49(1), replace “of this section” with “of this Subchapter.”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 20.2106 (a) and (e).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
18	1.4.54	20.2201(a), (b), (d) & (e)	N/A	C	<p>Reports of theft or loss of licensed material</p> <p>In 1.4.54(1)(a) &(b), replace “in Appendix C of this section” with “in Appendix C of this Subchapter”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 20.2201(a), (b), (d) and (e).</p>
19	Subchapter 4 Appendix A	Appendix A of 10 CFR 20	N/A	B	<p>Protection Factors for Respirators</p> <p>In Mississippi’s Appendix A, under “Assigned Protection Factors,” there are three footnote references using the wrong nomenclature. Instead of 4, 8, and 9, the footnotes should be iv, viii, and ix, respectively.</p> <p>Mississippi’s regulations in Appendix A include a reference to “of this section” in footnote i and v. This should be “of this Subchapter.”</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to Appendix A of 10 CFR Part 20.</p>
20	Subchapter 4 Appendix B	Appendix B (Tables 1, 2, & 3), 10 CFR 20	N/A	A	<p>Annual Limits on Intake (ALIs), Derived Air Concentrations (DACs), of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage</p> <p>Mississippi needs to make the following changes in the Introduction Section:</p> <p>a) Mississippi’s regulation in the</p>

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
				<p>Introduction paragraph of Appendix B (page 184) omitted the following sentence: "The class (D, W, or Y) given in the column headed "Class" applies only to the inhalation ALIs and DACs given in table 1, columns 2 and 3."</p> <p>b) In the second paragraph under the heading of "Table I, Occupational Values" (page 184), Mississippi's regulations reference the definition of weighting factor in 1.4.03. This should be 1.4.3.</p> <p>c) In the second paragraph under the heading of "Table II, Effluent Concentrations" (page 186), in the last sentence, Mississippi's regulation references "the previous Appendix A of this section." Appendix A should be Appendix B. "Of this section" should be "of this Subchapter."</p> <p>d) In the third paragraph under the heading of "Table II, Effluent Concentrations" (page 186), Mississippi's regulation states that the "...occupational stochastic inhalation ALI was divided by 2.4×10^9." This should be 2.4×10^9 ml.</p> <p>e) In the third paragraph under the heading of "Table II, Effluent Concentrations" (page 186), Mississippi's regulation states that the "...ingestion ALI and dividing by 7.3×10^7." This should be 7.3×10^7 ml.</p> <p>f) For the List of Elements, Hafniim should be Hafnium.</p> <p>Mississippi needs to make the following changes in the Appendix B Table:</p> <p>g) On page 190, Nitrogen should be Nitrogen-13.</p> <p>h) On page 190, the values for Nitrogen-13 in Table I, Col. 3, and</p>

