



Department of Energy
 Carlsbad Field Office
 P. O. Box 3090
 Carlsbad, New Mexico 88221

SEP 10 2008



Mr. James Bearzi, Chief
 Hazardous Waste Bureau
 New Mexico Environment Department
 2905 Rodeo Park Drive East, Building 1
 Santa Fe, NM 87505-6303

Subject: Transmittal of the Waste Isolation Pilot Plant Groundwater Level Measurements for August 2008

Dear Mr. Bearzi:

The purpose of this letter is to submit the Waste Isolation Pilot Plant groundwater level measurements for the month of August 2008, as required by Module V.J.2.b of the Hazardous Waste Facility Permit No. NM4890139088—TSDF.

We certify under penalty of law that this document and all enclosures were prepared under our direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Please feel free to contact Mr. H. L. (Jody) Plum at (505) 234-7462 if you have any questions regarding this data transmittal.

Sincerely,

David C. Moody, Manager
 Carlsbad Field Office

M. F. Sharif, General Manager
 Washington TRU Solutions LLC

Enclosures

cc: w/enclosures
 S. Zappe, NMED * ED
 C. Walker, Trinity Engineering ED

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 J. Kieling, NMED ED

*ED denotes electronic distribution



SUMMARY COMMENTS FOR THE WATER LEVEL MEASUREMENTS FOR THE
MONTH OF AUGUST 2008

1. The WIPP Hazardous Waste Facility Permit (HWFP), Attachment L, Section L-4c (1) requires cumulative fluctuations noted in the Detection Monitoring Program wells of more than two feet in the course of one year which are not attributable to site tests and subsequent stabilization to be reported. Section 6.2.5 of the Calendar Year 2006 Annual Site Environmental Report, submitted to the New Mexico Environment Department in compliance with HWFP Module V.J.2.C, reports regional and DMP water level rises greater than two feet and offers possible causes.

2. Adjusted Depth to Water = Depth to Water from Measuring Point – (Adjustment)

Water level = Top of Surveyed Casing Elevation – Adjusted Depth to Water

Column Length = Water Level – Culebra Midpoint Elevation

Fresh-water Head = Specific Gravity x Column Length + Culebra Midpoint Elevation

3. For packers installed on tubing or Water Quality Sampling Program wells with tubing access ports, an adjustment is necessary to reference the water level to the surveyed fixed permanent casing (TOC). If the measuring point is above the TOC, the depth to water relative to TOC is less. If the measuring point is below the TOC, the depth to water relative to TOC is greater (ref: WP 02-EM1014, Rev 4).

4. Densities in use for non-DMP Culebra wells are based on 2007 data and are shown as specific gravity.

5. Groundwater level measurements were taken at wells AEC-7, CB-1, DOE-2, H-06BR, H-15 and H15R, but are not included in this report. These wells were reconfigured (affecting top of casing) and need to be resurveyed. Resurveying will occur by September 30, 2008.

