POWER RESOURCES

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February 23, 2006

ATTN: Document Control Desk
Gary S. Janosko, Chief
Fuel Cycle Facilities Branch,
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Two White Flint North
Rockville, MD 20852-2738

RE: Smith Ranch-Highland Uranium Project
NRC License SUA-1548, Docket No. 40-8964
Semi-Annual Effluent and Environmental Monitoring Report, July 1 – December 31, 2005

Dear Mr. Janosko:

In accordance with 10 CFR 40.65 and License Condition No. 12.2 of License SUA-1548, please find enclosed the Semi-Annual Effluent and Environmental Monitoring Report for the Smith Ranch-Highland Uranium Project. This report covers the period July 1 – December 31, 2005. A copy of this report is also being forwarded to Mr. Paul Michalak, USNRC Headquarters, and Mr. Leonard Wert, Director DRSS, Region IV.

If you have any questions regarding the report, please contact me at (307) 358-6541, ext. 46.

Sincerely,

Ken Milmine

Ken Milmine
Manager-Health, Safety
& Environmental Affairs

KLM/bj

Enclosure

cc: Mr. Paul Michalak, USNRC Headquarters
Mr. Leonard Wert, Director DRSS, Region IV, USNRC
S.P. Collings w/o atta C. Foldenauer w/o atta File SR 4.6.4.1

NMSS01

POWER RESOURCES, INC.

SMITH RANCH - HIGHLAND URANIUM PROJECT

SEMI-ANNUAL EFFLUENT AND ENVIRONMENTAL MONITORING REPORT

FOR THE PERIOD

JULY 1 THROUGH DECEMBER 31, 2005

USNRC SOURCE MATERIAL LICENSE NO. SUA-1548

DOCKET NO. 40-8964

TABLE OF CONTENTS

1.0 RESULTS FROM EMPLOYEE URINALYSES IF AN EXPOSURE EXCEEDS ACTION LEVELS DESCRIBED IN THE OPERATIONS PLAN OF THE APPROVED LICENSE APPLICATION

During the period July 1, through December 31, 2005, no bioassays exceeded the action level of 15 µg/L uranium.

2.0 INJECTION RATES, RECOVERY RATES, AND INJECTION TRUNK-LINE PRESSURES FOR EACH SATELLITE FACILITY

The required information for each Satellite facility for the 3rd and 4th Quarters of 2005 is presented in Tables 1A, 1B, 1C, and 1D included in Attachment A.

2.1 Satellite No. 1

Satellite No. 1 did not operate during the report period since restoration activities in the A and B Wellfield are complete. Therefore, no injection or recovery rates are available for the report period.

2.2 Satellite No. 2, Satellite No. 3, Satellite SR-1, Central Processing Plant

The injection rates, recovery rates, and injection pressure data for Satellite No. 2, Satellite No. 3, Satellite SR-1, and the Central Processing Plant (CPP) are contained in Table 1B, 1C, and 1D. The injection rates represent the total recovery rates minus the purge (clean-out circuit) flow. The purge from Satellite No. 2 and No. 3 is treated for uranium and radium removal and pumped to the Satellite No. 2 Purge Storage Reservoir prior to disposal by irrigation at the Satellite No. 2 Land Application Facility. Purge from Satellite SR-1 and the CPP is disposed by deep injection through permitted waste disposal wells.

3.0 RESULTS OF EFFLUENT AND ENVIRONMENTAL MONITORING INCLUDING WATER QUALITY ANALYSES AND MONITORING REQUIRED BY THE WDEQ PERMIT FOR THE OPERATING IRRIGATION SYSTEMS

3.1 Stack Emission Surveys

When the Central Processing Facility (CPF) at the Highland Uranium Project is operational, PRI monitors the Yellowcake Dryer and Packaging scrubber exhaust stacks to determine the emission rate of particulates, uranium, radium, and thorium. During the report period, the Highland CPF remained on standby status as all yellowcake processing activities (elution, precipitation, drying, and packaging) were conducted at the Smith Ranch Central Processing Plant. The dryers at the Smith Ranch Central Processing Plant are zero emission vacuum dryers that do not require emission stack testing. Therefore, no stack tests were conducted during the report period. It is anticipated that the CPF at Highland will remain on standby status

during several upcoming report periods.

3.2 Air Particulate, Radon, and Gamma Radiation Monitoring

PRI maintains five Air Monitoring Stations at various locations on and around the licensed area. Two of these stations are used to monitor downwind conditions of the Highland CPF, and monitoring is not required unless the CPF is in operation. The Air Monitoring Stations are used to monitor air particulates, radon, and gamma radiation. The stations are located as follows:

- AS-1 (Dave's Water Well): This station monitors background conditions, upwind of both the Smith Ranch and HUP wellfields and yellowcake processing facilities.

- AS-2 (Smith Ranch Restricted Area): This station monitors conditions downwind of the Smith Ranch CPP Restricted Area Boundary.

- AS-3 (Vollman Ranch): This station monitors the nearest downwind resident to the Smith Ranch CPP Restricted Area.

- AS-4 (HUP Restricted Area): This station monitors conditions downwind of the HUP CPF Restricted Area Boundary (when the HUP CPF is operating).

- AS-5 (Fowler Ranch): This station monitors the nearest downwind resident to the HUP CPF Restricted Area (when the HUP CPF is operating).

Monitoring at AS-4 and AS-5 was not conducted during the reporting period since the Highland CPF remains on standby status. It is anticipated that the Highland CPF will remain in standby status for several upcoming reporting periods and monitoring of downwind air stations will only resume if the Highland CPF becomes operational.

Table 2 shows the air particulate and radon data collected at these sites during the report period. Review of data collected during the report period shows that the concentrations of all parameters are significantly less than the 10 CFR 20, Appendix B.

Gamma radiation data for the report period are provided in Table 3. 10 CFR 20 Appendix B contains no Effluent Concentration Limit for gamma radiation for comparison. However, gamma results for the report period are within normal background conditions and show no discernable trends with previous data.

3.3 Water Sampling Data

3.3.1 *Groundwater and Surface Water Monitoring Stations*

During the report period, monitoring was completed at eleven water wells and four stock ponds throughout the permit area. Water samples are collected from the water wells and stock ponds on a quarterly basis for analysis of uranium and radium-226. Table 4 provides the analytical data for samples collected during the report period. A review of data collected during the report period shows that six stock ponds (Stations SW-1, 2, 3, 4, 5 and 9) remained dry during the report period and four water wells (GW-5, 6, 8 and 9) did not run during the report period. A review of data collected from the eleven water wells and four stock ponds show that the concentrations of uranium and radium-226 are well below the 10 CFR 20, Appendix B, Effluent Concentration Limits of 3.0E-07 µCi/mL and 6.0E-08 µCi/mL, respectively.

3.4 Wastewater Land Application Facilities Monitoring

3.4.1 *Soil and Vegetation Sampling*

In accordance with the approved license application and the WDEQ permits for the Satellite No. 1 and Satellite No. 2 Wastewater Land Application Facilities, soil and vegetation sampling of the irrigation areas is conducted in late summer of each year. The soil and vegetation data are collected to monitor and evaluate any adverse effects to the irrigation areas. The 2005 soil and vegetation sampling at the irrigation areas were conducted on August 4 and August 22, 2005.

Soil data from the Satellite No. 1 and Satellite No. 2 Wastewater Land Application Facilities are provided in Tables 5 and 6 respectively. Comparison of data from the report period with previous data shows a slight increase in uranium and radium-226 concentrations at both facilities. Uranium concentrations at the 0-6 inch depth remain elevated above baseline conditions for the irrigation area at Satellite No. 1 in 2005.

The approved license applications for the facilities predicated that at the end of operations uranium concentrations in soil would be elevated above baseline, while radium concentrations would remain near baseline. Therefore, PRI does not anticipate any problems with meeting the criteria in 10 CFR 40 during decommissioning of the facilities.

Vegetation data from the Satellite No. 1 and No. 2 Wastewater Land Application Facilities are provided in Tables 7A and 7B respectively. Comparison of data from the report period with previous data does not indicate any significant changes. Uranium concentrations remain slightly elevated above baseline conditions and radium-226 concentrations remain near baseline.

3.4.2 *Irrigation Fluid*

In accordance with the approved license application and the WDEQ Wastewater Land Application permits, PRI monitors the treated irrigation fluid that is disposed of at both irrigation facilities. Grab samples are collected at the irrigator pivot during each month of operation and analyzed for various parameters. As noted in Table 8 and Table 9, only Irrigator 2 operated during the report period.

Irrigation fluid data collected at Satellite No. 2 is provided in Table 9. A review of the data indicates that the concentration of uranium in the monthly grab samples slightly exceeded the 10 CFR 20, Appendix B, Effluent Concentration Limit of 3.0 E-7 μCi/ml, but were significantly less than the estimate provided in the original license application for the facility (1.4E-6 μCi/ml) The samples contained radium-226 concentrations below the 10 CFR 20, Appendix B, Effluent Concentration Limit of 6.0E-08 μCi/ml and below the estimate provided in the original license application for the facility (3.0E-9 μCi/ml)

3.4.3 *Radium Treatment Systems*

PRI collects grab samples each month to ensure that the radium-226 treatment systems are adequately treating wastewater from Satellites No. 2 and No. 3 prior to discharge into the Purge Storage Reservoir. No samples were collected from the Satellite No. 1 radium treatment system since Satellite No. 1 did not operate during the report period. The monthly radium-226 grab samples for Satellite No. 2 and No. 3 are collected at the discharge points of the radium treatment system at each facility. The results of this monitoring are included in Table 10A, and 10B. Review of the monitoring data shows that all radium-226 concentrations were below the 10 CFR 20, Appendix B, Effluent Concentration Limit of 6.0E-8 μCi/ml (60 pCi/L) at Satellite No. 2 during the report period

3.4.4 *Soil Water*

In accordance with the approved license application and the WDEQ Wastewater Land Application Facility permits, PRI collects soil water samples at the irrigation areas in June of each year and analyzes them for various parameters, including uranium and radium-226. Sampling was conducted on June 30, 2005, but due to drought conditions and the relatively limited amount of irrigation, there was insufficient soil water available to produce a sample at any of the sample locations for the Satellite No. 1 and Satellite No. 2 irrigation areas.

3.4.5 *Satellite No. 1 Purge Storage Reservoir Monitor Well*

A shallow monitor well, located southwest of the Satellite No. 1 Purge Storage Reservoir is monitored at least weekly for potential seepage from the reservoir. There

was no evidence of seepage during the report period. PSR-1 was dry for the entire period and it is not anticipated that water will be diverted to PSR-1 in the near future. Therefore, it is unlikely there will be any seepage from PSR-1 in the following report periods.

3.4.6 *Satellite No. 2 Purge Storage Reservoir Shallow Wells*

In accordance with the approved license application, water levels are measured on a quarterly basis and ground water samples are required on a semi-annual basis from the two shallow monitoring wells located adjacent to the Satellite No. 2 Purge Storage Reservoir (PSR-2). PRI conducts quarterly sampling of these two wells. Shallow Wells No. 1 and No. 2 are located adjacent to the south and east sides of the reservoir, respectively. During the report period, monitoring was conducted on July 20 and November 1, 2005. Shallow Well No. 1 contained insufficient water to sample on both occasions and as a result, there is no data available for the report period. Table 12 contains the applicable data for Shallow Well No. 2.

Comparison of the uranium and radium-226 data from Shallow Well No. 2 does not indicate any significant trends or changes from previous report periods. Comparison of water level data collected during the report period with previous data continues to show a trend of higher water levels during the spring-summer months and lower water levels during the fall-winter months.