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
				<p>Table II, Col. 1, should be in Table I, Col. 2, and Table I, Col. 3, respectively.</p> <p>i) On page 190, the values for Oxygen-15 in Table I, Col. 3, and Table II, Col. 1, should be in Table I, Col. 2, and Table I, Col. 3, respectively.</p> <p>j) On page 190, the value for Fluorine-18, in Table III should be 7E+3.</p> <p>k) On page 207, Strontium-80, Class: SrTiO under Class D and Y should be SrTiO₃.</p> <p>l) On page 208-209, the entry for Yttrium-91m² is missing. This radionuclide and its values for each of the Tables need to be added to Appendix B. This is a standing comment from the comment letter dated May 19, 2011.</p> <p>m) On page 211, radionuclide Niobium-89² should be Niobium-89m².</p> <p>n) On page 261, the values for Lead-210 in Table I, Col. 1 and Col. 2 should be 6E-1 and 2E-1, respectively.</p> <p>o) On page 269, for radionuclide Uranium-230, many subscripts are missing from the radioisotopes for Class D: (1) UF should be UF₆; (2) UOF should be UO₂F₂; (3) UO(NO) should be UO₂(NO₃)₂.</p> <p>p) On page 269, for radionuclide Uranium-230, many subscripts are missing from the radioisotopes for Class W: (1) UO should be UO₃; (2) UF should be UF₄; (3) UCl should be UCl₄.</p> <p>q) On page 269, for radionuclide Uranium-230, many subscripts are missing from the radioisotopes for Class Y: (1) UO should be UO₂ and (2) UO should be U₃O₈.</p> <p>r) On page 272, for radionuclide</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>Plutonium-234, subscripts are missing for PuO under Class W and Y. PuO should be PuO₂ for Class W and Y.</p> <p>s) On page 281, footnote 2: At the end of the second sentence, "...from external exposure.", there should be a "superscript 1" reference to Note 1.</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category A designation assigned to Appendix B, 10 CFR Part 20.</p>
21	Subchapter 4 Appendix C	Appendix C, 10 CFR 20	N/A	A	<p>Quantities of licensed materials requiring labeling</p> <p>Mississippi needs to make the following changes in Appendix C:</p> <p>a) For Carbon-14, the value should be 100 microcuries.</p> <p>b) Neptunium-236 (1.15E+5) should be Neptunium-236 (1.15E+5 y)</p> <p>c) In footnote 1, the reference to Appendix B of this section should be "of this Subchapter."</p> <p>d) On page 295, footnote 1, in the last sentence, "E+9 years" should be "1E+9 years."</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category A designation assigned to Appendix C, 10 CFR Part 20.</p>
22	Subchapter 4 Appendix D	Appendix G, 10 CFR 20	N/A	B	<p>Requirements for Low-level radioactive waste intended for disposal at land disposal facilities and manifests</p> <p>The definition, "NRC Forms 540, 540A, 541, 541A, 542, and 542A" in</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>Mississippi's Appendix D did not include the following sentences: "Upon agreement between the shipper and consignee, NRC Forms 541 (and 541A) and NRC Forms 542 (and 542A) may be completed, transmitted, and stored in electronic media. The electronic media must have the capability for producing legible, accurate, and complete records in the format of the uniform manifest."</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to Appendix G, 10 CFR Part 20.</p>
23	Subchapter 4 Appendix E	61.55	N/A	B	<p>Waste classification</p> <p>In Appendix E, Section I., Table II, on page 308, "metal" is omitted at the end of the radionuclide "Ni-63 in activated."</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 61.55.</p>
24	N/A	30.13 40.12(a) 70.12	N/A	B	<p>Carriers</p> <p>Mississippi omits an equivalent provision to 10 CFR 30.13, 40.12(a) and 70.12.</p> <p>Mississippi needs to add an equivalent provision to 10 CFR 30.13, 40.12(a) and 70.12 in order to meet the Compatibility Category B designation assigned to these sections.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
25	1.3.3 (3)(a)	30.15	N/A	B	<p>Certain items containing byproduct material</p> <p>Mississippi omitted an equivalent language to 10 CFR 30.15(b).</p> <p>Mississippi needs to add an equivalent provision to 10 CFR 30.15(b) in order to meet the Compatibility Category B designation assigned to 10 CFR 30.15.</p>
26	1.3.3(2)	30.18	N/A	B	<p>Exempt quantities</p> <p>In 1.3.3(2), Mississippi's references "Appendix B of this Section." The correct reference should be "Appendix B of this Subchapter."</p> <p>In 1.3.3 (2)(e), Mississippi uses the term byproduct material instead of radioactive material.</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 30.18.</p>
27	1.3.20 (4)	30.51(d), (e), & (f) 40.61(d) & (e) 70.51(a) & (b)	N/A	H&S H&S C	<p>Records</p> <p>Mississippi's 1.3.20(4)(b) references 1.4.37(2) which is not equivalent to 10 CFR 20.2103(b)(4). The correct reference is 1.4.45.</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C and Category H&S designation assigned to these sections.</p>
