

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 29, 2014

Stephen F. Tarlton, Manager Radiation Control Program Hazardous Materials and Waste Management Division 4300 Cherry Creek Drive South Denver, CO 80246

Dear Mr. Tarlton:

We have reviewed the modifications to Colorado's "Colorado Radiation Control Act" received by our office on April 17, 2014, and May 12, 2014. The legislation was reviewed by comparison to 10 CFR 40, "Domestic Licensing of Source Material"; 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste"; and the Suggested State Legislation (SSL) on "Radiation Control," published 1983 by the Council of State Governments.

Please note that we have limited our review to program elements required for compatibility and/or health and safety and the identification of program elements that create conflicts, duplications or gaps in the orderly pattern of regulations on a nationwide basis (See the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs). We note that Colorado became an Agreement State on January 1, 1968 and amended their Agreement to include Section 11e.(2) material of the Atomic Energy Act on April 20, 1982. During the negotiations for both the Agreement and the amendment to the Agreement, NRC reviewed Colorado's enabling legislation.

Based on our review, we have one comment/concern about the legislation in addition to the previous comments provided in our October 24, 2011, and on January 16, 2014, letters. We discussed our review of the legislation with James Jarvis on May 28, 2014.

We offer the following comment:

In Section 1 under 25-11-107 it states, "Under no circumstances shall remediation be deemed complete until all groundwater wells affected by any release associated with the site or facility are restored to at least the numeric groundwater standards as established by the Water Quality Control Commission that apply to the historic uses of the wells. The licensee shall remediate any release affecting groundwater wells in the most expedited manner reasonably possible using best available active treatment and groundwater monitoring technologies."

It is unclear what is meant by phrase "numeric groundwater standards as established by the Water Quality Control Commission that apply to the historic uses of the wells." This phrase needs to be properly defined or removed from the legislation. In adopting this legislation and any implementing regulations, the State needs to consider the requirements of its 274b. Agreement with the Nuclear Regulatory Commission. The 274b. Agreement with Colorado requires the State to comply with Section 274o. In Section 274o., it states that a State shall require compliance with standards which shall be adopted by the State for the protection of the public health, safety, and the environment from hazards associated with such material which are equivalent, to the extent practicable, or more stringent than, standards adopted and enforced by the Commission for the same purpose.

In accordance with 274o, the State may adopt alternatives to the requirements adopted and enforced by the Commission for the same purpose if, after notice and opportunity for public hearing, the Commission determines that such alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission. In adopting any alternative standard, the State must submit and get approval from the NRC and the alternative standard may not preclude a practice (uranium milling).

We recommend that you address the comment above concerning the authority provided to the Department under the 274b. agreement with NRC in addition to the comments outlined in the October 24, 2011(Agencywide Documents and Access Management System (ADAMS) Number ML112630471), and January 14, 2014(ADAMS Number ML13353A092), letters. The State Regulation Status (SRS) Data Sheet summarizes our knowledge of the status of other Colorado regulations and legislation, 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.

S. Tarlton -3-

If you have any questions regarding the comments, please contact Stephen Poy at 301-415-7135 (Stephen.Poy@nrc.gov) or Kathleen Schneider, State Regulation Review Coordinator at 301-415-2320 (Kathleen.Schneider@nrc.gov).

Sincerely,

/RA/

John M. Moses, Acting Deputy Director Division of Materials Safety and State Agreements Office of Federal and State Materials and Environmental Management Programs

Enclosure: Colorado SRS Data Sheet

STATE REGULATION STATUS

State: Colorado Tracking Ticket Number: 14-22 [Revised Legislation reviewed is identified by a * Date: May 29, 2014

[Revised Legislation 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	Comments 05/29/1997	Colorado 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	Colorado has adopted Final Regulations equivalent to RATS ID 1997-5.
1991-3	Standards for Protection Against Radiation Part 20 56 FR 23360; 56 FR 61352; 57 FR 38588; 57 FR 57877; 58 FR 67657; 59 FR 41641; 60 FR 20183	01/01/1994	Final	No Comments 08/18/1997	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40, 70 56 FR 64980	10/15/1994	Final	Comments 05/29/1997	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 (Superceded by 2002-2)	01/27/1995	Not Required	Not Required	Colorado has adopted Final Regulations equivalent with 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.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1993-1	Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites] Parts 30, 40 58 FR 39628	10/25/1996	Final	No Comments 06/14/2000	
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Final	No Comments 05/29/1997	
1993-3	Definition of Land Disposal and Waste Site QA Program Part 61 58 FR 33886	07/22/1996	Final ML043290167	No Comments 01/05/2005 ML050050164	
1994-1	Self-Guarantee as an Additional Financial Mechanism Parts 30, 40, 70 58 FR 68726; 59 FR 1618	none	Final	No Comments 06/14/2000	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	Final ML043290167	No Comments 01/05/2005 ML050050164	
1994-3	Timeliness in Decommissioning Material Facilities Parts 30, 40, 70 59 FR 36026	08/15/1997	Final	No Comments 06/14/2000	
1995-1	Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use Parts 30, 32, 35 59 FR 61767; 59 FR 65243; 60 FR 322	01/01/1998	Final	No Comments 06/14/2000	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final	No Comments 06/14/2000	
1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20, 61 60 FR 15649; 60 FR 25983	03/01/1998	Final ML043290167	No Comments 01/05/2005 ML050050164	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 (Superceded by 1997-5)	06/30/1998	Final	No Comments 06/14/2000	Colorado has adopted Final Regulations equivalent to RATS ID 1997-5.
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19, 20 60 FR 36038	08/14/1998	Final ML080770375	No Comments 05/02/2008 ML081221012	
1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40, 70 60 FR 38235	11/24/1998	Final ML043290167	No Comments 01/05/2005 ML050050164	
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	Final ML043290167	No Comments 01/05/2005 ML050050164	Colorado has adopted Final Regulations equivalent to RATS IDs: 2002-2 and 2005-2.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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	No Comments 03/22/2001	Colorado has 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 ML043290167	No Comments 01/05/2005 ML050050164	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final	No Comments 08/08/2000	
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	No Comments 06/14/2000	
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20, 35 62 FR 4120	05/29/2000	Final	No Comments 06/14/2000	

