**ENERGY AND ENVIRONMENT CABINET**

**Steven L. Beshear**
Governor

**Leonard K. Peters**
Secretary

**Department for Environmental Protection**
**Division of Waste Management**
Maxey Flats Project
2597 Maxey Flat Rd.
Hillsboro, KY 41049
606-783-8680

August 30, 2010

Ms. Pam Scully
SRPM, Kentucky/Tennessee Section
North Site Management Branch
Waste Management Division
USEPA-Region IV
Sam Nunn Atlanta Federal Center Tower
61 Forsyth Street, SW
Atlanta, GA 30303-8960

Subject: Maxey Flats Project 2010 Semi-Annual Report

Dear Ms. Scully:

The Commonwealth of Kentucky hereby submits the Semi-Annual Report for 2010 to fulfill the requirements of Section 4.0 of the Performance Standard Verification Plan (PSVP). Copies are being distributed, under this cover, as indicated below.

If you have any questions, please contact me at (606)783-8680.

Sincerely,

Scott Wilburn
Environmental Control Supervisor
Maxey Flats Project

c: Derek Matory, USEPA
Jon Richards, USEPA
Vijendra Kothari, USDOE
Michelle Miller, Stoller, Corp.
Bennie Underwood, de maximis, inc.
Nicole Barkasi, de maximis, inc.
Shawn Cecil, EEC, Superfund Branch

# MAXEY FLATS PROJECT

# 2010 SEMI-ANNUAL REPORT

August 30, 2010

Kentucky Division of Waste Management
Superfund Branch
Maxey Flats Project

**Maxey Flats Project (MFP) Semi-annual Report**
**Reporting Period: January 2010 – June 2010**

Pursuant to the Consent Decree, this semi-annual report is submitted to the US EPA from the Commonwealth in accordance to requirements of the Statement of Work. Included in this report are narration of monitoring results, inspections, repair and maintenance activities along with inspection forms, site photographs, field daily logs and any other documentation relative to the IRP O&M Requirement Summary.

## Monitoring Results

This section covers surface water, ground water and subsidence monitoring tasks performed during the January 2010 through June 2010 reporting period necessary to comply with the Interim Maintenance Period Work Plan (IMP) and appendices.

## Surface Water (PSVP 3.1.2)

Surface water sampling for locations 102D, 103E, 106, C107, 122A, 122C, 143, and 144 is performed using automatic sequential samplers that collect a daily composite sample. The sampler located at the East Detention Basin (EDB) collects samples based on a 15 minute rain event with the intensity to produce a total rainfall in excess of 2.8 inches during a twenty-four period.

A total of 1,396 surface water samples have been collected and analyzed for tritium during this period with no anomalous data reported. Table 1 contains a summary of the data obtained during this reporting period.

## Alluvial Wells (PSVP 3.1.2.2)

Alluvial well sampling includes annual samples from AW-6, 10 and 12 and quarterly sampling of AW-1A and 7. For this reporting period two rounds of quarterly sampling were collected from AW-1A and 7 with no location exceeding a tritium analysis of 7 pCi/ml. Alluvial well sampling is compared to a drinking water standard of 20 pCi/ml. Alluvial wells 6, 10 and 12 are scheduled for sampling the last quarter of 2010. Table 2 contains a summary of the data for 2009 and the first half of 2010.

## Monitoring Wells

Two quarterly level measurements of 15 U-wells and one round of sampling of 4 U-wells were completed by Maxey Flats staff in January and April 2010. Sampling is not required by the IMP but is a requirement of the MFP Radioactive Material License. Table 3 contains a summary of the data for 2009 and the first half of 2010. Table 4 summarizes the tritium data for the U-wells.

## Trench Leachate Management (PSVP 2.3)

Trench sump liquid levels are obtained in accordance with the PSVP, Section 2.3 Sump Measurements and Tech Change III and the Second Five Year Review. First semiannual measurements were obtained in April to satisfy the semiannual collection period. Table 5 contains the liquid level measurements from October 2009 and April 2010. The data indicates the levels overall are remaining constant excluding sump 7-4 and sump 46-2.

Sump 7-4 has exceeded 67% of freeboard. A revised leachate management engineering evaluation was submitted to EPA August 6, 2008. The leachate management engineering evaluation recommends monitoring Sump 7-4 on a quarterly basis to determine if it stabilizes near pre-pump level. Sump 7-4 is currently within one foot of its pre-pump level.

