

APPENDIX N

GROUNDWATER MONITORING SUMMARY REPORT

Attachment N

2000 11e.(2) Groundwater Monitoring Summary Report

Introduction

In accordance with Section 12.2 of Envirocare's Materials License SMC-1559, issued by the U.S. Nuclear regulatory Commission (NRC), Envirocare is pleased to submit this annual groundwater sampling report. This report provides a brief summary of groundwater sampling and reporting activities conducted at Envirocare's 11e.(2) facility located in Clive, Utah. More detailed information is contained in the semi-annual reports submitted to the NRC.

Specifically, this report provides a summary of twelve monthly depth-to-water measurements and four quarterly groundwater monitoring activities that occurred at the facility during 2000. The four quarterly monitoring events were completed February 14 to 17, 2000 (first quarter), May 11 to 29, 2000 (second quarter), August 1 to 10, 2000 (third quarter), and October 3 to November 16, 2000 (fourth quarter). The four sampling events were conducted in compliance with Section 11.1.a of Envirocare's Materials License issued by the NRC.

Groundwater Elevations

On a monthly basis or prior to sampling, depths to groundwater were measured in all 11e.(2) and other site monitoring wells. These depths to groundwater were used to generate potentiometric surface maps of the upper, unconfined aquifer beneath the Envirocare facility. Tables N-1 January through N-1 December provide a summary of the depth-to-groundwater measurements for the twelve months. Also included in these tables are salt water and fresh water elevations calculated for each well. The State of Utah, Division of Radiation Control (DRC) requires that all groundwater measurements be referenced to fresh water equivalent heads. This conversion takes into account the difference in densities (specific gravity) of the groundwater beneath the facility. From these tables, twelve potentiometric contour maps were generated to show general groundwater flow direction and gradients. These maps are included as Figures GW0100SS, GW0200SS, GW0300SS, GW0400SS, GW0500SS, GW0600SS, GW0700FS, GW0800FS, GW0900FS, GW1000FS, GW1100FS, and GW1200FS.

Based on the contour maps, groundwater generally flows to the north/northeast and the potentiometric surface is flat. The large mound in the middle of the 11e.(2) cell (created by the ponding of stormwater from the Vitro embankment) is still evident, but this mound is dissipating. A second mound, however, was created by a leak in a pond located in the southwest corner of the facility. This pond was constructed to retain stormwater collected from the Vitro embankment. A piezometer was installed immediately down-

gradient of the southwest pond in August 1999 to evaluate changes in the mound and to monitor for additional leaks. The original leak was repaired and Vitro embankment stormwater was subsequently diverted to the pond in the winter of 2000.

Although it is dissipating, the second mound has created hydrogeochemical changes in the groundwater beneath the southwest corner of the facility. These changes will be discussed in the next section.

Analytical Results

Analytical results of the four quarterly sampling events are provided in Tables N-2 and N-3. Table N-2 provides a summary of the general chemistries (major cations and anions, metals, etc.) and Table N-3 provides a summary of radiological chemistries. A discussion of parameters that exceeded baseline concentrations established by the NRC (baselines) for 11e.(2) wells follows.

Arsenic

Arsenic concentrations exceeded baselines in monitoring wells GW-19A, GW-20, GW-25, GW-26, GW-27, GW-28, GW-57, and GW-58. These exceedances have been discussed in previous reports and appear to be directly related to increases in groundwater elevation. As groundwater elevations have risen and stayed high due to mounding, the groundwater has re-dissolved residual arsenic (in addition to other constituents) left as evaporate deposits by the Great Salt Lake and its predecessors.

Barium

Barium concentrations exceeded baselines in monitoring wells GW-19A, GW-20, GW-24, GW-25, GW-26, GW-27, GW-28, GW-29, GW-57, GW-58, GW-60, and GW-63 during first and second quarter sampling events. There was one barium exceedance in GW-19A in the third and fourth quarters of 2000.

Chromium

Chromium concentrations exceeded baselines in monitoring wells GW-19A in the first and second quarters of 2000 and GW-29 in the third and fourth quarters of 2000.

Fluoride

Fluoride methods used by American West Analytical Laboratories (AWAL) and Mountain States Analytical (MSAI) are subject to positive interference by chloride. Barringer laboratories (Barringer) analyzed site groundwater for fluorine using method 340.2. Based on these results, provided in Table N-3, GW-19A exceeded baselines for fluoride in the third and fourth quarters of 2000.

Molybdenum

Molybdenum concentrations exceeded baselines in monitoring wells GW-19A and GW-27.

Selenium

Selenium concentrations exceeded baselines in monitoring wells GW-19A, GW-24, GW-26, GW-29, GW-58, and GW-60 in the first and second quarters of 2000, and GW-19A and GW-26 in the third and fourth quarters of 2000.

Silver

Silver concentrations exceeded baselines in monitoring wells GW-26, GW-27, and GW-57 in the first and second quarters of 2000. There were no silver exceedances in the third and fourth quarters of 2000.

Thorium-230

Thorium-230 concentrations exceeded baselines in monitoring well GW-60 during the first quarter sampling.

Thorium-232

Thorium-232 concentrations exceeded baselines in monitoring wells GW-19A, GW-20, GW-24, GW-25, GW-26, GW-27, GW-28, GW-29, GW-57, GW-58, GW-60, and GW-63 in the first and second quarters of 2000. GW-19A, GW-27, and GW-28 exceeded established baseline Thorium-232 values in the third and fourth quarters of 2000. The major difference in the number of exceedances between the first and second quarters of 2000 and the third and fourth quarters of 2000 was the modification to the established baselines. Early in 2000, the established baseline was 0.0 pCi/L for thorium-232. This baseline did not consider laboratory minimum detectable amount (MDA) concentrations. This is the minimum thorium-232 concentration that a laboratory can detect. This number is usually something greater than zero. In an effort to consider the thorium-232 MDA, NRC granted Envirocare an error term of 1 (essentially the laboratory MDA) in calculating thorium-232 baselines. As a result, fewer thorium-232 exceedances were identified in the third and fourth quarters of 2000.

Total Uranium

Total uranium concentrations exceeded NRC established baselines in monitoring wells GW-19A, GW-27, GW-28, and GW-58. These monitoring wells also exceeded established total uranium baselines in 1999.

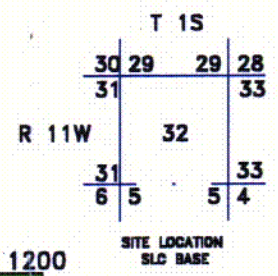
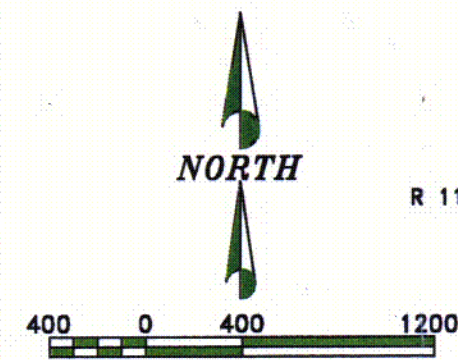
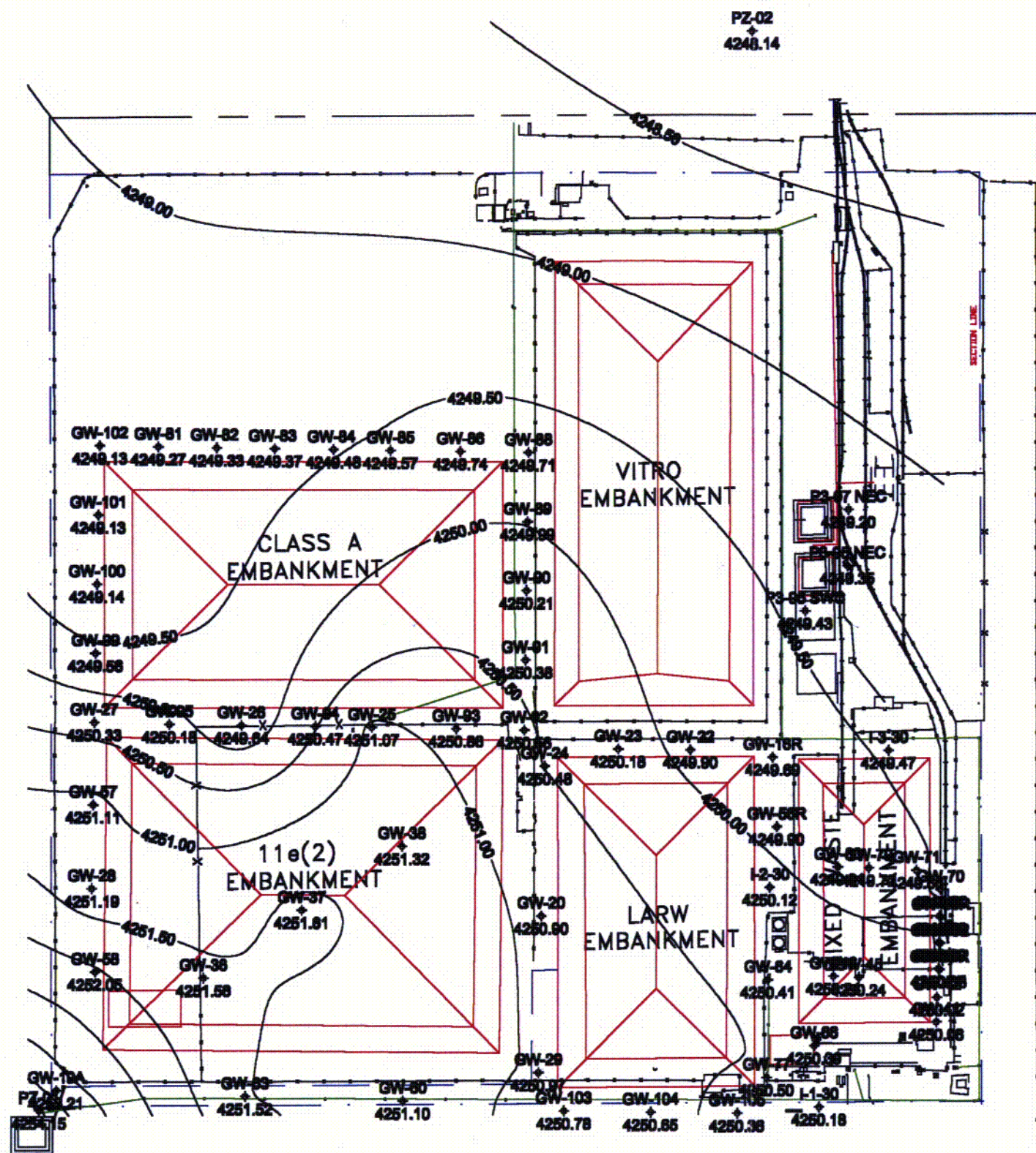
Conclusions and recommendations

Envirocare is confident that the exceedances discussed in this report are not due to cell leakage. The exceedances appear to be due to three factors unrelated to waste disposal activities in the 11e.(2) cell. These factors include higher groundwater elevations (causing re-dissolution of evaporates), seasonal effects that were also indicated in 1999, and baselines that did not account for laboratory MDAs. Exceedances consistently occurred in GW-19A, GW-26, GW-27, GW-28, GW-57, and GW-58. If the current disposal cell were to be defective, the leaked constituents would have to migrate up-gradient, over the mound, and then up to a distance of 1,500 feet (as in the case of GW-27) to be detected.

Envirocare continues to be cognizant of construction and other activities that might adversely affect groundwater underlying the area of the 11e.(2) facility. Tracking periodic depth to water measurements at the piezometer located immediately down-gradient of the southwest pond and on-going surface water management will assure that mounding in the 11e.(2) area will dissipate.

Envirocare has suggested to the NRC that changes to the monitoring plan for the shallow aquifer are necessary to confidently assess leakage to groundwater from the 11e.(2) embankment. One of these suggestions included monitoring groundwater for waste constituents most likely to be detected by the monitoring well network. To this end, Envirocare conducted a K_d study that was submitted to the NRC in September 2000 as *Metals Distribution Coefficient [K_d] Values Relevant To The Envirocare Site*. This report was part of an Amendment Request. Envirocare anticipates receipt of the NRC's evaluation of this Amendment Request.

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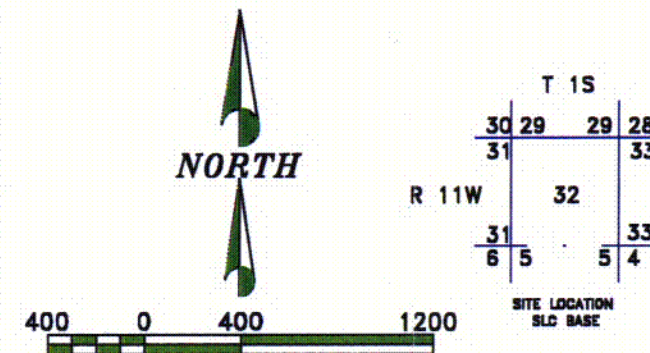
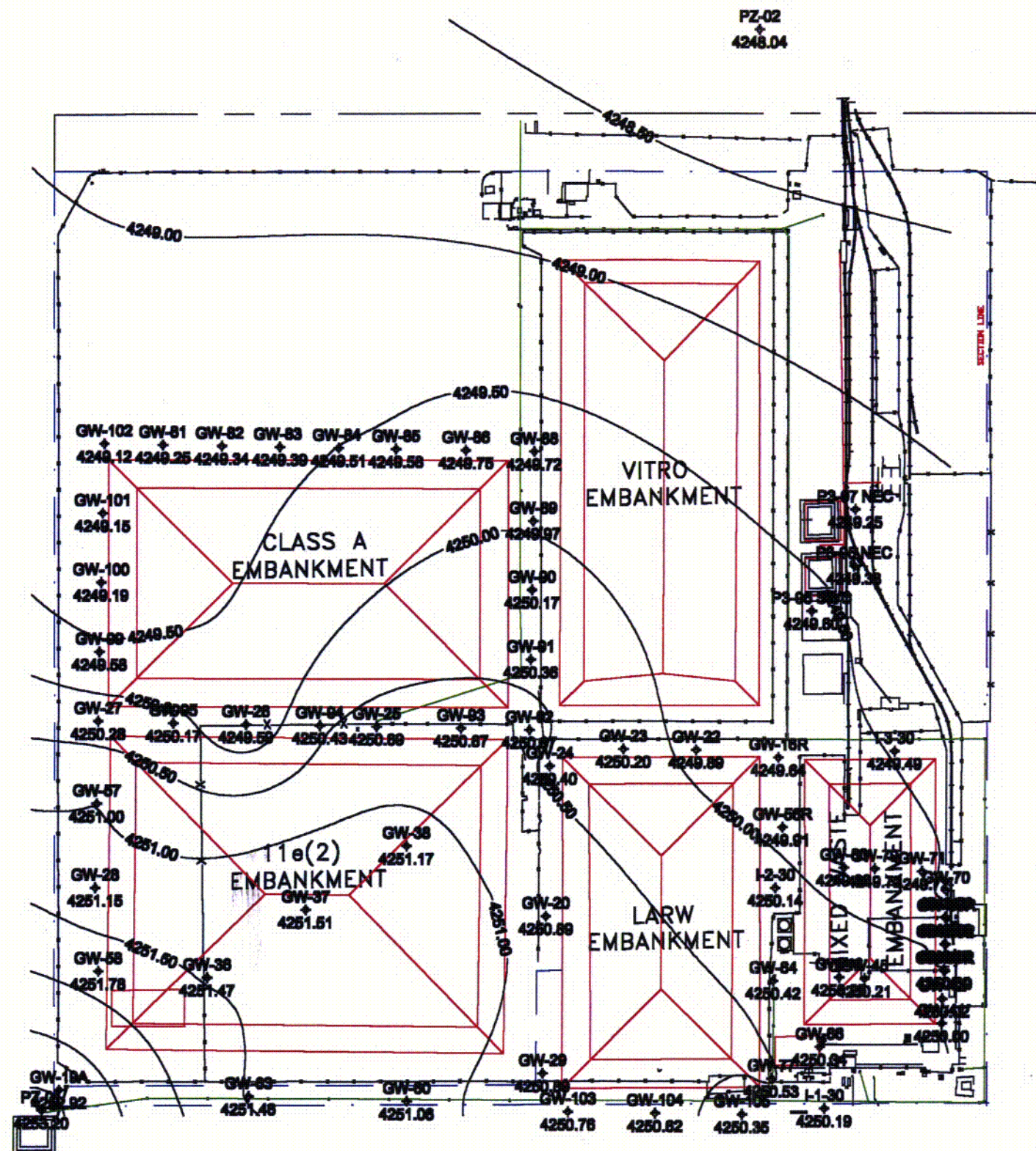
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 - POWER/TELEPHONE LINES
 - SECTION LINE
 - RAILROAD TRACK
 - GROUND WATER WELL
 - GROUND WATER CONTOUR (0.5' INTERVAL)
 - FLOW DIRECTION

ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

K. LUTZ	SITE PLAN	1" = 800'	08/25/00
J. LOW	JANUARY 2000		
	SHALLOW PIEZOMETRIC MAP		
	CLIVE, UTAH		

GW0100FS

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 - 4250.00 — GROUND WATER CONTOUR (0.5' INTERVAL)
 - FLOW DIRECTION



ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

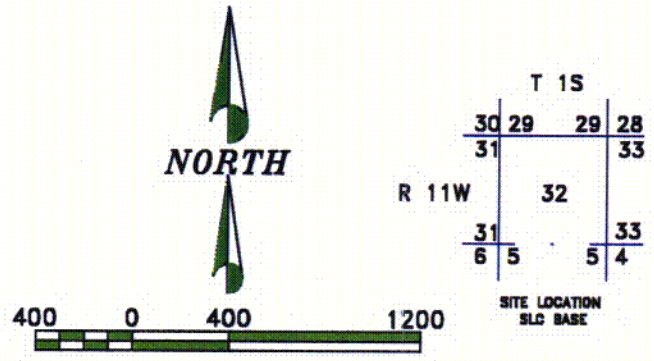
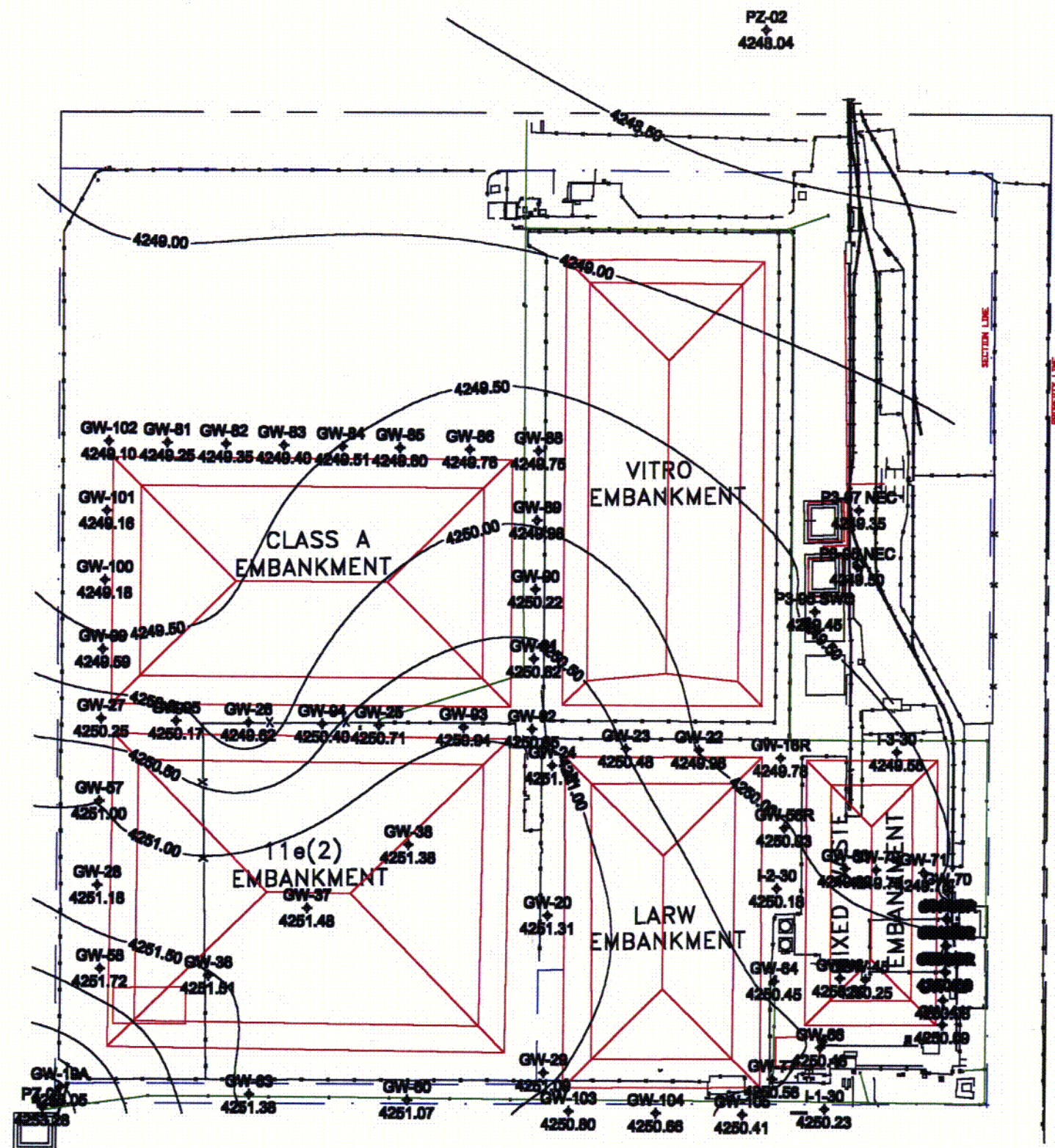
K. LUTZ
J. LOW

SITE PLAN
FEBRUARY 2000
SHALLOW PIEZOMETRIC MAP
CLIVE, UTAH


1" = 800' 08/25/00
GW0200FS



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 - GROUND WATER CONTOUR (0.5' INTERVAL)
 - FLOW DIRECTION

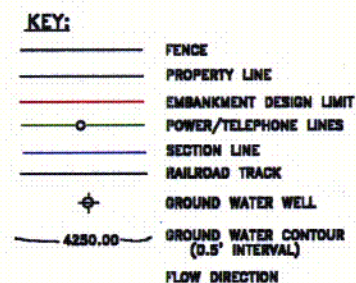


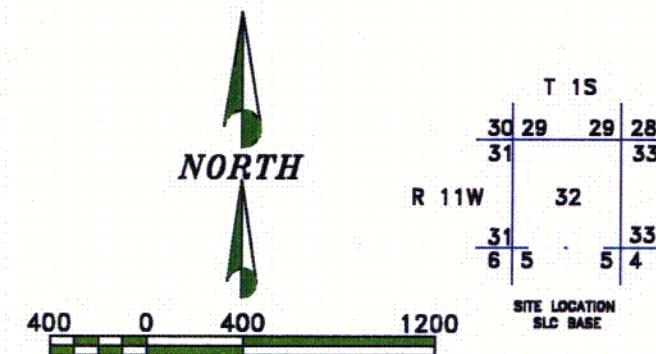
ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"


K. LUTZ	SITE PLAN	1" = 800'	08/25/00
J. LOW	MARCH 2000		
	SHALLOW PIEZOMETRIC MAP		
	CLIVE, UTAH		

GW0300FS

2-3

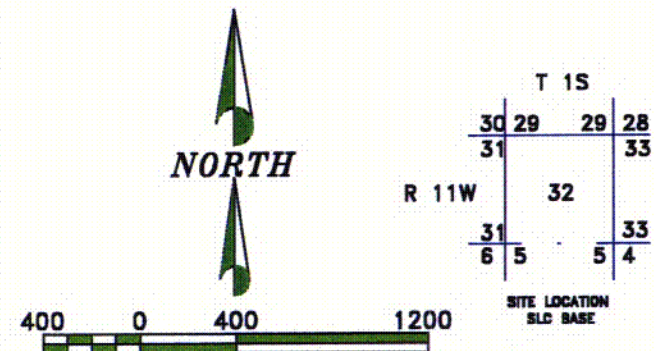
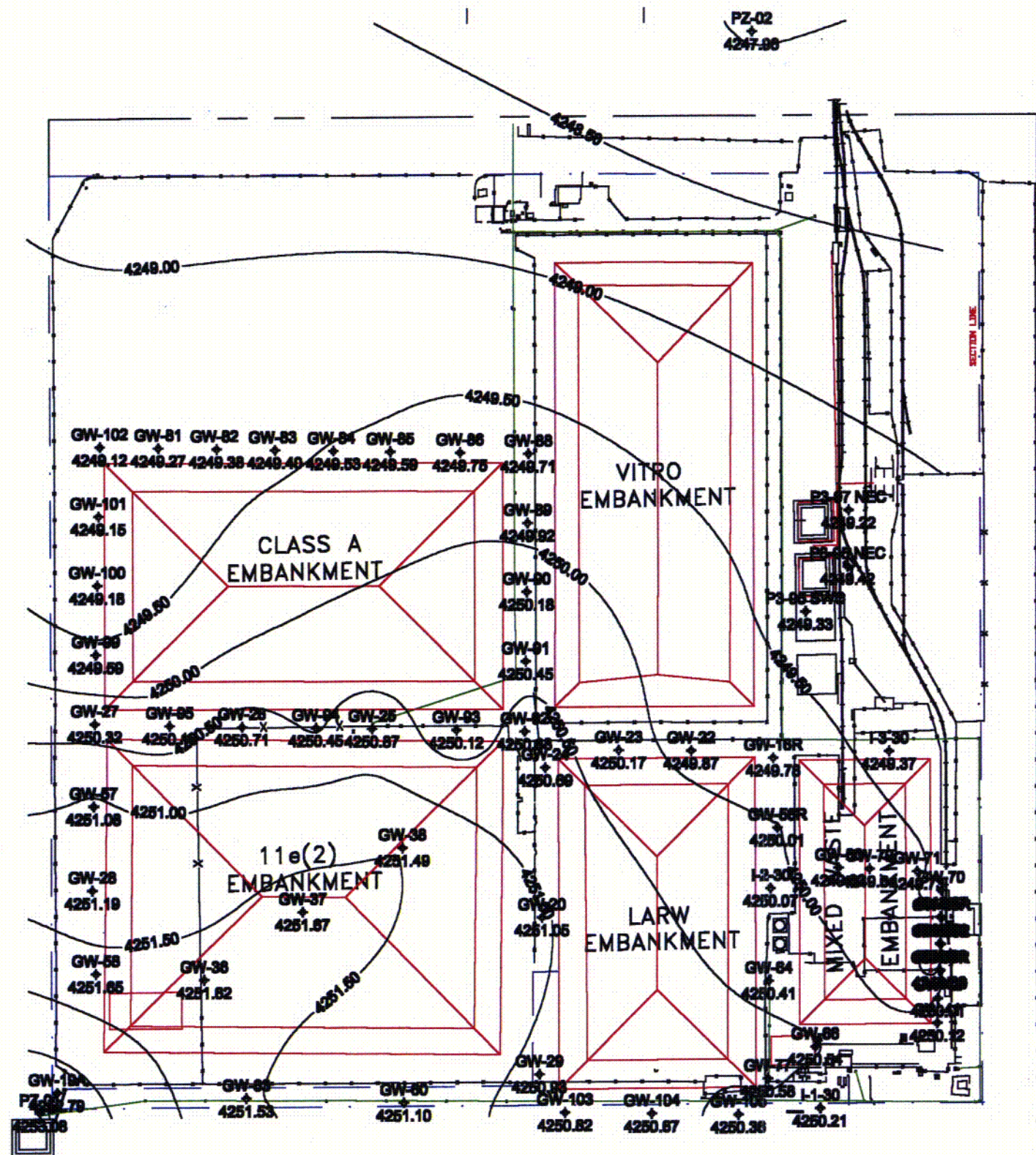






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 GROUND WATER WELL
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 FLOW DIRECTION

C-5

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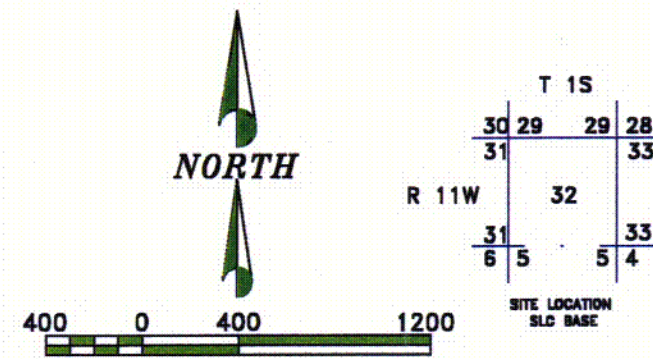
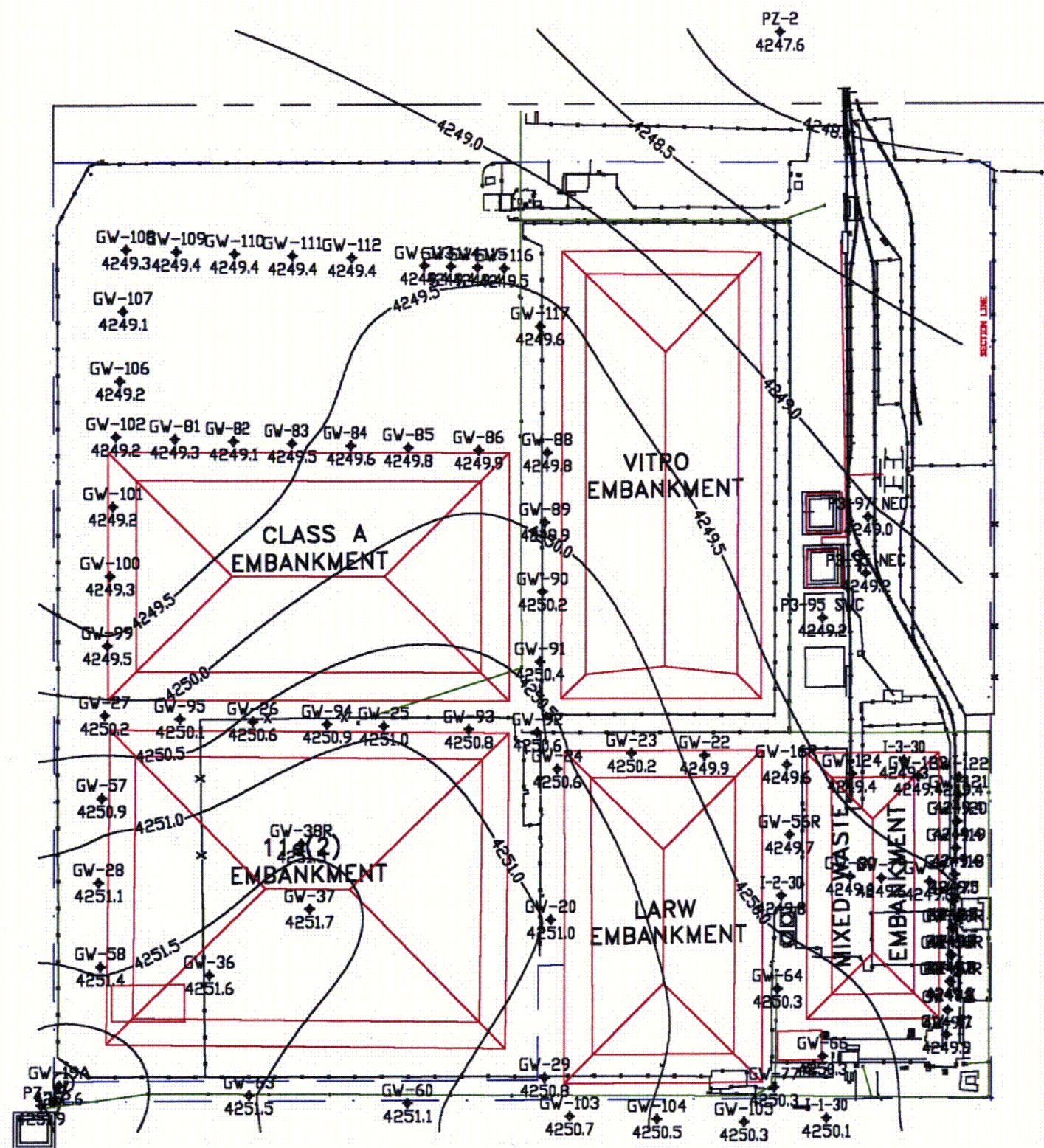
ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

K. LUTZ	SITE PLAN	1" = 800'	08/25/00
J. LOW	JUNE 2000		
	SHALLOW PIEZOMETRIC MAP		
	CLIVE, UTAH		


GW0600FS

c-6

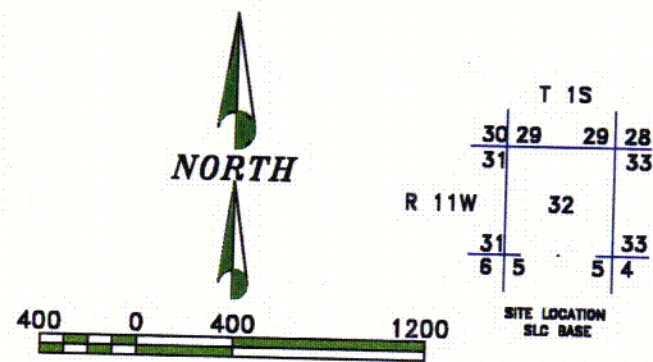
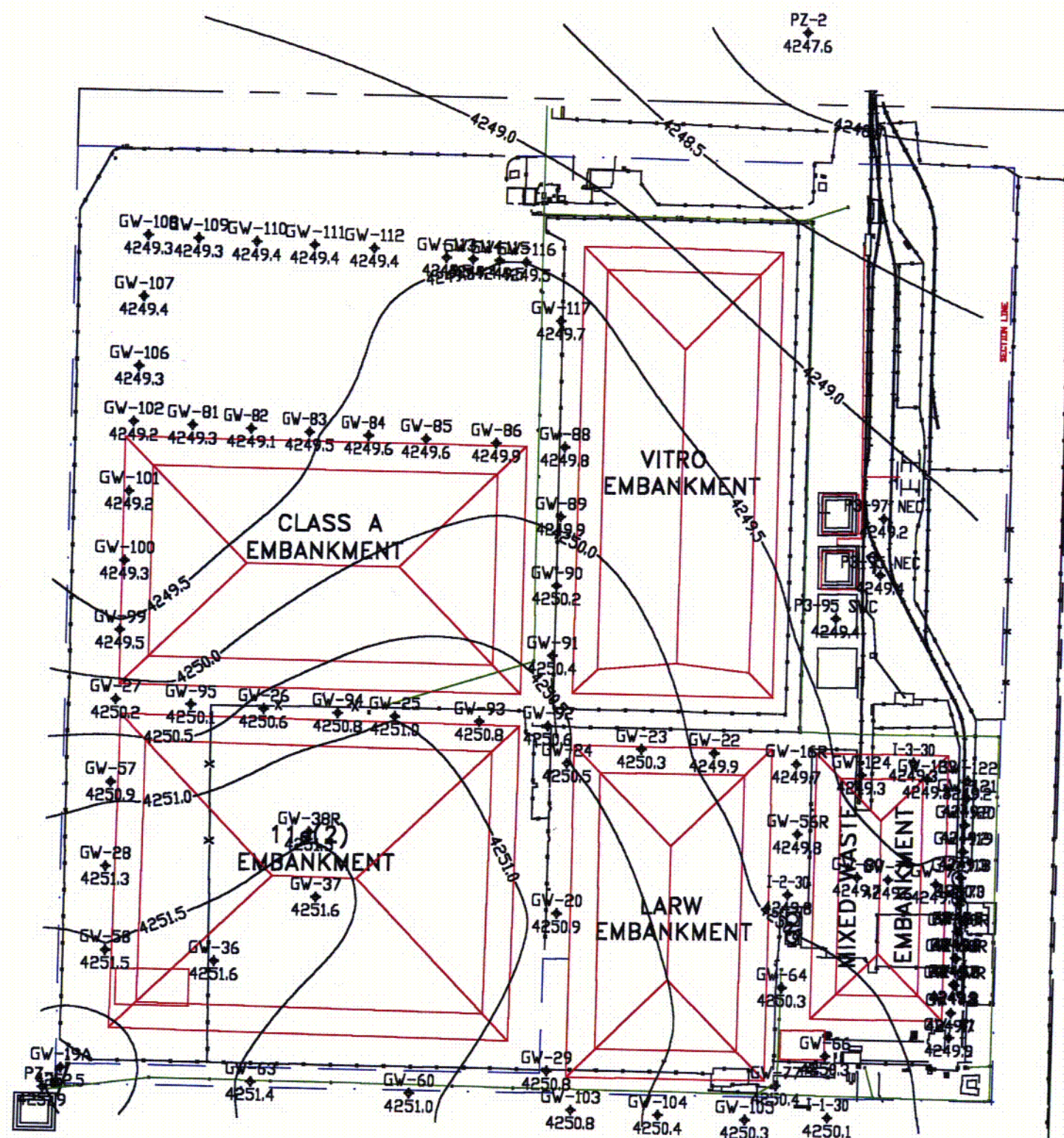
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	ENVIROCARE OF UTAH, INC. "THE SAFE ALTERNATIVE"		K. LUTZ	SITE PLAN	1" = 800'	04/12/00
			J. LOW	JULY 2000		
				SHALLOW PIEZOMETRIC MAP CLIVE, UTAH		
					GW0700FS	

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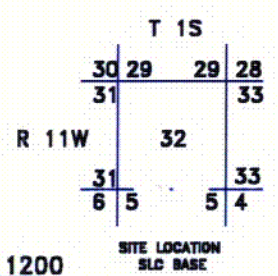
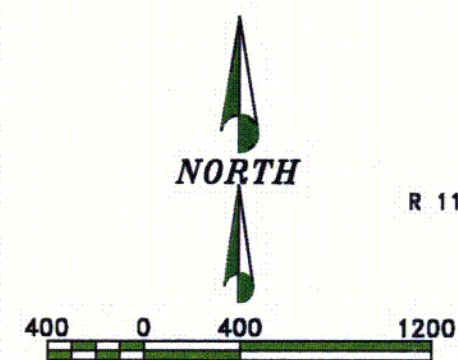
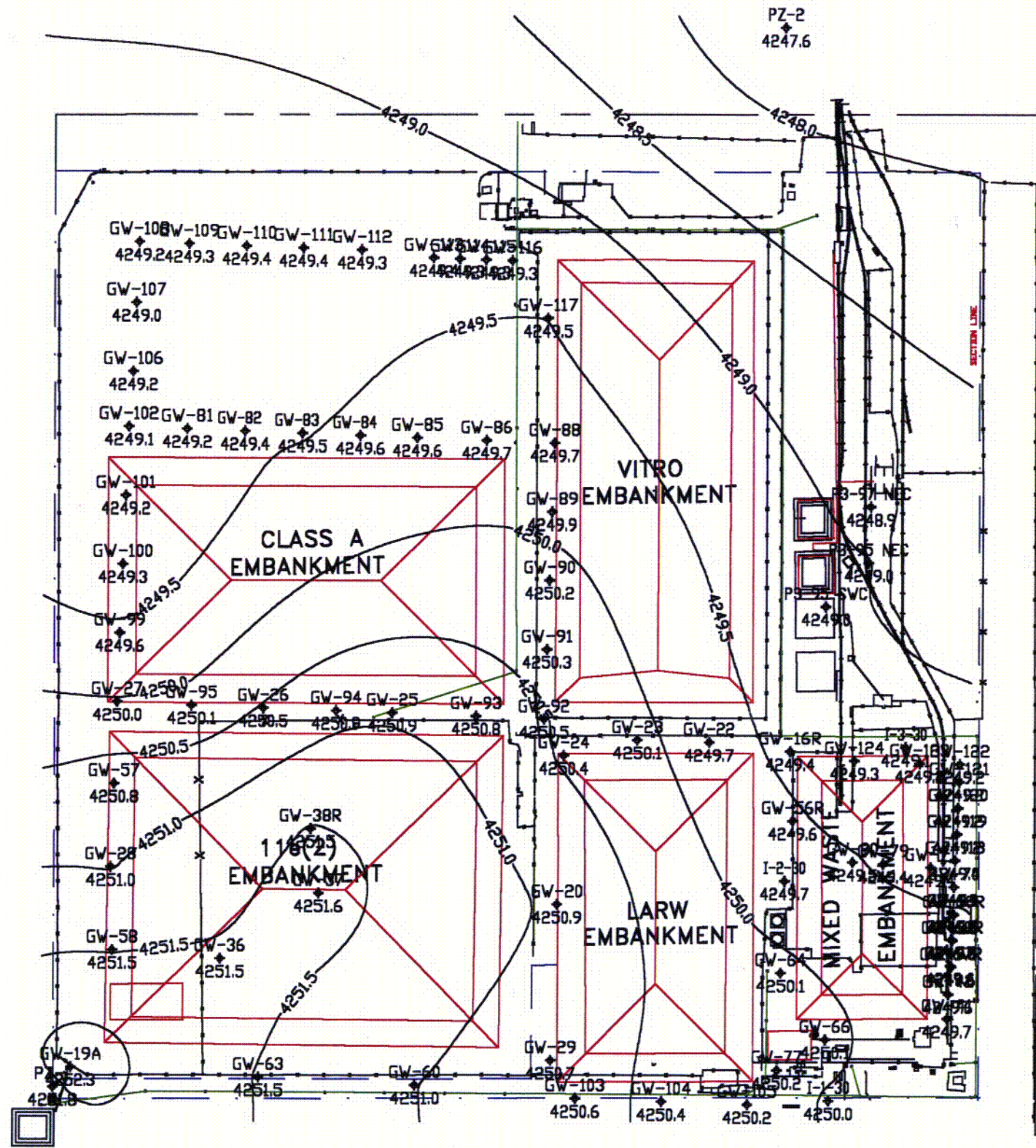
ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

K. LUTZ	SITE PLAN	1" = 800'	04/12/00
J. LOW	AUGUST 2000		
	SHALLOW PIEZOMETRIC MAP		
	CLIVE, UTAH		

GW0800FS



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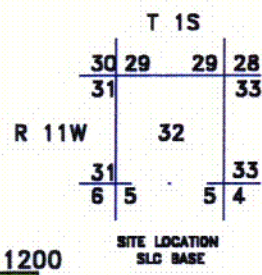
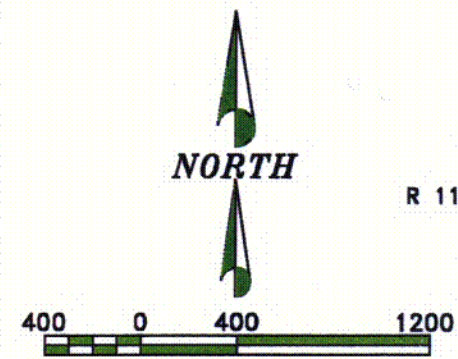
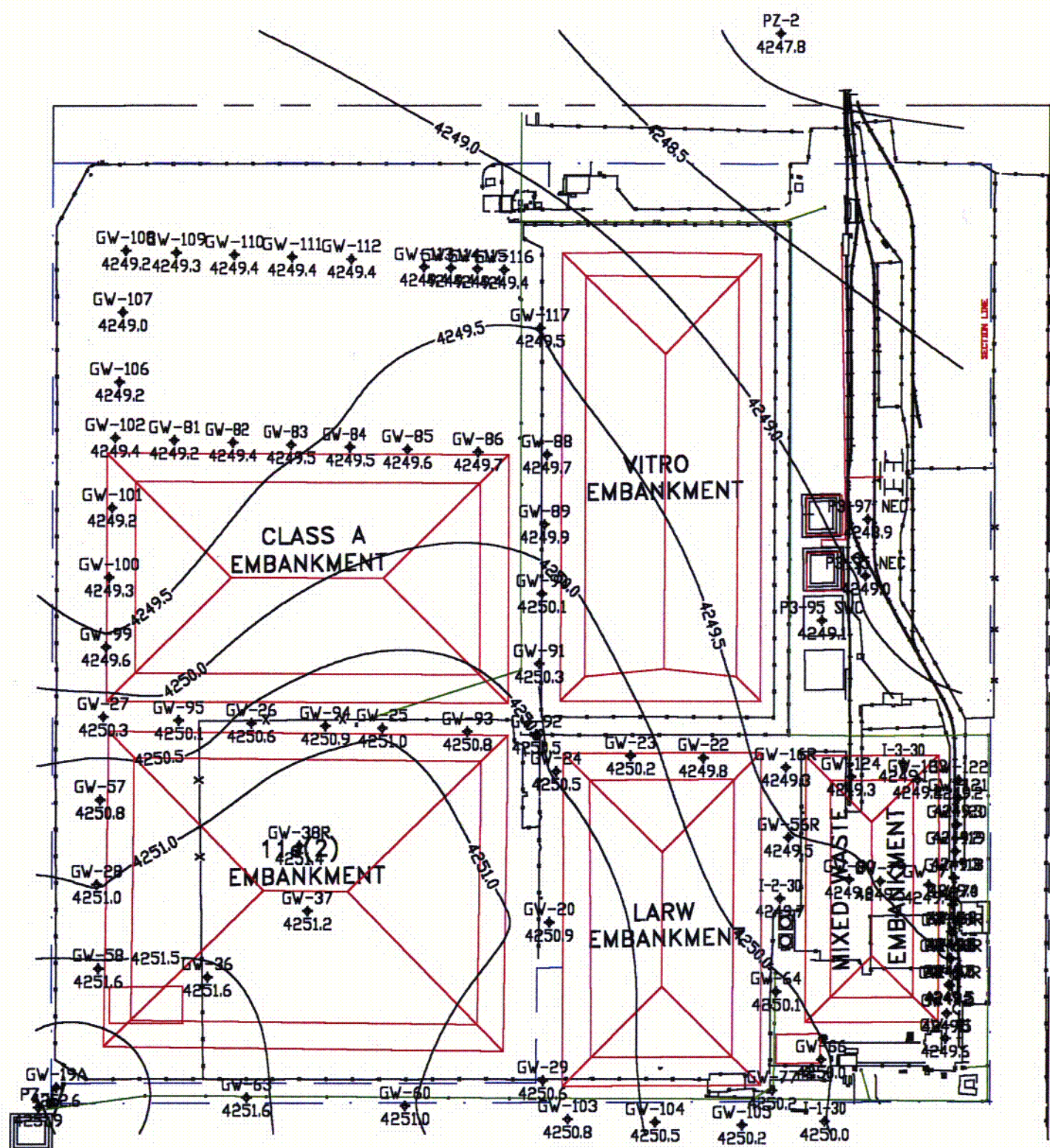


