October 3, 2013

Charles Maguire, Director Radioactive Materials Division Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711-3087

Dear Mr. Maguire:

We have reviewed the August 26, 2013, letter sent by you in response to the U.S. Nuclear Regulatory Commission (NRC) comment on revised Texas Commission on Environment Quality (TCEQ) rules dated August 13, 2013. These regulations were reviewed by comparison to the equivalent NRC rules in 10 CFR Parts 40 and 61 and our comment on the TCEQ assumed interest rate of 2 percent for the funding of long-term care for uranium milling facilities (30 TAC 336.1129). We discussed our review of the regulations with you on September 25, 2013.

As a result of our review, our one comment stands from the August 13, 2013, letter. Please note that we have limited our review to regulations required for compatibility and/or health and safety. The adoption of a 2 percent assumed interest rate for low-level radioactive waste disposal sites may be reasonable; however, it is inconsistent with the NRC regulatory requirements for long-term care funding for uranium milling disposal sites. The Compatibility Category C designation requires the State to adopt requirements to be equivalent to or more stringent than the NRC requirements. The 2 percent rate is less stringent than the more conservative 1 percent rate in the NRC regulations. The 2 percent rate does not meet the Category C compatibility designation.

Since the timeframes for the use of the funding are different for uranium milling disposal longterm care and the institutional period for a low-level waste disposal facility, the assumed interest rates are different. TCEQ needs to adopt an assumed interest rate for uranium mills that is different from the low-level waste disposal site criteria so that the TCEQ program can have financial regulations that meet the Compatibility Category C designation for uranium mills in the State of Texas.

We request that when you revise your regulations to address our comment, 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 Texas, in response to our comment, and provide a copy to Division of Materials Safety and State Agreements, FSME.

C. Magurie

The SRS Data Sheet summarizes our knowledge of the status of other TCEQ 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: <a href="http://nrc-stp.ornl.gov/rulemaking.html">http://nrc-stp.ornl.gov/rulemaking.html</a>.

If you have any questions regarding the comment, 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 Dennis Sollenberger at (301) 415-2819 (dennis.sollenberger@nrc.gov).

Sincerely,

## /RA/

Christian E. Einberg, Acting Deputy Director Division of Materials Safety and State Agreements Office of Federal and State Materials and Environmental Management Programs

Enclosures:

- 1. Compatibility Comment Table
- 2. TCEQ SRS Data Sheet

## COMPATIBILITY COMMENT ON TEXAS FINAL REGULATIONS

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
	Part 40 Appendix A	N/A	C	Appendix A: Criterion 10 Texas Commission on Environmental Quality (TCEQ) revised its regulation in §336.1127 to change the assumed annual real interest rate to 2.0 percent for long- term care funds for uranium mill sites. NRC's regulations use a 1.0 percent assumed annual real interest rate. The lower assumed annual real interest rate is a more conservative approach to ensure there are sufficient funds to cover the annual costs of site care, surveillance, and maintenance during long-term care. These sites are generally turned over to the U.S. Department of Energy (DOE) for long-term care, conducted under an NRC license. Sufficient funding is essential for adequate care, surveillance, and maintenance of the site after DOE takes ownership. The 2.0 percent interest rate could underfund DOE's long-term care activities at the site. TCEQ needs to adopt the 1.0 percent assumed annual real interest rate established in Criterion 10 of 10 CFR 40 Appendix A to meet the essential objective of this requirements and to meet the Compatibility Category C assigned to 10 CFR 40 Appendix A, Criterion 10.

## STATE REGULATION STATUS

State: Texas Commission on Environmental Quality [ 1 amendment(s) reviewed is identified by a \* at the beginning of the equivalent NRC requirement.] Tracking Ticket Number: 13-35 Date: October 3, 2013

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 ( <b>Superceded by 1997-5)</b>	01/10/1994	Not Applicable	Not Applicable	TX DSHS Responsibility
1991-2	ASNT Certification of Radiographers Part 34 56 FR 11504 ( <b>Superceded by 1997-5)</b>	none	Not Applicable	Not Applicable	TX DSHS Responsibility
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 11/06/1997	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40, 70 56 FR 64980	10/15/1994	Final	No Comments 01/07/1998	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superceded by 2002-2)	01/27/1995	Not Applicable	Not Applicable	TX DSHS Responsibility

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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	No Comments 01/07/1998	
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Not Applicable	Not Applicable	TX DSHS Responsibility
1993-3	Definition of Land Disposal and Waste Site QA Program Part 61 58 FR 33886	07/22/1996	Final	No Comments 01/07/1998	
1994-1	Self-Guarantee as an Additional Financial Mechanism Parts 30, 40, 70 58 FR 68726; 59 FR 1618	none	Final	No Comments 01/07/1998	
1994-2	Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards Part 40 59 FR 28220	07/01/1997	Final	No Comments 01/07/1998	