Sump 46-2 has exceeded 17% of freeboard but recent trending analysis indicates that its rate of level increase is declining. Sump 46-2 is still several feet below pre-pump level.

**Subsidence Monitoring (PSVP 2.2)**

Presently a subsidence on Trench 32 is pending repair. Only two additional small subsidences are being monitored, on trenches 32 and 37. At this time neither has met the IMP Work Plan Subsidence criteria.

In previous years the annual subsidence survey has been completed by Curd, Newton and Associates, Morehead, Kentucky. Curd, Newton and Associates recently split into two firms. Curd Engineering was contracted to complete the task but State finance requirements delayed the completion until August 20th. US EPA was informed of this delay and its impact on completing the subsidence repair over trench 32 in an email dated June 15, 2010. Comparing the 2010 control point elevation measurements to 2004 baseline measurements indicates variation ranged from -0.02" to -0.41". The IMP Work Plan does not prescribe Action Levels for subsidence monitoring. Six additional subsidence monitoring locations (29-34) were added in 2008 at the discretion of MFP to ensure monitoring of suspect areas. These points range in variation since 2008 from -0.07" to -0.12". Table 6 contains subsidence monitoring results.

**Erosion Monitoring (PSVP 2.1)**

Table 7 contains data obtained from surveys performed in the East Drainage Channel by USGS staff. The monitoring continues to indicate no acute or significant erosion.

**Inspections, Maintenance and Repair Activities Relative to the IRP**

**Inspections**

Inspections were conducted in accordance with the Operations and Maintenance Requirements Summary (O&M), Appendix B. This includes: (26) Weekly/Daily Inspections, (12) Twice-a-Month Inspections, (6) Monthly Inspections, (2) Quarterly Inspections, (1) Semi-annual Inspection and (1) Annual Inspection.

**Maintenance**

This section covers the maintenance of the geo-membrane liner, headwalls, drainage channels, diversion berms, interior anchor trenches, perimeter, and anchor trench, articulating block system, emergency spillway at the northeast corner, east detention basin, southeast cap and general site components.

The only items requiring attention were leaf removal from headwall inlets and weed control within the AB-mats.

## Repairs

A total of 21 repairs were made to the geomembrane liner during this reporting period. A quality control check was performed on each of the repaired sections.

## Reporting

All validated sampling data acquired on site has been forwarded to United States Environmental Protection Agency (USEPA), Project Coordinator for the Steering Committee, United States Department of Energy (USDOE) and the Commonwealth.

## Conclusion

There was no anomalous data reported during this period from 1,406 analyzed samples. The data supports the Maxey Flats Project, at present, is causing a minimal impact to human health and the environment.

**Table 1**
**Maxey Flats Project**
**Surface Water Data Summary**
**January 2010 – June 2010**

| Location | Minimum Activity (pCi/ml) | Date | Maximum Activity (pCi/ml) | Date | Average Activity (pCi/ml) | Sampling Period |
|---|---|---|---|---|---|---|
| ISCO 122A | -0.25 | 5/22/10 | 1.80 | 1/5/10 | 0.08 | 1/1-6/30/10 |
| ISCO 106 | 0.14 | 3/1/10 | 12.35 | 4/21/10 | 4.57 | 1/1-6/30/10 |
| ISCO 122C | 0.31 | 5/2/10 | 4.62 | 4/17/10 | 1.33 | 1/1-6/30/10 |
| ISCO 102D | -0.87 | 4/15/10 | 2.98 | 4/18/10 | 0.84 | 1/1-6/30/10 |
| ISCO 103E | 0.22 | 6/2/10 | 3.15 | 4/26/10 | 0.73 | 1/1-6/30/10 |
| ISCO EDB | 0.01 | 5/8/10 | 1.76 | 5/31/10 | 0.30 | 1/1-6/30/10 |
| ISCO 143 | -0.19 | 5/12/10 | 1.15 | 3/23/10 | 0.08 | 1/1-6/30/10 |
| ISCO 144 | 2.68 | 6/12/10 | 194.13 | 4/15/10 | 72.38 | 1/1-6/30/10 |
| ISCO C107 | 0.00 | 5/20/10 | 21.35 | 5/1/10 | 12.21 | 1/1-6/30/10 |