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C-9

	ENVIROCARE OF UTAH, INC. "THE SAFE ALTERNATIVE"		K. LUTZ J. LOW		SITE PLAN SEPTEMBER 2000 SHALLOW PIEZOMETRIC MAP CLIVE, UTAH		1" = 800' 04/12/00		GW0900FS

Fig. 10. ENGINEERING DWG. FILE: GROUND WATER FILES\2001\NEW EOL DERAD000ES.DWG. Last edited: 04/12/01 @ 12:48 p.m. by: Kutz, Krefr. nops




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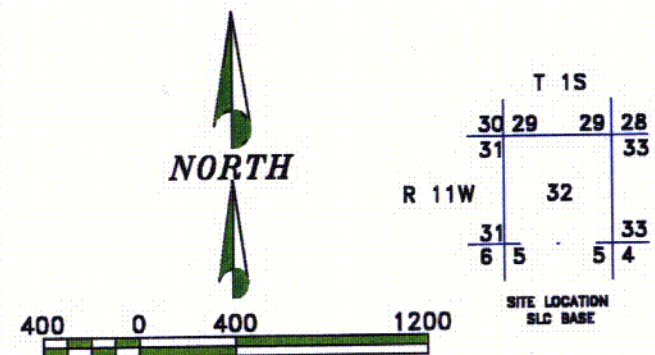
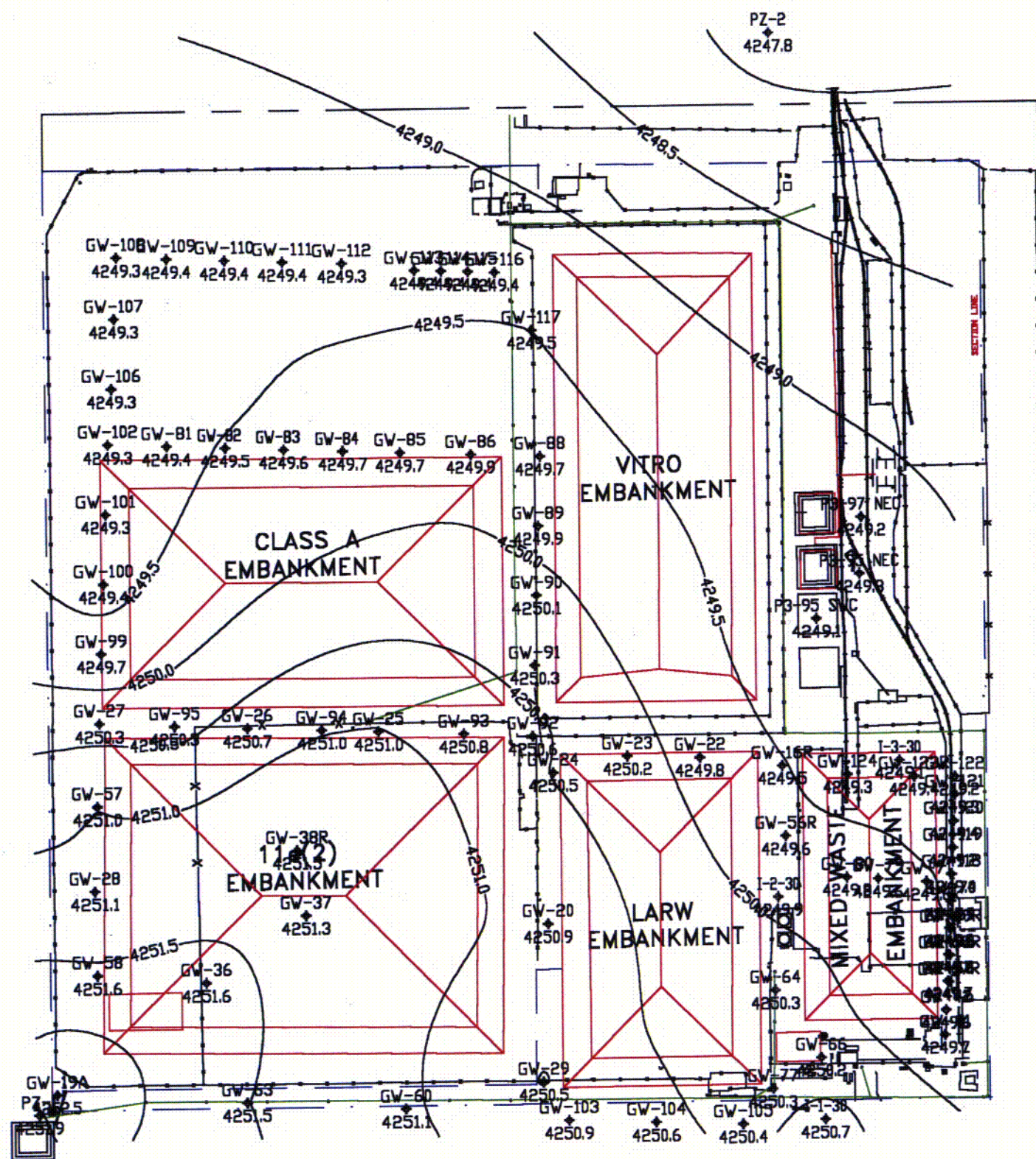
ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

K. LUTZ	SITE PLAN	1" = 800'	04/12/00
J. LOW	OCTOBER 2000		
	SHALLOW PIEZOMETRIC MAP		
	CLIVE, UTAH		

GW1000FS 

C-10

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ENVIROCARE
OF UTAH, INC.
"THE SAFE ALTERNATIVE"

K. LUTZ
J. LOW

SITE PLAN
NOVEMBER 2000
SHALLOW PIEZOMETRIC MAP
CLIVE, UTAH

1" = 800' 04/12/00
GW1100FS

TABLE N-1 January
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured January 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	29.32	4250.07	4250.18	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.90	4250.02	4250.12	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	31.97	4249.40	4249.47	1.024
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.47	4249.61	4249.69	1.032
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.03	4252.81	4253.21	1.054
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.92	4250.68	4250.90	1.043
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.42	4249.81	4249.90	1.033
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.58	4250.05	4250.18	1.039
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	26.35	4250.35	4250.48	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.35	4250.85	4251.07	1.041
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	25.11	4249.49	4249.64	1.046
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.29	4250.13	4250.33	1.043
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.29	4251.00	4251.19	1.035
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.48	4250.81	4250.97	1.039
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.59	4251.38	4251.56	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.64	4251.38	4251.61	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.28	4251.14	4251.32	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.62	4249.94	4250.06	1.033
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.42	4249.92	4250.02	1.030
GW-45	RCRA	1,554,221.2	859,970.9	4279.50	29.43	4250.07	4250.24	1.041
GW-46	RCRA	1,554,075.5	859,978.2	4279.50	29.44	4250.06	4250.24	1.041
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.38	4249.78	4249.90	1.033
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.02	4250.90	4251.11	1.039
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.35	4251.80	4252.05	1.040
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.65	4251.00	4251.10	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.61	4251.36	4251.52	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.58	4250.27	4250.41	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.32	4250.30	4250.39	1.025
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	32.28	4249.95	4250.07	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.57	4249.92	4250.03	1.021
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.55	4249.85	4250.00	1.032
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.53	4249.72	4249.87	1.031
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.89	4249.75	4249.89	1.033
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.87	4249.72	4249.89	1.033
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	32.38	4249.20	4249.30	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.17	4249.53	4249.66	1.023
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.75	4250.22	4250.39	1.032
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.21	4249.64	4249.72	1.025
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.17	4249.68	4249.81	1.026

TABLE N-1 January
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured January 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	29.11	4250.04	4251.36	1.020
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	31.95	4249.55	4250.69	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.53	4250.23	4251.62	1.020
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.75	4249.92	4251.17	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.59	4249.27	4249.35	1.023
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	30.94	4249.28	4249.43	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.76	4249.15	4249.20	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.57	4249.13	4249.27	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.53	4249.19	4249.33	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.57	4249.25	4249.37	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.82	4249.32	4249.48	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.37	4249.42	4249.57	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.72	4249.51	4249.74	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.86	4249.59	4249.71	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.42	4249.86	4249.99	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.68	4250.09	4250.21	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.39	4250.29	4250.38	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.46	4250.49	4250.56	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.19	4250.66	4250.86	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	25.98	4250.27	4250.47	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.62	4250.03	4250.18	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.24	4249.43	4249.56	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.18	4249.03	4249.14	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.05	4248.96	4249.13	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.42	4248.98	4249.13	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.79	4250.51	4250.78	1.034
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.37	4250.38	4250.65	1.035
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.92	4250.15	4250.36	1.032
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	15.96	4253.74	4254.15	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	33.90	4248.10	4248.14	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 February
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured February 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	29.31	4250.08	4250.19	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.88	4250.04	4250.14	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	31.95	4249.42	4249.49	1.024
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.52	4249.56	4249.64	1.032
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.31	4252.53	4252.92	1.054
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.93	4250.67	4250.89	1.043
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.43	4249.80	4249.89	1.033
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.56	4250.07	4250.20	1.039
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	26.43	4250.27	4250.40	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.72	4250.48	4250.69	1.041
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	25.16	4249.44	4249.59	1.046
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.34	4250.08	4250.28	1.043
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.33	4250.96	4251.15	1.035
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.56	4250.73	4250.89	1.039
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.68	4251.29	4251.47	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.74	4251.28	4251.51	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.43	4250.99	4251.17	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.68	4249.88	4250.00	1.033
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.42	4249.92	4250.02	1.030
GW-45	RCRA	1,554,221.2	859,970.9	4279.50	29.46	4250.04	4250.21	1.041
GW-46	RCRA	1,554,075.5	859,978.2	4279.50	29.43	4250.07	4250.25	1.041
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.37	4249.79	4249.91	1.033
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.13	4250.79	4251.00	1.039
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.61	4251.54	4251.78	1.040
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.69	4250.96	4251.06	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.67	4251.30	4251.46	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.57	4250.28	4250.42	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.37	4250.25	4250.34	1.025
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	32.35	4249.88	4250.00	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.51	4249.98	4250.09	1.021
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.58	4249.82	4249.97	1.032
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.59	4249.66	4249.81	1.031
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.96	4249.68	4249.82	1.033
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.92	4249.67	4249.84	1.033
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	32.39	4249.19	4249.29	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.11	4249.59	4249.72	1.023
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.62	4250.35	4250.53	1.032
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.21	4249.64	4249.72	1.025
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.18	4249.67	4249.80	1.026

TABLE N-1 February
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured February 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	29.07	4250.08	4251.40	1.020
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	31.92	4249.58	4250.72	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.45	4250.31	4251.70	1.020
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.75	4249.92	4251.17	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.56	4249.30	4249.38	1.023
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	30.78	4249.44	4249.60	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.71	4249.20	4249.25	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.59	4249.11	4249.25	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.52	4249.20	4249.34	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.55	4249.27	4249.39	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.79	4249.35	4249.51	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.36	4249.43	4249.58	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.71	4249.52	4249.75	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.85	4249.60	4249.72	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.44	4249.84	4249.97	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.72	4250.05	4250.17	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.41	4250.27	4250.36	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.35	4250.60	4250.67	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.37	4250.48	4250.67	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	26.02	4250.23	4250.43	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.63	4250.02	4250.17	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.22	4249.45	4249.58	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.13	4249.08	4249.19	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.03	4248.98	4249.15	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.43	4248.97	4249.12	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.81	4250.49	4250.76	1.034
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.40	4250.35	4250.62	1.035
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.93	4250.14	4250.35	1.032
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	16.87	4252.83	4253.20	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	34.00	4248.00	4248.04	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

– Not calculated

TABLE N-1 March
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured March 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	28.97	4250.42	4250.53	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.84	4250.08	4250.18	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	31.89	4249.48	4249.55	1.024
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.38	4249.70	4249.78	1.032
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.19	4252.65	4253.05	1.054
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.52	4251.08	4251.31	1.043
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.34	4249.89	4249.98	1.033
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.29	4250.34	4250.48	1.039
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	25.70	4251.00	4251.14	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.70	4250.50	4250.71	1.041
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	25.13	4249.47	4249.62	1.046
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.37	4250.05	4250.25	1.043
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.30	4250.99	4251.18	1.035
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.36	4250.93	4251.09	1.039
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.64	4251.33	4251.51	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.77	4251.25	4251.48	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.22	4251.20	4251.38	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.59	4249.97	4250.09	1.033
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.41	4249.93	4250.03	1.030
GW-45	RCRA	1,554,221.2	859,970.9	4279.50	29.42	4250.08	4250.25	1.041
GW-46	RCRA	1,554,075.5	859,978.2	4279.50	29.36	4250.14	4250.32	1.041
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.25	4249.91	4250.03	1.033
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.13	4250.79	4251.00	1.039
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.67	4251.48	4251.72	1.040
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.68	4250.97	4251.07	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.75	4251.22	4251.38	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.54	4250.31	4250.45	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.23	4250.39	4250.48	1.025
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	32.32	4249.91	4250.03	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.51	4249.98	4250.09	1.021
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.47	4249.93	4250.08	1.032
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.35	4249.90	4250.05	1.031
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.89	4249.75	4249.89	1.033
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.89	4249.70	4249.87	1.033
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	32.05	4249.53	4249.64	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.15	4249.55	4249.68	1.023
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.49	4250.48	4250.66	1.032
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.16	4249.69	4249.78	1.025
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.10	4249.75	4249.89	1.026

TABLE N-1 March
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured March 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	29.09	4250.06	4251.38	1.020
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	31.89	4249.61	4250.76	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.39	4250.37	4251.76	1.020
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.67	4250.00	4251.25	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.45	4249.41	4249.50	1.023
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	30.92	4249.30	4249.45	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.61	4249.30	4249.35	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.59	4249.11	4249.25	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.51	4249.21	4249.35	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.54	4249.28	4249.40	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.79	4249.35	4249.51	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.34	4249.45	4249.60	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.70	4249.53	4249.76	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.82	4249.63	4249.75	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.43	4249.85	4249.98	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.67	4250.10	4250.22	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.15	4250.53	4250.62	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.17	4250.78	4250.85	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.11	4250.74	4250.94	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	26.05	4250.20	4250.40	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.63	4250.02	4250.17	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.21	4249.46	4249.59	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.14	4249.07	4249.18	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.02	4248.99	4249.16	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.45	4248.95	4249.10	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.77	4250.53	4250.80	1.034
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.36	4250.39	4250.66	1.035
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.48	4250.59	4250.82	1.032
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	16.79	4252.91	4253.28	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	34.00	4248.00	4248.04	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 April
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured April 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	29.28	4250.11	4250.22	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.91	4250.01	4250.11	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	31.91	4249.46	4249.53	1.024
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.39	4249.69	4249.77	1.032
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.39	4252.45	4252.84	1.054
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.75	4250.85	4251.07	1.043
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.37	4249.86	4249.95	1.033
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.46	4250.17	4250.30	1.039
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	26.16	4250.54	4250.67	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.61	4250.59	4250.80	1.041
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	24.03	4250.57	4250.74	1.046
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.33	4250.09	4250.29	1.043
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.39	4250.90	4251.09	1.035
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.47	4250.82	4250.98	1.039
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.58	4251.39	4251.57	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.56	4251.46	4251.69	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.14	4251.28	4251.46	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.55	4250.01	4250.13	1.033
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.40	4249.94	4250.04	1.030
GW-45	RCRA	1,554,221.2	859,970.9	4279.50	29.46	4250.04	4250.21	1.041
GW-46	RCRA	1,554,075.5	859,978.2	4279.50	29.41	4250.09	4250.27	1.041
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.27	4249.89	4250.01	1.033
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.19	4250.73	4250.93	1.039
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.78	4251.37	4251.61	1.040
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.68	4250.97	4251.07	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.66	4251.31	4251.47	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.54	4250.31	4250.45	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.20	4250.42	4250.51	1.025
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	33.28	4248.95	4249.06	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.53	4249.96	4250.07	1.021
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.50	4249.90	4250.05	1.032
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.45	4249.80	4249.95	1.031
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.90	4249.74	4249.88	1.033
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.82	4249.77	4249.94	1.033
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	32.81	4248.77	4248.87	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.08	4249.62	4249.75	1.023
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.59	4250.38	4250.56	1.032
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.16	4249.69	4249.78	1.025
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.11	4249.74	4249.88	1.026

TABLE N-1 April
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured April 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	28.94	4250.21	4251.53	1.020
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	31.88	4249.62	4250.77	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.45	4250.31	4251.70	1.020
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.72	4249.95	4251.20	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.52	4249.34	4249.42	1.023
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	31.03	4249.19	4249.34	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.72	4249.19	4249.24	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.57	4249.13	4249.27	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.53	4249.19	4249.33	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.53	4249.29	4249.41	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.76	4249.38	4249.54	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.34	4249.45	4249.60	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.69	4249.54	4249.77	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.79	4249.66	4249.78	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.41	4249.87	4250.00	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.67	4250.10	4250.22	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.31	4250.37	4250.46	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.24	4250.71	4250.78	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.19	4250.66	4250.86	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	26.00	4250.25	4250.45	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.61	4250.04	4250.19	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.21	4249.46	4249.59	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.14	4249.07	4249.18	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.02	4248.99	4249.16	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.46	4248.94	4249.09	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.79	4250.51	4250.78	1.034
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.36	4250.39	4250.66	1.035
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.89	4250.18	4250.39	1.032
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	17.12	4252.58	4252.94	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	34.04	4247.96	4248.00	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured May 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	29.29	4250.10	4250.21	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.95	4249.97	4250.07	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	31.92	4249.45	4249.51	1.022
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.38	4249.70	4249.78	1.034
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.26	4252.58	4252.96	1.052
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.75	4250.85	4251.07	1.042
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.40	4249.83	4249.92	1.032
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.45	4250.18	4250.31	1.038
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	26.16	4250.54	4250.67	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.57	4250.63	4250.84	1.040
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	24.03	4250.57	4250.73	1.042
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.27	4250.15	4250.35	1.042
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.28	4251.01	4251.21	1.036
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.51	4250.78	4250.93	1.038
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.53	4251.44	4251.62	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.58	4251.44	4251.67	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.11	4251.31	4251.49	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.59	4249.97	4250.08	1.032
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.42	4249.92	4250.01	1.028
GW-45	RCRA	1,554,221.2	859,970.9	4279.50	29.43	4250.07	4250.23	1.040
GW-46	RCRA	1,554,075.5	859,978.2	4279.50	29.43	4250.07	4250.24	1.040
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.27	4249.89	4250.01	1.034
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.01	4250.91	4251.11	1.038
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.73	4251.42	4251.65	1.038
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.64	4251.01	4251.11	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.59	4251.38	4251.54	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.59	4250.26	4250.40	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.17	4250.45	4250.54	1.024
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	32.33	4249.90	4250.02	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.52	4249.97	4250.09	1.022
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.52	4249.88	4250.02	1.030
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.45	4249.80	4249.94	1.028
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.87	4249.77	4249.91	1.032
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.83	4249.76	4249.92	1.030
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	31.81	4249.77	4249.88	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.08	4249.62	4249.75	1.022
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.58	4250.39	4250.58	1.034
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.19	4249.66	4249.74	1.024
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.14	4249.71	4249.84	1.026

TABLE N-1
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured May 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	29.19	4249.96	4251.15	1.018
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	31.92	4249.58	4250.72	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.42	4250.34	4251.59	1.018
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.69	4249.98	4251.23	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.52	4249.34	4249.42	1.022
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	31.05	4249.17	4249.32	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.74	4249.17	4249.22	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.58	4249.12	4249.26	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.51	4249.21	4249.35	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.53	4249.29	4249.41	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.76	4249.38	4249.54	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.32	4249.47	4249.62	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.67	4249.56	4249.79	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.77	4249.68	4249.80	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.38	4249.90	4250.03	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.67	4250.10	4250.22	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.31	4250.37	4250.46	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.23	4250.72	4250.79	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.19	4250.66	4250.86	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	25.97	4250.28	4250.48	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.60	4250.05	4250.20	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.19	4249.48	4249.61	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.11	4249.10	4249.21	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.01	4249.00	4249.17	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.41	4248.99	4249.14	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.76	4250.54	4250.83	1.036
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.33	4250.42	4250.67	1.032
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.91	4250.16	4250.36	1.030
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	16.99	4252.71	4253.07	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	34.08	4247.92	4247.96	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 June
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured June 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,553,995.1	859,236.9	4279.39	29.29	4250.10	4250.21	1.028
I-2-30	LARW	1,553,712.5	860,484.5	4279.92	29.95	4249.97	4250.07	1.026
I-3-30	RCRA	1,554,388.7	861,259.1	4281.37	32.06	4249.31	4249.37	1.022
GW-16R	LARW	1,553,727.8	861,223.0	4281.08	31.38	4249.70	4249.78	1.034
GW-19A	11.e.(2)	1,549,663.5	859,343.5	4270.84	18.43	4252.41	4252.79	1.052
GW-20	11.e.(2) LARW	1,552,416.0	860,324.8	4276.60	25.77	4250.83	4251.05	1.042
GW-22	LARW	1,553,261.7	861,266.2	4277.23	27.45	4249.78	4249.87	1.032
GW-23	LARW	1,552,851.7	861,271.1	4276.63	26.59	4250.04	4250.17	1.038
GW-24	11.e.(2) LARW	1,552,435.3	861,174.2	4276.70	26.14	4250.56	4250.69	1.035
GW-25	11.e.(2) LARW	1,551,452.3	861,399.3	4276.20	25.54	4250.66	4250.87	1.040
GW-26	11.e.(2)	1,550,713.4	861,412.4	4274.60	24.05	4250.55	4250.71	1.042
GW-27	11.e.(2)	1,549,878.5	861,432.1	4272.42	22.30	4250.12	4250.32	1.042
GW-28	11.e.(2)	1,549,863.3	860,488.4	4271.29	20.30	4250.99	4251.19	1.036
GW-29	11.e.(2) LARW	1,552,401.2	859,435.9	4276.29	25.51	4250.78	4250.93	1.038
GW-36	11.e.(2)	1,550,498.2	859,978.6	4271.97	20.53	4251.44	4251.62	1.032
GW-37	11.e.(2)	1,551,055.1	860,361.9	4271.02	19.58	4251.44	4251.67	1.038
GW-38	11.e.(2)	1,551,623.9	860,723.0	4273.42	22.11	4251.31	4251.49	1.036
GW-41	RCRA	1,554,662.2	859,717.1	4279.56	29.55	4250.01	4250.12	1.032
GW-42	RCRA	1,554,665.1	859,856.4	4279.34	29.42	4249.92	4250.01	1.028
GW-55	RCRA	1,553,858.8	859,892.6	4279.95	Dry	—	—	—
GW-56R	LARW	1,553,751.5	860,827.6	4279.16	29.27	4249.89	4250.01	1.034
GW-57	11.e.(2)	1,549,871.1	860,964.8	4271.92	21.04	4250.88	4251.08	1.038
GW-58	11.e.(2)	1,549,883.3	860,015.3	4271.15	19.73	4251.42	4251.65	1.038
GW-60	11.e.(2)	1,551,630.8	859,278.9	4274.65	23.65	4251.00	4251.10	1.034
GW-63	11.e.(2) LARW	1,550,735.8	859,306.9	4271.97	20.60	4251.37	4251.53	1.030
GW-64	LARW	1,553,703.1	859,959.3	4278.85	28.58	4250.27	4250.41	1.034
GW-66	RCRA	1,553,967.2	859,585.0	4279.62	29.17	4250.45	4250.54	1.024
GW-67	RCRA	1,554,673.1	860,019.0	4282.23	33.28	4248.95	4249.06	1.022
GW-67R	RCRA	1,554,679.7	860,013.3	4281.49	31.52	4249.97	4250.09	1.022
GW-68	RCRA	1,554,676.5	860,167.3	4282.40	32.52	4249.88	4250.02	1.030
GW-68R	RCRA	1,554,682.9	860,163.0	4282.25	32.45	4249.80	4249.94	1.028
GW-69	RCRA	1,554,680.1	860,317.6	4281.64	31.87	4249.77	4249.91	1.032
GW-69R	RCRA	1,554,686.9	860,310.4	4281.59	31.83	4249.76	4249.92	1.030
GW-70	RCRA	1,554,684.2	860,468.7	4281.58	32.81	4248.77	4248.87	1.022
GW-71	RCRA	1,554,547.4	860,577.7	4281.70	32.10	4249.60	4249.73	1.022
GW-77	LARW	1,553,696.7	859,405.3	4282.97	32.58	4250.39	4250.58	1.034
GW-79	RCRA	1,554,276.6	860,592.0	4279.85	30.29	4249.56	4249.64	1.024
GW-80	RCRA	1,554,100.1	860,598.7	4275.85	26.15	4249.70	4249.83	1.026

TABLE N-1 June
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured June 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-100	Deep Wells	1,553,993.2	859,232.6	4279.15	29.17	4249.98	4251.17	1.018
I-3-100	Deep Wells	1,554,388.8	861,264.3	4281.50	32.06	4249.44	4250.58	1.018
GW-19B	Deep Wells	1,549,663.1	859,335.7	4270.76	20.53	4250.23	4251.48	1.018
GW-27D	Deep Wells	1,549,877.8	861,407.4	4273.67	23.70	4249.97	4251.22	1.018
P3-95 NEC	Pond Wells	1,554,153.6	862,309.1	4282.86	33.52	4249.34	4249.42	1.022
P3-95 SWC	Pond Wells	1,553,913.0	862,053.9	4280.22	31.04	4249.18	4249.33	1.040
P3-97 NEC	Pond Wells	1,554,159.6	862,629.1	4281.91	32.74	4249.17	4249.22	1.028
GW-81	New LARW	1,550,242.2	862,999.3	4276.70	27.57	4249.13	4249.27	1.032
GW-82	New LARW	1,550,573.4	862,992.3	4276.72	27.48	4249.24	4249.38	1.032
GW-83	New LARW	1,550,902.8	862,986.0	4276.82	27.54	4249.28	4249.40	1.028
GW-84	New LARW	1,551,235.6	862,979.5	4277.14	27.77	4249.37	4249.53	1.036
GW-85	New LARW	1,551,559.0	862,973.1	4277.79	28.35	4249.44	4249.59	1.036
GW-86	New LARW	1,551,955.2	862,965.8	4278.23	28.71	4249.52	4249.75	1.036
GW-88	New LARW	1,552,343.1	862,958.2	4279.45	29.86	4249.59	4249.71	1.034
GW-89	New LARW	1,552,337.5	862,564.4	4279.28	29.49	4249.79	4249.92	1.036
GW-90	New LARW	1,552,331.5	862,173.2	4278.77	28.71	4250.06	4250.18	1.030
GW-91	New LARW	1,552,325.5	861,778.5	4278.68	28.32	4250.36	4250.45	1.022
GW-92	New LARW	1,552,318.5	861,379.7	4278.95	28.34	4250.61	4250.68	1.018
GW-93	New LARW	1,551,931.0	861,389.5	4277.85	27.91	4249.94	4250.12	1.040
GW-94	New LARW	1,551,131.9	861,405.3	4276.25	26.00	4250.25	4250.45	1.038
GW-95	New LARW	1,550,303.2	861,420.0	4274.65	24.61	4250.04	4250.19	1.040
GW-99	New LARW	1,549,885.1	861,825.7	4273.67	24.21	4249.46	4249.59	1.034
GW-100	New LARW	1,549,893.7	862,218.8	4274.21	25.14	4249.07	4249.18	1.032
GW-101	New LARW	1,549,901.9	862,612.2	4275.01	26.03	4248.98	4249.15	1.032
GW-102	New LARW	1,549,910.8	863,006.2	4275.40	26.43	4248.97	4249.12	1.032
GW-103	LARW	1,552,546.7	859,219.0	4278.30	27.77	4250.53	4250.82	1.036
GW-104	LARW	1,553,039.3	859,211.2	4278.75	28.33	4250.42	4250.67	1.032
GW-105	LARW	1,553,529.7	859,203.1	4279.07	28.91	4250.16	4250.36	1.030
PZ-1	LARW	1,549,564.2	859,229.0	4269.70	16.98	4252.72	4253.08	1.056
PZ-2	LARW	1,553,611.8	865,345.7	4282.00	34.08	4247.92	4247.96	1.024

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 July
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured July 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	29.42	4249.98	4250.09	1.028
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	30.05	4249.72	4249.81	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.14	4249.22	4249.29	1.024
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.57	4249.53	4249.61	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.56	4252.26	4252.65	1.054
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.90	4250.75	4250.98	1.043
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.54	4249.80	4249.88	1.033
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.63	4250.11	4250.24	1.039
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.32	4250.43	4250.56	1.035
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.56	4250.75	4250.96	1.041
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.24	4250.41	4250.58	1.046
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.42	4249.95	4250.15	1.043
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.47	4250.91	4251.10	1.035
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.60	4250.61	4250.77	1.039
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.57	4251.45	4251.63	1.032
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.46	4251.42	4251.65	1.038
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.47	4251.23	4251.46	1.036
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	29.75	4249.73	4249.85	1.033
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.63	4249.61	4249.71	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	--	--	--
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.48	4249.60	4249.72	1.033
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.25	4250.68	4250.89	1.039
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.95	4251.19	4251.42	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.72	4250.96	4251.06	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.67	4251.35	4251.52	1.030
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.63	4250.13	4250.26	1.034
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.37	4250.17	4250.26	1.025
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.47	4249.68	4249.79	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.79	4249.62	4249.73	1.021
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.67	4249.62	4249.77	1.032
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.68	4249.61	4249.75	1.031
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.06	4249.59	4249.73	1.033
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.05	4249.58	4249.75	1.033
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.58	4249.43	4249.53	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.31	4249.43	4249.55	1.023
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.78	4250.13	4250.29	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.37	4249.50	4249.58	1.025
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.37	4249.52	4249.64	1.026

TABLE N-1 July
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured July 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.89	4250.45	4250.73	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.43	4250.24	4250.48	1.032
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	28.98	4250.10	4250.30	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	35.11	4249.29	4249.48	1.032
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.65	4249.25	4249.44	1.032
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.52	4249.19	4249.36	1.032
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	36.90	4249.21	4249.37	1.032
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.05	4249.20	4249.36	1.032
GW-123	RCRA	1,194,707.2	7,422,741.2	4289.21	40.01	4249.20	4249.40	1.032
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.24	4249.21	4249.42	1.032
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.39	4249.86	4251.18	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.41	4249.08	4250.22	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.60	4250.16	4251.55	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	23.87	4249.78	4251.03	1.018
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.80	4249.09	4249.18	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.15	4249.08	4249.23	1.040
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	32.92	4248.98	4249.03	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.47	4251.57	4251.90	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.24	4247.60	4247.63	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.65	4249.12	4249.27	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.87	4248.94	4249.07	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.56	4249.34	4249.46	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.78	4249.43	4249.58	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.27	4249.61	4249.77	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.70	4249.62	4249.85	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	29.94	4249.66	4249.77	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.53	4249.82	4249.95	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.80	4250.10	4250.22	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.47	4250.31	4250.40	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.43	4250.55	4250.62	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.28	4250.61	4250.80	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	25.96	4250.65	4250.85	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.68	4249.99	4250.14	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.21	4249.41	4249.54	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.14	4249.15	4249.26	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	26.03	4249.03	4249.20	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.49	4249.00	4249.15	1.032

TABLE N-1 July
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured July 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.34	4248.97	4249.22	1.034
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	27.22	4248.96	4249.12	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.79	4249.10	4249.34	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.34	4249.16	4249.39	1.032
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.56	4249.18	4249.39	1.030
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.80	4249.23	4249.44	1.030
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.35	4249.12	4249.39	1.040
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.64	4249.19	4249.44	1.042
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.16	4249.24	4249.44	1.034
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.61	4249.24	4249.44	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.51	4249.27	4249.45	1.036
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.61	4249.36	4249.63	1.048

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 August
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured August 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	29.40	4250.00	4250.11	1.028
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	30.04	4249.73	4249.82	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.14	4249.22	4249.29	1.024
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.46	4249.64	4249.72	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.66	4252.16	4252.53	1.052
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.93	4250.72	4250.93	1.040
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.54	4249.80	4249.88	1.033
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.60	4250.14	4250.27	1.039
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.38	4250.37	4250.51	1.036
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.52	4250.79	4250.99	1.040
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.17	4250.48	4250.64	1.042
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.35	4250.02	4250.21	1.040
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.32	4251.06	4251.26	1.036
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.57	4250.64	4250.79	1.038
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.57	4251.45	4251.63	1.032
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.51	4251.37	4251.60	1.038
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.46	4251.24	4251.47	1.036
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	29.71	4249.77	4249.89	1.033
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.63	4249.61	4249.71	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	--	--	--
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.38	4249.70	4249.82	1.033
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.23	4250.70	4250.91	1.039
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.85	4251.29	4251.52	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.74	4250.94	4251.04	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.76	4251.26	4251.42	1.030
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.61	4250.15	4250.29	1.034
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.31	4250.23	4250.32	1.025
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.41	4249.74	4249.85	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.75	4249.66	4249.77	1.021
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.65	4249.64	4249.79	1.032
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.66	4249.63	4249.77	1.031
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.04	4249.61	4249.75	1.033
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.05	4249.58	4249.75	1.033
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.58	4249.43	4249.53	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.31	4249.43	4249.55	1.023
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.69	4250.22	4250.39	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.34	4249.53	4249.61	1.025
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.29	4249.60	4249.73	1.026

TABLE N-1 August
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured August 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.87	4250.47	4250.75	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.46	4250.21	4250.45	1.032
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	28.98	4250.10	4250.30	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	34.28	4250.12	4250.32	1.032
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.77	4249.13	4249.26	1.022
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.65	4249.06	4249.21	1.029
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	37.02	4249.09	4249.24	1.029
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.17	4249.08	4249.21	1.026
GW-123	RCRA	1,194,707.2	7,422,741.2	4289.21	40.12	4249.09	4249.26	1.027
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.31	4249.14	4249.35	1.032
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.39	4249.86	4251.18	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.39	4249.10	4250.24	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.60	4250.16	4251.55	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	23.85	4249.80	4250.91	1.016
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.61	4249.28	4249.37	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.02	4249.21	4249.36	1.040
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	32.77	4249.13	4249.18	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.45	4251.59	4251.92	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.26	4247.58	4247.61	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.65	4249.12	4249.27	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.85	4248.96	4249.09	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.55	4249.35	4249.47	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.78	4249.43	4249.58	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.39	4249.49	4249.65	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.70	4249.62	4249.85	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	29.92	4249.68	4249.79	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.54	4249.81	4249.94	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.80	4250.10	4250.22	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.48	4250.30	4250.39	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.43	4250.55	4250.62	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.28	4250.61	4250.80	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	25.98	4250.63	4250.83	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.67	4250.00	4250.15	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.21	4249.41	4249.54	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.14	4249.15	4249.26	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	26.02	4249.04	4249.21	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.48	4249.01	4249.16	1.032

TABLE N-1 August
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured August 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.28	4249.03	4249.28	1.034
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	26.99	4249.19	4249.35	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.82	4249.07	4249.31	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.38	4249.12	4249.35	1.032
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.56	4249.18	4249.39	1.030
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.81	4249.22	4249.43	1.030
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.31	4249.16	4249.43	1.040
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.61	4249.22	4249.48	1.042
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.15	4249.25	4249.45	1.034
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.56	4249.29	4249.49	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.47	4249.31	4249.49	1.036
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.58	4249.39	4249.66	1.048

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 September
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured September 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	29.55	4249.85	4249.95	1.028
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	30.18	4249.59	4249.68	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.32	4249.04	4249.11	1.024
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.79	4249.31	4249.39	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.86	4251.96	4252.34	1.054
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.94	4250.71	4250.94	1.043
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.68	4249.66	4249.74	1.033
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.74	4250.00	4250.13	1.039
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.44	4250.31	4250.44	1.035
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.58	4250.73	4250.94	1.041
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.29	4250.36	4250.53	1.046
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.54	4249.83	4250.03	1.043
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.59	4250.79	4250.98	1.035
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.69	4250.52	4250.67	1.039
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.66	4251.36	4251.54	1.032
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.48	4251.40	4251.63	1.038
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.40	4251.30	4251.53	1.036
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	29.94	4249.54	4249.66	1.033
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.75	4249.49	4249.58	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	—	—	—
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.64	4249.44	4249.56	1.033
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.38	4250.55	4250.76	1.039
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.89	4251.25	4251.48	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.77	4250.91	4251.01	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.71	4251.31	4251.48	1.030
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.78	4249.98	4250.11	1.034
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.49	4250.05	4250.14	1.025
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.63	4249.52	4249.63	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.92	4249.49	4249.59	1.021
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.86	4249.43	4249.58	1.032
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.86	4249.43	4249.57	1.031
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.26	4249.39	4249.53	1.033
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.21	4249.42	4249.58	1.033
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.72	4249.29	4249.39	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.47	4249.27	4249.39	1.023
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.86	4250.05	4250.21	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.51	4249.36	4249.44	1.025
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.47	4249.42	4249.54	1.026

TABLE N-1 September
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured September 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.97	4250.37	4250.65	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.49	4250.18	4250.42	1.032
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	29.07	4250.01	4250.20	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	35.23	4249.17	4249.38	1.036
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.78	4249.12	4249.25	1.022
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.69	4249.02	4249.17	1.029
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	37.03	4249.08	4249.24	1.032
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.17	4249.08	4249.21	1.026
GW-123	RCRA	1,194,707.2	7,422,741.2	4289.21	40.17	4249.04	4249.24	1.032
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.40	4249.05	4249.25	1.032
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.55	4249.70	4251.01	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.46	4249.03	4250.17	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.68	4250.08	4251.47	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	24.00	4249.65	4250.89	1.018
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.97	4248.92	4249.01	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.34	4248.89	4249.03	1.040
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	33.05	4248.85	4248.90	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.54	4251.50	4251.83	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.26	4247.58	4247.61	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.71	4249.06	4249.20	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.51	4249.30	4249.44	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.54	4249.36	4249.48	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.80	4249.41	4249.56	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.41	4249.47	4249.63	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.83	4249.49	4249.72	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	30.01	4249.59	4249.70	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.59	4249.76	4249.89	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.86	4250.04	4250.16	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.54	4250.24	4250.33	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.52	4250.46	4250.53	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.31	4250.58	4250.77	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	25.93	4250.68	4250.88	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.69	4249.98	4250.13	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.19	4249.43	4249.56	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.14	4249.15	4249.26	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	26.03	4249.03	4249.20	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.51	4248.98	4249.13	1.032

TABLE N-1 September
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured September 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.38	4248.93	4249.18	1.034
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	27.32	4248.86	4249.02	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.88	4249.01	4249.25	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.43	4249.07	4249.30	1.032
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.58	4249.16	4249.37	1.030
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.82	4249.21	4249.42	1.030
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.41	4249.06	4249.33	1.040
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.72	4249.11	4249.36	1.042
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.25	4249.15	4249.34	1.034
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.71	4249.14	4249.34	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.62	4249.16	4249.34	1.036
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.74	4249.23	4249.50	1.048

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 October
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured October 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	29.50	4249.90	4250.00	1.028
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	30.17	4249.60	4249.69	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.33	4249.03	4249.10	1.024
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.83	4249.27	4249.35	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.64	4252.18	4252.57	1.054
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.93	4250.72	4250.95	1.043
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.66	4249.68	4249.76	1.033
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.70	4250.04	4250.17	1.039
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.42	4250.33	4250.46	1.035
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.55	4250.76	4250.97	1.041
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.18	4250.47	4250.65	1.046
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.32	4250.05	4250.25	1.043
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.60	4250.78	4250.97	1.035
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.73	4250.48	4250.63	1.039
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.64	4251.38	4251.56	1.032
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.86	4251.02	4251.25	1.038
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.50	4251.20	4251.43	1.036
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	30.03	4249.45	4249.57	1.033
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.83	4249.41	4249.50	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	--	--	--
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.68	4249.40	4249.51	1.033
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.37	4250.56	4250.77	1.039
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.82	4251.32	4251.55	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.76	4250.92	4251.02	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.61	4251.41	4251.58	1.030
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.82	4249.94	4250.07	1.034
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.59	4249.95	4250.04	1.025
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.74	4249.41	4249.52	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.99	4249.42	4249.52	1.021
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.95	4249.34	4249.49	1.032
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.91	4249.38	4249.52	1.031
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.33	4249.32	4249.46	1.033
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.30	4249.33	4249.49	1.033
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.80	4249.21	4249.31	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.45	4249.29	4249.41	1.023
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.92	4249.99	4250.15	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.49	4249.38	4249.46	1.025
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.40	4249.49	4249.61	1.026

TABLE N-1 October
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured October 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.85	4250.49	4250.77	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.45	4250.22	4250.46	1.032
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	29.05	4250.03	4250.22	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	35.25	4249.15	4249.36	1.036
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.76	4249.14	4249.27	1.022
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.65	4249.06	4249.21	1.029
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	37.02	4249.09	4249.25	1.032
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.15	4249.10	4249.23	1.026
GW-123	RCRA	1,194,707.2	7,422,741.2	4289.21	40.17	4249.04	4249.24	1.032
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.33	4249.12	4249.32	1.032
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.56	4249.69	4251.00	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.46	4249.03	4250.17	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.63	4250.13	4251.52	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	23.99	4249.66	4250.90	1.018
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.99	4248.90	4248.99	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.32	4248.91	4249.06	1.040
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	33.05	4248.85	4248.90	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.49	4251.55	4251.88	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.08	4247.76	4247.79	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.69	4249.08	4249.22	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.54	4249.27	4249.41	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.55	4249.35	4249.47	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.82	4249.39	4249.54	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.39	4249.49	4249.65	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.85	4249.47	4249.70	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	30.03	4249.57	4249.68	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.62	4249.73	4249.86	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.88	4250.02	4250.14	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.58	4250.20	4250.29	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.53	4250.45	4250.52	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.30	4250.59	4250.78	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	25.95	4250.66	4250.86	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.68	4249.99	4250.14	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.19	4249.43	4249.56	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.13	4249.16	4249.27	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	26.03	4249.03	4249.20	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.25	4249.24	4249.40	1.032

TABLE N-1 October
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured October 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.38	4248.93	4249.18	1.034
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	27.32	4248.86	4249.02	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.89	4249.00	4249.24	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.43	4249.07	4249.30	1.032
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.55	4249.19	4249.40	1.030
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.82	4249.21	4249.42	1.030
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.37	4249.10	4249.37	1.040
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.72	4249.11	4249.36	1.042
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.24	4249.16	4249.36	1.034
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.66	4249.19	4249.39	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.60	4249.18	4249.36	1.036
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.74	4249.23	4249.50	1.048

