



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 27, 2017

Debra G. Shults, Director
Department of Environment and Conservation
Division of Radiological Health
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Dear Ms. Shults:

We have reviewed the final revisions to the Tennessee State Regulations for Protection Against Radiation Chapters 0400-20-10 and 0400-20-13, received by our office on October 12, 2017. These regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) rules and the requirements of Regulation Amendment Tracking System Identification Numbers (RATS IDs) 2011-1, 2012-4, and 2013-1 as identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with Andrew Holcomb on November 21, 2017.

As a result of our review, we have five 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. 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 Nuclear Material Safety and Safeguards (NMSS) 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 NMSS Procedure SA-201, "Review of State Regulatory Requirements," please highlight the location of any changes made by Tennessee, in response to our comments, and provide a copy to Division of Material Safety, State, Tribal, and Rulemaking Programs, NMSS. The SRS Data Sheet summarizes our knowledge of the status of other Tennessee 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 NMSS State Communication Portal: <https://scp.nrc.gov/rulemaking.html>.

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 Michelle Beardsley, State Regulation Review Coordinator, at (267) 884-2305 (Michelle.Beardsley@nrc.gov) or Farrah Gaskins at (610) 337-5143 (Farrah.Gaskins@nrc.gov).

Sincerely,

/RA Paul Michalak for/

Kevin Williams, Deputy Director
Division of Material Safety, State, Tribal
and Rulemaking Programs
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. Compatibility Comments
2. Tennessee SRS Data Sheet

COMPATIBILITY COMMENTS ON TENNESSEE FINAL REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	N/A	20.1406(c) 30.34(b) 40.46, 70.36	2011-1	C C C C	<p>Minimization of contamination</p> <p>Terms and conditions of licenses</p> <p>Inalienability of licenses</p> <p>Tennessee did not submit their equivalent regulations to 10 CFR 20.1406(c), 30.34(b), 40.46, or 70.36 for review.</p> <p>Tennessee needs to provide for review the above equivalent regulations that meet the essential objectives of 10 CFR 20.1406(c), 30.34(b), 40.46, and 70.36 in order to meet the Compatibility Category C designation assigned to 10 CFR 20.1406(c), 30.34(b), 40.46, 70.36.</p> <p>COMMENT STANDS FROM NRC LETTER DATED JULY 1, 2015/ML15160A263</p>
2	0400-20-10-12(4)(b)1	30.35(e), 40.36(d), 70.25(e)	2011-1	H&S	<p>Financial assurance and recordkeeping for decommissioning</p> <p>Tennessee's regulation did not include equivalent requirements to 10 CFR 30.35(e), 40.36(d) and 70.25(e) for the submittal of a decommissioning funding plan.</p> <p>Tennessee needs to provide for review the above equivalent regulations that meet the health and safety objectives of 10 CFR 30.35(e), 40.36(d) and 70.25(e) in order to meet the Compatibility Category H&S designation assigned to 10 CFR 30.35(e), 40.36(d) and 70.25(e).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					COMMENT STANDS FROM NRC LETTER DATED JULY 1, 2015/ML15160A263
3	0400-20-10-.13(16)	32.57 32.58 32.59 32.102	2012-4	B	<p>Calibration or reference sources containing americium-241 or radium-226;</p> <p>Leak testing of each source;</p> <p>Schedule C—prototype tests for calibration or reference sources containing americium 241 or radium 226</p> <p>Tennessee needs to remove 0400-20-10-.13(16) in its entirety since NRC regulations do not contain provisions for plutonium sources.</p> <p>Tennessee needs to completely remove 0400-20-10-.13(16) as described above to meet the Compatibility Category B designation assigned to 10 CFR 32.57(e), 32.58, 32.59, and 32.102.</p>
4	0400-20-10-.04(6)(b)	30.19	2012-4	B	<p>Self-luminous products containing tritium, krypton 85, or promethium 147</p> <p>Tennessee references the wrong regulation in 0400-20-10-.04(6)(b). It states "...should apply for license under 10 CFR 32.22 and for a certificate of registration in accordance with 10 CFR 21.210." It should be "in accordance with 10 CFR 32.210".</p> <p>Tennessee should correct the reference to 32.210 as described above to meet the Compatibility Category B designation assigned to 10 CFR 30.19.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
5	0400-20-10-.04(5)(a-b)	30.20	2012-4	B	<p>Gas and aerosol detectors containing byproduct material</p> <p>Tennessee regulations state, “exempt from these rules”, and does not include, “from parts 19, 20, 21, and 30 through 36 and 39”.</p> <p>Tennessee needs to insert their equivalent requirements to 10 CFR Parts 19, 20, 21, and 30 through 36, and 39 in this statement.</p> <p>Tennessee needs to make the change as described above to meet the Compatibility Category B designation assigned to 10 CFR 30.20.</p>

