



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

NOV 17 2008

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

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

Dear Mr. Bearzi:

The purpose of this letter is to submit the Waste Isolation Pilot Plant groundwater level measurements for the month of October 2008, as required by Permit Condition 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 (575) 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

cc: w/o enclosures
 J. Kieling, NMED ED
 *ED denotes electronic distribution



SUMMARY COMMENTS FOR THE WATER LEVEL MEASUREMENTS FOR THE
MONTH OF OCTOBER 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 2007 Annual Site Environmental Report, submitted to the New Mexico Environment Department in compliance with HWFP Condition V.J.2.C, reports no DMP water level changes greater than two feet. Changes in DMP wells' water levels greater than two feet for the current year, if any, are noted in the data sheet and will be discussed in the next ASER.

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

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

Column Height = Water Level – Culebra Midpoint Elevation

Fresh-water Head = Specific Gravity x Column Height + 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 and H-16. However, fluid density for these wells has not been measured since reconfiguration; therefore the equivalent freshwater head cannot be calculated. The fluid density for these wells will be determined when the 2008 Pressure Density Survey is completed.

6. Groundwater level measurements were not taken at wells H-14 and H-15R due to Sandia National Laboratories (SNL) testing and instrumentation activities. Water level measurements are anticipated to resume in November 2008.

7. A groundwater level measurement was taken at H-6bR, but is not reported. The casing was resurveyed November 4, 2008. When data are available, the October water level and water levels retroactive to the date of elevation change will be provided.