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 November
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured November 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	28.82	4250.58	4250.70	1.030
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	29.98	4249.79	4249.88	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.34	4249.02	4249.08	1.022
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.65	4249.45	4249.53	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.67	4252.15	4252.53	1.054
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.96	4250.69	4250.91	1.042
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.59	4249.75	4249.83	1.030
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.67	4250.07	4250.20	1.038
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.42	4250.33	4250.46	1.036
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.49	4250.82	4251.02	1.040
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.10	4250.55	4250.71	1.042
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.25	4250.12	4250.33	1.044
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.49	4250.89	4251.09	1.036
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.90	4250.31	4250.46	1.040
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.58	4251.44	4251.63	1.034
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.76	4251.12	4251.34	1.036
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.40	4251.30	4251.52	1.034
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	29.91	4249.57	4249.68	1.032
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.72	4249.52	4249.61	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	--	--	--
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.58	4249.50	4249.61	1.032
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.14	4250.79	4250.99	1.038
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.80	4251.34	4251.57	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.72	4250.96	4251.06	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.69	4251.33	4251.51	1.032
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.64	4250.12	4250.26	1.036
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.48	4250.06	4250.16	1.028
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.60	4249.55	4249.66	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.88	4249.53	4249.63	1.020
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.80	4249.49	4249.63	1.030
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.78	4249.51	4249.65	1.030
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.24	4249.41	4249.55	1.034
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.22	4249.41	4249.58	1.034
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.71	4249.30	4249.40	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.25	4249.49	4249.61	1.022
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.76	4250.15	4250.31	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.33	4249.54	4249.63	1.026
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.25	4249.64	4249.77	1.026

TABLE N-1 November
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured November 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.74	4250.60	4250.89	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.31	4250.36	4250.62	1.034
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	28.91	4250.17	4250.37	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	35.25	4249.15	4249.36	1.036
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.78	4249.12	4249.25	1.022
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.51	4249.20	4249.35	1.029
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	37.01	4249.10	4249.26	1.032
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.16	4249.09	4249.22	1.026
GW-123R	RCRA	1,194,707.2	7,422,741.2	4285.11	35.91	4249.20	4249.40	1.032
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.34	4249.11	4249.31	1.032
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.56	4249.69	4251.00	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.47	4249.02	4250.16	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.62	4250.14	4251.53	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	24.00	4249.65	4250.89	1.018
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.71	4249.18	4249.27	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.29	4248.94	4249.09	1.040
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	32.75	4249.15	4249.21	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.48	4251.56	4251.89	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.08	4247.76	4247.79	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.51	4249.26	4249.41	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.43	4249.38	4249.52	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.44	4249.46	4249.58	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.68	4249.53	4249.68	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.30	4249.58	4249.74	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.70	4249.62	4249.85	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	30.01	4249.59	4249.70	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.61	4249.74	4249.87	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.88	4250.02	4250.14	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.56	4250.22	4250.31	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.42	4250.56	4250.63	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.25	4250.64	4250.83	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	25.84	4250.77	4250.98	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.50	4250.17	4250.32	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.08	4249.54	4249.67	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.04	4249.25	4249.37	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	25.89	4249.17	4249.34	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.30	4249.19	4249.35	1.032

TABLE N-1 November
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured November 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.28	4249.03	4249.28	1.034
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	27.02	4249.16	4249.32	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.80	4249.09	4249.33	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.32	4249.18	4249.41	1.032
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.55	4249.19	4249.40	1.030
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.81	4249.22	4249.43	1.030
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.39	4249.08	4249.35	1.040
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.71	4249.12	4249.37	1.042
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.23	4249.17	4249.37	1.034
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.69	4249.16	4249.36	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.59	4249.19	4249.37	1.036
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.74	4249.23	4249.50	1.048

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

TABLE N-1 December
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured December 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
I-1-30	RCRA	1,194,194.6	7,420,819.0	4279.40	29.25	4250.15	4250.27	1.030
I-2-30	LARW	1,193,935.7	7,422,071.2	4279.77	30.02	4249.75	4249.84	1.026
I-3-30	RCRA	1,194,626.1	7,422,833.0	4281.36	32.32	4249.04	4249.10	1.022
GW-16R	LARW	1,193,964.6	7,422,809.2	4281.10	31.62	4249.48	4249.56	1.032
GW-19A	11.e.(2)	1,189,866.3	7,421,006.9	4270.82	18.63	4252.19	4252.58	1.054
GW-20	11.e.(2) LARW	1,192,636.5	7,421,936.1	4276.65	25.93	4250.72	4250.94	1.042
GW-22	LARW	1,193,499.7	7,422,861.3	4277.34	27.60	4249.74	4249.82	1.030
GW-23	LARW	1,193,089.9	7,422,873.7	4276.74	26.70	4250.04	4250.17	1.038
GW-24	11.e.(2) LARW	1,192,671.5	7,422,785.1	4276.75	26.40	4250.35	4250.49	1.036
GW-25	11.e.(2) LARW	1,191,693.2	7,423,028.6	4276.31	25.50	4250.81	4251.01	1.040
GW-26	11.e.(2)	1,190,955.0	7,423,055.5	4274.65	24.15	4250.50	4250.66	1.042
GW-27	11.e.(2)	1,190,120.7	7,423,091.1	4272.37	22.28	4250.09	4250.30	1.044
GW-28	11.e.(2)	1,190,087.7	7,422,147.8	4271.38	20.50	4250.88	4251.08	1.036
GW-29	11.e.(2) LARW	1,192,604.8	7,421,047.6	4276.21	25.87	4250.34	4250.49	1.040
GW-36	11.e.(2)	1,190,712.6	7,421,626.5	4272.02	20.56	4251.46	4251.65	1.034
GW-37	11.e.(2)	1,191,276.7	7,421,998.9	4270.88	19.74	4251.14	4251.36	1.036
GW-38R	11.e.(2)	1,191,229.3	7,422,366.4	4275.70	24.41	4251.29	4251.51	1.034
GW-41	RCRA	1,194,870.5	7,421,286.0	4279.48	29.95	4249.53	4249.64	1.032
GW-42	RCRA	1,194,876.4	7,421,425.6	4279.24	29.69	4249.55	4249.64	1.030
GW-55	RCRA	1,194,070.6	7,421,476.9	4279.81	Dry	--	--	--
GW-56R	LARW	1,193,981.0	7,422,413.8	4279.08	29.57	4249.51	4249.62	1.032
GW-57	11.e.(2)	1,190,104.5	7,422,623.9	4271.93	21.17	4250.76	4250.96	1.038
GW-58	11.e.(2)	1,190,098.8	7,421,674.4	4271.14	19.84	4251.30	4251.53	1.040
GW-60	11.e.(2)	1,191,831.7	7,420,905.5	4274.68	23.76	4250.92	4251.02	1.034
GW-63	11.e.(2) LARW	1,190,937.5	7,420,950.5	4272.02	20.70	4251.32	4251.50	1.032
GW-64	LARW	1,193,916.5	7,421,546.5	4278.76	28.63	4250.13	4250.27	1.036
GW-66	RCRA	1,194,173.4	7,421,166.8	4279.54	29.50	4250.04	4250.14	1.028
GW-67	RCRA	1,194,887.2	7,421,587.8	4282.15	32.63	4249.52	4249.63	1.022
GW-67R	RCRA	1,194,893.7	7,421,581.8	4281.41	31.85	4249.56	4249.66	1.020
GW-68	RCRA	1,194,893.6	7,421,736.6	4282.29	32.81	4249.48	4249.62	1.030
GW-68R	RCRA	1,194,899.7	7,421,731.7	4282.29	32.76	4249.53	4249.67	1.030
GW-69	RCRA	1,194,899.9	7,421,886.4	4281.65	32.28	4249.37	4249.51	1.034
GW-69R	RCRA	1,194,906.5	7,421,879.2	4281.63	32.20	4249.43	4249.60	1.034
GW-70	RCRA	1,194,906.7	7,422,037.3	4282.01	32.70	4249.31	4249.41	1.022
GW-71	RCRA	1,194,771.8	7,422,148.8	4281.74	32.28	4249.46	4249.58	1.022
GW-77	LARW	1,193,899.3	7,420,992.4	4282.91	32.77	4250.14	4250.30	1.032
GW-79	RCRA	1,194,501.5	7,422,168.5	4279.87	30.32	4249.55	4249.64	1.026
GW-80	RCRA	1,194,325.1	7,422,178.3	4275.89	26.26	4249.63	4249.76	1.026

TABLE N-1 December
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured December 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-103	LARW	1,192,746.7	7,420,830.2	4278.34	27.78	4250.56	4250.84	1.036
GW-104	LARW	1,193,239.1	7,420,813.8	4278.67	28.43	4250.24	4250.49	1.034
GW-105	LARW	1,193,729.5	7,420,796.4	4279.08	29.00	4250.08	4250.28	1.030
GW-118	RCRA	1,194,912.9	7,422,188.4	4284.40	35.22	4249.18	4249.35	1.028
GW-119	RCRA	1,194,921.6	7,422,337.2	4284.90	35.71	4249.19	4249.33	1.024
GW-120	RCRA	1,194,927.4	7,422,487.1	4285.71	36.49	4249.22	4249.35	1.024
GW-121	RCRA	1,194,934.4	7,422,636.4	4286.11	36.97	4249.14	4249.25	1.022
GW-122	RCRA	1,194,936.9	7,422,736.8	4286.25	37.12	4249.13	4249.24	1.022
GW-123R	RCRA	1,194,698.7	7,422,739.2	4285.11	35.86	4249.25	4249.40	1.032
GW-124	RCRA	1,194,333.3	7,422,756.4	4278.45	29.29	4249.16	4249.35	1.030
I-1-100	Deep Well	1,194,192.7	7,420,814.7	4279.25	29.53	4249.72	4251.03	1.020
I-3-100	Deep Well	1,194,626.4	7,422,838.1	4281.49	32.46	4249.03	4250.17	1.018
GW-19B	Deep Well	1,189,865.7	7,420,999.2	4270.76	20.62	4250.14	4251.53	1.020
GW-27D	Deep Well	1,190,119.3	7,423,066.6	4273.65	24.00	4249.65	4250.89	1.018
P3-95 NEC	Pond Well	1,194,410.9	7,423,887.2	4282.89	33.69	4249.20	4249.29	1.023
P3-95 SWC	Pond Well	1,194,165.6	7,423,636.5	4280.23	31.30	4248.93	4249.19	1.072
P3-97 NEC	Pond Well	1,194,422.7	7,424,206.4	4281.90	32.75	4249.15	4249.21	1.028
PZ-1	Pond Well	1,189,764.9	7,420,894.3	4269.04	17.44	4251.60	4251.94	1.056
PZ-2	Pond Well	1,193,922.9	7,426,936.2	4281.84	34.05	4247.79	4247.82	1.024
GW-81	WLARW	1,190,513.6	7,424,651.0	4276.77	27.50	4249.27	4249.42	1.032
GW-82	WLARW	1,190,844.5	7,424,637.9	4276.81	27.47	4249.34	4249.48	1.032
GW-83	WLARW	1,191,173.7	7,424,625.2	4276.90	27.45	4249.45	4249.57	1.028
GW-84	WLARW	1,191,506.3	7,424,612.5	4277.21	27.71	4249.50	4249.65	1.036
GW-85	WLARW	1,191,829.5	7,424,600.2	4277.88	28.31	4249.57	4249.73	1.036
GW-86	WLARW	1,192,225.5	7,424,585.3	4278.32	28.69	4249.63	4249.86	1.036
GW-88	WLARW	1,192,613.1	7,424,570.2	4279.60	29.99	4249.61	4249.72	1.034
GW-89	WLARW	1,192,600.0	7,424,176.7	4279.35	29.60	4249.75	4249.88	1.036
GW-90	WLARW	1,192,586.7	7,423,785.8	4278.90	28.85	4250.05	4250.17	1.030
GW-91	WLARW	1,192,573.2	7,423,391.1	4278.78	28.55	4250.23	4250.32	1.022
GW-92	WLARW	1,192,558.8	7,422,992.5	4278.98	28.41	4250.57	4250.64	1.018
GW-93	WLARW	1,192,171.6	7,423,009.7	4277.89	27.22	4250.67	4250.86	1.040
GW-94	WLARW	1,191,373.0	7,423,040.6	4276.61	26.18	4250.43	4250.63	1.038
GW-95	WLARW	1,190,543.9	7,423,071.3	4274.67	24.61	4250.06	4250.21	1.040
GW-99	WLARW	1,190,134.5	7,423,484.5	4273.62	24.19	4249.43	4249.56	1.034
GW-100	WLARW	1,190,150.6	7,423,877.2	4274.29	25.09	4249.20	4249.31	1.032
GW-101	WLARW	1,190,166.3	7,424,270.3	4275.06	25.99	4249.07	4249.24	1.032
GW-102	WLARW	1,190,182.3	7,424,664.1	4275.49	26.39	4249.10	4249.25	1.032

TABLE N-1 December
SUMMARY OF GROUNDWATER ELEVATIONS
ENVIROCARE OF UTAH, INC.

Measured December 2000

Well ID	Area	STATE PLANE COORDINATES		Top of Pro. Casing w/o Lid ¹ (feet)	Depth to Water (feet)	Salt Water Elevation (feet)	Fresh Water Elevation (feet)	Specific Gravity (g/cm ³)
		Easting (feet)	Northing (feet)					
GW-106	B&C	1,190,205.3	7,424,978.4	4276.31	27.31	4249.00	4249.23	1.032
GW-107	B&C	1,190,222.9	7,425,371.2	4276.18	27.14	4249.04	4249.20	1.022
GW-108	B&C	1,190,239.3	7,425,717.5	4275.89	26.75	4249.14	4249.38	1.032
GW-109	B&C	1,190,522.2	7,425,706.2	4276.50	27.24	4249.26	4249.48	1.030
GW-110	B&C	1,190,849.7	7,425,693.4	4276.74	27.55	4249.19	4249.39	1.028
GW-111	B&C	1,191,176.7	7,425,681.7	4277.03	27.91	4249.12	4249.31	1.028
GW-112	B&C	1,191,511.6	7,425,670.3	4277.47	28.39	4249.08	4249.33	1.038
GW-113	B&C	1,191,919.7	7,425,625.6	4278.83	29.67	4249.16	4249.40	1.040
GW-114	B&C	1,192,069.4	7,425,620.2	4279.40	30.19	4249.21	4249.38	1.030
GW-115	B&C	1,192,219.4	7,425,614.7	4279.85	30.65	4249.20	4249.40	1.036
GW-116	B&C	1,192,369.3	7,425,609.3	4280.78	31.55	4249.23	4249.40	1.034
GW-117	B&C	1,192,572.9	7,425,281.2	4279.97	30.69	4249.28	4249.53	1.044

¹ - Surveyed location where depth to water measurements are referenced.

NM - Not Measured

-- Not calculated

Table N-2 Part 1
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
1 of 24

Well ID:	GW-19A	GW-19A	GW-900		GW-19A	GW-901		GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A1	GW-19A2	GW-19A
Date:	NRC	1/28/00	1/28/00	RPD	2/14/00	2/14/00	RPD	2/24/00	3/2/00	4/14/00	4/21/00	5/11/00	5/22/00	5/22/00	5/22/00
Lab:	Baselines	AWAL	AWAL		AWAL	AWAL		AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
GW-19A Dup															
Analyte															
Field Parameters															
pH (std. units)		6.98	6.98		6.91	6.91		6.89	6.88	7.06	7.09	7.08	7.15	7.15	7.15
Temperature (°C)		13.52	13.52		13.51	13.51		13.41	13.47	13.18	13.27	13.14	13.24	13.24	13.24
SC (mmhos/cm)		97.80	97.80		94.60	94.60		94.70	> 100.00	> 100.00	> 100.00	> 100.00	> 100.00	> 100.00	> 100.00
Eh (millivolts)		176.0	176.0		149.0	149.0		242.0	173.0	97.0	107.0	101.0	119.0	119.0	119.0
Depth to Water (feet)		18.32	18.32		17.99	17.99		17.85	18.17	18.03	18.25	18.45	18.40	18.40	18.40
Specific Gravity															
Dissolved Oxygen		0.46	0.46		0.47	0.47		0.23	0.38	4.27	4.88	4.22	4.50	4.50	4.50
GW Elevation		4252.51	4252.51		4252.84	4252.84		4252.66	4252.80	4252.58	4252.38	4252.43	4252.43	4252.43	4252.43
Anions (mg/L)															
Bromide					91	91	0.0%					31			
Fluoride					3.5	3.5	0.0%					2.1 J			
Chloride					36,000	36,000	0.0%					41,000			
Nitrate					2.2 J	2.3 J	2.2%					2.1			
Sulfate					7,000	6,800	1.4%					7,500			
Nitrate/Nitrite					2.2	2.3	2.2%					2.2			
Alkalinity															
Bicarbonate					110	120	4.3%					120			
Carbonate					< 10	< 10						< 10			
Hydroxide															
Cations (mg/L)															
Calcium					1,200	1,100	4.3%					1,100			
Magnesium					1,700	1,700	0.0%					1,500			
Potassium					720	670	3.6%					570			
Sodium					24,000	24,000	0.0%					21,000			
Metals (mg/L)															
Arsenic (ICP)	0.05														
Arsenic (HAA)	0.05														
Arsenic (GFAA)	0.05	0.062			0.059 J	0.042 J	16.8%	0.052				0.040	0.059		
Barium	0.02	0.045 J	0.072 J	23.1%	0.055 J	0.044 J	11.1%					0.067	0.11	0.070	0.0637
Beryllium	0.005				< 0.0020	< 0.0020						< 0.0020			
Cadmium	0.004				< 0.0040	< 0.0040						< 0.0040			
Chromium	0.005				< 0.0050	< 0.0050						0.012			
Copper					< 0.0080	< 0.0080						0.070			
Cyanide	0.005				< 0.0050	< 0.0050		< 0.0050				< 0.0050			

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
2 of 24

Well ID:	GW-19A	GW-19A	GW-900		GW-19A	GW-901		GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A1	GW-19A2	GW-19A
Date:	NRC	1/28/00	1/28/00	RPD	2/14/00	2/14/00	RPD	2/24/00	3/2/00	4/14/00	4/21/00	5/11/00	5/22/00	5/22/00	5/22/00
Lab:	Baselines	AWAL	AWAL		AWAL	AWAL		AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
			GW-19A Dup												
Iron					0.40	0.20								0.10	
Lead	0.005				< 0.0050	< 0.0050								< 0.0050	
Mercury	0.00034				< 0.0002	< 0.0002								< 0.0002	
Molybdenum	0.75				0.59	0.60								0.74	
Nickel	0.01				< 0.010	< 0.010								< 0.010	
Selenium (HAA)	0.005														
Selenium (GFAA)	0.005	0.038 J	0.062 J	24.0%	< 0.0050	< 0.0050	0.0%	0.025						0.020	
Silver	0.005				< 0.0050	< 0.0050								< 0.0050	
Zinc					< 0.10	< 0.10								0.12	
Ferric Iron (Fe ⁺³)															
Ferrous Iron (Fe ⁺²)															
Total Suspended Solids															
TOC														< 1.0	
TOX														< 0.050	
TDS					60,000	64,000								64,000	
Anions (meq/L)					1159.1	1155.1								1310.2	
Cations (meq/L)					1262.2	1255.9								1106.4	
Balance (%)					4%	4%								8%	
Volatiles (mg/L)															
Acetone	20				< 20	< 20								< 20	
2-Butanone (MEK)	20				< 20	< 20								< 20	
Carbon disulfide	2				< 2.0	< 2.0								< 2.0	
Chloroform	2				< 2.0	< 2.0								< 2.0	
1,2-Dichloroethane	2				< 2.0	< 2.0								< 2.0	
Methylene chloride	2				< 2.0	< 2.0								< 2.0	
1,1,2-Trichloroethane	50				< 50	< 50								< 50	
Vinyl Chloride	50				< 50	< 50								< 50	
Semi-Volatiles (mg/L)															
Benz(a)anthracene	100				< 100	< 100								< 100	
Benzo(a)pyrene	100				< 100	< 100								< 100	
Benzo(b)fluoranthene	100				< 100	< 100								< 100	
Benzo(k)fluoranthene	100				< 100	< 100								< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
3 of 24

Well ID:	GW-19A	GW-19A	GW-900		GW-19A	GW-901		GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A1	GW-19A2	GW-19A
Date:	NRC	1/28/00	1/28/00	RPD	2/14/00	2/14/00	RPD	2/24/00	3/2/00	4/14/00	4/21/00	5/11/00	5/22/00	5/22/00	5/22/00
Lab:	Baselines	AWAL	AWAL		AWAL	AWAL		AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
GW-19A Dup															
Chrysene	100				< 100	< 100							< 100		
Dibenz(a,h)anthracene	100				< 100	< 100							< 100		
Diethyl phthalate	4				< 4.0	< 4.0							< 4.0		
2-Methylnaphthalene	4				< 4.0	< 4.0							< 4.0		
Naphthalene	4				< 4.0	< 4.0							< 4.0		
Pesticides (mg/L)															
Chlordane	20				< 10	< 10							< 10		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
4 of 24

Well ID:	GW-20	GW-20	GW-20A	GW-20	GW-20	GW-20	GW-24	GW-24	GW-24A	GW-24A	GW-24B	GW-24B	GW-24	GW-24	GW-25	GW-25A
Date:	NRC	2/15/00	2/25/00	5/16/00	5/18/00	5/23/00	NRC	1/26/00	2/17/00	2/25/00	2/25/00	4/24/00	5/18/00	5/18/00	NRC	1/28/00
Lab:	Baselines	AWAL	AWAL	AWAL	MSAI	Barringer	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL
<hr/>																
Analyte																
Field Parameters																
pH (std. units)		6.93	6.89	7.15	7.20	6.93		6.98	6.94	6.96	6.96	7.27	7.26	7.26		6.97
Temperature (°C)		12.81	12.61	12.87	12.84	12.77		12.67	12.58	12.66	12.66	12.97	13.70	13.70		12.42
SC (mmhos/cm)		84.60	81.50	92.19	87.60	77.00		66,400	73,100	67,900	67,900	78.39	73.40	73.40		76.60
Eh (millivolts)		164	189	123.0	105	97		127.0	146.0	192.0	192.0	103.0	96.0	96.0		167
Depth to Water (feet)		24.45	25.68	25.73	25.84	25.8		26.29	25.90	25.88	25.88	26.20	26.27	26.27		25.70
Specific Gravity																
Dissolved Oxygen		0.35	0.30	3.00	2.82	3.63		0.65	0.36	0.24	0.24	1.23	5.20	5.20		0.17
GW Elevation		4250.92	4250.87	4250.76	4250.80	4250.80		4250.41	4250.80	4250.82	4250.82	4250.50	4250.43	4250.43		4250.48
Anions (mg/L)																
Bromide		86		35					94				40			
Fluoride		2.5		2.1					2.2				1.2			
Chloride		28,000		32,000					21,000				26,000			
Nitrate		2.0		1.8					0.99				0.74			
Sulfate		3,800		3,800					3,200				3,500			
Nitrate/Nitrite		2.0		1.8					0.99				0.76			
Alkalinity																
Bicarbonate		180		170					210				200			
Carbonate		< 10		< 10					< 10				< 10			
Hydroxide																
Cations (mg/L)																
Calcium		650		720					500				500			
Magnesium		980		950					780				690			
Potassium		740		620					630				520			
Sodium		20,000		19,000					15,000				16,000			
Metals (mg/L)																
Arsenic (ICP)	0.05						0.05								0.11	
Arsenic (HAA)	0.05						0.05								0.11	
Arsenic (GFAA)	0.05	0.043		0.053			0.05	0.040	0.035				0.037		0.11	0.092
Barium	0.023	0.12		0.16	0.0832		0.036		0.14				0.19	0.0786	0.044	
Beryllium	0.005	< 0.0020		< 0.0020			0.005		< 0.0020				< 0.0020		0.005	
Cadmium	0.004	< 0.0040		< 0.0040			0.004		< 0.0040				< 0.0040		0.004	
Chromium	0.005	< 0.0050		< 0.0050			0.005		< 0.0050				< 0.0050		0.005	
Copper		< 0.0080		0.072					< 0.0080				0.028			
Cyanide	0.005	< 0.005		< 0.0050			0.005		< 0.0050				< 0.0050		0.005	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
5 of 24

Well ID:	GW-20	GW-20	GW-20A	GW-20	GW-20	GW-20	GW-24	GW-24	GW-24A	GW-24A	GW-24B	GW-24B	GW-24	GW-24	GW-25	GW-25A
Date:	NRC	2/15/00	2/25/00	5/16/00	5/18/00	5/23/00	NRC	1/26/00	2/17/00	2/25/00	2/25/00	4/24/00	5/18/00	5/18/00	NRC	1/28/00
Lab:	Baselines	AWAL	AWAL	AWAL	MSAI	Barringer	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL
Iron		< 0.10		0.20				< 0.10					0.20			
Lead	0.005	< 0.0050	< 0.0050	< 0.0050			0.005	< 0.0050					< 0.0050		0.005	< 0.0050
Mercury	0.00049	< 0.0002		< 0.0002			0.00029	< 0.0002					< 0.0002		0.0002	
Molybdenum	0.33	0.13		0.17			0.33	0.17					0.18		0.3	
Nickel	0.01	< 0.010		0.0060			0.01	< 0.010					0.0060		0.01	
Selenium (HAA)	0.056						0.009								0.005	
Selenium (GFAA)	0.056	0.015 J		< 0.0050			0.009	< 0.0050	0.020 J	0.030 J			0.0090		0.005	
Silver	0.005	< 0.0050		0.011			0.005	< 0.0050					< 0.0050		0.005	
Zinc		< 0.10		0.26				0.10					0.16			
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids																
TOC				1.6									2.1			
TOX				< 0.050									< 0.050			
TDS		48,000		50,000				41,000					38,000			
Anions (meq/L)		870.1		981.1				660.2					806.7			
Cations (meq/L)		1002.0		956.5				757.8					791.0			
Balance (%)		7%		1%				7%					1%			
Volatiles (mg/L)																
Acetone	20	< 20		< 20			20	< 20					< 20		20	
2-Butanone (MEK)	20	< 20		< 20			20	< 20					< 20		20	
Carbon disulfide	2	< 2.0		< 2.0			2	< 2.0					< 2.0		2	
Chloroform	2	< 2.0		< 2.0			2	< 2.0					< 2.0		2	
1,2-Dichloroethane	2	< 2.0		< 2.0			2	< 2.0					< 2.0		2	
Methylene chloride	2	< 2.0		< 2.0			2	< 2.0					< 2.0		2	
1,1,2-Trichloroethane	50	< 50		< 50			50	< 50					< 50		50	
Vinyl Chloride	50	< 50		< 50			50	< 50					< 50		50	
Semi-Volatiles (mg/L)																
Benz(a)anthracene	100	< 100		< 100			100	< 100					< 100		100	
Benzo(a)pyrene	100	< 100		< 100			100	< 100					< 100		100	
Benzo(b)fluoranthene	100	< 100		< 100			100	< 100					< 100		100	
Benzo(k)fluoranthene	100	< 100		< 100			100	< 100					< 100		100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
6 of 24

	Well ID:	GW-20	GW-20	GW-20A	GW-20	GW-20	GW-20	GW-24	GW-24	GW-24A	GW-24A	GW-24B	GW-24B	GW-24	GW-24	GW-25	GW-25A
	Date:	NRC	2/15/00	2/25/00	5/16/00	5/18/00	5/23/00	NRC	1/26/00	2/17/00	2/25/00	2/25/00	4/24/00	5/18/00	5/18/00	NRC	1/28/00
	Lab:	Baselines	AWAL	AWAL	AWAL	MSAI	Barringer	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL
Chrysene		100	< 100		< 100			100		< 100				< 100		100	
Dibenz(a,h)anthracene		100	< 100		< 100			100		< 100				< 100		100	
Diethyl phthalate		4	< 4.0		< 4.0			4		< 4.0				< 4.0		4	
2-Methylnaphthalene		4	< 4.0		< 4.0			4		< 4.0				< 4.0		4	
Naphthalene		4	< 4.0		< 4.0			4		< 4.0				< 4.0		4	
Pesticides (mg/L)																	
Chlordane		10	< 10		< 10			20		< 10				< 10		10	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
7 of 24

Well ID:	GW-25	GW-25B	GW-25	GW-25	GW-700		GW-25	GW-889		GW-25	GW-889		GW-26	GW-26A	GW-26	GW-26B
Date:	2/15/00	2/25/00	4/24/00	5/16/00	5/16/00	RPD	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	1/28/00	2/15/00	2/25/00
Lab:	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
					GW-25 Dup			GW-25 Dup.			GW-25 Dup.					
Analyte																
Field Parameters																
pH (std. units)	6.91	6.89	7.18	7.46	7.46		7.22	7.22		7.22	7.22			7.12	7.05	7.03
Temperature (°C)	12.49	12.42	12.47	12.83	12.83		12.66	12.66		12.66	12.66			12.42	12.53	12.32
SC (mmhos/cm)	80.30	77.50	90.50	87.80	87.80		86.50	86.50		86.50	86.50			82.30	86.90	83.60
Eh (millivolts)	152	200	102	103.0	103.00		117	117		117	117			155	160	209
Depth to Water (feet)	25.72	25.70	25.61	25.53	25.53		25.56	25.56		25.56	25.56			24.18	24.30	24.23
Specific Gravity																
Dissolved Oxygen	0.64	0.02	1.45	1.39	1.39		3.99	3.99		3.99	3.99			0.41	0.58	0.29
GW Elevation	4250.50	4250.59	4250.67	4250.67	4250.67		4250.64	4250.64		4250.64	4250.64			4250.30	4250.37	4250.37
Anions (mg/L)																
Bromide	110			48	48	0.0%									86	
Fluoride	2.9			1.7	1.9	5.6%									2.6	
Chloride	26,000			30,000	30,000	0.0%									28,000	
Nitrate	0.17			< 0.10	< 0.10										2.1	
Sulfate	4,000			3,800	3,800	0.0%									4,500	
Nitrate/Nitrite	0.19			0.11	< 0.10										2.2	
Alkalinity																
Bicarbonate	190			190	200	2.6%									98	
Carbonate	< 10			< 10	< 10										< 10	
Hydroxide																
Cations (mg/L)																
Calcium	600			640	650	0.8%									860	
Magnesium	970			900	930	1.6%									1,200	
Potassium	720			580	600	1.7%									730	
Sodium	19,000			18,000	18,000	0.0%									20,000	
Metals (mg/L)																
Arsenic (ICP)													0.20			
Arsenic (HAA)													0.20			
Arsenic (GFAA)	0.11			0.13	0.13	0.0%							0.20	0.21	0.20	0.69 J
Barium	0.098			0.099 J	0.16 J	23.6%	0.084 J	0.059 J	17.5%	0.050 J	0.062 J	10.5%	0.044		0.16	
Beryllium	< 0.0020			< 0.0020	< 0.0020								0.005		< 0.0020	
Cadmium	< 0.0040			< 0.0040	< 0.0040								0.004		< 0.0040	
Chromium	< 0.0050			< 0.0050	< 0.0050								0.005		< 0.0050	
Copper	< 0.0080			0.099	0.08	8.2%									< 0.0080	
Cyanide	< 0.0050	< 0.0050		< 0.0050	< 0.0050								0.005		< 0.0050	< 0.0050

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
8 of 24

Well ID:	GW-25	GW-25B	GW-25	GW-25	GW-700		GW-25	GW-889		GW-25	GW-889		GW-26	GW-26A	GW-26	GW-26B
Date:	2/15/00	2/25/00	4/24/00	5/16/00	5/16/00	RPD	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	1/28/00	2/15/00	2/25/00
Lab:	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
	GW-25 Dup						GW-25 Dup						GW-25 Dup			
Iron	< 0.10			0.20	0.20	0.0%										< 0.10
Lead	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050								0.005	< 0.0050	< 0.0050	< 0.0050
Mercury	< 0.0002			< 0.0002	< 0.0002								0.0002		< 0.0002	
Molybdenum	0.20			0.24	0.24	0.0%							0.70		0.48	
Nickel	< 0.010			0.0050	0.0060	9.1%							0.01		< 0.010	
Selenium (HAA)													0.014			
Selenium (GFAA)	< 0.0050			< 0.0050	< 0.0050	0.0%							0.014	0.019 J	< 0.0050	0.020 J
Silver	< 0.0050			< 0.0050	< 0.0050								0.005		< 0.0050	
Zinc	< 0.10			0.29 J	0.22 J	13.7%									< 0.10	
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids																
TOC				< 1.0	< 1.0											
TOX				< 0.050	< 0.050											
TDS	46,000			49,000	49,000	0.0%									50,000	
Anions (meq/L)				925.2	925.4	0.0%										882.1
Cations (meq/L)				903.8	907.3	0.2%										1030.3
Balance (%)				1%	1%											8%
Volatiles (mg/L)																
Acetone	< 20			< 20	< 20								20		< 20	
2-Butanone (MEK)	< 20			< 20	< 20								20		< 20	
Carbon disulfide	< 2.0			< 2.0	< 2.0								2		< 2.0	
Chloroform	< 2.0			< 2.0	< 2.0								2		< 2.0	
1,2-Dichloroethane	< 2.0			< 2.0	< 2.0								2		< 2.0	
Methylene chloride	< 2.0			< 2.0	< 2.0								2		< 2.0	
1,1,2-Trichloroethane	< 50			< 50	< 50								50		< 50	
Vinyl Chloride	< 50			< 50	< 50								50		< 50	
Semi-Volatiles (mg/L)																
Benz(a)anthracene	< 100			< 100	< 100								100		< 100	
Benzo(a)pyrene	< 100			< 100	< 100								100		< 100	
Benzo(b)fluoranthene	< 100			< 100	< 100								100		< 100	
Benzo(k)fluoranthene	< 100			< 100	< 100								100		< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
9 of 24

Well ID:	GW-25	GW-25B	GW-25	GW-25	GW-700		GW-25	GW-889		GW-25	GW-889		GW-26	GW-26A	GW-26	GW-26B
Date:	2/15/00	2/25/00	4/24/00	5/16/00	5/16/00	RPD	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	1/28/00	2/15/00	2/25/00
Lab:	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
					GW-25 Dup.			GW-25 Dup.			GW-25 Dup.					
Chrysene	< 100			< 100	< 100								100			< 100
Dibenz(a,h)anthracene	< 100			< 100	< 100								100			< 100
Diethyl phthalate	< 4.0			< 4.0	< 4.0								4			< 4.0
2-Methylnaphthalene	< 4.0			< 4.0	< 4.0								4			< 4.0
Naphthalene	< 4.0			< 4.0	< 4.0								4			< 4.0
Pesticides (mg/L)																
Chlordane	< 10			< 10	< 10								10			< 10

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
10 of 24

Well ID:	GW-901	GW-26	GW-601	GW-26	GW-26	GW-26	GW-27	GW-27A	GW-27	GW-27B	GW-27	GW-27	GW-27	GW-27
Date:	2/25/00	RPD 4/24/00	4/24/00	RPD 5/16/00	5/22/00	5/22/00	NRC	1/28/00	2/16/00	2/25/00	4/24/00	5/15/00	5/22/00	5/22/00
Lab:	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
	GW-26 Dup.		GW-26 Dup.											
Analyte														
Field Parameters														
pH (std. units)	7.03	7.23	7.23	7.20	7.39	7.39		7.07	6.98	6.99	7.39	7.21	7.31	7.31
Temperature (°C)	12.32	12.42	12.42	12.65	12.68	12.68		12.32	12.21	12.25	12.51	13.28	12.71	12.71
SC (mmhos/cm)	83.60	99.23	99.23	97.43	96.10	96.10		78.70	84.90	79.50	88.31	80.47	88.3	88.3
Eh (millivolts)	209	112	112	99.0	138	138		155	154	194	120	78	112	112
Depth to Water (feet)	24.23	24.13	24.13	24.03	24.03	24.03		22.38	22.26	22.45	22.47	22.23	22.26	22.26
Specific Gravity														
Dissolved Oxygen	0.29	2.20	2.20	4.40	4.00	4.00		0.34	0.54	0.20	3.01	2.85	3.76	3.76
GW Elevation	4250.37	4250.47	4250.47	4250.57	4250.57	4250.57		4250.16	4249.97	4249.95	4250.19	4250.16	4250.16	4250.16
Anions (mg/L)														
Bromide				35					99			47		
Fluoride				2.1 J					2.30			1.8		
Chloride				34,000					27,000			31,000		
Nitrate				2.1					0.52			0.63		
Sulfate				5,000					4,500			4,500		
Nitrate/Nitrite				2.1					0.55			0.66		
Alkalinity														
Bicarbonate				98					150			150		
Carbonate				< 10					< 10			< 10		
Hydroxide														
Cations (mg/L)														
Calcium				960					740			750		
Magnesium				1,200					1,100			1,000		
Potassium				610					730			560		
Sodium				21,000					19,000			19,000		
Metals (mg/L)														
Arsenic (ICP)							0.059							
Arsenic (HAA)							0.059							
Arsenic (GFAA)	0.67 J	1.5%		0.23			0.059	0.11	0.13	0.040 J		0.13	0.12	
Barium				0.14	0.10	0.0739	0.053	0.25	0.076			0.19	0.15	0.0966
Beryllium				< 0.0020			0.005		< 0.0020			< 0.0020		
Cadmium				< 0.0040			0.004		< 0.0040			< 0.0040		
Chromium				< 0.0050			0.005		< 0.0050			< 0.0050		
Copper				0.15					< 0.0080			0.11		
Cyanide	< 0.0050	< 0.0050		< 0.0050	< 0.0050		0.005		< 0.0050			< 0.0050		

< - Not detected above PQL

-- Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
11 of 24

Well ID:	GW-901	GW-26	GW-601		GW-26	GW-26	GW-26	GW-27	GW-27A	GW-27	GW-27B	GW-27	GW-27	GW-27	GW-27
Date:	2/25/00	RPD	4/24/00	4/24/00	RPD	5/16/00	5/22/00	5/22/00	NRC	1/28/00	2/16/00	2/25/00	4/24/00	5/15/00	5/22/00
Lab:	AWAL		AWAL	AWAL		AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
	GW-26 Dup		GW-26 Dup												
Iron					0.30									0.20	
Lead	< 0.0050	< 0.0050	< 0.0050		< 0.0050			0.005		< 0.10				< 0.0050	< 0.0050
Mercury					< 0.0002			0.00026		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Molybdenum					0.56			0.65	0.55 J	0.56				0.61	
Nickel					0.0070			0.01		< 0.010				< 0.010	
Selenium (HAA)								0.005							
Selenium (GFAA)	0.020 J	0.0%			0.015			0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050		< 0.0050
Silver					0.013			0.005		< 0.0050			0.011		
Zinc					0.36					< 0.10			0.32		
Ferric Iron (Fe ⁺³)															
Ferrous Iron (Fe ⁺²)															
Total Suspended Solids															
TOC					< 1.0									1.8	
TOX					< 0.050									0.069	
TDS					57,000					48,000				51,000	
Anions (meq/L)					1061.1									967.2	
Cations (meq/L)					1075.8									960.5	
Balance (%)					1%									0%	
Volatiles (mg/L)															
Acetone					< 20			20		< 20				< 20	
2-Butanone (MEK)					< 20			20		< 20				< 20	
Carbon disulfide					< 2.0			2		< 2.0				< 2.0	
Chloroform					< 2.0			2		< 2.0				< 2.0	
1,2-Dichloroethane					< 2.0			2		< 2.0				< 2.0	
Methylene chloride					< 2.0			2		< 2.0				< 2.0	
1,1,2-Trichloroethane					< 50			50		< 50				< 50	
Vinyl Chloride					< 50			50		< 50				< 50	
Semi-Volatiles (mg/L)															
Benz(a)anthracene					< 100			100		< 100				< 100	
Benzo(a)pyrene					< 100			100		< 100				< 100	
Benzo(b)fluoranthene					< 100			100		< 100				< 100	
Benzo(k)fluoranthene					< 100			100		< 100				< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
12 of 24

	Well ID:	GW-901	GW-26	GW-601	GW-26	GW-26	GW-26	GW-27	GW-27A	GW-27	GW-27B	GW-27	GW-27	GW-27	GW-27
	Date:	2/25/00	RPD 4/24/00	4/24/00	RPD 5/16/00	5/22/00	5/22/00	NRC	1/28/00	2/16/00	2/25/00	4/24/00	5/15/00	5/22/00	5/22/00
	Lab:	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
		GW-26 Dup		GW-26 Dup											
Chrysene					< 100			100		< 100			< 100		
Dibenz(a,h)anthracene					< 100			100		< 100			< 100		
Diethyl phthalate					< 4.0			4		< 4.0			< 4.0		
2-Methylnaphthalene					< 4.0			4		< 4.0			< 4.0		
Naphthalene					< 4.0			4		< 4.0			< 4.0		
Pesticides (mg/L)															
Chlordane					< 10			10		< 10			< 10		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
13 of 24

Well ID:	GW-28	GW-28	GW-28A	GW-28B	GW-28	GW-28	GW-28	GW-28	GW-28	GW-29	GW-29	GW-29A	GW-29B	GW-29	GW-29	GW-29
Date:	NRC	2/15/00	2/24/00	2/24/00	3/2/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	2/16/00	2/28/00	2/28/00	4/20/00	5/23/00	5/23/00
Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
Analyte																
Field Parameters																
pH (std. units)		7.05	7.07	7.07	7.04	7.28	7.19	7.41	7.41		6.75	6.73	6.73	6.71	6.91	6.91
Temperature (°C)		13.22	13.15	13.15	13.38	13.19	13.31	13.32	13.32		12.67	12.76	12.76	12.80	13.20	13.20
SC (mmhos/cm)		73.60	68.10	68.10	73.00	76.45	72.75	79.80	79.80		80,200	78,800	78,800	78.72	73.30	73.30
Eh (millivolts)		154.0	232.0	232.0	176.0	83.0	69.0	107.0	107.0		172	174	174	170	103	103
Depth to Water (feet)		20.52	20.00	20.00	20.29	20.23	20.23	20.30	20.30		25.38	25.35	25.35	25.45	25.45	25.45
Specific Gravity																
Dissolved Oxygen		0.37	0.23	0.23	0.56	3.33	3.51	4.25	4.25		0.55	0.40	0.40	0.51	2.48	2.48
GW Elevation		4251.29	4251.29	4251.00	4251.06	4251.06	4250.99	4250.99	4250.99		4250.94	4250.94	4250.84	4250.84	4250.84	4250.84
Anions (mg/L)																
Bromide		90					36				110				50	
Fluoride		2.6					2.1				2.4				1.7	
Chloride		22,000					28,000				24,000				28,000	
Nitrate		0.56					0.49				0.07				< 0.10	
Sulfate		3,800					3,500				3,800				3,800	
Nitrate/Nitrite		0.58					0.51				< 0.10				< 0.10	
Alkalinity																
Bicarbonate		140					140				270				260	
Carbonate		< 10					< 10				< 10				< 10	
Hydroxide																
Cations (mg/L)																
Calcium		510					500				610				590	
Magnesium		840					740				990				850	
Potassium		640					500				690				560	
Sodium		17,000					18,000				18,000				19,000	
Metals (mg/L)																
Arsenic (ICP)	0.078									0.05						
Arsenic (HAA)	0.078									0.05						
Arsenic (GFAA)	0.078	0.084					0.082	0.08		0.05	0.036				0.027	
Barium	0.033	0.11					0.13	0.10	0.0974	0.038	0.083				0.14	0.0826
Beryllium	0.005	< 0.0020					< 0.0020			0.005	< 0.0020				< 0.0020	
Cadmium	0.004	< 0.0040					< 0.0040			0.004	< 0.0040				< 0.0040	
Chromium	0.005	< 0.0050					< 0.0050			0.005	< 0.0050				< 0.0050	
Copper		< 0.0080					0.14				< 0.0080				< 0.0080	
Cyanide	0.005	< 0.005					< 0.0050			0.005	< 0.0050				< 0.0050	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
14 of 24

