April 10, 2014

MEMORANDUM TO: Bill Von Till, Chief
Uranium Recovery Licensing Branch
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

FROM: Chad Glenn, Sr. Project Manager ***/RA/***
Materials Decommissioning Branch
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: PUBLIC MEETING SUMMARY

On March 26, 2014, a Public Meeting was held with AUC LLC (AUC) at U.S. Nuclear Regulatory Commission Headquarters. The purpose of the meeting was to discuss the staff's request for additional information on AUC's license application. A summary of the meeting is enclosed.

Docket No: 040-09092

Enclosure: Meeting Summary

cc: Meeting Attendees (via email)

CONTACT: Chad Glenn, FSME/DWMEP
(301) 415-6722

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ML14099A027

OFFICE	DWMEP	DWMEP	DWMEP	DWMEP
NAME	CGlenn	JCaverly	SAchten	CGlenn
DATE	4/8/14	4/10/14	4/10/14	4/10/14

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MEETING SUMMARY

DATE: March 26, 2014

PLACE: NRC One White Flint North, Conference Room 3-B4
1155 Rockville Pike
Rockville, Maryland

PURPOSE: This meeting was held at the request of AUC LLC (AUC) to discuss the NRC staff's request for additional information on AUC's license application.

ATTENDEES:

See Attendees List (Attachment 1)

BACKGROUND:

On October 3, 2012, AUC LLC (AUC) submitted a license application requesting authorization to construct and operate its proposed Reno Creek In Situ Leach Uranium Recovery (ISR) project to be located in the Powder River Basin near Wright, Wyoming. The Agencywide Document Access and Management System (ADAMS) Accession Number is ML122890785. The staff's acceptance of the license application request is documented in a letter dated June 18, 2013, (ADAMS Accession Number ML13161A319). The staff proceeded with its review of the license application and determined that additional information is necessary for the staff to be able to complete its review. Staff issued its Request for Additional Information (RAI) on February 10, 2014, (ADAMS Accession Number ML13365A110).

DISCUSSION:

The U.S. Nuclear Regulatory Commission (NRC) staff read the opening statement for the meeting and AUC proceeded with a discussion of the staff's RAIs on the license application request. The attendance list is included as Attachment 1. Attachment 2 contains the meeting agenda included in the original meeting notice. Topics from the meeting are presented below in the order they were discussed. When referring to RAIs, the staff has used the same numbering system used in the RAI package.

<u>Environmental Report (ER) RAIs</u>

RAI GEN-1 Preconstruction Activities

AUC questioned the need for providing separate descriptions of proposed preconstruction activities and construction activities and the environmental impacts of those activities, including any proposed measures to reduce adverse effects of the impacts, in the application. AUC stated that preconstruction activities and construction activities are considered in the analysis of cumulative impacts. NRC requested a separate description of preconstruction and construction activities to assess their respective contribution to cumulative impacts.

Enclosure

Path Forward: Rather than revising the application to include separate discussions of preconstruction and construction activities, AUC proposes to respond to this RAI by identifying where this information is located in the application. AUC believes this approach will provide the information needed to support an independent analysis of preconstruction and construction activities and their respective contribution to the cumulative impacts. See Action Item #1

RAI LU-3 Hunting & Fishing Restrictions

AUC asked what information is needed to address this RAI. NRC staff clarified the information requested regarding hunting restrictions on state-owned/leased land within the proposed project boundary. After a brief discussion, AUC indicated that it understands the information needed to respond to this RAI.

Path Forward: AUC proposes to add a map that will provide clarifying information to address this RAI.

RAI SW-1 Water Quality Data

AUC inquired about the type of data needed to address this RAI. NRC staff clarified the type of data expected to address this RAI.

Path Forward: AUC committed to provide a reference to access the U.S. Geological Survey tabulated water quality data for Stream Gage #06364700 located on Antelope Creek near Teckla, WY. NRC staff noted that this information will also address RAI ER SW-3.

RAI SW-2 Surface Water Uses

AUC sought clarification on information needed to estimate surface water uses. NRC staff responded that it seeks bulk estimates of surface water uses in and around the project to evaluate consumptive use impacts of the proposed project.

Path Forward: AUC committed to provide information to address this RAI.

RAI SW-4 Wetlands

AUC inquired as to what type of information is needed to address this RAI. NRC staff responded that it expects AUC to provide additional discussion to clarify the relevance of wetlands in the surface water impacts evaluation.

Path Forward: AUC committed to provide this information to address this RAI.

RAI GEN-2 Cumulative Effects

In response to AUC's request for clarification, NRC staff stated that it is looking for more detail regarding AUC's future plans for expanding Reno Creek operations to include satellite facilities or processing resins from other outside facilities. AUC stated that its application presently provides an annual production limit of two million pounds of yellow cake. AUC noted that any request to increase the Reno Creek production limit or extend the life-cycle of the facility would

require a license amendment and NRC approval. AUC also referred to NRC's response to public comments on the Strata Ross ISR project (NUREG-1910, Supplement 5, Appendix B, page B-20).

