



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

November 19, 2014

Ms. Jennifer Opila, Manager
Radiation Control Program
Hazardous Materials and Waste
Management Division
4300 Cherry Creek Drive
South Denver, CO 80246

Dear Ms. Opila:

We have reviewed the final revision to the Colorado Rules and Regulations Pertaining to Radiation Control, 6 CCR 1007-1, Part 3, Licensing of Radioactive Materials, received by our office on September 4, 2014. These regulations were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules 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 James Jarvis on November 17, 2014.

As a result of our review, we have two 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 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 Colorado, in response to our comments, and provide a copy to Division of Material Safety, State, Tribal and Regulation Programs, Office of Nuclear Material Safety and Safeguards (NMSS). The SRS Data Sheet summarizes our knowledge of the status of other Colorado 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 website: <http://nrc-stp.ornl.gov/rulemaking.html>.

J. Opila

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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 Janine Katanic, State Regulation Review Coordinator, at (817) 200-1151 (janine.katanic@nrc.gov) or Stephen Poy at (301) 415-7135 (stephen.poy@nrc.gov).

Sincerely,

/RA/

Pamela J. Henderson, Deputy Director
Division of Material Safety, State, Tribal,
and Rulemaking Programs
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. Compatibility Comments
2. Colorado SRS Data Sheet

COMPATIBILITY COMMENTS ON COLORADO FINAL REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	3.9	Appendix A to Part 40 Criterion 9	2011-1	C	<p>Appendix A, Technical Criteria , Criterion 9</p> <p>Colorado omits an equivalent paragraph to Appendix A to Part 40 Criterion 9 (a) from their regulations.</p> <p>Colorado omits an equivalent paragraphs to Appendix A to Part 40 Criterion 9 (d)-(i) from their regulations.</p> <p>Colorado needs to make the above change in order to meet the Compatibility Category C designation assigned to 10 CFR Appendix A to Part 40 Criterion 9.</p> <p>COMMENT STANDS</p>
2	3.9.5.10	Part 40, Appendix A, <i>II. Financial Criteria, Criterion 10</i>	N/A	C	<p>Appendix A, <i>II. Financial Criteria, Criterion 10</i></p> <p>In Section 3.9.5.10 (4), Colorado's regulations states, "The amount of funds to be provided by such long-term care warranties shall be based on Department-approved cost estimates and shall be enough that with an assumed six percent annual real interest rate, the annual interest earnings will be sufficient to cover to the annual costs of site surveillance by the Department, including reasonable administrative costs incurred by the Department, in perpetuity, subsequent to the termination of the license." In NRC's equivalent requirements in Criterion 10 states "...with an assumed 1 percent annual real interest rate..." The assumption of six percent in the above statement underestimates the</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>amount of funds set aside for long term care creating a situation of having insufficient funds to cover the costs of surveillance. This is least restrictive than the NRC requirements in Criterion 10 and should be revised to address the essential objective of this requirement.</p> <p>COMMENT STANDS.</p> <p>Colorado needs to adopt the above changes in order to meet the Compatibility Category C designation assigned to Appendix A.</p>

STATE REGULATION STATUS

State: Colorado
 [7 amendment(s) reviewed is identified by a *
 at the beginning of the equivalent NRC requirement.]

Tracking Ticket Number: 14-52
 Date: November 19, 2014

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.

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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	
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	

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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.
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	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
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	
1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 (Superseded 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	

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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) 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	

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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 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	Final ML14258B206	No Comments 11/19/2014 ML14301A452	
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	R ¹ ML14083A534	Comments 06/10/2014 ML14083A527	
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	Final ML14258B206	No Comments 11/19/2014 ML14301A452	
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	
*2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010	Final ML14258B206	No Comments 11/19/2014 ML14301A452	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Package	Outgoing Package	Notes
*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 ML14258B206	No Comments 11/19/2014 ML14301A452	
*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 ML121150500 Final ML14258B206 Final ML13176A122	No Comments 06/21/2012 ML12150A112 No Comments 11/19/2014 ML14301A452 No Comments 09/16/2013 ML13176A118	Part 35 only Parts 30, 31, 32, 33, 61 & 150 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 Effective Dose Equivalent Parts 19, 20 72 FR 68043	02/15/2011	Final ML13162A626 Final ML13176A122	No Comments 08/15/2013 ML13162A614 No Comments 09/16/2013 ML13176A118	Definitions associated with RATS ID 2008-1 only Part 20 only
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	

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*2011-1	Decommissioning Planning Parts 20, 30, 40, 70 76 FR 35512	12/17/2015	Final ML13176A122 Final ML14258B206	No Comments 09/16/2013 ML13176A118 Comments 11/19/2014 ML14301A452	Part 20 only Parts 30, 40 & 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	Final ML14258B206	No Comments 11/19/2014 ML14301A452	
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 ML14083A534	Comments 06/10/2014 ML14083A527	
2012-3	Technical Corrections Part 30, 34, 40 and 71 77 FR 39899	08/06/2015	Proposed ML14083A534	No Comments 06/10/2014 ML14083A527	Part 71 only
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	Proposed ML14083A534	No Comments 06/10/2014 ML14083A527	Part 71 only

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	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	
*N/A	10 CFR Part 40, Appendix A, Criterion 10	N/A	Final ML14258B206	Comments 11/19/2014 ML14301A452	

¹ R stands for revisions to final rule