

April 30, 2009

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

FROM: Myron Fliegel, Project Manager **/RA/ By S. Cohen for**  
Uranium Recovery Licensing Branch  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

DATE/TIME: May 11, 2009  
1:00 p.m. - 4:30 p.m.

LOCATION: U.S. Nuclear Regulatory Commission  
Two White Flint North, Room T8 C1  
11545 Rockville Pike  
Rockville, MD 20852

Newly scheduled       Revised       Canceled

APPLICANT: Uranium One/Moore Ranch ISR

DOCKET: 04009073

PURPOSE: Teleconference to Discuss Non-Radiological Issues Relating to Moore Ranch ISR License Application.

PARTICIPANTS:

NRC Offices	<u>Applicant</u>
Stephen Cohen	Mike Griffin
Myron Fliegel	et al.
Elise Striz	
Dan Gillen	
et al.	

CONTACT: Myron Fliegel, FSME/DWMEP/DURLD  
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[myron.fliegel@nrc.gov](mailto:myron.fliegel@nrc.gov)

CATEGORY: Category 1. The public is invited to observe this meeting and will have opportunities to communicate with the NRC staff after the business portion, but before the meeting is adjourned. **Interested members of the public can participate in this meeting via a toll-free teleconference. For details, please call the NRC meeting contact by close of business May 6, 2009.**

ENCLOSURE:                   Agenda

NOTE:                           The NRC's Policy Statement "Enhanced Public Participation in NRC Meetings," May 28, 2002, applies to this meeting. The Policy Statement may be found on the NRC Web site, [www.nrc.gov](http://www.nrc.gov), and contains information regarding visitors and security.

ENCLOSURE: Agenda

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DISTRIBUTION:

Meeting Attendees  
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**ML091200019**

Office	DWMEP	DWMEP	DWMEP	DWMEP	
Name	MFliegel	BGarrett	SCohen	MFliegel- SCohen for	
Date	4/29/09	4 /30/09	4/30/09	4/30/09	

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MEETING AGENDA  
Uranium One/Moore Ranch ISR  
May 11, 2009

MEETING PURPOSE: Teleconference to Discuss Non-Radiological Issues Relating to Moore Ranch ISR License Application.

MEETING PROCESS:

<u>Time</u>	<u>Topic</u>	<u>Lead</u>
1:00 p.m.	Introductions	All
	Discussion of Non-hydrology Issues (list of issues attached)	All
	Discussion of Hydrology Issues (list of issues attached)	All
	Summary of Action Items	Moderator
	Public Comment/Questions	Moderator
4:30 p.m.	Adjourn	

Enclosure

Non-hydrology Issues  
Uranium One/Moore Ranch ISR  
May 11, 2009

1. Consistency in identification of wellfields.
2. Update schedule of activities.
3. Correct longitude and latitude of site.
4. Explanation of proposed distant site boundaries.
5. Figure 5.7-1 is missing.
6. Liquid waste disposal plans are contingent on approval by Wyoming.
7. Incorrect reference on page 4-6 to figure 3.1-5A – should be figure 3.1-4A. Page 4-8 repeats paragraphs from previous page.
8. Multiple tank failures are not addressed.
9. An agreement for disposal of 11e.(2) is needed.
10. Interim storage of 11e.(2) is not discussed.
11. Section 5.2 does not include a focused discussion of reporting requirements.
12. There is no approved agreement for offsite waste disposal.
13. Flare factor used for surety estimate is not justified and is inconsistent in application.
14. Compliance with 10 CFR 20.2202 and 20.2203 after radiological release accident is not discussed.
15. Multiple tank failure accidents are not discussed.
16. Vacuum dryer accidents are not discussed.

Hydrology Issues

Uranium One/Moore Ranch ISR  
May 11, 2009

1. Characterization of 60 sand is incomplete.
2. The location of the area where the 60 sand is the underlying aquifer is not provided.
3. The vertical gradient between the 68 sand and the 60 sand is not assessed.
4. Pump tests are lacking in the 68 sand where it is part of the ore zone.
5. The baseline water quality of the 60 sand is not assessed.
6. The impact of CBM water on the 72 sand is not completely evaluated.
7. Proposed casing materials and joints are not justified.
8. Evidence is not provided that extraction rates to recover an excursion will not result in excessive dewatering.
9. The behavior of the 70 sand during operation has not been adequately assessed in the area where it coalesces with the 68 sand.
10. The description and use of downhole gas spargers at Moore Ranch is not provided.
11. The impact of operations on the 68 sand where it coalesces with the 70 sand is not provided.
12. The location of monitoring wells in the 60 sand where it is the underlying aquifer is not provided.
13. The proposed excursion indicators for the overlying 72 sand may not distinguish effects from CBM water.
14. NRC review of hydrologic data packages.
15. The potential for corrective actions for excursions resulting in excessive aquifer dewatering is not resolved.
16. Revision of the surety if an excursion lasts longer than 60 days is not discussed.
17. Restoration of groundwater to the standards in 10 CFR part 40, Appendix A, criterion 5B is not proposed.
18. NRC approval of restoration target values (RTVs) is not discussed.
19. RTVs for the 68 sand where it coalesces with the 70 sand are not discussed.
20. Effect of potential conductivity impairment due to use of dissolved oxygen in lixiviant on restoration is not discussed.

21. Pore volume of the 68 sand where it coalesces with the 70 sand is not included in the estimate of the total pore volume for restoration.
22. Detailed description of monitoring during restoration is not provided.
23. Monitoring of the 68 sand where it coalesces with the 70 sand is not discussed.
24. Justification of the proposed 6 month stability monitoring period is not provided.
25. Identification of hot spots when averages are used to determine that restoration standards are met is not discussed.
26. Restoration schedule inconsistent between figures 1.8-1 and 6.1-1.