STATE REGULATION STATUS

State: Tennessee

Tracking Ticket Number: 18-01

Date: 11/27/2017

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

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1991-1	Safety Requirements for Radiographic Equipment Part 34 55 FR 843 (Superceded by 1997-5)	01/10/1994	Not Required	Not Required	Tennessee 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	Tennessee 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 ML062130090	No Comments 09/01/2006 ML062490270	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40 and 70 56 FR 64980	10/15/1994	Final	No Comments 12/02/1996	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superceded by 2002-2)	01/27/1995			
1992-2	Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions Parts 30 and 35 57 FR 45566	none	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1993-1	Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites] Parts 30 and 40 58 FR 39628	10/25/1996	Final ML113550088	No Comments 02/03/2012 ML120090004	1997-current LBR adequate per MRB
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Not Applicable ¹	Not Applicable	Tennessee 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	Final	No Comments 12/02/1996	
1994-1	Self-Guarantee as an Additional Financial Mechanism Parts 30, 40 and 70 58 FR 68726; 59 FR 1618	none	Not Required	Not Required	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	Tennessee does not have the authority to regulate this material under its Agreement.
1994-3	Timeliness in Decommissioning Material Facilities Parts 30, 40 and 70 59 FR 36026	08/15/1997	Final ML071560152	No Comments 07/11/2007 ML071920135	
1995-1	Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use Parts 30, 32 and 35 59 FR 61767; 59 FR 65243; 60 FR 322	01/01/1998	Final ML020320229	No Comments 02/01/2002 ML020360223	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final ML020320229	No Comments 02/01/2002 ML020360223	
1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20 and 61 60 FR 15649; 60 FR 25983	03/01/1998	Final ML020320229	No Comments 02/01/2002 ML020360223	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 (Superceded by 1997-5)	06/30/1998	Final ML020320229	No Comments 02/01/2002 ML020360223	Tennessee has adopted Final Regulations equivalent to RATS ID: 1997-5.
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19 and 20 60 FR 36038	08/14/1998	Final ML020320229	No Comments 02/01/2002 ML020360223	
1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40 and 70 60 FR 38235	11/24/1998	Final ML113550088	No Comments 02/03/2012 ML120090004	
1995-7	Medical Administration of Radiation and Radioactive Materials Parts 20 and 35 60 FR 48623 (Superceded by 2002-2 and 2005-2)	10/20/1998	Final ML040980538	No Comments 05/06/2004 ML041270512	

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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 ML020320229	No Comments 02/01/2002 ML020360223	
1996-2	One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses Parts 30, 40 and 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 and 70 61 FR 24669	06/17/1999	Final ML113550088	No Comments 02/03/2012 ML120090004	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final ML020320229	No Comments 02/01/2002 ML020360223	
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 ML020320229	No Comments 02/01/2002 ML020360223	
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20 and 35 62 FR 4120	05/29/2000	Final ML020320229	No Comments 02/01/2002 ML020360223	

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1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 (Superceded 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 and 150 62 FR 28947	06/27/2000	Final ML020320229	No Comments 02/01/2002 ML020360223	
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40 and 70 62 FR 39057	08/20/2000	Final ML113550088	No Comments 02/03/2012 ML120090004	
1997-7	Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon-14 Urea Part 30 62 FR 63634	01/02/2001	Final ML020320229	No Comments 02/01/2002 ML020360223	
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71 and 150 63 FR 1890; 63 FR 13773	02/12/2001	Final ML020320229	No Comments 02/01/2002 ML020360223	
1998-2	Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees Parts 30, 40 and 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 (Superceded 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)

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1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Final ML040980538	No Comments 05/06/2004 ML041270512	
1998-5	Minor Corrections, Clarifying Changes, and a Minor Policy Change Parts 20, 32, 35, 36 and 39 63 FR 39477; 63 FR 45393	10/26/2001	Final ML062130094	No Comments 09/01/2006 ML062490270	
1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	Final ML062130094	No Comments 09/01/2006 ML062490270	
1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	Not Applicable	Not Applicable	Tennessee 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 ML062130094	No Comments 09/01/2006 ML062490270	

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2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	Final ML062130094	No Comments 09/01/2006 ML062490270	
2000-2	New Dosimetry Technology Parts 34, 36 and 39 65 FR 63750	01/08/2004	Final ML062130094	No Comments 09/01/2006 ML062490270	
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31 and 32 65 FR 79162	02/16/2004	Final ML12255A011	No Comments 09/26/2012 ML12257A288	
2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	Final ML071560152	No Comments 07/11/2007 ML071920135	
2002-2	Medical Use of Byproduct Material Parts 20, 32 and 35 67 FR 20249	10/24/2005	Final ML100840107	No Comments 05/03/2010 ML100980120	
2003-1	Financial Assurance for Materials Licensees Parts 30, 40 and 70 68 FR 57327	12/03/2006	Legally binding requirement ML101580029	No Comments 08/18/2010 ML102010156	
2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	Final ML113550088	No Comments 02/03/2012 ML120090004	