Well ID:	GW-28	GW-28	GW-28A	GW-28B	GW-28	GW-28	GW-28	GW-28	GW-28	GW-28	GW-29	GW-29	GW-29A	GW-29B	GW-29	GW-29	GW-29
Date:	NRC	2/15/00	2/24/00	2/24/00	3/2/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	2/16/00	2/28/00	2/28/00	4/20/00	5/23/00	5/23/00	
Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	
Iron		< 0.10					0.30				< 0.10					0.30	
Lead	0.005	< 0.0050	< 0.0050				< 0.0050	< 0.0050	< 0.0050		0.005	< 0.005				< 0.0050	
Mercury	0.00038	< 0.0002					< 0.0002				0.00038	< 0.0002				< 0.0002	
Molybdenum	0.46	0.27					0.31				0.37	0.18				0.16	
Nickel	0.01	< 0.010					< 0.010				0.01	< 0.010				< 0.010	
Selenium (HAA)	0.005										0.005						
Selenium (GFAA)	0.005	< 0.0050		< 0.0050			< 0.0050				0.005	< 0.0050	< 0.0050	0.010 J		< 0.0050	
Silver	0.005	< 0.0050					0.011				0.005	< 0.0050				< 0.0050	
Zinc		< 0.10					0.31					< 0.10				0.10	
Ferric Iron (Fe ⁺³)																	
Ferrous Iron (Fe ⁺²)																	
Total Suspended Solids																	
TOC							1.9									1.4	
TOX							< 0.050									< 0.050	
TDS		44,000					45,000					43,000				44,000	
Anions (meq/L)							862.0					757.5				870.2	
Cations (meq/L)							881.6					912.6				940.2	
Balance (%)							1%					19%				4%	
Volatiles (mg/L)																	
Acetone	20	< 20					< 20				20	< 20				< 20	
2-Butanone (MEK)	20	< 20					< 20				20	< 20				< 20	
Carbon disulfide	2	< 2.0					< 2.0				2	< 2.0				< 2.0	
Chloroform	2	< 2.0					< 2.0				2	< 2.0				< 2.0	
1,2-Dichloroethane	2	< 2.0					< 2.0				2	< 2.0				< 2.0	
Methylene chloride	2	< 2.0					< 2.0				2	< 2.0				< 2.0	
1,1,2-Trichloroethane	50	< 50					< 50				50	< 50				< 50	
Vinyl Chloride	50	< 50					< 50				50	< 50				< 50	
Semi-Volatiles (mg/L)																	
Benz(a)anthracene	100	< 100					< 100				100	< 100				< 100	
Benzo(a)pyrene	100	< 100					< 100				100	< 100				< 100	
Benzo(b)fluoranthene	100	< 100					< 100				100	< 100				< 100	
Benzo(k)fluoranthene	100	< 100					< 100				100	< 100				< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
15 of 24

	Well ID:	GW-28	GW-28	GW-28A	GW-28B	GW-28	GW-28	GW-28	GW-28	GW-28	GW-29	GW-29	GW-29A	GW-29B	GW-29	GW-29	GW-29
	Date:	NRC	2/15/00	2/24/00	2/24/00	3/2/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	2/16/00	2/28/00	2/28/00	4/20/00	5/23/00	5/23/00
	Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI
Chrysene		100	< 100								100	< 100					< 100
Dibenz(a,h)anthracene		100	< 100								100	< 100					< 100
Diethyl phthalate		4	< 4.0								4	< 4.0					< 4.0
2-Methylnaphthalene		4	< 4.0								4	< 4.0					< 4.0
Naphthalene		4	< 4.0								4	< 4.0					< 4.0
Pesticides (mg/L)																	
Chlordane		10	< 10								10	< 10					< 10

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
16 of 24

Well ID:	GW-57	GW-57	GW-57A	GW-57B	GW-57	GW-57	GW-57	GW-57	GW-58	GW-58A	GW-58	GW-58B	GW-58	GW-58	GW-910		GW-58
Date:	NRC	2/15/00	2/24/00	2/24/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	1/28/00	2/14/00	2/24/00	4/21/00	5/11/00	5/11/00	RPD	5/22/00
Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL
Analyte																	
Field Parameters																	
pH (std units)		6.98	6.99	6.99	7.21	7.18	7.32	7.32		7.15	7.10	7.08	7.31	7.32	7.32		7.41
Temperature (°C)		13.25	13.11	13.11	13.46	13.85	13.44	13.44		13.31	13.34	13.14	13.00	12.91	12.91		12.96
SC (mmhos/cm)		75.80	69.90	69.90	77.21	73.56	81.40	81.40		73.800	71.800	71.800	80.34	96.60	96.60		83.30
Eh (millivolts)		155	233	233	82	89.0	125.0	125.0		161.0	142.0	242.0	87	99.0	99.0		118
Depth to Water (feet)		21.22	20.80	20.80	21.03	21.03	21.12	21.12		19.63	19.52	19.60	19.70	19.83	19.83		19.78
Specific Gravity																	
Dissolved Oxygen		0.45	0.21	0.21	3.53	2.97	4.45	4.45		0.61	0.58	0.21	4.66	3.73	3.73		4.84
GW Elevation		4251.12	4251.12	4250.89	4250.89	4250.80	4250.80	4250.80		4251.7	4251.7	4251.7	4251.32	4251.32	4251.32		4251.37
Anions (mg/L)																	
Bromide		100				32				99				39	38	1.3%	
Fluoride		2.6				2.0				2.5 J				4.7 J	1.8 J	44.6%	
Chloride		21,000				28,000				24,000				29,000	29,000	0.0%	
Nitrate		1.0				0.95				1.6				1.7	1.7	0.0%	
Sulfate		4,500				4,500				3,800				4,400	4,000	4.8%	
Nitrate/Nitrite		1.1				0.97				1.6				1.7	1.7	0.0%	
Alkalinity																	
Bicarbonate		110				120				120				120	120	0.0%	
Carbonate		< 10				< 10				< 10				< 10	< 10		
Hydroxide																	
Cations (mg/L)																	
Calcium		850				880				610				540	530	0.9%	
Magnesium		1,000				930				900				740	730	0.7%	
Potassium		660				540				650				510	510	0.0%	
Sodium		16,000				18,000				18,000				16,000	16,000	0.0%	
Metals (mg/L)																	
Arsenic (ICP)	0.05								0.12								
Arsenic (HAA)	0.05								0.12								
Arsenic (GFAA)	0.05	0.05				0.057			0.12	0.15	0.14 J	0.13		0.11	0.10	4.8%	0.15
Barium	0.048	0.15				0.11	0.13	0.0923	0.048		0.12			0.080	0.11	15.8%	0.14
Beryllium	0.005	< 0.0020				< 0.0020			0.005		< 0.0020			< 0.0020	< 0.0020		
Cadmium	0.004	< 0.0040				< 0.0040			0.004		< 0.0040			< 0.0040	< 0.0040		
Chromium	0.005	< 0.0050				< 0.0050			0.005		< 0.0050			< 0.0050	< 0.0050		
Copper		< 0.0080				0.130					< 0.0080			0.030	0.020	20.0%	
Cyanide	0.005	< 0.0050				< 0.0050			0.005		< 0.005			< 0.0050	< 0.0050		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
17 of 24

Well ID:	GW-57	GW-57	GW-57A	GW-57B	GW-57	GW-57	GW-57	GW-57	GW-58	GW-58A	GW-58	GW-58B	GW-58	GW-58	GW-58	GW-910	GW-58
Date:	NRC	2/15/00	2/24/00	2/24/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	1/28/00	2/14/00	2/24/00	4/21/00	5/11/00	5/11/00	RPD	5/22/00
Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL
Iron		< 0.10				0.10				< 0.10				0.12	0.10	9.1%	
Lead	0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050			0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050			< 0.0050
Mercury	0.00038	< 0.0002				< 0.0002			0.00060	< 0.0002			< 0.0002	< 0.0002			
Molybdenum	0.53	0.35				0.40			0.36	0.25			0.25	0.28	5.7%		
Nickel	0.01	< 0.010				0.0090			0.01	< 0.010			< 0.010	< 0.010			
Selenium (HAA)	0.005								0.005								
Selenium (GFAA)	0.005	< 0.0050	< 0.0050	< 0.0050		< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0080	0.0070	6.7%	< 0.0050
Silver	0.005	< 0.0050				0.013			0.005	< 0.0050			< 0.0050	< 0.0050			
Zinc		< 0.10				0.26				< 0.10				0.070	0.090	12.5%	
Ferric Iron (Fe ⁺³)																	
Ferrous Iron (Fe ⁺²)																	
Total Suspended Solids																	
TOC						2.5								1.1	< 1.0		
TOX						< 0.050								< 0.050	< 0.050		
TDS		44,000				48,000				45,000				46,000	46,000	0.0%	
Anions (meq/L)		685.6				882.5				759.4				908.5	900.1	0.5%	
Cations (meq/L)		837.6				917.3				904.1				796.9	795.6	0.1%	
Balance (%)		10%				2%				9%				7%	6%		
Volatiles (mg/L)																	
Acetone	20	< 20				< 20			20	< 20				< 20	< 20		
2-Butanone (MEK)	20	< 20				< 20			20	< 20				< 20	< 20		
Carbon disulfide	2	< 2.0				< 2.0			2	< 2.0				< 2.0	< 2.0		
Chloroform	2	< 2.0				< 2.0			2	< 2.0				< 2.0	< 2.0		
1,2-Dichloroethane	2	< 2.0				< 2.0			2	< 2.0				< 2.0	< 2.0		
Methylene chloride	2	< 2.0				< 2.0			2	< 2.0				< 2.0	< 2.0		
1,1,2-Trichloroethane	50	< 50				< 50			50	< 50				< 50	< 50		
Vinyl Chloride	50	< 50				< 50			50	< 50				< 50	< 50		
Semi-Volatiles (mg/L)																	
Benz(a)anthracene	100	< 100				< 100			100	< 100				< 100	< 100		
Benzo(a)pyrene	100	< 100				< 100			100	< 100				< 100	< 100		
Benzo(b)fluoranthene	100	< 100				< 100			100	< 100				< 100	< 100		
Benzo(k)fluoranthene	100	< 100				< 100			100	< 100				< 100	< 100		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
18 of 24

	Well ID:	GW-57	GW-57	GW-57A	GW-57B	GW-57	GW-57	GW-57	GW-57	GW-58	GW-58A	GW-58	GW-58B	GW-58	GW-58	GW-910		GW-58
	Date:	NRC	2/15/00	2/24/00	2/24/00	4/21/00	5/15/00	5/22/00	5/22/00	NRC	1/28/00	2/14/00	2/24/00	4/21/00	5/11/00	5/11/00	RPD	5/22/00
	Lab:	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		AWAL
Chrysene		100	< 100				< 100			100		< 100			< 100	< 100		
Dibenz(a,h)anthracene		100	< 100				< 100			100		< 100			< 100	< 100		
Diethyl phthalate		4	< 4.0				< 4.0			4		< 4.0			< 4.0	< 4.0		
2-Methylnaphthalene		4	< 4.0				< 4.0			4		< 4.0			< 4.0	< 4.0		
Naphthalene		4	< 4.0				< 4.0			4		< 4.0			< 4.0	< 4.0		
Pesticides (mg/L)																		
Chlordane		10	< 10				< 10			10		< 10			< 10	< 10		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
19 of 24

Well ID:	GW-58	GW-60	GW-60	GW-60A	GW-60B	GW-60	GW-60	GW-888		GW-60	GW-888		GW-63	GW-63	GW-63A	GW-63B
Date:	5/22/00	NRC	2/14/00	2/24/00	2/24/00	5/11/00	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	2/14/00	2/24/00	2/24/00
Lab:	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
								GW-60 Dup.			GW-60 Dup.					
Analyte																
Field Parameters																
pH (std. units)	7.41		7.02	6.97	6.97	7.15	7.28	7.28		7.28	7.28			7.17	7.12	7.12
Temperature (°C)	12.96		13.86	13.63	13.63	14.08	13.92	13.92		13.92	13.92			14.31	14.17	14.17
SC (mmhos/cm)	83.30		64.30	64.20	64.20	87.20	75.90	75.90		75.90	75.90			57.00	57.30	57.30
Eh (millivolts)	118		121.0	224.0	224.0	113.0	69.0	69.0		69.0	69.0			129.0	217.0	217.0
Depth to Water (feet)	19.78		23.63	23.63	23.63	23.67	23.66	23.66		23.66	23.66			20.65	20.58	20.58
Specific Gravity																
Dissolved Oxygen	4.84		0.29	0.00	0.00	0.97	1.63	1.63		1.63	1.63			0.57	0.19	0.19
GW Elevation	4251.37		4251.09	4251.09	4250.98	4251.09	4251.09	4251.09		4251.09	4251.09			4251.39	4251.39	4251.45
Anions (mg/L)																
Bromide			100			43								91		
Fluoride			2.1			1.6 J								2.2		
Chloride			20,000			26,000								18,000		
Nitrate			0.44 J			0.50								2.2 J		
Sulfate			2,500			3,200								2,900		
Nitrate/Nitrite			0.45			0.50								2.2		
Alkalinity																
Bicarbonate			170			160								150		
Carbonate			< 10			< 10								< 10		
Hydroxide																
Cations (mg/L)																
Calcium			510			450								410		
Magnesium			760			630								680		
Potassium			590			480								520		
Sodium			15,000			14,000								13,000		
Metals (mg/L)																
Arsenic (ICP)		0.050											0.05			
Arsenic (HAA)		0.050											0.05			
Arsenic (GFAA)		0.050	0.034			0.020							0.05	0.043		
Barium	0.0779	0.037	0.10 J			0.12	0.07 J	0.13 J	28%	0.079 J	0.064 J	10%	0.097	0.13 J		
Beryllium		0.005	< 0.0020			< 0.0020							0.005	< 0.0020		
Cadmium		0.004	< 0.0040			< 0.0040							0.004	< 0.0040		
Chromium		0.005	< 0.0050			< 0.0050							0.005	< 0.0050		
Copper			< 0.0080			0.030								< 0.0080		
Cyanide		0.005	< 0.0050			< 0.0050							0.005	< 0.0050		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
20 of 24

Well ID:	GW-58	GW-60	GW-60	GW-60A	GW-60B	GW-60	GW-60	GW-888		GW-60	GW-888		GW-63	GW-63	GW-63A	GW-63B
Date:	5/22/00	NRC	2/14/00	2/24/00	2/24/00	5/11/00	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	2/14/00	2/24/00	2/24/00
Lab:	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
								GW-60 Dup.			GW-60 Dup.					
Iron			< 0.10			< 0.10								< 0.10		
Lead	0.005		< 0.0050	< 0.0050		< 0.0050	< 0.0050	< 0.0050					0.005	< 0.0050	< 0.0050	
Mercury	0.00049		< 0.0002			< 0.0002							0.00046	< 0.0002		
Molybdenum	0.31		0.18			0.15							0.31	0.19		
Nickel	0.01		< 0.010			< 0.010							0.01	< 0.010		
Selenium (HAA)	0.015												0.005			
Selenium (GFAA)	0.015		< 0.0050	0.014 J	0.016 J	0.010	< 0.0050	< 0.0050					0.005	< 0.0050		< 0.0050
Silver	0.005		< 0.0050			< 0.0050							0.005	< 0.0050		
Zinc			< 0.10			0.080								< 0.10		
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids																
TOC						1.2										
TOX						< 0.050										
TDS			39,000			45,000								34,000		
Anions (meq/L)			616.8			799.8								568.6		
Cations (meq/L)			755.6			695.6								655.2		
Balance (%)			10%			7%								7%		
Volatiles (mg/L)																
Acetone	20		< 20			< 20							20	< 20		
2-Butanone (MEK)	20		< 20			< 20							20	< 20		
Carbon disulfide	2		< 2.0			< 2.0							2	< 2.0		
Chloroform	2		< 2.0			< 2.0							2	< 2.0		
1,2-Dichloroethane	2		< 2.0			< 2.0							2	< 2.0		
Methylene chloride	2		< 2.0			< 2.0							2	< 2.0		
1,1,2-Trichloroethane	50		< 50			< 50							50	< 50		
Vinyl Chloride	50		< 50			< 50							50	< 50		
Semi-Volatiles (mg/L)																
Benz(a)anthracene	100		< 100			< 100							100	< 100		
Benzo(a)pyrene	100		< 100			< 100							100	< 100		
Benzo(b)fluoranthene	100		< 100			< 100							100	< 100		
Benzo(k)fluoranthene	100		< 100			< 100							100	< 100		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
21 of 24

Well ID:	GW-58	GW-60	GW-60	GW-60A	GW-60B	GW-60	GW-60	GW-888		GW-60	GW-888		GW-63	GW-63	GW-63A	GW-63B
Date:	5/22/00	NRC	2/14/00	2/24/00	2/24/00	5/11/00	5/22/00	5/22/00	RPD	5/22/00	5/22/00	RPD	NRC	2/14/00	2/24/00	2/24/00
Lab:	MSAI	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL		MSAI	MSAI		Baselines	AWAL	AWAL	AWAL
								GW-60 Dup.			GW-60 Dup.					
Chrysene	100	< 100					< 100						100	< 100		
Dibenz(a,h)anthracene	100	< 100					< 100						100	< 100		
Diethyl phthalate	4	< 4.0					< 4.0						4	< 4.0		
2-Methylnaphthalene	4	< 4.0					< 4.0						4	< 4.0		
Naphthalene	4	< 4.0					< 4.0						4	< 4.0		
Pesticides (mg/L)																
Chlordane	10	< 10					< 10						10	< 10		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
22 of 24

Well ID:	GW-63	GW-63	GW-63	GW-63	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks
Date:	4/14/00	5/11/00	5/22/00	5/22/00	2/17/00	5/11/00	5/15/00	5/16/00	5/18/00	5/24/00
Lab:	AWAL	AWAL	AWAL	MSAI	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL

Analyte				
Field Parameters				
pH (std. units)	7.31	7.23	7.40	7.40
Temperature (°C)	14.29	14.01	14.04	14.04
SC (mmhos/cm)	62.18	77.38	67.40	67.40
Eh (millivolts)	97	105.0	95	95
Depth to Water (feet)	20.52	20.72	20.61	20.61
Specific Gravity				
Dissolved Oxygen	3.83	3.45	3.18	3.18
GW Elevation	4251.25	4251.36	4251.36	4251.36
Anions (mg/L)				
Bromide		48		
Fluoride		3.2		
Chloride		22,000		
Nitrate		0.23		
Sulfate		2,900		
Nitrate/Nitrite		0.23		
Alkalinity				
Bicarbonate		140		
Carbonate		< 10		
Hydroxide				
Cations (mg/L)				
Calcium		370		
Magnesium		580		
Potassium		430		
Sodium		12,000		
Metals (mg/L)				
Arsenic (ICP)				
Arsenic (HAA)				
Arsenic (GFAA)		0.020		
Barium		0.13	0.10	0.100
Beryllium		< 0.0020		
Cadmium		< 0.0040		
Chromium		< 0.0050		
Copper		0.010		
Cyanide		< 0.0050		

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part I
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
23 of 24

Well ID:	GW-63	GW-63	GW-63	GW-63	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks
Date:	4/14/00	5/11/00	5/22/00	5/22/00	2/17/00	5/11/00	5/15/00	5/16/00	5/18/00	5/24/00
Lab:	AWAL	AWAL	AWAL	MSAI	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
<hr/>										
Iron		0.11								
Lead	< 0.0050	< 0.0050	< 0.0050							
Mercury		< 0.0002								
Molybdenum		0.16								
Nickel		< 0.010								
Selenium (HAA)										
Selenium (GFAA)		< 0.0050								
Silver		< 0.0050								
Zinc		0.070								
Ferric Iron (Fe ⁺³)										
Ferrous Iron (Fe ⁺²)										
Total Suspended Solids										
TOC		1.3								
TOX		< 0.050								
TDS		36,000								
Anions (meq/L)		680.9								
Cations (meq/L)		599.2								
Balance (%)		6%								
Volatiles (mg/L)										
Acetone		< 20			< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone (MEK)		< 20			< 10	< 10	< 10	< 10	< 10	< 10
Carbon disulfide		< 2.0			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform		< 2.0			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,2-Dichloroethane		< 2.0			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methylene chloride		< 2.0			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,1,2-Trichloroethane		< 50			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl Chloride		< 50			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Semi-Volatiles (mg/L)										
Benz(a)anthracene		< 100								
Benzo(a)pyrene		< 100								
Benzo(b)fluoranthene		< 100								
Benzo(k)fluoranthene		< 100								

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 1
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
24 of 24

	Well ID:	GW-63	GW-63	GW-63	GW-63	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks	Trip Blanks
	Date:	4/14/00	5/11/00	5/22/00	5/22/00	2/17/00	5/11/00	5/15/00	5/16/00	5/18/00	5/24/00
	Lab:	AWAL	AWAL	AWAL	MSAI	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
<hr/>											
Chrysene											< 100
Dibenz(a,h)anthracene											< 100
Diethyl phthalate											< 4.0
2-Methylnaphthalene											< 4.0
Naphthalene											< 4.0
Pesticides (mg/L)											
Chlordane											< 10

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11c.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
1 of 18

Well ID:	GW-19A	GW-19A	GW-19A	GW-602		GW-19A	GW-19AA	GW-601		GW-20	GW-20	GW-20A	GW-20	GW-20A	GW-24	GW-24
Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/4/00	10/4/00	10/4/00	RPD	NRC	8/8/00	8/8/00	10/23/00	10/23/00	NRC	8/8/00
Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	AWAL		Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL
					GW-19A Dup.				GW-19A Dup.							
Analyte																
Field Parameters																
pH (std. units)		7.09	7.01	7.01		6.99	6.99	6.99			7.19	7.19	7.13	7.13		7.29
Temperature (°C)		13.27	13.38	13.38		13.57	13.57	13.57			12.89	12.89	12.66	12.66		14.25
SC (mmhos/cm)		94,800	89,600	89,600		92,400	92,400	92,400			77.9	77.9	78.7	78.7		64,500
Eh (millivolts)		130.0	165.0	165.0		153.0	153.0	153.0			110	110	114	114		119
Depth to Water (feet)		18.64	18.62	18.62		18.65	18.65	18.65			25.91	25.91	25.94	25.94		26.36
Specific Gravity																
Dissolved Oxygen		9.21	4.51	4.51		4.51	4.51	4.51			5.98	5.98	2.55	2.55		5.91
GW Elevation		4252.19	4252.21	4252.21		4252.18	4252.18	4252.18			4250.69	4250.69	4250.66	4250.66		4250.34
Anions (mg/L)																
Bromide						20							< 10			
Fluoride		5.2				7.4					3.6		4.7			3.5
Chloride		40,000				36,000					32,000		28,000			26,000
Nitrate		2.2				2.1					1.9		1.9			1.2
Sulfate		6,500				7,000					3,500		4,300			3,000
Nitrate/Nitrite		2.2				2.1					1.9		1.9			1.2
Alkalinity																
Bicarbonate		120				120					180		180			230
Carbonate		< 10				< 10					< 10		< 10			< 10
Hydroxide																
Cations (mg/L)																
Calcium		1,100				1,100					650		570			440
Magnesium		1,500				1,600					930		800			660
Potassium		540				640					610		530			490
Sodium		24,000				21,000					18,000		17,000			14,000
Metals (mg/L)																
Arsenic (ICP)	0.05									0.05					0.05	
Arsenic (HAA)	0.05									0.05					0.05	
Arsenic (GFAA)	0.05	0.015	0.068	0.076	6%	0.060	0.050	0.050	0%	0.05	0.026	0.028	0.030	0.030 J	0.05	0.028
Barium	0.02	0.0070	< 0.0040	< 0.0040		0.0340				0.023	0.010	0.010	0.019	0.019	0.036	0.016
Beryllium	0.005	< 0.0020				< 0.0020				0.005	< 0.0020	< 0.0020	< 0.0020		0.005	< 0.0020
Cadmium	0.004	< 0.0040				< 0.0040				0.004	< 0.0040	< 0.0040	< 0.0040		0.004	< 0.0040
Chromium	0.005	< 0.0050	< 0.0050	< 0.0050		< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050
Copper		< 0.0080				< 0.0080					< 0.0080	< 0.0080	0.017			< 0.0080
Cyanide	0.005	< 0.0050				< 0.0050				0.005	< 0.0050		< 0.0050		0.005	< 0.0050

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
2 of 18

Well ID:	GW-19A	GW-19A	GW-19A	GW-602		GW-19A	GW-19AA	GW-601		GW-20	GW-20	GW-20A	GW-20	GW-20A	GW-24	GW-24
Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/4/00	10/4/00	10/4/00	RPD	NRC	8/8/00	8/8/00	10/23/00	10/23/00	NRC	8/8/00
Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	AWAL		Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL
				GW-19A Dup.				GW-19A Dup.								
Iron		< 0.10				< 0.10					< 0.10		< 0.10			< 0.10
Lead	0.005	< 0.0050				< 0.0050				0.005	< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050
Mercury	0.00034	< 0.0002				< 0.0002				0.00049	< 0.0002	< 0.0002	< 0.0002		0.00029	< 0.0002
Molybdenum	0.75	0.74				0.83				0.33	0.17	0.18	0.19		0.33	0.19
Nickel	0.01	< 0.010				< 0.010				0.01	< 0.010	< 0.010	< 0.010		0.01	< 0.010
Selenium (HAA)	0.005									0.056					0.009	
Selenium (GFAA)	0.005	< 0.0050	< 0.0050	< 0.0050		0.030	< 0.0050	< 0.0050		0.056	< 0.0050	< 0.0050	< 0.0050		0.009	< 0.0050
Silver	0.005	< 0.0050				< 0.0050				0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005	< 0.0050
Zinc		< 0.10				< 0.10					< 0.10	< 0.10	< 0.10			< 0.10
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids						340										
TOC						< 1.0							< 1.0			
TOX						< 0.050							< 0.050			
TDS		66,000				58,000					51,000		45,000			39,000
Anions (meq/L)		1261.3				1159.3					975.0		879.3			796.8
Cations (meq/L)		1236.1				1116.4					907.6		847.3			697.8
Balance (%)		1%				2%					4%		2%			7%
Volatiles (mg/L)																
Acetone	20	< 20				< 20				20	< 20		< 20		20	< 20
2-Butanone (MEK)	20	< 20				< 20				20	< 20		< 20		20	< 20
Carbon disulfide	2	< 2.0				< 2.0				2	< 2.0		< 2.0		2	< 2.0
Chloroform	2	< 2.0				< 2.0				2	< 2.0		< 2.0		2	< 2.0
1,2-Dichloroethane	2	< 2.0				< 2.0				2	< 2.0		< 2.0		2	< 2.0
Methylene chloride	2	< 2.0				< 2.0				2	< 2.0		< 2.0		2	< 2.0
1,1,2-Trichloroethane	50	< 50				< 50				50	< 50		< 50		50	< 50
Vinyl Chloride	50	< 50				< 50				50	< 50		< 50		50	< 50
Semi-Volatiles (mg/L)																
Benz(a)anthracene	100	< 100				< 100				100	< 100		< 100		100	< 100
Benzo(a)pyrene	100	< 100				< 100				100	< 100		< 100		100	< 100
Benzo(b)fluoranthene	100	< 100				< 100				100	< 100		< 100		100	< 100
Benzo(k)fluoranthene	100	< 100				< 100				100	< 100		< 100		100	< 100

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
3 of 18

	Well ID:	GW-19A	GW-19A	GW-19A	GW-602		GW-19A	GW-19AA	GW-601		GW-20	GW-20	GW-20A	GW-20	GW-20A	GW-24	GW-24
	Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/4/00	10/4/00	10/4/00	RPD	NRC	8/8/00	8/8/00	10/23/00	10/23/00	NRC	8/8/00
	Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	AWAL		Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL
						GW-19A Dup.				GW-19A Dup.							
Chrysene		100	< 100				< 100				100	< 100		< 100		100	< 100
Dibenz(a,h)anthracene		100	< 100				< 100				100	< 100		< 100		100	< 100
Diethyl phthalate		4	< 4.0				< 4.0				4	< 4.0		< 4.0		4	< 4.0
2-Methylnaphthalene		4	< 4.0				< 4.0				4	< 4.0		< 4.0		4	< 4.0
Naphthalene		4	< 4.0				< 4.0				4	< 4.0		< 4.0		4	< 4.0
Pesticides (mg/L)																	
Chlordane		20	< 10				< 10				10	< 10		< 10		20	< 10

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11c.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
4 of 18

Well ID:	GW-24A	GW-24	GW-24A	GW-25	GW-25	GW-25A	GW-25	GW-25	GW-25A	GW-26	GW-26	GW-26A	GW-26A	GW-26	GW-26A	GW-401
Date:	8/8/00	10/23/00	10/23/00	NRC	8/7/00	8/7/00	9/19/00	10/19/00	10/19/00	NRC	8/7/00	8/7/00	9/19/00	10/23/00	10/23/00	10/23/00
Lab:	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
																GW-26A Dup.
Analyte																
Field Parameters																
pH (std. units)	7.29	7.20	7.20		7.25	7.25	7.04	7.12	7.12		7.40	7.40	7.26	7.30	7.30	7.30
Temperature (°C)	14.25	13.20	13.20		12.52	12.52	12.46	12.50	12.50		12.93	12.93	12.74	12.55	12.55	12.55
SC (mmhos/cm)	64,500	65,800	65,800		74,000	74,000	69,500	74,900	74,900		80,400	80,400	76,800	83,800	83,800	83,800
Eh (millivolts)	119	96	96		98	98	105	143	143		101	101	118	85	85	85
Depth to Water (feet)	26.36	26.40	26.40		25.50	25.50	25.53	25.47	25.47		24.15	24.15	24.16	24.08	24.08	24.08
Specific Gravity																
Dissolved Oxygen	5.91	2.45	2.45		6.74	6.74	1.11	1.50	1.50		9.14	9.14	4.56	4.95	4.95	4.95
GW Elevation	4250.34	4250.30	4250.30		4250.70	4250.70	4250.67	4250.73	4250.73		4250.45	4250.45	4250.44	4250.52	4250.52	4250.52
Anions (mg/L)																
Bromide		< 10						< 10						< 10		
Fluoride		4.1			3.8			3.4 J			4.0			5.1		
Chloride		22,000			30,000			27,000			29,000			29,000		
Nitrate		1.1			< 0.10			0.62			2.5			2.4		
Sulfate		3,600			3,500			4,000			5,000			4,000		
Nitrate/Nitrite		1.1			< 0.10			0.62			2.5			2.4		
Alkalinity																
Bicarbonate		230			200			190			100			100		
Carbonate		< 10			< 10			< 10			< 10			< 10		
Hydroxide																
Cations (mg/L)																
Calcium		400			610			560			820			830		
Magnesium		590			950			850			1,200			1,100		
Potassium		460			610			570			580			590		
Sodium		14,000			18,000			16,000			19,000			18,000		
Metals (mg/L)																
Arsenic (ICP)				0.11						0.2						
Arsenic (HAA)				0.11						0.2						
Arsenic (GFAA)	0.026	0.03		0.11	0.098	0.10		0.060 J	0.070 J	0.2	0.17 J	0.16 J	0.24	0.29 J	0.28 J	0.28 J
Barium	0.018	0.022	0.022	0.044	0.012	0.012		0.018	0.018	0.044	0.0060	0.0060		0.018	0.018	0.018
Beryllium	< 0.0020	< 0.0020		0.005	< 0.0020	< 0.0020		< 0.0020		0.005	< 0.0020	< 0.0020		< 0.0020		
Cadmium	< 0.0040	< 0.0040		0.004	< 0.0040	< 0.0040		< 0.0040		0.004	< 0.0040	< 0.0040		< 0.0040		
Chromium	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050		< 0.0050		0.005	< 0.0050	< 0.0050		< 0.0050		
Copper	< 0.0080	0.017			< 0.0080	< 0.0080		0.0090			< 0.0080	< 0.0080		0.013		
Cyanide		< 0.0050		0.005	< 0.0050			< 0.0050		0.005	< 0.0050			< 0.0050		

- - Not detected above PQL

- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
5 of 18

	Well ID: GW-24A	GW-24	GW-24A	GW-25	GW-25	GW-25A	GW-25	GW-25	GW-25A	GW-26	GW-26	GW-26A	GW-26A	GW-26	GW-26A	GW-401
Date:	8/8/00	10/23/00	10/23/00	NRC	8/7/00	8/7/00	9/19/00	10/19/00	10/19/00	NRC	8/7/00	8/7/00	9/19/00	10/23/00	10/23/00	10/23/00
Lab:	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
																GW-26A Dup.
Iron		< 0.10			< 0.10				< 0.10		< 0.10			< 0.10		
Lead	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050			< 0.0050	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050		
Mercury	< 0.0002	< 0.0002		0.0002	< 0.0002	< 0.0002			< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		
Molybdenum	0.19	0.22		0.3	0.25	0.24			0.23	0.70	0.58	0.55	0.55	0.58		
Nickel	< 0.010	< 0.010		0.01	< 0.010	< 0.010			< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.010		
Selenium (HAA)				0.005						0.014						
Selenium (GFAA)	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050			< 0.0050	0.014	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.030	0.030
Silver	< 0.0050	< 0.0050		0.005	< 0.0050				< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	< 0.10	< 0.10			< 0.10	< 0.10			< 0.10		< 0.10	< 0.10	< 0.10	< 0.10		
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids																
TOC		< 1.0							< 1.0						< 1.0	
TOX		< 0.050							< 0.050						< 0.050	
TDS		40,000			43,000				43,000						54,000	
Anions (meq/L)		696.9			919.1				845.1		920.6				899.8	
Cations (meq/L)		689.3			907.2				808.5		981.0				930.0	
Balance (%)		1%			1%				2%		3%				2%	
Volatiles (mg/L)																
Acetone		< 20		20	< 20				< 20	20	< 20				< 20	
2-Butanone (MEK)		< 20		20	< 20				< 20	20	< 20				< 20	
Carbon disulfide		< 2.0		2	< 2.0				< 2.0	2	< 2.0				< 2.0	
Chloroform		< 2.0		2	< 2.0				< 2.0	2	< 2.0				< 2.0	
1,2-Dichloroethane		< 2.0		2	< 2.0				< 2.0	2	< 2.0				< 2.0	
Methylene chloride		< 2.0		2	< 2.0				< 2.0	2	< 2.0				< 2.0	
1,1,2-Trichloroethane		< 50		50	< 50				< 50	50	< 50				< 50	
Vinyl Chloride		< 50		50	< 50				< 50	50	< 50				< 50	
Semi-Volatiles (mg/L)																
Benz(a)anthracene		< 100		100	< 100				< 100	100	< 100				< 100	
Benzo(a)pyrene		< 100		100	< 100				< 100	100	< 100				< 100	
Benzo(b)fluoranthene		< 100		100	< 100				< 100	100	< 100				< 100	
Benzo(k)fluoranthene		< 100		100	< 100				< 100	100	< 100				< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
6 of 18

	Well ID: GW-24A	GW-24	GW-24A	GW-25	GW-25	GW-25A	GW-25	GW-25	GW-25A	GW-26	GW-26	GW-26A	GW-26A	GW-26	GW-26A	GW-401
Date:	8/8/00	10/23/00	10/23/00	NRC	8/7/00	8/7/00	9/19/00	10/19/00	10/19/00	NRC	8/7/00	8/7/00	9/19/00	10/23/00	10/23/00	10/23/00
Lab:	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
																GW-26A Dup.
Chrysene		< 100		100	< 100			< 100		100	< 100			< 100		
Dibenz(a,h)anthracene		< 100		100	< 100			< 100		100	< 100			< 100		
Diethyl phthalate		< 4.0		4	< 4.0			< 4.0		4	< 4.0			< 4.0		
2-Methylnaphthalene		< 4.0		4	< 4.0			< 4.0		4	< 4.0			< 4.0		
Naphthalene		< 4.0		4	< 4.0			< 4.0		4	< 4.0			< 4.0		
Pesticides (mg/L)																
Chlordane		< 10		10	< 10			< 10		10	< 10			< 10	< 10	< 10

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
7 of 18

Well ID:	GW-27	GW-27	GW-27A	GW-27	GW-27	GW-27A	GW-28	GW-28	GW-28A	GW-28	GW-28A	GW-28A	GW-303		GW-29	GW-29
Date:	RPD	NRC	8/3/00	8/3/00	9/19/00	10/19/00	10/19/00	NRC	8/3/00	8/3/00	10/18/00	10/18/00	10/18/00	RPD	NRC	8/10/00
Lab:		Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL		Baselines	AWAL
														GW-28 Dup.		
Analyte																
Field Parameters																
pH (std. units)			7.31	7.31	7.18	7.21	7.21		7.40	7.41	7.32	7.32	7.32			6.98
Temperature (°C)			12.82	12.82	12.83	12.75	12.75		13.05	13.32	13.38	13.38	13.38			13.01
SC (mmhos/cm)			79,500	79,500	71,400	75,700	75,700		74.20	79.80	78.20	78.20	78.20			71.90
Eh (millivolts)			146	146	116	131	131		127.0	107.0	131.0	131.0	131.0			104
Depth to Water (feet)			22.33	22.33	22.3	22.23	22.23		20.30	20.30	20.27	20.27	20.27			25.55
Specific Gravity																
Dissolved Oxygen			8.25	8.25	2.93	3.19	3.19		6.01	4.25	2.78	2.78	2.78			3.33
GW Elevation			4250.09	4250.09	4250.12	4250.19	4250.19		4250.99	4250.99	4251.02	4251.02	4251.02			4250.74
Anions (mg/L)																
Bromide						< 10					< 10					
Fluoride			4.2			3.6 J			3.5		3.1					3.7
Chloride			29,000			27,000			27,000		25,000					28,000
Nitrate			0.65			1.4			0.48		0.35					< 0.10
Sulfate			4,700			4,500			3,500		3,600					2,800
Nitrate/Nitrite			0.65			1.4			0.48		0.35					< 0.10
Alkalinity																
Bicarbonate			150			150			140		150					290
Carbonate			< 10			< 10			< 10		< 10					< 10
Hydroxide																
Cations (mg/L)																
Calcium			680			650			480		460					520
Magnesium			1,000			960			760		710					800
Potassium			560			540			510		490					510
Sodium			18,000			16,000			16,000		14,000					16,000
Metals (mg/L)																
Arsenic (ICP)		0.059						0.078							0.05	
Arsenic (HAA)		0.059						0.078							0.05	
Arsenic (GFAA)	0%	0.059	0.078	0.075		0.070 J	0.080 J	0.078	0.050	0.040	0.080 J	0.050	0.050	0%	0.05	0.032
Barium	0%	0.053	0.020	0.020		0.023	0.023	0.033	0.019	0.019	0.020	0.020	0.020	0%	0.038	0.020
Beryllium		0.005	< 0.0020	< 0.0020		< 0.0020		0.005	< 0.0020	< 0.0020	< 0.0020				0.005	< 0.0020
Cadmium		0.004	< 0.0040	< 0.0040		< 0.0040		0.004	< 0.0040	< 0.0040	< 0.0040				0.004	< 0.0040
Chromium		0.005	< 0.0050	< 0.0050		< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050				0.005	< 0.0050
Copper			< 0.0080	< 0.0080		< 0.0080			< 0.0080	< 0.0080	< 0.0080					< 0.0080
Cyanide		0.005	< 0.0050			< 0.0050		0.005	< 0.0050		< 0.0050				0.005	< 0.0050

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
8 of 18

Well ID:	GW-27	GW-27	GW-27A	GW-27	GW-27	GW-27A	GW-28	GW-28	GW-28A	GW-28	GW-28A	GW-303		GW-29	GW-29	
Date:	RPD	NRC	8/3/00	8/3/00	9/19/00	10/19/00	10/19/00	NRC	8/3/00	8/3/00	10/18/00	10/18/00	10/18/00	RPD	NRC	8/10/00
Lab:		Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL		Baselines	AWAL
													GW-28 Dup			
Iron			< 0.10			< 0.10			< 0.10		< 0.10					< 0.10
Lead		0.005	< 0.0050	< 0.0050		< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050			0.005		< 0.0050
Mercury		0.00026	< 0.0002	< 0.0002		< 0.0002		0.00038	< 0.0002	< 0.0002	< 0.0002			0.00038		< 0.0002
Molybdenum		0.65	0.74	0.77		0.57		0.46	0.34	0.35	0.32			0.37		0.21
Nickel		0.01	< 0.010	< 0.010		< 0.010		0.01	< 0.010	< 0.010	< 0.010			0.01		< 0.010
Selenium (HAA)		0.005						0.005						0.005		
Selenium (GFAA)	0%	0.005	< 0.0050	< 0.0050		< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050			0.005		< 0.0050
Silver		0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005		< 0.0050
Zinc			< 0.10	< 0.10		< 0.10			< 0.10	< 0.10	< 0.10					< 0.10
Ferric Iron (Fe ⁺³)																
Ferrous Iron (Fe ⁺²)																
Total Suspended Solids																
TOC						< 1.0					< 1.0					
TOX						< 0.050					< 0.050					
TDS			52,000	52,000		48,000			45,000		43,000					42,000
Anions (meq/L)			915.2			854.8			833.9		779.9					849.8
Cations (meq/L)			913.5			821.2			795.5		702.9					800.8
Balance (%)			0%			2%			2%		5%					3%
Volatiles (mg/L)																
Acetone		20	< 20	< 20		< 20		20	< 20		< 20			20		< 20
2-Butanone (MEK)		20	< 20	< 20		< 20		20	< 20		< 20			20		< 20
Carbon disulfide		2	< 2.0	< 2.0		< 2.0		2	< 2.0		< 2.0			2		< 2.0
Chloroform		2	< 2.0	< 2.0		< 2.0		2	< 2.0		< 2.0			2		< 2.0
1,2-Dichloroethane		2	< 2.0	< 2.0		< 2.0		2	< 2.0		< 2.0			2		< 2.0
Methylene chloride		2	< 2.0	< 2.0		< 2.0		2	< 2.0		< 2.0			2		< 2.0
1,1,2-Trichloroethane		50	< 50	< 50		< 50		50	< 50		< 50			50		< 50
Vinyl Chloride		50	< 50	< 50		< 50		50	< 50		< 50			50		< 50
Semi-Volatiles (mg/L)																
Benz(a)anthracene		100	< 100	< 100		< 100		100	< 100		< 100			100		< 100
Benzo(a)pyrene		100	< 100	< 100		< 100		100	< 100		< 100			100		< 100
Benzo(b)fluoranthene		100	< 100	< 100		< 100		100	< 100		< 100			100		< 100
Benzo(k)fluoranthene		100	< 100	< 100		< 100		100	< 100		< 100			100		< 100

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
10 of 18

Well ID:	GW-29A	GW-29	GW-29A	GW-57	GW-57	GW-57A	GW-57	GW-57A	GW-58	GW-58	GW-58A	GW-58A	GW-58	GW-302	GW-58A
Date:	8/10/00	11/13/00	11/13/00	NRC	8/3/00	8/3/00	10/18/00	10/18/00	NRC	8/7/00	8/7/00	9/19/00	10/18/00	10/18/00	10/18/00
Lab:	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
Analyte															
Field Parameters															
pH (std. units)	6.98	6.90	6.90		7.34	7.32	7.27	7.27		7.37	7.37	7.21	7.20	7.20	7.20
Temperature (°C)	13.01	12.72	12.72		13.22	13.44	13.69	13.69		12.93	12.93	13.19	13.91	13.91	13.91
SC (mmhos/cm)	71.90	76	76		73.40	81.40	80.60	80.60		75,700	75,700	66,900	75,700	75,700	75,700
Eh (millivolts)	104	186	186		138.0	125.0	150.0	150.0		131	131	126	121.0	121.0	121.0
Depth to Water (feet)	25.55	25.88	25.88		21.21	21.12	21.12	21.12		19.83	19.83	19.8	19.85	19.85	19.85
Specific Gravity															
Dissolved Oxygen	3.33	0.00	0.00		5.37	4.45	3.08	3.08		7.37	7.37	4.26	1.30	1.30	1.30
GW Elevation	4250.74	4250.41	4250.41		4250.71	4250.80	4250.80	4250.80		4251.32	4251.32	4251.35	4251.30	4251.30	4251.30
Anions (mg/L)															
Bromide		< 10					< 10						< 10	< 10	
Fluoride		4.7 J			5.7		3.4			3.7			3.0	3.0	
Chloride		23,000			26,000		25,000			28,000			26,000	29,000	
Nitrate		< 0.10			1.0		0.86			1.6			1.3	1.3	
Sulfate		3,700			4,500		4,400			3,300			3,200	3,700	
Nitrate/Nitrite		< 0.10			1.0		0.86			1.6			1.3	1.3	
Alkalinity															
Bicarbonate		280			120		120			130			120	130	
Carbonate		< 10			< 10		< 10			< 10			< 10	< 10	
Hydroxide															
Cations (mg/L)															
Calcium		490			810		800			560			550	560	
Magnesium		860			930		890			820			770	780	
Potassium		540			540		530			510			510	510	
Sodium		17,000			16,000		15,000			17,000			15,000	15,000	
Metals (mg/L)															
Arsenic (ICP)				0.05					0.12						
Arsenic (HAA)				0.05					0.12						
Arsenic (GFAA)	0.031	0.020		0.05	0.025	0.020	0.050 J	0.020	0.12	0.10	0.094		0.15 J	0.15 J	
Barium	0.020	0.026	0.026	0.048	0.014	0.012	0.020	0.021	0.048	0.020	0.019		0.023	0.022	0.022
Beryllium	< 0.0020	< 0.0020		0.005	< 0.0020	< 0.0020	< 0.0020		0.005	< 0.0020	< 0.0020		< 0.0020	< 0.0020	
Cadmium	< 0.0040	< 0.0040		0.004	< 0.0040	< 0.0040	< 0.0040		0.004	< 0.0040	< 0.0040		< 0.0040	< 0.0040	
Chromium	< 0.0050	0.04		0.005	< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	
Copper	< 0.0080	0.017			< 0.0080	< 0.0080	< 0.0080			< 0.0080	< 0.0080		0.015	0.013	
Cyanide	< 0.0050	< 0.0050		0.005	< 0.0050		< 0.0050		0.005	< 0.0050			< 0.0050	< 0.0050	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
11 of 18