4.0 SAFETY AND ENVIRONMENTAL EVALUATIONS

All safety and environmental evaluations made by the Safety and Environmental Review Panel (SERP) and resulting changed pages to the Operations Plan and Reclamation Plan of the approved license must be submitted on an annual basis. During the period January 1 through December 31, 2005, PRI completed the following Safety and Environmental Evaluations:

Safety and Environmental Evaluation No. 2005-1 – Dated March 10, 2005, for Start-up of Mine Unit-15

Safety and Environmental Evaluation No. 2005-2 – Dated June 15, 2005, for Changes to EHS Department Staff

Safety and Environmental Evaluation No. 2005-3 – Dated June 16, 2005, for Evaporation Pond Sludge Removal and Liner Replacement.

Safety and Environmental Evaluation No. 2005-3A – Dated October 19, 2005, for Amendment to Evaporation Pond Sludge Removal and Liner Replacement

Safety and Environmental Evaluation No. 2005-4 - Dated July 28, 2005, for Reduction of Inspection Frequency at Satellite No. 1 from Daily to Weekly

Safety and Environmental Evaluation No. 2005-5 – Dated October 4, 2005, for Adding Mine Unit-E, D, and 1 to Restoration Plan

Summaries of the completed SERP evaluations are provided in Attachment B

5.0 RUTH ISL PROJECT

The Ruth Project is licensed for commercial ISL uranium activities, however none has been initiated. The existing buildings and evaporation ponds, along with a few remaining wells, are left from research and development testing conducted by Uranerz, USA, one of the previous licensees. The facilities at the project are non-operational and on stand-by status. Therefore, radiation and effluent monitoring was not conducted and is not required by the NRC or the Wyoming Department of Environmental Quality. The quantity of radionuclides released to unrestricted areas in liquid and in gaseous effluents is considered negligible and is not applicable at this time.

Activities conducted during the report period consisted of quarterly inspections of the existing facilities. Inspection of the perimeter fence, pond embankments, and pond liners yielded no deficiencies during the report period.

6.0 NORTH BUTTE ISL PROJECT

The North Butte Project is also licensed for commercial ISL uranium operations; however, construction of facilities has not commenced and is currently on hold. Since there are no radioactive materials present on site, no radionuclides were released to unrestricted areas in liquid or in gaseous effluents.

License Condition 9.5 requires PRI to submit, for the NRC and WDEQ-LQD approval, an itemized cost estimate for implementation of the NRC-approved decommissioning/ restoration plan prior to commencement of construction of a commercial facility at the North Butte/Ruth sites. Currently, PRI is in the process of updating the Operations and Reclamation Plan for the North Butte ISL Project in pursuit of approval to commence construction activities at the North Butte site.

ATTACHMENT A

DATA TABLES 1-12

TABLE 1A
SATELLITE NO. 1 INJECTION RATES, RECOVERY RATES, INJECTION PRESSURES

MONTH	Injection Pressure (PSI) RO #1	RO #2	RO #3	Grounwater Sweep GPM	Radium Ponds GPM	RO Feed GPM	Injection GPM	RO Concentrate GPM	Purge Flow GPM
Jul-05	0	0	0	0	0	0	0	0	0
Aug-05	0	0	0	0	0	0	0	0	0
Sep-05	0	0	0	0	0	0	0	0	0
Oct-05	0	0	0	0	0	0	0	0	0
Nov-05	0	0	0	0	0	0	0	0	0
Dec-05	0	0	0	0	0	0	0	0	0

TABLE 1B
AVERAGE INJECTION RATES (GPM)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	Central Processing Plant
Jul-05	2,573	1,655	2,368	3,954
Aug-05	2,544	1,622	2,610	3,832
Sep-05	2,551	1,632	3,051	3,888
Oct-05	2,561	1,655	3,224	3,919
Nov-05	2,466	1,362	3,420	4,264
Dec-05	2,502	1,343	3,405	4,179

TABLE 1C
AVERAGE RECOVERY RATES (GPM)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	Central Processing Plant
Jul-05	2,596	1,715	2,382	3,981
Aug-05	2,567	1,680	2,624	3,857
Sep-05	2,574	1,692	3,066	3,910
Oct-05	2,584	1,722	3,239	3,942
Nov-05	2,489	1,430	3,423	4,301
Dec-05	2,525	1,412	3,405	4,220

TABLE 1D
INJECTION TRUNK LINE PRESSURES (PSI)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	Central Processing Plant
5-Jul	95	80	63	161
Aug-05	94	76	67	162
Sep-05	93	77	72	159
Oct-05	96	82	72	163
Nov-05	88	74	79	170
Dec-05	96	72	86	174

TABLE 2

AIR SAMPLING DATA - 2005
ENVIRONMENTAL MONITORING SITES
3rd & 4th QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	RADIONUCLIDE (µCi/ml)	CONCENTRATION (µCi/ml)	ERROR EST. +/- (µCi/ml)	L.L.D. (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT %
FENCE LINE	3rd	U-Nat	3.93E-16	N/A	1.00E-16	9.00E-14	0.4
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Restricted Area		Ra-226	1.82E-16	1.4E-16	1.00E-16	9.00E-13	< 1.0
Boundary		Pb-210	1.96E-14	2.10E-15	2.00E-15	6.00E-13	3.3
		Rn-222			3.00E-10	1.00E-08	0.0
	4th	U-Nat	2.81E-16	N/A	1.00E-16	9.00E-14	0.3
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	2.05E-14	1.53E-15	2.00E-15	6.00E-13	3.4
		Rn-222	1.30E-09	NA	3.00E-10	1.00E-08	13.0
VOLLMAN RANCH	3rd	U-Nat	4.57E-16	N/A	1.00E-16	9.00E-14	0.5
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Downwind Nearest		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
Residence		Pb-210	2.61E-14	2.27-15	2.00E-15	6.00E-13	4.4
		Rn-222			3.00E-10	1.00E-08	0.0
	4th	U-Nat	1.96E-16	N/A	1.00E-16	9.00E-14	0.2
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	3.35E-14	1.81E-15	2.00E-15	6.00E-13	5.6
		Rn-222	1.70E-09	N/A	3.00E-10	1.00E-08	17.0
DAVE'S WATER WELL	3rd	U-Nat	1.07E-16	N/A	1.00E-16	9.00E-14	0.1
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Background		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
Site		Pb-210	2.88E-14	2.32E-15	2.00E-15	6.00E-13	4.8
		Rn-222			3.00E-10	1.00E-08	0.0
	4th	U-Nat	1.44E-16	N/A	1.00E-16	9.00E-14	0.2
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	2.51E-14	1.56E-15	2.00E-15	6.00E-13	4.2
		Rn-222	1.30E-09	N/A	3.00E-10	1.00E-08	13.0

TABLE 3

DIRECT RADIATION (GAMMA) MEASUREMENT DATA - 2005
ENVIRONMENTAL MONITORING SITES
3rd & 4th QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	EXPOSURE RATE (mR/qtr)	ERROR ESTIMATE (mR/qtr)
FENCE LINE			
Air Station	3rd Quarter	35	0.9
Restricted Area Boundary	4th Quarter	39	1.3
VOLLMAN'S RANCH			
Air Station	3rd Quarter	33	1.9
Downwind Nearest Residence	4th Quarter	32	1.1
DAVE'S WATER WELL			
Air Station	3rd Quarter	26	1.5
Background Site	4th Quarter	30	1.6

TABLE 4

WATER SAMPLING DATA - 2005
ENVIRONMENTAL MONITORING SITES
3rd & 4th QUARTERS

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
SW-1 Stock Pond Section 3 T35N, R74W	3rd Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-2 Stock Pond Section 2 T35N, R74W	3rd Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-3 Stock Pond Section 35 T36N, R74W	3rd Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-4 Stock Pond Section 36 T36N, R74W	3rd Quarter	U-Nat					3.0E-07	
		Ra-226		DRY			6.0E-08	
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-5 Stock Pond Section 21 T36N, R73W	3rd Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-6 Stock Pond Section 22 T36N, R73W	3rd Quarter	U-Nat	0.0024			1.6E-09	3.0E-07	0.5
		Ra-226		0.3	3.00E 01	3.0E-10	6.0E-08	0.5
	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
SW-7	3rd Quarter	U-Nat	0.002			1.4E-09	3.0E-07	0.5
Stock Pond		Ra-226		1.2	4.00E-01	1.2E-09	6.0E-08	2.0
Section 22								
T36N, R73W	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-8	3rd Quarter	U-Nat	0.024			1.6E-08	3.0E-07	5.4
Stock Pond		Ra-226		1.3	5.00E-01	1.3E-09	6.0E-08	0.0
Section 18								
T36N, R72W	4th Quarter	U-Nat	0.0462			3.1E-08	3.0E-07	10.4
		Ra-226		0.8	4.00E-01	8.0E-10	6.0E-08	1.3
SW-9	3rd Quarter	U-Nat		DRY			3.0E-07	
Stock Pond		Ra-226					6.0E-08	
Section 18								
T36N, R72W	4th Quarter	U-Nat		DRY			3.0E-07	
		Ra-226					6.0E-08	
SW-10	3rd Quarter	U-Nat		DRY			3.0E-07	
Stock Pond		Ra-226					6.0E-08	
Section 19								
T36N, R72W	4th Quarter	U-Nat	0.0656			4.4E-08	3.0E-07	14.8
		Ra-226		0.6	4.00E-01	6.0E-10	6.0E-08	1.0
GW-1	3rd Quarter	U-Nat	0.0408			2.8E-08	3.0E-07	9.2
Windmill		Ra-226		1.5	5.00E-01	1.5E-09	6.0E-08	2.5
Section 1								
T35N, R74W	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-2	3rd Quarter	U-Nat	0.0334			2.3E-08	3.0E-07	7.5
Water Well		Ra-226		0.9	4.00E-01	9.0E-10	6.0E-08	1.5
Section 35								
T36N, R74W	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
GW-3 Windmill Section 27 T36N, R74W	3rd Quarter	U-Nat	0.116			7.9E-08	3.0E-07	26.2
		Ra-226		0.8	4.00E-01	8.0E-10	6.0E-08	1.3
	4th Quarter	U-Nat	0.129			8.7E-08	3.0E-07	29.1
		Ra-226		1.7	5.00E-01	1.7E-09	6.0E-08	2.8
GW-4 Windmill Section 23 T36N, R74W	3rd Quarter	U-Nat	0.078			5.3E-08	3.0E-07	17.6
		Ra-226		ND			6.0E-08	
	4th Quarter	U-Nat	0.0905			6.1E-08	3.0E-07	20.4
		Ra-226		0.9	4.00E-01	9.0E-10	6.0E-08	1.5
GW-5 Windmill Section 30 T36N, R73W	3rd Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-6 Windmill Section 28 T36N, R73W	3rd Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-7 Water Well Section 27 T36N, R73W	3rd Quarter	U-Nat	0.0309			2.1E-08	3.0E-07	7.0
		Ra-226		1	4.00E-01	1.0E-09	6.0E-08	1.7
	4th Quarter	U-Nat	0.0346			2.3E-08	3.0E-07	7.8
		Ra-226		0.6	3.00E-01	6.0E-10	6.0E-08	1.0
GW-8 Windmill Section 23 T36N, R73W	3rd Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
GW-9 Windmill Section 14 T36N, R73W	3rd Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-10 Water Well Section 14 T36N, R73W	3rd Quarter	U-Nat	0.0031			2.1E-09	3.0E-07	0.7
		Ra-226		0.4	3.00E-01	4.0E-10	6.0E-08	0.7
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-11 Water Well Section 11 T36N, R73W	3rd Quarter	U-Nat	0.0058			3.9E-09	3.0E-07	1.3
		Ra-226		0.3	3.00E-01	3.0E-10	6.0E-08	0.5
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	
GW-12 Water Well Section 7 T36N, R72W	3rd Quarter	U-Nat	0.0139			9.4E-09	3.0E-07	3.1
		Ra-226		0.7	4.00E-01	7.0E-10	6.0E-08	1.2
	4th Quarter	U-Nat		NOT RUNNING			3.0E-07	
		Ra-226					6.0E-08	

