February 27, 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: Elise Striz, Project Manager /RA/

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

SUBJECT: PUBLIC MEETING SUMMARY

On January 23, 2014, a Public Meeting was held with Uranium One, USA at U.S.

Nuclear Regulatory Commission Headquarters. The purpose of the meeting was to discuss

Uranium One's responses to staff's Request for Additional Information for the Ludeman In Situ

Recovery (ISR) application and miscellaneous licensing issues related to operations at the

Willow Creek ISR facility. A summary of the meeting is enclosed.

Enclosure: Meeting Summary

cc: Meeting Attendees (via email)

CONTACT: Elise Striz, FSME/DWMEP

(301) 415-0708

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<u>DISTRIBUTION</u>: DPersinko Meeting Attendees

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OFFICE	DWMEP	DWMEP	DWMEP
NAME	EStriz	SAchten	EStriz
DATE	2/24/14	2/24/14	2/27/14

OFFICIAL RECORD COPY

MEETING REPORT

<u>DATE</u>: January 23, 2014

<u>TIME</u>: 9:00 a.m. to 12:00 p.m.

PLACE: U.S. Nuclear Regulatory Commission

Two White Flint North, Rockville, Maryland

Room T8A1

<u>PURPOSE</u>: The purpose of the meeting was to discuss Uranium One's responses to NRC

staff's request for additional information (RAI) for the Ludeman in situ recovery (ISR) application and miscellaneous licensing issues related to operations at the

Willow Creek ISR facility.

ATTENDEES:

See Attendees List (Attachment 1).

BACKGROUND:

Uranium One, USA (Uranium One), provided a response to the RAIs for the Ludeman ISR application on June 14, 2013. Staff found the response to the safety RAIs to be incomplete as several RAIs had not been addressed. Uranium One submitted additional RAI response information on November 4, 2013. Staff found three of the remaining safety RAI responses to still be incomplete. To begin the acceptance review for RAI responses, NRC staff must receive a response to all RAIs. Uranium One requested to hold this meeting to receive guidance from NRC on how to respond to these remaining RAIs. In addition, NRC staff offered to provide initial feedback to Uranium One on the completeness of the RAI responses to the environmental report RAIs and the health physics RAIs. Uranium One also had several questions concerning the operation of its Willow Creek ISR facility, which it requested to be addressed.

DISCUSSION:

NRC staff read the opening statement for the meeting. Attendees of the meeting were asked to provide brief introductions and sign the attendance sheet (Attachment 1). NRC staff provided an overview of the discussion topics planned for the meeting, which can be found in the agenda (Attachment 2). NRC staff from the Environmental Review Branch (ERB) began the meeting. ERB staff asked questions about several responses to the environmental RAIs. Specifically, ERB staff sought clarification for the response to RAI FD.4, which concerned the processing facility water balances; WR5C, which addressed the aquifer which would supply water to the processing facility; and FD.3 which addressed the detail provided in the header house schematics. Uranium One addressed all issues raised by staff, and committed to provide the name of the aquifer which will be used to provide water for the processing plant.

The next discussion concerned the Uranium One responses to the technical report RAIs. Uranium One staff requested clarification on the amount and type of documentation to adequately respond to RAI 1. This RAI is related to the corporate structure of Uranium One.

Uranium One stated that they had legally corrected hundreds of documents to reflect a change of title from Uranium One, Americas to Uranium One, USA. Uranium One asked if a letter listing the legal documents that verify the title transfer is complete would be sufficient as opposed to providing all the individual documents. NRC staff indicated a letter of this nature should be satisfactory, but would discuss this further internally to confirm the proposed approach.

NRC staff and Uranium One next discussed responses to RAI 42, concerning the Modified North Platte River Decree and the Wyoming State Engineer's Office role in providing approval for all injection and production wells to be used at the Peterson Satellite under this decree.