Path Forward: AUC proposes to follow-up with NRC staff in the near future to get additional clarification on information needed to address this RAI.

RAI Gen-5 Alternatives

AUC inquired why NRC is asking AUC to provide another alternative. NRC staff explained that AUC's application includes the proposed alternative and the no action alternative, but does not discuss alternatives considered but rejected (e.g., consider the use of a satellite facility, move CPP to new location, or waste disposal alternative). NRC staff stated that another alternative is needed to allow a comparison among alternatives. AUC referred to the discussion of alternatives in NRC's response to public comments on the Strata Ross ISR project (NUREG-1910, Supplement 5, Appendix B, pages B-60-62).

Path Forward: AUC plans to consider this information and develop a new alternative similar to Dewey Burdock liquid waste disposal options (NUREG-1910, Supplement 4).

Technical Report RAIs

RAI-63 Groundwater Restoration Terminology

In a response to a question on groundwater restoration terminology, NRC staff stated that AUC needs to meet, not be consistent with, 10 CFR Part 40 Appendix A Criterion 5B(5). NRC staff noted that "consistent with baseline" needs to be better defined (e.g., taking the mean of the baseline values and incorporating the statistical variability of the data prior to operations) to calculate a specific concentration that will be the Commission-approved background for that parameter.

Path Forward: AUC indicated it understands what information is required and will provide the information to address this RAI.

RAI-71 Decommissioning Plan

In response to AUC's clarifying question, NRC staff stated that the discussion in the application related to the Reclamation Action Plan (RAP) and Decommissioning Plan (DP) was confusing because it was not clear if the RAP and DP are combined in one plan or two separate plans.

Path Forward: AUC will revise language in the application to clarify that the RAP is one document that addresses both the RAP and the DP consistent with NUREG-1569.

RAI-21 Air Quality

In response to AUC clarification question, NRC staff explained that it seeks additional information regarding the type of analysis for air particulate data since Section 2.9 of the

application did not provide this information. AUC's application needs to describe the type of analysis used for dust loading.

Path Forward: AUC indicated that it understands the issue and will provide information to address this RAI.

RAI-74 Radon Monitoring

In response to AUC's clarifying question, NRC suggested that AUC consider similar publicly available responses (see ADAMS Accession Numbers ML14049A007, ML14051A113, ML14066A051, ML14057A477, ML14063A415, ML14071A092, and ML14063A214).

Path Forward: AUC deferred further discussion of this RAI until after the NRC's April 2, 2014 Radon Workshop.

New RAI Meteorology

In this RAI, NRC states that regression analysis may not be the best tool to address representativeness. Rather, it is more important to describe what parameters and analysis were used to demonstrate representativeness. NRC provided reference to several publicly available documents to clarify the point (See ADAMS Accession Numbers ML14049A172, ML14057A658, and ML14063A416). AUC asked if the NRC would consider additional information that demonstrates that the linear regression is an acceptable method.

Path Forward: AUC committed to consider above references. NRC staff committed to provide a write-up of this new RAI. See Action Item 2.

Action Items

At the conclusion of the meeting, staff and AUC identified for action items:

1. Staff and AUC will arrange a time to further clarify a proposed path forward for ER RAI GEN-1. Under the proposed path forward, AUC would respond to this RAI by providing information at an appropriate level of detail rather than revising various sections of the application to include this information.
2. Staff will provide a written version of the new RAI (See Attachment 3).
3. AUC will provide a schedule for responding to RAI's in several weeks.
4. Staff will consider AUC proposed procedure for electronic submittals in letter dated March 10, 2014, (ADAMS Accession Number 14083A404).

The meeting concluded at approximately 3:30 p.m. eastern standard time. There were no questions from members of the public.

Attachments:
1. List of Attendees
2. Meeting Agenda
3. New RAI

LIST OF PARTICIPANTS

DATE: _3/26/14__

MEETING: **NRC – AUC LLC meeting on license application request for proposed Reno Creek ISR project in Campbell County, WY**

NAME	ORGANIZATION	PHONE NUMBER or E-mail (work)
James Webb	USNRC	(301) 415-6252
Leland Huffman	AUC LLC	307 287-1809
Chris Pugsley	Thompson & Pugsley PLLC	202-496-0780
Tony Thompson	" "	" "
Philip Cavendor	AUC LLC	303-Yop-6683
Dan Deutts	AUC LLC	303-258-6051
Jim Viellenave	AUC LLC	303-953-7975
Chad Glenn	NRC	301-415-6722
Sarah Achten	NRC	301-415-6009
Joan Olmstead	NRC	301-415-2859
JOSE VALDES	NRC	301-415-5259
JOHN SAXTON	NRC	301-415-0697
Elise A. Striz	NRC	301-415-0708
Marla Morales	SwRI	301.881.0289
Jill Caverly	NRC	301-415-6699
Amy Snyder	NRC	301 415-6822
Participants via	Phone:	
Ruth Thomas	Interested Member of Public	
Darrell Liles	SENES Consultants	
Ray DeLeno	TREC	
Femi Osidele	SWRI	

