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September 19, 2013
Contract No. NRC-41-09-011
Account No. 20.15265.30.002
Job Code F1256

U.S. Nuclear Regulatory Commission
ATTN: Ms. Jill Caverly
FSME/DWMEP/DURLD
TWFN
Mail Stop 8F 5
Rockville, MD 20555

Subject: Intermediate Milestone (IM) 15265.30.001.020—Letter Report: Site Visit Trip Report

Dear Ms. Caverly:

This letter documents completion of the letter report summarizing the site visit by staffs of the U.S. Nuclear Regulatory Commission (NRC) Contract NRC-41-09-011 Task Order 30 and the Center for Nuclear Waste Regulatory Analyses (CNWRA®) to the proposed Reno Creek *In-Situ* Recovery project and meetings with federal, state, county, and local agencies and organizations.

As requested by NRC, the subject deliverable has been placed on the computer drive shared by NRC and CNWRA. The file is named *Site Visit-Reno Creek.doc* and is in the folder entitled *FSME/TO 30 Reno Creek/Site Visit*. This letter documents transmittal of the subject IM using the shared NRC/CNWRA computer drive.

If you have any questions concerning this deliverable, please do not hesitate to contact Ms. Marla Morales at (301) 881-0289 or me at (210) 522-6418.

Sincerely,

Robert Lenhard, Ph.D.
Program Manager
Environmental Protection and Waste
Management for Non-High-Level
Radioactive Waste

RL/ls

cc:	K. Hsueh	J. Moore	W. Patrick	M. Morales
	A. Mohseni	H. Alcantara	GED Directors	CNWRA QA
			GED Managers	Record Copy B—IQS



Washington Office
1801 Rockville Pike, Suite 105 • Rockville, Maryland 20852-1633

**Meeting With Wyoming Game and Fish Department
September 11, 2013
Sheridan, Wyoming**

Meeting Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Lynn Jahnke, WGFD
Bud Stewart, WGFD
Amy Hester, Research Scientist, CNWRA (by telephone)

On September 11, 2013, NRC and CNWRA staffs met with WGFD to learn their perspective on the potential impacts on ecological resources (terrestrial and aquatic) associated with the proposed Reno Creek ISR Project. The focus of the meeting was to identify early in the review process the concerns of the WGFD as they relate to the specifics of the location of the proposed Reno Creek project. WGFD indicated that because of the project location there may be no critical areas for sage-grouse or big game, but recommended that CNWRA staff review the most recent WGFD surveys on their website. Additional concerns WGFD expressed included the need for a traffic management plan that includes the travel of personnel to and from the site. WGFD also discussed the potential need for an amphibian and reptile survey but acknowledged that the absence of surface water at the site may negate the need to perform such a survey.

Follow-up actions: NRC and CNWRA staffs will contact WGFD for independent confirmation of threatened and endangered species within and near the project area and to obtain the most recent ecological resource survey data.

**Site Visit to the Proposed Reno Creek Uranium Project,
Campbell County, Wyoming,
and Meetings With Federal, State, and County Agencies, and Local Organizations
September 10–12, 2013**

The following U.S. Nuclear Regulatory Commission (NRC) and Center for Nuclear Waste Regulatory Analyses (CNWRA[®]) staff members participated in the site visit and meetings:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA

Introduction

AUC, LLC (AUC) submitted a source material license application to the NRC on October 5, 2012, for the Reno Creek Uranium Project in Campbell County, Wyoming. This license application included an environmental report and technical report and, if approved by NRC, would allow AUC to conduct *in-situ* recovery (ISR) operations for uranium extraction at the proposed Reno Creek project area. Under Task Order 30 of Contract No. NRC–41–09–011, the CNWRA is assisting NRC staff in reviewing AUC’s license application documents, evaluating potential environmental impacts of the proposed action and alternatives, and developing a draft supplemental environmental impact statement (SEIS) in accordance with NRC environmental protection regulations at 10 CFR Part 51.