**Table 2**
**Maxey Flats Project**
**Alluvial Monitoring Well Data**
**January 2009 – June 2010**

| Well ID | Date | Tritium Activity (pCi/ml) | Error +/- | Specific Conductivity (μmho) | pH | Temperature [C] |
|---|---|---|---|---|---|---|
| AW-1 | 02/13/09 | 1.74 | 0.13 | 290 | 5.92 | 55.8 |
| AW-1 | 06/05/09 | 5.44 | 0.18 | 246 | 6.97 | 56.5 |
| AW-1 | 09/09/09 | 2.06 | 0.13 | 364 | 6.10 | 56.9 |
| AW-1 | 11/25/09 | 4.42 | 0.16 | 303 | 6.10 | 59.4 |
| AW-1 | 03/25/10 | 6.41 | 0.19 | 293 | 6.50 | 55.9 |
| AW-1 | 05/25/10 | 5.57 | 0.18 | 272 | 6.20 | 58.1 |
| | | | | | | |
| AW-6 | 11/25/09 | 0.23 | 0.10 | 360 | 5.40 | 60.9 |
| | | | | | | |
| AW-7 | 02/13/09 | 5.98 | 0.18 | 125 | 5.59 | 56.8 |
| AW-7 | 06/05/09 | 4.85 | 0.18 | 142 | 6.36 | 57.4 |
| AW-7 | 09/10/09 | 5.59 | 0.18 | 126 | 6.26 | 61.4 |
| AW-7 | 11/25/09 | 5.55 | 0.18 | 164 | 5.20 | 58.1 |
| AW-7 | 03/25/10 | 5.19 | 0.17 | 166 | 5.30 | 55.5 |
| AW-7 | 05/25/10 | 4.75 | 0.17 | 172 | 5.30 | 60.2 |
| | | | | | | |
| AW-10 | 11/25/09 | 0.45 | 0.10 | 112 | 4.80 | 61.0 |
| | | | | | | |
| AW-12 | 11/25/09 | 0.61 | 0.11 | 413 | 5.70 | 58.8 |

Note: Measurements conducted by Maxey Flats Project staff as of July 2007

**Table 3**
**Maxey Flats Project**
**USGS Monitoring Well Data**
**January 2009-June 2010**

| Well ID | Ground Level to Bottom (ft) | Ground Level to Liquid (ft) 1/22/09* | Ground Level to Liquid (ft) 4/22/09* | Ground Level to Liquid (ft) 7/7/09* | Ground Level to Liquid (ft) 10/19/-10/21/09** | Ground Level to Liquid (ft) 2/24/10** | Ground Level to Liquid (ft) 4/27/10** |
|---|---|---|---|---|---|---|---|
| ESI-1 | 22.13 | 14.55 | 5.53 | 6.84 | 6.67 | 7.07 | 13.01 |
| ESI-2 | 14.67 | 12.24 | 11.84 | 11.81 | 3.92 | 11.99 | 11.76 |
| ESI-4 | 24.48 | 12.80 | 12.26 | 12.39 | 12.78 | 12.62 | 12.39 |
| ESI-5 | 22.87 | 13.61 | 13.34 | 13.31 | 12.94 | 13.77 | 13.59 |
| ESI-12 | 38.92 | 18.87 | 19.17 | 19.61 | 19.66 | 19.04 | 19.26 |
| ESI-19 | 19.52 | 14.50 | 14.28 | 14.13 | 14.39 | 14.24 | 14.17 |
| ESI-20 | | 101.74 | 101.77 | 101.71 | 101.76 | 99.50 | 101.73 |
| N2B | 9.75 | Dry | 9.16 | 9.08 | 9.18 | 6.23 | 8.85 |
| UE-2 | 15.60 | 14.63 | 14.37 | 14.26 | 14.31 | 14.31 | 14.03 |
| UE-11 | 16.70 | 14.71 | 14.49 | 14.46 | 14.36 | 14.33 | 14.22 |
| UF-1 | 18.20 | 14.82 | 14.48 | 14.60 | 14.45 | 14.14 | 13.68 |
| UF-2 | 13.15 | 10.69 | 10.18 | 10.27 | 10.38 | 10.20 | 10.03 |
| UF-5 | 17.50 | 6.70 | 4.66 | 6.44 | 6.50 | 4.41 | -- |
| UF-10a | | 28.53 | 28.31 | -- | 28.49 | -- | 28.61 |
| UF-37 | 21.90 | 12.65 | 13.35 | 13.00 | 11.98 | 13.16 | 12.69 |
| UF-45 | 18.90 | 14.75 | 14.27 | 14.40 | 14.45 | 14.24 | 14.33 |
| UK-1 | 12.60 | 11.07 | 10.60 | 10.66 | 10.69 | 10.58 | 10.27 |