Attachment 1

LIST OF PARTICIPANTS

DATE: _3/26/14__

MEETING: **NRC – AUC LLC meeting on license application request for proposed Reno Creek ISR project in Campbell County, WY**

NAME	ORGANIZATION	PHONE NUMBER or E-mail (work)
Amy Hester	SWRI	
Bradley Werling	"	
Jim Prikryl	"	
Jim Myers	"	
Chandrika Manepally	"	
Pat LaPlante	"	

PUBLIC MEETING AGENDA

NRC – AUC LLC meeting on license application request for proposed Reno Creek ISR project
in Campbell County, WY March 26, 2014, 10:00 AM to 03:00 PM
NRC One White Flint North, 3-B4
11555 Rockville Pike
Rockville, MD

10:00 am – 10:10 am: Introductions, opening remarks, and statement of purpose
10:10 am - Noon: Clarification questions and related discussion on RAIs
Noon - 1:00 pm: Lunch Break
1:00 pm – 2:30 pm: Clarification questions and related discussion on RAIs
2:30 pm – 3:00 pm: Public questions/comments for NRC staff
3:00 pm: Adjourn

The time of the meeting is local to the jurisdiction where the meeting is being held.

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If reasonable accommodation is needed to participate in this meeting, or if a meeting notice, transcript, or other information from this meeting is needed in another format (e.g., Braille, large print), please notify the NRC meeting contact. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

ADAMS Accession Number:

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Link to meeting details: http://meetings.nrc.gov/pmns/mtg?do=details&Code=20140494

Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings"
67 Federal Register 36920, May 28, 2002
The policy statement may be found on the NRC website
http://www.nrc.gov/reading-rm/doc-collections/commission/policy/67fr36920.html

Attachment 2

New Request for Additional Information (RAI) - Meteorology

The applicant's statement(s) and analysis

In Section 2.5.3.8 of the Technical Report, AUC LLC (AUC) provided information to demonstrate that the baseline year represents long term. On page 2.5-23, AUC stated that the linear regression analysis provides a useful tool to assess the degree of correlation between short and long-term distribution. AUC provided graphs with regression analysis in Figures 2.5-36, 2.5-37, 2.5-40, 2.5-42, and 2.5-44.

U.S. Nuclear Regulatory Commission (NRC) Review and Analysis

Regulatory Guide 3.63, "Onsite Meteorological Measurement Program for Uranium Recovery Facilities-Data Acquisition and Reporting", dated March 1988, Section C.1, recommends that the licensee/applicant demonstrate that the onsite data is representational, compare a concurrent period of meteorological data from a National Weather Service (NWS) station (within 50 miles) against the long-term meteorological data from that same NWS station. For example, and using wind direction as the meteorological parameter, on-site wind direction data during year 2012 can be compared to the NWS station (within 50 miles) wind direction during the same year (2012). The predominate wind direction may differ from the predominate onsite meteorological wind direction. If the wind direction from the comparable NWS station for the year 2012 shows that this wind direction is nearly the same over a longer period (i.e., 20 years) from the same NWS station, then this would demonstrate that the wind direction from the concurrent year is representative of the long-term period and one can therefore conclude that the onsite meteorological data would be also representative. A statistical method should be used to demonstrate that the data is representational.

Staff reviewed the application for compliance with the requirements of 10 CFR 40 Appendix A, Criterion 7, and the acceptance criteria in Section 2.5-3 of NUREG-1569 and the guidance in Regulatory Guide 3.63. NRC staff reviewed the information provided in Section 2.5 of the Technical Report provided by AUC. The applicant used data from both onsite meteorology and an off-site meteorology site (Antelope). The applicant attempted to demonstrate representativeness by performing a regression analysis using the Antelope site data only, and the Antelope site data versus the onsite meteorological data (See Figures 2.5-40 and 2.5-44). Based on the information submitted, the NRC staff cannot determine that the regression analysis is the appropriate analysis to demonstrate representativeness. The NRC staff finds that other statistical approaches should be considered or discuss why they are not applicable, such as: 1) testing summary statistics, such as the mean from the short and long term data; and 2) testing the statistics for similarity or validity of the data by using a statistical method such as the Student's T-test, Chi Square test for distribution, Kolmogorov-Smirnov test for distribution, etc., as appropriate.

RAI

The applicant should identify the meteorological parameter(s) and describe a statistical method that demonstrates representativeness. The applicant shall provide an analysis that demonstrates the data collected are representative of long-term conditions at the Reno Creek ISR Project. Justification of the similarity or validity of the data should include analysis of the statistical data presented to illustrate confidence in the representativeness of the data.