

October 19, 2009

Ms. Ruth McBurney, Executive Director
Conference of Radiation Control
Program Directors, Inc.
1030 Burlington Lane, Suite 4B
Frankfort, KY 40601

Dear Ms. McBurney:

We have reviewed proposed Suggested State Regulations (SSR) Part U, "Licensing Requirements for Uranium and Thorium Processing." These regulations were received by our office on May 27, 2009 and were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules in 10 CFR Part 40 and Appendix A to 10 CFR 40. We discussed our review of the regulations with Sue Smith on October 8, 2009.

As a result of our review, we have 29 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 CRCPD Suggested State Regulations meet the compatibility and health and safety categories of the equivalent NRC regulation so that NRC can provide federal concurrence on the SSRs may only be made based on a review of the final SSR Part U regulations as approved by the CRCPD Executive Board. However, we have determined that if the proposed Part U 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 Federal and State Materials and Environmental Management Programs (FSME) Procedure [SA-200](#).

We request that when the proposed regulations are approved by the CRCPD Executive Board as final SSRs, a copy of the "approved" regulations be provided to us for review for federal concurrence. As requested in FSME Procedure [SA-201](#), "Review of State Regulatory Requirements," please highlight the final changes, and provide a copy to the Division of Materials Safety and State Agreements, FSME.

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 Kathleen Schneider, State Regulation Review Coordinator, at (301) 415-2320 (Kathleen.Schneider@nrc.gov) or Dr. Janine F. Katanic, CHP, at (817) 860-8151 (Janine.Katanic@nrc.gov).

Sincerely,

/RA/

Robert J. Lewis, Director
Division of Materials Safety and State Agreements
Office of Federal and State Materials and
Environmental Management Programs

Enclosure:
As stated

cc: Phil Egidi, CO, SR-U Chair
Earl Fordam, WA, SSR Council Chair

[Concurrence Page]