Well ID:	GW-29A	GW-29	GW-29A	GW-57	GW-57	GW-57A	GW-57	GW-57A	GW-58	GW-58	GW-58A	GW-58A	GW-58	GW-302	GW-58A
Date:	8/10/00	11/13/00	11/13/00	NRC	8/3/00	8/3/00	10/18/00	10/18/00	NRC	8/7/00	8/7/00	9/19/00	10/18/00	10/18/00	10/18/00
Lab:	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
Iron	< 0.10	< 0.10			< 0.10		< 0.10			0.20			< 0.10	< 0.10	
Lead	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	
Mercury	< 0.0002	< 0.0002		0.00038	< 0.0002	< 0.0002	< 0.0002		0.00060	< 0.0002	< 0.0002		< 0.0002	< 0.0002	
Molybdenum	0.21	0.22		0.53	0.44	0.44	0.39		0.36	0.32	0.32		0.31	0.31	
Nickel	< 0.010	< 0.010		0.01	< 0.010	< 0.010	< 0.010		0.01	< 0.010	< 0.010		< 0.010	< 0.010	
Selenium (HAA)				0.005					0.005						
Selenium (GFAA)	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	< 0.0050
Silver	< 0.0050	< 0.0050		0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	
Zinc	< 0.10	< 0.10			< 0.10	< 0.10	< 0.10			< 0.10	< 0.10		< 0.10	< 0.10	
Ferric Iron (Fe ⁺³)															
Ferrous Iron (Fe ⁺²)															
Total Suspended Solids															
TOC		< 1.0					< 1.0						< 1.0	< 1.0	
TOX		< 0.050					< 0.050						< 0.050	< 0.050	
TDS		42,000			46,000		45,000			48,000			40,000	41,000	
Anions (meq/L)		727.9			826.3		796.1			857.6			799.2	894.1	
Cations (meq/L)		848.5			826.8		779.2			848.0			756.4	757.7	
Balance (%)		8%			0%		1%			1%			3%	8%	
Volatiles (mg/L)															
Acetone		< 20		20	< 20		< 20		20	< 20			< 20	< 20	
2-Butanone (MEK)		< 20		20	< 20		< 20		20	< 20			< 20	< 20	
Carbon disulfide		< 2.0		2	< 2.0		< 2.0		2	< 2.0			< 2.0	< 2.0	
Chloroform		< 2.0		2	< 2.0		< 2.0		2	< 2.0			< 2.0	< 2.0	
1,2-Dichloroethane		< 2.0		2	< 2.0		< 2.0		2	< 2.0			< 2.0	< 2.0	
Methylene chloride		< 2.0		2	< 2.0		< 2.0		2	< 2.0			< 2.0	< 2.0	
1,1,2-Trichloroethane		< 50		50	< 50		< 50		50	< 50			< 50	< 50	
Vinyl Chloride		< 50		50	< 50		< 50		50	< 50			< 50	< 50	
Semi-Volatiles (mg/L)															
Benz(a)anthracene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	
Benzo(a)pyrene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	
Benzo(b)fluoranthene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	
Benzo(k)fluoranthene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
12 of 18

	Well ID: GW-29A	GW-29	GW-29A	GW-57	GW-57	GW-57A	GW-57	GW-57A	GW-58	GW-58	GW-58A	GW-58A	GW-58	GW-302	GW-58A
	Date: 8/10/00	11/13/00	11/13/00	NRC	8/3/00	8/3/00	10/18/00	10/18/00	NRC	8/7/00	8/7/00	9/19/00	10/18/00	10/18/00	10/18/00
	Lab: AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	Baselines	AWAL	AWAL	AWAL	AWAL	AWAL	AWAL
Chrysene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	
Dibenz(a,h)anthracene		< 100		100	< 100		< 100		100	< 100			< 100	< 100	
Diethyl phthalate		< 4.0		4	< 4.0		< 4.0		4	< 4.0			< 4.0	< 4.0	
2-Methylnaphthalene		< 4.0		4	< 4.0		< 4.0		4	< 4.0			< 4.0	< 4.0	
Naphthalene		< 4.0		4	< 4.0		< 4.0		4	< 4.0			< 4.0	< 4.0	
Pesticides (mg/L)															
Chlordane		< 10		10	< 10		< 10		10	< 10			< 10	< 10	

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
13 of 18

Well ID:	GW-60	GW-60	GW-60	GW-603		GW-60A	GW-60	GW-63	GW-63	GW-776		GW-63	GW-63	GW-707		GW-63A	Trip Blank
Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/18/00	10/18/00	NRC	8/1/00	8/1/00	RPD	9/19/00	10/5/00	10/5/00	RPD	10/5/00	8/1/00
Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	Baselines	AWAL	AWAL		AWAL	AWAL	AWAL		AWAL	AWAL
					GW-60 Dup										GW-63 Dup		
Analyte																	
Field Parameters																	
pH (std. units)		7.24	7.11	7.11		7.20	7.20		7.36	7.36		7.28	7.19	7.19		7.19	--
Temperature (°C)		13.93	13.89	13.89		13.91	13.91		14.11	14.11		14.13	14.35	14.35		14.35	--
SC (mmhos/cm)		64,500	61,600	61,600		75,700	75,700		55,500	55,500		54,500	59,500	59,500		59,500	--
Eh (millivolts)		94.0	114.0	114.0		121.0	121.0		121.0	121.0		115.0	148.0	148.0		148.0	--
Depth to Water (feet)		23.72	23.74	23.74		23.70	23.70		20.74	20.74		20.59	20.69	20.69		20.69	--
Specific Gravity																	--
Dissolved Oxygen		4.8	0.51	0.51		1.30	1.30		10.97	10.97		3.4	3.65	3.65		3.65	--
GW Elevation		4250.93	4250.91	4250.91		4250.95	4250.95		4251.23	4251.23		4251.38	4251.28	4251.28		4251.28	--
Anions (mg/L)																	
Bromide							< 10						64	49	13%		--
Fluoride		3.2					2.5		3.1	3.0	2%		3.7	3.8	1%		--
Chloride		25,000					24,000		22,000	22,000	0%		21,000	20,000	2%		--
Nitrate		0.54					0.47		0.23	0.22	2%		0.28	0.27	2%		--
Sulfate		3,200					3,200		2,900	2,800	2%		2,600	2,700	2%		--
Nitrate/Nitrite		0.54					0.47		0.23	0.22	2%		0.28	0.27	2%		--
Alkalinity																	
Bicarbonate		180					180		160	160	0%		160	160	0%		--
Carbonate		< 10					< 10		< 10	< 10			< 10	< 10	--		--
Hydroxide																	--
Cations (mg/L)																	
Calcium		470					490		420	410	1%		390	380	1%		--
Magnesium		670					680		650	660	1%		620	610	1%		--
Potassium		460					480		440	440	0%		460	460	0%		--
Sodium		15,000					14,000		13,000	14,000	4%		12,000	12,000	0%		--
Metals (mg/L)																	
Arsenic (ICP)	0.05							0.05									--
Arsenic (HAA)	0.05							0.05									--
Arsenic (GFAA)	0.05	0.013					0.030 J	0.05	0.012	0.024	33%		0.040	0.040	0%		--
Barium	0.037	0.014	< 0.0040	< 0.0040		0.018	0.020	0.097	0.0250	0.026	2%	< 0.0040	0.033	0.026	12%	0.031	--
Beryllium	0.005	< 0.0020					< 0.0020	0.005	< 0.0020	< 0.0020			< 0.0020	< 0.0020			--
Cadmium	0.004	< 0.0040					< 0.0040	0.004	< 0.0040	< 0.0040			< 0.0040	< 0.0040			--
Chromium	0.005	< 0.0050	< 0.0050	< 0.0050			< 0.0050	0.005	< 0.0050	< 0.0050		< 0.0050	< 0.0050	< 0.0050			--
Copper		< 0.0080					0.013		< 0.0080	< 0.0080			< 0.0080	< 0.0080			--
Cyanide	0.005	< 0.0050					< 0.0050	0.005	< 0.0050	< 0.0050			< 0.0050	< 0.0050			--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11c.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
14 of 18

Well ID:	GW-60	GW-60	GW-60	GW-603		GW-60A	GW-60	GW-63	GW-63	GW-776		GW-63	GW-63	GW-707		GW-63A	Trip Blank
Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/18/00	10/18/00	NRC	8/1/00	8/1/00	RPD	9/19/00	10/5/00	10/5/00	RPD	10/5/00	8/1/00
Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	Baselines	AWAL	AWAL		AWAL	AWAL	AWAL		AWAL	AWAL
					GW-60 Dup.										GW-63 Dup		
Iron		< 0.10					0.10		< 0.10	< 0.10			0.10	0.20	33%		--
Lead	0.005	< 0.0050					< 0.0050	0.005	< 0.0050	< 0.0050			< 0.0050	< 0.0050			--
Mercury	0.00049	< 0.0002					< 0.0002	0.00046	< 0.0002	< 0.0002			< 0.0002	< 0.0002			--
Molybdenum	0.31	0.22					0.21	0.31	0.22	0.22	0%		0.21	0.26	11%		--
Nickel	0.01	< 0.010					< 0.010	0.01	< 0.010	< 0.010			< 0.010	< 0.010			--
Selenium (HAA)	0.015							0.005									--
Selenium (GFAA)	0.015	< 0.0050					< 0.0050	0.005	< 0.0050	< 0.0050			< 0.0050	< 0.0050			--
Silver	0.005	< 0.0050					< 0.0050	0.005	< 0.0050	< 0.0050			< 0.0050	< 0.0050			--
Zinc		< 0.10					< 0.10		< 0.10	< 0.10			< 0.10	< 0.10			--
Ferric Iron (Fe ⁺³)																	--
Ferrous Iron (Fe ⁺²)																	--
Total Suspended Solids																	--
TOC			< 1.0	< 1.0			< 1.0					< 1.0	< 1.0	< 1.0			--
TOX							< 0.050						< 0.050	< 0.050			--
TDS		39,000					43,000		35,000	34,000	1%		34,000	32,000	3%		--
Anions (meq/L)		772.1							681.2	679.1	0%		646.9	620.8	2%		--
Cations (meq/L)		742.9							651.2	695.0	3%		604.2	602.9	0%		--
Balance (%)		2%							2%	1%			3%	1%			--
Volatiles (mg/L)																	
Acetone	20	< 20					< 20	20	< 20	< 20			< 20	< 20			20
2-Butanone (MEK)	20	< 20					< 20	20	< 20	< 20			< 20	< 20			20
Carbon disulfide	2	< 2.0					< 2.0	2	< 2.0	< 2.0			< 2.0	< 2.0			2
Chloroform	2	< 2.0					< 2.0	2	< 2.0	< 2.0			< 2.0	< 2.0			2
1,2-Dichloroethane	2	< 2.0					< 2.0	2	< 2.0	< 2.0			< 2.0	< 2.0			2
Methylene chloride	2	< 2.0					< 2.0	2	< 2.0	< 2.0			< 2.0	< 2.0			2
1,1,2-Trichloroethane	50	< 50					< 50	50	< 50	< 50			< 50	< 50			50
Vinyl Chloride	50	< 50					< 50	50	< 50	< 50			< 50	< 50			50
Semi-Volatiles (mg/L)																	
Benz(a)anthracene	100	< 100					< 100	100	< 100	< 100			< 100	< 100			--
Benzo(a)pyrene	100	< 100					< 100	100	< 100	< 100			< 100	< 100			--
Benzo(b)fluoranthene	100	< 100					< 100	100	< 100	< 100			< 100	< 100			--
Benzo(k)fluoranthene	100	< 100					< 100	100	< 100	< 100			< 100	< 100			--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
15 of 18

	Well ID:	GW-60	GW-60	GW-60	GW-603		GW-60A	GW-60	GW-63	GW-63	GW-776		GW-63	GW-63	GW-707		GW-63A	Trip Blank
	Date:	NRC	8/1/00	9/19/00	9/19/00	RPD	10/18/00	10/18/00	NRC	8/1/00	8/1/00	RPD	9/19/00	10/5/00	10/5/00	RPD	10/5/00	8/1/00
	Lab:	Baselines	AWAL	AWAL	AWAL		AWAL	AWAL	Baselines	AWAL	AWAL		AWAL	AWAL	AWAL		AWAL	AWAL
		GW-60 Dup											GW-63 Dup					
Chrysene		100	< 100				< 100		100	< 100	< 100			< 100	< 100			--
Dibenz(a,h)anthracene		100	< 100				< 100		100	< 100	< 100			< 100	< 100			--
Diethyl phthalate		4	< 4.0				< 4.0		4	< 4.0	< 4.0			< 4.0	< 4.0			--
2-Methylnaphthalene		4	< 4.0				< 4.0		4	< 4.0	< 4.0			< 4.0	< 4.0			--
Naphthalene		4	< 4.0				< 4.0		4	< 4.0	< 4.0			< 4.0	< 4.0			--
Pesticides (mg/L)																		
Chlordane		10	< 10				< 10		10	< 10	< 10			< 10	< 10			--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11c.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
16 of 18

Well ID:	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Date:	8/3/00	8/7/00	8/8/00	8/10/00
Lab:	AWAL	AWAL	AWAL	AWAL
<hr/>				
Analyte				
Field Parameters				
pH (std. units)	--	--	--	--
Temperature (°C)	--	--	--	--
SC (mmhos/cm)	--	--	--	--
Eh (millivolts)	--	--	--	--
Depth to Water (feet)	--	--	--	--
Specific Gravity	--	--	--	--
Dissolved Oxygen	--	--	--	--
GW Elevation	--	--	--	--
Anions (mg/L)				
Bromide	--	--	--	--
Fluoride	--	--	--	--
Chloride	--	--	--	--
Nitrate	--	--	--	--
Sulfate	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Alkalinity	--	--	--	--
Bicarbonate	--	--	--	--
Carbonate	--	--	--	--
Hydroxide	--	--	--	--
Cations (mg/L)				
Calcium	--	--	--	--
Magnesium	--	--	--	--
Potassium	--	--	--	--
Sodium	--	--	--	--
Metals (mg/L)				
Arsenic (ICP)	--	--	--	--
Arsenic (HAA)	--	--	--	--
Arsenic (GFAA)	--	--	--	--
Barium	--	--	--	--
Beryllium	--	--	--	--
Cadmium	--	--	--	--
Chromium	--	--	--	--
Copper	--	--	--	--
Cyanide	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
17 of 18

Well ID:	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Date:	8/3/00	8/7/00	8/8/00	8/10/00
Lab:	AWAL	AWAL	AWAL	AWAL
<hr/>				
Iron	--	--	--	--
Lead	--	--	--	--
Mercury	--	--	--	--
Molybdenum	--	--	--	--
Nickel	--	--	--	--
Selenium (HAA)	--	--	--	--
Selenium (GFAA)	--	--	--	--
Silver	--	--	--	--
Zinc	--	--	--	--
Ferric Iron (Fe ⁺³)	--	--	--	--
Ferrous Iron (Fe ⁺²)	--	--	--	--
Total Suspended Solids	--	--	--	--
TOC	--	--	--	--
TOX	--	--	--	--
TDS	--	--	--	--
Anions (meq/L)	--	--	--	--
Cations (meq/L)	--	--	--	--
Balance (%)	--	--	--	--
Volatiles (mg/L)				
Acetone	20	20	20	20
2-Butanone (MEK)	20	20	20	20
Carbon disulfide	2	2	2	2
Chloroform	2	2	2	2
1,2-Dichloroethane	2	2	2	2
Methylene chloride	2	2	2	2
1,1,2-Trichloroethane	50	50	50	50
Vinyl Chloride	50	50	50	50
Semi-Volatiles (mg/L)				
Benz(a)anthracene	--	--	--	--
Benzo(a)pyrene	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-2 Part 2
11e.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
18 of 18

Well ID:	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Date:	8/3/00	8/7/00	8/8/00	8/10/00
Lab:	AWAL	AWAL	AWAL	AWAL
Chrysene	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--
Diethyl phthalate	--	--	--	--
2-Methylnaphthalene	--	--	--	--
Naphthalene	--	--	--	--
Pesticides (mg/L)				
Chlordane	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Enbvirocare of Utah
11c.(2) Quarterly Monitoring Program
First and Second Quarters 2000
1 of 9

Well ID:	GW-19A	GW-19A	GW-900	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A	GW-19A
	NRC													
Date:	Baseline	1/28/00	1/28/00	2/14/00	3/2/00	3/2/00	3/2/00	3/2/00	3/2/00	4/14/00	4/21/00	5/9/00	5/11/00	5/22/00
Lab:		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Envirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
2 of 9

Well ID:	GW-19A	GW-19A	GW-19A	GW-20 NRC	GW-20	GW-20	GW-20	GW-20	GW-20	GW-20	GW-24 NRC	GW-24	GW-24
Date:	5/22/00	5/22/00	5/22/00	Baseline	2/15/00	5/16/00	5/16/00	5/23/00	5/23/00	5/23/00	Baseline	2/17/00	2/17/00
Lab:	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer
	Re-analysis	Re-analysis	Re-analysis				Re-analysis		Re-analysis			Re-analysis	
Analyte													
Radiologics (pCi/L)													
Radium-226	--	--	--	5.67	1.3 ± 0.48	0.82 ± 0.49	--	--	--	--	5.47	1.1 ± 0.55	--
Radium-228	--	--	--		2.2 ± 0.44	1.4 ± 0.41	--	--	--	--		2.0 ± 0.43	--
Thorium-230	--	--	--	1.04	-1.8 ± 1.4	2.6 ± 0.87	-1.5 ± 1.6	0.69 ± 0.91	-0.050 ± 0.44		1.76	0.053 ± 0.75	-0.80 ± 0.65
Thorium-232	2.8 ± 0.72	2.2 ± 0.92	-0.12 ± 0.41	0.0	0.27 ± 0.48	0.11 ± 0.67	-0.1 ± 0.47	--	--	--	0.0	0.77 ± 0.34	0.58 ± 0.31
Uranium (mg/L)	--	--	--	0.013	0.01	0.0094	--	--	--	--	0.02	0.014	--
Flourine (mg/L)	--	--	--	0.85	0.62	--	--	--	--	--	0.83	0.72	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Envirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
3 of 9

Well ID:	GW-24	GW-24	GW-24	GW-24	GW-24	GW-24A	GW-24A	GW-24A	GW-24A	GW-24A	GW-24A
Date:	2/17/00	2/17/00	4/24/00	5/18/00	5/18/00	5/18/00	5/18/00	5/18/00	5/18/00	5/18/00	5/18/00
Lab:	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
	Re-analysis	Re-analysis			Re-analysis		Re-analysis	Re-analysis	Re-analysis	Re-analysis	Re-analysis
Analyte											
Radiologies (pCi/L)											
Radium-226	--	--	--	0.68 ± 0.44	--	--	--	--	--	--	--
Radium-228	--	--	--	2 ± 0.43	--	--	--	--	--	--	--
Thorium-230	-1.4 ± 0.76	-1.5 ± 1.6	--	3.9 ± 1	4.1 ± 1.7	0.85 ± 1.3	-0.19 ± 1.3	-1.7 ± 0.99	--	--	--
Thorium-232	0.0072 ± 0.52	0.32 ± 0.29	0.010 ± 0.38	0 ± 0.5	0.37 ± 0.64	0.60 ± 0.53	0.31 ± 0.54	0.29 ± 0.41	0.14 ± 0.54	0.14 ± 0.55	0.12 ± 0.39
Uranium (mg/L)	--	--	--	0.015	--	--	--	--	--	--	--
Flourine (mg/L)	--	--	--	0.74	--	--	--	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Enbvirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
4 of 9

Well ID:	GW-25	GW-25	GW-25	GW-25	GW-700	GW-26	GW-26	GW-26	GW-26	GW-26	GW-26	GW-601
	NRC					NRC						
Date:	Baseline	2/15/00	5/16/00	5/16/00	5/16/00	Baseline	2/15/00	4/24/00	4/24/00	4/24/00	4/24/00	4/24/00
Lab:		Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
					Re-analysis	GW-25 Dup			Re-analysis	Re-analysis	Re-analysis	GW-26 Dup.
Analyte												
Radiologics (pCi/L)												
Radium-226	5.36	1.8 ± 0.53	1.7 ± 0.68	--	1.1 ± 0.56	4.97	0.84 ± 0.4	--	--	--	--	--
Radium-228		2.5 ± 0.45	1.9 ± 0.42	--	2.2 ± 0.44		1.7 ± 0.43	--	--	--	--	--
Thorium-230	2.6	-1 ± 1.7	4.8 ± 1.1	-1.8 ± 1.6	0.16 ± 0.69	1.57	-1.7 ± 4.6	--	--	--	--	--
Thorium-232	0.0	-0.42 ± 0.88	0.52 ± 0.83	-0.07 ± 0.49	-0.18 ± 0.45	0.0	0.83 ± 4.3	--	0.85 ± 0.91	0.49 ± 1.0	0.69 ± 0.98	-0.060 ± 0.27
Uranium (mg/L)	0.13	0.11	0.09	--	0.094	0.033	0.027	0.028	0.028	0.028	0.028	0.026
Flourine (mg/L)	1.04	0.87	--	--	--	0.98	0.68	--	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Enbvirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
5 of 9

Well ID:	GW-26	GW-26	GW-26	GW-26	GW-27 NRC	GW-27	GW-27	GW-27	GW-27	GW-28 NRC	GW-28	GW-28	GW-28	GW-28
Date:	5/16/00	5/16/00	5/16/00	5/16/00	Baseline	2/16/00	5/15/00	5/22/00	Baseline	2/15/00	3/2/00	3/2/00	3/2/00	3/2/00
Lab:	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer
		Re-analysis	Re-analysis	Re-analysis								Re-analysis	Re-analysis	
Analyte														
Radiologies (pCi/L)														
Radium-226	0.42 ± 0.41	--	--	--	3.85	0.8 ± 0.38	0.45 ± 0.41	--	3.59	0.17 ± 0.36	--	--	--	--
Radium-228	1.4 ± 0.82	--	--	--	4.62	1.8 ± 0.43	1.9 ± 0.43	--	1.16	1.3 ± 0.42	--	--	--	--
Thorium-230	0.20 ± 0.44	-0.10 ± 1.3	--	--	0.0	0.55 ± 1.5	-1.4 ± 1.6	--	0.0	0.017 ± 4.4	--	--	--	--
Thorium-232	-0.21 ± 0.40	0.27 ± 0.69	1.6 ± 1.1	-0.24 ± 0.42	0.0	0.45 ± 0.6	0.76 ± 0.86	0 ± 0.7	0.0	-0.42 ± 1.9	--	--	--	--
Uranium (mg/L)	0.025	--	--	--	0.030	0.028	0.033	--	0.011	0.0089	0.013	0.010	0.011	
Flourine (mg/L)	0.67	--	--	--	1.18	0.96	0.98	--	1.02	0.88	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Envirocare of Utah
 11e.(2) Quarterly Monitoring Program
 First and Second Quarters 2000
 6 of 9

Well ID:	GW-28	GW-28	GW-28	GW-28	GW-29 NRC	GW-29	GW-29	GW-29	GW-29	GW-29	GW-29	GW-29
Date:	3/2/00	3/2/00	3/2/00	5/15/00	Baseline	2/16/00	2/16/00	4/20/00	4/20/00	4/20/00	5/23/00	5/23/00
Lab:	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
	Re-analysis	Re-analysis	Re-analysis			Re-analysis					Re-analysis	
Analyte												
Radiologics (pCi/L)												
Radium-226	--	--	--	0.93 ± 0.51	6.15	0.91 ± 0.43	--	--	--	--	0.92 ± 0.5	--
Radium-228	--	--	--	1.6 ± 0.42	2.28	2.8 ± 0.46	--	--	--	--	2.2 ± 0.44	--
Thorium-230	--	--	--	-2.1 ± 1.4		-2.5 ± 1.5	--	--	--	--	6.9 ± 1.3	-2.5 ± 2
Thorium-232	--	--	--	0.070 ± 0.36	0.0	1 ± 0.73	0.12 ± 0.63	0.30 ± 0.54	0.46 ± 0.53	0.070 ± 0.47	-0.11 ± 0.42	-0.13 ± 0.62
Uranium (mg/L)	0.011	0.010	0.011	0.012	0.040	0.019	0.019	--	--	--	0.021	--
Flourine (mg/L)	--	--	--	0.90	0.93	0.82	0.82	--	--	--	0.83	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part I

Envirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
7 of 9

Well ID:	GW-29	GW-29	GW-29	GW-29	GW-29	GW-29	GW-57	GW-57	GW-57	GW-58	GW-58	GW-58
							NRC			NRC		
Date:	5/23/00	5/23/00	5/23/00	5/23/00	5/23/00	5/23/00	Baseline	2/15/00	5/15/00	Baseline	2/14/00	5/11/00
Lab:	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer		Barringer	Barringer
	Verification	Re-analysis	Re-analysis	Re-analysis	Re-analysis	Re-analysis						
Analyte												
Radiologics (pCi/L)												
Radium-226	--	--	--	--	--	--	3.39	0.59 ± 0.35	0.53 ± 0.47	5.15	0.91 ± 0.44	0.56 ± 0.44
Radium-228	--	--	--	--	--	--	3.89	1.2 ± 0.41	0.95 ± 0.4	0.84	1.7 ± 0.43	1.6 ± 0.42
Thorium-230	--	--	--	--	--	--	0.18	0.59 ± 4.7	-0.24 ± 1.1	0.0	-1.7 ± 3.5	-1.2 ± 1.2
Thorium-232	4.2 ± 1.2	0.85 ± 0.98	0.79 ± 0.8	0.9 ± 0.76	0.35 ± 0.76	0.4 ± 0.66	0.0075	-0.061 ± 3.9	0.22 ± 0.51	0.036	0.78 ± 2.1	0.53 ± 0.49
Uranium (mg/L)	--	--	--	--	--	--	0.98	0.005	0.014	1.11	0.036	0.042
Flourine (mg/L)	--	--	--	--	--	--		0.79	0.81		0.9	0.95

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part I

Enbvirocare of Utah
11e.(2) Quarterly Monitoring Program
First and Second Quarters 2000
8 of 9

Well ID:	GW-910	GW-58	GW-60 NRC	GW-60	GW-60	GW-60	GW-60	GW-60	GW-60	GW-60	GW-888
Date:	5/11/00	5/22/00	Baseline	2/14/00	2/14/00	5/11/00	5/22/00	5/22/00	5/22/00	5/22/00	5/22/00
Lab:	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
GW-58 Dup.			Re-analysis				Re-analysis		Re-analysis	Re-analysis	GW-60 Dup.
Analyte											
Radiologics (pCi/L)											
Radium-226	0.57 ± 0.41	--	4.07	0.55 ± 0.38	--	1.0 ± 0.58	--	--	--	--	--
Radium-228	1.6 ± 0.42 J	--		2.1 ± 0.44	--	2.1 ± 0.44 J	--	--	--	--	--
Thorium-230	1.5 ± 2.0	--	0.0	0.38 ± 1.9	2.0 ± 1.7	-3.4 ± 1.7	0.91 ± 0.56	-0.74 ± 1.4	-0.91 ± 1.2	-2.5 ± 2	-2.2 ± 1.9
Thorium-232	0.84 ± 0.80	-0.01 ± 0.43	0.0	0.032 ± 1	0.15 ± 0.67	0.17 ± 0.45	0.61 ± 0.88	0.9 ± 0.72	0.14 ± 0.48	-0.12 ± 0.33	-0.2 ± 0.77
Uranium (mg/L)	0.041	--	0.02	0.015		0.015					
Flourine (mg/L)	0.90 J	--	0.94	0.64	--	0.68 J	--	--	--	--	--

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 1

Enbvirocare of Utah
 11e.(2) Quarterly Monitoring Program
 First and Second Quarters 2000
 9 of 9

Well ID:	GW-63	GW-63	GW-63
	NRC		
Date:	Baseline	2/14/00	5/11/00
Lab:		Barringer	Barringer

Analyte			
Radiologics (pCi/L)			
Radium-226	4.13	0.34 ± 0.39	0.43 ± 0.42
Radium-228		1.9 ± 0.44	2.3 ± 0.44
Thorium-230	2.62	-2 ± 4	-4.3 ± 1.6
Thorium-232	0.0	-0.086 ± 2.8	0.29 ± 0.43
Uranium (mg/L)	0.011	0.011	0.0096
Flourine (mg/L)	1.08	0.73	0.77 J

< - Not detected above PQL

-- - Not sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
1 of 9

Well ID:	GW-19A NRC	GW-19AA	GW-19AB	GW-19A	GW-19A	GW-19A	GW-19AA	GW-601	GW-20 NRC	GW-20A	GW-20A
Date:	Baseline	8/1/00	8/1/00	8/1/00	8/1/00	10/4/00	10/4/00	10/4/00	Baseline	8/8/00	8/8/00
Lab:		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer
	Verification	Verification	Re-analysis	Verification	W-19AA Dup	Verification	Re-analysis				
Analyte											
Radiologics (pCi/L)											
Radium-226	3.28 ± 0.6	--	--	-0.017 ± 0.38	--	-0.061 ± 0.27	--	--	5.67 ± 0.6	--	--
Radium-228	2.29 ± 1.0	--	--	0.61 ± 0.49	--	0.96 ± 0.58	--	--	1.04 ± 1.0	--	--
Thorium-230	0.0 ± 1.0	-0.0015 ± 0.61	0.42 ± 0.67	-0.38 ± 1.6	0.72 ± 0.60	-2.1 ± 0.76	--	--	0.0 ± 1.0	0.18 ± 0.91	-0.26 ± 0.29
Thorium-232	0.0051	--	--	2.5 ± 1.3	-0.039 ± 0.37	0.067 ± 0.28	--	--	0.013	--	0.0063 ± 0.21
Uranium (mg/L)	1.12	--	--	0.0049	--	0.0029	--	--	0.85	--	--
Flourine (mg/L)	1.1	1.1	0.99	--	1.1	1.2	1.2	--	--	--	--

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
2 of 9

Well ID:	GW-20	GW-20	GW-24 NRC	GW-24A	GW-24	GW-24	GW-24A	GW-402	GW-24
Date:	8/8/00	10/23/00	Baseline	8/8/00	8/8/00	8/8/00	10/23/00	10/23/00	10/23/00
Lab:	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
Verification				Re-analysis			GW-24A Dup.		
Analyte									
Radiologics (pCi/L)									
Radium-226	1.5 ± 0.78	1.6 ± 0.57	5.47 ± 0.6	--	1.2 ± 0.73	--	--	--	0.84 ± 0.45
Radium-228	1.6 ± 0.41	1.5 ± 0.4	--	--	2.4 ± 0.43	--	--	--	1.7 ± 0.4
Thorium-230	-1.6 ± 1.4	0.16 ± 0.74	1.76 ± 1.0	-0.89 ± 1.8	-0.76 ± 2.4	-0.39 ± 0.31	-0.17 ± 0.86	-1.0 ± 1.1	-0.13 ± 0.28
Thorium-232	-0.099 ± 0.56	0.3 ± 0.42	0.0 ± 1.0	--	0.43 ± 1.2	-0.48 ± 0.30	-0.11 ± 0.38	0.089 ± 0.38	-0.35 ± 0.18
Uranium (mg/L)	0.011	0.0091	0.02	--	0.016	--	--	--	0.018
Flourine (mg/L)	0.65	0.1	0.83	--	0.78	--	--	--	0.1

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
3 of 9

Well ID:	GW-25 NRC	GW-25	GW-25	GW-25	GW-25	GW-706	GW-25	GW-26 NRC	GW-26A	GW-26	GW-26
Date:	Baseline	8/7/00	8/7/00	8/7/00	9/19/00	9/19/00	10/19/00	Baseline	8/7/00	8/7/00	8/7/00
Lab:		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer
			Re-analysis	Re-analysis		W-25 Dup			Verification		Re-analysis
Analyte											
Radiologics (pCi/L)											
Radium-226	5.36 ± 0.6	2.4 ± 0.86	--	--	--	--	1.9 ± 0.64	4.97 ± 0.6	--	0.58 ± 0.55	--
Radium-228		2.3 ± 0.43	--	--	--	--	1.9 ± 0.42		--	1.6 ± 0.41	--
Thorium-230	2.60 ± 1.0	0.27 ± 1.2	-0.88 ± 1.3	0.012 ± 0.41	--	--	-4.0 ± 1.2	1.57 ± 1.0	--	-0.018 ± 1.7	-3.7 ± 2.5
Thorium-232	0.0 ± 1.0	0.71 ± 0.75	0.28 ± 0.63	0.13 ± 0.30	--	--	0.29 ± 0.49	0.0 ± 1.0	-0.0033 ± 1.3	0.23 ± 1.2	-0.094 ± 1.1
Uranium (mg/L)	0.13	0.091	--	--	--	--	0.10	0.033	0.031	0.028	--
Flourine (mg/L)	1.04	0.87	--	--	--	--	< 0.1	0.98	--	0.66	--

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
4 of 9

Well ID:	GW-26	GW-26	GW-27 NRC	GW-27A	GW-27B	GW-27	GW-27	GW-27	GW-27	GW-27	GW-27
Date:	8/7/00	10/23/00	Baseline	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	9/19/00
Lab:	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
Re-analysis						Re-analysis	Re-analysis	Re-analysis	Re-analysis		
Analyte											
Radiologics (pCi/L)											
Radium-226	--	0.67 ± 0.46	3.85 ± 0.6	--	--	0.39 ± 0.48	--	--	--	--	--
Radium-228	--	1.9 ± 0.59	--	--	--	0.46 ± 0.47	--	--	--	--	--
Thorium-230	-0.033 ± 0.31	-2.6 ± 0.99	4.62 ± 1.0	--	--	-3.7 ± 1.6	--	--	--	--	--
Thorium-232	-0.16 ± 0.25	0.11 ± 0.4	0.0 ± 1.0	0.38 ± 0.70	-0.19 ± 0.55	0.23 ± 0.69	--	--	--	--	--
Uranium (mg/L)	--	0.030	0.030	0.035	--	0.037	0.021	0.028	0.028	0.021	0.033
Flourine (mg/L)	--	< 0.1	1.18	--	--	0.94	--	--	--	--	--

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
5 of 9

Well ID:	GW-27A	GW-27A	GW-27A	GW-27	GW-27	GW-28 NRC	GW-28	GW-28	GW-28	GW-28A	GW-28B	GW-28A
Date:	10/19/00	10/19/00	10/19/00	10/19/00	10/19/00	Baseline	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	10/18/00
Lab:	Barringer	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer
	Re-analysis	Re-analysis	Re-analysis	Re-analysis	Re-analysis				Re-analysis	Re-analysis		
Analyte												
Radiologies (pCi/L)												
Radium-226	--	--	--	0.28 ± 0.36	--	3.59 ± 0.6	-0.028 ± 0.36	--	--	--	--	--
Radium-228	--	--	--	1 ± 0.57	--	1.16 ± 1.0	0.88 ± 0.49	--	--	--	--	--
Thorium-230	--	--	--	0.43 ± 0.4	--	0.0 ± 1.0	-0.85 ± 1.1	--	--	--	--	--
Thorium-232	--	--	--	-0.81 ± 0.28	--	0.41 ± 0.67	--	--	--	0.33 ± 0.58	--	--
Uranium (mg/L)	0.035	0.035	0.030	0.027	0.028	0.011	0.012	0.0082	0.0081	0.012	0.012	0.0070
Flourine (mg/L)	--	--	--	< 0.1	--	1.02	0.85	--	--	--	--	--

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
6 of 9

< - Not detected above PQL
 -- - Not Sampled
 Outlined results indicate exceedances
 J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
7 of 9

Well ID:	GW-57	GW-58 NRC	GW-58	GW-58	GW-58	GW-58	GW-58	GW-58	GW-58 A	GW-58 B	GW-58	GW-705	GW-58				
Date:	10/18/00	Baseline	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	8/3/00	9/19/00	9/19/00	10/18/00				
Lab:	Barringer		Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer	Barringer				
Re-analysis										Re-analysis		Re-analysis		Re-analysis		GW-58 Dup.	
Analyte																	
Radiologics (pCi/L)																	
Radium-226	0.13 ± 0.34	5.15 ± 0.6	0.46 ± 0.51	--	--	--	--	--	--	--	--	--	1 ± 0.4				
Radium-228	1.4 ± 1.1		0.86 ± 0.5	--	--	--	--	--	--	--	--	--	1.8 ± 0.6				
Thorium-230	-0.52 ± 0.56	0.84 ± 1.0	0.23 ± 0.56	--	--	--	--	--	--	--	--	--	0 ± 0.73				
Thorium-232	-0.26 ± 0.29	0.0 ± 1.0	0.51 ± 0.33	--	--	--	--	-0.045 ± 0.54	-0.31 ± 0.33	--	--	--	0.3 ± 0.46				
Uranium (mg/L)	0.0032	0.036	0.035	0.035	0.032	0.031	0.046	0.042	--	0.034	0.038	0.038					
Flourine (mg/L)	0.81	1.11	0.9	--	--	--	--	--	--	--	--	--	0.93				

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
11.(2) Quarterly Monitoring Program
Third and Fourth Quarters 2000
8 of 9

Well ID:	GW-58	GW-58	GW-302	GW-58 A	GW-60 NRC	GW-60	GW-60	GW-60	GW-63 NRC	GW-63	GW-63
Date:	10/18/00	10/18/00	10/18/00	10/18/00	Baseline	8/1/00	8/1/00	10/18/00	Baseline	8/1/00	8/1/00
Lab:	Barringer	Barringer	Barringer	Barringer		Barringer	Barringer	Barringer		Barringer	Barringer
	Re-analysis	Re-analysis	GW-58 Dup.			Re-analysis				Re-analysis	
Analyte											
Radiologics (pCi/L)											
Radium-226	--	--	0.67 ± 0.46	--	4.07 ± 0.6	1.6 ± 0.52	--	1.2 ± 0.47	4.13 ± 0.6	0.70 ± 0.50	--
Radium-228	--	--	1.7 ± 0.59	--	0.0 ± 1.0	0.32 ± 1.4	--	2.3 ± 0.61	2.62 ± 1.0	2.0 ± 0.53	--
Thorium-230	--	--	0.31 ± 0.8	--	0.0 ± 1.0	-0.63 ± 1.5	-0.7 ± 0.87	2.62 ± 1.0	-1.5 ± 1.6	0.49 ± 1.4	--
Thorium-232	--	--	-0.2 ± 0.28	--	0.0 ± 1.0	1.3 ± 0.91	-0.31 ± 0.64	0.096 ± 0.4	0.0 ± 1.0	0.36 ± 0.87	0.017 ± 0.72
Uranium (mg/L)	0.033	0.033	0.035	0.026	0.02	0.019	--	0.016	0.011	0.011	--
Flourine (mg/L)	--	--	0.93	--	0.94	0.64	--	0.66	1.08	0.58	--

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

Table N-3 Part 2

Envirocare of Utah
 11.(2) Quarterly Monitoring Program
 Third and Fourth Quarters 2000
 9 of 9

Well ID:	GW-776	GW-63	GW-707
Date:	8/1/00	10/5/00	10/5/00
Lab:	Barringer	Barringer	Barringer
	GW-63 Dup.	GW-63 Dup.	
Analyte			
Radiologies (pCi/L)			
Radium-226	0.19 ± 0.41	0.12 ± 0.3	0.2 ± 0.34
Radium-228	1.8 ± 0.53	1.1 ± 0.38	1.5 ± 0.4
Thorium-230	0.048 ± 1.2	-1.1 ± 0.65	-1.2 ± 0.75
Thorium-232	0.093 ± 0.56	-0.57 ± 0.32	-0.25 ± 0.33
Uranium (mg/L)	0.011	0.0094	0.011
Flourine (mg/L)	0.75	0.78	0.78

< - Not detected above PQL

-- - Not Sampled

Outlined results indicate exceedances

J - Value is an estimate

APPENDIX O

HEALTH PHYSICS AUDIT REPORTS

20 September 2000

Mr. Charles Judd, President
Envirocare of Utah, Inc.
46 West Broadway, Suite 116
Salt Lake City, Utah 84101

COPY

Dear Mr. Judd;

On 13 and 18 September 2000 I visited the Envirocare of Utah, Inc. Radioactive Waste Site at Clive, Utah assisted by Tye Rogers, Acting Corporate RSO, Richard Reifsnyder, Corporate QAO, Bill Craig Acting Site RSO, and other administrative and operational personnel for the following purposes and applications prescribed for the Independent Health Physics Auditor. On 13, 14, 18 and 19 September 2000 I reviewed and audited documents supporting operating licenses for the Clive Site. Audit was performed under Envirocare Audit Control Number A-00-22

PURPOSE OF INDEPENDENT AUDIT

As required by Section 9.17 of NRC License SMC-1559, Amendment No. 25, Docket No. 40-8989 for NRC 11e.(2) Byproduct Material License issued to Envirocare of Utah, Inc. the following independent internal audit of facility operations and documentation has been performed by an NRC approved independent consultant (Gary M. Sandquist) as required by the License.

APPLICATION OF INDEPENDENT AUDIT

The NRC approved independent consultant for the Audit performed the following activities associated with the Audit:

- Inspected and toured the site and its facilities
- Interviewing operational and administrative personnel
- Reviewed health physics operations, audited radiation records, procedures, and safety practices at the site.
- Audited compliance of activities and activities with the NRC License SMC-1559, Amendment No. 25, Docket No. 40-8989 for 11e.(2) Byproduct Material License issued to Envirocare of Utah, Inc.

The site serves as a disposal facility for radioactive waste and is Licensed by the State of Utah (License Number UT 2300249, Amendment 10, dated 17 July 2000) for the permanent disposal of radioactive waste and by the US NRC for the disposal of Byproduct Materials as packaged or bulk radioactive waste under License NRC: SMC-1559.

To facilitate the Audit and insure comprehensive coverage audit a checklist for radiological activities and documentation associated with the NRC License SMC-1559, 11e.(2) Byproduct Material License issued to Envirocare of Utah, Inc. and a general audit checklist were prepared and employed by the auditor for the audit.

SPECIFIC SMC-1559, AMENDMENT 25, **INSPECTION ITEMS**

Quality Assurance Program Audit Items from SMC-1559 for the period:
25 September 1999 to 19 September 2000

CHECKLIST OF SMC-1559 AUDIT ITEMS

Safety and Environmental Review Panel (SERP): (Ref.: SMC-1559, Amend 25, Sect 9.4) Licensee formed SERP to authorize changes in facility, processes, procedures, and conduct test and experiments in License Application subject to conditions in Sect 9.4a,b, c.

Observation: The Envirocare SERP was first constituted and convened by Envirocare on 13 March 1996. Numerous actions have been taken by the SERP since its formation. Twenty-two meetings of the SERP (SERP99-001 to 99-014) were held in 1999, and twenty-six meetings in 2000 as of 5 July 2000. The membership and actions of these SERP meetings assessed from the meeting minutes appear to be consistent with regulatory requirements and within limits of License authorization.

Disturbance to Cultural: (Ref.: SMC-1559, Amend 25, Sect 9.5). Licensee encountered any cultural resources and were these reported as required?

Observation: No cultural resources were reported to have been encountered by Envirocare during the audit period. Item is adequate and meets all requirements. No corrective actions required.

Standard Operating Procedures (Operational SOPs): (Ref.: SMC-1559, Amend 25, Sect 9.6a) SOPs exist for all operational activities (viz., handling, storing, disposal, etc.) of radioactive materials.

Observation: Standard Operating Procedures for Operations at Envirocare are contained in various documents. Control copies of the Operational SOPs are found in various offices at the Clive Site. This auditor reviewed Controlled Copy(s) No. 10 in the Corporate QA Office. SOPs are found in the NORM/LARW/11e(2) Manual, Rev 8, dated 28 Jul 2000; Training Manual, Rev 0, dated 28 Jul 2000; Safety and Health Manual, dated 28 Aug 1998; and Radiation Safety Manual, dated 4 Aug 2000. For those SOPs directly relating to 11(e)2 operations, procedures appear adequate and complete. The SERP has reviewed and approved certain Operational SOPs. Item is adequate and meets all requirements. No corrective actions required.