Groundwater level Measurements for August 2008

Well Number	Zone	Top of Surveyed Casing Elevation (ft amsl)	Date	Time	Depth to Water from Measuring Point (feet)	Adjustment (feet)	Adjusted Depth to Water (feet)	Adjusted Depth to Water (m)	Water Level (ft amsl)	Water Level (m amsl)	Fresh-water Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Length (feet)	Notes
AEC-7	CUL	3656.99	08/15/08	10:48	614.96	0.00	614.96	187.44	3042.03	927.21	3096.90	2782.00	1.211	260.03	
C-2737 (PIP)	CUL	3400.76	08/15/08	09:27	385.85	-0.60	386.45	117.79	3014.31	918.76	3017.36	2709.70	1.010	304.61	
ERDA-9	CUL	3410.17	08/15/08	08:10	397.47	-0.03	397.50	121.16	3012.67	918.26	3027.69	2693.00	1.047	319.67	
H-02b2	CUL	3378.36	08/14/08	12:45	331.97	0.00	331.97	101.18	3046.39	928.54	3050.64	2742.80	1.014	303.39	
H-03b2	CUL	3389.91	08/15/08	08:55	387.24	0.00	387.24	118.03	3002.67	915.21	3015.29	2702.20	1.042	300.47	
H-04b	CUL	3333.56	08/11/08	09:27	329.21	0.00	329.21	100.34	3004.37	915.73	3006.99	2829.50	1.015	174.87	
H-05b	CUL	3506.76	08/12/08	10:00	466.63	0.00	466.63	142.23	3040.15	926.64	3080.52	2596.50	1.091	443.65	
H-07b1	CUL	3163.72	08/12/08	13:54	164.41	0.00	164.41	50.11	2999.31	914.19	2999.52	2893.80	1.002	105.51	
H-09c (PIP)	CUL	3407.05	08/12/08	12:27	410.73	0.07	410.66	125.17	2996.39	913.30	2996.64	2743.50	1.001	252.89	
H-10c	CUL	3688.40	08/12/08	11:47	664.82	0.00	664.82	202.64	3023.58	921.59	3029.24	2316.30	1.068	707.26	
H-11b4	CUL	3410.79	08/14/08	14:07	422.83	0.00	422.83	128.88	2987.96	910.73	3009.90	2674.60	1.070	313.36	
H-12	CUL	3427.33	08/12/08	11:07	456.51	0.00	456.51	139.14	2970.82	905.51	3007.87	2588.90	1.097	381.92	
H-17	CUL	3385.24	08/14/08	14:46	417.93	0.00	417.93	127.39	2977.31	904.44	3007.54	2664.80	1.133	302.51	
H-19b0	CUL	3418.33	08/11/08	10:57	424.95	0.00	424.95	129.52	2993.38	912.38	3015.75	2664.40	1.068	328.98	
I-461	CUL	3283.61	08/14/08	09:45	238.36	0.00	238.36	72.65	3045.25	926.19	3045.94	2907.10	1.005	138.15	
SNL-01	CUL	3512.84	08/14/08	07:20	432.57	0.00	432.57	131.65	3080.27	938.87	3086.22	2900.00	1.033	180.27	
SNL-02	CUL	3323.06	08/14/08	08:33	250.73	0.00	250.73	75.42	3072.33	936.45	3074.97	2852.30	1.012	220.03	
SNL-03	CUL	3490.35	08/14/08	07:00	416.77	0.00	416.77	127.03	3073.58	936.83	3081.62	2723.80	1.023	349.78	
SNL-05	CUL	3379.98	08/14/08	08:17	305.25	0.00	305.25	93.04	3074.73	937.18	3078.17	2731.00	1.010	343.73	
SNL-06	CUL	3646.11	08/12/08	09:16	879.67	0.00	879.67	268.12	2766.44	843.21	2879.24	2307.90	1.246	458.54	1
SNL-08	CUL	3555.73	08/12/08	10:14	544.01	0.00	544.01	165.81	3011.72	917.97	3055.57	2536.00	1.103	425.72	
SNL-09	CUL	3360.96	08/14/08	10:12	309.70	0.00	309.70	94.40	3051.26	930.02	3057.44	2793.80	1.024	257.46	
SNL-10	CUL	3377.59	08/14/08	13:07	324.50	0.00	324.50	98.91	3053.09	930.58	3056.27	2764.10	1.011	288.99	
SNL-12	CUL	3339.46	08/12/08	12:12	337.07	0.00	337.07	102.74	3002.39	915.13	3003.56	2768.60	1.005	233.79	
SNL-13	CUL	3294.22	08/14/08	13:36	284.53	0.00	284.53	86.72	3009.89	917.35	3012.84	2653.10	1.027	116.59	
SNL-14	CUL	3368.41	08/14/08	14:36	376.26	0.00	376.26	114.68	2992.15	912.01	3006.23	2698.90	1.048	293.25	
SNL-15	CUL	3479.93	08/12/08	10:43	638.37	0.00	638.37	194.58	2841.56	866.11	2906.42	2557.10	1.228	284.46	2
SNL-16	CUL	3133.00	08/12/08	14:18	123.39	0.00	123.39	37.51	3009.61	917.33	3010.44	2926.70	1.010	82.91	
SNL-17	CUL	3238.06	08/12/08	13:28	231.23	0.00	231.23	70.48	3006.83	916.48	3007.54	2888.50	1.006	118.33	