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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	Colorado has adopted Final Regulations equivalent to RATS ID 2004-1. (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	No Comments 08/08/2000	
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40, 70 62 FR 39057	08/20/2000	Final	No Comments 07/13/1999	
1997-7	Exempt Distribution of a Radioactive Drug Containing One Micro curie of Carbon-14 Urea Part 30 62 FR 63634	01/02/2001	Final	No Comments 06/14/2000	
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71, 150 63 FR 1890; 63 FR 13773	02/12/2001	Final ML010380248	No Comments 09/17/2001 ML012630207	
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)

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
					Colorado has adopted Final Regulations equivalent to RATS ID: 2002-2.
1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Final	No Comments 08/08/2000	
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 ML043290167	No Comments 01/05/2005 ML050050164	
1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	Final ML042440167	No Comments 01/05/2005 ML050050164	
1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	Final ML020320440	No Comments 03/28/2002 ML020880468	
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.

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1999-3	Respiratory Protection and Controls to Restrict Internal Exposure Part 20 64 FR 54543; 64 FR 55524	02/02/2003	Final ML043290167	No Comments 01/05/2005 ML050050164	
2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	Final ML051580379	No Comments 07/11/2005 ML051930014	
2000-2	New Dosimetry Technology Parts 34, 36, 39 65 FR 63750	01/08/2004	Final ML043290167	No Comments 01/05/2005 ML050050164	
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, 32 65 FR 79162	02/16/2004	R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	
2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	Final ML043290167	No Comments 01/05/2005 ML050050164	
2002-2	Medical Use of Byproduct Material Parts 20, 32, 35 67 FR 20249	10/24/2005	Final ML 051580379	No Comments 07/11/2005 ML051930014	
2003-1	Financial Assurance for Materials Licensees Parts 30, 40, 70 68 FR 57327	12/03/2006	Final ML043290167	No Comments 01/05/2005 ML050050164	

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2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	Final ML072620303	Comments 10/15/2007 ML072900374	
2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	Final ML052010436	No Comments 08/05/2005 ML052220212	
2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	Final ML051580379	No Comments 07/11/2005 ML051930014	
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	License Condition ML052580384	No Comments 09/19/2005 ML052630557	
2006-1	Minor Amendments Parts 20, 30, 32, 35, 40 and 70 71 FR 15005	03/27/2009	R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	
2006-2	National Source Tracking System - Serialization Requirements Part 32 with reference to Part 20 Appendix E 71 FR 65685	02/06/2007	Final ML13176A122	No Comments 09/16/2013 ML13176A118	Part 20 only Colorado does not have any licensees subject to these regulations. (See SECY-95-112)
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	License Condition ML082730235 Final ML13176A122	No Comments 10/21/2008 ML082880091 No Comments 09/16/2013 ML13176A118	

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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	R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	
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	R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	
2007-3	07-3 Requirements for Expanded Definition of Byproduct Material Parts 20, 30, 31, 32, 33,	11/30/2010	Final ML121150500	No Comments 06/21/2012 ML12150A112	Part 35 only
	35, 61, 150 72 FR 55864		R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	Parts 30, 31, 32, 33, 61 & 150
			Final ML13176A122	No Comments 09/16/2013 ML13176A118	Part 20 only
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 ML081070079	No Comments 05/13/2008 ML081260713	
2008-1	Occupational Dose Records, Labeling Containers, and Total	02/15/2011	Final ML13162A626	No Comments 08/15/2013 ML13162A614	Definitions associated with RATS ID 2008-1 only
	Effective Dose Equivalent Parts 19, 20 72 FR 68043		Final ML13176A122	No Comments 09/16/2013 ML13176A118	Part 20 only

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 ML121150500	Comments 06/21/2012 ML12150A112	
2011-1	Decommissioning Planning Parts 20, 30, 40, 70 76 FR 35512	12/17/2015	Final ML13176A122 Proposed	No Comments 09/16/2013 ML13176A118 Comments	Part 20 only Parts 30, 40 & 70
			ML14023A707	03/26/2014 ML14023A698	1 and 66, 46 & 70
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	R ¹ ML14023A707	No Comments 03/26/2014 ML14023A698	
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			

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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	10 CFR 20.1003	N/A	Final ML13162A626	No Comments 08/15/2013 ML13162A614	
N/A	10 CFR Part 40	N/A	R ¹ ML13316A107	Comments 01/14/2014 ML13316A058	
N/A	Legislation	N/A	Final ML111080623	Comments 10/24/2011 ML112630034	
N/A	10 CFR Part 20.1403(a), 20.1901 and 20.2104	N/A	Final ML13176A122	No Comments 09/16/2013 ML13176A118	
*N/A	Revision to Radiation Control Act	N/A	Final ML14107A082	Comments 05/29/2014 ML14084A381	

¹ R stands for revisions to final rule