TABLE 5
SATELLITE No. 1
LAND APPLICATION FACILITY (IRRIGATOR 1)
ANNUAL SOIL DATA

SAMPLE ID	SAMPLE DATE	CONDUCTIVIT SAT. PASTE mmhos/cm	pH SAT. PASTE std. Units	POTASSIUM SOLUBLE mg/kg-dry	Sat %	CALCIUM SOLUBLE meq/L	MAGNESIUM SOLUBLE meq/L	SODIUM SOLUBLE meq/L	SAR	ARSENIC ABDTPA mg/kg-dry	BARIUM ABDTPA mg/kg-dry	BORON ABDTPA mg/kg-dry	SELENIUM ABDTPA mg/kg-dry	RADIUM 226 uCi/g-dry	TOTAL ERROR ESTIMATE±	URANIUM - NATURAL TOTAL uCi/g-dry
Irrigator #1 S.E. Location 1 0-6"	8/4/05	2.69	6.1	4.50	38.00	8.9	1.10	13.0	5.84	0.032	0.8	ND	0.373	1.00E-06	1.00E-07	2.00E-08
Irrigator #1 S.E. Location 1 6-12"	8/4/05	2.33	5.9	5.98	57.40	8.4	1.40	14.0	6.26	0.010	0.4	ND	0.22	2.00E-06	2.00E-07	1.00E-06
Irrigator #1 S.E. Location 2 0-6"	8/4/05	2.82	6.4	6.28	66.80	9.4	2.30	15.0	6.06	0.026	0.6	ND	0.627	1.00E-06	1.00E-07	3.00E-06
Irrigator #1 S.E. Location 2 6-12"	8/4/05	4.07	7.0	5.47	64.50	24.0	12.00	15.0	3.43	0.027	0.9	ND	0.437	2.00E-06	1.00E-07	1.00E-06
Irrigator #1 S.E. Location 3 0-6"	8/4/05	1.00	6.3	4.01	48.30	2.6	0.98	5.5	4.08	0.014	0.7	ND	0.43	1.00E-06	1.00E-07	9.00E-06
Irrigator #1 S.E. Location 3 6-12"	8/4/05	1.29	6.5	6.19	56.70	5.8	2.90	5.3	2.53	0.014	1.2	ND	0.345	2.00E-06	2.00E-07	8.00E-07
Irrigator #1 S.W. Location 4 0-6"	8/4/05	1.13	6.9	9.21	64.30	4.2	2.20	5.0	2.79	0.030	1.2	ND	0.43	2.00E-06	2.00E-07	5.00E-06
Irrigator #1 S.W. Location 4 6-12"	8/4/05	1.84	7.4	8.25	64.30	7.5	3.90	7.2	3.02	0.029	1.7	ND	0.395	2.00E-06	1.00E-07	2.00E-06
Irrigator #1 S.W. Location 5 0-6"	8/4/05	1.08	6.2	8.92	50.60	3.7	2.00	4.6	2.73	0.014	0.7	ND	0.183	1.00E-06	1.00E-07	3.00E-06
Irrigator #1 S.W. Location 5 6-12"	8/4/05	2.19	6.4	5.67	63.60	8.1	5.10	7.5	2.94	0.013	0.6	ND	0.323	1.00E-06	1.00E-07	1.00E-06
Irrigator #1 S.W. Location 6 0-6"	8/4/05	0.82	6.9	6.68	59.40	3.3	1.70	3.6	2.29	0.038	1.1	ND	0.343	1.00E-06	1.00E-07	1.00E-05
Irrigator #1 S.W. Location 6 6-12"	8/4/05	2.11	6.9	8.23	62.40	9.1	4.70	7.6	2.90	0.033	1.0	ND	0.374	1.00E-06	1.00E-07	4.00E-06
Irrigator #1 S.W. Location 7 0-6"	8/4/05	3.33	6.3	17.70	65.80	13.0	7.20	12.0	3.93	0.025	0.5	ND	0.25	2.00E-06	2.00E-07	8.00E-06
Irrigator #1 S.W. Location 7 6-12"	8/4/05	4.14	6.5	10.50	65.50	18.0	12.00	13.0	3.44	0.025	0.7	ND	0.125	2.00E-06	2.00E-07	2.00E-06
Irrigator #1 N.W. Location 8 0-6"	8/4/05	0.72	6.6	6.27	41.80	2.4	1.30	3.1	2.28	0.040	0.5	ND	0.425	1.00E-06	1.00E-07	2.00E-05
Irrigator #1 N.W. Location 8 6-12"	8/4/05	1.46	6.4	15.00	73.40	4.9	3.20	5.4	2.69	0.011	0.8	ND	0.214	2.00E-06	2.00E-07	2.00E-06
Irrigator #1 N.W. Location 9 0-6"	8/4/05	1.00	6.7	13.10	79.10	3.2	1.80	4.2	2.65	0.020	0.6	ND	0.425	2.00E-06	2.00E-07	1.00E-05
Irrigator #1 N.W. Location 9 6-12"	8/4/05	1.91	6.8	12.50	75.40	6.7	4.20	7.5	3.20	0.020	0.7	ND	0.286	2.00E-06	2.00E-07	3.00E-06
Irrigator #1 N.W. Location 10 0-6"	8/4/05	1.12	6.3	8.05	63.60	3.9	2.10	4.4	2.56	0.009	0.5	ND	0.299	2.00E-06	2.00E-07	6.00E-06
Irrigator #1 N.W. Location 10 6-12"	8/4/05	1.60	7.0	4.63	67.30	6.7	3.70	5.9	2.60	0.010	1.5	ND	0.269	2.00E-06	2.00E-07	2.00E-06
Irrigator #1 N.E. Location 11 0-6"	8/4/05	0.41	5.8	3.08	27.40	1.2	0.58	2.4	2.55	0.014	0.6	ND	0.116	1.00E-06	1.00E-07	2.00E-06
Irrigator #1 N.E. Location 11 6-12"	8/4/05	0.87	6.2	5.46	43.50	2.9	1.50	3.7	2.48	0.008	0.6	ND	0.117	1.00E-06	1.00E-07	1.00E-06
Irrigator #1 N.E Location 12 0-6"	8/4/05	2.87	6.9	13.90	72.30	12.0	6.20	11.0	3.69	0.029	1.0	ND	0.631	1.00E-06	2.00E-07	7.00E-06
Irrigator #1 N.E. Location 12 6-12"	8/4/05	4.41	7.3	6.71	68.20	21.0	10.00	16.0	3.96	0.023	1.1	ND	0.348	1.00E-06	2.00E-07	2.00E-06
Irrigator #1 N.E. Location 13 0-6"	8/4/05	0.71	6.5	5.93	59.30	2.1	1.30	3.5	2.72	0.010	0.5	ND	0.122	2.00E-06	2.00E-07	1.00E-06
Irrigator #1 N.E. Location 13 6-12"	8/4/05	1.56	7.1	4.85	68.00	5.9	4.10	6.6	2.97	0.011	1.2	ND	0.213	2.00E-06	2.00E-07	6.00E-07
Irrigator #1 N.E. Location 14 0-6"	8/4/05	0.53	6.3	7.02	49.90	1.7	1.00	3.0	2.56	0.028	0.6	ND	0.476	1.00E-06	1.00E-07	1.00E-05
Irrigator #1 N.E. Location 14 6-12"	8/4/05	0.84	6.8	5.16	58.50	3.0	2.00	3.7	2.34	0.016	0.6	ND	0.223	1.00E-06	2.00E-07	3.00E-06
Irrigator #1 Background 0-6"	8/4/05	1.82	6.1	9.81	53.40	6.9	3.60	7.4	3.25	0.008	0.2	ND	0.379	1.00E-06	2.00E-07	4.00E-06
Irrigator #1 Background 6-12"	8/4/05	2.69	6.2	6.92	37.10	12.0	5.80	9.2	3.11	0.017	0.2	ND	0.581	9.00E-07	1.00E-07	7.00E-07

