



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

December 10, 2004



ENTERED



Mr. Steve Zappe, WIPP Project Leader
Hazardous Waste Permits Program
Hazardous Waste Bureau
New Mexico Environment Department
2905 E. Rodeo Park Dr. Bldg. 1
Santa Fe, New Mexico 87505-6303

Subject: Transmittal of the Waste Isolation Pilot Plant Groundwater Level
Measurements for the Month of November 2004

Dear Mr. Zappe:

The purpose of this letter is to submit the Waste Isolation Pilot Plant groundwater level data for the month of November 2004, 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 attachments 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. Jody Plum at (505) 234-7462, if you have any questions regarding this data transmittal.

Sincerely,

L. L. Piper, Acting Manager
Carlsbad Field Office

S. D. Warren, General Manager
Washington TRU Solutions LLC

Enclosure

cc: w/enclosure
C. Walker, Trinity Engineering

cc: w/o enclosure
J. Kieling, NMED
J. Bearzi, NMED



SUMMARY COMMENTS FOR THE WATER LEVEL MEASUREMENTS FOR THE
MONTH OF NOVEMBER 2004

1. The WIPP Groundwater Detection Monitoring Program Plan, 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 or natural stabilization to be reported. None of the Water Quality Sampling Program (WQSP) wells indicate more than two feet of cumulative change from December 2003 through November 2004. Interim fluctuations in the DMP wells greater than two feet are related to specific pumping episodes or natural stabilization.
2. Groundwater level measurements were not taken at well H-15 due to instrumentation installed by Sandia National Laboratories (SNL). Also automated water level monitoring testing continues at well H-15. Water level measurements will not be taken from this well until all testing is completed and all instrumentation removed.
3. Groundwater level measurements were not taken at well SNL-9 due to SNL pump testing. Water level measurements will resume in December.
4. Groundwater level measurements were not taken at well WIPP-26 due to road hazards after recent rainfall. Water level measurements will not be taken until road hazards have been repaired.
5. The top of casing (TOC) elevations for wells AEC-7 and CB-1 (PIP) have been changed in this report to reflect new reference points after reconfiguration. These elevations will be used for future reports.
6. Adjusted freshwater heads are based on the most current fluid density measured for each well. Calendar year 2004 density survey is in progress.