NRC and CNWRA staffs participated in an information gathering site visit to the proposed uranium project site on September 10, 2013, to gather firsthand information about the site and proposed action and to learn more about the contents of the environmental report and technical report by interacting directly with AUC staff. From September 10 to September 12, 2013, meetings were also held to learn more about various aspects of the proposed project with the staffs of the following Federal, and State of Wyoming agencies: Wyoming Department of Environmental Quality-Land Quality Division (WYDEQ-LQD), Wyoming Department of Environmental Quality-Water Quality Division (WYDEQ-WQD), Wyoming Department of Environmental Quality-Air Quality Division (WYDEQ-AQD), U.S. Fish and Wildlife (USFW), and Wyoming Game and Fish Department (WGFD). Meetings were also held with the following county agencies and local organizations: Campbell County Commissioners and Powder River Basin Resource Council. At these meetings, NRC and CNWRA staffs elicited information and concerns from these agencies and organizations pertaining to the proposed uranium project. This letter report summarizes the visit.

**Visit to AUC's Proposed Reno Creek *In-Situ* Uranium Recovery Site
Campbell County, Wyoming
September 10, 2013**

Site Visit Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Randy Withrow, Senior Program Manager, Cultural Resources, The Louis Berger Group Inc.
Jim Viellenave, President, AUC
Phil Cavendor, Environmental Manager, AUC
Leland Huffman, Engineering and Operations Manager, AUC
Joe Skorupa, USFW
Luke McManan, WYDEQ-LQD
Doren Larner, WYDEQ-AQD
Mickey Shober, Campbell County Commissioner
Bob Myer, Keystone Science, AUC consultant

On September 10, 2013, Phil Cavendor of AUC guided the group through approximately 5 field stops over 4 hours. The stops provided an overview of the entire proposed project area and highlighted the wellfield areas planned to have the most activity. During the site visit, NRC and CNWRA staffs sought clarification on topics including waste management, groundwater and surface water characteristics, transportation networks, air quality, ecology, public and occupational health, and land use.

Prior to the site visit, AUC gave the group a brief presentation describing both the proposed action and the specific stops included in the site visit. AUC provided maps showing the proposed site boundary, wellfields and central processing plant building location.

During the site visit, AUC noted that the land and mineral rights within the project boundary are mostly privately owned with about 11 percent of the surface rights and 11 percent of the mineral rights being State owned. AUC described the land use within the area as 90 percent agricultural-livestock grazing. AUC indicated that the only residents living within the site are the Taffner family and their residence is planned to be purchased and the central processing plant placed at that location. AUC discussed the decommissioning process in terms of equipment removal and the preferences of the land owner.

During a tour of the proposed site with AUC staff, NRC and CNWRA staffs noted that most of the operational area of the site is grassland that has a relatively flat topography. NRC and CNWRA staffs observed that the road bisecting the proposed project area (Hwy 387) is paved with two additional roads (Cosner and Clarkelen Roads) targeted by the county for a magnesium chloride dust/road stabilization treatment in the next few years. AUC staff referred additional questions from NRC and CNWRA staff about erosion characteristics and sediment loads to the WYDEQ-LQD and WYDEQ-WQD.

Follow-up actions: NRC and CNWRA staff indicated to AUC that the topics of discussion that were not fully clarified will be included in requests for additional information (RAIs) to AUC.

**Meeting With Wyoming Game and Fish Department
September 11, 2013
Sheridan, Wyoming**

Meeting Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Lynn Jahnke, WGFD
Bud Stewart, WGFD
Amy Hester, Research Scientist, CNWRA (by telephone)

On September 11, 2013, NRC and CNWRA staffs met with WGFD to learn their perspective on the potential impacts on ecological resources (terrestrial and aquatic) associated with the proposed Reno Creek ISR Project. The focus of the meeting was to identify early in the review process the concerns of the WGFD as they relate to the specifics of the location of the proposed Reno Creek project. WGFD indicated that because of the project location there may be no critical areas for sage-grouse or big game, but recommended that CNWRA staff review the most recent WGFD surveys on their website. Additional concerns WGFD expressed included the need for a traffic management plan that includes the travel of personnel to and from the site. WGFD also discussed the potential need for an amphibian and reptile survey but acknowledged that the absence of surface water at the site may negate the need to perform such a survey.

Follow-up actions: NRC and CNWRA staffs will contact WGFD for independent confirmation of threatened and endangered species within and near the project area and to obtain the most recent ecological resource survey data.

