



July 17, 2013

Attn: Document Control Desk
Director
Office of Federal and State Materials and
Environmental Management Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Protection
Mail Stop T-8F5
11545 Rockville Pike
Two White Flint North
Rockville, MD 20852-2738

Re: Semi-Annual Report Uranerz Energy Corporation Nichols Ranch ISR Project SUA-1597

Dear Director and Deputy Director,

This letter and attachment serves as the Semi-Annual Report for the Uranerz Energy Corporation Nichols Ranch ISR Project that is required by License Condition 11.1 B and D in SUA-1597.

If you have any questions regarding the provided information, please contact me at 307-265-8900 or by email at mthomas@uranerz.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael P. Thomas", written in a cursive style.

Michael P. Thomas
Vice President Regulatory Affairs
Uranerz Energy Corporation

MT/dk

Attachments

January-June 2012 Semi-Annual Report

cc: Ron Linton, NRC Project Manager
Mark Rogaczewski, WDEQ-LQD District III Supervisor

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**Nichols Ranch ISR Project
License Number SUA-1597**

Semi-Annual Report

January- June 2013

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1. Introduction:

Uranerz received Source Material License SUA-1597 on July 19, 2011. The Semi-Annual and Annual report summarizes the operational and environmental activities and monitoring for the Nichols Ranch and Hank Units as required by SUA-1597. Semi-Annual reporting is performed according to SUA-1597 License Condition 11.1 B and D, and 12.10 and includes information for the period of January through June 2013.

2. Activities Summary:

Uranerz continued construction of the Nichols Ranch Unit Central Processing Plant (CPP) and Production Area #1 (PA#1) during the report period as summarized in Quarterly Reports submitted to the NRC.

The NRC provided comments in May, 2013 for PA#1 Wellfield Package. Uranerz submitted responses to NRC's request in June, 2013. The Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) approved PA#1 Wellfield Package June 4, 2013.

Installation of two deep disposal wells was re-scheduled to commence the beginning 3rd Quarter 2013.

No operational activities occurred at the Hank Unit during the report period. The Environmental Assessment (EA) is pending with the Bureau of Land Management (BLM) for the 280 acres that the BLM manages.

3. Safety and Environmental Review Panel (SERP) Evaluations

Per License Condition 9.4E Uranerz shall furnish, in an annual report to the NRC, a description of such changes, tests, or experiments, including a summary of the evaluations made by the safety and environmental evaluation panel (SERP). Uranerz will, in accordance with these requirements, submit the SERP summaries and related text changes in the second semi-annual report, thereby capturing an annual period of evaluations and changes.

4. Status of Production Areas

Operations

During the reporting period no production areas were operational. As stated above construction of the facilities and PA#1 continues at the Nichols Ranch Unit.

Restoration

No production areas are in restoration for the reporting period.

Mechanical Integrity Testing

As done previously, the number of wells installed and mechanical integrity test (MIT) status (License Condition 11.1B) has been reported in the Quarterly Reports to the NRC to reduce reporting redundancy between agencies requiring the same information.

5. Operational Monitoring

No production activities occurred during the report period. The following results are a summary of operational effluent and environmental monitoring required to be reported semi-annually in accordance with License Condition 11.1D.

Excursion Well Status

No wells were on excursion status during the reporting process. Excursion monitoring will commence following lixiviant circulation.

Groundwater Monitoring

A review of groundwater wells, per License Condition 11.7 within 2 kilometers of any production area showed no new groundwater wells.

Pursuant to License Condition 12.10 pre-operational water samples were collected from domestic and livestock wells located within 2 kilometers of the proposed production area. The samples were analyzed at an offsite laboratory for natural uranium, radium-226, and those constituents, chloride, conductivity, and alkalinity, as listed in Section 5.7.8.9 of the license application. The analysis results are provided in Appendix A.

Surface Water Monitoring

In accordance with Section 5.7.7.3.1 of the license application surface water will be collected and analyzed for total uranium, Th-230, Ra-226, and Pb-210. Given the prevailing dry conditions grab samples from locations of surface water were not able to be collected. There are three surface water self-samplers on site with two located at the Nichols Ranch Unit and one at the Hank Unit. Uranerz collected no samples during the period, as there was no water present to sample (as shown in Appendix B).