* - Measurements and sampling conducted by USGS staff (well recorders removed 7/8/09)

** - Manual measurements and sampling conducted by MFP staff as of August 2009

**Table 4**
**Maxey Flats Project**
**U-Well Tritium Data**
**January 2009-June 2010**

| Well ID | Tritium Activity 4/22/09 | | Tritium Activity 10/21/09 | | Tritium Activity 4/27/10 | |
|---|---|---|---|---|---|---|
| | Activity (pCi/ml) | Error +/- | Activity (pCi/ml) | Error +/- | Activity (pCi/ml) | Error +/- |
| N2B | 29,025 | 11 | 140,683 | 24 | 9,864 | 6 |
| UE-2 | 359,785 | 39 | 173,104 | 26 | 191,719 | 28 |
| UF-2 | 185,759 | 28 | 148,731 | 24 | 137,663 | 24 |
| UF-10a | 31,247 | 12 | *measurement only* | | *measurement only* | |
| UK-1 | 97,191 | 20 | 196,764 | 28 | 181,926 | 27 |

* - Measurements and sampling conducted by USGS staff (well recorders removed 7/8/09)

** - Manual measurements and sampling conducted by MFP staff as of August 2009

**Table 5**
**Maxey Flats Project**
**Trench Sump Leachate Measurements**
**October 2009 and April 2010**

| Trench Sump ID | Baseline ToC-ToL | Oct 2009 ToC-ToL | Apr 2010 ToC-ToL | | Trench Sump ID | Baseline ToC-ToL | Oct 2009 ToC-ToL | Apr 2010 ToC-ToL |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 20.80 | 19.76 | 19.84 | | 28-12 | 26.40 | 26.32 | 26.32 |
| 2-6 | 21.45 | 20.09 | 20.16 | | 29W | 24.95 | 25.62 | 26.92 |
| 3-2 | 23.00 | 23.10 | 23.10 | | 29-5 | 28.10 | 27.63 | 27.63 |
| 3-4 | 15.63 | 16.05 | 16.14 | | 29-6 | 25.33 | 25.65 | 25.65 |
| 7-4 | 15.28 | 6.56 | 6.34 | | 30-4 | 23.40 | 23.29 | 23.29 |
| 7-5 | 18.43 | 20.02 | 20.12 | | 30-8 | 29.10 | 29.92 | 29.92 |
| 7-7 | 19.33 | 21.00 | 21.13 | | 30-10 | 29.20 | 29.04 | 29.04 |
| 10-7 | 27.83 | 27.32 | 27.29 | | 31-2 | 25.05 | 25.18 | 25.21 |
| 10-8 | 27.51 | 27.70 | 27.72 | | 31-5 | 23.23 | 23.04 | 23.08 |
| 10-9 | 26.06 | 24.49 | 24.42 | | 31-7 | 24.78 | 24.69 | 24.69 |
| 11-5 | 20.92 | 21.00 | 21.12 | | 31-9 | 24.95 | 25.97 | 26.02 |