**Meeting With Wyoming Department of Environmental Quality—Land Quality and Air
Quality Divisions
September 11, 2013
Sheridan, Wyoming**

Meeting Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Amy Hester, Research Scientist, CNWRA (by phone)
Luke McManan, WYDEQ-LQD
Doren Larner, WYDEQ-AQD
Miles Bennett, WYDEQ-LQD, Uranium Coordinator
Tanner Shatto, WYDEQ-AQD
Mark Rogaczewski, WYDEQ-LQD
Mark Taylor, WYDEQ-LQD

On September 11, 2013, NRC and CNWRA staffs met with staff of the Wyoming Department of Environmental Quality (WDEQ) to learn their perspective on various aspects of AUC's license application and the proposed project site. WDEQ is the primary state permitting agency for AUC's proposed Reno Creek ISR project. WDEQ would issue the following state permits for the proposed project: mining permit, National Pollutant Discharge Elimination System (NPDES) surface water discharge permit, air quality permit, water rights permit, and aquifer exemption request. WDEQ consults and works with the U.S. Environmental Protection Agency (EPA) on applications for UIC permits (e.g., Class III for lixiviant injection associated with ISR of uranium; Class V for deep well waste water disposal).

Regarding permitting for the proposed project site, WDEQ noted that AUC submitted an application for a permit to mine. However, on August 13 and 27, 2013, WDEQ-LQD responded to the AUC application with comments and questions and reported that the application was 'technically incomplete. Currently, WDEQ is waiting for additional information from AUC to resolve WDEQ concerns with the permit application.

Additionally, a number of concerns were expressed by the CNWRA staff regarding air permitting, however the WDEQ-Air Quality staff participating in the meeting dealt predominately with air quality compliance. WDEQ-AQD staff provided contact information for their air-permitting staff.

Follow-up actions: NRC and CNWRA staffs will contact the air-permitting WDEQ-AQD personnel to gather additional information.

**Meeting With Powder River Basin Resource Council (PRBRC)
September 11, 2013
Sheridan, Wyoming**

Meeting Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Shannon Anderson, PRBRC, Organizer
Kevin Lind, PRBRC, Director

On September 11, 2013, NRC and CNWRA staffs met with the PRBRC to learn their concerns and their perspectives on potential environmental impacts of the proposed Reno Creek ISR project. PRBRC indicated their main concerns included: water quality, restoration standards, regional air quality, groundwater depletion, legacy issues from abandoned wells, and the frequency of excursions from other currently operating in-situ uranium extraction facilities. PRBRC indicated they had not reviewed the publicly available AUC Reno Creek license application. They plan to review the draft Reno Creek SEIS when it is released. Additionally, PRBRC noted they had been contacted by the applicant (AUC) and were in the process of scheduling a meeting.

Follow-up actions: none

**Meeting With Wyoming Department of Environmental Quality—Water Quality Division
September 12, 2013
Casper, Wyoming**

Meeting Participants:

Jill Caverly, Project Manager, NRC
Kellee Jamerson, Project Manager, NRC
Marla Morales, Principal Investigator, Research Scientist, CNWRA
Bradley Werling, Research Scientist, CNWRA
Amy Hester, Research Scientist, CNWRA (by phone)
Jason Vreeland, WDEQ-WQD
Karen Farley, WDEQ-WQD

On September 12, 2013, NRC and CNWRA staffs met with staff of the Wyoming Department of Environmental Quality—Water Quality Division (WDEQ-WDQ) to learn their perspectives on various aspects of AUC's license application and the proposed project site. WDEQ-WQD indicated they had not received an application from the applicant for construction of a water well on site. WDEQ-WQD stated their office issues permits for wells prior to construction for any water used as process water or facility water because this water will come in contact with the public thereby bringing it within their jurisdiction. They indicated the applicant would first need to contact the Wyoming State Engineers Office to apply for the right to access the water and then apply to WDEQ-WQD to construct the well. Additionally, the Casper office of WDEQ-WQD provided contact information for state regulators in Cheyenne who would issue permits for other aspects of water usage for the site.

Follow-up action: NRC and CNWRA staffs will contact the other WDEQ-WQD office to follow up on water permitting for the proposed Reno Creek ISR project.

Summary:

The site visit provided NRC and CNWRA staffs with a better understanding of (i) AUC's license application; (ii) important issues and concerns of federal, state, county, and local agencies, and organizations; (iii) state permitting process requirements, and the current status of the applications; (iv) local stakeholder concerns associated with the proposed uranium extraction project. CNWRA will work with NRC staff to prepare and transmit formal RAIs to AUC to clarify project information and to resolve gaps in the license application documents. Additional information gathered from relevant federal, state and county agencies will be incorporated into the draft SEIS as appropriate.