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March 27, 2013

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

Subject: Maxey Flats Project – 2012 Annual Report

Dear Ms. Scully;

The Commonwealth of Kentucky is submitting the 2012 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 2012 through December 2012.

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

Sincerely,

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

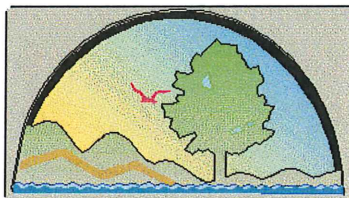
Scott Wilburn, Project Coordinator

e-attachment

cc: Nicole Barkasi, de maximis, inc.
Michelle Miller, USDOE
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Gwen Hooten, USDOE
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**MAXEY FLATS PROJECT
ANNUAL REPORT
2012**

March 27, 2013



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

Maxey Flats Project
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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
MFP	Maxey Flats Project
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

(Files separate from Main Report included on disc)

- Appendix A** **Maxey Flats Project Analytical Data 2012**
2012 MFP 5YR Review Non Rad Analyses.pdf
2012 MFP Tritium Data.xlsx
2012 MFP VOC Summary to US EPA.pdf
- Appendix B** **Maxey Flats Project Well Levels 2012**
2012 MFP Alluvial Well Levels.xlsx
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- Appendix C** **Maxey Flats Project Precipitation 2012**
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2012 MFP Liner Repair Map.pdf
2012 MFP Subsidence Measurements Estes Surveying.xlsx
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- Appendix E** **Maxey Flats Project Trench Sump Information 2012**
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- Appendix F** **Maxey Flats Project Compliance Information 2012**
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- Appendix H** **Maxey Flats Project Cathodic Protection Inspection 2012**
2012 MFP Cathodic Protection Evaluation.pdf
- Appendix I** **Maxey Flats Project Non-IMP Information 2012**
2012 MFP Monthly Reports.pdf
Trench Stabilization Criteria Eval 092112.pdf
Trench Stabilization Criteria US EPA Approval 111612.pdf

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 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, and Associated Remedial Activities and Performance Monitoring.

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 2012 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 Project Analytical Data 2012; *2012 MFP Tritium Data.xlsx*.

3.1 East Detention Basin

The first point of monitoring surface water runoff from the MFP 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 2012 and analyzed for tritium. Results range from -0.14 to 2.33 pCi/mL. Figure 3-1 on page 3 provides the IMP Annual Average for Tritium Concentrations for 2004-2012.

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 events in 2012 exceeded the storm event criteria; therefore no screening comparison of current flow rate versus pre-developed flow rate was required.

3.2 Perennial Streams Surface Water

Perennial Streams Surface Water (PSSW) monitoring is conducted at five locations in three streams inside and outside the MFP's 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 2012 with no anomalous data reported. For 2012, 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 2004-2012.

Sample location 122A serves as the background sample. It is located on Rock Lick Creek up-gradient from site influence. For 2012, this location yielded 360 samples for tritium analysis. Tritium results range from -0.27 to 0.92 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 2012, this location yielded 366 samples for tritium analysis. Tritium results range from -0.03 to 13.35 pCi/mL.

Sample location 122C is located on Rock Lick Creek, downstream of 106 and 143 influences. For 2012, this location yielded 363 samples for tritium analysis. Tritium results range from 0.35 to 3.00 pCi/mL.

Sample location 103E is located on Drip Springs Creek and receives influence from Drain 107. For 2012, this location yielded 365 samples for tritium analysis. Tritium results range from -0.07 to 2.71 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 2012, this location yielded 365 samples for tritium analysis. Tritium results range from 0.09 to 2.10. 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 MFP'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 2012, all DCSW locations had annual averages below the 100 pCi/mL action level, ensuring compliance to the 25 mrem/yr standard. A total of 919 samples were collected from the drains for tritium analysis. Figure 3-1, below provides the IMP Annual Average Tritium Concentrations for 2004-2012.