| 11-6 | 24.03 | 24.66 | 24.70 | | 32E | 29.13 | 28.95 | 28.93 |
| 15-4 | 26.68 | 26.61 | 26.63 | | 32-9 | 28.89 | 28.96 | 28.95 |
| 15-5 | 24.14 | 23.97 | 23.88 | | 35-2 | 27.04 | 28.14 | 28.28 |
| 15-6 | 28.88 | 28.10 | 28.10 | | 35-6 | 27.65 | 27.30 | 27.29 |
| 15-8 | 22.21 | 22.57 | 22.59 | | 36-3 | 20.73 | 20.76 | 20.79 |
| 18-6 | 30.41 | 30.14 | 30.14 | | 36-6 | 24.00 | 23.97 | 24.00 |
| 18-9 | 22.00 | 21.96 | 21.95 | | 36-7 | 22.70 | 22.20 | 22.20 |
| 19-5 | 28.85 | 28.79 | 28.77 | | 37-3 | 22.97 | 22.59 | 22.59 |
| 19-6 | 23.50 | 23.05 | 23.05 | | 37-4 | 23.37 | 23.39 | 23.39 |
| 19-7 | 30.80 | 29.65 | 29.62 | | 38-4 | 21.80 | 21.35 | 21.36 |
| 20W | 26.50 | 28.18 | 28.20 | | 38-5 | 21.45 | 21.01 | 21.01 |
| 20-7 | 29.85 | 29.64 | 29.64 | | 39-4 | 19.02 | 19.12 | 19.12 |
| 20-9 | 30.06 | 29.98 | 29.98 | | 40-15 | 21.50 | 21.35 | 21.36 |
| 20-11 | 24.21 | 24.02 | 24.02 | | 40-17 | 28.75 | 28.33 | 28.29 |
| 23-5 | 31.20 | 30.75 | 30.73 | | 40-19 | 30.30 | 29.58 | 29.59 |
| 23-6 | 31.17 | 30.45 | 30.40 | | 40-22 | 32.53 | 31.81 | 31.84 |
| 23-9 | 24.55 | 24.24 | 24.24 | | 42-11 | 28.60 | 28.48 | 28.52 |
| 24-5 | 23.37 | 23.30 | 23.30 | | 42-19 | 27.70 | 27.92 | 27.95 |
| 24-6 | 26.45 | 26.41 | 26.43 | | 42-20 | 35.35 | 34.96 | 34.96 |
| 25-5 | 22.91 | 23.53 | 23.55 | | 43-7 | 35.95 | 36.42 | 36.46 |
| 25-7 | 25.05 | 24.70 | 24.70 | | 43-9 | 34.15 | 34.65 | 34.68 |
| 25-9 | 22.59 | 22.49 | 22.52 | | 43-13 | 30.35 | 30.64 | 30.64 |
| 26-2 | 28.11 | 27.31 | 27.29 | | 44-5 | 41.45 | 40.49 | 40.49 |
| 26-3 | 26.90 | 26.31 | 26.25 | | 44-14 | 34.30 | 34.25 | 34.28 |
| 26-4 | 21.70 | 22.11 | 22.25 | | 44-20 | 38.50 | 38.34 | 38.34 |
| 27-9 | 28.08 | 26.34 | 26.32 | | 44-22 | 39.90 | 39.90 | 39.88 |
| 27-11 | 25.8 | 25.61 | 25.60 | | 45-1 | 29.50 | 29.29 | 29.26 |
| 28W | 26.00 | 26.03 | 26.04 | | 46-1 | 25.90 | 21.85 | 21.98 |
| 28-6 | 27.50 | 27.07 | 27.04 | | 46-2 | 22.15 | 20.16 | 20.25 |
| 28-11 | 27.00 | 26.92 | 26.92 | | 46-3 | 18.50 | 18.64 | 20.18 |

