



## ENERGY AND ENVIRONMENT CABINET

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March 24, 2014

Ms. Pam Scully, SRPM, Kentucky/Tennessee Section  
USEPA-Region IV  
Sam Nunn Federal Center  
61 Forsyth Street SW  
11<sup>th</sup> Floor  
Atlanta, GA 30303-8960

**Subject: Maxey Flats Project – 2013 Annual Report**

Dear Ms. Scully;

The Commonwealth of Kentucky is submitting the 2013 Annual Report for the Maxey Flats Project to fulfill the requirements of Section 4.0 of the Performance Verification Standard Plan (PSVP). The report was prepared by the Maxey Flats Section and summarizes information from the period of January 2013 through December 2013.

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

Sincerely,

A handwritten signature in blue ink that reads "Scott Wilburn".

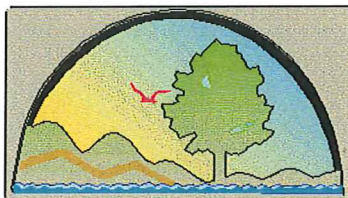
Scott Wilburn  
Environmental Scientist III

e-attachment

cc: Nicole Barkasi, de maximis, inc.  
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**MAXEY FLATS DISPOSAL SITE  
ANNUAL REPORT  
2013**

**March 24, 2014**



Energy and Environment Cabinet  
Department for Environmental Protection  
Division of Waste Management  
Superfund Branch

Maxey Flats Disposal Site  
2597 Maxey Flat Road  
Hillsboro, KY 41049  
606-783-8680

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### List of Acronyms

ARARs	Applicable or Relevant and Appropriate Requirements
BoRP	Balance of Remedial Phase
Commonwealth	Commonwealth of Kentucky
DCSW	Drainage Channels Surface Water
IRP	Initial Remedial Phase
IMP	Interim Maintenance Period
MFDS	Maxey Flats Disposal Site
O&M	Operation and Maintenance Requirement Summary
PSVP	Performance Standards Verification Plan
PSSW	Perennial Streams Surface Water
REI	Reasonably Exposed Individual
RML	Radioactive Material License
US EPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

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### List of Appendices

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- Appendix B**      **Maxey Flats Disposal Site Well Levels 2013**  
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- Appendix H**      **Maxey Flats Disposal Site Cathodic Protection Inspection 2013**  
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*2013 Maxey Flats Monthly Reports.pdf*

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## 1.0 Introduction

The Commonwealth is submitting this report in accordance with Section 4.0 of the PSVP. The report summarizes sampling and maintenance activities listed in the 2003 Interim Maintenance Period Work Plans, PSVP, and the O&M.

## 2.0 Scope of Work

The IMP is ongoing pursuant to the Consent Decree (Civil Action Number 95-58) signed by the USEPA, the Maxey Flats Steering Committee (Settling Private Parties), and the Commonwealth. The Commonwealth is responsible for completion of the BoRP that includes the Interim Maintenance Period, Final Closure Period (FCP), and Associated Remedial Activities and Performance Monitoring. Although the MFDS is officially in the FCP relevant IMP activities will be completed throughout the FCP as long as they are applicable and don't interfere with remedial progress. IMP activities will cease upon US EPA's approval of a Institutional Control Period Work Plan.

The Interim Maintenance Period Work Plan describes the tasks to be completed including:

- Surface/ground water monitoring
- IRP cap maintenance and replacement
- Trench leachate management and monitoring
- Subsidence monitoring and surveys
- Erosion evaluation
- General site maintenance
- Contaminated liquid and waste disposal
- Data collection, analysis, and reporting
- Site drainage and erosion control features

## 3.0 Surface Water Monitoring

All IMP Surface water monitoring locations are evaluated based on tritium sampling results. The 2013 annual tritium averages for all surface water locations yielded results below their specified screening assessment levels. Tritium results for all surface water monitoring appear in Appendix A: Maxey Flats Disposal Site Analytical Data 2013; *2013 MFDS Tritium Data.xlsx*.

### 3.1 East Detention Basin

The first point of monitoring surface water runoff from the MFDS is at the East Detention Basin (EDB). Sampling is performed at the EDB as a requirement of the RML, not the IMP Work Plan. Sampling occurs based on storm events of 2.8 inches of rainfall in a 24-hour period. In order for the sequential sampler to collect a storm event sample, the sampler is programmed to collect a sample based on 0.11 inches of

rainfall per hour. A total of 34 samples were collected in 2013 and analyzed for tritium. Results range from 0.06 to 2.77 pCi/mL. Figure 3-1 provides the IMP Annual Average for Tritium Concentrations for 2004-2013.