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COMPATIBILITY COMMENTS ON CRCPD SSRRCR PROPOSED REGULATIONS

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	U.1	10 CFR 40.1	N/A	D	<p>Purpose</p> <p>SSR Part U, Purpose, includes the term “residual radioactive material.” The term “residual radioactive material” in 10 CFR Part 40 is used only in respect to materials at sites subject to remediation under title I of the Uranium Mill Tailings Radiation Control Action of 1978, as amended. The authority for these materials is reserved to the NRC and Agreement States do not have authority for this activity. Although this provision is designated as Compatibility Category D, the inclusion of the term residual radioactive material in the Purpose creates conflicts and duplication in the orderly pattern of regulations on a nationwide basis (See the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.) The phrase “...and residual radioactive material.” in the last sentence should be deleted since this material is reserved to NRC’s jurisdiction.</p> <p>SSR Part U, Section U.1 needs to make the above changes in order to meet the Compatibility Category D designation assigned to 10 CFR 40.1.</p>
2	U.2.b.	10 CFR 40.2a(b)	N/A	A	<p>Coverage of inactive tailings sites.</p> <p>In Section U.2.b., delete the phrase “or residual radioactive material” in the first sentence since Agreement States do not have authority over this material under their agreements.</p> <p>SSR Part U, Section U.2.b needs to delete words “or residual radioactive material” in the first sentence in order to meet the Compatibility Category A designation assigned to 10 CFR 40.2a(b).</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
3	U.2.d	10 CFR 40.3	N/A	C	<p>License requirements</p> <p>In Section U.2.d., delete the phrase “or residual radioactive material” since Agreement States do not have authority over this material under their agreements.</p> <p>SSR Part U, Section U.2.d needs to delete words “or residual radioactive material” in order to meet the Compatibility Category C designation assigned to 10 CFR 40.3.</p>
4	U.3.	61.2	N/A	H&S	<p>Definitions.</p> <p>The term “active maintenance” is defined in Part 61.2 and in SSR Part M. The definition is not defined in 10 CFR 40 or in Appendix A to 10 CFR 40. The use of two different definitions can result in conflicts and duplications. The definition of “active maintenance” should be deleted from SSR Part U.</p> <p>SSR Part U, Section U.3 needs to delete the definition of “active maintenance” in order to meet the Category H&S designation assigned to Section 61.2.</p>
5	U.3. Appendix A	N/A C	N/A	N/A	<p>Definitions.</p> <p>The term “decommissioning funding plan” as defined in Section U.3 should be deleted. The term “decommissioning funding plan” ties back into 10 CFR 40.36, which is not applicable 11e.(2) licensees. Also, Part S should not have any requirements for activities in connection with 11e2. material and as such all references to Part S should be removed from SSR Part U.</p> <p>SSR Part U, Section U.3 needs to make the above changes in order to meet the Compatibility Category C designation assigned to Appendix A.</p>
6	U.3.	N/A	N/A	N/A	<p>Definitions.</p> <p>The terms “long term care” and “post closure” as defined in Section U.3 are</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>not defined in 10 CFR 40 or in Appendix A to 10 CFR 40. These terms are not part of NRC's regulatory scheme and do not appear in Part U other than in the definitions. These definitions can lead to conflicts with the requirements of Part 40 and should be deleted.</p> <p>SSR Part U, Section U.3 needs to delete the definitions of "long term care" and "post closure" in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
7	U.3.	N/A	N/A	N/A	<p>Definitions.</p> <p>The term "monitoring" is defined in Section U.3. However, this term is not defined in 10 CFR 40 or in Appendix A to 10 CFR 40. As written, the definition of "monitoring" in Part U applies only to radiological monitoring. However, the monitoring requirements of Part U may apply to both radiological and other non-radiological hazardous constituents. This definition as written can lead to gaps in the regulatory scheme.</p> <p>SSR Part U, Section U.3 needs to delete the definition of "monitoring" in order to avoid duplications, conflicts and gaps according to in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
8	U.3.	N/A	N/A	N/A	<p>Definitions.</p> <p>The terms "natural thorium" and "natural uranium" are defined in Part U, section U.3. However, these terms are not defined in 10 CFR 40 or in Appendix A to 10 CFR 40. Also the terms "natural thorium" and "natural uranium" do not appear in Part U other than in the definitions. Many States can not administratively adopt terms that are not</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>used within the regulation although the terms are technically correct.</p> <p>SSR Part U, Section U.3 needs to delete the definitions of “natural thorium” and “natural uranium” in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
9	U.3.	N/A	N/A	N/A	<p>Definitions.</p> <p>The term “surveillance” is defined in Part U, Section U.3 as “the observation of the site for the purposes of visual detection of the need for maintenance, custodial care, evidence of unauthorized access, and compliance with other license and regulatory requirements.” However, this term is not defined in 10 CFR 40 or in Appendix A to 10 CFR 40. The term “surveillance” as used 10 CFR 40 includes monitoring or other surveillance that cannot be performed visually. This definition as written can lead to gaps in the regulatory program and should be deleted.</p> <p>SSR Part U, Section U.3 needs to delete the definition of “surveillance” in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
10	U.9.2. and U.9.3.	Appendix A Criterion 9 and 10.		C	<p>Financial assurance and recordkeeping for decommissioning.</p> <p>Section U.9.2 and U.9.3 address requirements in 10 CFR 40.36, which do not apply to uranium or thorium milling and byproduct material activities at sites formal associated with such milling. Requirements for financial assurance are found in 10 CFR 40 Appendix A. Section U.9.2 and U.9.3 should be deleted.</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					SSR Part U needs to delete Section U.9.2 and U.9.3 in order to meet the Compatibility Category C designation assigned to Appendix A, Criterion 9 and 10.
11	None	10 CFR 40.60 (a), (b), (c)(1), (c)(2)	N/A	C	<p>Reporting requirements.</p> <p>SSR Part U has omitted the requirements in 10 CFR 40.60(a), (b), (c)(1), and (c)(2).</p> <p>SSR Part U needs to add the above requirements to SSR Part U to meet the Compatibility Category C designation assigned to Section 10 CFR 40.60.</p>
12	U.3.	10 CFR 40 Appendix A	N/A	A	<p>Introduction. (Definitions)</p> <p>The definition in Section U.3. for “leachate” substitutes the words “radioactive material” for “byproduct material.” Part U appropriately defines “byproduct material” (same as 10 CFR 40) but does not define “radioactive material.” “Radioactive material” is defined in CRCPD SSRCR Part A as “any solid, liquid, or gas which emits radiation spontaneously.” Therefore, substituting “radioactive material” for “byproduct material” is not appropriate in the definition of “leachate.” “Radioactive material” as defined only refers to the radioactive material only, not the total mass of the material as 11e.(2) byproduct material is defined.</p> <p>SSR Part U, Section U.3 needs to replace the term “radioactive materials” with “byproduct material” in the definition of “leachate” in order to meet the Compatibility Category A designation assigned to the definitions in 10 CFR 40, Appendix A.</p>