Note: Italicized measurements represent dry sumps

**Table 6 Maxey Flats Project Subsidence Monitoring**
**Control Point Survey**
**August 2010**

| Subsidence Control Point | 2004 Elevation | 2005 Elevation | 2006 Elevation | 2007 Elevation | 2008 Elevation | 2009 Elevation | 2010 Elevation | Variation From 2004 | Variation From 2008 | Variation From 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1061.82' | 1061.77' | 1061.79' | 1061.80' | 1061.81' | 1061.80' | 1061.79' | -0.03' | -0.02' | -0.01' |
| 2 | 1064.53' | 1064.52' | 1064.47' | 1064.46' | 1064.45' | 1064.41' | 1064.40' | -0.13' | -0.05' | -0.01' |
| 3 | 1064.72' | 1064.70' | 1064.63' | 1064.64' | 1064.6' | 1064.54' | 1064.54' | -0.18' | -0.06' | -0.00' |
| 4 | 1063.90' | 1063.85' | 1063.77' | 1063.76' | 1063.73' | 1063.60' | 1063.65' | -0.25' | -0.08' | +0.05' |
| 5 | 1058.81' | 1058.75' | 1058.68' | 1058.64' | 1058.59' | 1058.53' | 1058.49' | -0.32' | -0.10' | -0.04' |
| 6 | 1063.65' | 1063.60' | 1063.52' | 1063.51' | 1063.49' | 1063.44' | 1063.43' | -0.22' | -0.06' | -0.01' |
| 7 | 1061.72' | 1061.66' | 1061.61' | 1061.60' | 1061.59' | 1061.53' | 1061.57' | -0.15' | -0.02' | +0.04' |
| 8 | 1059.75' | 1059.69' | 1059.66' | 1059.64' | 1059.62' | 1059.54' | 1059.51' | -0.24' | -0.11' | -0.03' |
| 9 | 1060.73' | 1060.71' | 1060.71' | 1060.70' | 1060.76' | 1060.64' | 1060.70' | -0.03' | -0.06' | +0.06' |
| 10 | 1057.06' | 1057.03' | 1056.99' | 1056.96' | 1056.93' | 1056.0' | 1056.90' | -0.16' | -0.03' | -0.00' |
| 11 | 1060.61' | 1060.58' | 1060.54' | 1060.55' | 1060.53' | 1060.52' | 1060.51' | -0.10' | -0.02' | -0.01' |
| 12 | 1062.31' | 1062.28' | 1062.26' | 1062.25' | 1062.23' | 1062.21' | 1062.21' | -0.10' | -0.02' | -0.00' |
| 13 | 1063.64' | 1063.63' | 1063.60' | 1063.60' | 1063.61' | 1063.60' | 1063.61' | -0.03' | -0.00' | +0.01' |
| 14 | 1063.55' | 1063.54' | 1063.51' | 1063.50' | 1063.51' | 1063.46' | 1063.47' | -0.08' | -0.04' | +0.01' |
| 15 | 1060.65' | 1060.60' | 1060.54' | 1060.53' | 1060.51' | 1060.47' | 1060.47' | -0.19' | -0.05' | -0.01' |
| 16 | 1058.84' | 1058.85' | 1058.80' | 1058.81' | 1058.82' | 1058.79' | 1058.80' | -0.04' | -0.02' | +0.01' |
| 17 | 1054.77' | 1054.75' | 1054.71' | 1054.71' | 1054.70' | 1054.68' | 1054.66' | -0.11' | -0.04' | -0.02' |
| 18 | 1050.90' | 1050.86' | 1050.82' | 1050.83' | 1050.82' | 1050.81' | 1050.81' | -0.09' | -0.01' | -0.00' |
| 19 | 1047.40' | 1047.36' | 1047.30' | 1047.31' | 1047.26' | 1047.24' | 1047.19' | -0.21' | -0.07' | -0.05' |
| 20 | 1045.59' | 1045.55' | 1045.42' | 1045.41' | 1045.31' | 1045.27' | 1045.18' | -0.41' | -0.13' | -0.09' |
| 21 | 1042.68' | 1042.67' | 1042.63' | 1042.66' | 1042.67' | 1042.68' | 1042.64' | -0.04' | -0.03' | -0.04' |
| 22 | 1039.28' | 1039.24' | 1039.16' | 1039.17' | 1039.15' | 1039.14' | 1039.09' | -0.19' | -0.06' | -0.05' |
| 23 | 1049.75' | 1049.76' | 1049.71' | 1049.73' | 1049.72' | 1049.73' | 1049.72' | -0.03' | -0.00' | -0.01' |
| 24 | 1053.08' | 1053.06' | 1052.99' | 1052.97' | 1052.94' | 1052.92' | 1052.90' | -0.18' | -0.04' | -0.02' |
| 25 | 1052.27' | 1052.25' | 1052.21' | 1052.22' | 1052.18' | 1052.16' | 1052.13' | -0.14' | -0.05' | -0.03' |
| 26 | 1048.32' | 1048.30' | 1048.27' | 1048.26' | 1048.24' | 1048.26' | 1048.22' | -0.10' | -0.02' | -0.04' |
| 27 | 1045.39' | 1045.35' | 1045.29' | 1045.28' | 1045.27' | 1045.25' | 1045.23' | -0.16' | -0.04' | -0.02' |
| 28 | 1059.72' | 1059.75' | 1059.68' | 1059.66' | 1059.63' | 1059.66' | 1059.70' | -0.02' | +0.07' | +0.04' |
| 29 | | | | | 1061.42' | 1061.34' | 1061.30' | | -0.12' | -0.04' |
| 30 | | | | | 1063.93' | 1063.85' | 1063.85' | | -0.08' | -0.00' |
| 31 | | | | | 1063.22' | 1063.17' | 1063.13' | | -0.09' | -0.04' |
| 32 | | | | | 1057.30' | 1057.24' | 1057.20' | | -0.10' | -0.04' |
| 33 | | | | | 1061.86' | 1061.80' | 1061.79' | | -0.07' | -0.01' |
| 34 | | | | | 1063.05' | 1062.98' | 1062.96' | | -0.09' | -0.02' |