Standard Operating Procedures (Non-operational SOPs): (Ref.: SMC-1559, Amend 25, Sect 9.6a) SOPs exist for all non operational activities (viz., environmental and personnel monitoring, bioassay, administrative, training, instrumentation, etc.)

Observation: Non-operational Standard Operating Procedures at Envirocare are provided in several documents. Copies of the Non-Operational SOPs are found in various offices at the Clive Site. This auditor reviewed Controlled Copies No. 10 in the Corporate QA Office. SOPs are found in the NORM/LARW/11e(2) Manual, Rev 8, dated 28 Jul 2000; Training Manual, Rev 0, dated 28 Jul 2000; Safety and Health Manual, dated 28 Aug 1998; and Radiation Safety Manual, dated 4 Aug 2000. For those SOPs directly relating to 11(e)2 non-operational activities, procedures appear adequate and complete. The SERP has reviewed and approved certain Non-operational SOPs. Item is adequate and meets all requirements. No corrective actions required.

Envirocare QA/QC Plans: (Ref.: SMC-1559, Amend 25, Sect 9.6e) Quality controls exist for waste sampling and characterization, protective equipment and respirator protection equipment and meet ANSI Z-88.2).

Observation: This license requirement item is now addressed in the Envirocare QA Documents including the 11e(2) Construction QA/QC Plan, dated 14 Jun 2000, Control Document No. 10. The Envirocare Quality Assurance Manual also exists and is date 1 March 1999. Richard Reifsnyder is the designated Corporate QA Officer. The QA Program and Plan are generally modeled after NQA-1 and appears adequate and meet requirements.

Air Sampling Program: (Ref.: SMC-1559, Amend 25, Sect 9.6f) Current design and implementation of air sampling program based on NRC REG GUIDE 8.25, Rev 1, 1992.

Observation: Item is adequate and meets all requirements. No corrective actions required.

CRSO Approval of Radiological SOPs: (Ref.: SMC-1559, Amend 25, Sect 9.8) SOPs approved and annually reviewed by CRSO who is qualified by training requirements defined in Sect 9.10.

Observation: Certain Qualification Module forms are not formally reviewed with signatures by the CRSO. These include Lift Approval, MW Inspection Qualification, Moisture Determination, and QC Engineering Technician Assistant, I, and II. Approval of the forms may be incorporated in the approval of the accompanying SOPs. In general item is adequate and meets requirements.

Envirocare Radiological Organization: (Ref.: SMC-1559, Amend 25, Sect 9.9) Existing Radiological Administrative Structure conform to REG GUIDE 8.31.

Observation: The Radiological Organization has undergone reorganization since the last audit. All radiological operations and personnel come under the Senior VP for Compliance and Development who is Kenneth Alkema. The Acting CRSO (Tye Rogers) and acting SRSO (Bill Craig) have been recently designated. The auditor was informed that these changes in the Radiological Organization have or will be reported to the NRC. This item is adequate and meets all requirements if proper documentation exists for designations. No corrective actions required.

CRSO Reporting, Qualification and Training: (Ref.: SMC-1559, Amend 25, Sect 9.10) CRSO reports to Envirocare VP for Compliance/Development on radiological safety and qualified as per REG GUIDE 8.31 and received 40 hour biennial training.

Observation: The Acting CRSO reports to the Senior VP for Compliance and Development. The Acting CRSO completed 40-hours of training on 10 December 1998. Item is adequate and meets all requirements. No corrective actions required.

Site Radiation Safety Officer (SRSO), Health Physics Specialists (HPSs), Environmental Monitoring Technicians (EMTs): (Ref.: SMC-1559, Amend 25, Sect 9.10) SRSO, HPSs and EMTs report to appropriate officers, are qualified as per REG GUIDE 8.31, are reviewed by CRSO and receive required training.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Annual Training for Facility Inspectors: (Ref.: SMC-1559, Amend 25, Sect 9.11a and 9.11b) All facility inspectors of 11e(2) byproduct materials and disposal areas receive annual training as required.

Observation: Item is adequate and meets requirements. Documentation by Envirocare designates the following personnel as 11e(2) qualified facility inspectors (T. Rogers, J. Gonzales, R. Lemmon, S. Johanson, J. Heckman, C. Thorne, T. Jensen, B. Kirkwood, T. Turner, B. Worwood, and D. Kerby). Training of these inspectors was performed under the direction of the CRSO on 7 July 2000. Item is adequate and meets all requirements. No corrective actions required.

Approved Financial Surety Statement: (Ref.: SMC-1559, Amend 25, Sect 9.12) Requires a current financial surety arrangements.

Observation: A financial surety instrument as an irrevocable letter of credit naming NRC as beneficiary with a related standby trust agreement, between Envirocare and Wells Fargo as Trustee fulfills the requirements in 10CFR 40.36(e)(2)(ii). No corrective actions required presently required.

Radiation Work Permits (RWP): (Ref.: SMC-1559, Amend 25, Sect 9.13) RWPs used for all radiological activities where no SOP exists and describe scope of work, ALARA precautions, additional radiological monitoring and sampling, and protective equipment used.

Observation: In general RWPs are prepared and documented in the Operational Work Permits Manual. In 1999 28 RWPs were issued and as of 13 Sep 2000, 15 RWP have been issued. Item appears adequate and meets requirements. No corrective actions required.

CRSO Approval of RWPs: (Ref.: SMC-1559, Amend 25, Sect 9.13) RWPs reviewed and approved by CRSO prior to initiation of work.

Observation: The CRSO or designee have reviewed and approved RWPs for the Site. Item is adequate and meets all requirements. No corrective actions required.

SOPs for Worker Contamination Control: (Ref.: SMC-1559, Amend 25, Sect 9.14) SOPs provide for control of dust inhalation, and use of dust suppressants on operational roads.

Observation: EMP-9 dated 1 Nov 1996 in the Operating Procedures Manual and RWP 97107 provide for dust control. However, no formal approval form signed by the CRSO for EMP-9 was found. Otherwise, item is adequate and meets all requirements. CRSO should provide formal review.

Qualified Respirator Fit Tests: (Ref.: SMC-1559, Amend 25, Sect 9.15) CRSO or designee qualified by training and performs annual respirator fits tests as provided in SMC-1559, Amend 25, Sect 9.11 and REGUIDE 8.15 for employees using respirators. Approved SOPs exist and are current for fit testing.

Observation: Jeff Gardner is designated as the Respirator Fit Officer (Designated as the Risk Manager by Envirocare). The Envirocare Safety and Health Manual describes these tests. Item is adequate and meets all requirements. No corrective actions required.

Annual Certification of Facility Drawings (as built): (Ref.: SMC-1559, Amend 25, Sect 9.16) Registered Professional Engineering must certify as built drawings of Envirocare facility on annual basis.

Observation: Various Facility Layout Drawings dated and stamped by David Comstock, Registered Professional Engineer in Utah, License No., 363849, on 02/01/00. Currency of License was validated from the Web Page by the Utah Department of Business Regulation. Item is adequate and meets all requirements. No corrective actions required.

Annual Independent Internal Audit: (Ref.: SMC-1559, Amend 25, Sect 9.17) Annual independent internal audit of facility operations for compliance with regulations and licensed conditions performed by NRC approved consultant. Audit submitted with annual report to NRC.

Observation: Item is adequate and meets all requirements. No corrective actions required. Annual audit conducted by NRC approved consultant on 13 through 19 September, 2000 by Gary M. Sandquist, Ph.D., PE, CHP, and CQA. Item is adequate and meets all requirements. No corrective actions required.

Restrictions on Eating and Drinking Areas: (Ref.: SMC-1559, Amend 25, Sect 10.1) Only approved areas used for eating and drinking at facility.

Observation: Areas in the Operations Building with entrance to the disposal site or handling of radioactive materials are posted for prohibition of eating or drinking. Truck drivers entering the site with waste deliveries are provided statements forbidding eating and drinking while in the restricted areas. Item is adequate and meets all requirements. No corrective actions required.

Characterization of Wastes not Listed in SMC 11.1: (Ref.: SMC-1559, Amend 25, Sect 10.2a) Waste received for disposal not listed in SMC 11.1 is analyzed, characterized, documented, and contained according to procedures and license conditions.

Observation: No waste "not approved" according to SMC 11.1 was received during the audit period. Item is adequate and meets all requirements. No corrective actions required.

Radon Attenuation Testing: (Ref.: SMC-1559, Amend 25, Sect 10.2b) Radon attenuation model parameter values measured and documented including, porosity, emanation factor, diffusion coefficients, long term moisture content values. Testing conducted every 5000 cu yd of contaminated material and radon barrier emplacement or twice per month during disposal. ASTM testing procedures used and data reported in annual effluent and environmental monitoring report.

Observation: These activities are currently in progress and being performed by outside laboratory for this requirement. Information that was available appeared adequate and meets current requirements. When tests are completed, analysis and documentation regarding radon attenuation testing should be assembled and reviewed by CRSO.

Distribution of Ra-226 and Th-230: (Ref.: SMC-1559, Amend 25, Sect 10.2c) Distribution of Ra-226 and Th-230 in 11e(2) byproduct material in upper 10 feet of cover meets facility radon attenuation model requirements. Nuclides measured every 3000 cu yd of material placement or weekly during disposal operations. Data reported in annual effluent and environmental monitoring report.

Observation: Gamma spectrometry is used to establish Ra-226 distribution in cover. Alpha spectrometry of Th-230 is performed by outside laboratory. Item appears adequate and meets current requirements. No corrective actions required.

Corrective Action to clean up Groundwater Contamination: (Ref.: SMC-1559, Amend 25, Sect 10.3) Envirocare must clean up contaminated ground water if required by NRC within 18 months of exceedence date.

Observation: Envirocare is in negotiation with the NRC regarding groundwater contamination licensing requirements. This item is open and will be assessed by the NRC.

Ground water and land surface monitoring during Post Closure: (Ref.: SMC-1559, Amend 25, Sect 10.4) Envirocare must monitor ground water and land surface during post closure until transferred to long-term custody.

Observation: Envirocare is currently an active NRC Licensed disposal site for 11e.(2) Item is adequate and meets all requirements. No corrective actions required.

Quality Assurance Plan. (Ref.: SMC-1559, Amend 25, Sect 10.5) Implement QA Plan as specified in License.

Observation: A Quality Assurance Manual dated 1 March 1999 was reviewed. QA Program is modeled after NQA-1-1994. Item is adequate and meets requirements.

EPA Test for Liquids in Waste: (Ref.: SMC-1559, Amend 25, Sect 10.6) EPA Paint Filter Liquid Test (SW-846, Method 9095) performed at prescribed frequency on waste shipments prior to site acceptance to control free standing liquids in waste.

Observation: Item is adequate and meets all requirements. No corrective actions required. Tests are performed under Envirocare Procedure EC-3025 contained in LARW Waste Management Plan dated 6 June 2000.

Control of External Radiation Level in Waste: (Ref.: SMC-1559, Amend 25, Sect 10.7) Waste received for disposal with external exposures greater than 5 mrem per hour at 30 cm not disposed of within 24 hours posted as a "Radiation Area" according to 10CFR20.1902(a).

Observation: For 11e(2) waste this item is adequate and meets all requirements. No corrective actions required.

Facility Compliance with Specifications: (Ref.: SMC-1559, Amend 25, Sect 10.8)
Facility complies with annual specifications:

<u>Disposed waste characteristic</u>	<u>1 Jan 00 to 15 Sep 00</u>	
disposal mass $\leq 453,600$ metric tonnes , $\leq 382,000$ cu m, $\leq 400,000$ cu yds	286,000 cu yds	72% max
disposal surface area $\leq 55,572$ sq. m, $\leq 598,172$ sq ft, ≤ 13.73 acres	481,835 sq ft	81% max
embankment capacity ≤ 4.20 million cu m or ≤ 5.5 million cu yd	1,111,00 cu yds	20 % max
undisposed waste $\leq 84,180$ cu m or $\leq 2,970,000$ cu ft $\leq 110,000$ cu yds	0 cu yds	0 % max
all truck load or railcar shipment ≤ 4000 pCi/g of U series	< 2000 pCi/g	
or $\leq 60,000$ pCi/g of Th-230	$< 60,000$ pCi/g	
or ≤ 6000 pCi/g of Th series	< 6000 pCi/g	
effluent concentration limits comply with Table 2, Appendix B of 10CFR20.1001-20.2401 and population dose limits of 10CFR20.1301		

Observation: There are some significant typographical errors in Amendment 25 of the SMC-1559 License. The unit's pCi/g are denoted by "P.I./g" and the US Code of Federal Regulations (CFR) is denoted by the acronym "CAR." These should be corrected and resolved between the NRC and Envirocare to prevent misinterpretation. Otherwise, item is currently adequate and meets license requirements. Corrective action is required to provide correct units and CFR designation.

Monitoring in POC Wells: (Ref.: SMC-1559, Amend 25, Sect 11.1) Detection, compliance and corrective action monitoring performed at POC wells for constituents in SMC, Section 11.1 and new constituents as per Section 10.2(a). Detection monitoring performed quarterly if POC wells contaminant-free. Otherwise see SMC, Section 11.1 for procedures.

Observation: GWPLs are exceeded in several monitoring wells for certain constituents. Because of exceedances in these wells, Envirocare is measuring affected wells monthly. These issues will be addressed by NRC for corrective action. Corrective action required.

Monitoring Certification: (Ref.: SMC-1559, Amend 25, Sect 11.2) Monitoring samples analyzed by certified laboratory within 2 weeks after monitoring compliance period. Occupational exposure results performed within 1 week after receipt of analysis. Non routine sample analysis by certified laboratory or Envirocare within 2 working days after sample collection. CRSO and Ground Water Manager review results within 2 working days after receipt of results.

Observation: Analysis methods for total organic halogens are apparently limited by current servicing laboratory. Envirocare is seeking to correction of this issue, which will be addressed by the NRC. Corrective action is required.

CRSO and Site Engineer Inspections: (Ref.: SMC-1559, Amend 25, Sect 11.3) CRSO and Site Engineer perform and document joint inspections of work areas monthly. Deficiencies corrected within 7 working days after disclosure. Corrective actions reported in annual report.

Observation: Inspections reported in weekly CRSO Inspection Log. Shane Johanson has been designated as Site Engineer for such inspections. Item is adequate and meets requirement.

Personnel Radiological Monitoring: (Ref.: SMC-1559, Amend 25, Sect 11.4a) Monitoring demonstrates compliance with Subpart C of Part 20 as follows:

- personnel monitoring required by 10CFR20.1502
- continuous monitoring of airborne concentrations of Rn-222 and Rn-220 (SMC, Sec 9.3)
 - waste unloading area
 - waste storage area
 - covered waste area
 - security guard trailer (this trailer has been removed by Envirocare)
- airborne particulate monitoring (SMC, Sec 9.3)
- gamma radiation exposure measurements of work areas (SMC, Sec 9.3)
- demonstrate that monitoring locations are representative of occupational exposures

Observation: Item is adequate and meets all requirements. No corrective actions required.

Site Radiological Monitoring: (Ref.: SMC-1559, Amend 25, Sect 11.4b) Monitoring demonstrates compliance with Subpart D of Part 20 as follows:

- continuous monitoring of airborne concentrations at site perimeter of Rn-222 and Rn-220 (SMC, Sec 9.3)
- airborne particulate monitoring at air sampling stations in Table 7.2 of License (SMC, Sec 9.3)
- gamma radiation exposure measurements of unrestricted areas (SMC, Sec 9.3)

Observation: Some data regarding Rn concentrations not available for review. Otherwise, item is adequate and meets all requirements. No corrective actions required.

Personnel Radiation Exposures: (Ref.: SMC-1559, Amend 25, Sect 11.4c) Monitoring demonstrates compliance with Subpart D of Part 20 as follows:

- calculate total effective dose equivalent for occupational workers and demonstrate compliance (≤ 5000 mrem/yr.)
- calculate total effective dose equivalent for public and demonstrate compliance (≤ 100 mrem/yr.)

Observation: Item is adequate and meets all requirements. No corrective actions required.

NRC Notification for Ground Water Exceedence or New Contaminant: (Ref.: SMC-1559, Amend 25, Sect 12.2) Envirocare to notify NRC if ground water exceedence or new contaminant is identified.:

Observation: NRC has been informed of Ground Water Exceedence levels for certain contaminants in certain wells. These issues are under review and will be addressed by the NRC.

Annual ALARA Audit: (Ref.: SMC-1559, Amend 25, Sect 12.3) Perform annual ALARA audit of Envirocare Radiation Safety Program led by CRSO and includes representative of Corporate Management as per REG GUIDE 8.31. Audit addresses following records and activities:

- bioassay results and actions taken for levels in excess of Table 1 of REG GUIDE 8.22
- records of external and internal exposures
- safety meeting minutes, attendance records, training program records
- daily inspection logs and summary reports of monthly reviews
- radiological surveys, environmental radiological effluent and monitoring data
- surveys required by RWPs
- reports of overexposures to NRC and State of Utah
- reviews of operating and monitoring procedures completed during year.
- review and analysis of trends in personnel exposures, radiological effluent data, performance of exposure and effluent control equipment.
- recommendations to reduce personnel exposures or environmental releases.

Observation: Annual ALARA audit conducted 29 March 1999. It appears all the above items were reviewed and audited. Item is adequate and meets requirements. No corrective actions required.

Land Use Survey around Site: (Ref.: SMC-1559, Amend 25, Sect 12.4) Conduct annual land use survey for 5 km radius around site. Assess population and industrial changes. Inventory domestic and agricultural wells in survey area. Document survey in annual report.

Observation: Reported in Annual Radiological Monitoring Report to NRC dated 31 Mar 1999. Data for 2000 not completed. Item is adequate and meets all requirements. No corrective actions required.

Notification of Violation of Regulations or License Conditions: (Ref.: SMC-1559, Amend 25, Sect 12.5) Inform NRC as required in SMC, Section 12.5 of waste shipment that violates regulations or license conditions.

Observation: Item is adequate and meets all requirements. No corrective actions required. No violations were reported to NRC as per License Conditions 12.5 or 12.8.

Annual Report to NRC: (Ref.: SMC-1559, Amend 25, Sect 12.6) Submission of annual report to NRC documenting following by 31 March :

- all annual reporting requirements as specified in license or applicable regulations
- results of calibration of equipment
- audits and inspections completed during year
- results of meeting and training courses required by license
- other significant information, reviews, investigations, corrective actions

Observation: Reported in Annual Radiological Monitoring Report to NRC dated 31 Mar 1998. Item is adequate and meets all requirements. No corrective actions required.

Notification of Disposal Cell Failure: (Ref.: SMC-1559, Amend 25, Sect 12.8) Inform NRC as required in SMC, Section 12.8 of failure of 11e.(d) byproduct material disposal cells that releases waste into unrestricted areas, condition that might lead to system failure or release of waste into unrestricted areas.

Observation: Item is adequate and meets all requirements. No corrective actions required. No violations were reported to NRC as per License Conditions 12.5 or 12.8.

CHECKLIST OF GENERAL AUDIT ITEMS

The following activities, documents and programs which support license activities at Envirocare of Utah, Inc. were also inspected and audited for compliance with existing state and federal license requirements, regulations regarding radiological activities at the Clive Site.

Instrument Constancy: All portable and laboratory radiation detection and measurement instrumentation checked on daily basis.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Instrument Calibration: All portable survey instruments calibrated by outside calibration facilities following repair and at six (6) month intervals.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Gamma Spectrometer System Operation and Certification:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Air Sampler Maintenance and Calibration: All air samplers calibrated for airflow every six (6) months.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Electronic Balance Calibration: The laboratory electronic balance calibrated monthly..

Observation: Item is adequate and meets all requirements. No corrective actions required.

Postings: Notice to employees, notice of location of documents required by 10CFR19,20,40 and 51, and copy of Section 206 of the Energy Reorganization Act of 1974 posted.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Site Regulations: Site regulations current and signed by all employees or other entrants in the restricted areas.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Waste Manifest (RSR) and Continuation Sheets: Waste manifest and continuation sheets current, complete and accurate.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Incoming Shipment Data Analysis: Laboratory analysis of incoming waste samples reviewed and compared to waste manifest sheets for accuracy.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Independent Health Physics Audits: Quarterly audits performed by independent HP auditor and reviewed by the CRSO or designee.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Weekly Audits by RSO: Weekly inspections performed and documented by the CRSO or designee.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Unlimited Release of Vehicles, Equipment, and Packages:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Emergency Response (Kits and Drills):

Observation: Item is adequate and meets all requirements. No corrective actions required.

Personnel Dosimetry for Employees: Work areas and breathing zone samples collected and analyzed for potential exposures.

Observation: Item is adequate and meets all requirements. No corrective actions required.

ALARA Program and Activities:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Personnel Monitoring for Visitors:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Access and Exiting Control for Employees:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Area Surveys of Restricted Areas Operations: Surveys performed as scheduled and reviewed by Site RSO and actions performed noted.

Observation: Item is adequate and meets all requirements. No corrective actions

Training of Employees and Examinations:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Respiratory Protection Training and Testing:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Ground Water Sampling:

Observation: Corrective action required. See previous entry on "Monitoring in POC Wells".

Soil Sampling Program:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Environmental Air Sampling Program: Samples collected and airborne radioactivity concentrations within regulatory limits.

Observation: Item is adequate and meets all requirements. No corrective actions required.

Vegetation Sampling Program:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Environmental Gamma Monitoring:

Observation: Item is adequate and meets all requirements. No corrective actions required.

Radon-220, 222, Monitoring Program

Observation: Item not fully addressed and resolved. See "Radon Attenuation Testing."

Chain of Custody Forms:

Observation: Item is adequate and meets all requirements. No corrective actions required.

FINDINGS AND OBSERVATIONS

FINDINGS

Monitoring in POC Wells: (Ref.: SMC-1559, Amend 25, Sect 11.1) Detection, compliance and corrective action monitoring performed at POC wells for constituents in SMC, Section 11.1 and new constituents as per Section 10.2(a). Detection monitoring performed quarterly if POC wells contaminant-free. Otherwise see SMC, Section 11.1 for procedures.

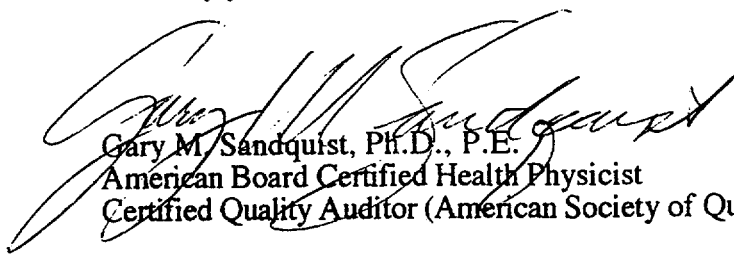
Finding: Analytical results for groundwater sampling showed that GWPLs were exceeded in several monitoring wells for certain constituents. Because of exceedances in these wells, Envirocare should measure all wells on the accelerated schedule required by the license. NRC will review and assess these exceedances.

Corrective action is required.

OBSERVATIONS

1. Certain Qualification Module forms are not formally reviewed with signatures by the CRSO. These include Lift Approval, MW Inspection Qualification, Moisture Determination, and QC Engineering Technician Assistant, I, and II. Approval of the forms may be incorporated in the approval of the accompanying SOPs. (Ref: SMC-1559, Amend 25, Sect 9.8)
2. The Radiological Organization has undergone reorganization since the last audit. All radiological operations and personnel come under the Senior VP for Compliance and Development who is Kenneth Alkema. The Acting CRSO (Tye Rogers) and acting SRSO (Bill Craig) have been recently designated. The auditor was informed that these changes in the Radiological Organization have or will be reported to the NRC. (Ref: SMC-1559, Amend 25, Sect 9.9)
3. EMP-9 dated 1 Nov 1996 in the Operating Procedures Manual and RWP 97107 provide for dust control. However, no formal approval form signed by the CRSO for EMP-9 was found. (Ref: SMC-1559, Amend 25, Sect 9.14)
4. Radon attenuation testing activities are currently in progress and being performed by outside laboratory for this requirement. Information that was available appeared adequate and meets current requirements. The tests should be completed and analysis and documentation regarding radon attenuation testing should be assembled, reviewed, and documented by the CRSO. (Ref: SMC-1559, Amend 25, Sect 10.2b)
5. There are some significant typographical errors in Amendment 25 of the SMC-1559 License. The unit's pCi/g are denoted by P.I./g and the US Code of Federal Regulations (CFR) is denoted by the acronym CAR in Amendment 25. These should be corrected and resolved between the NRC and Envirocare to prevent misinterpretation. Corrective action is required to provide correct units and proper CFR designation. (Ref: SMC-1559, Amend 25, Sect 10.8)

Sincerely yours


Gary M. Sandquist, Ph.D., P.E.
American Board Certified Health Physicist
Certified Quality Auditor (American Society of Quality)

APPENDIX P

ALARA/RADIATION PROTECTION PROGRAM
SURVEILLANCE

Envirocare of Utah, Inc.

Annual ALARA and Radiation Protection Program Report

March 2000

Submitted by: _____

Tye Rogers
Corporate RSO

References

- 1) U.S. Nuclear Regulatory Commission Materials License SMC-1559
- 2) Utah Radioactive Material License UT 2300249
- 3) U.S.N.R.C 10 CFR 20.1101(c)
- 4) Envirocare ALARA Program

Introduction

A surveillance (audit) was conducted of the Envirocare of Utah's ALARA and Radiation Protection Program for 2000. The references for this report are listed above with detailed references listed below. Since the Envirocare site is comprised of the Low Activity Radioactive Waste (LARW) disposal operations and the 11e.(2) disposal operations, this report will address specific areas as required but will be written as a single document.

Joe Heckman -Deputy Corporate Radiation Safety Officer (DCRSO), Adam Jones- Assistant Site RSO (ASRSO), Bill Craig- Assistant Site RSO (ASRSO), Brian Clayman- Site RSO (SRSO) and Wayne Jones – Quality Assurance Technical Assistant performed the surveillance.

Surveillance Scope

- 1) Training
 - a) 11e.(2)- License Condition (LC) 9.10, 12.3.c, 12.6(4)
 - b) LARW- LC 32
- 2) Radiation Work Permits (RWP's)
 - a) 11e.(2)- LC 9.13, 12.3(f)
- 3) Respiratory Protection Program
 - a) 11e.(2)- LC 9.6(e), 9.15
 - b) LARW- LC 24
- 4) Environmental Monitoring
 - a) 11e.(2)- LC 9.6(a), 9.6(f), 11.4, 12.3(e)
 - b) LARW- LC 26
- 5) Dosimetry: external and internal
 - a) 11e.(2)- LC 9.6(a), 12.3(a), 12.3(b)
 - b) LARW- LC 23

- 6) Inspections
 - a) 11e.(2)- LC 12.3(d)
- 7) Instrument Calibration
 - a) 11e.(2)- LC 9.6(a), 12.6(2)
- 8) Incidents, Investigations and Stop Work Orders
 - a) 11e.(2)- LC 12.6(5), 12.8
- 9) ALARA Program
 - a) Section 5.4.7
- 10) Organization
 - a. 11e.(2)- LC 9.9

Surveillance Results

STRENGTHS:

1. Envirocare has placed increased emphasis on Access Control and Radiation Work Permits.
 - a. Health Physics personnel man the access control points during normal work hours to assist site personnel with RWP briefs and exit surveys.
 - b. The site access badge has been changed to indicate the level of qualification an individual holds.
2. The respiratory protection program has been strengthened.
 - a. A quantitative fit test device has been purchased and quantitative fit testing is performed for site personnel who wear respiratory protection.
 - b. The respiratory protection issue point is manned during normal working hours by an Access Control Technician trained in the cleaning and maintenance of the respiratory protection equipment.
 - c. The site access badge has been changed to indicate the respiratory protection equipment and sizes an individual is authorized to use.
3. The training department has implemented a training database, which tracks training requirements.
4. As a result of an increased verification and validation of off-site laboratory results, Envirocare identified deficiencies in laboratory analysis. Envirocare has changed laboratory vendors as a result.

5. Envirocare initiated the use of electronic alarming dosimeters. The dosimeters allow Health Physics personnel to set alarms for integrated exposure and maximum dose rates for individuals who are issued a dosimeter. The dosimeters have good accuracy and are normally within 10% of the TLD or Luxel TM results.

FINDINGS

I Training

- a. Records of safety meetings are incomplete. The topic discussed is not included on the roster.

II Radiation Work Permits (RWP's)

There were no findings in this audit.

III Respiratory Protection Program

There were no findings in this audit.

IV Environmental Monitoring

- a. Several low-volume air samplers were used past the calibration expiration. The samplers were identified as out of calibration by the Quality Assurance department and removed from service. The samplers passed calibration testing without adjustment, therefore the sampling results were considered valid.

V Dosimetry: internal and external

a. Internal Dosimetry

A license amendment request was submitted to the U.S. NRC to change the requirement for investigating results greater than 3σ to investigating results above an action level. This method ensures that results, which indicate a possible exposure are investigated, but eliminates the confusion of the former requirement.

b. External

Although there is no requirement for electronic tracking of estimated exposure, it would facilitate better trending for ALARA considerations.

VI Inspections

There were no findings as a result of this audit. Several administrative errors were identified by the surveillance personnel, but were corrected by the SRSO.

VII Instrument Calibration

See environmental monitoring section.

VIII Incidents and Investigations

There were no over-exposures during the year 2000. 35 personnel exceeded the 50 mrem per quarter investigation level. All investigations are complete. Of the 35 personnel 22 of them worked on a project with a special ALARA goal of 1000 mrem per year. In one case, an individual working in Shipping and Receiving who performed the majority of the receipt inspections and surveys exceeded the investigation level. The individual was assigned manifest review duties, and other Shipping and Receiving personnel were assigned to incoming survey and inspection duties.

Personnel working on daily storage pad inspections also exceeded the investigation level. These personnel were instructed in ALARA practices to reduce exposures, including an inventory sheet, which is pre-organized to minimize time on the storage pad.

VIII Emergency Plan

The procedure has been revised during 2000 to address a broader scope of situations.

IX Waste Handling

The basis for this portion of the surveillance is LC 58 and LC 59 of Utah Radioactive Material License #UT2300249.

LC 58 requires: The licensee shall fulfill and maintain compliance with all conditions and requirements in the Waste Characterization Plan as contained in the license renewal application, dated February 16, 2000.

LC 59 requires: The licensee shall fulfill and maintain compliance with all conditions and requirements as contained in the LARW Waste Management Plan, dated June 6, 2000.

Envirocare has added a Risk Factor value for safety, radiation safety and operational difficulty to the Waste Profile process to identify to site personnel the relative hazards and ALARA concerns associated with a particular waste stream. The risk factors are used in the consideration of Radiation Work Permit development.

Envirocare has submitted a request to amend the Waste Characterization Plan to allow sampling requirements to be waived based on ALARA considerations. This request is under review by the UDRC at this time.

XI ALARA Program

a. ALARA Goals

1. The occupation radiation exposure goal was met. No radiation workers exceeded the annual goals of Total Effective Dose Equivalent (TEDE) of 200 mrem, without prior authorization from the CRSO. During 2000, Envirocare managed a waste stream with high Thorium-232 and Radium-226 content. An evaluation of waste handling activities was performed prior to receiving the waste and a project specific ALARA goal of 1000 mrem was assigned to this project. The highest exposure received by an individual on this project was 582 mrem

b. Effluent

1. Although the concentrations do not exceed the 10 CFR 20, Appendix B limits for air effluents, perimeter air sampling results have increased in 2000 compared to previous years. This due to two factors: The concentration of radioactive material in the waste received has increased. The amount of open cell space is larger. Envirocare has aggressively pursued alternative waste handling methods to reduce exposures to site personnel and effluents.

XII Organization

With the diversity of projects performed at Envirocare's South Clive Facility, the Radiation Protection Program is complex. The separation of health physics and operations is critical to ensure radiation safety and compliance are both properly analyzed.

Overall structure of the organization of management maintains a proper separation of operations and radiation protection responsibilities. While it is the responsibility of all personnel to practice good ALARA principles, an independent health physics staff implies a strong Radiation Safety Program.

The number of health physics personnel is dependent on the number and type of activities performed at the facility. The total number of functions, during a workday, requiring HPS support are:

<u>Functions</u>	<u>Number of Health Physics Specialists</u>
Incoming waste acceptance	3
Access Control Point	2
Unloading dock	1
Rail release	2
Intermodal release	1
Operations wash pad release	1
Radiation Area coverage - Storage	1
Radiation Area coverage - Cell	1
Radiation Area coverage – management unit	1
Mixed Waste Treatment	1
Mixed Waste Macro	1
Mixed Waste wash pad	1
Radiation Work Permit	1
Total	17

During the week, the present HPS staff can support 7 functions daily for six days. To increase the efficiency of the facility, operations and health physics has coordinated activities requiring HPS support to specific days.

Recommendations

Health Physics management should be apart of long-term planning. With knowledge of forecasted waste acceptance, then the Health Physics management can properly plan needed HPS coverage.

Short-term management involves maintaining good communications between operations and health physics. Planning of operations should occur at least a week in advance to schedule staff to meet the requirements of the projects.

Daily communication is also critical. Changes in priorities must be indicated to all teams to properly respond to site needs.

XIII Source Leak Check and Inventory

Envirocare performs leak testing of sources using site contamination measurement equipment.

The Leak Test results indicate that all results were less than 0.005 uCi (185 Bq).

There were no findings as a result of this audit.

APPENDIX Q

SAFETY AND ENVIRONMENTAL REVIEW PANEL

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-001

Date: January 14, 2000

Action Requested: To authorize revision of the 11e.(2) CQA/QC Plan in order to reinstate the previously approved quality control and quality assurance activities for 11e.(2) radon barrier placement.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval of the proposed 11e.(2) CQA/QC Plan to reinstate the previously approved quality control and quality assurance activities for 11e.(2) radon barrier placement does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-001 requests approval for the use of a revised 11e.(2) CQA/QC Plan. The revised plan reinstates the previously approved quality control and quality assurance activities for 11e.(2) radon barrier, including:

Work Element: Radon Barrier Placement

Lift Thickness:

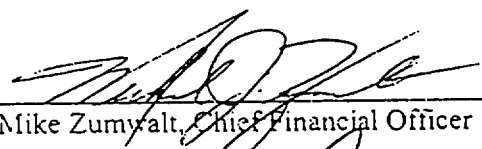
1. Remove the detailed explanation for installation of grade poles. This change does not modify the quality control process because grade poles are used for thickness determination.
2. Remove the inspection requirement for dry clod size. Due to the natural moisture content of on-site clay, dry clods are usually not found in the radon barrier material.
3. Remove the second testing option for ensuring the lift thickness; Digging a hole and measuring the loose lift thickness. Lift thickness is determined using grade poles.

Permeability:

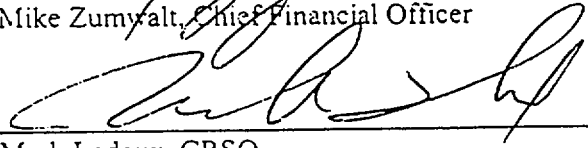
1. Reinstates the permeability testing frequency for all radon barrier to a rate of one test per 2,000 cubic yards.

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486).

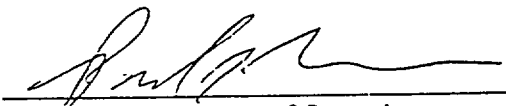
Because the request does not conflict with any regulatory requirements, the SERP hereby approves the revised 11e.(2) CQA/QC Plan


Mike Zumwalt, Chief Financial Officer

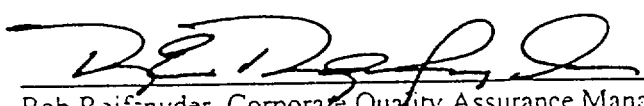
1/2/00
Date


Mark Ledoux, CRSO

1-24-00
Date


Paul Larsen, Director of Operations

1/19/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

1/19/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-002
Date: January 18, 2000
Action Requested: To authorize revision of the 11e.(2) CQA/QC Plan to incorporate the requirements of Amendment 19 of the license into the 11e.(2) CQA/QC Plan for In-cell bulk placement.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval of the proposed 11e.(2) CQA/QC Plan to incorporate the requirements of Amendment 19 of the license does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.


- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

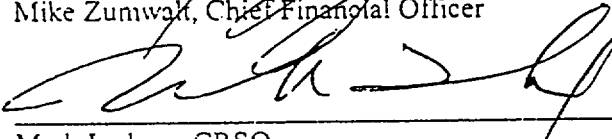
SERP Request Docket # 11e.(2) 00-002 requests approval for the use of a revised 11e.(2) CQA/QC Plan. The revised plan incorporates the requirements for in-cell bulk placement as designated with Amendment 19 of the license that was approved on September 30, 1999. Additionally, the revised plan provides clarification to the language for snow removal specifications for clay liner placement, waste placement, radon barrier, filter zone, and rock erosion barrier.

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486).

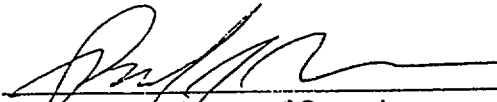
Because the request does not conflict with any regulatory requirements, the SERP hereby approves the revised 11e.(2) CQA/QC Plan dated, January 14, 2000.


Mike Zumwalt, Chief Financial Officer

1/21/00
Date


Mark Ledoux, CRSO

4-19-00
Date


Paul Larsen, Director of Operations

1/19/00
Date


Bob Reifsnnyder, Corporate Quality Assurance Manager
(Temporary member)

1/19/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-003
Date: January 18, 2000
Action Requested: To 1) amend License Condition 12.6 to allow submittal of annual report by April 30 of each year, 2) Request an extension for License Condition 10.2.b.3. from March 31, 2000 to July 1, 2000, and 3) amend License Condition 10.2.c. to use waste sample analysis upon receipt versus as-placed samples.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to 1) amend License Condition 12.6 and 2) amend License Condition 10.2.c. does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-003 requests approval to 1) amend License Condition 12.6 to allow submittal of annual report by April 30 of each year, 2) Request an extension for License Condition 10.2.b.3. from March 31, 2000 to July 1, 2000, and 3) amend License Condition 10.2.c. to use waste sample analysis upon receipt versus as-placed samples.


A request for an extension as submitted in 2) above, does not require submittal to the SERP. Therefore, The SERP Panel Findings will not result in denial of item 2).

License Condition 12.6. states " The licensee shall, unless otherwise specified, submit an annual report documenting: 1) the annual reporting requirements as specified in the license conditions, 2) the results of calibration of equipment, 3) reports on audits and inspections completed during the year, 4) the results of all meetings and training courses required by this license, and 5) any other significant subsequent information, reviews, investigations and corrective actions. This report, covering the calendar year, shall be submitted to the NRC by March 1 following the first full year after receipt of this license, and by March 31 every year thereafter. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained at the site and corporate headquarters for a period of at least five (5) years."

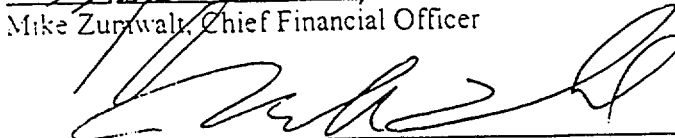
License Condition 10.2.c. states "the distribution of the ^{226}Ra and ^{230}Th concentrations in the 11e.(2) byproduct material in the upper 3.3 meters (10 feet) of the contaminated material to verify that the concentration in any lift does not exceed the values used in the radon attenuation model. The licensee shall measure the ^{226}Ra and ^{230}Th concentrations using standard analytical procedures, for every 3,000 cy of material placed for compaction or at least once a week during material placement. The data will include the elevation (or lift number) of the sample location. The results will be presented as average values for each lift in the annual effluent and environmental monitoring report.

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486) for items 1) and 3) respectively. Specifically for item 3), in the FSER on page 72, 3.5.3., it states "The NRC staff concludes that the current design of the radon barrier and the parameter values chosen for modeling the radon flux may not be representative of the material that the applicant might accept for disposal. Therefore, the applicant should select conservative physical parameters or a license condition will require testing of contaminated material accepted by Envirocare that would be placed in the upper levels of the cell. Material that could cause that layer to exceed the parameter values indicated in the radon barrier model would have to be excluded from placement in the upper levels of the cell. The radon barrier soil would also be required to meet the parameter limits specified by this model."

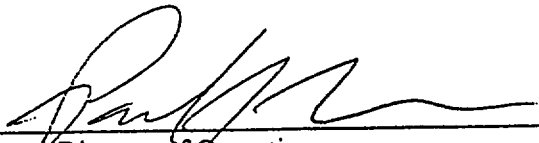
Because the request does conflict with regulatory requirements, the SERP hereby denies the request to 1) amend License Condition 12.6, and 2) amend License Condition 10.2.c.


Mike Zurwalt, Chief Financial Officer


01/21/00
Date


Mark Ledoux, CRSO

1-21-00
Date


Paul Larsen, Director of Operations

1/19/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

1/19/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-004

Date: March 9, 2000

Action Requested: To amend License Condition 9.10 to 1) qualify Health Physics Specialists and Environmental Monitoring Technicians in accordance with Envirocare's Training Manual, and release the requirement that Health Physics Specialists and Environmental Monitoring Technicians have qualifications as specified in Section 2.4 of Regulatory Guide 8.31, or equivalent, and 2) allow review and approval of work performed by newly hired Health Physics Specialists and Environmental Monitoring Technicians by a qualified individual instead of the Corporate Radiation Safety Officer until the employee has completed qualification requirements.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend License Condition 9.10 does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.



ENVIROCARE
OF LTAH, INC.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-004 requests approval to amend License Condition 9.10 to 1) qualify Health Physics Specialists and Environmental Monitoring Technicians in accordance with Envirocare's Training Manual and release the requirement that Health Physics Specialists and Environmental Monitoring Technicians have qualifications as specified in Section 2.4 of Regulatory Guide 8.31, or equivalent, and 2) allow review and approval of work performed by newly hired Health Physics Specialists and Environmental Monitoring Technicians by a qualified individual instead of the Corporate Radiation Safety Officer until the employee has completed qualification requirements.

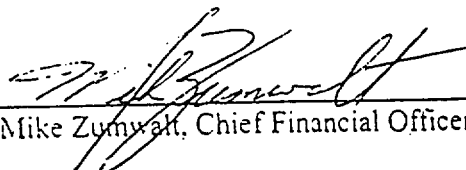
License Condition 9.10. states " The licensee shall have a CRSO responsible for the site who shall report directly to the Sr. Vice President of Compliance and Development on matters dealing with radiological safety aspects of the licensed facility. In addition to the responsibilities and qualifications specified in the licensee's application, the CRSO, or his designate shall be qualified as specified in Sections 1.2 and 2.4 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures as Uranium Mills will be As Low As Reasonably Achievable," dated May 1983. In addition, the CRSO shall also receive 40-hours of related health and safety refresher training every two years.

The Site Radiation Safety Officer (SRSO) is responsible to the CRSO and works very closely with the Site Facility Manager. Individuals designated as Health Physics Specialists and Environmental Monitoring Technicians shall report to the Site Facility Manager and SRSO on matters dealing with radiological safety. In addition, the CRSO or his designate shall be accessible to the SRSO. Health Physics Specialists, and Environmental Monitoring Technicians at all times. In addition to the responsibilities and qualifications specified in the license application, the SRSO, Health Physics Specialist, and Environmental Monitoring Technician shall have qualifications as specified in Section 2.4 of Regulatory Guide 8.31, or equivalent. Any person newly hired as a SRSO, Health Physics Specialist, and Environmental Monitoring Technician shall have all work reviewed and approved by the CRSO as part of a comprehensive training program until appropriate course training is complete, and for at least 6 months from the date of appointment.

For the purposes of this licensee condition, reference to "uranium mill" or "milling" in NRC Regulatory Guide 8.31 shall mean the licensee's facility and authorized activities."

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486) for items 1) and 2) respectively.


Because the request does conflict with regulatory requirements, the SERP hereby denies the request to amend License Condition 9.10.


Mike Zumwalt, Chief Financial Officer

3/7/00
Date




ENVIROCARE
OF UTAH, INC.



Mark Ledoux, CRSO

3-12-00
Date



Paul Larsen, Director of Operations

3/17/00
Date



Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

3/17/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-005

Date: March 9, 2000

Action Requested: To amend License Condition 9.15 to allow qualified individuals designated by the Risk Manager and Corporate Radiation Safety Officer to perform qualitative or quantitative respirator fit testing.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend License Condition 9.15 does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.



ENVIROCARE
OF UTAH, INC.


Discussion:

SERP Request Docket # 11e.(2) 00-005 requests approval to amend License Condition 9.15 to allow qualified individuals designated by the Risk Manager and Corporate Radiation Safety Officer to perform qualitative or quantitative respirator fit testing.