28	Subchapter 3 Appendix C	30.72	N/A	H&S	<p>Schedule C- Quantities of radioactive materials requiring consideration of the need for an</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>emergency plan for responding to a release</p> <p>In Appendix C of Subchapter 3, Mississippi listed 3,000 Ci for the Quantity of Tin-126 requiring consideration of the need for an emergency plan for responding to a release. The correct value of Tin-126 should be 1,000 Ci.</p> <p>Mississippi needs to make the above change in order to meet the Category H&S designation assigned to 10 CFR 30.72, Schedule C.</p>
29	1.3.6(4)	31.5	N/A	C	<p>Certain detecting, measuring, gauging or controlling devices and certain devices for producing light or an ionized atmosphere</p> <p>In 1.3.6(4)(c)(viii)(iii)(iv), Mississippi references to 1.3.6(4)(c)(xiii)(ii) which is not equivalent to 10 CFR 31.5(c)(8)(ii). The correct reference is 1.3.6(4)(c)(viii)(ii).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 31.5.</p>
30	N/A	32.2	N/A	A	<p>Definitions: Dose commitment</p> <p>Mississippi omits an equivalent definition to Dose commitment in their regulations.</p> <p>Mississippi needs to adopt equivalent definition to Dose Commitment in order to meet the Category A designation assigned to 10 CFR 32.2 Definitions: Dose commitment.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
31	N/A	32.2	N/A	B	<p>Definitions: Lot Tolerance Percent Defective</p> <p>Mississippi omits an equivalent definition to Lot Tolerance Percent Defective in its regulations.</p> <p>Mississippi needs to adopt an equivalent definition to Lot Tolerance Percent Defective in order to meet the Compatibility Category B designation assigned to 10 CFR 32.2 Definitions: Lot Tolerance Percent Defective.</p>
32	1.3.12(4)(d)	32.51a	N/A	B	<p>Same: Conditions of licenses</p> <p>In 1.3.12(4)(d)(i)(ii), Mississippi references 1.1.4, which is not equivalent to NRC's reference to 10 CFR 30.51. The correct reference is 1.3.20.</p> <p>In 1.3.12(4)(d)(ii)(v), Mississippi references 1.3.15(5) which is not equivalent to NRC's reference to 10 CFR 30.34(h). The correct reference is 1.3.15(4).</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 32.51a.</p>
33	1.3.12(8)	32.71	N/A	B	<p>Manufacture and distribution of byproduct material for certain in vitro clinical or laboratory testing under general license</p> <p>In 1.3.12(8)(b)(v), Mississippi states: "... and 1.85 kBq (0.05 microcurie of americium-241 each." The quantity of americium-241 in kBq and microcurie are incorrect. The correct quantity should be "0.185 kBq" and "0.005 microcurie."</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Mississippi needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 32.71.
34	N/A	32.210(a), (b), (c), (d), (e), & (f)	N/A	B	<p>Registration of product information</p> <p>Mississippi omits equivalent language to NRC provision 10 CFR 32.210 (a), (b), (c), (d), (e), and (f).</p> <p>Mississippi needs to add an equivalent provision to 10 CFR 32.210 (a), (b), (c), (d), (e), and (f) in order to meet the Compatibility Category B designation assigned to 10 CFR 32.210 (a), (b), (c), (d), (e), and (f).</p>
35	1.5.5	34.13	N/A	C	<p>Specific license for industrial radiography</p> <p>Mississippi has an additional requirement in 1.5.5(n) which states that a license will be issued if the requirements of that part that are applicable are met. However, it incorrectly references 1.5.5(13), which does not exist. The reference should be 1.5.5(3).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 34.13.</p>
36	1.5.8	34.23	N/A	B	<p>Locking of radiographic exposure devices, storage containers and source changers</p> <p>In 1.5.8(2), Mississippi uses an incorrect footnote reference; the superscript 3 after the word "locked" should be 28 as used in 1.5.8(1).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Mississippi needs to correct the footnote reference above in order to meet the Compatibility Category B designation assigned to 34.23.
37	1.5.12	34.31	N/A	C	<p>Inspection and maintenance of radiographic exposure devices, transport and storage containers, associated equipment, source changers and survey instruments</p> <p>Mississippi has an incomplete sentence in 1.5.12(6). The sentence should read: "Records of equipment problems and of any maintenance performed under 1.5.12 must be made in accordance with 1.5.30."</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 34.31.</p>
38	1.5.34	34.83	N/A	C	<p>Records of personnel monitoring procedures</p> <p>Mississippi lists an incorrect reference in 1.5.34(1). Instead of referencing 1.5.20(1), Mississippi should reference 1.5.20(2).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned 34.83.</p>
39	1.5.37	34.89	N/A	C	<p>Location of documents and records</p> <p>Mississippi needs to replace the reference to Subchapter 3 with Subchapter 13 in 1.5.37(2)(k).</p> <p>Mississippi needs to make the above</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					change in order to meet the Compatibility Category C designation assigned 34.89.
40	1.5.38	34.101	N/A	C	<p>Notifications</p> <p>Mississippi references the wrong section in 1.5.38(2). Mississippi needs to replace the reference to 1.4.54 with 1.4.56.</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 34.101.</p>