NOTE: POINTS 29-34 WERE ADDED BY THE COMMONWEALTH OF KENTUCKY IN 2008

**Table 7**
**Maxey Flats Project**
**Erosion Monitoring – East Drain**
**2010**

**East Drain Cross Section #3.5**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 746.57 |
| 2 | 746.57 |
| 4 | 746.51 |
| 6 | 745.93 |
| 8 | 746.26 |
| 10 | 746.28 |
| 12 | 746.19 |
| 14 | 746.36 |
| 16 | 746.63 |
| 18 | 746.94 |
| 20 | 747.14 |
| 22 | 747.13 |
| 24 | 747.11 |
| 26 | 747.19 |
| 28 | 747.15 |
| 30 | 747.41 |
| 30.5 | 747.41 |

**East Drain Cross Section #5.0**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 767.22 |
| 2 | 767.22 |
| 4 | 767.58 |
| 7 | 764.70 |
| 7.5 | 764.30 |
| 8 | 763.44 |
| 10 | 762.77 |
| 12 | 762.98 |
| 14 | 763.19 |
| 16 | 763.27 |
| 18 | 764.82 |
| 20 | 765.21 |
| 22 | 766.34 |
| 24 | 765.74 |
| 26 | 766.78 |
| 28 | 768.08 |
| 29.5 | 768.08 |

**East Drain Cross Section #5.5**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 769.03 |
| 2 | 769.03 |
| 4 | 767.52 |
| 6 | 766.23 |
| 8 | 765.43 |
| 10 | 765.08 |
| 12 | 765.29 |
| 14 | 765.03 |
| 16 | 764.60 |
| 18 | 767.49 |
| 20 | 769.20 |
| 21 | 769.52 |
| 22.5 | 769.52 |

**East Drain Cross Section #6.0**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 780.76 |
| 1 | 780.76 |
| 2 | 780.26 |
| 3 | 779.43 |
| 4 | 777.50 |
| 5 | 775.51 |
| 6 | 774.26 |
| 8 | 773.67 |
| 10 | 773.69 |
| 12 | 773.69 |
| 14 | 774.82 |
| 16 | 777.63 |
| 21 | 782.70 |

**Table 7 (continued)**
**Maxey Flats Project**
**Erosion Monitoring – East Drain**
**2010**

**East Drain Cross Section #6.5**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 781.11 |
| 2 | 781.11 |
| 4 | 780.21 |
| 6 | 779.41 |
| 8 | 777.67 |
| 10 | 777.43 |
| 12 | 777.74 |
| 14 | 777.79 |
| 16 | 780.00 |
| 18 | 782.16 |
| 18.5 | 782.95 |

**East Drain Cross Section #6.75**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 793.19 |
| 1 | 791.60 |
| 2 | 790.19 |
| 4 | 789.95 |
| 6 | 789.23 |
| 8 | 788.95 |
| 10 | 789.46 |
| 12 | 789.51 |
| 14 | 790.19 |
| 16 | 792.24 |
| 17 | 792.67 |
| 18 | 793.19 |

**East Drain Cross Section #8.0**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 925.52 |
| 2 | 925.52 |
| 4 | 925.49 |
| 6 | 921.46 |
| 8 | 921.60 |
| 10 | 922.32 |
| 12 | 923.48 |
| 14 | 923.41 |
| 16 | 924.31 |
| 18 | 926.60 |
| 20 | 926.48 |
| 22 | 925.88 |
| 24 | 926.87 |
| 26 | 926.72 |
| 28 | 926.62 |
| 28.7 | 926.62 |

**East Drain Cross Section #12.0**

| Station | Elevation in Feet Date May-10 |
|---|---|
| 0 | 985.07 |
| 6 | 985.07 |
| 8 | 985.10 |
| 10 | 984.88 |
| 12 | 984.52 |
| 14 | 983.96 |
| 16 | 983.92 |
| 18 | 982.02 |
| 20 | 982.06 |
| 22 | 984.06 |
| 24 | 984.50 |
| 26 | 983.75 |
| 28 | 984.07 |
| 30 | 983.30 |
| 32 | 984.65 |
| 34 | 984.98 |
| 36 | 985.27 |
| 38 | 984.90 |
| 40 | 984.70 |
| 42 | 985.73 |
| 44 | 986.19 |
| 45.7 | 986.19 |