License Condition 9.15. states " The licensee shall have the CRSO, or designate, qualified by the way of specialized radiation protection training equivalent to that required for the CRSO as described in License Condition 9.11, perform qualitative respirator fit tests using irritant smoke for all employees required to wear respirators prior to the initial use of a respirator and annually thereafter. During the annual fit test, the CRSO shall ensure that the employee is correctly performing negative pressure fit checks and instruct the employee that the fit test is to be performed each time a respirator is donned and prior to entering an area where respirators are required. The licensee shall follow the guidance provided in Regulatory Guide 8.15 "Acceptable Programs for Respiratory Protection." The fit tests and fit instructions shall be documented in the SOPs."

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486.

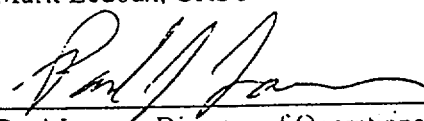
Because the request does conflict with regulatory requirements, the SERP hereby denies the request to amend License Condition 9.15.


Mike Zumwalt, Chief Financial Officer


3/17/00
Date


Mark Ledoux, CRSO

3-17-00
Date


Paul Larsen, Director of Operations

3/17/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

3/17/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-006
Date: February 14, 2000
Action Requested: To amend License Condition 9.12 to reflect cost of approved open cell increase from 38,472m² to 55,572m² on July 20, 1998.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend License Condition 9.12 does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

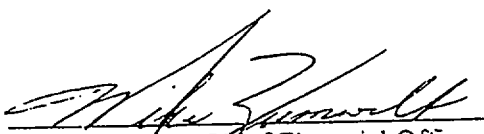
SERP Request Docket # 11e.(2) 00-006 requests approval to amend License Condition 9.12 to reflect an increase in surety amount for the cost of approved open cell increase from 38,472m² to 55,572m² on July 20, 1998. The revised dollar amount of the surety will be an amount not less than \$4,553,575.00.

License Condition 9.12. states " The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criterion 9, adequate to cover the estimated costs. if accomplished by a third party, for completion of the NRC-approved reclamation/decommissioning plan including: above-ground decommissioning and decontamination and groundwater restoration. as warranted.

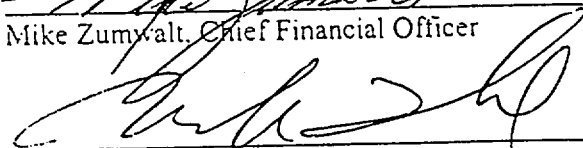
Annual updates tot he surety amount. required by 10 CFR 40, Appendix A, Criterion 9, shall be provided to the NRC at least 3 months prior to August 31 of each year. If the NRC has not approved a proposed revision 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing arrangement, prior to the expiration, for 1 year. Along with each proposed revision or annual update of the surety, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The licensee must also ensure that the surety covers the above-ground decommissioning and decontamination, soil and water sample analyses, and groundwater restoration associated with the site. The basis for the cost estimated is the NRC-approved reclamation/decommissioning plan or the NRC-approved revisions to the plan

Envirocare's currently approved surety instrument, a trust agreement issued by Zions First National Bank of Utah on February 7, 1996, in favor of the NRC, shall be continuously maintained in an amount not less than \$3,854,721.00 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9, until a replacement is authorized by the NRC."

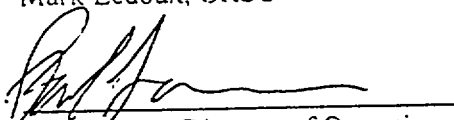
Because the request does conflict with regulatory requirements, the SERP hereby denies the request to amend License Condition 9.12.


Mike Zumwalt, Chief Financial Officer


2/17/00
Date


Mark Ledoux, CRSO

2-17-00
Date


Paul Larsen, Director of Operations

2/14/00
Date


Bob Reifsnnyder, Corporate Quality Assurance Manager
(Temporary member)

2/15/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-007

Date: March 14, 2000

Action Requested: To allow for the transfer of 11e.(2) bulk material from railcars to vehicles on hardened surfaces adjacent to the railroad tracks located within the Restricted Area.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to allow for the transfer of 11e.(2) bulk material from railcars to vehicles on hardened surfaces adjacent to the railroad tracks located within the Restricted Area, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2)-00-007 requests approval to allow for the transfer of 11e.(2) bulk material from railcars to vehicles on hardened surfaces adjacent to the railroad track located within the Restricted Area. Hardened surfaces are defined as four (4) inches of compacted asphalt or four (4) inches of compacted road base.

License Condition 11.4. states " The licensee shall: a) Monitor the following to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502: (1) Continuously monitor at least the following areas for airborne concentrations of ^{222}Rn and ^{220}Rn as per Section 7.3.2 of the license application (see License Condition 9.3): (i) Waste Unloading Area (ii) Waste Storage Area (iii) Covered Waste Area (iv) Security Guard Trailer." Envirocare is currently performing monitoring in accordance with License Condition 11.4. If the additional bulk transfer area is approved, Envirocare will ensure monitoring for the area in accordance with License Condition 11.4.

The Final Safety Evaluation Report (NUREG 1486), page 85, 5.2.3. Waste Handling and Interim Storage, third paragraph, states " Envirocare has stated that wastes will be transferred to either the disposal or storage area within 24 hours of receipt. The transfer of bulk wastes to containers will take place only on asphalt or concrete surfaces at the railway rollover or the storage area to avoid contact with natural soils."

The Final Safety Evaluation Report (NUREG 1486), page 95, 6.1.2.1. , second paragraph states " The 11e.(2) byproduct material will be received either by truck or railcar. The railcar will be directly unloaded using the "rollover" facility or a specially designed front-end loader."

Page Z-2 of Appendix Z of the License Application states " Transfers of waste material must take place on asphalt or a concrete pad in areas approved by the Executive Secretary. These transfers include: rail car to dump truck, rail car to container, container to container, container to bulk storage, bulk to container storage.

Page Z-4 of Appendix Z states " Containers will be off-loaded by various methods. In general, the material will be off-loaded either for direct disposal placement or for storage prior to disposal. Transfers of bulk material to containers will take place only on asphalt or concrete surfaces at the following locations: Rollover, Storage Area (Including the Unloading Ramp)."


The proposed revision is consistent with findings of the Final Environmental Impact Statement (NUREG 1476.

Since Envirocare had committed in the Final Safety Evaluation Report to perform waste transfers on asphalt or concrete, the performance of waste transfer on hardened surfaces cannot be approved via the SERP.

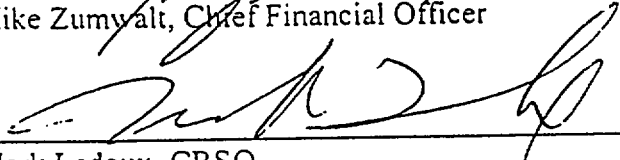


ENVIROCARE
OF UTAH, INC.

Because the request does conflict with regulatory requirements, the SERP hereby denies the request to allow for the transfer of 11e.(2) bulk material from railcars to vehicles on hardened surfaces adjacent to the railroad track located within the Restricted Area.


Mike Zumwalt, Chief Financial Officer

3/17/00
Date


Mark Ledoux, CRSO

3-17-00
Date


Paul Larsen, Director of Operations

3/17/00
Date


Bob Reifsnryder, Corporate Quality Assurance Manager
(Temporary member)

3/17/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-008

Date: March 15, 2000

Action Requested: To revise section 17 of the license application to change reference to "TLD" in the application to "TLD or equivalent, approved by the CRSO."

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to revise section 17 of the license application to change reference of "TLD" in the application to TLD or equivalent, approved by the CRSO, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.



ENVIROCARE
OF UTAH, INC.

Discussion:

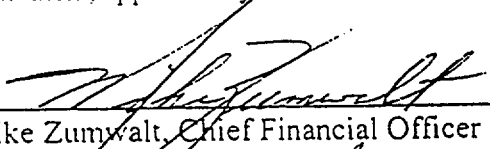
SERP Request Docket # 11e.(2) 00-008 requests approval to allow for the transfer of 11e.(2) bulk material from railcars to vehicles on hardened surfaces adjacent to the railroad track located within the Restricted Area. Hardened surfaces are defined as four (4) inches of compacted asphalt or four (4) inches of compacted road base.

The Final Safety Evaluation Report (NUREG 1486), 6.4.1.1. Personnel and Occupational Exposure Monitoring, states "Envirocare committed to monitor radiation exposure of all personnel using the following methods as described in the license application: a. Permanent employees will be issued TLD badges which will be examined and exchanged on a quarterly basis. The Radiation Safety Officer will keep quarterly dosimeter records for all staff. The dosimeters will be used primarily to assess direct gamma exposure. b. Individuals visiting the site on a short-term basis will be issued a self-reading pocket dosimeter to record exposure. The dosimeters will be read as the individual leaves the site and recorded in the Site Access Log. A group of visitors may all use one TLD or one pocket dosimeter, if they will stay in one vicinity in the controlled area and are near the individual with the dosimeter."

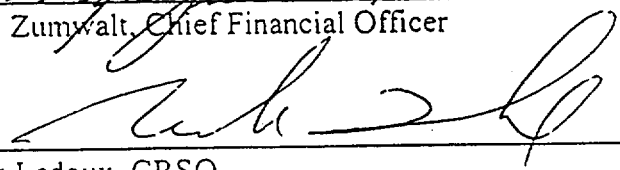
The proposed revision is consistent with findings of the Final Environmental Impact Statement (NUREG 1476).

Since Envirocare had committed in the Final Safety Evaluation Report to monitor radiation exposure of all personnel using specific methods as described in the license application, the proposed revision to Section 17 cannot be approved via the SERP.

Because the request does conflict with regulatory requirements, the SERP hereby denies the request to revise section 17 of the license application to change reference to "TLD" in the application to "TLD or equivalent, approved by the CRSO."


Mike Zumwalt, Chief Financial Officer



Date


Mark Ledoux, CRSO


Date


Paul Larsen, Director of Operations


Date


Bob Reifshyder, Corporate Quality Assurance Manager
(Temporary member)


Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-010

Date: August 7, 2000

Action Requested: To authorize modification of the requirements listed in Section 16 of the License Application for the release of equipment, vehicles, conveyances, and other items from waste management areas. Approve proposed editorial changes including changes to reflect current regulatory requirements of Section 16.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize modification of the requirements listed in Section 16 of the License Application for the release of equipment, vehicles, conveyances, and other items from waste management areas, and approve editorial changes does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-010 requests approval for the modification of the requirements listed in Section 16 of the License Application for the release of equipment, vehicles, conveyances, and other items from waste management areas and approval for minor editorial changes within the text. Also included is a revision to the text to update current regulatory requirements.


Changes proposed in the revision include the following:

- Update 10 CFR reference for shipment acceptance.
- Add Department of Transportation (DOT) to the list of releases for clarification of available releases.
- Replace "unlimited" with "unrestricted" use. Unrestricted use release terminology is used in the Final Safety Evaluation Report.
- Add "All vehicles, packages, equipment, or other items leaving the controlled area, except conveyance used for commercial transport of radioactive waste material, shall have an unrestricted use release" to clarify the release types and items the release types apply to, as applicable to the release from the controlled area.
- Remove the reference to the release forms and the forms themselves. Provide the minimum requirements for documentation.
- Update to the text to reflect In-cell bulk storage.

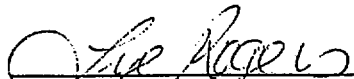
Proposed revisions to Section 16 of the License Application are provided in Attachment 1. Attachment 2 contains a clean copy.

The changes listed and described above do not impair the ability to meet all applicable NRC regulations. There is no degradation in the essential safety or environmental commitments in the license application. The changes are consistent with the conclusions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) and the Final Safety Evaluation Report (NUREG-1486).

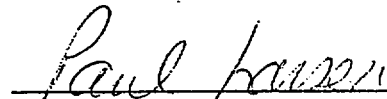
Because the request does not conflict with regulatory requirements, the SERP hereby approves the revised Section 16 of the License Application.


Mike Zumwalt, Chief Financial Officer

10/10/00
Date

 via telecon
Tye Rogers, Acting CRSO

10/10/00
Date

 via telecon
Paul Larsen, Vice President of Operations

10/10/00
Date

 via telecon
Bob Reifsnyder, Corporate Quality Assurance Manager

10/10/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-011

Date: August 14, 2000

Action Requested: To authorize the use of occupancy factors presented to ensure compliance with restricted area boundary regulatory requirements.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to use occupancy factors presented to ensure compliance with restricted area boundary regulatory requirements does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**

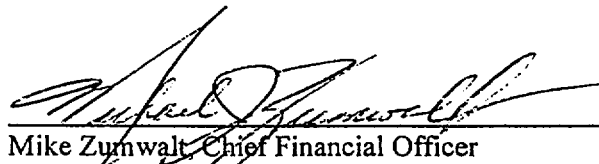
Discussion:

SERP Request Docket # 11e.(2) 00-011 requests authorization for the use of occupancy factors presented to ensure compliance with restricted area boundary regulatory requirements.


The proposed occupancy factors, justification, and criteria are listed in Attachment 1.

The proposed revision is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486).

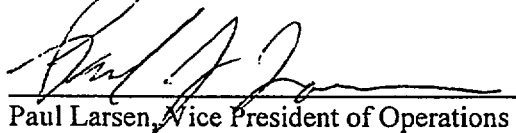
Because the request does not conflict with any regulatory requirements, the SERP hereby approves the request to authorize the use of occupancy factors to ensure compliance with restricted area boundary regulatory requirements.


Mike Zumwalt, Chief Financial Officer

8/15/00
Date


Vern Andrews, CRSO

8/15/00
Date


Paul Larsen, Vice President of Operations

8/15/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

8/15/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-012

Date: April 4, 2000

Action Requested: To allow for the placement of additional monitoring stations in order to monitor dose to members of the public, due to an extension of the site boundary outside of section 32.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to allow for the placement of additional monitoring stations in order to monitor dose to members of the public, due to an extension of the site boundary outside of section 32, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.**



Discussion:

SERP Request Docket # 11e.(2) 00-012 requests approval to allow for the placement of additional environmental monitoring stations in order to monitor dose to members of the public, due to an extension of the site boundary outside of section 32.

License SMC-1559, Condition 11.4 states the following:

"The Licensee shall:

- a) Monitor the following to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502:
 - (1) Continuously monitor at least the following areas for airborne concentrations of ^{222}Rn and ^{220}Rn as per Section 7.3.2 of the license application (see License Condition 9.3):
 - (i) Waste Unloading Area
 - (ii) Waste Storage Area
 - (iii) Covered Waste Area
 - (iv) Security Guard Trailer
 - (2) Shall perform Airborne Particulate Monitoring as per Section 7.3.1 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the work area as per Section 7.3.3 of the license application (see License Condition 9.3); and
 - (4) Shall demonstrate that the monitoring locations are representative of the occupational exposure to radiation and radioactive materials.
- b) Monitor the following to demonstrate compliance with Subpart D of Part 20:
 - (1) continuously monitor the site perimeter as per Section 7.4 of the license application (see License Condition 9.3) for ^{222}Rn and ^{220}Rn airborne concentrations;
 - (2) Shall monitor the effluent release of airborne particulates as per Section 7.4 of the license application (see License Condition 9.3) at the air sampling stations listed in Table 7.2 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the unrestricted area as per Section 7.3.3 of the license application (see License Condition 9.3); and
 - (4) Shall assume that the measured net values originated solely from the 11e.(2) disposal facility.
- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

The License Application Table 7.1 lists the sample point locations providing northern and eastern coordinates. Table 7.2 provides the stations, sample collection requirements, and the sample analysis requirements. If additional environmental monitoring stations are added, the aforementioned tables will require revision.

The Final Environmental Impact Statement (NUREG 1476), Page 2-6, 2.3.2.2 states the following: "The property to be used in this disposal project is owned by Envirocare and encompasses most of Section 32 of Township 1S, Range 11W. With the exception of approximately 40 ha (100 acres) that were used for the Vitro Remedial Action project, all of the section is owned by Envirocare." "A buffer zone of 91 m (300 ft) will be maintained between the closest edge of any embankment and the outside site boundary or



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OF UTAH, INC.

property line. A buffer zone of 30 m (100 ft) will be maintained between the closest edge of any embankment and the Vitro (DOE) site fence".

The disposal operations will occur within section 32 as stated above. Monitoring will occur outside of the section. Buffer zone requirements will be met as listed above with the extension of the site boundary.

The Final Environmental Impact Statement (NUREG 1476), Page 5-22, 5.4, paragraph 3 states the following: "The radiological monitoring program is described in Table 5.6. The disposal site layout and environmental monitoring station locations are provided in Figure 5.2." Table 5.6 lists all of the stations, collection methods, frequency, and sample analysis.

The Final Environmental Impact Statement (NUREG 1476) Page 5-22, 5.4.1.2. states the following: "Radon in outdoor air would be measured on a continuous basis using E-Perm Electret Ion Chambers. Radon detectors would be placed at the ten air sampling stations listed in Table 5.6." Table 5.6 lists all of the stations, collection methods, frequency, and sample analysis.


The Final Safety Evaluation Report (NUREG 1486), Page 123, paragraph 5, states "Therefore, the applicant will be required by license condition to monitor the unrestricted areas at the site boundary to demonstrate that the TEDE to an individual member of the public that would result at that location would not exceed 100 mrem/yr."

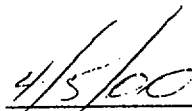
The Final Safety Evaluation Report (NUREG 1486), Page 136, states "The on-site monitoring stations will be located at A2, A3, A5, A6, A7, and A11 through A13 (see Table 7.1 of the application for coordinates of these stations).

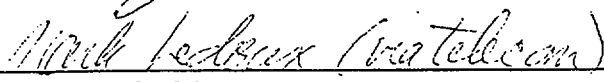
The Final Safety Evaluation Report (NUREG 1486), Page 137, states "Detection of elevated exposure rates at the boundary environmental stations in unrestricted areas may necessitate additional controls including limitations on waste emplacement activities or additional restrictions on the acceptable concentrations for disposal, even though the source of the elevated exposure rates may be the adjacent waste disposal facilities under the control of the applicant."

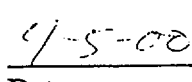
With additional environmental monitoring stations, Envirocare will still meet the requirements for demonstrating compliance with the 100 mrem limitation. However, an amendment is required in order to update Tables 7.1 and 7.2 of the license application.

Because the request does conflict with regulatory requirements, the SERP hereby denies the request to allow for the placement of additional monitoring stations in order to monitor dose to members of the public, due to an extension of the site boundary outside of section 32.


Mike Zumwalt, Chief Financial Officer


Date


Mark Ledoux, CRSO


Date



ENVIROCARE
OF UTAH, INC.

Paul Larsen (via telecon)
Paul Larsen, Director of Operations

4-5-00
Date

Bob Reifsnyder (via telecon)
Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

4-5-00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-013

Date: May 10, 2000

Action Requested: To authorize revision to Figures 18.1 – 18.6 of Section 18 of the License Application due to a proposed designation of a new Corporate Radiation Safety Officer.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to revise Section 18 of the License Application for the designation of a new Corporate Radiation Safety Officer, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.



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Discussion:

SERP Request Docket # 11e.(2) 00-013 requests approval of the proposed revisions to Section 18 of the License Application due to the designation of a new Corporate Radiation Safety Officer.

License SMC-1559, Condition 9.10 states the following:

"The licensee shall have a CRSO responsible for the site who shall report directly to the Sr. Vice President of Compliance and development on matters dealing with radiological safety aspects of the licensed facility. In addition to the responsibilities and qualifications specified in the licensee's application, the CRSO, or his designate shall be qualified as specified in Sections 1.2 and 2.4 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures as Uranium Mills will be As Low As Reasonably Achievable," dated May 1983. In addition, the CRSO shall also receive 40-hours of related health and safety refresher training every two years."

Proposed revision to Section 18 is included in Attachment A. The proposed changes to Section 18 of the license application does not change the structural organization as designated in the license. All reporting requirements as mandated by the license remains. Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 18 of the license application.

Mike Zumwalt via email
Mike Zumwalt, Chief Financial Officer

5-10-00
Date

Mark Ledoux, CRSO

Date

Paul Larsen, Director of Operations

Date

Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

Date

Discussion:

SERP Request Docket # 11e.(2) 00-013 requests approval of the proposed revisions to Section 18 of the License Application due to the designation of a new Corporate Radiation Safety Officer.

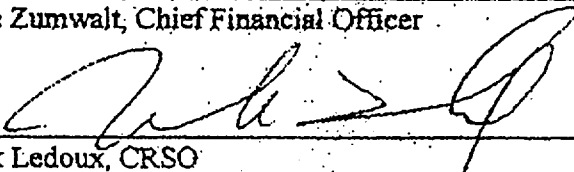
License SMC-1559, Condition 9.10 states the following:

"The licensee shall have a CRSO responsible for the site who shall report directly to the Sr. Vice President of Compliance and development on matters dealing with radiological safety aspects of the licensed facility. In addition to the responsibilities and qualifications specified in the licensee's application, the CRSO, or his designate shall be qualified as specified in Sections 1.2 and 2.4 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures as Uranium Mills will be As Low As Reasonably Achievable," dated May 1983. In addition, the CRSO shall also receive 40-hours of related health and safety refresher training every two years."


Proposed revision to Section 18 is included in Attachment A. The proposed changes to Section 18 of the license application does not change the structural organization as designated in the license. All reporting requirements as mandated by the license remains. Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 18 of the license application.

Mike Zumwalt, Chief Financial Officer


Date


Mark Ledoux, CRSO

5-10-00
Date


Paul Larsen, Director of Operations

5/10/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

5/10/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-014

Date: August 3, 2000

Action Requested: To authorize revision to Section 17 of the license application, and amend License Condition 12.3 to incorporate proposed changes for internal dose assessment and bioassay sampling.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval To authorize revision to Section 17 of the license application, and amend License Condition 12.3 to incorporate proposed changes for internal dose assessment and bioassay sampling, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-014 requests approval to authorize revision to Section 17 of the license application, and amend License Condition 12.3 to incorporate proposed changes for internal dose assessment and bioassay sampling.

Due to new regulations and the availability of 12 years of site bioassay data, the following changes to Section 17 of the license application are proposed for the internal dose assessment program:

- Clarify conditions applicable to work place air sampling (17.4.4.1). The use of DACs and DAC-hrs should be used as action levels, not dose assessment.
- Move current 17.4.4.2 to end of section for better flow of information, providing instruction for calculations for the previous parts.
- Remove current dose conversion tables. Change the references to the Federal Guidance Reports and ICRP Publication 30, and other approved guidance reports such as 68, and 72. Since ICRP 30, there has been continuous research that has been published on internal dose assessment. Thus, the dose factor tables should not be in the licensee application.
- Remove reference to permanent employees working at the site and replace with monitored individuals working at the site (17.4.4.5). There are now many support groups with small potential of internal dose exposure not requiring monitoring.
- Remove gross beta minus K-40 from the analytical requirements. The analysis of total uranium and isotopic thorium provides complete detection of potential exposure.
- Clarify that isotopic thorium is not required for initial bioassay. There is no detectable thorium in bioassays from background. In the event there was a prior exposure, prior to working at the site, the ability to detect it would be very unlikely.
- Do not use three standard deviations as an action level. This generates a large number of false positives, especially with uranium. In accordance with NRC Regulatory Guide 8.9, action levels should be used. Envirocare should continue to use 3 sigma for trending and review of data.
- Remove the reference and tables for the Uranium Mill Tailing modeling. Over the past several years, the waste isotopic characteristics have not matched this modeling. Replace with requirement for the radiation protection staff to model on a quarterly basis.
- Clarify the two purposes of bioassays at the Envirocare facility:
 1. For monitored individuals not in direct contact with the waste, the annual bioassays will be used to monitor exposures for compliance with the 10 CFR 20.
 2. For monitored individuals working with the waste, Radiation Work Permits and air monitoring will be used to indicate bioassay frequency. At a minimum, bioassay sampling will be performed quarterly for selected 11e.(2) workers.

The proposed changes in redline/strikeout format are provided in Attachment 1. Attachment 2 contains a clean copy.

License Condition 12.3 states the following:

- 12.3 The licensee shall perform an annual ALARA audit of the radiation safety program which shall be led by the CRSO or designate, qualified by way of specialized radiation protection training equivalent to that required for the CRSO as defined in License Condition 9.10, in accordance with Section 2.3.3 of Regulatory Guide 8.31. The audit team should contain a representative from corporate management. A report of this audit shall be submitted to corporate headquarters and the Chief, Uranium Recovery and Low-Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, within 60 days after conducting the audit. The report shall include detailed summaries of the analytical results of the radiological surveys. In order to evaluate the ALARA objective, the licensee shall, at a minimum, review the following records:
- a) Bioassay results including any actions taken when the results exceeded action levels in Table 1 of Regulatory Guide 8.22, "Bioassay at Uranium Mills," dated January 1987.
 - b) Records of external and internal exposure.
 - c) Safety meeting minutes, attendance records, and training program records.
 - d) Daily inspection log entries and summary reports of the monthly reviews.
 - e) Radiological survey and monitoring data, as well as environmental radiological effluent and monitoring data.
 - f) Surveys required by radiation work permits.
 - g) Reports on overexposure submitted to NRC and State of Utah.
 - h) Reviews of operating and monitoring procedures completed during the period.

The audit shall also address any noticeable trends in personnel exposures for identifiable categories of workers and types of activities, any trends in radiological effluent data, and the performance of exposure and effluent control equipment as well as its utilization, maintenance, and inspection history. Any recommendations to further reduce personnel exposures or environmental releases of uranium or radon and radon progeny shall be included in the report.

Requested language for License Condition 12.3 is as follows:

- 12.3 The licensee shall perform an annual ALARA audit of the radiation safety program which shall be led by the CRSO or designate, qualified by way of specialized radiation protection training equivalent to that required for the CRSO as defined in License Condition 9.10, in accordance with Section 2.3.3 of Regulatory Guide 8.31. The audit team should contain a representative from corporate management. A report of this audit shall be submitted to corporate headquarters and the Chief, Uranium Recovery and Low-Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, within 60 days after conducting the audit. The report shall include detailed summaries of the analytical results of the radiological surveys. In order to evaluate the ALARA objective, the licensee shall, at a minimum, review the following records:


- a) Bioassay results including any actions taken when the results exceed established action levels as referenced in Regulatory Guide 8.9, "Acceptable Concepts, Models, Equations, and Assumptions For A Bioassay Program", dated July 1993.
- b) Records of external and internal exposure.
- c) Safety meeting minutes, attendance records, and training program records.
- d) Daily inspection log entries and summary reports of the monthly reviews.
- e) Radiological survey and monitoring data, as well as environmental radiological effluent and monitoring data.
- f) Surveys required by radiation work permits.
- g) Reports on overexposure submitted to NRC and State of Utah.
- h) Reviews of operating and monitoring procedures completed during the period.

The audit shall also address any noticeable trends in personnel exposures for identifiable categories of workers and types of activities, any trends in radiological effluent data, and the performance of exposure and effluent control equipment as well as its utilization, maintenance, and inspection history. Any recommendations to further reduce personnel exposures or environmental releases of uranium or radon and radon progeny shall be included in the report.

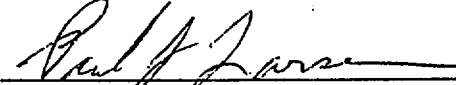
Because the request does conflict with regulatory requirements, the SERP hereby denies the request to authorize revision to Section 17 of the license application and amend License Condition 12.3.


Mike Zumwalt, Chief Financial Officer

8/15/00
Date


Vernon E. Andrews, CRSO

8/15/00
Date


Paul Larsen, Vice President of Operations

8/15/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

8/15/00
Date



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SOLUTIONS

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-015

Date: May 18, 2000

Action Requested: To authorize revision to the SERP Administrative Procedure, ADMIN-5.0, to reflect NRC document distribution change and due date of the annual report to April 30, approved via Amendment 22 of the License.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to revise the SERP Administrative Procedure, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

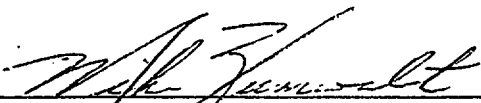


ENVIROCARE
WATER TREATMENT

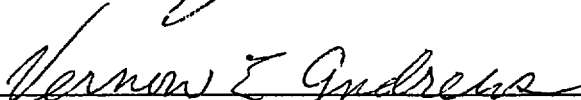
Discussion:

SERP Request Docket # 11e.(2).00-015 requests approval of the proposed revisions to authorize revision to the SERP Administrative Procedure, ADMIN-5.0., to reflect NRC document distribution changes and due date of annual report to April 30, approved via Amendment 22 of the License.

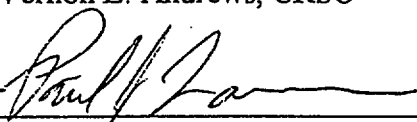
Proposed revision reflecting only administrative changes to ADMIN-5.0 is included as Attachment A. The proposed changes to ADMIN-5.0 do not change any requirements as delineated by the license. The proposed changes are administrative in nature due to the recent installation and incorporation of the NRC ADAMS system. Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to the SERP Administrative Procedure.


Mike Zumwalt, Chief Financial Officer


5/19/00
Date


Vernon E. Andrews, CRSO

5/19/00
Date


Paul Larsen, Director of Operations

5/19/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

5/19/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-016

Date: May 19, 2000

Action Requested: To authorize revision to Section 18 of the License Application to change the title of Director of Operations to Vice President of Operations and revise Figures 18.1- 18.6 to reflect other personnel changes.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to revise Section 18 of the License Application to change the title of Director of Operations to Vice President of Operations, and revise Figures 18.1 – 18.6 to reflect current personnel changes does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

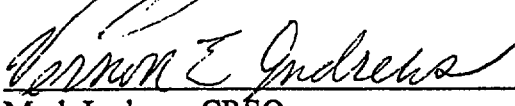
SERP Request Docket # 11e.(2) 00-016 requests approval of the proposed revisions to Section 18, including Figures 18.1-18.6 of the License Application. The changes incorporate a title change from Director of Operations to Vice President of Operations, and other personnel changes.

Proposed revision to Section 18 is included in Attachment A. The proposed changes to Section 18 of the license application do not change the structural organization as designated in the license. All reporting requirements as mandated by the license remains.

Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 18 of the license application.


Mike Zumwalt, Chief Financial Officer


5/19/00
Date


Mark Ledoux, CRSO

5/19/00
Date


Paul Larsen, Director of Operations

5/19/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

5/19/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-017

Date: June 7, 2000

Action Requested: Approve Engineering Procedure ENG-9.1, Clay Mining and Excavation.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval for Engineering Procedure ENG-9.1, Clay Mining and Excavation, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**

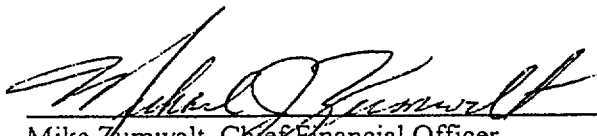
Discussion:

SERP Request Docket # 11e.(2) 00-017 requests approval of Engineering Procedure ENG-9.1, Clay Mining and Excavation.

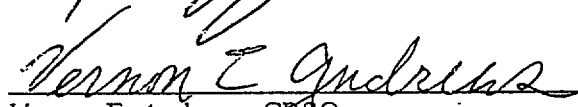
The proposed Procedure delineates the method used for controlling clay mining and excavation activities, and management of storm water that falls within the excavated areas.

The proposed procedure is consistent with findings of both the FEIS (NUREG 1476), and FSER (NUREG-1486).

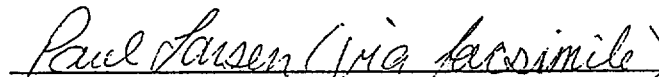
Because the request does not conflict with any regulatory requirements, the SERP hereby approves Engineering Procedure ENG-9.1, Clay Mining and Excavation.


Mike Zumwalt, Chief Financial Officer


6/8/00
Date


Vernon E. Andrews, CRSO

6/8/00
Date


Paul Larsen, Vice President of Operations

6/8/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

6/9/00
Date



ENVIROCARE
INCORPORATED

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-018

Date: June 15, 2000

Action Requested: To authorize revision to Section 18 of the License Application and the Construction QA/QC Plan to reflect proposed changes to the organization.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to Section 18 of the License Application and the CQA/QC Plan to reflect proposed changes to the organization does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.



ENVIROCARE
OF THE STATE OF TEXAS

Discussion:


SERP Request Docket # 11e.(2) 00-018 requests approval of the proposed revisions to Section 18, including Figures 18.1-18.6 of the License Application and the CQA/QC Plan.

Changes proposed in the organization include the following:

- Change in title from Sr. Vice President of Operations and Business Development to Executive Vice President
- Addition of Director of Site Operations
- Change in reporting authority for the Corporate Engineering Manager from the Sr. Vice President of Compliance and Development to the Vice President of Operations.
- Change in reporting authority for the Risk Manager from the Corporate Radiation Safety Officer to the Sr. Vice President of Compliance and Development.

Proposed revisions to Section 18 are provided in Attachment 1. Proposed revisions to the CQA/QC Plan are provided in Attachment 2.


Because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 18 of the license application and the CQA/QC Plan.


Mike Zumwalt, Chief Financial Officer


6/19/00
Date


Vernon E. Andrews, CRSO

6/19/00
Date


Paul Larsen, Vice President of Operations

6/19/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager
(Temporary member)

6/19/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-019

Date: September 7, 2000

Action Requested: To authorize revision to Section 17 of the license application to change the requirement that the Site Radiation Safety Officer review Disposal Contracts as part of ALARA activities, to a requirement of the Corporate Radiation Safety Officer to review the Waste Profile Record for each newly proposed waste stream prior to the issuance of a "Notice to Transport".

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to Section 17 of the license application to modify the requirements for the aforementioned ALARA activities, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.



ENVIROCARE
OF CT, INC.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-019 requests approval of the proposed revision to Section 17 of the license application. The revision is requested to modify the requirements for the Site Radiation Safety Officer (SRSO) ALARA activities and the Corporate Radiation Safety Officer (CRSO) ALARA activities.

- 17.4.1., Radiation Protection Policy, Page 17-18 in the discussion of the SRSO ALARA activities, states the following:

“Reviews of new proposed disposal contracts to assure that Envirocare’s procedures, facilities, and equipment are appropriate and sufficient to limit exposures to workers and the environment”.

It is proposed that the language be changed as follows and placed as 17.4.1., Radiation Protection Policy, Page 17-18 in the discussion of the Corporate Radiation Safety Officer (CRSO) ALARA activities.

“Reviews of new proposed Waste Profile Records (WPRs) to assure that Envirocare’s procedures, facilities, and equipment are appropriate and sufficient to limit exposures to workers and the environment.

The Waste Profile Record provides detailed information concerning the waste characteristics (radiological and non-radiological). During the review of the WPR, the CRSO evaluates the suitability of the waste to the site, and the site controls required to accept and process the waste for disposal.


The requested change is consistent with the conclusions and actions analyzed in the Final Environmental Impact Statement (NUREG-1476).

On page 6-32, 6.5.5, ALARA Controls, of the Final Safety Evaluation Report (NUREG-1486) it states the following: “The applicant indicated also that the FRSO will document ALARA activities that include review of disposal contracts, monthly review of environmental air monitoring, adjustment of work procedures to reduce exposures, and review of gamma exposure rates in the working areas to reduce exposures to ALARA.” The review of Waste Profile Records by the CRSO provides the information necessary to reduce exposures to ALARA. The intent from the beginning was that the CRSO would review the waste profile records.

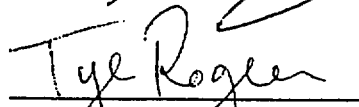


ENVIROCARE

Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 17 of the license application.


Mike Zumwalt, Chief Financial Officer

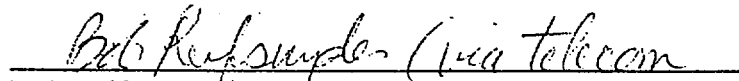
9/7/00
Date


Tye Rogers, Acting CRSO

9/7/00
Date


Paul Larsen, Vice President of Operations

9/7/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

9/7/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-020

Date: August 3, 2000

Action Requested: To authorize revision to Section 17 of the license application to modify the requirements for water application to haul roads.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to Section 17 of the license application to modify the requirements for water application to haul roads, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-020 requests approval of the proposed revision to Section 17 of the license application. The revision is requested to modify the requirements for water application to haul roads.

Changes proposed in the revision include the following:

- Change the requirement listed in 17.4.1.a, as follows:
 - a. Dust suppression on all operational roads by application of magnesium chloride or watering as necessary.

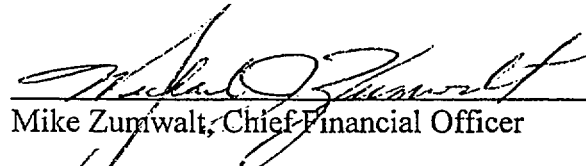
Currently the requirement is listed as follows:

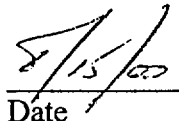
- a. Dust suppression on all operational roads by application of magnesium chloride or watering at 2-hour intervals.

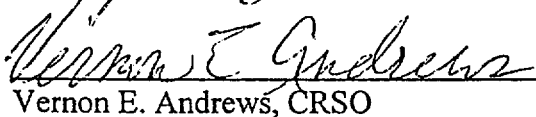
The proposed change is consistent with License Condition 9.14 that states " The licensee shall provide SOPs for controlling internal contamination of workers from dust inhalation, which shall include the use of dust suppressants (e.g., magnesium chloride or water) on all operational roads, as necessary.

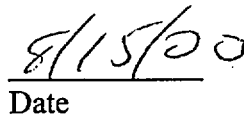
The requested change is consistent with the conclusions and actions analyzed in the Final Environmental Impact Statement (NUREG-1476) and the Final Safety Evaluation Report (NUREG-1486).

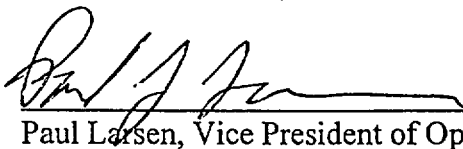
Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 17 of the license application.


Mike Zumwalt, Chief Financial Officer


Date

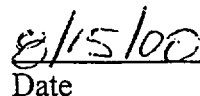

Vernon E. Andrews, CRSO


Date


Paul Larsen, Vice President of Operations


Date


Bob Reifsnnyder, Corporate Quality Assurance Manager


Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-021

Date: October 24, 2000

Action Requested: To authorize revision to Section 17 of the license application to add the Operations Building and approve minor editorial changes.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to Section 17 of the license application to add the Operations Building and approve minor editorial changes, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-021 requests approval of a proposed revision to Section 17 of the license application and approval of minor editorial changes.

It is requested that the License Application be changed, specifically that the Operations building be added to the text of the application. In situations where the functions or facilities formerly in the Administration building have been relocated to the Operations building, the text should reflect the change in facilities. Proposed changes to Section 17 are provided in redline/strikeout format as Attachment 1.

The Operations building is part of the facilities at Envirocare. It was constructed to accommodate the increased staff needed to process the increased volume of waste Envirocare now receives.

The 11e(2) Radioactive Materials License SMC-1559, Amendment 29 (including the Technical Evaluation Reports) does not stipulate anything to the contrary of the requested change. License condition 9.4a)(1) permits Envirocare to make changes in the facility through the SERP process.

The Environmental Impact Statement, NUREG-1476 (including Supplement 1) references the facilities formerly in the administration building, as well as the building itself, in many instances.

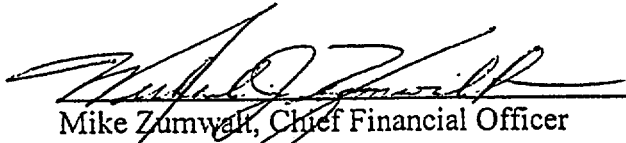
The addition of an Operations Building will not result in an increase in the frequency of occurrence of an accident previously evaluated in the license application. Additionally, the addition of the Operations Building will not increase the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the license application. The addition of the Operations Building will not create a possibility for an accident of a different type than any previously evaluated in the license application, result in a departure from the method of evaluation described in the license application used in establishing the final safety evaluation report (FSER) or the environmental impact statement (EIS).

The facilities in the Operations building are equivalent, and in most cases better suited for the functions for which the facility was intended, to the facilities in the Administration building which were replaced.

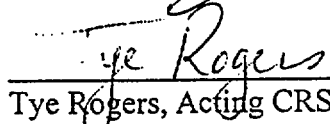
The requested change does not negatively impact Envirocare of Utah, Inc.'s ability to comply with Title 10, Parts 20, 40 or 61.

The requested change is consistent with the conclusions and actions analyzed in the Final Environmental Impact Statement (NUREG-1476) and the Final Safety Evaluation Report (NUREG-1486).

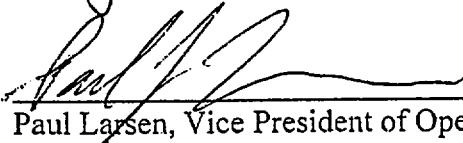
Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 17 of the license application.


Mike Zumwalt, Chief Financial Officer

12/20/00
Date


Tye Rogers, Acting CRSO

11/20/00
Date


Paul Larsen, Vice President of Operations

11/20/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

11/20/00
Date

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-024

Date: August 4, 2000

Action Requested: To authorize revision to Section 17 of the license application to allow for the use of equivalent instrumentation for those listed in Section 17.4.6.1.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to Section 17 of the license application to allow for the use of equivalent instrumentation for instrumentation listed in Section 17.4.6.1, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-024 requests approval of proposed revisions to Section 17 of the license application.

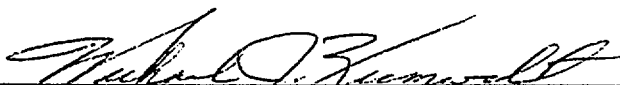
Changes proposed in the revision include the following:

- Addition of language to Section 17.4.6.1. allowing the selection of equivalent instrumentation
- Removal of instrumentation quantities in the application text
- Replacement of Technical Associates Model MGS 5AB gas flow counter with Model 5S5T analyzing scaler ratemeter, with Packard Tri-Carb Liquid Scintillation Counter.


Proposed revisions to Section 17 are provided in Attachment 1.

The proposed revision to Section 17 is consistent with the conclusions and actions selected and analyzed in the Final Environmental Impact Statement NUREG-1476 and the Final Safety Evaluation Report NUREG-1486.

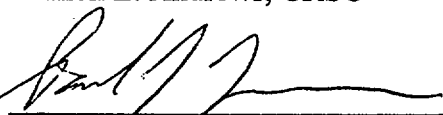
Because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to Section 17.


Mike Zumwalt, Chief Financial Officer

8/15/00
Date


Vernon E. Andrews, CRSO

8/15/00
Date


Paul Larsen, Vice President of Operations

8/15/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

8/15/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-025

Date: July 14, 2000

Action Requested: To authorize revision to ADMIN-5.0, *SERP Administrative Procedure* reflecting changes per reorganization effective June 4, 2000 at the Nuclear Regulatory Commission (NRC) and the addition of the Corporate Quality Assurance Manager as a permanent member of the SERP.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to ADMIN-5.0 reflecting changes per reorganization effective June 4, 2000, at the NRC, and the addition of the Corporate Quality Assurance Manager as a permanent member of the SERP does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.



ENVIROCARE
OF UTAH, INC.

Discussion:

SERP Request Docket # 11e.(2) 00-025 requests approval of the proposed revisions to ADMIN-5.0, *SERP Administrative Procedure*.

Changes proposed in the revision include the following:

- Addition of Corporate Quality Assurance Manager as a permanent member of the SERP.
- Change in NRC Branch and Division titles and addresses according to NRC reorganization effective June 4, 2000.

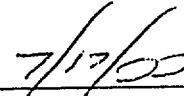
Proposed revisions to ADMIN-5.0 are provided in Attachment 1. Attachment 2 contains a clean copy.

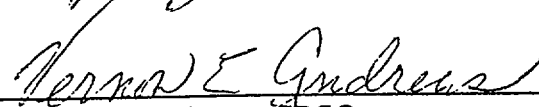
The addition of a permanent SERP member does not require a request to amend License Condition 9.4, because the minimum number of SERP members and authority granted each have not changed.

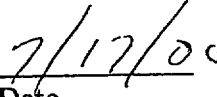
Envirocare received notice of the NRC reorganization via email from Harold Lefevre, Project Manager on June 5, 2000. The current license references notification to those individuals responsible prior to the reorganization. Harold Lefevre mentioned in a telephone conversation with Treesa Parker that the NRC would amend the license to reflect the reorganization with the next amendment. Therefore, the SERP can approve the changes to ADMIN-5.0


Because the request does not conflict with regulatory requirements, the SERP hereby approves the proposed revision to ADMIN-5.0, *SERP Administrative Procedure*.