Pursuant to the ROD and IRP Design, discharge from the East Detention Basin should be released to the East Main Drainage Channel at a rate not to exceed predevelopment flow conditions. Following storm events exceeding 2.8 inches rainfall in 24 hours (2 year storm event or greater), the Commonwealth is required to collect recordings and report findings. Based on data collected from the East Drain Rain Gauge, no rain event in 2013 exceeded the storm event criteria; therefore no screening comparison of current flow rate versus pre-developed flow rate was required. The highest 24 hour recorded rain event for 2013 was 1.92”.

### 3.2 Perennial Streams Surface Water

Perennial Streams Surface Water (PSSW) monitoring is conducted at five locations in three streams inside and outside the site boundary. These locations are monitored using sequential samplers that collect a four aliquot daily composite. The PSSW samples are compared to a specific action level of 20 pCi/mL and a screening level of 50% of the Action Level. A total of 1,819 PSSW samples were collected and analyzed for tritium during 2013 with no anomalous data reported. For 2013, all PSSW locations were below the average annual tritium screening level of 10 pCi/mL; ensuring that the 4 mrem/yr IMP specified dose limit has been met. Figure 3-1 on Page 3 provides the IMP Annual Average Tritium Concentrations for 2004-2013.

Sample location 122A serves as the background sample. It is located on Rock Lick Creek up-gradient from site influence. For 2013, this location yielded 365 samples for tritium analysis. Tritium results range from -0.24 to 1.55 pCi/mL.

Sample location 106 is located on No Name Branch, a tributary to Rock Lick Creek. Location 106 receives direct influence from drain 144 and exhibits seasonal tritium level fluctuation concurrent with drain 144. For 2013, this location yielded 365 samples for tritium analysis. Tritium results range from 0.41 to 9.59 pCi/mL.

Sample location 122C is located on Rock Lick Creek, downstream of 106 and 143 influences. For 2013, this location yielded 365 samples for tritium analysis. Tritium results range from 0.37 to 2.74 pCi/mL.

Sample location 103E is located on Drip Springs Creek and receives influence from Drain 107. For 2013, this location yielded 365 samples for tritium analysis. Tritium results range from -0.07 to 1.29 pCi/mL.

Sample location 102D is the only PSSW sampler located outside the Buffer Zone. Due to its location below the confluence of three streams; and its location outside the Buffer Zone, 102D is designated as the compliance point for site runoff. This location is the point for monitoring the Reasonably Exposed Individual (REI) and is compared to a 4 mrem/year dose limit. For 2013, this location yielded 359 samples for tritium analysis. Tritium results range from -0.20 to 2.23. The annual average was well below the action level, ensuring compliance to the 4 mrem/yr dose limit.



### 3.3 Drainage Channels Surface Water

Drainage Channels Surface Water (DCSW) monitoring is conducted at three locations inside the MFDS's boundary. The three primary drains that produce intermittent flow are monitored and compared to a 25 mrem/year Total Effective Dose Equivalent standard and a more restrictive annual 100 pCi/mL action level. These drains are sampled as a composite by automated samplers that collect a four aliquot daily sample. For 2013, all DCSW locations had annual averages below the 100 pCi/mL action level, ensuring compliance to the 25 mrem/yr standard. A total of 947 samples were collected from the drains for tritium analysis. Figure 3-1, below provides the IMP Annual Average Tritium Concentrations for 2004-2013.

Sample location C107 is located at the base of the West Drain, which discharges into Drip Springs Creek. For 2013, this location yielded 218 samples for tritium analysis. Results range from 0.35 pCi/mL to 24.14 pCi/mL.

Sample location 143 is located near the base of the South Drain, which discharges into Rock Lick Creek. For 2013, this location yielded 365 samples for tritium analysis. Results range from -0.24 pCi/mL to 0.81 pCi/mL.

Sample location 144 is located at the base of the East Drain, which discharges into No Name Branch. For 2013, this location yielded 364 samples for tritium analysis. Results range from 0.29 pCi/mL to 151.03 pCi/mL.

### 3.4 Sampling Equipment Status

Samples were collected in accordance with the PSVP, unless problems occurred beyond control such as: freezing lines, washouts, equipment failure, no flow, or power outages.