TABLE 6
SATELLITE No. 2
LAND APPLICATION FACILITY (IRRIGATOR 2)
ANNUAL SOIL DATA

SAMPLE ID	SAMPLE DATE	CONDUCTIVITY SAT. PASTE mmhos/cm	pH SAT. PASTE std. Units	POTASSIUM SOLUBLE mg/kg-dry	Sat %	CALCIUM SOLUBLE meq/L	MAGNESIUM SOLUBLE meq/L	SODIUM SOLUBLE meq/L	SAR	ARSENIC ABDTPA mg/kg-dry	BARIUM ABDTPA mg/kg-dry	BORON ABDTPA mg/kg-dry	SELENIUM ABDTPA mg/kg-dry	RADIUM 226 uCi/g-dry	TOTAL ERROR ESTIMATE±	URANIUM - NATURAL TOTAL uCi/g-dry
Irrigator #2 SW 1/4 Location #1 0-6"	8/22/05	1.44	6.4	2.8	67.7	5.0	2.90	3.60	1.82	0.009	0.7	<.2	0.1	2.00E-06	2.00E-07	2.00E-06
Irrigator #2 SW 1/4 Location #1 6-12"	8/22/05	2.33	7.4	4.0	76.0	10.0	5.90	4.50	1.59	<.004	0.4	<.2	0.15	2.00E-06	1.00E-07	9.00E-07
Irrigator #2 SW 1/4 Location #2 0-6"	8/22/05	0.26	6.4	1.6	64.9	1.0	0.73	1.20	1.32	0.008	2.2	<.2	0.04	2.00E-06	1.00E-07	2.00E-06
Irrigator #2 SW 1/4 Location #2 6-12"	8/22/05	3.83	7.4	5.6	72.0	6.1	1.60	7.00	3.59	0.007	1.8	<.2	0.04	2.00E-06	1.00E-07	1.00E-06
Irrigator #2 SW 1/4 Location #3 0-6"	8/22/05	1.16	6.4	3.0	74.9	5.2	3.30	3.20	1.56	0.009	0.5	<.2	0.1	1.00E-06	1.00E-07	1.00E-06
Irrigator #2 SW 1/4 Location #3 6-12"	8/22/05	2.15	6.9	3.0	72.1	12.0	7.20	5.10	1.68	0.006	0.3	<.2	0.17	2.00E-06	1.00E-07	1.00E-06
Irrigator #2 SW 1/4 Location #4 0-6"	8/22/05	3.05	7.1	2.7	63.2	24.0	9.90	7.50	1.85	0.009	0.3	<.2	0.14	1.00E-06	1.00E-07	4.00E-06
Irrigator #2 SW 1/4 Location #4 6-12"	8/22/05	4.38	7.3	1.8	50.4	33.0	12.00	12.00	2.49	0.01	0.2	0.3	0.26	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 NW 1/4 Location #5 0-6"	8/22/05	4.05	6.6	6.5	62.3	27.0	16.00	7.80	1.71	0.005	<.2	0.3	0.46	1.00E-06	1.00E-07	5.00E-06
Irrigator #2 NW 1/4 Location #5 6-12"	8/22/05	3.57	6.9	2.9	66.7	26.0	14.00	8.10	1.83	0.012	<.2	0.2	0.2	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 NW 1/4 Location #6 0-6"	8/22/05	0.96	6.5	3.2	59.5	4.3	2.80	3.10	1.66	0.005	0.7	0.4	0.09	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 NW 1/4 Location #6 6-12"	8/22/05	2.04	6.8	1.1	88.8	8.8	6.60	6.00	2.17	0.005	0.2	0.2	0.19	2.00E-06	2.00E-07	1.00E-06
Irrigator #2 NW 1/4 Location #7 0-6"	8/22/05	1.42	6.5	2.5	55.8	6.3	3.50	3.20	1.45	0.009	0.7	0.2	0.09	1.00E-06	1.00E-07	1.00E-06
Irrigator #2 NW 1/4 Location #7 6-12"	8/22/05	0.98	7.2	2.2	58.3	5.3	2.50	3.20	1.64	0.005	0.5	<.2	0.04	1.00E-06	1.00E-07	9.00E-07
Irrigator #2 NW 1/4 Location #8 0-6"	8/22/05	0.80	6.4	4.0	59.3	3.5	2.50	2.50	1.43	0.013	1.1	0.2	0.08	1.00E-06	1.00E-07	3.00E-06
Irrigator #2 NW 1/4 Location #8 6-12"	8/22/05	1.08	6.4	2.9	65.2	4.6	4.00	3.40	1.65	0.009	0.5	<.2	0.07	2.00E-06	1.00E-07	1.00E-06
Irrigator #2 NE 1/4 Location #9 0-6"	8/22/05	1.71	7.1	4.7	65.4	8.9	5.10	3.50	1.32	0.007	0.9	0.2	0.15	2.00E-06	1.00E-07	1.00E-06
Irrigator #2 NE 1/4 Location #9 6-12"	8/22/05	1.17	7.6	2.5	71.4	5.6	3.50	3.20	1.5	0.005	0.6	0.2	0.12	1.00E-06	1.00E-07	9.00E-07
Irrigator #2 NE 1/4 Location #10 0-6"	8/22/05	3.22	6.9	4.3	67.8	22.0	11.00	6.50	1.61	0.007	<.2	0.2	0.24	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 NE 1/4 Location #10 6-12"	8/22/05	3.50	6.8	3.4	62.6	25.0	12.00	7.90	1.84	0.004	<.2	<.2	0.16	1.00E-06	1.00E-07	1.00E-06
Irrigator #2 NE 1/4 Location #11 0-6"	8/22/05	1.50	6.6	3.8	47.4	8.8	4.80	3.60	1.38	0.012	0.5	0.2	0.17	2.00E-06	2.00E-07	2.00E-06
Irrigator #2 NE 1/4 Location #11 6-12"	8/22/05	2.68	6.7	5.4	71.0	18.0	10.00	5.90	1.59	<.004	0.2	0.3	0.25	2.00E-06	2.00E-07	1.00E-06
Irrigator #2 NE 1/4 Location #12 0-6"	8/22/05	3.08	7.4	5.9	58.0	25.0	10.00	6.80	1.63	0.007	0.4	0.2	0.14	1.00E-06	1.00E-07	4.00E-06
Irrigator #2 NE 1/4 Location #12 6-12"	8/22/05	3.90	7.6	2.1	47.6	31.0	9.50	7.30	1.63	<.004	0.3	<.2	0.34	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 SE 1/4 Location #13 0-6"	8/22/05	1.23	7.4	5.0	74.0	8.4	2.80	3.50	1.47	0.008	0.9	<.2	0.07	2.00E-06	1.00E-07	2.00E-06
Irrigator #2 SE 1/4 Location #13 6-12"	8/22/05	3.31	7.5	7.6	78.6	30.0	8.70	6.50	1.49	0.008	<.2	<.2	0.26	2.00E-06	2.00E-07	1.00E-06
Irrigator #2 SE 1/4 Location #14 0-6"	8/22/05	2.80	7.0	6.8	56.4	20.0	11.00	6.20	1.59	0.012	0.3	0.2	0.22	1.00E-06	1.00E-07	8.00E-06
Irrigator #2 SE 1/4 Location #14 6-12"	8/22/05	3.22	7.4	2.4	45.0	27.0	11.00	7.90	1.83	0.007	<.2	<.2	0.11	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 SE 1/4 Location #15 0-6"	8/22/05	1.32	7.2	8.0	93.2	8.3	3.20	3.20	1.33	0.006	0.4	<.2	0.17	2.00E-06	2.00E-07	2.00E-06
Irrigator #2 SE 1/4 Location #15 6-12"	8/22/05	3.06	7.2	10.0	83.4	25.0	8.40	5.50	1.36	0.006	0.2	0.2	0.39	2.00E-06	1.00E-07	1.00E-06
Irrigator #2 SE 1/4 Location #16 0-6"	8/22/05	0.76	7.2	25.0	81.8	23.0	9.00	11.00	2.84	0.008	1	<.2	0.08	1.00E-06	1.00E-07	3.00E-06
Irrigator #2 SE 1/4 Location #16 6-12"	8/22/05	1.66	7.4	7.8	99.6	10.0	3.80	4.30	1.6	0.006	4	<.2	0.19	1.00E-06	1.00E-07	2.00E-06
Irrigator #2 Background 0-6"	8/22/05	0.28	6.8	1.2	40.0	2.1	0.66	0.20	0.17	0.005	2.5	<.2	0.02	9.00E-07	1.00E-07	1.00E-06
Irrigator #2 Background 6-12"	8/22/05	0.37	7.4	1.0	43.3	3.0	1.00	0.22	0.16	<.004	2.3	0.3	0.01	1.00E-06	1.00E-07	8.00E-07

TABLE 7A

SATELLITE NO. 1 LAND APPLICATION FACILITY
ANNUAL VEGETATION DATA
2005

SAMPLE SITE SAMPLE DATE		Quarter 1 (NW) 16-Sep-05	Quarter 2 (NE) 16-Sep-05	Quarter 3 (SE) 16-Sep-05	Quarter 4 (SW) 16-Sep-05	Background 16-Sep-05
TRACE METALS (mg/kg): SW3050 Dry Ash Extracted	L.L.D					
As	0.05	0.1	0.4	0.2	0.2	0.4
Ba	0.05	31.6	39.5	39.7	37.2	46.9
B	5	8.8	10.2	8.6	9.1	12.9
Se	0.05	18	21.0	20.9	12.6	6.9
RADIOMETRIC (µCi/kg): SW3050 Dry Ash Extracted						
U-Nat		9.20E-03	8.80E-03	7.30E-03	7.30E-03	2.60E-02
U-Nat LLD		2.00E-05	2.00E-05	2.00E-05	2.00E-05	1.00E-05
Ra226		1.50E-04	1.10E-04	1.60E-04	1.70E-04	2.2E-04
Ra226 ERR. EST. +/-		1.20E-05	7.90E-06	9.20E-06	1.10E-05	3.0E-05
Ra226 LLD		5.0E-08	5.0E-08	5.00E-08	5.00E-08	

TABLE 7B

SATELLITE NO. 2 LAND APPLICATION FACILITY
ANNUAL VEGETATION DATA
2005

SAMPLE SITE SAMPLE DATE		Quarter 1 (NW) 19-Aug-05	Quarter 2 (NE) 19-Aug-05	Quarter 3 (SE) 19-Aug-05	Quarter 4 (SW) 19-Aug-05	Background 19-Aug-05
TRACE METALS (mg/kg): SW3050 Dry Ash Extracted	L.L.D.					
As	0.05	0.4	0.1	0.3	0.2	0.4
Ba	0.05	16.4	10.4	18.7	28.1	43.2
B	5	12.6	24.8	10	5.7	ND
Se	0.05	15.9	13.5	12.3	2.9	3.4
RADIOMETRIC (µCi/kg): SW3050 Dry Ash Extracted						
U-Nat		3.50E-03	1.00E-02	9.20E-03	2.10E-03	3.10E-04
U-Nat LLD		5.00E-08	5.00E-08	5.00E-08	5.00E-08	5.00E-08
Ra226		4.60E-05	5.10E-05	6.80E-05	7.40E-05	1.50E-04
Ra226 ERR. EST. +/-		3.50E-06	4.60E-06	5.00E-06	5.60E-06	9.10E-06
Ra226 LLD		2.00E-07	2.00E-07	2.00E-07	2.00E-07	2.00E-07

TABLE 8

SATELLITE NO. 1 LAND APPLICATION FACILITY (IRRIGATOR NO. 1)
MONTHLY IRRIGATION FLUID DATA

IRRIGATION CYCLE		Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
VOLUME (AF)							
MAJOR IONS (mg/L)	REP. LIMIT						
Ca	1.0						
Mg	1.0	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did
Na	1.0	Not Operate	Not Operate	Not Operate	Not Operate	Not Operate	Not Operate
K	1.0						
HCO_3	1.0						
SO_4	1.0						
Cl	1.0						
NON-METALS							
TDS @ 180° C (mg/L)	10.0						
pH (standard units)	0.010						
SAR	0.01						
TRACE METALS (mg/L)							
As	0.001						
Ba	0.10						
B	0.10						
Se	0.001						
RADIOMETRIC							
U-nat (uCi/mL)	2.03E-10						
Ra-226 (uCi/mL)	2.00E-10						
Ra Err. Est. +/-							

TABLE 9

SATELLITE NO. 2 LAND APPLICATION FACILITY (IRRIGATOR NO. 2)
MONTHLY IRRIGATION FLUID DATA

IRRIGATION CYCLE		Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
VOLUME (AF)		44.7	72	82.1			
MAJOR IONS (mg/L)	REP. LIMIT						
Ca	1.0	226	223	229			
Mg	1.0	95.2	94	102	Irrigator Did	Irrigator Did	Irrigator Did
Na	1.0	89.1	85	100	Not Operate	Not Operate	Not Operate
K	1.0	23.0	25.0	14.8			
HCO_3	1.0	142	111	109			
SO_4	1.0	668	641	721			
Cl	1.0	296	261	291			
NON-METALS							
TDS @ 180° C (mg/L)	10.0	1760	1690	1720			
pH (standard units)	0.010	8.25	8.23	8.13			
SAR	0.01	1.25	1.2	4.37			
TRACE METALS (mg/L)							
As	0.001	0.004	0.004	0.006			
Ba	0.1	ND	ND	ND			
B	0.10	0.10	0.20	0.10			
Se	0.001	0.237	0.185	0.198			
RADIOMETRIC							
U-nat (uCi/mL)	2.03E-10	5.03E-07	4.19E-07	4.99E-07			
Ra-226 (uCi/mL)	2.00E-10	1.00E-09	5.00E-10	1.06E-08			
Ra Err. Est. +/-		4.00E-10	3.00E-10	1.00E-09			

TABLE 10A

MONTHLY RADIUM GRAB SAMPLES
AT THE DISCHARGE FROM THE RADIUM TREATMENT SYSTEM
SATELLITE NO. 2

SAMPLE DATE		11-Jul-05	4-Aug-05	13-Sep-05	17-Oct-05	8-Nov-05	5-Dec-05
RADIOMETRIC	Rep. Limit						
Ra-226 (uCi/mL)	2.00E-10	4.90E-09	3.50E-09	1.40E-09	2.50E-09	1.40E-09	3.50E-09
Ra Err. Est.+/-		8.00E-10	6.00E-10	5.00E-10	6.00E-10	6.00E-10	7.00E-10