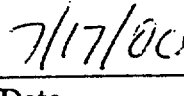

Mike Zumwalt, Chief Financial Officer


Date


Vernon E. Andrews, CRSO


Date


Paul Larsen, Vice President of Operations


Date


Bob Reifsnnyder, Corporate Quality Assurance Manager


Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-026

Date: June 30, 2000

Action Requested: To authorize request to amend Table S-1 of License SMC 1559 as presented in Appendix Z, Groundwater Monitoring Quality Assurance Plan and revise Appendix Z to reflect current Table S-1 for Silver, Acetone, and 2-Butanone.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend Table S-1 of the License to reflect detection levels as presented in Appendix Z, *Groundwater Monitoring Quality Assurance Plan*, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.**



Discussion:

SERP Request Docket # 11e.(2) 00-026 requests approval to authorize changes to Table S-1 of the License to raise detection levels to reflect those listed in Appendix Z, *Groundwater Monitoring Quality Assurance Plan*. SERP 00-026 also requests approval for revision to Appendix Z, *Groundwater Monitoring Quality Assurance Plan* in order to lower the detection levels for Acetone and 2-Butanone from 25 µg/l to 20 µg/l to reflect current Table S-1 requirements.

The requested changes to Table S-1 include the following:

Constituent	Previous Table S-1 Value µg/l	Requested Table S-1 Value µg/l
Carbon Disulfide	2.0	5.0
Chloroform	2.0	5.0
1,2-Dichloroethane	2.0	5.0
Diethylphthalate	4.0	10.0
Methylene Chloride	2.0	5.0
2-Methylnaphthalene	4.0	10.0
Naphthalene	4.0	10.0

License Condition 11.1 (g) states

“ If a baseline background or site-specific standard ground-water quality value listed in the attached Tables S-1 and STD-1, for any of the above constituents is exceeded, or if a new hazardous constituent, identified based on waste characterization (see License Condition 10.2 (a)) is detected in a POC well, the licensee shall take a confirmatory sample within 72 hours, excluding weekends and holidays, and have it analyzed. Upon receipt of the sample analysis, if the second sample does not indicate exceedence/detection, a third sample shall be taken within 72 hours, excluding weekends and holidays, and analyzed. If neither the second nor third samples indicated exceedence/detection, the first sample shall be considered in error. If the second or third sample indicates exceedence/detection, the licensee shall notify NRC and meet the reporting requirements as stated in License Condition 12.2.

In addition, within 30 days from the receipt of the analysis results, the licensee shall develop and implement proposed site-specific standards for groundwater protection and develop a written compliance monitoring plan. The compliance monitoring plan will be in accordance with the sampling schedule specified in Part a) of this license condition and in the applicable regulations, for individual constituents that have been detected in the POC wells in excess of the background values.

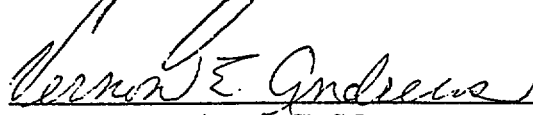
All water sampling and analysis activities shall be carried out in accordance with the sampling procedures of a certified laboratory. The sampling of the monitoring wells shall be conducted according to acceptable industry standards and in conformance to the proposed quality assurance measures provided in Appendix Z of the license application.”

Due to the inclusion of Table S-1 in License Condition 11.1, and the direction given to confirm any value determined to exceed those presented within Table S-1, requesting change to Table S-1 will require an amendment to the license.

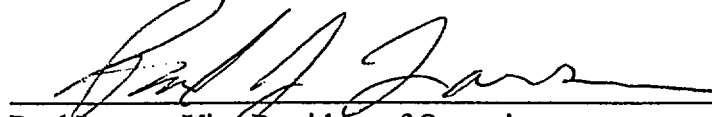
Because the request does conflict with regulatory requirements, the SERP hereby denies the request to amend Table S-1 of the License and revise Appendix Z, Groundwater Monitoring Quality Assurance Plan to reflect current Table S-1 for Silver, Acetone, and 2-Butanone.


Mike Zumwalt, Chief Financial Officer

7/5/00
Date


Vernon E. Andrews, CRSO

7/5/00
Date


Paul Larsen, Vice President of Operations

7/5/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

7/5/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-027

Date: September 12, 2000

Action Requested: To authorize revision to Sections 16, 17, and 18 of the License Application, amend License SMC-1559 to incorporate proposed organizational changes.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval To authorize revision to Sections 16, 17, and 18 of the License Application, amend License SMC-1559 to incorporate proposed organizational changes, does require a request to amend the license.
The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.
- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.
- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.



ENVIROCARE
OF TEXAS, INC.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-027 requests approval to authorize revision to Sections 16, 17, and 18 of the License Application, and amend License SMC-1559 to incorporate proposed organizational changes. Proposed changes to the organization are as follows:

1. A Radiation Protection Manager (RPM) has been added to assume the responsibilities of the existing Corporate Radiation Safety Officer. The RPM will assume the duties of the CRSO as presently designated in the License and License Application.
2. The radiological laboratory and chemical laboratory have been combined with the Laboratory Manager reporting to the Radiation Protection Manager.
3. A Corporate Radiation Safety Officer will be reassigned to the following:
The CRSO is responsible for the content and status of the Envirocare Radiation Safety Program, resolving radiation policy issues, representing Envirocare as needed in hearings, meetings, negotiations, etc., and will provide training and direction to persons involved with radiation safety.

The following License Conditions identify the Corporate Radiation Safety Officer:

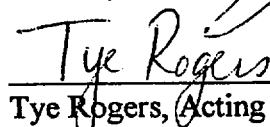
9.4	9.15
9.8	11.2
9.10	11.3
9.13	12.3

Sections 5 and 6 of the Final Safety Evaluation Report (NUREG-1486) identify the CRSO and designate responsibilities for facility operations and radiation safety.

Therefore, because the request does conflict with regulatory requirements, specifically License SMC-1559, the SERP hereby denies the request.


Mike Zumwalt, Chief Financial Officer

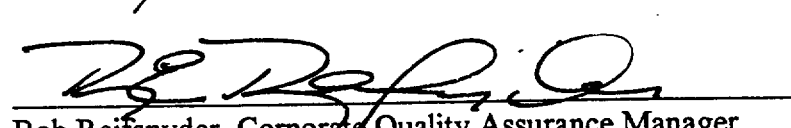
9/12/00
Date


Tye Rogers, Acting CRSO

9/12/00
Date


Paul Larsen, Vice President of Operations

9/12/00
Date


Bob Reifsnnyder, Corporate Quality Assurance Manager

9/12/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-028

Date: August 7, 2000

Action Requested: To authorize revision to Section 7 and Section 8 of the License Application, approve a proposed Environmental Monitoring and Surveillance Plan to be incorporated as Appendix LL of the License Application, and amend License Condition 11.4.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval of the revised Section 7, Section 8, the addition of Appendix LL, and request to amend License Condition 11.4, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-028 requests approval of the proposed revision to Section 7 and Section 8 of the License Application, the proposed Environmental Monitoring and Surveillance Plan to be incorporated as Appendix LL of the License Application, and amend License Condition 11.4.

License Condition 11.4 states the following:

11.4 The Licensee shall:

- a) Monitor the following to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502:
 - (1) Continuously monitor at least the following areas for airborne concentrations of ^{222}Rn and ^{220}Rn as per Section 7.3.2 of the license application (see License Condition 9.3):
 - (i) Waste Unloading Area
 - (ii) Waste Storage Area
 - (iii) Covered Waste Area
 - (iv) Security Guard Trailer
 - (2) Shall perform Airborne Particulate Monitoring as per Section 7.3.1 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the work area as per Section 7.3.3 of the license application (see License Condition 9.3);
 - (4) Shall demonstrate that the monitoring locations are representative of the occupational exposure to radiation and radioactive materials.
- b) Monitor the following to demonstrate compliance with Subpart D of Part 20:
 - (1) Continuously monitor the site perimeter as per Section 7.4 of the license application (see License Condition 9.3) for ^{222}Rn and ^{220}Rn airborne concentrations;
 - (2) Shall monitor the effluent release of airborne particulates as per Section 7.4 of the license application (see License Condition 9.3) at the air sampling stations listed in Table 7.2 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the unrestricted area as per Section 7.3.3 of the license application (see License Condition 9.3) and
 - (4) Shall assume that the measured net values originated solely from the 11e.(2) disposal facility.
- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

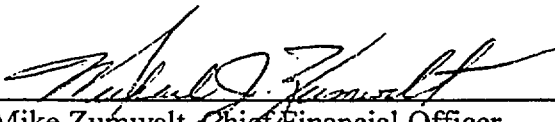
It is requested that License Condition 11.4 be amended as follows:

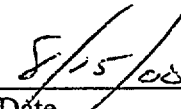
The licensee shall:

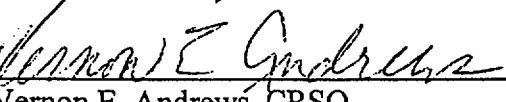
- a) Perform monitoring to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502.
- b) Perform monitoring to demonstrate compliance with Subpart D of Part 20, assuming that the measured net values originate solely from the 11e.(2) disposal facility.
- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

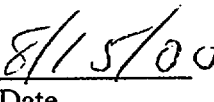
An Environmental Monitoring and Surveillance Plan has been prepared and is proposed as Appendix LL. This plan is enclosed as Attachment 1. This plan incorporates detail regarding monitoring locations, sample collection, frequency, analysis, etc., currently detailed in Section 7 and Section 8 of the License Application, and provides a comprehensive plan for monitoring radiation and radioactive emissions to the environment. Proposed revision to Section 7 and Section 8 is enclosed as Attachment 2 in redline/strikeout format.


Because the request does conflict with regulatory requirements specifically stated in the license, the SERP hereby denies the request.

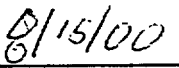

Mike Zumwalt, Chief Financial Officer

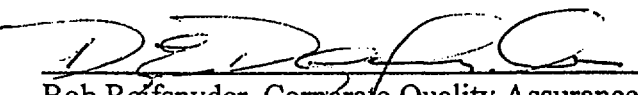

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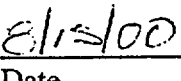

Vernon E. Andrews, CRSO


Date


Paul Larsen, Vice President of Operations


Date


Bob Reifsnnyder, Corporate Quality Assurance Manager


Date



Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-030

Date: August 15, 2000

Action Requested: To authorize an increase in the Ra-226 and Th-230 concentration limits in waste placed within ten (10) feet of the top and sides specified in Section 16.2.2. of the license application. Approve proposed concentrations of 4,000 and 11,000 pCi/g for Ra-226 and Th-230, respectively and eliminate the concentration limit for the top two (2) feet.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval To authorize an increase in the Ra-226 and Th-230 concentration limits in waste placed within ten (10) feet of the top and sides specified in Section 16.2.2. of the license application, approval of proposed concentrations of 4,000 and 11,000 pCi/g for Ra-226 and Th-230, and elimination of the concentration limit for the top two (2) feet, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.



ENVIROCARE

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-030 requests approval for an increase in the Ra-226 and Th-230 concentration limits in waste placed within ten (10) feet of the top and sides specified in Section 16.2.2. of the license application. Additionally, approvals for proposed concentrations of 4,000 and 11,000 pCi/g for Ra-226 and Th-230, respectively, and elimination of the concentration limit for the top two (2) feet.

License Condition 10.2.c) states the following:

"The licensee shall analyze and adequately characterize:

- c) the distribution of the ^{226}Ra and ^{230}Th concentrations in the 11e.(2) byproduct material in the upper 3.3 meters (10 feet) of the contaminated material to verify that the concentration in any lift does not exceed the values used in the radon attenuation model. The licensee shall measure the ^{226}Ra and ^{230}Th concentrations using standard analytical procedures, for every 3000 cy of material placed for compaction or at least once a week during material placement. The data will include the elevation (or lift number) of the sample location. The results will be presented as average values for each lift in the annual effluent and environmental monitoring report."

The license condition requires that concentrations be determined in order to verify that the concentration in any lift does not exceed the values used in the radon attenuation model. Envirocare will continue to verify against the new proposed concentrations in order to verify compliance with Criterion 6 of 10 CFR Part 40, Appendix A.


Section 3.5.3. of the Final Safety Evaluation Report (NUREG-1486), page 3-32 states: "The NRC staff concludes that the current design of the radon barrier and the parameter values chosen for modeling the radon flux may not be representative of the material that the applicant might accept for disposal. Therefore, the applicant should select conservative physical parameters or a license condition will require testing of contaminated material accepted by Envirocare that would be placed in the upper levels of the cell. Material that could cause that layer to exceed the parameter values indicated in the radon barrier model would have to be excluded for placement in the upper levels of the cell. The radon cover soil would also be required to meet the parameter limits specified by this model."

On page 3-33, Table 6 lists the Radon Input Parameters for the modeling. In order to change the proposed items, an amendment to the license is required.

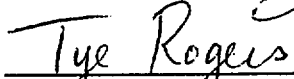


ENVIROCARE
A THORCO COMPANY


Therefore, because the request does conflict with regulatory requirements, the SERP hereby denies the request.


Mike Zumwalt, Chief Financial Officer

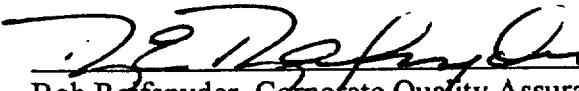
9/12/00
Date


Tye Rogers, Acting CRSO

9/12/00
Date


Paul Larsen, Vice President of Operations

9/12/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

9/12/00
Date



ENVIROCARE
OF UTAH, INC.

Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-031

Date: September 6, 2000

Action Requested: To authorize revision to BD-1 procedure to allow generators the option, with Envirocare's authorization, to submit the required waste profiling information on forms other than the EC-0230, EC-3200, EC-0500, and EC-0650.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to authorize revision to BD-1 procedure allowing generators the option, with Envirocare's authorization, to submit the required waste profiling information on forms other than the EC-0230, EC-3200, EC-0500, and EC-0650, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.



ENVIROCARE
OF UTAH, INC.

- d. In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-031 requests approval for the proposed revision to BD-1 procedure in order to allow generators the option, with Envirocare's authorization, to submit the required waste profiling information on forms other than the EC-0230, EC-3200, EC-0500, and EC-0650.

Section 5.3 of BD-1, *Waste Profile Acceptance Process Procedure*, states the following: "Business Development is responsible for providing current waste profile forms to users. Those personnel charged with review and acceptance authority must develop, and maintain current methods of documenting completion of acceptance."

The proposed revision is as follows: "Business Development is responsible for providing current waste profile forms to users. Envirocare may authorize generators to use their own forms only if the information provided is equal in content to the waste profile information requested on the Waste Profile Record. Those personnel charged with review and acceptance authority must develop, and maintain current methods of documenting completion of acceptance."

Section 16.1.3.1 of the License Application states the following: "Before a shipment may be accepted for disposal, a completed Uniform Low-Level Radioactive Waste manifest (radioactive waste manifest), or equivalent documentation for the shipment must be received at Envirocare."

This request is consistent with Section 16.1.3.1 of the License Application in that Envirocare may approve equivalent documentation.

The request is consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) and the Safety Evaluation Report (NUREG-1486).


Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the request.


Mike Zumwalt, Chief Financial Officer

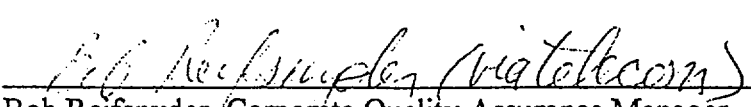

Date


Tye Rogers, Acting CRSO


Date


Paul Larsen, Vice President of Operations


Date


Bob Reifsnyder, Corporate Quality Assurance Manager


Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-032

Date: September 12, 2000

Action Requested: To amend License SMC-1559 to include the ability to receive, store, and dispose of Unimportant Quantities of Source Material.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend License SMC-1559 to include the ability to receive, store, and dispose of Unimportant Quantities of Source Material, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-032 requests authorization to amend License SMC-1559 to include the ability to receive, store, and dispose of Unimportant Quantities of Source Material.

Unimportant Quantities of Source Material is defined as source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 0.05 percent of the mixture, compound, solution or alloy (10CFR 40.13). Source Material is defined as (1) Uranium or thorium, or any combination thereof, in any physical or chemical form or (2) ores which contain by weight 0.05 percent or more of uranium, thorium, or any combination thereof (10 CFR 40.4).

A draft amendment request is enclosed as Attachment 1 providing technical justification for the request.

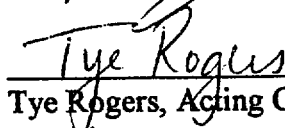
License Condition 6 designates that the license is for 11e.(2) byproduct material. Envirocare is requesting that Unimportant Quantities of Source Material be added in the designation. Additional License Conditions affected by this request include:

9.3
9.6
9.11

Because the request does conflict with regulatory requirements, specifically License SMC-1559, the SERP hereby denies the request.


Mike Zumwalt, Chief Financial Officer

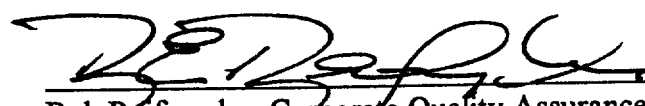
9/12/00
Date


Tye Rogers, Acting CRSO

9/12/00
Date


Paul Larsen, Vice President of Operations

9/12/00
Date


Bob Reifsnnyder, Corporate Quality Assurance Manager

9/12/00
Date

Memo

To: SERP Files
From: Tye Rogers
CC: Treesa Parker SERP Coordinator
Date: 04/16/2001
Re: SERP 11e.(2) 00-033, replacement of original panel findings signed September 12, 2000

SERP Panel Findings for Docket Number 11e.(2) 00-033 containing signatures dated September 12, 2000, was inadvertently misplaced. This memo with attached verification of signature through use of the attached SERP Meeting Minutes dated 09/12/00, will serve as a replacement.

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-033

Date: September 11, 2000

Action Requested: To authorize an alternate method, than that required by Radioactive Material License Condition 10.2.b), to verify the values used in the radon attenuation model.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to authorize an alternate method for verifying the values used in the radon attenuation model, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis is necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is not consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-033 requests an alternate method, than that required by Radioactive Material License Condition 10.2.b), to verify the values used in the radon attenuation model.

License Condition 10.2.b) states the following:

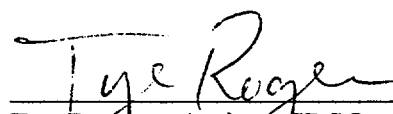
“The licensee shall analyze and adequately characterize:

- b) the following key radon attenuation model parameter values during placement to verify that the values used in the licensee's radon attenuation model have been achieved: 1) porosity (calculated from as-placed density and specific gravity); 2) emanation factor emanation factor (contaminated material only); and 3) diffusion coefficient for the upper ten feet of 11e.(2) byproduct material and the radon barrier material at several moisture levels, including the long-term moisture levels, including the long-term moisture content value for that material. Testing shall be conducted at least once every 5000 cy of contaminated and radon barrier material placed or at least two every month of material placement. The licensee shall use American Society for Testing and Materials (ASTM) testing procedures, or the equivalent. Average values for each parameter will be calculated and provided in the annual effluent and environmental monitoring report.”

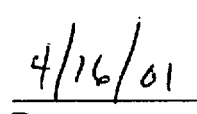
The license condition requires that porosity, emanation factor, and diffusion coefficient be tested during material placement. This requirement is specifically identified in Section 2.1.3. of Supplement 1, Final Safety Evaluation Report (NUREG-1486) (FSER), page 8, Which states: “It is evident that a model using the applicant's choice of parameter values, modified to represent long-term moisture conditions, will meet the radon flux criterion. Since the other parameters can be measured during construction of the cell to verify the model, the staff is assured that the disposal cell will meet the radon attenuation criterion. Therefore, the applicant will be required, by license condition, to measure key parameter value during material placement to confirm that the proposed values in the radon attenuation model can be met.” Therefore, because the request does conflict with regulatory requirements, the SERP hereby denies the request.

Mike Zumwalt, Chief Financial Officer

Date



Tye Rogers, Acting CRSO



Date

Paul Larsen, Vice President of Operations

Date

Bob Reifsnyder, Corporate Quality Assurance Manager

Date

SERP COMMITTEE MEETING

Minutes

September 12, 2000

9:00 AM

Attending: Bob Reifsnnyder, Paul Larsen, Tye Rogers, Mike Zumwalt, Treasa Parker

1. SERP 99-011 (Priority 1)

- Amend license condition 10.6 and Section 16 of the Application to address leaking or standing water in shipments.
- License Condition 10.6 does not allow receipt; EC is using WMP for LARW, which is unacceptable.
- 11e.(2) Waste Management Plan Draft circulated for comments
- After completion of internal review, a SERP request for approval will be completed
- **SERP Request submitted December 14, 1999**
- **SERP 99-021**
- **SERP denied 1/12/00**
- **Draft amendment request circulated for review prior to informal submittal to Harold Lefevre at NRC. Needs to be submitted as soon as possible to meet March 1, 2000 deadline of formal submittal (commitment made to NRC via letter).**
- **Amendment request submitted March 1, 2000 to meet commitment established at Performance Meeting in December 1999.**
- **Initial review by John Lusher, HP of the NRC completed. Mr. Lusher to provide technical review to Harold Lefevre the week of March 13th.**
- **Harold received John Lusher's comments. Review in process. May change proposed notification to operations center.**
- **Received comments from Harold, incorporated into redline of license and submitted for approval.**
- **Revised submittal sent to NRC June 9, 2000.**
- **NRC will approve after mechanism change approval**
- **Amendment 25 received, distribution of revised application sections completed 09/01/00.**
- **Remove from October agenda**

2. Ground Water Issues (Priority 1)

- **Envirocare to request change of background levels**
- **Historical data base will be developed to track trends (To be completed early February)**
- **Discussion regarding the number of monitoring wells required at our facility**
 - **Due to slow moving aquifer, more wells are required**
- **Ken to provide schedule to SERP outlining resolution to groundwater issues**
 - **Schedule provided by Dan Shrum**
 - **Schedule to be revised due to additional information required for submittal (Kd values, etc.)**
 - **Awaiting information regarding timeline from Barringer Labs. Dan Shrum to provide revised schedule upon agreement.**
 - **Schedule agreed upon**
 - **In process of having Kd studies performed in the lab**

- SERP 99-015: (Priority 1)
 - Requested change to Appendix Z and request change to the detection levels for molybdenum, beryllium, thorium 230, and thorium 232.
 - In addition, authorize a request that baseline concentrations of thorium 230 in monitoring well GW-60 and thorium 232 in all monitoring wells be changed.
 - panel findings prepared and circulated
 - SERP 99-015 denied 10/27/99
 - Amendment request submitted 11/16/99
 - Still in process with Mike Layton of the NRC
 - Items provided to Harold Lefevre at NRC for approval
 - Waiting on NRC
 - SERP 00-026: (Priority 1)
 - Request to amend Table S-1 of License as presented in Appendix A, Groundwater Monitoring Quality Assurance Plan and revise Appendix Z to reflect current Table S-1 values for Silver, Acetone, and 2-Butonone.
 - SERP 00-026 denied 07/05/00
 - Amendment request submitted 07/06/00
 - Items provided to Harold Lefevre at NRC for approval
 - Waiting on NRC
3. SERP 00-003: (Priority 1)
 - Outstanding portion of SERP request, to amend License Condition 10.2.c. to use waste sample analysis upon receipt versus as-placed samples.
 - Amendment request submitted 06/16/00
 - Additional information to be provided to Harold Lefevre this week (Tye)
 4. SERP 00-011 (Priority 1)
 - Request to Authorize the use of Occupancy Factors to ensure compliance with restricted area boundary regulatory requirements.
 - Vern to review and provide comments
 - Revised SERP Panel Findings Prepared
 - SERP approved 08/15/00. Remove from agenda when approved by radiation safety committee.
 - Tye to check on status of radiation safety committee approval.
 5. SERP Request 00-012 (Priority 1)
 - Authorize the placement of additional monitoring stations in order to monitor dose to members of the public.
 - SERP denied
 - Amendment request to be submitted
 - To be combined with 00-028
 - SERP denied request
 - Draft amendment request to Tye for review
 - amendment will be submitted this week (09/15/00)
 - Amendment request submitted 09/20/00

6. SERP Request 00-014 (Priority 1)
 - Authorize revision to Section 17 of the application "Internal Radiation Dose Assessment". Remove three standard deviation action level in 17.4.4.5, and reference Regulatory Guide 8.9, and remove Table 17.4.1.
 - SERP Panel Findings Prepared
 - SERP denied 08/15/00
 - Amendment request to be submitted
7. SERP Request 00-028 (Priority 1)
 - Request to authorize revision to Section 7 of the License Application, introduce a new Appendix LL, *Environmental Monitoring and Surveillance Plan*, and amend License Condition 11.4
 - SERP Panel Findings prepared and circulated 08/08/00
 - SERP denied 08/15/00
 - Draft amendment request to Tye (Combined with 00-012, 99-012)
 - Amendment request to be submitted
 - Amendment submitted 09/20/00
8. SERP 00-030 (Priority 1)
 - Request to authorize an increase in the Ra-2226 and Th-230 concentration limits in waste placed within ten (10) feet of the top and sides specified in Section 16.2.2 of the license application. Approve proposed concentrations of 4,000 and 11,000 pCi/g for Ra-226 and Th-230, respectively and eliminate the concentration limit for the top two (2) feet.
 - Discussed at August SERP Meeting
 - Panel findings prepared and circulated for signature
 - Amendment request submitted 08/21/00, revised 08/24/00, revised 08/30/00.
9. SERP 00-031 (Priority 1)
 - Request to approve revised BD-1 procedure to allow Envirocare to authorize generators to use their own forms only if the information provided is equal in content to the waste profile information requested on the Waste Profile Record.
 - SERP Panel Findings circulated 09/07/00
 - SERP approved 09/08/00
 - Remove from October agenda
10. SERP Request 00-027
 - Request to designate a Radiation Protection Manager to be responsible for licensing activities.
 - Combine the radiological and chemical laboratories
 - Panel Findings prepared
 - SERP denied 09/12/00
 - Amendment request to be submitted 09/22/00
11. SERP 00-032 (Priority 1)
 - Request to amend the license in order to include the ability to receive, store, and dispose of Unimportant Quantities of Source Material.
 - SERP Panel Findings Prepared
 - SERP denied 09/12/00

- Amendment request submitted 09/12/00

12. SERP 99-012 (Priority 2)

- Authorize relocation of Environmental Monitoring Station A-5 for the proposed expansion of the LARW Embankment 200 feet to the south.
- SERP denied 7/15/99.
- Amendment Request submitted 07/19/99
- Discussion held with Harold Lefevre.
 - They are waiting for DRC approval to approve amendment request.
 - They have no issues
- Need to resolve the location of station or if relocation is required
- Amendment request to RML approved 10/28/99
- Amendment request still on hold pending DRC and Envirocare discussions
- Request to withdraw this request to be completed with items in SERP 00-028
- Draft request to Tye
- To be submitted by 09/22/00

13. SERP 99-013 (Priority 2)

- Evaluate License Condition 9.10 to allow organization changes without license amendment.
- Treesa to review license and propose language to support request
- Deadline for proposed language July 1, 2000.
- Suggestion by Vern to review NUREG's 1199 and 1200 to determine required components of Section 18.
- SERP request withdrawn 07/25/00
- Items required by NUREG 1199 and 1200 are included and present content is unable to be removed.
- Remove from October Agenda

14. SERP 99-018 (Priority 2)

- Removal of security guard trailer
- SERP Denied request 12/08/99
- Draft Amendment request circulated for review prior to meeting 02/07/00
- Complete final revision and send by 3/24/00.
- Passed on to John Lusher, HP of the NRC.
- Received comments from Harold, Treesa addressing comments
 - Harold would like to see Section 7 revised according to current Environmental Monitoring.
 - Met with Shane Lowry to discuss
 - Requires further discussion with CRSO, and Harold prior to completion
- Vern delegated revision of Section 7 to Joe Heckman.
- Items will be submitted with request from SERP 00-028
- Draft request to Tye for review
- Will be submitted by 09/22/00

15. SERP 00-004 (Priority 2)

Envirocare of Utah, Inc.

- Request to amend License Condition 9.10
- Regards issue with qualification of personnel and review by CRSO for six months
- SERP Panel Findings circulated for review 03/09/00
- SERP denied, 03/17/00
- Amendment request to be submitted to NRC
- Teleconference with Vern, Treasa, Harold L and John L at NRC held to discuss request
- Revised submittal sent to NRC 08/09/00
- Waiting on NRC

16. SERP Request 00-005 (Priority 2)

- Request to amend License Condition 9.15
- Regards issues with annual training for respirator fit tests
- SERP Panel Findings circulated for review 03/10/00
- SERP denied, 03/17/00
- Amendment Request submitted 07/10/00
- Waiting on NRC

17. SERP Request 00-007 (Priority 2)

- Request to allow for the transfer of 11e.(2) Material from railcars to vehicles on hardened surfaces adjacent to the railroad tracks located within the restricted area (Bulk Transfer Area).
- SERP Panel Findings circulated for review 03/14/00
- SERP denied, 03/17/00
- Amendment request submitted 08/15/00.
- Waiting on NRC

18. SERP Request 00-029 (Priority 2)

- Request to dispose of oversized debris, crushed boxes, and large debris in the 11e.(2) Embankment. Authorize use of CLSM.
- SERP Panel Findings Prepared
- SERP denied 09/12/00

19. SERP Request 00-008 (Priority 2)

- Change reference to "TLD" in the license application to "TLD or equivalent, as approved by the CRSO".
- SERP Panel findings prepared 03/17/00
- SERP denied, 03/17/00
- Request to be submitted
- Vern to discuss SERP request with Harold to determine if SERP may have been approved
- Wayne discussed issue with Harold; an amendment request is required.
 - Due date given of June 26, 2000 as part of NOV response
 - Allen Erichsen to prepare amendment request
 - Amendment Request submitted 06/23/00
 - Waiting on NRC

20. SERP 99-021 (Priority 2)

Envirocare of Utah, Inc.

- Revised Waste Management Plan for Review
 - Will revise according to approval of amendment for free standing liquid
 - New revision will be revision 1 to the plan
 - Waiting on NRC to approve amendment for freestanding liquid
 - In process of drafting revision 1 of the proposed 11e.(2) WMP for incorporation of items approved with Amendment 25
21. SERP Request 00-010 (Priority 3)
- Revise Section 16 of the License Application to remove Limited Release and change Unlimited Release to Unrestricted Release, Remove radiological survey release form attachments and state in the text that SOP's will be used that contain minimum information.
 - SERP Panel Findings Prepared and circulated for review 08/08/00
 - May need to additionally revise Section 16 prior to review.
 - Tye to check on status and provide information to Treesa by 09/22/00.
22. SERP 00-019 (Priority 3)
- Revise Section 17.4.1. of the application (SRSO) from "disposal contracts" to "Waste Profile Records"
 - SERP Panel Findings prepared and circulated for review 08/07/00
 - SERP will approve the request due to the fact that the intent from the beginning was that the CRSO would review the waste profile records.
 - SERP Panel Findings will be revised accordingly and re-circulated for signature.
 - SERP Panel Findings revised and re-circulated for signature 09/07/00
 - SERP approved 09/12/00
 - Remove from October Agenda
23. SERP 00-020 (Priority 3)
- Revise Section 17.4.1.a. to change dust suppression from "2 hour intervals" to "as necessary"
 - SERP Panel Findings prepared and circulated for review 08/09/00
 - SERP approved 08/15/00
 - Incorporated into revised Section 17 and distributed to Document Control 09/08/00
 - Remove from October Agenda
24. SERP 00-021 (Priority 3)
- Revise License Application to add work areas in the LARW Operations Building (sample control lab, rad lab, and engineering lab) and remove references to the corresponding work areas in the administration building. Change survey and sampling requirements for these facilities to the LARW Operations Building.
 - SERP review in process
25. SERP 00-024 (Priority 3)
- Revise Section 17 of the application to update instruments reflecting new and improved radiation technology
 - SERP Panel Findings prepared and circulated for review 08/07/00
 - SERP approved 08/15/00
 - Section 17 revised and distributed to Document Control 09/08/00

- Remove from October agenda
26. SERP Request 00-032 (Priority 1)
 - Request to amend the license to include the ability to receive, store, and dispose of Unimportant Quantities of Source Material.
 - Panel Findings Prepared
 - SERP denied 09/12/00
 - Amendment request to be submitted 09/12/00
 27. SERP Request 00-033 (Priority 1)
 - Request to authorize an alternate method, than that required by Radioactive Material License Condition 10.2.b), to verify the values used in the radon attenuation model.
 - Panel Findings prepared
 - SERP denied
 28. Other Items
 - Priority List for Envirocare and NRC in regards to Amendment Requests
 - SERP Priority Spreadsheet
 - Request to designate Treesa Parker as full time SERP Coordinator due to increase in 11e.(2) Activities.
 - Update on completion of outstanding SERP items
 - Treesa provided update on outstanding SERP items
 - Work has not slowed
 - Tye to discuss with Ken
 - Upcoming NRC visit and NRC presentation by John Lusher regarding SERP guidance and standardized license conditions. Presentation scheduled for Tuesday, September 26, 2000 at the site.
 - All SERP Panel members are required to attend
 - October SERP Meeting to be held on Tuesday, October 10, 2000 at 9:00 AM.



ENVIROCARE
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Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-034

Date: September 18, 2000

Action Requested: To provide approval for the construction and use of an additional temporary storm water retention pond located at the west end of the approved 11e.(2) embankment.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval to construct and use an additional temporary storm water retention pond located at the west end of the approved 11e.(2) embankment, does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis is necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**

Discussion:

SERP Request Docket # 11e.(2) 00-034 requests approval for the construction and use of an additional temporary storm water retention pond located at the west end of the approved 11e.(2) embankment. The purpose of the new pond is to ensure that there is adequate capacity to contain contaminated run-off from the Envirocare 11e.(2) and LARW/NORM facilities. In the past, Envirocare has had to bring in temporary storage tanks for providing additional capacity when runoff was higher than expected. The design and specifications for the new pond are identical to those of the existing two evaporation ponds currently used to manage 11e.(2) and LARW/NORM wastewater, with the exception that the new pond area and storage capacity are larger, and a water transfer pad has been added to the design details to minimize potential spills due to water transfers. Construction of the Pond includes the installation of a double lined system and a leak detection system. The pond is a temporary facility, which will be completely removed and disposed in the low-level waste cell prior to use of the area for disposal of 11e.(2) waste. The area will be radiologically surveyed after removal to ensure that any contaminated material is completely removed.

A copy of the construction project plan and design drawings for the new pond are attached for your review. Envirocare has already received approval from the Division of Radiation Control to construct the pond, based upon their review of the enclosed construction project plan and design drawings.

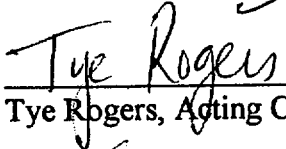
The request is consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

Part 1 of Appendix Z of the license application currently allows for the use of evaporation ponds. No revision to this appendix is necessary.

Therefore, because the request does not conflict with regulatory requirements, the SERP hereby approves the request.


Mike Zumwalt, Chief Financial Officer

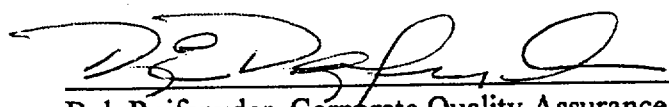

Date


Tye Rogers, Acting CRSO


Date


Paul Larsen, Vice President of Operations


Date


Bob Reifsnyder, Corporate Quality Assurance Manager


Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-035

Date: October 17, 2000

Action Requested: Request to amend License Condition 11 of License SMC-1559 and authorize revision to Appendix Z, *Groundwater Monitoring Quality Assurance Plan* of the License Application.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval to amend License Condition 11 and authorize revision to Appendix Z, *Groundwater Monitoring Quality Assurance Plan* of the License Application, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis is not necessary for the determination of the request.

- c. The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-035 requests amendment to License Condition 11 and requests authorization of a revision to Appendix Z of the License Application.

It is requested that the following changes be made to License SMC-1559:

11.1.a) Change the last sentence to read as follows: "All water samples shall be collected on a quarterly schedule, at least three months apart, except for organic samples which shall be collected every five years."

11.1.b) The following list of constituents will be removed from this Section, Arsenic, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Molybdenum, Nickel, and Selenium. Copper will be added to this list of constituents.

11.1.d) The last sentence, "Table STD-1 in the license application provides a list of hazardous constituents that have been detected in the groundwater above background and for which site-specific standards have been established for the disposal site," shall be removed.

11.1.g) The words "ans STD-1" shall be removed from the first sentence.

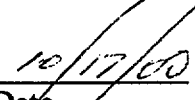
Table STD-1 shall be removed from the license.

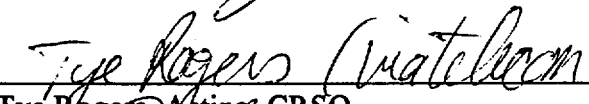
Table S-1 shall be modified as follows: NRC-Approved Background Concentrations shall be removed for the following constituents: Arsenic, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Molybdenum, Nickel, and Selenium. Background concentrations will be added for Copper.

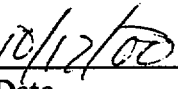
Revision to Appendix Z, *Groundwater Monitoring Quality Assurance Plan* incorporates the proposed changes to License SMC-1559. Attachment 1 contains revision in redline/strikeout format.


Because the requested changes conflict with requirements specifically stated in the license, the SERP hereby denies the request.



Mike Zumwalt, Chief Financial Officer


Date 10/17/00

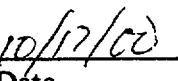

Tye Rogers, Acting CRSO


Date 10/17/00


Paul Larsen, Vice President of Operations


Date 10/17/00


Bob Reifsnyder, Corporate Quality Assurance Manager


Date 10/17/00



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Envirocare of Utah, Inc. 11e.(2) License

SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP) PANEL FINDINGS

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-036

Date: December 12, 2000

Action Requested: To authorize use of an 11e.(2) Waste Management Plan that describes the management controls of receipt, handling, storage and disposal of 11e.(2) Material.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have been met, indicating that granting approval for the use of an 11e.(2) Waste Management Plan describing the management controls of receipt, handling, storage and disposal of 11e.(2) Material does not require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. **In consideration of the above, the SERP has determined that the change does not require an amendment to Radioactive Materials License SMC-1559.**



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Discussion:


SERP Request Docket # 11e.(2) 99-021 requested authorization for the use of an 11e.(2) Waste Management Plan describing the management controls for receipt, handling, storage and disposal of 11e.(2) Material. The request was denied on January 12, 2000. Since that time, Amendment #25 approved revisions to License Condition 10.6 as well as Sections 15, 16, 17, and Appendix Z to the License Application. Accordingly, the basis for denial of docket 11e.(2) 99-021 is no longer applicable.

The purpose of this SERP request is to authorize use of the attached 11e.(2) Waste Management Plan. This plan has been developed to summarize for personnel involved in 11e.(2) waste management operations the applicable requirements from Envirocare's 11e.(2) Materials License SMC-1559 issued by the NRC, Radioactive Materials License UT 2300249 issued by the State of Utah, and Ground Water Quality Discharge Permit UGW450005 issued by the State of Utah.


The requested action does not conflict with regulatory requirements; accordingly, the SERP hereby approves the request.


Mike Zumwalt, Chief Financial Officer

12/18/00
Date


Tye Rogers, acting CRSO

12/18/00
Date


Paul Larsen, Vice President of Operations

12/18/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

12/18/00
Date

Envirocare of Utah, Inc. 11e.(2) License

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
PANEL FINDINGS**

In accordance with the Safety and Environmental Review Panel (SERP) Administrative Procedure, ADMIN-5, the panel has determined that the provisions of the procedure have been met to change Envirocare 11e.(2) License, SMC-1559, as follows:

Docket Number: 11e.(2) 00-037

Date: December 14, 2000

Action Requested: To authorize revision to the previously proposed Environmental Monitoring and Surveillance Plan to be incorporated as Appendix LL of the License Application, amend License Condition 11.4, and approve the addition of monitoring stations A19 and A20.

The SERP has reviewed the requested action and the requirements of License Condition 9.4 (SMC-1559) and finds as follows:

- a. **The change does not conflict with any requirement specifically stated in the license (excluding material referenced in License Condition 9.3), or impair the licensee's ability to meet all applicable NRC regulations.**

The license conditions have been reviewed and it has been determined that the requirements of license condition 9.4 have not been met, indicating that granting approval of the revised Appendix LL, and request to amend License Condition 11.4, does require a request to amend the license. The requested change does not conflict with any required actions pursuant to 10 CFR Part 20.

- b. **There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.**

This revision does not affect the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan. As such, a safety and environmental analysis was not necessary for the determination of the request.

- c. **The changes are consistent with the conclusions of actions analyzed and selected in the site Environmental Impact Statement (NUREG-1476) dated August 1993, and the Safety Evaluation Report (NUREG-1486) dated January 1994.**

The EIS and the SER have been reviewed to confirm that the requested action is consistent with the conclusions of these documents.

- d. In consideration of the above, the SERP has determined that the change does require an amendment to Radioactive Materials License SMC-1559.

Discussion:

SERP Request Docket # 11e.(2) 00-037 requests approval of the proposed revision to the Environmental Monitoring and Surveillance Plan to be incorporated as Appendix LL of the License Application, amendment of License Condition 11.4, and approval for the addition of monitoring stations A19 and A20. The NRC during a regulatory inspection requested the additional monitoring stations A19 and A20. Station A19 is located near the intermodal unloading facility. Station A20 is located near the Rail Wash Facility on Track No. 4.

License Condition 11.4 states the following:

11.4 The Licensee shall:

- a) Monitor the following to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502:
 - (1) Continuously monitor at least the following areas for airborne concentrations of ^{222}Rn and ^{220}Rn as per Section 7.3.2 of the license application (see License Condition 9.3):
 - (i) Waste Unloading Area
 - (ii) Waste Storage Area
 - (iii) Covered Waste Area
 - (iv) Security Guard Trailer
 - (2) Shall perform Airborne Particulate Monitoring as per Section 7.3.1 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the work area as per Section 7.3.3 of the license application (see License Condition 9.3);
 - (4) Shall demonstrate that the monitoring locations are representative of the occupational exposure to radiation and radioactive materials.
- b) Monitor the following to demonstrate compliance with Subpart D of Part 20:
 - (1) Continuously monitor the site perimeter as per Section 7.4 of the license application (see License Condition 9.3) for ^{222}Rn and ^{220}Rn airborne concentrations;
 - (2) Shall monitor the effluent release of airborne particulates as per Section 7.4 of the license application (see License Condition 9.3) at the air sampling stations listed in Table 7.2 of the license application (see License Condition 9.3);
 - (3) Shall perform gamma radiation exposure measurements of the unrestricted area as per Section 7.3.3 of the license application (see License Condition 9.3) and
 - (4) Shall assume that the measured net values originated solely from the 11e.(2) disposal facility.

- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

It is requested that License Condition 11.4 be amended as follows:

The licensee shall:

- a) Perform monitoring to demonstrate compliance with Subpart C of Part 20, in addition to any personnel monitoring required by 10 CFR 20.1502.
- b) Perform monitoring to demonstrate compliance with Subpart D of Part 20, assuming that the measured net values originate solely from the 11e.(2) disposal facility.
- c) Calculate total effective dose equivalent (TEDE) for its occupational workers and the public to demonstrate that the 5000 mrem (50 mSv) and 100 mrem (1 mSv) dose limits, respectively are not exceeded.

The previously proposed Environmental Monitoring and Surveillance Plan has been revised to incorporate the addition of A19 and A20. This plan is enclosed as Attachment 1. This plan incorporates detail regarding monitoring locations, sample collection, frequency, analysis, etc., currently detailed in Section 7 and Section 8 of the License Application, and provides a comprehensive plan for monitoring radiation and radioactive emissions to the environment.

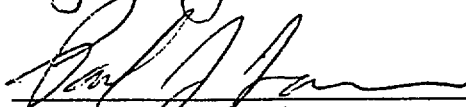
Because the request does conflict with regulatory requirements specifically stated in the license, the SERP hereby denies the request.


Mike Zumwalt, Chief Financial Officer

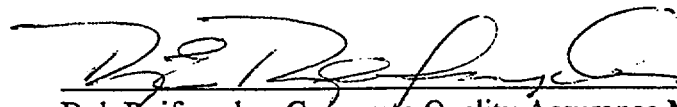
12/18/00
Date


Tye Rogers, Acting CRSO

12/18/00
Date


Paul Larsen, Vice President of Operations

12/18/00
Date


Bob Reifsnyder, Corporate Quality Assurance Manager

12/18/00
Date