13	U.3.	10 CFR 40 Appendix A	N/A	A	<p>Introduction. (Definitions)</p> <p>The definition in Section U.3. for “licensed site” substitutes the words “radioactive material” for “byproduct material.” Part U appropriately defines “byproduct material” (same as 10 CFR 40) but does not define</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>“radioactive material.” “Radioactive material” is defined in CRCPD SSRCR Part A as “any solid, liquid, or gas which emits radiation spontaneously.” Therefore, substituting “radioactive material” for “byproduct material” is not appropriate in the definition of “licensed site.” “Radioactive material” as defined only refers to the radioactive material only, not the total mass of the material as 11e.(2) byproduct material is defined.</p> <p>SSR Part U, Section U.3 needs to replace the term “radioactive materials” with “byproduct material” in the definition of “licensed site” in order to meet the Compatibility Category A designation assigned to the definitions in 10 CFR 40, Appendix A.</p>
14	U.6.c.i.	10 CFR 40.31 (f),	N/A	D	<p>Application for Specific Licenses.</p> <p>In Section U.6.c.i, the phrase “or byproduct material” was omitted after “source material milling license”.</p> <p>SSR Part U, Section U.6.c.i needs to be revised as noted above in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
15	U.8.a.	10 CFR 150.31(b)(3)	N/A	C	<p>Environmental Impact Analysis.</p> <p>In Section U.8.a (1) the phrase “to receive, possess, and use source material for uranium or thorium milling” has been omitted after “a license application”.</p> <p>SSR Part U, Section U.8.a.(1) needs to be revised to include the phrase “to receive, possess, and use source material for uranium or thorium milling” after “a license application” to meet the Compatibility Category C designation assigned to Section 10 CFR 150.31(b)(3).</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>In Section U.8.a.i, recommend the phrase “and the environment;” be inserted after “...public health” for clarity.</p> <p>SSR Part U, Section U.8.a.i needs to be revised as noted above to meet the Compatibility Category C designation assigned to Section 10 CFR 150.31(b)(3).</p>
16	U.11.1.c.	10 CFR 40 Appendix A	N/A		<p>Decommissioning Requirements.</p> <p>Section U.11.1.c. refers to the financial assurance requirements of Part S which is modeled after the requirements in 10 CFR 40.36. However, 10 CFR 40.36 excludes the licensees covered by the proposed Part U, since these licensees are required to meet the financial requirements set forth in Appendix A. References to Part S should be deleted.</p> <p>SSR Part U, Section U.11.1.c needs to delete the reference to Part S in order to meet the Compatibility Category C designation assigned to the 10 CFR 40, Appendix A.</p>
17	U.11.1.d.	10 CFR 40.36	N/A	N/A	<p>Decommissioning Requirements.</p> <p>Section U.11.1.d. refers to the notification requirement of Part C, Section C.32.b. However there is a duplicative notification requirement in Part U, Section U.11.1.a. Section U.11.1.d should be revised to refer to Section U.11.1.a.</p> <p>SSR Part U, Section U.11.1.d. needs to be revised as noted above in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
18	U.11.2.	10 CFR 40.36	N/A	N/A	<p>Decommissioning Requirements.</p> <p>In Sections U.11.2.a. and U.11.2.e. the reference to “[and Part O]” should be deleted. Part O as noted in Section O.2.a. “Scope” does not apply to</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>“uranium and thorium recovery facility licensees under Part U, Appendix A, of these regulations, or uranium solution extraction facilities.”</p> <p>SSR Part U, Sections U.11.2.a. and U.11.2.e. need to be revised as noted above in order to avoid duplications, conflicts and gaps in accordance with the 1997 Policy Statement on Adequacy and Compatibility of Agreement State Programs.</p>
19	Appendix A Criterion 6(2)	10 CFR 40 Appendix A I. Technical Criteria Criterion 6(2)	N/A	C	<p>Criterion 6</p> <p>Part U, Appendix A, Criterion 6(2) incorrectly cites “40 CFR Part 6.” Instead of “40 CFR Part 61.”</p> <p>Part U, Appendix A, Criterion 6(2) needs to be revised to include the reference “40 CFR Part 61” to meet the Compatibility Category C designation assigned to 10 CFR Part 40, Appendix A, Criterion 6(2).</p>
20	Appendix A Criterion 6A(3)	10 CFR 40 Appendix A I. Technical Criteria Criterion 6A(3)	N/A	C	<p>Criterion 6A</p> <p>In Part U, Appendix A, Criterion 6A(3), the first sentence should be revised to state “upon licensee request” not “upon licensee report”.</p> <p>Part U, Appendix A, Criterion 6A(3), needs to be revised as noted to meet the Compatibility Category C designation assigned to 10 CFR Part 40, Appendix A, Criterion 6A(3).</p>
21	U.4.c.	10 CFR 40 Appendix A I. Technical Criteria Criterion 7	N/A	C	<p>Criterion 7</p> <p>Part U, Section U.4.c. states “during any one full year...” whereas 10 CFR 40 Appendix A, Criterion 7 states “At least one full year prior to any major site construction...” This lead to confusion since as Section U.4.c. is currently written, a preoperational study from many years prior could be used.</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					SSR Part U, Section U.4.c needs to be revised to state "At least one full year" in order to meet the Compatibility Category C designation assigned to the 10 CFR 40, Appendix A, Criterion 7.
22	Appendix A Criterion 11	10 CFR 40 Appendix A III. Site and Byproduct Material Ownership Criterion 11	N/A	NRC	<p>Criterion 11</p> <p>The Rationale for Part U indicates that Criterion 11 was included in Part U "for completeness" and notes that only Criterion 11.C. through 11.F. are for NRC compatibility. The language in Part U, Appendix A, Criterion 11.C through 11.F. should match NRC's language exactly if it is to be provided for information purposes.</p> <p>Part U, Appendix A, Criterion 11.E. says "administrative or legal costs" whereas 10 CFR 40, Appendix A, Criterion 11 says "administrative and legal costs."</p> <p>SSR Part U, Criterion 11.C through F should match the NRC requirements exactly in order to meet the Compatibility Category NRC designation assigned to 10 CFR Part 40, Appendix A, Criterion 11.C through F.</p>
23	Appendix A Criterion 13 Hazardous Constituents	10 CFR 40 Appendix A V. Hazardous Constituents Criterion 13	N/A	C	<p>Hazardous Constituents</p> <p>SSR Part U, Appendix A, Criterion 13 contains a significant number of errors in the chemical formulas in the list of <i>Hazardous Constituents</i> and needs careful proofing. The list needs to be accurate because it defines the hazardous constituents.</p> <p>SSR Part U, Appendix A, Criterion 13, <i>Hazardous Constituents</i> needs to be revised to accurately include the chemical formulas meet the Compatibility Category C designation assigned to the 10 CFR 40, Appendix A, Criterion 13.</p>