41	Subchapter 5 Appendix A	Appendix A, 10 CFR Part 34	N/A	B	<p>Radiographer certification</p> <p>Mississippi needs to correct the codification in Appendix A after (II)(B). The second "A" and "B" should be "a" and "b."</p> <p>Note: Mississippi has additional text at the end of Appendix A that appears to be footnote text that should be clarified.</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to Appendix A, 10 CFR Part 34.</p>
42	1.7.63	35.590	N/A	B	<p>Training for use of sealed sources for diagnosis</p> <p>Mississippi needs to revise the incorrect references in the first paragraph of 1.7.63 from "1.7.52" to "1.7.62" which is the equivalent section to 10 CFR 35.500.</p> <p>Mississippi needs to make the above changes in order to meet the</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Compatibility Category C designation assigned to 10 CFR 35.590.
43	1.12.16	36.39	N/A	H&S	<p>Design requirements</p> <p>In 1.12.16(1), Mississippi needs to correct the activity reference of Becquerel from “2 x 10¹⁷” to “2 x 10¹⁷.”</p> <p>Mississippi needs to make the above change in order to meet the Category H&S designation 10 CFR 36.39.</p>
44	1.14.4	39.15	N/A	C	<p>Agreement with well owner or operator</p> <p>In 1.14.4(1)(d), Mississippi needs to revise the reference “1.14.29(2)(c)” to “1.14.29(3).”</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation 10 CFR 39.15.</p>
45	1.14.25	39.55	N/A	C	<p>Tritium neutron generator target source</p> <p>In 1.14.25(2), Mississippi needs to revise the reference “1.14.29” (Notifications of Incidents, Abandonment, and Lost Sources) to “1.14.12” (Design and Performance Criteria for Sealed Sources Used in Downhole Operations).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 39.55.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
46	1.14.16	39.63	N/A	C	<p>Operating & Emergency procedures</p> <p>Mississippi's 1.14.16(9) does not include use, inspection and maintenance of "sealed sources" as being required in the written operating and emergency procedures.</p> <p>Mississippi needs to add "sealed sources" in 1.14.16(9) in order to meet the Compatibility Category C designation assigned to 10 CFR 39.63.</p>
47	1.14.29	39.69	N/A	C	<p>Radioactive contamination control</p> <p>In 1.14.29(2)(a) and (b), the requirements of 10 CFR 39.69(c) and Section 39.69(a), are addressed respectively. Mississippi omits the equivalent language of 10 CFR 39.69(b). Mississippi needs to add an equivalent provision to 10 CFR 39.69(b).</p> <p>Mississippi needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR 39.69.</p>
48	1.3.9(7)	40.36 (a), (b), (d), & (f)	N/A	H&S	<p>Financial assurance and recordkeeping for decommissioning</p> <p>Mississippi omits equivalent language to 10 CFR 40.36(a) and (b).</p> <p>Mississippi needs to add an equivalent provision to 10 CFR 40.36(a) and (b) in order to meet the Category H&S designation assigned to 10 CFR 40.36(a) and (b).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
49	N/A	70.4	N/A	A	<p>Definitions: Acute</p> <p>Mississippi's regulation omits an equivalent definition of Acute in their regulations.</p> <p>Mississippi needs to add the equivalent definition of Acute in order to meet the Compatibility Category A designation assigned to 10 CFR 70.4 Definitions: Acute.</p>
50	1.3.6(7)	70.19	N/A	C	<p>General license for calibration or reference sources</p> <p>In 1.3.6(7)(a), Mississippi needs to insert the reference "1.3.12(6)" after "1.3.6(7)(d) and (e)."</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category C designation assigned to 10 CFR 70.19.</p>
51	1.13.2(13)	71.4	N/A	B	<p>Definition: Low Specific Activity (LSA) material</p> <p>The codification used by Mississippi for the definition of LSA material is incorrect. Instead of including LSA-II and LSA-III as two of the three LSA groups in the definition of LSA material in 1.13(2)(13), Mississippi lists them as separate terms in their definitions.</p> <p>Mississippi must correct the codification in 1.13.2 (13) to list the current 1.13.2(14) and 1.13.2(15) under the definition of LSA materials. Mississippi could reference 1.13.2(14) and 1.13.2(15) under the definition of 1.13.2(13) if Mississippi wishes to keep the codification as it is.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71.4 Definitions: Low Specific Activity (LSA) material.
52	1.13.2(26)	71.4	N/A	B	<p>Definition: Surface Contaminated Object (SCO)</p> <p>The codification used by Mississippi for the definition of SCO is incorrect. Instead of including SCO-I and SCO-II as the two SCO groups in the definition of SCO in 1.13(2)(26), Mississippi lists them as separate terms in their definitions.</p> <p>Mississippi must correct the codification in 1.13.2 (27) to list the current 1.13.2(27) and 1.13.2(28) under the definition of SCO. Mississippi could reference 1.13.2(27) and 1.13.2(28) under the definition of 1.13.2(13) if Mississippi wishes to keep the codification as it is.</p> <p>Mississippi needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71.4 Definitions: Surface Contaminated Object.</p>
53	N/A	150.3	N/A		<p>Definitions: Offshore waters</p> <p>Mississippi omits an equivalent definition of Offshore waters in their regulations.</p> <p>Mississippi needs to add an equivalent definition of Offshore waters in order to meet the Compatibility Category B designation assigned to 10 CFR 150.3 Definitions: Offshore waters.</p>