TABLE 10B

MONTHLY RADIUM GRAB SAMPLES
AT THE DISCHARGE FROM THE RADIUM TREATMENT SYSTEM
SATELLITE NO. 3

SAMPLE DATE		11-Jul-05	4-Aug-05	13-Sep-05	17-Oct-05	8-Nov-05	5-Dec-05
RADIOMETRIC	Rep. Limit						
Ra-226 (uCi/mL)	2.00E-10	1.50E-09	2.90E-09	7.60E-09	1.79E-08	2.70E-09	1.19E-08
Ra Err. Est.+/-		5.00E-10	6.00E-10	9.00E-10	1.40E-09	5.00E-10	1.10E-09

TABLE 11A

SATELLITE NO. 1 LAND APPLICATION FACILITY (IRRIGATOR NO. 1)
ANNUAL SOIL WATER DATA

SAMPLE SITE		**2' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**	**4' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**	**6' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**
SAMPLE DATE				
MAJOR IONS (mg/L)	REP. LIMIT			
HCO_3	1.0			
SO_4	1.0	INSUFFICIANT WATER FOR SAMPLING		
Cl	1.0			
NON-METALS				
Cond (umho/cm)	1.0			
pH (standard units)	0.010			
TRACE METALS (mg/L)				
B	0.10			
Se	0.001			
RADIOMETRIC				
U-nat: (mg/L)	0.0003			
Ra-226: (pCi/L)	0.2			
Ra Err. Est. +/-				
U-nat: (uCi/mL)	2.03E-10			
Ra-226: (uCi/mL)	2.00E-10			
Ra Err. Est. +/-				

TABLE 11B

SATELLITE NO. 2 LAND APPLICATION FACILITY (IRRIGATOR NO. 2)
ANNUAL SOIL WATER DATA

SAMPLE SITE		**2' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**	**4' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**	**6' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite**
SAMPLE DATE				
MAJOR IONS (mg/L)	REP. LIMIT			
HCO_3	1.0			
SO_4	1.0	INSUFFICIANT WATER FOR SAMPLING		
Cl	1.0			
NON-METALS				
Cond (umho/cm)	1.0			
pH (standard units)	0.010			
TRACE METALS (mg/L)				
B	0.10			
Se	0.001			
RADIOMETRIC				
U-nat: (mg/L)	0.0003			
Ra-226: (pCi/L)	0.2			
Ra Err. Est. +/-				
U-nat: (uCi/mL)	2.03E-10			
Ra-226: (uCi/mL)	2.00E-10			
Ra Err. Est. +/-				

TABLE 12

SATELLITE NO. 2 PURGE STORAGE RESERVOIR
SHALLOW MONITORING WELLS
QUARTERLY WATER LEVEL DATA
SEMI-ANNUAL WATER QUALITY DATA

SAMPLE SITE		Shallow Well No. 1 (South)		Shallow Well No. 2 (East)	
SAMPLE DATE		20-Jul-05	1-Nov-05	20-Jul-05	1-Nov-05
WATER LEVEL (DTW)		Dry	Dry	10.14	11
MAJOR IONS (mg/L)	Rep. Limit	Insufficient Water			
HCO_3	1.0	For Sampling		181	159
SO_4	1.0			2320	2440
Cl	1.0			309	264
NON-METALS					
Cond (µmho/cm)	1.0			4880	4860
pH (standard units)	0.01			7.63	7.66
TRACE METALS (mg/L)					
Ba	0.001			ND	ND
Se	0.0025			0.1	0.081
RADIOMETRIC					
U-nat (uCi/mL)	6.77E-10			4.20E-08	1.77E-08
Ra-226 (uCi/mL)	2.00E-10			2.20E-09	2.20E-09
Ra-226 Err. Est. +/- (uCi/mL)				7.00E-10	5.00E-10

ATTACHMENT B

SAFETY AND ENVIRONMENTAL EVALUATIONS COMPLETED IN 2005

Inter-Company Memorandum

Date:	March 10, 2005
To:	C. Foldenauer, B. Kearney, T. McCullough, M. Bryson, L. Hiebert, P. Drummond, L. Reimann, S. Lunsford
From:	K. Milmine
Re:	Safety and Environmental Review Panel (SERP) No. 2005-1: Start-up of Mine Unit-15
cc:	File SR 4.6.4.2

A. INTRODUCTION

In accordance with the NRC requirements, a Safety and Environmental Review Panel (SERP) must be conducted prior to wellfield startup to ensure that the results of the hydrologic testing and the planned mining activities are consistent with technical requirements and do not conflict with any requirement stated in the NRC License. Additionally, the SERP conducts an Operations/Technical Review, Environmental/Radiation Safety/Industrial Safety review, and a Compliance Review in accordance with Management of Change Procedures.

A SERP was convened on March 10, 2005 to perform these reviews for the startup of Mine Unit-15 (MU-15). MU-15 is currently under development and injection and production operations are nearly ready for startup at Headerhouse 15-1. Preoperational hydrologic testing and baseline water quality data have been completed and verbally approved by the WDEQ-LQD on March 4, 2005. An Operations Review Committee (ORC) was convened on March 4, 2005 to discuss line pressure testing of the IC and PC trunk lines. The SERP also discussed the status of action items produced from the ORC. The results of the SERP review are summarized in the following sections.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL

NRC License Condition 9.4d of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Members of this SERP review include:

Chuck Foldenauer- Mine Manager
Bill Kearney- Manager- Health, Safety and Environmental Affairs/CRSO
Tim McCullough- Safety Supervisor
Mike Bryson- Wellfield Operations Superintendent

Ken Milmine- Sr. Environmental Scientist
Lonnie Hiebert- Construction Superintendent
Pat Drummond- Central Plant and Maintenance Superintendent
Larry Reimann- Senior Engineer
Steve Lunsford- Chief Geologist

Bill Kearney was not present at the meeting however he did review and agree with the conclusions of this final SERP.

C. EVALUATION OF PROPOSED CHANGE/TEST

Hydrologic Testing Results

Review of the Pump Test results determined that

- The O Sand monitor well ring is in communication with the O Sand Production Zone;
- Adequate confinement exists between the O Sand Production Zone and the Overlying and Underlying sands;
- The O sand has been adequately characterized with respect to hydrogeologic conditions within MU-15

These results demonstrate that mining can proceed in accordance with NRC License SUA-1548 and Mine Permit No. 633.

The baseline water quality data is complete and the proposed UCLs were submitted to WDEQ-LQD on December 3, 2004 along with the Interim Monitoring Plan to be utilized during the stages of development and startup. The WDEQ has reviewed the proposed UCLs, the Interim Monitoring Plan, and the Pump Test results and provided verbal approval for all on March 4, 2005. Written approval shall be forthcoming.

Operations/Technical Review

Discussion items related to operational and technical aspects of MU-15 start up are provided in the list below.

- The production and injection trunk lines are currently being filled for pressure testing. One to two production pumps from Headerhouse 15-1 will be started to assist in filling the trunk lines. As determined by the ORC, the three, non-coated, 14-inch trunk line fittings in the booster stations have been replaced with coated fittings for corrosion protection. Also, continual monitoring of filling and pressure testing activities is being conducted by operators around the clock.

- Carbon Dioxide and Oxygen are both being introduced at the headerhouses. As a result, oxygen levels must be determined prior to entering the basements of the headerhouses (see Environmental/Safety Review), as is currently done prior to entering a bell hole valve station.

- One booster station will be required for startup of Headerhouse 15-1, as well as carbon dioxide and oxygen for injection. The oxygen tank has been filled and the road to the oxygen tank will be graveled on Saturday, March 12.

- Sump alarms are not yet operational, but will be operational prior to headerhouse startup.

- The headerhouse startup checklist will begin circulation for sign off soon. Startup is currently scheduled for March 21.

Environmental/Safety Review

As determined by the previous ORC, temporary covers have been installed over openings in the booster station floor for pump installation. This will effectively eliminate a potential falling hazard until permanent flooring can be installed.

Other environmental/safety controls determined by the SERP are listed below.

- As previously stated, basements with carbon dioxide lines will require monitoring of oxygen levels prior to entry, similar to entry into a bell hole (confined space entry permit is not required). The confined Space Entry procedure in Volume V, Industrial Safety Manual, will be revised to reflect entry into basements where carbon dioxide is present.

- Some wells are located in an ephemeral draw in areas that have been dammed of for water storage. These dams will need to be breached to allow water to flow through and not inundate these wellheads. It has been determined that the landowner would prefer installation of piping through the dams instead of removing the dams themselves. This is to be completed as soon as reasonable, however it is not required for wellfield startup.

No other increased environmental or safety risk was determined by the SERP for the startup of MU-15 and current wellfield startup procedures are adequate (see attached Risk Screening)

Compliance Review

As previously stated, WDEQ-LQD verbal approval has been provide for the Pump Test, UCLs, and Interim Monitoring Plan, and therefore, operations may start at Headerhouse 15-1 utilizing the Interim Monitoring Plan. Although, WDEQ-LQD's review of the information was completed, the written correspondence will be forthcoming.

The SERP evaluated the startup of MU-15 against the conditions stated in the License Condition 9.4 as shown in the table below. The SERP concluded that the startup of MU-15 satisfied those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?		X	
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?		X	
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?		X	
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?		X	
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?		X	
Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).		X	
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).		X	
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).		X	
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.		X	

D. CONCLUSIONS

The SERP concluded that that the commencement of production at MU-15 would not require a License Amendment and does not conflict with any other regulatory requirement. Also, the commencement of production at MU-15 will not result in the degradation of any essential safety or environmental commitments in the License Application, Environmental Assessments, or current operating procedures. As a result, the SERP approved the start-up of MU-15 once the trunk line testing is successful and the controls identified by the SERP for implementation prior to startup are in place.

Signature: _____ Date: 3.14.05
C. Foldenauer, Mine Manager

Signature: Michael D. Bryson Date: 3/23/05
M. Bryson, Wellfield Operations Superintendent

Signature: _____ Date: 3/14/05
S. Lunsford, Chief Geologist

Signature: _____ Date: 3/14/05
K. Milmine, Senior Environmental Scientist

Signature: _____ Date: 3/23/05
T. McCullough, Safety Supervisor

Signature: _____ Date: 3/14/05
W. F. Kearney, Manager Health, Safety, and Environmental Affairs/CRSO

Signature: _____ Date: 3/23/05
L. Hiebert, Construction Superintendent

Signature: _____ Date: 3.14.05
P. Drummond, Central Plant and Maintenance Superintendent

Signature: _____ Date: 3/14/05
L. Reimann, Senior Engineer

RISK SCREENING/ASSESSMENT
EHS-3-1

Section 1

Title of Proposed Change: MU-15 start up

Assessment Team: C. Foldenauer, T. McCullough, M. Bryson, R. Milmine, L. Hiebert, P. Drummond, L. Reimann, S. Lunsford

Section 2

Risk Assessment Question	Yes	No	N/A
Will the proposed change result in a potential increase of radiological exposure to employees or the public?	☐	☒	☐
Will additional radiological monitoring be required as a result of the proposed change?	☐	☒	☐
Will additional radiological controls or personal protective equipment be required as a result of the proposed change?	☐	☒	☐
Will the proposed change result in an increase in transportation of radioactive materials or require modification of current transportation methods?	☐	☒	☐
Will the proposed change result in an increased potential for a significant release or spill of radioactive material?	☐	☒	☐
Has new equipment, facilities, or processes been proposed that introduce potential additional hazards or require engineering controls to reduce hazards?	☐	☒	☐
Have new electrical systems been proposed that introduce potential additional hazards or require engineering controls to reduce hazards?	☐	☒	☐
Will the proposed change result in an increased exposure to elevated noise levels?	☐	☒	☐
Will new potentially hazardous chemicals and/or bulk chemical storage areas be introduced?	☒	☐	☐
Will the proposed change introduce potentially hazardous confined space areas or introduce potential hazards to existing confined spaces?	☒	☐	☐
Will the proposed change result in abnormal hazards from excavation or construction not predicted in current procedures?	☐	☒	☐