The following comments are related to the Rationale document, Matters for Future Consideration for Part U or are generic in nature.

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
24	Rationale	N/A	N/A	N/A	<p>Introduction</p> <p>The last sentence contains an incorrect reference to 10 CFR 36. The correct reference is 10 CFR 40.36. However, as previously noted, the financial assurance requirements of 10 CRF 40.36 do not apply to U or Th milling. Instead, the financial assurance requirements in Appendix A of 10 CFR 40 apply. As a result, references to 10 CFR 40.36 are not applicable, could be confusing, and it is recommended that the references be deleted.</p>
25	Rationale	N/A	N/A	N/A	<p>Specific Provisions Sec. U.1. and U.2 – Purpose and Scope</p> <p>The 1st sentence states that “Part U contains the special licensing requirements for natural uranium and natural thorium processing and disposal.” This is not accurate. Part U pertains to source material and byproduct material (as defined in 10 CFR 40). The terms “natural uranium” and “natural thorium” are specific and are not necessarily inclusive of source material. In fact the terms “natural uranium” and “natural thorium” are not used in Part U (other than in the Part U definitions).</p>
26	Rationale	N/A	N/A	N/A	<p>Specific Provisions Sec. U.2 – Definitions</p> <p>There is a typographical error in the section title – it should say U.3.</p>
27	Rationale	N/A	N/A	N/A	<p>Specific Provisions Sec. U.9 – Financial Assurance Arrangements</p> <p>This section contains another reference to 10 CFR 40.36, which as previously noted, does not apply to Part U activities. In addition, this section states that “The applicable financial framework and fund(s) may be referenced to either Part C or Part S of these regulations.” Part U, Appendix A provides the necessary framework. References to</p>

SSRCR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Part C or Part S are confusing and unnecessary.
28	Matters for Future Consideration	N/A	N/A	N/A	Matters for Future Consideration The date "January 22, 3008" should be "January 22, 2008."
29	U.*7.a.	N/A	N/A	N/A	Transmittal of Applicant's Environmental Report for Review and Comment In paragraph a, recommend that the phrase "or Environmental Assessment" be inserted after (EIS) for completeness in accordance to the requirements of the National Environment Policy Act.