Sample location C107 is located at the base of the West Drain, which discharges into Drip Springs Creek. For 2012, this location yielded 199 samples for tritium analysis. Results range from 1.64 pCi/mL to 30.55 pCi/mL

Sample location 143 is located near the base of the South Drain, which discharges into Rock Lick Creek. For 2012, this location yielded 359 samples for tritium analysis. Results range from -0.19 pCi/mL to 0.30 pCi/mL

Sample location 144 is located at the base of the East Drain, which discharges into No Name Branch. For 2012, this location yielded 361 samples for tritium analysis. Results range from 1.64 pCi/mL to 188.38 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 Project
Annual Average Tritium Concentration (pCi/mL)
2004-2012

		Perennial Streams Surface Water					Drainage Channels Surface Water		
EDB		122A	106B	122C	103E	102D	C107	143	144
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

4.0 Groundwater Monitoring Wells

Groundwater monitoring at MFP 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 Project Analytical Data 2012; *2012 MFP Tritium Data.xlsx*. Water level monitoring tables for both alluvial and perimeter wells are contained in Appendix B: Maxey Flats Project Well Levels 2012; *2012 MFP Alluvial Well Levels.xlsx* and *2012 MFP Perimeter Well Levels.xlsx*.

4.1 Alluvial Wells

Alluvial well samples for 2012 were collected as outlined in the PSVP and the 2007 US EPA Five Year Review. Five wells were sampled in 2012: AW-6, 10, and 12 were sampled once (annual), and AW-1 and 7 were sampled on a quarterly basis. During this reporting period, a total of 20 alluvial well samples were collected and analyzed for tritium, yielding results typical of historic range.

Additional sampling of all alluvial wells was completed as part of the USEPA 2007-2012 Five Year Review. Section 15 of this annual report contains further details on this sampling.

For 2012, AW-7 yielded the highest tritium concentration, with a value of 5.70 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.

4.2 Perimeter Monitoring Wells

Well water levels were collected from the seventeen Perimeter Monitoring Wells quarterly. The 2012 measurements indicated the water levels are typical of historic data. In past years these measurements were used to develop a potentiometric surface map but this requirement was rescinded in accordance with Technical Change 10.

The 2012 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 Project Analytical Data 2012; *2012 MFP Tritium Data.xlsx*

6.0 Rainfall Data

Presently, there are three rain gauge locations associated with the MFP: the East Detention Basin (EDB), sampling location 102D, and the main office. The official annual rainfall data is obtained from the EDB rain gauge, when available. 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 39.40 inches of rainfall was measured at the EDB gauge during 2012. 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 Project Precipitation 2012; *2012 MFP 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 2012, a total of 57 repairs were made to the liner and boots. A total of 465 repairs have been made from 2004-2012. The repair map appears in Appendix D: Maxey Flats Project IRP Cap 2012; *2012 MFP Liner Repair Map.pdf*.

Permanent geomembrane repairs continue to become more difficult with each passing year. This is likely due to the more rapid aging of the geomembrane as a result of the exposed installation of the IRP cap. The effects of full UV exposure and the expected process of oxidation have made it difficult to bond new patching material to the existing geomembrane. Due to the ineffectiveness of the IMP prescribed repair method, anticipated installation of the final cap, and the observed effectiveness of

Tapecoat G-25 temporary patch material, the Commonwealth submitted Technical Change 11 (Appendix D: Maxey Flats Project IRP Cap 2012; *USEPA Change Req 2012 No 11.pdf*). Technical Change 11 instituted the use of temporary patches for small defects. These temporary patches will be inspected annually and replaced if their integrity appears to be compromised.

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 2012. 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 Project IRP Cap 2012; *2012 MFP Subsidence Tracking Form 2003-2012.xlsx* contains the subsidence repair tracking information.

Estes Land Surveying performed the annual engineering subsidence survey of the trench cap in June 2012. 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 2011 and 2012 subsidence control points range from +0.17 feet to -0.01 feet. The variations between the 2004 (baseline) and the 2012 subsidence control points range from +0.08 feet to -0.48 feet. No particular area of significant subsidence was indicated. The report provided by Estes Land Surveying is available in Appendix D: Maxey Flats Project IRP Cap 2012; *2012 MFP 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. A significant hole was located during the 2008 annual inspection on the perimeter Anchor Trench (at LP 363) along the restricted area fence near the north perimeter channel. This hole has not been permanently patched. There is an excessive amount

of moisture in the soil which renders the welding process ineffective. Due to the location, this hole does not impact the protectiveness of the liner to prevent infiltration that would affect trench liquid levels. All other anchor trenches appear to be functioning to design.