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1994-3	Timeliness in Decommissioning Material Facilities Parts 30, 40, 70 59 FR 36026	08/15/1997	Final	No Comments 01/07/1998	
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	Not Applicable	Not Applicable	TX DSHS Responsibility
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final	No Comments 01/07/1998	
1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20, 61 60 FR 15649; 60 FR 25983	03/01/1998	Final	No Comments 01/07/1998	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 (Superceded by 1997-5)	06/30/1998	Not Applicable	Not Applicable	TX DSHS Responsibility
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19, 20 60 FR 36038	08/14/1998	Final	No Comments 01/07/1998	

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1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40, 70 60 FR 38235	11/24/1998	Final	No Comments 01/07/1998	
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	Not Applicable	Not Applicable	TX DSHS Responsibility
1996-1	Compatibility with the International Atomic Energy Agency Part 71 60 FR 50248; 61 FR 28724 (Superceded by 2004-1)	04/01/1999	Not Applicable	Not Applicable	TX DSHS Responsibility
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	No Comments 01/07/1998	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final ML012610092	No Comments 11/26/01 ML013330250	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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	Not Applicable	Not Applicable	TX DSHS Responsibility
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20, 35 62 FR 4120	05/29/2000	Not Applicable		TX DSHS Responsibility
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, 150 62 FR 28947	06/27/2000	Not Applicable	Not Applicable	TX DSHS Responsibility
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40, 70 62 FR 39057	08/20/2000	Final ML063450071	No Comments 01/09/2007 ML070090204	
1997-7	Exempt Distribution of a Radioactive Drug Containing One Micro curie of Carbon-14 Urea Part 30 62 FR 63634	01/02/2001	Not Applicable	Not Applicable	TX DSHS Responsibility
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71,	02/12/2001	Final ML063450071	No comments 1/09/07 ML070090204	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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 (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)
1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Not Applicable	Not Applicable	TX DSHS Responsibility
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 ML012610092	No Comments 11/26/2001 ML013330250	
1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	Final ML063450071	No Comments 01/09/2007 ML070090204	
*1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	R <sup>1</sup> ML13240A300	Comments 10/03/2013 ML13240A299	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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 ML012610092	No Comments 11/26/2001 ML013330250	
2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	Not Applicable	Not Applicable	TX DSHS Responsibility
2000-2	New Dosimetry Technology Parts 34, 36, 39 65 FR 63750	01/08/2004	Not Applicable	Not Applicable	TX DSHS Responsibility
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, 32 65 FR 79162	02/16/2004	Not Applicable	Not Applicable	TX DSHS Responsibility
2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	Final ML063450071	No Comments 01/09/2007 ML070090204	

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	Not Applicable	Not Applicable	TX DSHS Responsibility
2003-1	Financial Assurance for Materials Licensees Parts 30, 40, 70 68 FR 57327	12/03/2006	Final ML063450071	No Comments 01/09/2007 ML070090204	
2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	Not Applicable	Not Applicable	TX DSHS Responsibility
2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	Not Applicable	Not Applicable	TX DSHS Responsibility
2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	Not Applicable	Not Applicable	TX DSHS Responsibility
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	Proposed ML111880217 License Condition ML052240226	Comments 08/18/2011 ML112060277 No Comments 12/12/2005 ML053420404	
2006-1	Minor Amendments Parts 20, 30, 32, 35, 40 and 70 71 FR 15005	03/27/2009			

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	Not Applicable	Not Applicable	TX DSHS Responsibility
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	Proposed ML111880217	Comments 08/18/2011 ML112060277	Note: Because of the upcoming licensee for a LLW site, TCEQ is adopting this provision prior to the LLW site becoming operational and receiving waste.
2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010	Not Applicable	Not Applicable	TX DSHS Responsibility
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	Not Applicable	Not Applicable	TX DSHS Responsibility
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 ML111880217	Comments 08/18/2011 ML112060277	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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 ML082100350	No Comments 09/11/2008 ML082410019	
2008-1	Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19, 20 72 FR 68043	02/15/2011	Proposed ML111880217	No Comments 08/18/2011 ML112060277	
2009-1	Medical Use of Byproduct Material – Authorized User Clarification Part 35 74 FR 33901	09/28/2012			TX DSHS Responsibility
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			TX DSHS Responsibility

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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			
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	Compact Waste Disposal Facility and Commingling of Waste Part 61	N/A	Final ML121230326	No Comments 06/29/2012 ML12152A150	
*N/A	10 CFR Part 40	N/A	R <sup>1</sup> ML13240A300	Comments 10/03/2013 ML13240A299	
N/A	Exemption for Radioactive Substances from Disposal Requirements	N/A	Final ML13176A107	No Comments 08/15/2013 ML13176A104	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
N/A	Legislation on Production Area Authorizations and Compact Waste	N/A	Final ML13178A064	No Comments 08/23/2013 ML13178A059	

<sup>1</sup>R Stands for proposed revisions to a final rule