**Figure 3-1**  
**Maxey Flats Disposal Site**  
**Annual Average Tritium Concentration (pCi/mL)**  
**2004-2013**

		Perennial Streams Surface Water					Drainage Channels Surface Water		
		<b>EDB</b>	<b>122A</b>	<b>106B</b>	<b>122C</b>	<b>103E</b>	<b>102D</b>	<b>C107</b>	<b>143</b>
2004	0.14	0.06	4.55	1.10	0.90	0.78	14.58	0.21	60.66
2005	0.16	0.05	4.23	1.01	0.67	0.79	16.97	0.10	40.03
2006	0.16	0.05	3.41	0.86	0.47	0.62	8.62	0.10	43.35
2007	0.55	0.02	5.24	1.27	0.62	0.93	13.28	0.07	70.03
2008	0.05	-0.10	3.33	0.87	0.47	0.62	10.42	-0.11	33.76
2009	0.90	0.07	3.39	0.88	0.36	0.58	5.87	0.10	44.34
2010	0.59	0.06	4.41	1.34	0.49	0.79	10.99	0.06	61.60
2011	0.38	0.06	3.21	0.91	0.37	0.61	8.63	0.03	56.43
2012	0.72	0.05	3.88	1.19	0.51	0.82	12.96	0.06	67.85
2013	0.94	0.05	3.61	1.00	0.44	0.67	10.42	0.07	59.34

## 4.0 Groundwater Monitoring Wells

Groundwater monitoring at MFDS is accomplished using Alluvial and Perimeter Monitoring Wells. The alluvial wells, located in the buffer zone, were installed during the IRP to satisfy the requirements of the SOW. Seventeen monitoring wells referred to as Perimeter Monitoring Wells are located along the west perimeter fence of the restricted area, with the exception of one interior well, which is located within the restricted area between the EMC bunker and North Channel. Sixteen of the seventeen perimeter wells were installed as investigative monitoring points prior to the Consent Decree. Originally, over 300 investigative monitoring wells were installed; IRP operations removed all but the remaining sixteen. The one interior well was installed during the IRP. These seventeen wells are maintained for water level monitoring to satisfy the requirements of the IMP Work Plan and sampled to satisfy the contaminant monitoring requirements of the RML. Tritium analyses for all the wells are contained in Appendix A: Maxey Flats Disposal Site Analytical Data 2013; *2013 MFDS Tritium Data.xlsx*. Water level monitoring tables for both alluvial and perimeter wells are contained in Appendix B: Maxey Flats Disposal Site Well Levels 2013; *2013 MFDS Alluvial Well Levels.xlsx* and *2013 MFDS Perimeter Well Levels.xlsx*.

### 4.1 Alluvial Wells

#### 4.1.1 Tritium Evaluation 2013

Alluvial well samples for 2013 were collected for tritium analysis as outlined in the PSVP and the 2007 US EPA Five Year Review. Five wells were sampled in 2013; an annual sample is collected from AW-6, 10, and 12, and quarterly samples were collected from AW-1 and 7. During this reporting period, a total of 18 alluvial well samples were collected and analyzed for tritium, yielding results typical of historic range.

For 2013, AW-7 yielded the highest tritium concentration, with a value of 6.05 pCi/mL. Comparison of this value to 50% of the 20 pCi/mL ARAR screening assessment level indicated that action levels for additional radiological analysis were not exceeded.

Access to the alluvium within the buffer zone is controlled by the Commonwealth, therefore the alluvial wells are not considered a drinking water source and do not represent a potential radiological dose to the public.

#### 4.1.2 Arsenic Evaluation 2012-2013

During the course of preparing the Five Year Review in 2012, it was determined surface water sampling location 144 exceeded 50% of the established screening level for tritium. In accordance with requirements of the Interim Maintenance Plan (IMP), a sampling event was conducted specifically to quantify the concentrations of contaminants of concern in groundwater as identified in the Record of Decision. Fourteen alluvial wells and four stream sampling locations were sampled and extensively analyzed in September 2012. The Third Party (Test America) laboratory results identified four

locations that exceeded the current 10 µg/L Maximum Contaminant Level (MCL) for arsenic: alluvial well locations AW-1, AW-6, AW-13 and AW-14. The Commonwealth proposed quarterly sampling and analysis specifically for arsenic at the four wells for a minimum of four quarters to evaluate the environmental criterion. The results of this study will be used to determine the appropriate course of action.