Will the proposed change result in an increased fire hazard or will existing fire protection systems be ineffective?	☐	☒	☐
Will the proposed change increase the potential for a violation of an environmental or radiological regulatory permit or standard?	☐	☒	☐
Will the proposed change cause significant surface disturbance outside of the permit area?	☐	☒	☐
Will the proposed change result in a significant increase in solid, hazardous, or radiological waste generation?	☐	☒	☐
Will the proposed change require approval from a regulatory agency or coverage under a permit?	☐	☒	☐
Will special training need to be incorporated beyond the scope of current training programs?	☐	☒	☐
Will additional Operating or Emergency Response Procedures need to be developed prior to change implementation?	☐	☒	☐
Will the proposed change introduce potential legal issues or obligations?	☐	☒	☐
Will the proposed change result in nonconformance with established company policies?	☐	☒	☐
Will the proposed change result in damage to the credibility, public perception, reputation, or public good standing of Power Resources, Crow Butte Resources, or Cameco as a reputable company?	☐	☒	☐
Are there any other risk scenarios not included in the above questions that could result from the proposed change?	☐	☒	☐

Section 3

If yes was answered to any questions above, indicate the controls or mitigative actions to be used to minimize the associated risk:

- Carbon dioxide and Oxygen will now be introduced at the headerhouse. As a result monitoring of oxygen levels will be conducted prior to entry into the basement of the headerhouses, similar to current procedures for entry into Bell Holes. The Industrial Safety Manual, Confined Space Entry procedure will be revised to reflect this. A confined space Entry permit will not be required for entry into Headerhouse basements.
- ~~The~~ new oxygen storage tank has been moved from SR-1 to MU-6 storage area installed. A protective barrier is in place and a gravel access road will be constructed for safe access.

Section 4

Is the risk(s) identified acceptable as a result of the controls and mitigative actions described above.	Yes ☒	No ☐
If "No", describe additional controls or mitigative actions required to bring the risk(s) back to acceptable levels:		

Section 5

Risk Assessment Team Approvals

Name (Print)	Signature	Date
Ken Milmine	Ken Milmine	3/11/05
CHUCK FOLDENAUER		3.14.05
Pat Drummond		3/14/05
Steve Lunsford		3.14.05
Larry Reimann		3/14/05
~~Tom Hoe~~		
Lonnie Hiebert		3/23/05
Tim McCullough		3/23/05

Inter-Company Memorandum

Date:	June 15, 2005
To:	C. Foldenauer, S. P. Collings, T. McCullough, A. Crook
From:	Ken Milmine- Manager- Health, Safety, and Environmental Affairs
Re:	Safety and Environmental Review Panel (SERP) No. 2005-2: EHS Department Staff Changes to the Manager- Health, Safety, and Environmental Affairs, and appointment of Radiation Safety Officer
cc:	File SR 4.6.4.2

A. INTRODUCTION

On May 6, 2005 the Manager- Health, Safety and Environmental Affairs/Corporate Radiation Safety Officer at the Smith Ranch-Highland Uranium Project terminated employment at the facility. As a result, Ken Milmine was appointed Manager- Health, Safety and Environmental Affairs and Tim McCullough was appointed as acting site Radiation Safety Officer (RSO).

The SERP reviewed this change in relation to the qualifications described in the current License Application. The results of the SERP review are presented in the following sections.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)

NRC License condition 9.4d of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have the financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Individuals selected to perform this SERP review include:

C. Foldenauer- Mine Manager
K. Milmine - Manager- Health, Safety, and Environmental Affairs
T. McCullough- Safety Supervisor/Acting Radiation Safety Officer
A. Crook- Radiation Safety Technician
S. P. Collings- Senior Vice President of Operations

C. EVALUATION OF PROPOSED CHANGE/TEST

The SERP met on May 20, 2005 to review the temporary management change in relation to the qualifications described in the License Application. S. P. Collings was not present at the meeting

however he did review and agree with this final SERP. Qualifications for the Manager- Health, Safety, and Environmental Affairs stated in the NRC License Application include:

- A Bachelor's Degree in engineering or science from an accredited College or University.
- Minimum of five years of experience in environmental and safety management and operations functions.

A review of Mr. Milmine's qualifications showed that he has a Bachelors Degree in Environmental Engineering and has 10 years of experience in administering and managing environmental programs in which 7 of those years were at active mining operations. It was also shown that Mr. Milmine has been a certified Mine Safety and Health Administration (MSHA) Instructor at these previous mining operations and also was trained as a radiation worker for three years at a Department of Energy facility. He has fulfilled the responsibility of Senior Environmental Scientist at the SR-HUP for 1.5 years and understands environmental, safety, and radiation protection requirements. The SERP concluded Mr. Milmine's qualifications satisfied the qualifications described in the License Application for the Manager- Health, Safety, and Environmental Affairs. Mr. Milmine will not retain the title of CRSO as described in the License Application as these duties will now fall under the oversight of the site RSO

Qualifications for RSO contained in the License Application states that the guidelines set forth in Regulatory Guide 8.31 will be met for the position of RSO. Guidelines set forth in Regulatory Guide 8.31 include:

- A bachelor's degree in physical sciences, industrial hygiene, or engineering from an accredited college or university or an equivalent combination of training and relevant experience.
- At least 1 year of experience relevant to uranium recovery operations in applied health physics, radiation protection, industrial hygiene, or similar work.
- At least 4 weeks of specialized training in health physics specifically applicable to uranium recovery. In addition, the RSO should attend refresher training on uranium recovery facility health physics every 2 years.
- A thorough knowledge of the proper application and use of all health physics equipment used in the recovery facility, the chemical and analytical procedures used for radiological sampling and monitoring, methodologies used to calculate personnel exposure to uranium and its daughters, and a thorough understanding of the uranium recovery process and equipment used in the facility and how the hazards are generated and controlled during the recovery process.

A review of Mr. McCullough's qualifications showed that he has several years of experience as a Radiation Safety Technician and has continued his involvement in radiation safety matters as the Industrial Safety Supervisor. Additionally, Mr. McCullough has been involved in radiation safety training for employees and of the current Radiation Safety Technician. Mr. McCullough last completed bi-annual training in May of 2000, and will complete bi-annual refresher training as soon as possible. The SERP concluded Mr. McCullough's qualifications satisfied the qualifications described in the License Application for the RSO and Regulatory Guide 8.31, once bi-annual training has been completed. Mr. McCullough will be Acting RSO until this training

training is complete, when he will then assume oversight as Radiation Safety Officer. Oversight of the SR-HUP will be conducted by the Manager of Health, Safety and Environmental Affairs/Radiation Safety Officer for Crow Butte Resources until Mr. McCullough assumes oversight.

It was also noted at the meeting that A. Crook, Radiation Safety Technician, has completed the 40-hour Radiation Safety Officer training course.

The NRC was notified of these staffing changes in correspondence dated May 10, 2005

The SERP evaluated the temporary change in management against the conditions stated in the License Condition 9.4b as shown in the table below. The SERP concluded that these changes satisfied those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?	☐	☒	☐
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?	☐	☒	☐
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?	☐	☒	☐
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?	☐	☒	☐
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?	☐	☒	☐
Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).	☐	☒	☐
Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).	☐	☒	☐
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).	☐	☒	☐
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).	☐	☒	☐
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).	☐	☒	☐
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).	☐	☒	☐
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.	☐	☒	☐

D. CONCLUSIONS

The SERP concluded that the EHS staffing changes are consistent with NRC License SUA-1548 and Regulatory Guide 8.31 and should not compromise the effectiveness of the ALARA and

environmental compliance programs. Appropriate pages in Chapter 9 and Figure 9-1 of the License Application have been revised to reflect the removal of the title of CRSO and are also provided as an attachment to this SERP evaluation.

Signature: _____ Date: 6.15.05
C. Foldenauer, Mine Manager

Signature: _____ Date: 6/15/05
K. Milmine, Manager- Health, Safety and Environmental Affairs

Signature: _____ Date: 6/16/05
T. McCullough, Safety Supervisor/Radiation Safety Officer

Signature: _____ Date: 6/16/05
A. Crook, Radiation Safety Technician

Signature: _____ Date: 6/20/05
S. P. Collings, Senior Vice President of Operations

CHAPTER 9
MANAGEMENT ORGANIZATION AND ADMINISTRATIVE PROCEDURES

9.1 ENVIRONMENT, HEALTH, AND SAFETY MANAGEMENT

Power Resources, Inc. (PRI) will maintain a performance-based approach to the management of the environment, health and safety program, including radiation safety. The Environment, Health and Safety Systems Management Program encompasses licensing, compliance, environmental monitoring, industrial hygiene, and health physics programs under one umbrella, and it includes involvement by the individual worker to the senior management of PRI. This program will allow PRI to operate efficiently and maintain an effective Environment, Health and Safety Program (EHS Program).

9.2 ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT ORGANIZATION

Figure 9-1 is a partial organization chart for PRI with respect to the operation of the Smith Ranch – Highland Uranium Project (SR-HUP) and associated operations, and represents the management levels that play a key part in the Environmental, Health and Safety Systems Management Program and may serve a functional part of the Safety and Environmental Review Panel (SERP) described under Section 9.5.2.1. The dashed line of reporting signifies a dual reporting function. This organization allows environmental, health, industrial safety, and radiation safety matters to be considered at any management level.

9.3 ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT QUALIFICATIONS

9.3.1 Board of Directors

The Board of Directors has the ultimate responsibility and authority for radiation safety and environmental compliance for PRI, including the SR-HUP. The Board of Directors sets corporate policy and provides procedural guidance in these areas. The Board of Directors directly provides operational direction to the President of PRI.

9.3.2 President

The President is responsible for interpreting and acting upon the Board of Directors policy and procedural decisions. The President directly supervises the Senior Vice President of Operations. The President is empowered by the Board of Directors to have the responsibility and authority for the radiation safety and environmental compliance programs. He is responsible for ensuring that Operations staff are complying with all applicable regulations and permit/license conditions through direct supervision of the Senior Vice President of Operations.

9.3.3 Senior Vice President of Operations

The Senior Vice President of Operations reports to the President and is directly responsible for ensuring that Corporate Operations personnel (including the Smith Ranch - Highland Uranium Project) comply with Industrial Safety, Radiation Safety, and Environmental Protection Programs as stated in the EHS Management System. The Senior Vice President of Operations is also responsible for company compliance with all regulatory license conditions/stipulations, regulations and reporting requirements. The Senior Vice President of Operations has the responsibility and authority to terminate immediately any activity that is determined to be a threat to employees or public health, the environment, or potentially a violation of state or federal regulations as indicated in reports from the Manager-Health, Safety and Environmental Affairs or the RSO.

The Senior Vice President of Operations directly supervises the General Manager of Operations.

9.3.4 Mine Manager

The Mine Manager is responsible for managing the day to day operations at the SR-HUP, and reports directly to the Senior Vice President of Operations. The Mine Manager is responsible for ensuring that SR-HUP personnel comply with Industrial Safety, Radiation Safety, Environmental Protection Programs, and all relevant state and federal regulations.

The Mine Manager has the responsibility and the authority to suspend, postpone or modify, immediately if necessary, any activity that is determined to be a threat to employees, public health, the environment, or potentially a violation of state or federal regulations. The Mine Manager cannot unilaterally override a decision for suspension, postponement or modification if that decision is made by the Senior Vice President of Operations, the Manager-Health, Safety and Environmental Affairs, or the RSO.