STATE REGULATION STATUS

State: Mississippi

Tracking Ticket Number: 12-30
Date: July 9, 2013

[7 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 (Superceded by 1997-5)	01/10/1994	Final ¹ 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 (Superceded 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 ¹ 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 ¹ ML010590507	No Comments 11/16/2001 ML013230431	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superceded by 2002-2)	01/27/1995	Final ¹ 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 ¹ 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 ¹ 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 ⁱⁱ	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 ¹ 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 ¹ 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 ¹ 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 ¹ ML010590507	No Comments 11/16/2001 ML013230431	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323	06/30/1998	Final ¹ 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
	(Superseded by 1997-5)				
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19, 20 60 FR 36038	08/14/1998	Final ¹ 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 ¹ ML010590507	No Comments 11/16/2001 ML013230431	
1995-7	Medical Administration of Radiation and Radioactive Materials Parts 20, 35 60 FR 48623 (Superseded 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 (Superseded by 2004-1)	04/01/1999			
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 ¹ 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 ¹ 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 ¹ ML010590507	No Comments 11/16/2001 ML013230431	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20, 35 62 FR 4120	05/29/2000	Final ¹ ML010590507	No Comments 11/16/2001 ML013230431	
1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 (Superseded by 2004-1)	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 ¹ 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 ¹ 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 ¹ 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 ¹ 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 (Superseded by 2002-2)	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.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Final ML091540220	No Comments 07/21/2009 ML091670024	
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	Final ¹ 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 ¹ 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 ¹ 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	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
*2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, 32 65 FR 79162	02/16/2004	Final ML12275A387	Comments 07/09/2013 ML13002A239	
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	Final ML12275A387	No Comments 07/09/2013 ML13002A239	
*2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	Final ML12275A387	Comments 07/09/2013 ML13002A239	
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	Final ML12275A387	Comments 07/09/2013 ML13002A239	
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	Final ML 12275A387	No Comments 07/09/2013 ML 13002A239	
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	Final ML 12275A387	No Comments 07/09/2013 ML 13002A239	
*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	Final ML 12275A387	Comments 07/09/2013 ML 13002A239	
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			
2013-1	Physical Protection of Byproduct Material, 10 CFR Parts 20, 30, 32, 33, 34, 35, 36, 37, 39, and 71 78 FR 16922	03/19/2016			

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
2013-2	Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions, 10 CFR Parts 30, 40, and 70 78 FR 32310	08/27/2016			
*N/A	Various provisions - renumbering of State regulations	N/A	Final ML 12275A387	Comments 07/09/2013 ML 13002A239	

ⁱ 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.

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