Laboratory results and subsequent inquiries to experts in drinking water well conditions or local geology have proven inconclusive. Jerry Martin with the Kentucky Division of Water (DOW) informed MFP that no Arsenic Level Profile has ever been done for the area and Robert Blair (DOW) stated the levels of arsenic in wells at MFP were very similar to the levels he is finding in his study of Ohio River Basin drink water wells. A study of the Ohio/Sunbury Shale Formation by Geologist Charles Mason at Morehead State University identified high levels of arsenic in the Ohio Shale Formation, a prominent geologic feature at MFP. A meeting with Dr. Mason is scheduled to discuss the possible influences Ohio Shale in the alluvium could have on alluvial well water.

The results of this sampling are presented in Appendix A: Maxey Flats Disposal Site Analytical Data 2013; *2013 MFDS Alluvial Well Arsenic Study.xlsx*.

#### 4.2 Perimeter Monitoring Wells

Well water levels were collected from the seventeen Perimeter Monitoring Wells on a quarterly basis. The 2013 measurements indicate the water levels are typical of historic data.

The 2013 tritium results for the Perimeter Wells were typical of historical data and trends. Contamination monitoring of the Perimeter Monitoring Wells is a requirement of the RML, not the IMP Work Plan.

### 5.0 Data Management

A data package is prepared for each group of samples analyzed on site. The data package contains the tritium instruments' QC charts (efficiency and background), chain of custody forms, raw data sheets, and data reduction sheets. Data is reviewed and validated by DeNuke, Inc., a third party contractor that specializes in radiation services. Following data validation, the results are entered into the site's database and transmitted to USEPA, USDOE, *de maximis, inc.* and the Commonwealth. These packets are available on site for review. Analytical results are contained in the electronic file, Appendix A: Maxey Flats Disposal Site Analytical Data 2013; *2013 MFDS Tritium Data.xlsx*

## 6.0 Rainfall Data

Presently, there are three rain gauge locations associated with the MFDS: the East Detention Basin (EDB), sampling location 102D, and the main office. The official annual rainfall data is obtained from the EDB rain gauge. This rain gauge was chosen because of its conjunction with the sampler at the EDB. Rainfall data from an alternate rain gauge, maintained at the main office, may be used to determine official rainfall totals if the EDB rain gauge is non-functional. A total of 42.51 inches of rainfall was measured at the EDB gauge during 2013. This is compared to an annual average precipitation of 47.33 inches (NOAA, National Climatic Data Center; Farmers, Kentucky). Annual precipitation data appears in Appendix C: Maxey Flats Disposal Site Precipitation 2013; *2013 MFDS Daily Rainfall.xlsx*.

## 7.0 Initial Remedial Phase Cap Maintenance

### 7.1 Geomembrane Liner and Boots

The liner covering the trench cap and the sump boots were inspected monthly as part of the monthly inspection. The comprehensive visual and air lancing inspections were completed in April and May as part of the annual inspection. During 2013, a total of 46 repairs were made to the liner and boots. A total of 511 repairs have been made from 2004-2013. The repair map appears in Appendix D: Maxey Flats Disposal Site IRP Cap 2013; *2013 MFDS Liner Repair Map.pdf*.

### 7.2 Headwall Maintenance

Headwall maintenance includes four headwalls and associated items along the North Channel, the northeast corner piping, geomembrane liner battens, and the liquid collection system.

During this reporting period, debris/leaves were removed numerous times from the trash grate and restricting plate of the upstream headwall of the northeast corner piping. Removal of the leaves/debris will be a continuous maintenance issue for the site.

### 7.3 Subsidence Monitoring and Repair

Subsidence inspections were conducted monthly in accordance with the O&M, Section 3.3.3; Subsidence Monitoring. No areas warranted subsidence repair during 2013. Areas near trenches 15, 21, 36, 37, and 46 are being visually monitored monthly for subsidence qualification. A total of four subsidence repairs have been made since the 2003 Certification of Completion. Appendix D: Maxey Flats Disposal Site IRP Cap 2013; *2013 MFDS Subsidence Tracking Form 2003-2013.xlsx* contains the subsidence repair tracking information. Monitoring of these areas will continue in the FCP but any required subsidence repairs not deemed critical will be addressed during cap construction.

Estes Land Surveying performed the annual engineering subsidence survey of the trench cap in June 2013. Elevations were obtained for the 28 subsidence control points established during the remedial work and six additional points established in 2008. The measured variations between the 2012 and 2013 subsidence control points range from +0.20 feet to -0.32 feet. The variations between the 2004/2008 (baseline) and the 2013 subsidence control points range from +0.17 feet to -0.59 feet. Monitoring points 20 and 29 have been identified as having significant subsidence.