Meteorology

Uranerz previously reported that a meteorological station was installed for the collection of data per License Condition 12.7. Results of the one year monitoring will be submitted to the NRC under separate cover.

6. Surety

Uranerz previously requested, under cover letter dated July 30, 2012, an administrative amendment to change the surety review dates to December. The WDEQ-LQD also requires an annual surety review and therefore Uranerz request would align the NRC and LQD surety reviews for consistency, standardization and reduced redundancy.

Uranerz submitted the update to the NRC under cover letter dated December 20, 2012. The NRC responded requesting additional information in April 2013, to which Uranerz submitted response in June 2013.

All activities that have been conducted to date at the Nichols Ranch ISR Project are covered in the original surety estimate that was submitted when SUA-1597 was issued. The next surety review will be conducted in December 2013.

Appendices

Appendix A – Livestock and Domestic Wells within 2 Kilometers

Appendix B – Surface Water

Appendix A
Livestock and Domestic Wells Within 2 Kilometers
Water Quality Analysis
January-June 2013 Semi-Annual Report

Sample Location	Sample Date	Uranium-Natural (Total)		Radium 226			Alkalinity (mg/L)	Conductivity (umhos/cm)	Chloride (mg/L)
		Concentration (mg/L)	Reporting Limit (mg/L)	Concentration (pCi/L)	Precision (±) (pCi/l)	MDC or RL (pCi/L)			
Hank Unit									
North Dry Willow*	19 Jun 13	0.0861	0.0003	3.7	0.39	0.17	131	2150	9
Dry Willow #1	5 Feb 13	0.0026	0.0003	53	1.0	0.14	121	1190	3
Brown - F	5 Feb 13	0.0004	0.0003	1.3	0.19	0.15	146	475	4
Brown - WS*	19 Jun 13	0.0094	0.0003	0.30	.015	0.18	79	1150	5
Means #1*	19 Jun 13	0.284	0.0003	0.84	0.21	0.18	102	1610	4
Paden #1*	19 Jun 13	0.606	0.0003	4.9	.045	0.17	119	2070	8
Red Springs Artesian	4 Feb 13	0.0738	0.0003	0.30	0.08	0.09	514	3880	13
Doble Hill Well #1	Not Sampled, Dry Well								
Connie #2	Not Sampled, Dry Well								
Nichols Ranch Unit									
DW-4L	6 Feb 13	ND	0.0003	0.33	0.12	0.14	111	612	9
DW-4M	10 Jan 13	ND	0.0003	0.29	0.22	0.30	238	1090	11
DW-4U	10 Jan 13	0.0767	0.0003	0.48	0.25	0.30	123	1470	5
Nichols #1	9 Jan 13	0.0289	0.0003	-0.2	0.10	0.26	139	496	6
Pats #1	30 Jan 13	0.0450	0.0003	0.24	0.13	0.17	134	610	6
Pug #2	9 Jan 13	ND	0.0003	0.10	0.17	0.27	248	498	3
Brown 21-6	29 Jan 13	ND	0.0003	-0.02	0.1	.019	155	414	6
Dry Fork #3	Not Sampled, Dry Well								
Pug #1	Not Sampled, Dry Well								

Notes:

ND =Not Detected at the Reporting Limit

MDC = Minimum Detectable Concentration

RL = Reporting Limit

*At the end of September 2012 the Landowner shut down the wells.

Appendix B
Uranerz Surface Water
Water Quality Analysis
January - June 2013 Semi-Annual Report

Sample Location	Sample Date	Uranium-Natural (Total)		Radium 226			Lead 210			Thorium 230		
		Concentration (mg/L)	Reporting Limit (mg/L)	Concentration (pCi/L)	Precision (±) (pCi/L)	MDC or RL (pCi/L)	Concentration (pCi/L)	Precision (±) (pCi/L)	MDC or RL (pCi/L)	Concentration (pCi/L)	Precision (±) (pCi/L)	MDC or RL (pCi/L)
NRSSW (Cottonwood D Nichols)	NA	No water present to sample										
NRSSE (Cottonwood U Nichols)	N/A	No water present to sample										
Dry Willow Reservoir	N/A	No water present to sample										
Brown Water Pond	N/A	No water present to sample										
HSS (Dry Willow Creek)	NA	No water present to sample										

Notes:

ND =Not Detected at the Reporting Limit

MDC = Minimum Detectable Concentration

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