Next, Uranium One's response to RAIs 38, 39 and 58 were discussed. These RAIs concern the presence of an unconfined aquifer within the ore zone at the Peterson Satellite. NRC staff stated that Uranium One had not evaluated water levels at the satellite as discussed in RAI 38. NRC Staff also indicated that the analysis of the pumping tests for the response to RAI 39 had not been sufficient to assess the presence of an unconfined aquifer. Finally, if an unconfined aquifer is present, NRC staff stated the operating issues for an unconfined aquifer listed in RAI 58 would need to be addressed in full.

Finally, NRC staff and Uranium One discussed the strategy for detecting and correcting contamination to the surficial aquifers in the 100 and 110 sands during operations from ISR operations in the Leuenberger portion of the satellite (Wellfield 1). This wellfield is located just south of the Negley subdivision which has several domestic and stock wells completed in the same 100 and 110 sand aquifers. Any contamination of these aquifers in Wellfield 1 could be in the zone of capture for the Negley wells over the period of operations and must be detected and corrected. NRC stated a guard well strategy to detect any contamination to these surficial aquifers must be considered. Uranium One stated it understood the issue and would propose a strategy to detect and correct contamination to protect domestic wells in the Negley subdivision.

The last discussion concerned licensing issues at the Uranium One Willow Creek ISR Facility. NRC staff stated that potential processing of material from the Honeymoon facility would require a license amendment. NRC staff suggested Uranium One use a Safety and Environmental Review Panel to verify the need for an amendment. Surety issues at the facility were discussed addressing the need to include third party costs for report preparation. The requirements in Criterion 9 for a standby trust were also discussed. Finally numerous health physics and soil issues associated with the decommissioning of the Irigaray wellfields were discussed.

NRC Staff advised Uranium One that once they submit a complete response to all RAIs, NRC would advise them of the review schedule for the Ludeman Application.

There were no questions posed by members of the public.

ACTION ITEMS

During the meeting, the following actions items were initiated:

1. Uranium One will provide the name of the specific aquifer which will be used to provide water for the satellite processing facility (WR5C).

- NRC staff will contact The Office of General Council to verify that a letter listing the legal documents that verify the title transfer from Uranium One Americas to Uranium One, USA is complete would be sufficient as opposed to providing all the individual title documents.
- 3. Uranium One will provide a complete response to RAIs 38, 39, and 58 addressing the possible presence of an unconfined aquifer in the ore zone at the Peterson wellfields.
- 4. Uranium One will provide a guard well strategy for the 100 and 110 sand aquifers at Wellfield 1 in the Leuenberger section of the proposed license area.

The meeting concluded at approximately 11:55 p.m. Eastern time.

Attachments:

- 1. List of Attendees
- 2. Meeting Agenda

Meeting Attendees Date: Thursday January 23, 2014 Room TWFN 8A1

9:00 am to 12:00 pm

Topic: To discuss the Request for Additional Information response submitted to NRC by Uranium One for the Ludeman In Situ Recovery Application. To discuss Willow Creek licensing actions.

NAME	AFFILIATION
Elise Striz	U.S. NRC
Doug Mandeville	U.S. NRC
Ron Linton	U.S. NRC
Kelley Jamerson	U.S. NRC
Jill Caverly	U.S. NRC
Tanya Oxenberg	U.S. NRC
Donna Wichers	Uranium One
Jon Winter	Uranium One
Scott Schierman	Uranium One
Lisa Manglass	Senes, Inc.
Darrell Liles	Senes, Inc.

MEETING AGENDA Uranium One Ludeman ISR Application and Willow Creek ISR January 23, 2014 TWFN 8A1

MEETING PURPOSE: To discuss the Request for Additional Information (RAIs) response

submitted to NRC by Uranium One for the Ludeman In Situ Recovery

Application. To discuss Willow Creek licensing actions.

MEETING PROCESS:

<u>Time</u> <u>Topic</u>

<u>Lead</u>

9:00 a.m. Introductions All

Ludemann RAI response discussion Uranium One

Willow Creek licensing actions discussion Uranium One

Public Comment/Questions Moderator

2:00 p.m. Adjourn