Waterlevel Measurements
For
November 2004

| WELL NUMBER | ZONE | CASING ELEVATION ft amsl | DATE | TIME (MST) | DEPTH TO WATER ft | ADJUST TO TOC ft | ADJUSTED DEPTH TOC ft | ADJUSTED DEPTH METERS | WATER LEVEL ELEVATION ft amsl | ELEVATION IN METERS amsl | ADJUSTED FRESHWATER HEAD ft amsl |
|-------------------|---------|--------------------------------|----------|---------------|----------------------------|---------------------------|--------------------------------|-----------------------------|--|-----------------------------------|---|
| AEC-7 | CUL | 3657.29 | 11/08/04 | 13:13 | 629.00 | 0.00 | 629.00 | 191.72 | 3028.29 | 923.02 | 3050.35 |
| C-2737 (PIP) | CUL | 3399.30 | 11/10/04 | 09:39 | 390.58 | 0.89 | 389.69 | 118.78 | 3009.61 | 917.33 | 3014.70 |
| DOE-1 | CUL | 3466.04 | 11/10/04 | 08:45 | 479.41 | 0.00 | 479.41 | 146.12 | 2986.63 | 910.32 | 3015.93 |
| ERDA-9 | CUL | 3410.10 | 11/09/04 | 13:25 | 401.06 | 0.65 | 400.41 | 122.04 | 3009.69 | 917.35 | 3025.19 |
| H-02b2 | CUL | 3378.31 | 11/10/04 | 09:34 | 339.61 | 0.00 | 339.61 | 103.51 | 3038.70 | 926.20 | 3041.06 |
| H-03b2 | CUL | 3390.03 | 11/10/04 | 10:02 | 390.58 | 0.00 | 390.58 | 119.05 | 2999.45 | 914.23 | 3010.82 |
| H-04b | CUL | 3333.35 | 11/09/04 | 14:25 | 330.91 | 0.00 | 330.91 | 100.86 | 3002.44 | 915.14 | 3006.05 |
| H-05b | CUL | 3506.04 | 11/10/04 | 11:38 | 476.53 | 0.00 | 476.53 | 145.25 | 3029.51 | 923.39 | 3074.50 |
| H-06b | CUL | 3348.25 | 11/09/04 | 09:58 | 296.21 | 0.00 | 296.21 | 90.28 | 3052.04 | 930.26 | 3064.20 |
| H-07b2 | CUL | 3165.07 | 11/08/04 | 07:16 | 165.73 | 0.00 | 165.73 | 50.61 | 2999.34 | 914.20 | 2999.25 |
| H-09c (PIP) | CUL | 3407.30 | 11/08/04 | 10:40 | 412.01 | 0.08 | 411.93 | 125.56 | 2995.37 | 912.99 | 2995.62 |
| H-10c | CUL | 3688.64 | 11/08/04 | 09:36 | 663.40 | 0.00 | 663.40 | 202.20 | 3025.24 | 922.09 | 3025.24 |
| H-11b4 | CUL | 3410.89 | 11/10/04 | 06:12 | 425.18 | 0.00 | 425.18 | 129.59 | 2985.71 | 910.04 | 3005.88 |
| H-17 | CUL | 3385.31 | 11/10/04 | 06:44 | 420.92 | 0.00 | 420.92 | 128.30 | 2964.39 | 903.55 | 3014.02 |
| H-19b0 | CUL | 3418.38 | 11/09/04 | 13:47 | 427.76 | 0.00 | 427.76 | 130.38 | 2990.62 | 911.54 | 3012.45 |
| I-461 | CUL | 3289.48 | 11/09/04 | 09:24 | 240.62 | 0.00 | 240.62 | 73.34 | 3048.86 | 929.29 | 3051.44 |
| P-17 | CUL | 3337.24 | 11/10/04 | 07:21 | 351.78 | 0.00 | 351.78 | 107.22 | 2985.46 | 909.97 | 2999.77 |
| SNL-01 | CUL | 3512.84 | 11/09/04 | 06:40 | 439.25 | 0.00 | 439.25 | 133.88 | 3073.59 | 936.83 | 3077.93 |
| SNL-02 | CUL | 3323.03 | 11/09/04 | 08:29 | 254.38 | 0.00 | 254.38 | 77.54 | 3068.65 | 935.32 | 3071.89 |
| SNL-03 | CUL | 3490.34 | 11/09/04 | 07:07 | 424.05 | 0.00 | 424.05 | 129.25 | 3068.29 | 934.61 | 3075.89 |
| SNL-05 | CUL | 3381.88 | 11/09/04 | 06:12 | 311.89 | 0.00 | 311.89 | 95.06 | 3069.99 | 935.73 | 3072.02 |
| SNL-12 | CUL | 3339.44 | 11/08/04 | 12:00 | 338.45 | 0.00 | 338.45 | 103.16 | 3000.99 | 914.70 | 3001.91 |
| WIPP-12 | CUL | 3472.06 | 11/09/04 | 12:48 | 439.95 | 0.00 | 439.95 | 134.10 | 3032.11 | 924.19 | 3068.91 |
| WIPP-13 | CUL | 3405.71 | 11/10/04 | 10:26 | 349.29 | 0.00 | 349.29 | 106.46 | 3056.42 | 931.60 | 3066.96 |
| WIPP-19 | CUL | 3435.14 | 11/09/04 | 13:02 | 394.75 | 0.00 | 394.75 | 120.32 | 3040.39 | 926.71 | 3078.24 |
| WIPP-21 | CUL | 3418.96 | 11/09/04 | 13:13 | 401.99 | 0.00 | 401.99 | 122.53 | 3016.97 | 919.57 | 3041.18 |