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2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	Final ML113550096 License Condition ML081260292	No Comments 02/03/2012 ML120090004 No Comments 05/13/2008 ML081340237	
2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	Final ML100840107	No Comments 05/03/2010 ML100980120	
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	License Condition ML052590043	No Comments 09/19/2005 ML052630474	
2006-1	Minor Amendments Parts 20, 30, 32, 35, 40 and 70 71 FR 15005	03/27/2009	Final ML100840107	No Comments 05/03/2010 ML100980120	
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 ¹	Not Applicable	Tennessee does not have any licensees subject to these regulations.
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	Final ML100840107 License Condition ML082880040	No Comments 05/03/2010 ML100980120 No Comments 10/21/2008 ML082880288	

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2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010	Final ML100840107	No Comments 05/03/2010 ML100980120	
2007-2	Exemptions From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements Parts 30, 31, 32 and 150 72 FR 58473	12/17/2010	Final ML113550096	No Comments 02/03/2012 ML120090004	
2007-3	Requirements for Expanded Definition of Byproduct Material Parts 20, 30, 31, 32, 33, 35, 61 and 150 72 FR 55864	11/30/2010	Final ML113550096	No Comments 02/03/2012 ML120090004	
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 ML080840479	No Comments 04/14/2008 ML081050443	
2008-1	Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19 and 20 72 FR 68043	02/15/2011	Final ML113550096	No Comments 02/03/2012 ML120090004	
2009-1	Medical Use of Byproduct Material – Authorized User Clarification Part 35 74 FR 33901	09/28/2012	Final ML113550096	No Comments 02/03/2012 ML120090004	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
* 2011-1	Decommissioning Planning Parts 20, 30, 40 and 70 76 FR 35512	12/17/2015	Proposed ML15149A063 Final ML17285A382	Comments 07/01/2015 ML15149A061 Comments 11/27/2017 ML17285A381	
2011-2	Licenses, Certifications, and Approvals for Materials Licensees Parts 30, 36, 39, 40, 70 and 150 76 FR 56951	11/14/2014	Proposed ML14059A053 Final ML16074A346	No Comments 04/30/2014 ML14059A044 No Comments 04/08/2016 ML16074A342	
2012-1	Change of Compatibility of Parts 31.5 and 31.6 (See RATS ID: 2001-1 for Rule text) 77 FR 3640	01/25/2015	Final ML12255A011	No Comments 09/26/2012 ML12257A288	
2012-2	Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste Part 71 77 FR 34194	08/10/2015	Proposed ML14059A053 Final ML16047A346	Comments 04/30/2014 ML14059A044 Comment 04/08/2016 ML16047A342	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2012-3	Technical Corrections Parts 30, 34, 40 and 71 77 FR 39899	08/06/2015	Proposed ML14059A053 Final ML16047A346	No Comments 04/30/2014 ML14059A044 No Comments 04/08/2016 ML16047A342	
* 2012-4	Requirements for Distribution of Byproduct Material Parts 30, 31, 32, 40 and 70 77 FR 43666	10/23/2015	Proposed ML15118A549 Final ML17285A382	Comments 06/18/2015 ML15118A549 Comments 11/27/2017 ML17285A381	
* 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	Proposed ML15230A076 Proposed License Condition ML15292A555 Final ML17285A382	Comments 09/21/2015 ML15230A069 No Comments 11/03/2015 ML15292A553 No Comments 11/27/2017 ML17285A381	Part 37 only
2013-2	Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions, Parts 30, 40 and 70 78 FR 32310	08/27/2016	Final ML17244A699	Comments 10/25/2017 ML17244A677	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2015-1	Domestic Licensing of Special Nuclear Material – Written Reports and Clarifying Amendments Part 70 79 FR 57721, 80 FR 143	01/26/2018	Final ML17244A699	No Comments 10/25/2017 ML17244A677	
2015-2	Safeguards Information - Modified Handling Categorization, Change for Materials Facilities Parts 30, 37, 73 and 150 79 FR 58664, 80 FR 3865	01/28/2018	Final ML17244A699	No Comments 10/25/2017 ML17244A677	
2015-3	Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements Part 71 80 FR 33987	07/13/2018 *extended to 08/15/2020 See STC 17-060	Final ML17244A699	Comments 10/25/2017 ML17244A677	
2015-4	Miscellaneous Corrections, Parts 37 and 40 80 FR 45841	09/02/2018	Final ML17244A699	Comments 10/25/2017 ML17244A677	
2015-5	Miscellaneous Corrections, Parts 19, 20, 30, 32, 37, 40, 61, 70, 71 and 150 80 FR 74974	12/31/2018	Final ML17244A699	Comments 10/25/2017 ML17244A677	