



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 12, 2016

MEMORANDUM TO: Bill Von Till, Chief
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

FROM: Lloyd Desotell, Hydrogeologist */RA/*
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF JULY 19, 2016 MEETING WITH UR-ENERGY
INC.

On July 19, 2016, U.S. Nuclear Regulatory Commission (NRC) staff met with Wyoming Department of Environmental Quality and representatives of Ur-Energy Inc. via teleconference to discuss Ur-Energy's Lost Creek East Hydrologic Pump Test Plan. The associated meeting notice was issued on July 7, 2016, and is available at NRC's Agencywide Documents Access and Management System Accession No. ML16196A124. A summary of the meeting is enclosed.

Docket No. 040-09068

Enclosure:
Meeting Summary

CONTACT: Lloyd Desotell, NMSS/DUWP
(301) 415-5969

August 12, 2016

MEMORANDUM TO: Bill Von Till, Chief
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

FROM: Lloyd Desotell, Hydrogeologist */RA/*
Uranium Recovery Licensing Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF JULY 19, 2016 MEETING WITH UR-ENERGY
INC.

On July 19, 2016, U.S. Nuclear Regulatory Commission (NRC) staff met with Wyoming Department of Environmental Quality and representatives of Ur-Energy Inc. via teleconference to discuss Ur-Energy's Lost Creek East Hydrologic Pump Test Plan. The associated meeting notice was issued on July 7, 2016, and is available at NRC's Agencywide Documents Access and Management System Accession No. ML16196A124. A summary of the meeting is enclosed.

Docket No. 040-09068

Enclosure:
Meeting Summary

CONTACT: Lloyd Desotell, NMSS/DUWP
(301) 415-5969

DISTRIBUTION

KJamerson BvonTill JSaxton DBrown

ML16222A723

OFFICE	DUWP	DUWP	DUWP
NAME	LDesotell	SAchten	LDesotell
DATE	8/4/16	8/11/16	8/12/16

OFFICIAL RECORD COPY

MEETING SUMMARY

DATE: July 19, 2016

TIME: 12:30 p.m. – 1:00 p.m., EST

PLACE: U.S. Nuclear Regulatory Commission
Two White Flint North, North Bethesda, MD
Room TWFN-08C01

PURPOSE: To discuss Ur-Energy's Lost Creek East Hydrologic Pump Test Plan

ATTENDEES: See attached list

DISCUSSION:

U.S. Nuclear Regulatory Commission (NRC) staff opened the meeting with a statement on the purpose of the meeting and introductions.

Ur-Energy Inc. (Ur-Energy) provided a few opening remarks indicating that its goal was to get a sense if the regulatory agencies believed the submitted plan would address the data gaps identified in the characterization of the Lost Creek East property. Additionally, Ur-Energy stated that any agreements from regulatory agencies on the plan do not constitute an agreement that the data gaps have been filled. Ur-Energy acknowledged that the collected data will need to be evaluated by NRC and Wyoming Department of Environmental Quality (WDEQ) before each agency could make a substantive determination.

Ur-Energy then provided a brief overview of the plan indicating that six underlying aquifer (L Horizon) wells would be installed (two per existing well testing cluster) and a total of six pumping tests would be conducted, three in the KM Horizon and three in the L Horizon. Ur-Energy went on to state that a major objective of the test plan is to evaluate the degree of vertical hydraulic communication between the KM Horizon and the underlying L Horizon.

WDEQ opened the discussion by stating that while it did not fully agree with some of the background information presented in the test plan, those concerns were not material to the implementation of the hydrologic testing plan. WDEQ stated that the plan was noncommittal regarding step-testing in the L Horizon prior to conducting the constant rate pumping tests. Ur-Energy responded that step-testing would be conducted in the L Horizon prior to the constant rate tests. WDEQ then stated that the duration of the pump testing was ambiguous and asked for clarification. Ur-Energy responded that the tests would be conducted for at least a day or two or until adequate data was collected to ensure that a good fit to type curves could be made. WDEQ concluded that, if the plan were revised to include those clarifications, it would have no major objections to the test plan.

NRC staff asked at what frequency the water level and flow measurements would be taken during the tests. Ur-Energy responded that data would be collected more frequently at the beginning of the test but should not exceed 30 minute intervals.

Enclosure

NRC staff stated that although pump testing of the L Horizon (the aquifer that underlies the KM Horizon production zone) provided good information, this testing was not needed to meet the acceptance criteria in NUREG-1569. Ur-Energy then indicated that based on NRC staff's comment it may revisit that part of the plan. WDEQ indicated that it may want some hydrologic characterization of the L Horizon. Ur-Energy then stated that Ur-Energy and WDEQ could further discuss Wyoming's data needs in a separate meeting.

NRC staff also explained that although pump test data were not needed for the L Horizon, water quality and water level data were needed for the L Horizon. NRC staff concluded that overall, the test plan seemed reasonable and should address data gaps related to the characterization and performance of the confining unit that separates the KM Horizon production zone from the L Horizon within the Lost Creek East property.

Ur-Energy stated that drilling of the additional L Horizon wells may commence in August with aquifer testing being conducted in September 2016. Ur-Energy stated that the pumping test data and analysis would be provided to NRC by the end of October 2016 to supplement the KM/Lost Creek East amendment requests.

After the meeting, through e-mail, Ur-Energy indicated that background data would generally be collected for approximately one week prior to the pumping tests.

After the meeting NRC staff made a follow-up telephone call to Ur-Energy on July 21, 2016 that confirmed that two wells would be installed per testing cluster in the L Horizon even if pump testing of the L Horizon was not conducted.

On July 21, 2016 Ur-Energy e-mailed a revised testing plan (Agencywide Documents Access and Management System Accession No. ML16207A616) to address the comments discussed in the July 19, 2016 public meeting.

PUBLIC DISCUSSION:

There were no questions from the members of the public.

ATTACHMENT: Meeting Attendees

MEETING ATTENDEES

Date: July 19, 2016

Topic: Meeting between Ur-Energy Inc, Wyoming Dept of Environmental Quality and U.S. Nuclear Regulatory Commission on the Lost Creek ISR Lost Creek East Hydrologic Test Plan

NRC	Affiliation
Lloyd Desotell	NRC
Dave Brown	NRC
John Saxton	NRC
Kellee Jamerson	NRC
Brian Wood	Wyoming Department of Environmental Quality
John Cash	Ur-Energy Inc.
Steve Hatten	Ur-Energy Inc.
Kevin Shelburne	Ur-Energy Inc.
Jim Bonner	Ur-Energy Inc.
Mike Gaither	Ur-Energy Inc.
Dan Heilig	Wyoming Outdoor Council
Amber Wilson	Wyoming Outdoor Council
Ben Schiffer	WWC Engineering
Jack Fritz	WWC Engineering