

AUC LLC

The Reno Creek ISR Project

January 12, 2015

Mr. Chad Glenn
United States Nuclear Regulatory Commission
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Reno Creek *In-Situ* Leach Uranium Recovery (ISR) Project
Vegetation Sampling Procedure and Lab Analyses per Regulatory Guide 4.14.

Dear Mr. Glenn:

By this letter AUC LLC (AUC) respectfully submits to NRC staff an outline of AUC's vegetation sampling procedure and results of sample analyses as committed to in the Public Meeting dated October 8, 2014. This information is submitted in response to RAIs 23 and 24 of the Request for Additional Information (RAI) Response Package submitted to NRC June 13, 2014 and referenced in the RAI Clarification Response Package submitted under cover dated December 23, 2014.

This is the first of three rounds of sampling. The second round's laboratory data will be available soon, and results will be transmitted to you upon receipt. The third round of sampling will be conducted as early in the spring grazing season as possible, with laboratory results transmitted to you shortly thereafter.

Respectfully Submitted,



James H. Viellenave
President
AUC LLC

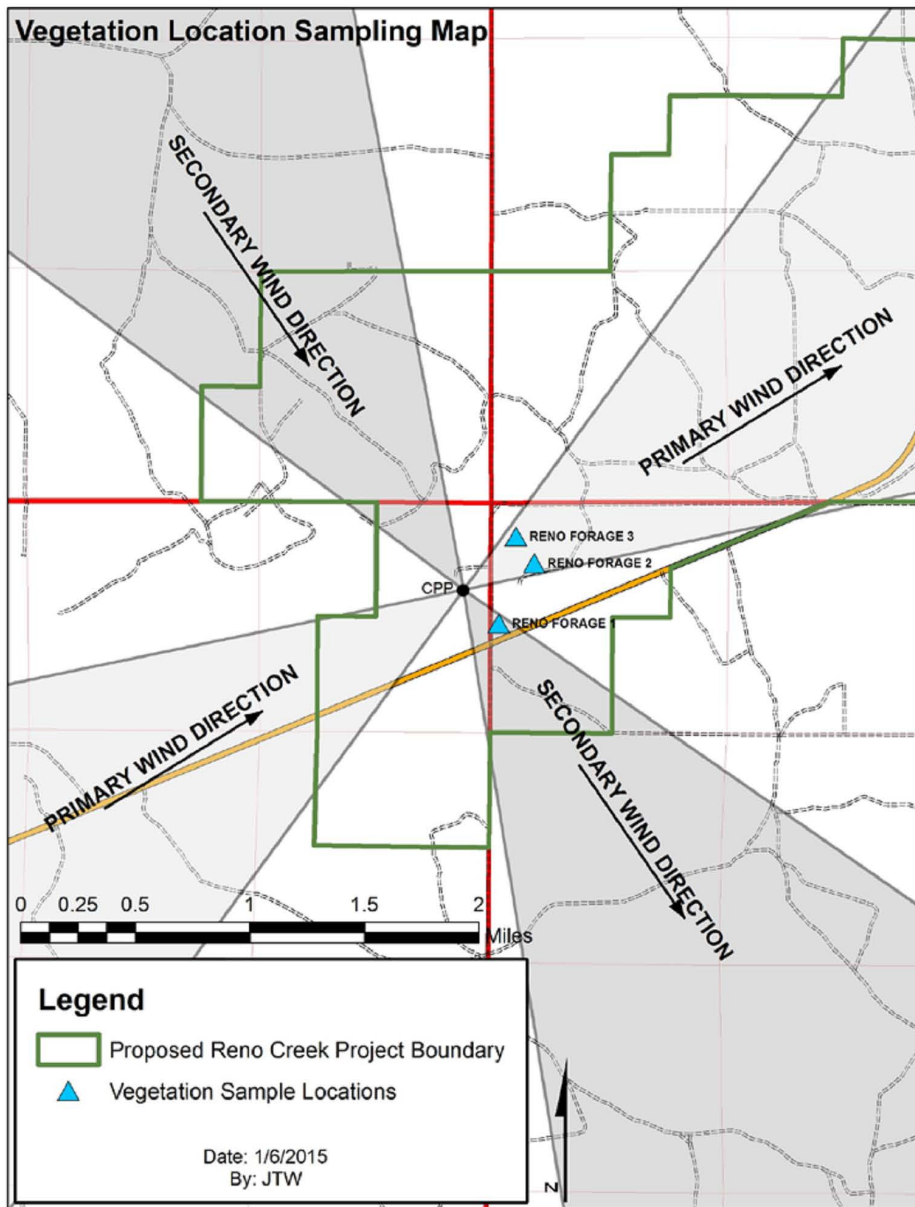
Enclosures

Note: The electronic documents are in Adobe PDF format that meet the NRC requirements for electronic submittals including optical character recognition (OCR), a resolution of 300 dpi and embedded fonts.

