May 17, 2010

SUMMARY OF COMMENTS ON SA-900, "Termination of Uranium Milling Licenses In Agreement States"

I. Sent to Agreement States for Comment: July 24, 2009 (FSME-09-061)

OAS

No comments received.

II. Sent to the NRC Offices for Comment: July 24, 2009

Comments/Dated: Region III - 8/7/2009 (e-mail)

Region IV - 8/19/2009 (e-mail)

- 8/20/2009 (e-mail) FSME/DWMEP - 8/24/09 (e-mail)

OGC – 8/25/2009 (mark-up)

Region III

Comment 1:

Section IV.A Change "Program" to "Programs"

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 2:

Section IV.B The DWMEP team member is not mentioned as in Section IV.D. This appears incongruous.

Response:

We agree with this comment and have added mention of the DWMEP team member to Section IV.B.

Comment 3:

Section IV.B & C Remove the term "finally" in both paragraphs. It doesn't serve any purpose.

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 4:

Section V.F.1 I suggest that you simply say here that the MSSA Director should assemble a review team (this was discussed in an earlier paragraph).

Response:

We agree with this comment and the revised procedure will read as follows:

".....The MSSA Director or designee should assemble a review team."

Comment 5:

App. D Page D.7 Change STP to FSME

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 6:

App. E Page E.1 Change "Thorium" to "thorium"

Response:

We agree with this comment and the procedure will be revised accordingly.

Region IV

Comment 1:

Add the ADAMS Accession numbers to references on page 9.

Response:

ADAMS Accession numbers have been added to the documents found in ADAMS.

Comment 2:

Page A-1, Step 2, first paragraph: should read "as necessary", not "in necessary"

Response 2:

We agree with this comment and the procedure will be revised accordingly.

Comment 3:

Page 1 of 9. Paragraph III.A needs to be placed into context since paragraph B was deleted. Consider moving paragraph IV.A to III.B or move III.A to IV.A

Response:

We appreciate the comment, however no change to the procedure is necessary based on this comment. We believe that it is appropriate to keep the Background and the Roles and Responsibilities separate.

Comment 4:

Page 2 of 9, Paragraph IV.C The sentence "the pm is the primary NRC contact for the state during the review" sounds awkward. Consider changing it to something like "the pm is the primary liaison/interface between the NRC and the State for this project"

Response:

We agree with this comment and the revised procedure will read as follows:

"The PM is the primary interface between the NRC and the State during the review."

Comment 5:

Page 3 of 9, Paragraph IV.C and D; for consistent flow of information, rotate paragraphs C and D.

Response:

We agree with this comment at the procedure will be revised accordingly.

Comment 6:

The sample letters don't include SI units. Do we want to include both traditional and SI units in the document?

Response:

We appreciate the comment; however no change to the procedure will be made at this time based on this comment. In keeping with the Criteria from Appendix A to 10 CFR Part 40, we decided to not put any SI units in this revision of the document. During future revisions of this procedure and the other FSME procedures, we will consider whether SI units will be adopted for all units of measure.

Comment 7:

Page A-1. In two places, first paragraph after Step 1 and first paragraph after Step 2, the term "decommissioning report" was used although we use the term "final status survey report."

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 8:

Page A-3, In two places, second paragraph after Step 1 and first paragraph after Step 2, the term "decommissioning report" was used although we use the term "final status survey report."

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 9:

Page B-7, Paragraph 4(c), flatness of slopes, the second sentence has to be revised due to wording errors.

Response:

We agree with this comment and the revised procedure will read as follows:

"The erosion potential of the covers is minimized by designing the rock to be sufficiently large to resist flooding and erosion, based on the slope selected."

Comment 10:

Page B-10, Paragraph 2.1.1: Typo in third sentence

Response:

We agree with this comment and the revised procedure will read as follows:

"The final disposal cell is an above grade stabilized in place embankment extending to a maximum height of XXX feet above the prevailing surface grade."

