



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

October 3, 2016

Mr. Ryan Schierman  
Program Manager of Natural Resources  
Wyoming Department of Environmental Quality  
Land Quality Division  
122 W. 25<sup>th</sup> Street  
Herschler 4W  
Cheyenne, WY 82002

Dear Mr. Schierman:

We have reviewed the proposed revisions to the Wyoming regulations Chapter 1, General Provisions, and Chapter 3, Radiation Protection Standards, received by our office on January 11, 2016. These regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) regulations rules in Title 10 of the Code of Federal Regulations (CFR) Part 20. Regulations that do not directly correspond to the Part 20 requirements will be reviewed when we receive regulatory packages showing their relationship to the other relevant provisions in the Title 10 of the CFR. We discussed our review of the regulations with you on September 28, 2016.

As a result of our review, we have 33 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. Under our current procedure, a finding that the Wyoming regulations meet the compatibility and health and safety categories of the equivalent NRC regulation may only be made based on a review of the final Wyoming regulations. However, we have determined that if your proposed regulations were adopted, 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 the proposed regulations are adopted and published as final regulations, 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 final changes, and provide a copy to Division of Material Safety, State, Tribal, and Rulemaking Programs, NMSS.

The State Regulation Status (SRS) Data Sheet summarizes our knowledge of the status of Wyoming 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>.

R. Schierman

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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 Michelle Beardsley, State Regulation Review Coordinator, at (267) 884-2305 ([Michelle.Beardsley@nrc.gov](mailto:Michelle.Beardsley@nrc.gov)) or Stephen Poy at (301) 415-7135 ([Stephen.Poy@nrc.gov](mailto:Stephen.Poy@nrc.gov)).

Sincerely,

**/RA/**

**PMichalak for PHenderson**

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

Enclosure:  
Compatibility Comments

R. Schierman

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Sincerely,

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

Enclosure:  
Compatibility Comments

DISTRIBUTION: SP08  
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OFFICE	ASPB	ASPB	OGC	ASPB:BC	MSTR:DD
NAME	SPoy	MBeardsley	JOlmstead via email	PMichalak	PMichalak for PHenderson
DATE	4/28/16	4/28/16	9/28/16	10/03/16	10/03/16

**ML16123A034**

**OFFICIAL RECORD COPY**

**Package ML16097A339**

## COMPATIBILITY COMMENTS ON WYOMING PROPOSED REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	Chapter 1, General Provisions, Sections 2-3	20.1001 20.1002	N/A	D	<p><b>Purpose and Scope</b></p> <p>The use of the terms source material, milling and byproduct material will need to be coordinated with the terms as provided in Wyoming's enabling legislation. For example, the NRC comments require revising the legislation to state WY is obtaining authority over "source material involved in milling and the resulting byproduct material as specified in the act." We recommend deleting reference to uranium "recovery" throughout the statute and regulations to be consistent with the AEA, UMTRCA and the NRC regulatory provisions that only use the term "milling".</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
2	Chapter 1, General Provisions, Section 4	N/A	N/A	D	<p><b>Incorporation by Reference</b></p> <p>In part a of Section 4, Wyoming makes reference to an Appendix A, Table 1-1. This table has not been provided by the State of Wyoming for review.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
3	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A	H&S	<p><b>Definitions: Byproduct Material</b></p> <p>Wyoming omits equivalent requirements for parts 1, 3, and 4 of the definition of byproduct material as defined in 10 CFR 20.1003.</p> <p>Wyoming will need to provide a definition that is consistent with the term byproduct material as defined</p>

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					<p>in the enabling legislation. In addition, Wyoming should also include language with regard to laboratory facilities. Specifically, the Wyoming definition of byproduct material shall exclude the regulation of laboratory facilities by the State of Wyoming.</p> <p>Wyoming needs to submit requirements that meet the essential objectives in order to meet the Compatibility Category H&amp;S designation assigned to 10 CFR 20.1003.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
4	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Commencement of Construction</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
5	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Construction</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>

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6	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Contamination</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
7	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Exclusive Use</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
8	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Exposure Rate</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
9	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Financial Assurance</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p>

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					<p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
10	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: License</b></p> <p>Wyoming has provided unique reciprocity requirements in their enabling legislation.</p> <p>Wyoming needs to provide a definition of License that addresses its unique reciprocity regulations.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
11	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Licensee</b></p> <p>Wyoming has provided unique reciprocity requirements in their enabling legislation.</p> <p>Wyoming needs to provide a definition of Licensee that addresses its unique reciprocity regulations.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
12	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Licensed Material</b></p> <p>Wyoming has provided unique reciprocity requirements in their enabling legislation.</p> <p>Wyoming needs to provide a definition of Licensed Material that addresses its unique reciprocity regulations.</p>

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					<b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
13	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<b>Definitions: Low Specific Activity (LSA) Material</b>  Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.  Wyoming will need to resubmit this definition as a part of other regulations as applicable.  <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
14	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<b>Definitions: Natural Uranium</b>  Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.  Wyoming will need to resubmit this definition as a part of other regulations as applicable.  <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
15	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<b>Definitions: Natural Thorium</b>  Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.  Wyoming will need to resubmit this definition as a part of other regulations as applicable.  <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>