| WIPP-22 | CUL | 3428.12 | 11/09/04 | 13:07 | 397.21 | 0.00 | 397.21 | 121.07 | 3030.91 | 923.82 | 3062.05 |
| WIPP-25 (PIP) | CUL | 3214.39 | 11/09/04 | 08:53 | 151.91 | 0.42 | 151.49 | 46.17 | 3062.90 | 933.57 | 3059.80 |
| WIPP-27 (PIP) | CUL | 3178.98 | 11/08/04 | 08:24 | 94.86 | 0.42 | 94.44 | 28.79 | 3084.54 | 940.17 | 3090.70 |
| WIPP-29 | CUL | 2978.26 | 11/08/04 | 07:35 | 10.79 | 0.00 | 10.79 | 3.29 | 2967.47 | 904.48 | 2970.71 |
| WIPP-30 (PIP) | CUL | 3429.05 | 11/09/04 | 07:37 | 359.06 | 0.70 | 358.36 | 109.23 | 3070.69 | 935.95 | 3077.82 |
| WQSP-1 | CUL | 3419.20 | 11/09/04 | 10:22 | 365.10 | 0.16 | 364.94 | 111.23 | 3054.26 | 930.94 | 3070.97 |
| WQSP-2 | CUL | 3463.90 | 11/09/04 | 10:39 | 405.14 | 0.16 | 404.98 | 123.44 | 3058.92 | 932.36 | 3078.64 |
| WQSP-3 | CUL | 3480.30 | 11/09/04 | 12:36 | 469.35 | 0.16 | 469.19 | 143.01 | 3011.11 | 917.79 | 3068.14 |
| WQSP-4 | CUL | 3433.00 | 11/09/04 | 13:35 | 445.09 | 0.16 | 444.93 | 135.61 | 2988.07 | 910.76 | 3013.07 |
| WQSP-5 | CUL | 3384.40 | 11/09/04 | 13:57 | 381.24 | 0.16 | 381.08 | 116.15 | 3003.32 | 915.41 | 3010.39 |
| WQSP-6 | CUL | 3364.70 | 11/09/04 | 14:09 | 350.52 | 0.16 | 350.36 | 106.79 | 3014.34 | 918.77 | 3018.05 |
| C-2737 (ANNULUS) | MAG | 3399.30 | 11/10/04 | 09:45 | 256.45 | 0.00 | 256.45 | 78.17 | 3142.85 | 957.94 | * |
| H-02b1 | MAG | 3378.46 | 11/10/04 | 09:26 | 234.68 | 0.00 | 234.68 | 71.53 | 3143.78 | 958.22 | * |
| H-03b1 | MAG | 3390.64 | 11/10/04 | 08:50 | 245.77 | 0.00 | 245.77 | 74.91 | 3144.87 | 958.56 | * |
| H-04c | MAG | 3334.04 | 11/09/04 | 14:37 | 192.79 | 0.00 | 192.79 | 58.76 | 3141.25 | 957.45 | * |
| H-05c | MAG | 3506.04 | 11/10/04 | 11:48 | 349.51 | 0.00 | 349.51 | 106.53 | 3156.53 | 962.11 | * |
| H-06c | MAG | 3348.52 | 11/09/04 | 09:52 | 281.75 | 0.00 | 281.75 | 85.88 | 3066.77 | 934.75 | * |
| H-08a | MAG | 3432.99 | 11/08/04 | 11:14 | 405.75 | 0.00 | 405.75 | 123.67 | 3027.24 | 922.70 | * |
| H-09c (ANNULUS) | MAG | 3407.30 | 11/08/04 | 10:44 | 272.09 | 0.00 | 272.09 | 82.93 | 3135.21 | 955.61 | * |
| H-10a | MAG | 3688.67 | 11/08/04 | 09:47 | 468.80 | 0.00 | 468.80 | 142.28 | 3221.87 | 982.03 | * |
| H-11b2 | MAG | 3411.64 | 11/10/04 | 06:18 | 278.57 | 0.00 | 278.57 | 84.91 | 3133.07 | 954.96 | * |
| H-14 | MAG | 3347.11 | 11/10/04 | 09:09 | 236.59 | 0.00 | 236.59 | 72.11 | 3110.52 | 948.09 | * |
| H-18 | MAG | 3414.21 | 11/09/04 | 10:15 | 339.17 | 0.00 | 339.17 | 103.38 | 3075.04 | 937.27 | * |
| WIPP-18 | MAG | 3458.76 | 11/09/04 | 12:57 | 314.44 | 0.00 | 314.44 | 95.84 | 3144.32 | 958.39 | * |
| WIPP-25 (ANNULUS) | MAG | 3214.39 | 11/09/04 | 08:56 | 152.75 | 0.00 | 152.75 | 46.56 | 3061.64 | 933.19 | * |
| H-03d/DL (PVC) | DL | 3390.01 | 11/10/04 | 09:56 | 314.35 | 2.22 | 312.13 | 95.14 | 3077.88 | 938.14 | * |
| WQSP-6a | DL | 3363.80 | 11/08/04 | 14:34 | 167.00 | 0.25 | 166.75 | 50.83 | 3197.05 | 974.46 | * |
| H-08c | RUS/SAL | 3432.90 | 11/08/04 | 11:24 | 451.80 | 0.00 | 451.80 | 137.71 | 2981.10 | 908.64 | * |
| AEC-8 | B/C | 3537.10 | 11/10/04 | 11:07 | 470.55 | 0.00 | 470.55 | 143.42 | 3066.55 | 934.68 | * |
| CB-1(PIP) | B/C | 3328.87 | 11/10/04 | 08:00 | 603.17 | 0.00 | 603.17 | 183.85 | 2725.70 | 830.79 | * |
| DOE-2 | B/C | 3418.96 | 11/10/04 | 10:39 | 744.69 | 0.00 | 744.69 | 226.98 | 2674.27 | 815.12 | * |

* Density data not acquired, therefore adjusted freshwater head measurements cannot be calculated for these wells.