Comment 11:

Page B-11, Paragraph 2.1.4: Second paragraph is not clear. Please reword

Response:

We agree with this comment and the revised procedure will read as follows:

"Radon barrier clay soils from the XXXX area were evaluated by [reference]. The XXXX borrow area is located about XX miles [west] of the tailings pile. In [year], XX exploratory test pits were excavated in the XXXX area. Sandy soil for the radon barrier was obtained from material excavated during the reconfiguration of XXXX area (reference). In addition to the sampling associated with the reconfiguration of XXXX area, three additional samples were taken from the borrow area."

Comment 12:

Page B-11, Paragraph 2.1.4: First paragraph should include a concluding sentence such as "borrow area soil was adequate for use as radon barrier material"

Response:

We agree with this comment and have addressed it with Region IV's Comment 11.

Comment 13:

Page B-15, Second paragraph under Seismic design ground motion heading: The sentence "the xx miles was used as the site-to-source distance for floating earthquakes...." as worded, the sentence implies that xx miles is listed elsewhere in the report.

Response:

We agree with this comment and the revised procedure will read as follows:

"XX miles was used as the site-to-source distance for floating earthquakes within [the host tectonic province]."

Comment 14:

Page B-27, second paragraph of Section 3.2 seems out of place. The paragraph does not specifically mention radon emanation, the subject of this section. Consider moving paragraph to the construction section.

Response:

We appreciate the comment, however no change to the procedure is necessary based on this comment. We considered this comment and believe that since this paragraph discusses the basis for acceptability of the as-built cover instead of how the cover to be constructed it is appropriate to keep it in this section rather than move it to the construction section.

FSME/DWMEP

Comment 1

In general:

- Broaden SA-900 to include termination of uranium heap leach facility licenses.
- Throughout SA-900, including appendices, use the terminology "in situ recovery" and
 "ISR" instead of "in situ leach" and "ISL" as that is now being used by the NRC in the
 area of Uranium Recovery. Also, replace the phrase, "non-conventional uranium mill (or
 milling)" with "uranium in situ recovery facility".

Response:

We appreciate and considered the comment on broadening SA-900 to include heap leach facilities, however the use of the terms conventional and non-conventional uranium mills or milling were discussed during the development of this procedure and in the working group's report (See *Final Report of the Working Group on Uranium Milling License Termination in Agreement States*, July 2002 (http://nrc-stp.ornl.gov/umill/workinggrprpt.pdf)). The decision was to use the generic terms "conventional" and "non-conventional" uranium mills or milling for the procedure. However, the following clarification will be made to Section III(B) so that the reader is aware that heap leach facilities are considered conventional uranium milling operations.

A conventional uranium mill (which includes heap leach facilities) is a facility that generates mill tailings which will be transferred to a custodial agency for long term care in accordance with 10 CFR § 40.28 after the entire license is terminated.

In response to the second bullet comment to revise SA-900 and appendixes to replace "non-conventional uranium mill (or milling)" with "uranium in situ recovery facility", since ISR are a subcategory of non-conventional uranium mills, the generic terms will be used as noted above and there will be no change based on this comment.

Comment 2:

Page 1, Section III (BACKGROUND), Part B, first paragraph. Begin the paragraph with: "Three types of Agreement State uranium milling licenses are involved: conventional uranium mill, heap leach facility, and in situ recovery facility licenses. Conventional uranium mills and uranium heap leach facilities generate "tailings" which will be transferred to a custodial agency

Response:

As noted in response to DWMEP Comment 1 above, heap leach facilities are a subcategory of conventional mills. We appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 3:

Page 1, Section III, (BACKGROUND), Part B, second paragraph. Begin the paragraph with: "For all types of licenses, the Agreement State ..."

Response:

As noted in response to DWMEP Comment 1 above, heap leach facilities are a subcategory of conventional mills. We appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 4:

Page 2, Section III, (BACKGROUND), Part C. In the next to last sentence, incorporate a reference to "heap leach facility" licenses in addition to a reference to "in situ recovery facility" licenses.