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16	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Ore</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
17	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A	A	<p><b>Definitions: Quality Factor</b></p> <p>Wyoming omits references to a table equivalent to 1004(b).2 of 10 CFR 20.1004 in the provided definition of Quality Factor.</p> <p>Wyoming needs to submit the above in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1003, Definition- Quality Factor.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
18	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Radiation Level</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
19	Chapter 1, General Provisions, Section 5,	20.1003	N/A		<p><b>Definitions: Radioactivity</b></p> <p>Wyoming has provided this definition as a part of their regulations</p>

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	Definitions				<p>equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
20	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Recovery</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
21	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Residual Radioactive Material</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>

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22	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Roentgen</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
23	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Site</b></p> <p>Wyoming has provided a definition of site that conflicts with their definition of site boundary.</p> <p>Wyoming needs to provide a definition of site that takes into account its definition of site boundary. Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
24	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Test</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016,ML16035A488</b></p>

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25	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Uranium Fuel Cycle</b></p> <p>In Wyoming's definition of Uranium Fuel Cycle, it states, "Uranium fuel cycle does not include mining operations, handling of unrefined and unprocessed ore, operations at waste disposal sites, transportation of radioactive material in support of these operations, and the reuse or recovered non-uranium special nuclear and byproduct materials from the cycle."</p> <p>Wyoming needs to delete the phrase "handling of unrefined and unprocessed ore" from the above statement since some ores are considered source material and considered a part of the uranium fuel cycle which is not included in the Wyoming Agreement.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
26	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Uranium milling</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to provide a definition that is consistent with the term uranium milling as defined in the enabling legislation.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>

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27	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Waste</b></p> <p>This definition will need to refer to a definition of byproduct material that is compatible with NRC regulations.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
28	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Licensed Site</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
29	Chapter 1, General Provisions, Section 5, Definitions	20.1003	N/A		<p><b>Definitions: Operations</b></p> <p>Wyoming has provided this definition as a part of their regulations equivalent to 10 CFR Part 20.</p> <p>Wyoming will need to resubmit this definition as a part of other regulations as applicable.</p> <p><b>Comment stands from NRC letter 3/15/2016, ML16035A488</b></p>
30	Chapter 1, General Provisions, Section 7, Units of Exposure and Dose	20.1004	N/A	A	<p><b>Units of Radiation Dose</b></p> <p>Wyoming omits Table 1004(b).2 as referenced in 20.1004 and omits the equivalent requirements for 10 CFR 20.1004(c).</p> <p>Wyoming needs to submit the above in order to meet the Compatibility Category A designation assigned to</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					10 CFR 20.1004. <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
31	Chapter 1, General Provisions, Section 8, Units of Radioactivity	20.1005	N/A	A	<b>Units of Radioactivity</b>  Wyoming omits equivalent requirements for 10 CFR 20.1005(b).  Wyoming needs to submit equivalent requirements as stated above in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1005. <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
32	Chapter 3, Radiation Protection Standards	20.1301(c)	N/A	A	<b>Dose limits for individual members of the public</b>  Wyoming omits equivalent requirements for 10 CFR 20.1301(c).  Wyoming needs to submit equivalent requirements as stated above in order to meet the Compatibility Category A designation assigned to 10 CFR 20.1301(c). <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>
33	Chapter 3, Radiation Protection Standards	20.1601(f)	N/A	H&S	<b>Control of access to high radiation areas</b>  Wyoming omits equivalent requirements for 10 CFR 20.1601(f).  Wyoming needs to submit equivalent requirements as stated above in order to meet the Compatibility Category H&S designation assigned

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					to 10 CFR 20.1601(f). <b>Comment stands from NRC letter 3/15/2016, ML16035A488</b>

State: Wyoming

**STATE REGULATION STATUS**

Tracking Ticket Number: 16-63  
Date: 10/03/2016

Wyoming Submittal Description	Incoming Letter	Outgoing Package	Notes
Proposed Enabling Legislation Wyoming House Bill HB0027	ML15225A439 8/13/2015	Comments 9/28/2015 ML15225A433	
Revised Proposed Enabling Legislation Proposed Wyoming Statutes 35-11-103 and 35-11-2001 through -2004; Wyoming Statutes 16-3-101 through -106; Wyoming Statutes 6-5-101 through -108, -110, -111, -113, and -118; Wyoming Statutes 9-13-102 through -106, -108, and -109.	ML15324A391 11/19/2015	Comments 9/26/2016 ML15324A388	
Wyoming DEQ Proposed Regulations to 10 CFR Part 20 Chapter 1: General Provisions Chapter 3: Radiation Protection Standards	ML16014A133 1/11/2016  ML16097A348 4/5/2016	Comments 03/15/2016 ML16014A131  Comments 10/03/2016 ML16097A339	
Wyoming DEQ Proposed Regulations to 10 CFR Parts 19 and 71 Chapter 1: General Provisions Chapter 5: Notice, Instructions and Reports to Workers Chapter 9: Transportation of Licensed Material Chapter 10: Risk-Informed and Performance Based Licensing and Inspection	ML16095A093 03/29/2016	Comments 7/25/2016 ML16095A091	

Enclosure 2