SNL-18	CUL	3375.44	08/14/08	07:57	295.53	0.00	295.53	91.30	3076.91	937.54	3082.96	2824.20	1.028	251.71	
SNL-19	CUL	3222.85	08/14/08	08:44	149.55	0.00	149.55	45.58	3073.10	936.68	3073.72	2867.60	1.003	205.50	
WIPP-11	CUL	3427.78	08/14/08	11:18	361.60	0.00	361.60	110.22	3066.18	934.57	3085.03	2570.00	1.038	496.18	
WIPP-13	CUL	3403.67	08/14/08	11:44	343.36	0.00	343.36	104.66	3062.31	933.39	3082.03	2690.30	1.053	372.01	
WIPP-19	CUL	3435.11	08/14/08	12:12	388.44	0.00	388.44	118.40	3046.67	928.63	3063.46	2665.00	1.044	381.67	
WIPP-25 (PIP)	CUL	3214.24	08/14/08	09:09	149.41	1.29	148.12	45.15	3066.12	934.55	3069.57	2752.30	1.011	313.82	8
WQSP-1	CUL	3419.25	08/14/08	11:04	358.10	0.18	357.92	109.09	3061.33	933.09	3076.41	2705.60	1.048	355.73	3
WQSP-2	CUL	3463.87	08/14/08	12:28	397.74	0.20	397.54	121.17	3066.33	934.62	3086.85	2638.80	1.048	427.53	4
WQSP-3	CUL	3480.14	08/14/08	12:00	462.20	0.19	462.01	140.82	3018.13	919.95	3076.21	2620.30	1.146	397.83	
WQSP-4	CUL	3433.09	08/11/08	10:44	442.41	0.18	442.23	134.79	2990.86	911.61	3016.26	2652.20	1.075	338.66	
WQSP-5	CUL	3384.38	08/11/08	10:25	377.85	0.20	377.65	115.11	3006.73	916.45	3013.78	2725.70	1.025	281.03	
WQSP-6	CUL	3364.72	08/11/08	09:47	342.77	0.19	342.58	104.42	3022.14	921.15	3025.70	2767.60	1.014	254.54	
C-2737 (ANNULUS)	MAG	3400.76	08/15/08	09:41	254.99	0.00	254.99	77.72	3145.77	958.83					
H-02b1	MAG	3378.48	08/14/08	12:51	235.21	0.00	235.21	71.69	3143.28	958.07					
H-03b1	MAG	3390.72	08/15/08	09:07	243.96	0.00	243.96	74.36	3146.76	959.13					
H-04c	MAG	3334.28	08/11/08	09:13	187.00	0.00	187.00	57.00	3147.28	959.29					
H-06c	MAG	3348.69	08/14/08	10:27	280.01	0.00	280.01	85.35	3068.66	935.33					5
H-08a	MAG	3433.28	08/12/08	13:00	405.98	0.00	405.98	123.74	3027.30	922.72					
H-09c (ANNULUS)	MAG	3407.05	08/12/08	12:32	269.27	0.00	269.27	82.07	3137.78	956.40					
H-10a	MAG	3688.45	08/12/08	11:37	465.95	0.00	465.95	142.02	3222.50	982.22					
H-11b2	MAG	3411.86	08/14/08	14:16	274.81	0.00	274.81	83.76	3137.05	956.17					6
H-14	MAG	3347.08	08/14/08	13:21	218.31	0.00	218.31	66.54	3128.77	953.65					7
H-18	MAG	3414.21	08/14/08	10:48	265.04	0.00	265.04	80.78	3149.17	959.87					
WIPP-18	MAG	3457.57	08/14/08	12:18	307.69	0.00	307.69	93.78	3149.88	960.08					
WIPP-25 (ANNULUS)	MAG	3214.24	08/14/08	09:18	149.68	1.29	148.39	45.23	3065.85	934.47					
WQSP-6a	DL	3363.80	08/11/08	09:56	167.26	0.26	167.00	50.90	3196.80	974.36					

Groundwater level Measurements for August 2008

Well Number	Zone	Top of Surveyed Casing Elevation (ft amsl)	Date	Time	Depth to Water from Measuring Point (feet)	Adjustment (feet)	Adjusted Depth to Water (feet)	Adjusted Depth to Water (m)	Water Level (ft amsl)	Water Level (m amsl)	Fresh-water Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Length (feet)	Notes
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Notes

1. Decreased in water elevation due to swabbing of tubing on 6/26/08
2. Recovering from development 09/2006 and bailing 01/2007
3. WQSP-1 indicated a 2.08 feet decrease in water level during the last 12 months
4. WQSP-2 indicated a 2.24 feet decrease in water level during the last 12 months
5. Responding to drilling and development of adjacent well H-6bR
6. Decrease in water level due to pumping on 6/26/08 and pump removal
7. Recovering from SNL testing
8. Water level measured from outer casing, not tubing