These areas will be closely monitored in 2014 and addressed during cap design and construction. No particular area of significant subsidence was indicated. The report provided by Estes Land Surveying is available in Appendix D: Maxey Flats Disposal Site IRP Cap 2013; *2013 MFDS Subsidence Measurements Estes Surveying.pdf*.

#### 7.4 Diversion Berms

The diversion berms were inspected twice a month as required by the O&M. Excluding possible liner repairs, all were found to be in satisfactory condition.

#### 7.5 Anchor Trenches

The anchor trenches were inspected twice a month as required by the O&M. All anchor trenches appear to be functioning to design.

#### 7.6 Drainage Channels

All drainage channels were inspected during 2013 as required by the O&M. Maintenance within the drains included control of vegetation in the Articulating Block mats and gabions. This was accomplished by spraying the areas with weed killer and/or manually removing the vegetation.

#### 7.7 Articulating Concrete Block Mat (AB Mat) System

The AB mat system was inspected monthly as required by the O&M. Buildup of sediment within the AB mats has been observed, but appears to have minimal impact on reducing the velocity of water flowing to the EDB, nor does it appear to have impacted the EDB's ability to control flow. This buildup of sediment should be expected, as it is an inherent design feature of AB mats. In various locations, the cable linking the blocks is showing signs of stress; this has been observed for several years and will continue to be monitored. One section of blocks in the east drainage channel on LP-191EX continues to be monitored closely due to accelerated erosion of the concrete blocks, but no decrease in performance has been observed.

#### 7.8 Former Leachate Storage Facility Area

The covered area of the former leachate storage facility was found to be in satisfactory condition. The area shows no signs of subsidence or any damage to the geomembrane liner or boots around the tank extensions.

## 7.9 Inspections

A total of 95 inspections were performed in 2013. Excluding the item discussed in 7.7, no unsatisfactory notations were recorded that presented a persistent problem. All unsatisfactory items either received actions to return them to satisfactory status or were designated for monitoring.

## 7.10 Equipment Status

All liner repair equipment remains in good working condition.

## 8.0 Trench Leachate Management and Monitoring

Trench sump liquid level measurements were obtained in accordance with the PSVP, Section 2.3, Sump Measurement, and the 2007 US EPA Five Year Review. The purpose of collection and evaluation of the trench sump leachate levels is to detect recharge conditions that may require leachate management.

The average loss of freeboard for all sumps is 1.30%. Three sumps have a greater than 10% loss of freeboard. Sumps 7-4, 46-1, and 46-2 have a freeboard percentage loss of 71%, 17%, and 12%, respectively. Due to freeboard loss of greater than 50%, Sump 7-4 continues to be evaluated under the 2011 revised Leachate Management Engineering Evaluation.

Appendix E: Maxey Flats Disposal Site Trench Sump Information 2013 contains tables for trench freeboard, leachate levels, sump bottom measurements and a graph of leachate levels of Trench Sump 7-4.

## 9.0 Contaminated Liquid and Solid Waste

Contaminated liquid and waste generated on site will be disposed of in accordance with the IMP Work Plan, Section 3.2: *Treatment of Other Contaminated Liquids*, and Section 3.3: *Waste Burial*.

For 2013, no liquid beneath the trench cap liner was managed. No solid waste was disposed of on site during this reporting period. Solid and liquid waste generated from laboratory, radiological activities and site maintenance is temporarily stored in a secured area.

Appendix F: Maxey Flats Disposal Site Compliance Information 2013, contains the Annual Low Level Radioactive Waste Report submitted to the Cabinet for Health and Family Services, Radiation Health Branch (RHB); *2013 MFDS LLRW Report.pdf*.

## **10.0 Erosion Monitoring**

Estes Land Surveying was contracted for the seventh (based on the area report spreadsheet) consecutive measurement to complete erosion monitoring and to produce a drain profile of the east drain using IMP Methodology. Estes Land Surveying conducted erosion measurements in May and November of 2013. The IMP Methodology cross-sections and tables for the 2011-2013 East drain erosion measurements and the calculated areas are presented in Appendix G: Maxey Flats Disposal Site Drainage Channel Erosion Monitoring 2013; *MFDS 2013 East Drain Shaw Monuments.pdf*.

The Maxey Flats Disposal Site staff completed the 2013 erosion screening measurements in April using the USGS methodology. Results of this screening appear in Appendix G: Maxey Flats Disposal Site Drainage Channel Erosion Monitoring 2013; *MFDS East Drain Erosion USGS Monuments 2011-2013.xlsx*.