Groundwater level Measurements for October 2008

Well Number	Zone	Top of 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 Height (feet)	Notes
AEC-7	CUL	3656.96	10/14/08	08:00	814.36	0.00	814.36	187.26	3042.60	927.38					6
C-2737 (PIP)	CUL	3400.76	10/15/08	12:10	385.61	-0.60	385.21	117.72	3014.55	918.83	3017.60	2709.70	1.010	304.65	
ERDA-9	CUL	3410.17	10/15/08	12:00	397.62	-0.03	397.65	121.20	3012.52	918.22	3027.54	2693.00	1.047	319.52	
H-02b2	CUL	3378.36	10/13/08	12:45	332.05	0.00	332.05	101.21	3046.31	928.52	3050.56	2742.80	1.014	303.51	
H-03b2	CUL	3389.91	10/14/08	13:52	388.06	0.00	388.06	118.28	3001.85	914.96	3014.44	2702.20	1.042	299.65	
H-04b	CUL	3333.58	10/13/08	14:35	329.21	0.00	329.21	100.34	3004.37	915.73	3006.99	2829.50	1.015	174.87	
H-05b	CUL	3506.78	10/14/08	08:21	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	10/13/08	13:39	164.64	0.00	164.64	50.18	2999.08	914.12	2999.29	2893.80	1.002	105.28	
H-09c (PIP)	CUL	3407.05	10/14/08	10:33	410.26	0.07	410.19	125.03	2996.86	913.44	2997.11	2743.50	1.001	253.36	
H-10c	CUL	3688.40	10/14/08	09:54	664.88	0.00	664.88	202.66	3023.52	921.57	3029.18	2316.30	1.008	707.22	
H-11b4	CUL	3410.79	10/14/08	11:36	422.75	0.00	422.75	128.85	2988.04	910.75	3009.98	2874.60	1.070	313.44	
H-12	CUL	3427.33	10/14/08	09:15	456.53	0.00	456.53	139.15	2970.80	905.50	3007.84	2588.90	1.097	381.90	
H-16	CUL	3410.65	10/15/08	14:35	373.05	0.00	373.05	113.71	3037.60	925.86					6
H-17	CUL	3385.24	10/14/08	12:05	417.85	0.00	417.85	127.38	2967.39	904.46	3007.63	2664.80	1.133	302.59	
H-19b0	CUL	3418.33	10/14/08	13:44	425.66	0.00	425.66	129.74	2992.67	912.17	3014.99	2664.40	1.068	323.27	
I-461	CUL	3283.61	10/13/08	10:57	238.19	0.00	238.19	72.60	3045.42	928.24	3046.11	2907.10	1.005	138.32	
SNL-01	CUL	3512.84	10/15/08	07:30	433.17	0.00	433.17	132.03	3079.67	938.68	3086.60	2900.00	1.033	179.67	
SNL-02	CUL	3323.06	10/13/08	11:42	251.91	0.00	251.91	76.78	3071.15	938.09	3073.78	2852.30	1.012	218.85	
SNL-03	CUL	3490.35	10/14/08	14:23	417.25	0.00	417.25	127.18	3073.10	936.68	3081.13	2723.80	1.023	349.30	
SNL-05	CUL	3379.98	10/13/08	11:57	305.85	0.00	305.85	93.22	3074.13	936.99	3077.56	2731.00	1.010	343.13	
SNL-06	CUL	3646.11	10/14/08	07:00	863.20	0.00	863.20	263.10	2782.91	848.23	2899.76	2307.90	1.246	475.01	1
SNL-08	CUL	3555.73	10/14/08	08:38	544.23	0.00	544.23	165.88	3011.50	917.91	3055.33	2686.00	1.103	425.50	
SNL-09	CUL	3360.96	10/13/08	10:45	309.90	0.00	309.90	94.46	3051.06	929.96	3057.23	2793.80	1.024	257.26	
SNL-10	CUL	3377.59	10/13/08	13:07	324.60	0.00	324.60	98.94	3062.99	930.55	3056.17	2764.10	1.011	288.89	
SNL-12	CUL	3339.46	10/14/08	10:15	336.95	0.00	336.95	102.70	3002.51	915.17	3003.68	2766.60	1.005	233.91	
SNL-13	CUL	3294.22	10/13/08	14:10	284.55	0.00	284.55	86.73	3009.67	917.35	3012.82	2893.10	1.027	116.57	
SNL-14	CUL	3368.41	10/14/08	11:54	376.13	0.00	376.13	114.64	2992.28	912.05	3006.36	2698.90	1.048	293.38	
SNL-15	CUL	3479.93	10/14/08	08:50	632.83	0.00	632.83	192.89	2847.10	867.80	2913.22	2567.10	1.228	290.00	7
SNL-16	CUL	3133.00	10/13/08	13:24	123.15	0.00	123.15	37.54	3009.85	917.40	3010.68	2926.70	1.010	83.15	
SNL-17	CUL	3238.06	10/13/08	13:58	231.32	0.00	231.32	70.61	3006.74	916.45	3007.45	2886.50	1.006	118.24	
SNL-18	CUL	3375.44	10/15/08	08:24	300.12	0.00	300.12	91.48	3075.32	937.36	3082.35	2824.20	1.028	251.12	
SNL-19	CUL	3222.65	10/13/08	11:36	150.40	0.00	150.40	45.84	3072.25	936.42	3072.86	2867.60	1.003	204.65	
WPPP-11	CUL	3427.78	10/13/08	12:06	362.01	0.00	362.01	110.34	3065.77	934.45	3084.61	2570.00	1.038	495.77	
WPPP-13	CUL	3405.67	10/13/08	12:24	343.76	0.00	343.76	104.78	3061.91	933.27	3081.61	2690.30	1.053	371.61	
WPPP-19	CUL	3435.11	10/15/08	11:15	388.66	0.00	388.66	118.46	3046.45	928.56	3063.23	2665.00	1.044	381.45	
WPPP-25 (PIP)	CUL	3214.24	10/13/08	11:13	148.90	0.30	148.60	45.29	3065.64	934.41	3069.09	2752.30	1.011	313.34	
WQSP-1	CUL	3419.25	10/15/08	11:00	358.61	0.18	358.43	109.25	3060.82	932.94	3077.87	2705.60	1.048	355.22	2
WQSP-2	CUL	3463.87	10/15/08	11:35	398.21	0.20	398.01	121.31	3065.86	934.47	3086.36	2636.80	1.048	427.06	3
WQSP-3	CUL	3480.14	10/15/08	11:25	462.90	0.19	462.11	140.85	3018.03	919.90	3076.10	2620.30	1.146	397.73	
WQSP-4	CUL	3433.09	10/14/08	13:43	443.05	0.18	442.87	134.99	2990.22	911.42	3015.57	2652.20	1.075	338.02	
WQSP-5	CUL	3384.38	10/14/08	13:32	378.74	0.20	378.54	115.38	3005.84	916.18	3012.84	2725.70	1.025	280.14	
WQSP-6	CUL	3364.72	10/14/08	13:19	343.44	0.19	343.25	104.62	3021.47	920.94	3025.02	2767.60	1.014	253.87	
C-2737 (ANNULUS)	MAG	3400.76	10/15/08	12:15	256.70	0.00	256.70	78.24	3144.06	958.31					
H-02b1	MAG	3378.49	10/13/08	12:51	235.16	0.00	235.16	71.68	3143.33	958.09					
H-03b1	MAG	3350.72	10/14/08	14:00	244.05	0.00	244.05	74.39	3146.67	959.11					
H-04c	MAG	3334.28	10/13/08	14:30	186.88	0.00	186.88	56.96	3147.40	959.33					
H-05c	MAG	3348.89	10/13/08	10:28	279.37	0.00	279.37	85.15	3069.32	935.53					4
H-06a	MAG	3433.28	10/14/08	10:56	406.03	0.00	406.03	123.76	3027.25	922.71					
H-09c (ANNULUS)	MAG	3407.05	10/14/08	10:35	269.15	0.00	269.15	82.04	3137.90	956.43					
H-10a	MAG	3688.45	10/14/08	09:42	466.10	0.00	466.10	142.07	3222.35	982.17					
H-11b2	MAG	3411.86	10/14/08	11:48	274.18	0.00	274.18	83.57	3137.68	956.36					5
H-15	MAG	3484.44	10/14/08	14:03	358.83	0.00	358.83	109.37	3125.61	952.89					
H-18	MAG	3414.21	10/15/08	10:55	264.51	0.00	264.51	80.82	3149.70	960.03					
WPPP-18	MAG	3457.57	10/15/08	11:20	307.80	0.00	307.80	93.82	3149.77	960.05					
WPPP-25 (ANNULUS)	MAG	3214.24	10/13/08	11:16	149.99	1.29	148.70	45.32	3065.54	934.38					
WQSP-6a	DL	3363.80	10/14/08	13:24	167.40	0.28	167.14	50.94	3196.68	974.34					
CB-1	B/C	3329.12	10/14/08	13:00	326.76	0.00	326.76	99.60	3002.36	915.12					
DOE-2	B/C	3419.18	10/13/08	12:10	353.84	0.00	353.84	107.85	3065.34	934.32					

Groundwater level Measurements for October 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)	Freshwater Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Height (feet)	Notes
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Notes

1. Recovering from development 09/2005 and bailing 01/2007
2. WQSP-1 indicated a 2.91 feet decrease in Freshwater head from January 2008 to Present (current calendar year)
3. WQSP-2 indicated a 3.00 feet decrease in Freshwater head from January 2008 to Present (current calendar year)
4. Responding to drilling and development of adjacent well H-6bR
5. Still recovering from pumping on 6/26/08 and pump removal.
6. 2008 density not yet determined.
7. Recovering from pumping 04/2007