The position of Mine Manager requires a Bachelor's Degree in engineering or science form an accredited college or university, or equivalent work experience, and a minimum of five years supervisory experience. Work experience will include industrial process/production experience, and industrial process/production management.

9.3.5 Manager-Health, Safety and Environmental Affairs

Reporting directly to the Mine Manager, the Manager-Health, Safety and Environmental Affairs oversees all Radiation Protection, Health, and Environmental Programs as stated in the EHS Management System, at company operations, including the SR-HUP. This position assists in the development and review of radiologic and environmental sampling and analysis procedures and is responsible for routine auditing of the programs. The Manager-Health, Safety and Environmental Affairs has the responsibility and authority to suspend, postpone, or modify any activity that is

determined to be a threat to employees, public health, the environment or potentially a violation of state or federal regulations. As such, the Manager-Health, Safety and Environmental Affairs has a secondary reporting requirement to the Senior Vice President of Operations.

The position of Manager-Health, Safety and Environmental Affairs requires a Bachelor's degree in an engineering or science field from an accredited college or university, or an equivalent level of work experience. Additionally, a minimum of five years of experience in environmental and safety management and operations functions will be required.

9.3.6 Environmental Coordinator

The Environmental Coordinator is primarily responsible for assisting in the implementation of the environmental compliance programs and the compilation of required reports. This position also assists with the industrial and radiation safety programs. This position supervises the Environmental Specialist. This position reports directly to the Manager-Health, Safety and Environmental Affairs.

The position of Environmental Coordinator requires a minimum of a Bachelor's Degree from an accredited college or university in the physical sciences, biology, engineering or related discipline and must be computer literate and have at least four years experience in environmental compliance and permitting.

9.3.7 Environmental Specialist or Environmental Technician

The Environmental Specialist or Environmental Technician assists with the implementation of the environmental compliance programs including maintaining ground water monitoring data bases and waste management programs. This position also assists with the industrial and radiation safety programs and may be used as a training position for the Radiation Safety Technician (RST). The position normally reports to the Senior Environmental Scientist, but will report radiation safety items directly to the RSO.

The position of Environmental Technician may be utilized in lieu of the Environmental Specialist depending on the level of responsibility given to the position and required qualifications for that level of responsibility. The position of Environmental Technician requires a minimum of an Associates Degree, or relevant experience in physical sciences, environmental science, or related field.

9.3.8 Radiation Safety Officer (RSO)

Reporting directly to the Manager-Health, Safety and Environmental Affairs, the Radiation Safety Officer (RSO) is responsible for the daily supervision of the radiation safety programs at the SR-HUP. Responsibilities include the development and implementation of all radiation safety programs, ensuring that all records are correctly maintained, and assisting the Manager-Health, Safety and Environmental Affairs in

ensuring compliance with NRC regulations and license conditions applicable to worker health.

The RSO conducts training programs for the supervisors and employees with regard to the proper application of radiation protection procedures. The RSO personally inspects facilities to verify compliance with all applicable radiological health and safety requirements. The RSO has the responsibility and the authority, through appropriate line management, to suspend, postpone, or modify any work activity that is unsafe or potentially a violation of NRC regulations or license conditions, including the ALARA program. Depending on the level of activity at the site, the RSO may also fulfill the responsibilities of the RST.

The position of RSO requires a minimum of a Bachelor's Degree in an engineering or science field from an accredited college or university, or an equivalent level of work experience. Additionally, the position of RSO requires a combination of education, training, and/or experience in applied health physics and radiation protection to meet the requirements of NRC Regulatory Guide 8.31.

9.3.9 Radiation Safety Technician (RST)

The Radiation Safety Technician (RST) conducts radiological surveys, collects air, water, soil and vegetation samples, performs analyses and collects data for the radiation safety program, performs calculations of employee radiation exposures, keeps records, and conducts various other activities associated with implementation of the environmental and radiation protection programs. The RST reports directly to the RSO. Depending on the level of activity at the site, the responsibilities of the RST and RSO may be combined.

The position of RST requires a minimum of a high school diploma, or alternatively, an equivalent combination of experience and training in radiation protection at uranium mining and/or processing operations.

9.3.10 Safety Supervisor

The Safety Supervisor is responsible for the non-radiation related health and safety programs. Responsibilities include the development and implementation of health and safety programs in compliance with the Wyoming State Mine Inspector Office regulations. Responsibilities include safety training of new and existing employees, and the maintenance of appropriate records to document compliance with regulations. The Safety Supervisor may also be a qualified RST and functions in this capacity when needed. The Safety Supervisor reports directly to the Manager-Health, Safety and Environmental Affairs.

In addition to meeting the qualifications and training requirements of the RST (as described in Section 9.3.7 above), the Safety Supervisor should have two (2) years of college in the physical sciences, engineering, or health fields. Two years of applied

occupational safety experience may be substituted for each one (1) year of college. In any event, a minimum of a High School Diploma or equivalent is required.

9.4 ALARA POLICY

The purpose of the ALARA (As Low As Reasonably Achievable) Policy is to keep exposures to all radioactive nuclides and other hazardous material as low as possible and to as few personnel as possible, taking into account the state of technology and the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest.

In order for an ALARA Policy to correctly function, all individuals including management, supervisors, health physics staff, and workers, must take part and each share in the responsibility to keep all exposures as low as reasonably achievable. This policy addresses this need and describes the responsibilities of each.

9.4.1 Management Responsibilities

Consistent with Regulatory Guide 8.31, the licensee Management is responsible for the development, implementation, and enforcing the applicable rules, policies, and procedures as directed by regulatory agencies and company policies. These shall include the following:

1. The development of a strong commitment to and continuing support of the implementation and operations of the ALARA program;

2. An Annual Audit Program which reviews radiation monitoring results, procedural, and operational methods;

3. A continuing evaluation of the Health Physics Program including adequate staffing and support;

4. Proper training and discussions which address the ALARA program and its function to all facility employees and, when appropriate, to contractors and visitors.

Inter-Company Memorandum

Date:	June 16, 2005
To:	C. Foldenauer, P. Drummond, T. McCullough, L. Reimann, C. Czarnecki
From:	K. Milmine- Manager- Health, Safety and Environmental Affairs
Re:	Safety and Environmental Review Panel (SERP) No. 2005-3: Evaporation Pond Sludge Removal and Liner Replacement
cc:	File SR 4.6.4.2

A. INTRODUCTION

In accordance to NRC License condition 9.4, A SERP was convened to discuss changes to the evaporation ponds at the Smith Ranch CPP area. These changes include removal of sludge from the ponds and relining the ponds with a new synthetic liner placed over the existing synthetic liners.

The SERP met on June 3, 2005 to discuss the operational/technical aspects, as well as the environmental and safety aspects of these changes. Results of these discussions are presented below.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)

NRC License condition 9.4d of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have the financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Individuals selected to perform this SERP review include:

C. Foldenauer- Mine Manager
K. Milmine - Manager- Health, Safety, and Environmental Affairs
T. McCullough- Safety Supervisor/Acting Radiation Safety Officer
L. Reimann- Sr. Engineer
C. Czarnecki- Staff Engineer
P. Drummond- Central Plant and Maintenance Superintendent
E. Heide- Central Plant Foreman

C. EVALUATION OF PROPOSED CHANGE/TEST

Operations/Technical Review

- Sludge will be removed from the west pond first and a new liner will be installed. Once the west pond is complete, then work will begin on the east pond.

- Sludge will be slurried in the pond and sucked out using the sucker tank from Crow Butte Resources (CBR). The slurry will then be pumped into super sacks and allowed to drain into the east pond. Once the sludge has decanted through the super sacks, then the sludge will be hauled to an NRC licensed landfill or sold to a uranium mill for processing. All water must be drained from the super sacks prior to placement in a BFI or the side dump trailer.

- Roughly 8600 ft^3 of sludge will be produced. This will require approximately 22 truckloads of 27 yd^3.

- The new liner will be installed over old liner. This will require a vent to be installed between the new and old liner.

- The sucker tank will be inspected when it arrives and tested to ensure safe operation. Repairs will be made if needed prior to use.

- If the super sacks do not decant the water from the sludge adequately, then the sludge will simply be transferred to the east pond and liner installation will commence in the west pond. Required freeboard will still be maintained in the east pond during transfer. The west pond liner can then be installed.

Environmental/Safety

- Personal protective equipment needed includes tyvek coveralls, rubber boots, gloves, and face shield or respirator if they prefer.

- The driver who picks up the sucker tank will need a CDL with Hazmat endorsement. Also a current Material License (Amendment 9) must be sent with driver to CBR

- The person who picks up the sucker tank at CBR will be task trained there so they can task train PRI employees here. A task-training sheet will be completed by all people who will operate that piece of equipment.

- Must enter and exit the pond in a dry area. A rope or ladder will be provided if needed if safe entry or exit into the ponds cannot be achieved by simply walking up and down the liner.

- An RWP will need to be completed for this work.

- A safety meeting will be conducted prior to commencement of work to cover:

    - Hazards of slipping and falling on liner

- Radiation safety aspects and personal protective equipment identified in the RWP
- Other safety and environmental concerns

- No lifejackets will be worn since the water will be low. There will be at least two people in operation at all times.

Compliance Review

The SERP evaluated the proposed sludge removal and relining of the evaporation ponds against the conditions stated in the License Condition 9.4 as shown in the table below. The SERP concluded that this proposed work at the evaporation ponds satisfied those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?		X	
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?		X	
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?		X	
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?		X	
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?		X	
Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).		X	
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).		X	
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).		X	
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.		X	

D. CONCLUSION

The SERP concluded that the proposed sludge removal and relining activities for the evaporation ponds would not require a License Amendment and does not conflict with any other regulatory requirement. Also, that these activities will not result in the degradation of any essential safety or environmental commitments in the License Application, Environmental Assessments, or current operating procedures. As a result, the SERP approved the sludge removal and relining activities for the evaporation ponds to be conducted within the controls identified by the SERP.

Signature: _____ Date: 6-16-05
C. Foldenauer, Mine Manager

Signature: _____ Date: 6-17-05
Pat Drummund, Central Plant and Maintenance Superintendent

Signature: _____ Date: 6/21/05
Tim McCullough, Safety Supervisor

Signature: _____ Date: 6-20-05
Larry Reimann, Senior Engineer

Signature: _____ Date: 6/20/05
Catherine Czarnecki, Staff Engineer

Signature: _____ Date: 6/16/05
K. Milmine Manager- Health, Safety, and Environmental Affairs

Signature: _____ Date: 6-30-05
E. Heide- CPP Foreman

Inter-Company Memorandum

Date:	July, 28 2005
To:	C. Foldenauer, L. Huffman, T. McCullough, A. Crook, J. Winter
From:	Ken Milmine- Manager- Health, Safety, and Environmental Affairs
Re:	Safety and Environmental Review Panel (SERP) No. 2005-4: Reduction of Inspection Frequency at Satellite No. 1 from Daily to Weekly
cc:	File SR 4.6.4.2

A. INTRODUCTION

Currently, facility inspections of the Satellite No. 1 area are conducted on a daily basis as required by License Condition 11.7 for operating areas. Satellite No. 1 and other associated facilities (Purge Storage Reservoir, Irrigator, etc.) are currently not in operation, and activities will be very limited in the future since mining and restoration activities are complete in that area. As a result, PRI is proposing to change the inspection frequency at Satellite No. 1 to weekly instead of daily.