Response:

As noted in response to DWMEP Comment 1 above, the generic terms "conventional" and "non-conventional" uranium mills or milling will be used for the purpose of the procedure. We appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 5:

Page 2, Section IV (ROLES AND RESPONSIBILITIES), Part B, first sentence. Change the phrase referring to early interaction activities to "... Agreement States involved in the review."

Response:

We agree with this comment and the procedure will be revised accordingly.

Comment 6:

Page 2, Section V (GUIDANCE), Part A, first paragraph. For clarity, replace the next to last sentence with the following: "NRC will review the State's determination and will provide its views as to whether the basis is sufficient to support the conclusion provided by the Agreement State for NRC consideration."

Response:

We agree with this comment, however, the text was modified as follows:

"NRC will review the State's determination and will provide its views as to whether the basis is sufficient to support the conclusion provided by the Agreement State."

Comment 7:

Page 8, Section V (GUIDANCE), Part H, item 1. Revise the first sentence to indicate that the "... license termination process for conventional uranium mill, heap leach facility, and in situ recovery facility licenses in Agreement States is documented in Appendix A."

Response:

As noted in response to DWMEP Comment 1 above, the generic terms "conventional" and "non-conventional" uranium mills or milling will be used for the purpose of the procedure. . We

appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 8:

Page 8, Section VI (APPENDICES). Broaden the title of Appendix B to indicate that it provides a sample Completion Review Report for conventional uranium mill and heap leach facility licenses. Revise Appendix B accordingly to include appropriate references to conventional mill or heap leach facilities. The guidance should indicate that the sample Completion Review Report should be tailored accordingly for a heap leach facility.

Response:

As noted in response to DWMEP Comment 1 above, the generic terms "conventional" and "non-conventional" uranium mills or milling will be used for the purpose of the procedure. We appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 9:

Page 8, Section VI (APPENDICES). Broaden the title to Appendix D to indicate that it provides a sample NRC determination letter for conventional uranium mill and heap leach facility licenses. Revise Appendix D accordingly to include appropriate references to conventional mill or heap leach facilities. The guidance should indicate that the sample NRC determination letter should be tailored accordingly for a heap leach facility.

Response:

As noted in response to DWMEP Comment 1 above, the generic terms "conventional" and "non-conventional" uranium mills or milling will be used for the purpose of the procedure. We appreciate the comment; however no change to the procedure will be made at this time based on this comment.

Comment 10:

In addition, DWMEP offer the following editorial comments:

- Add the appropriate punctuation for the header lines in page 2, Section V (GUIDANCE), Part A; page 4, Section V (GUIDANCE), Part E; Page 5, Section V (GUIDANCE), Part F; and page 7, Section V (GUIDANCE), Part G.
- Page 2, Section IV (ROLES AND RESPONSIBILITIES), Part A, first sentence. Change the reference to FSME to "Programs" not "Program".
- Page 4, Section V (GUIDANCE), Part D, item 2, last sentence. Replace "are met" with "have been met."

Response:

We appreciate the first bullet comment; however the suggested change is not consistent with the format for the FSME procedures. No change to the procedure is necessary based on this comment. We agree with the second and third bullet comments and the revised procedure will revised to reflect these changes.

OGC

Comment 1:

In paragraph IV B. on page 2, add the phrase "to support" to the last sentence.

Response:

We agree with this comment and the revised procedure will read as follows:

"The MSSA Director or designee requests the Office of General Counsel (OGC) to assign staff level contacts to support members of the review team."

Comment 2:

In paragraph IV C. on page 3, change the last sentence to reflect OGC will assign a staff member to support the review team.

Response:

We agree with this comment and the revised procedure will read as follows:

"OGC will assign a staff member to support the review team."

Comment 3:

In paragraph F. 1. on page 5, change the last sentence to reflect that OGC will assign a staff member to support the review team.

Response:

We agree with this comment and have addressed it with Region III's Comment 4.