Vegetation Sampling Procedure

Sample Locations

As required in Table 1 of Regulatory Guide 4.14 the applicant needs to collect vegetation samples at least three times during the grazing season in grazing areas in three different sectors that will have the highest predicted air particulate concentrations due to operations and located near the Central Processing Plant (CPP). The purpose of this work is to establish preoperational radionuclide concentrations. The figure below shows the vegetation sample locations.



The sampling locations have been selected based on meteorological data from the Reno Creek site meteorological station. The selected sampling locations are in three different sectors having the highest predicted radionuclide concentrations, using the site's wind rose centered on the planned CPP location.

AUC collected two of the required three rounds of vegetation samples at each of the selected sampling locations, during the grazing season in October and November of 2014. The sample locations are labeled Reno Forage 1, Reno Forage 2 and Reno Forage 3.

Sample Procedure

1. Begin sampling at the centers of the sample locations and sample as close to the centers as the availability of forage vegetation allows. Forage vegetation is any vegetation that may be eaten by grazing cattle, essentially grasses. No woody plants should be sampled. Do not allow the vegetation to come in contact with the ground during sampling, to prevent contamination by soil particles.
2. Cut grass with manual hedge clippers and use a large dust-pan to keep the forage vegetation samples from contacting the ground/soil.
3. Place the collected samples in suitably sized plastic bags, such as 39 gallon large Yard Bags. Double bag the samples to protect from possible contamination.
4. Use an appropriate scale to weigh the collected sample to ensure that the amount of vegetation collected meets the weight requirement for proper analysis at the laboratory. The total sample weight for each of the three samples should be 3.6 to 4.0 kg (8-9 lbs).
5. Deliver the collected samples, one sample from each of the 3 sampling locations, to Inter-Mountain Labs (IML) in Sheridan, Wyoming for analysis.
6. Specify on their Chain of Custody (CoC) form that the analyses are for the radionuclides (210Pb, 210Po, 226Ra, 230Th and U-nat), using MDA's as specified for preoperational forage vegetation in USNRC Regulatory Guide 4.14.

Sampling Results

The tables below present the laboratory results for the first round of forage vegetation sample analyses.

Sample ID: Reno Forage 1	Forage Vegetation (Round 1)	Sample Size: 4.5 kg	Date Collected: 10/15/2014	
Analyses	Result	Precision (\pm)	RL	Units
Lead 210	261	18.3	1	pCi/Kg
Polonium 210	3.9	3.6	1	pCi/Kg
Radium 226	21.3	2.3	0.05	pCi/Kg
Thorium 230	5.9	2.2	0.2	pCi/Kg
Thorium 229 Tracer (30-120)	79.8	NA	0.2	pCi/Kg
Uranium	5.1	NA	0.2	pCi/Kg
RL - Reporting Limit	NA - Not Applicable			

Sample ID: Reno Forage 2	Forage Vegetation (Round 1)	Sample Size: 4.1 kg	Date Collected: 10/15/2014	
Analyses	Result	Precision (\pm)	RL	Units
Lead 210	209	16.1	1	pCi/Kg
Polonium 210	ND	NA	1	pCi/Kg
Radium 226	25.1	2.3	0.05	pCi/Kg
Thorium 230	4	1.6	0.2	pCi/Kg
Thorium 229 Tracer (30-120)	92.3	NA	0.2	pCi/Kg
Uranium	4.1	NA	0.2	pCi/Kg
RL - Reporting Limit	ND - Not Detected at the Reporting Limit		NA - Not Applicable	

Sample ID: Reno Forage 3	Forage Vegetation (Round 1)	Sample Size: 3.7kg	Date Collected: 10/15/2014	
Analyses	Result	Precision (\pm)	RL	Units
Lead 210	251	18.3	1	pCi/Kg
Polonium 210	11.4	5.3	1	pCi/Kg
Radium 226	31.5	2.7	0.05	pCi/Kg
Thorium 230	11.3	3	0.2	pCi/Kg
Thorium 229 Tracer (30-120)	87.6	NA	0.2	pCi/Kg
Uranium	7	NA	0.2	pCi/Kg
RL - Reporting Limit	NA - Not Applicable			