Seasonal visual erosion monitoring of the east, south, and west drainage channels was completed in compliance with IMP Work Plan requirements. These inspections revealed no new erosion concerns since those noted in 2011.

## **11.0 IMP Work Plan Revisions, Changes, and Correspondence**

Revisions and changes to the IMP Work Plan are required to be submitted in writing to USEPA for approval.

## **12.0 Custodial Care Activities**

### **12.1 Vegetation**

All vegetation was maintained below required height limits to permit leachate monitoring.

### **12.2 Building and Grounds Maintenance**

In addition to the established buildings receiving routine maintenance, a storage bunker was constructed to hold gravel and sand. In addition to routine grounds maintenance, an excavator was used to make needed improvements around sampling location 106B.

### **12.3 Security Fence**

The security fence surrounding the site remains in satisfactory condition with minor maintenance required.

### **12.4 Roadway Maintenance**

Routine maintenance was performed on all facility owned roadways.

### 13.0 Cathodic Protection

Operation of the cathodic protection system installed on the 20,000 gallon UST within the restricted area has been checked monthly with all readings documented within the accepted range. Jeffery D. Harris of Corrosion Concerns, LLC completed the 2013 annual evaluation of the cathodic system on July 31<sup>st</sup>. The system evaluation report appears in Appendix H: Maxey Flats Disposal Site Cathodic Protection Inspection 2013; *2013 MFDS Cathodic Protection Evaluation.pdf*.

### 14.0 Non IMP Work Plan Activities and Developments

The main purpose of this document is to summarize completion of the tasks required by the IMP Work Plan for the calendar year. Many other activities and developments relevant to MFDS operations took place during 2013. Some of the major Non-IMP Work Plan activities and developments undertaken are included in this section.

January 2013: The initial RCP Remedial Design Work Plan prepared by DWM was submitted to US EPA. URS, Inc. was selected as the design contractor. URS submitted the draft final Remedial Design Work Plan to KDEP and EPA on June 21, 2013. This plan was revised and finalized by URS and submitted to US EPA during November 2013.

April 2013: URS contacted Photo Science for completion of LiDAR map of MFDS.

May 2013: URS completed geological hydro evaluation study that evaluated the need for additional capping north of the IRP cap. This study was presented to CHFS and discussed during meetings in July. It was later concluded that additional capping was not warranted.

June 2013: Explanation of Significant Difference identifying elements in the ROD that should be modernized submitted to US EPA for approval. US EPA approves URS as the Supervising Contractor.

July 2013: KY Governor Steve Beshear, KY Senator Walter Blevins, KY Representative Mike Denham and other dignitaries visited the site to announce funding and the beginning of the FCP process. The event had forty attendees.

April 2013: The design contract with URS was finalized. The contract includes: information gathering, cost estimates, completion of Remedial Design Work Plans; development of sump abandonment method, preparation of sump abandonment bid package, sump abandonment oversight and Final Closure Period Cap Design. Cap Construction Oversight will also be performed by URS.

August 2013: Sump Abandonment Bid Package Submitted to US EPA for approval.



October 2013: URS completed Geotechnical Work that included: 17 cone penetrometers, 14 hollow stem auger boreholes, 9 hand auger boreholes and 20 soil test pits. Over 80 samples were submitted for geotechnical laboratory testing. In addition, all drains flowing from the cap area were evaluated and a route for the haul road was chosen.

November 2013: Sump abandonment Bid Package received approval from US EPA. The bid package was posted on the Commonwealth's procurement webpage.

December 2013: URS submitted Maxey Flats Final Cap 30% Design Package to US EPA. Sump Abandonment Site tour bid meeting completed. Sump Abandonment Bids to be submitted and contractor selected in January 2014.

The Commonwealth Finance Cabinet initiated purchase of the Conn Property located at the end of Upper Rock Lick road during 2013. An appraisal and sales contract have been completed for the purchase. The survey work was started in 2013 but won't be completed until 2014. Additional work remaining is the environmental impact study and renewal of the sales contract.

Appendix I contains the Maxey Flats Disposal Site monthly reports file, *2013 MFDS Monthly Reports.pdf*. These reports are generated for the purpose of informing the Commonwealth's Superfund Branch of ongoing IMP, RML, and other administrative activities. The reports also contain further details about the topics discussed in this report.

## **15.0 Conclusions**

This concludes the textual outlining of the IMP activities at the Maxey Flats Disposal Site for 2013. If copies of inspections or deliverables not included in this report are required, please contact the MFDS office.