The SERP met on July 27, 2005 to discuss the operational, safety, and environmental aspects of this change in relation to the current License Application and License Conditions. The results of the SERP review are presented in the following sections.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)

NRC License condition 9.4d of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have the financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Individuals selected to perform this SERP review include:

C. Foldenauer- Mine Manager
K. Milmine - Manager- Health, Safety, and Environmental Affairs
T. McCullough- Safety Supervisor/Radiation Safety Officer
A. Crook- Radiation Safety Technician
L. Huffman- Restoration Superintendent
J. Winter- Senior EHSMS Coordinator

C. EVALUATION OF PROPOSED CHANGE/TEST

The SERP met on July 27, 2005 to discuss the operational. safety, and environmental aspects of reducing the inspection frequency at Satellite No. 1 in relation to the current License Application and License Conditions. Current and future operational status determined for Satellite No. 1 is described below:

- The Satellite No. 1 building is currently not in use. All solution tanks and vessels have been emptied and cleaned, and the Reverse Osmosis unit will be removed.
- It is not anticipated that the building will be heated this winter, and therefore, the propane will not be in use. Weekly inspections will be sufficient if it is determined that heat is needed this winter.
- The alpha meter will be source checked prior to use.
- Bulk chemicals have been moved to Satellite No. 2 or the Boner Building.
- The building could be used for a staging or storage area for future reclamation or decommissioning activities (wellfield piping removal, headerhouse removal, and well plugging), and also may be used to pump wastewater to the Morton 120 Deep Disposal Well (if necessary).
- Monthly inspections performed by RSO or designee, and the Restoration Foreman will continue along with quarterly radiological monitoring.
- L. Huffman will modify the SOP to reflect weekly inspections and revise the inspection form accordingly.

The SERP evaluated the temporary change in management against the conditions stated in the License Condition 9.4b as shown in the table below. The SERP concluded that these changes satisfied those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?	☐	☒	☐
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?	☐	☒	☐
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?	☐	☒	☐
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?	☐	☒	☐
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?	☐	☒	☐
Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).	☐	☒	☐

Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).	☐	☒	☐
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).	☐	☒	☐
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).	☐	☒	☐
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).	☐	☒	☐
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).	☐	☒	☐
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.	☐	☒	☐

D. CONCLUSIONS

The SERP concluded that reducing the inspection frequency at Satellite No. 1 from daily to weekly is consistent with NRC License SUA-1548 and should not compromise the effectiveness of the ALARA and environmental compliance programs. Therefore, the SERP approves this change in inspection frequency while Satellite No. 1 is not in use. Daily inspections will be required when or if Satellite No. 1 is in use.

Signature: _____ Date: 7.29.05
C. Foldenauer, Mine Manager

Signature: _____ Date: 7/29/05
K. Milmine, Manager- Health, Safety and Environmental Affairs

Signature: _____ Date: 8/5/05
T. McCullough, Safety Supervisor/Radiation Safety Officer

Signature: _____ Date: 7/29/05
A. Crook, Radiation Safety Technician

Signature: _____ Date: 8/10/05
Leland Huffman, Restoration Superintendant

Signature: _____ Date: 7-29-05
J. Winter, Senior EHSMS Coordinator

Inter-Company Memorandum

Date:	February 1, 2006
To:	C. Foldenauer, P. Drummond, L. Reimann, C. Czarnecki, T. McCullough, A. Crook, E. Heide
From:	Ken Milmine – Manager-Health, Safety and Environmental Affairs KCK
Re:	SERP 2005-3A Amendment – Evaporation Pond Sludge Removal
cc:	File SR. 4.6.4.2

A. INTRODUCTION

Safety and Environmental Review Panel was reconvened on October 19, 2005 to discuss amendment to SERP 2005-3 to include the use of a Track Hoe. Results of these discussion are presented below.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)

NRC License condition 9.4D of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Individuals selected to perform this SERP review include:

C.Foldenauer – Mine Manager
K.Milmine – Manager – Health, Safety, and Environmental Affairs
T. McCullough – Safety Supervisor/RSO
A. Crook – Radiation Safety Tech.
L. Reimann – Sr. Engineer
C. Czarnecki – Staff Engineer
P. Drummond – Central Plant and Maintenance Superintendent
~~E. Heide – Central Plant Foreman~~

C. EVALUATION OF PROPOSED CHANGE/TEST

The method of sludge removal has changed from the original SERP conducted for this project. The sludge will now be removed mechanically by a Track Hoe instead of pumping it out in a slurry.

Operations/Technical Review

- Track Hoe with a 54' Arm will be utilized to remove sludge. The Track Hoe will not need to enter the pond at any time.
- Sludge will be loaded into BFI and allowed to drain through culvert back into the pond
- A Regular backhoe will be used to unload BFI into side dump
- One or two spotters in the bottom when it gets to that point to wash down or shovel sludge into the bucket. Spotters will watch and guide the Track Hoe bucket to prevent putting a hole in the liner

Safety and Environmental

- A BZ will be used in cab with the driver for the time he is in there
- Spotters will be in the same protective equipment as per first SERP review
- Another RWP will be done and reviewed with personnel
- Task training for Track Hoe is complete
- Sludge will be wet at all times. Using the Track Hoe there is a greater potential for dust.

Compliance Review

The SERP evaluated the proposed amendment to include the use of the Track Hoe against the conditions stated in the License Condition 9.4 as shown in the table below. The SERP concluded that this proposed work at the evaporation ponds satisfied those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?		X	
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?		X	
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?		X	
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?		X	
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?		X	

Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).		X	
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).		X	
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).		X	
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.		X	

D. CONCLUSIONS

The SERP concluded that the proposed amendment to the original SERP would not require a License Amendment and does not conflict with any other regulatory requirement. Also, that these activities will not result in the degradation of any essential safety or environmental commitments in the License Application, Environmental Assessments, or current operating procedures. As a result, the SERP approved the use of a Track Hoe to perform sludge removal and relining activities for the evaporation ponds to be conducted within the controls identified by the SERP.

Signature: _____ Date: 2-23-06

C. Foldenauer, Mine Manager

Signature: Ken Milmine Date: 2/20/06

K. Milmine – Manager – Health, Safety and Environmental Affairs

Signature: T. McCullough Date: 2/20/06

T. McCullough – Safety Supervisor/RSO

Signature: Arlene Crook Date: 2/20/06

A. Crook – Radiation Safety Tech

Signature: _____ Date: 2 17 06

P. Drummond – Central Plant and Maintenance Superintendent

Signature: _____ Date: 2/17/06

L. Reimann – Sr. Engineer

Signature: Catherine Czarnecki Date: 2/17/06

Czarnecki – Staff Engineer

Signature: DID NOT ATTEND Date: 2/17/06

E. Heide – CPP Foreman

Inter-Company Memorandum

Date:	February 1, 2006
To:	C. Foldenauer, M. Bryson, A. Crook, P. Drummond, S. Hatten, J. Winter
From:	Ken Milmine – Manager-Health, Safety and Environmental Affairs KM
Re:	Safety and Environmental Review Panel (SERP) No. 2005-5 - Adding Mine Unit E, D, and 1 to Restoration Plan
cc:	File SR. 4.6.4.2

A. INTRODUCTION

In accordance with NRC requirements, a Safety and Environmental Review Panel (SERP) must be conducted prior to beginning restoration activities.

A SERP was convened on October 4, 2005 to discuss approval for adding Mine Unit D, E and 1 to the restoration plan once Operations is prepared to begin restoration activities.

B. SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)

NRC License condition 9.4D of SUA-1548 requires that any changes, test or experiments made under the Performance Based License Condition be evaluated by a SERP consisting of at least three individuals. One member must have management expertise and have financial and management responsibility for approving changes. The second member must have operational and/or construction expertise and have responsibility for implementing any operational changes. The third member must be the Radiation Safety Officer (RSO), or equivalent, with the responsibility of assuring that the proposed activities will conform to radiation safety and environmental requirements. Individuals selected to perform this SERP review include:

C.Foldenauer – Mine Manager
K.Milmine – Manager – Health, Safety, and Environmental Affairs
J. Winter – Environmental Coordinator
A.Cook – Radiation Safety Tech
L.Huffman – Restoration Superintendent
P.Drummond – Central Plant and Maintenance Superintendent
M.Bryson – Superintendent of Wellfield Operations
S.Hatten – Wellfield Manager

C. EVALUATION OF PROPOSED CHANGE/TEST

Operations/Technical Review

- Amount of restoration in D-1 through D-5 and E will depend on amount of flow which can be handled at Satellite #2. Sampling in Mine Unit 1 will not change until stability period
- Need to verify if resin is available for restoration or if we need to buy it. Will check to see if there is extra for this year, then potentially order more next year
- Mine Units D & E need an end of mining sample. Therefore, downhole pumps need to be installed in MP wells which will be powered from the headerhouse
- Monitor Wells will go on a bi-monthly sampling schedule
- Pre-start up maintenance and procedures are followed
- ORC for the RO installation at the CPP will show any safety concerns with the RO installation
- Flexible line will be used for transferring resin so it can be removed from the floor and not have a permanent line across the floor
- 100 gpm of concentrate will be disposed through the DDW

Safety and Environmental

- No issues were presented
- Proper pretest inspections are done for every headerhouse/pattern
- Gamma and Radon surveys will continue in headerhouses as current
- Need approval for bioremediation from the State for MU-1
- No risk screening needed – Risk screening was performed during previous ORC meetings for RO unit installation at Satellite #2 and the CPP

The SERP evaluated adding Mine Unit D, E, and 1 to the restoration plan against the conditions stated in the License Condition 9.4 as shown in the table below. The SERP concluded that this proposed work satisfies those conditions.

LICENSE REQUIREMENT	YES	NO	N/A
Does the proposed change, test, and/or experiment conflict with the ALARA principle?		X	
Does the proposed change, test, and/or experiment conflict with PRI's ability to meet all applicable regulations including NRC, WDEQ, and EPA?		X	
Is there degradation in the essential safety or environmental commitments in the license application, or provided in the approved reclamation plan?		X	
Does the proposed change, test, and/or experiment conflict with any requirement specifically stated in the source material license?		X	
Is the proposed change, test, and/or experiment not consistent with the conclusions of actions analyzed in the facilities Environmental Assessment (EA) or supplemental EAs?		X	
Result in any increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of an accident previously evaluated in the license application (as updated).		X	
Result in any increase in the consequences of a malfunction of an SSC previously evaluated in the license application (as updated).		X	
Create a possibility for an accident of a different type than previously evaluated in the application (as updated).		X	
Create a possibility for a malfunction of an SSC with a different result than previously evaluated in the license application (as updated).		X	
Result in the departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report or the environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations. SSC means any SSC which has been referenced in a NRC staff SER, TER, EA, or environmental impact statement (EIS) and all supplements and amendments.		X	

D. CONCLUSIONS

The SERP concluded that the proposed addition of Mine Units D, E, and 1 to the restoration plan would not require a License Amendment and does not conflict with any other regulatory requirement. Also, that these activities will not result in the degradation of any essential safety or environmental commitments in the License Application, Environmental Assessments, or current operation procedures. As a result, SERP approved the addition of these Mine Units to the Restoration Plan to be conducted within the control identified by the SERP

Signature: _____ Date: 2.23.06
C. Foldenauer, Mine Manager

Signature: _____ Date: 2/17/06
K. Milmine – Manager – Health, Safety and Environmental Affairs

Signature: _____ Date: 2.17.06
J. Winter – Environmental Coordinator

Signature: _____ Date: 2/22/06
A. Crook – Radiation Safety Tech

Signature: _____ Date: 2/22/06
P. Drummond – Central Plant and Maintenance Superintendent

Signature: Michael D. Bryson Date: 2/22/06
M. Bryson – Superintendent of Wellfield Operations

Signature: _____ Date: 2-22-06
S. Hatten – Wellfield Manager