7.6 Drainage Channels

All drainage channels were inspected during 2012 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 2012. Excluding the items discussed in Section 7.5 and 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%, 18%, and 13%, respectively. Due to freeboard loss of greater than 50%, Sump 7-4 continues to be evaluated under the 2011 revised Leachate Management Engineering Evaluation.

In addition to the previously mentioned documents, Appendix E: Maxey Flats Project Trench Sump Information 2012 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 2012, 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 Project Compliance Information 2012, contains the Annual Low Level Radioactive Waste Report submitted to the Cabinet for Health and Family Services, Radiation Health Branch (RHB); *2012 MFP LLRW Report.pdf*.

10.0 Erosion Monitoring

Estes Land Surveying was contracted for the fifth 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 2012. The IMP Methodology cross-sections and tables for the 2011-2012 East drain erosion measurements and the calculated areas are presented in Appendix G: Maxey Flats Project Drainage Channel Erosion Monitoring 2012; *MFP 2012 East Drain Shaw Monuments.pdf*.

The Maxey Flats Project staff completed the 2012 erosion screening measurements in March using the USGS methodology. Results of this screening appear in Appendix G: Maxey Flats Project Drainage Channel Erosion Monitoring 2012; *MFP East Drain Erosion USGS Monuments 2003-2012.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. Technical Change 11 was submitted to US EPA on May 3, 2102 and appears in Appendix D: Maxey Flats Project IRP Cap 2012; *US EPA Change Req 2012 No11.pdf*. Technical Change 11 expands the use of temporary patches from temporary to permanent with the requirement of annual inspections to ensure patch integrity. Technical Change 11 will be utilized until completion of the final cap installation.

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

In addition to routine maintenance on all facility owned roadways, 128 tons of gravel was placed on the perimeter road and around maintenance buildings.

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 2012 annual evaluation of the cathodic system on June 15. The system evaluation report appears in Appendix H: Maxey Flats Project Cathodic Protection Inspection 2012; *2012 MFP 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 MFP operations took place during 2012. Some of the major Non-IMP Work Plan activities and developments undertaken are included in this section.

In September of 2012, the DWM formally requested entry into the Final Closure Period (FCP) with the submission of the Trench Stabilization Criteria Evaluation report to US EPA (Appendix I: Maxey Flats Project Non-IMP Information 2012; *Trench Stabilization Criteria Eval 092112*). On November 16th, the DWM received confirmation from US EPA that Trench Stabilization Criteria had been met, officially placing the MFP in the Final Closure Period (Appendix I: Maxey Flats Project Non-IMP Information 2012; *Trench Stabilization Criteria US EPA Approval 111612.pdf*).

Concurrent with the request to enter FCP, the DWM and KY Finance Cabinet initiated a request for proposal (RFP) for Cap Design and development of the FCP Remedial Design Work Plan. The following events led to the selection of the FCP design contractor:

- October 16th and 18th: the MFP hosted open house events for prospective bidders.
- November 28th: a selection committee evaluated the submitted proposals to select a short list of three companies to formally present their design proposals.
- December 12th: a detailed facility tour was provided to the three companies selected.
- January 16th: the short list contractors presented their proposals to the selection committee. URS, Inc. was selected as the design contractor.

Pending contract approval, URS will begin FCP Remedial Design activities the spring of 2013.

During September 2011, the MFP office was approached by Jerry Gibbs, the administrator of 38 acres of land that borders the MFP site boundary. Mr. Gibbs presented an offer to sell the property to the Commonwealth below market value. The Commonwealth Finance Cabinet finalized purchase of the property in October 2012. The Commonwealth Finance Cabinet is evaluating the purchase of two more tracts of land (Jent and Conn Properties) that would provide multiple benefits for FCP.

Appendix I contains the Maxey Flats Project monthly reports file, *2012 MFP Monthly Reports.pdf*. These reports are generated for the purpose of keeping the Commonwealth's Superfund Branch informed of ongoing IMP, RML, and other administrative activities. The reports also contain further details about the topics discussed in this report.

15.0 2012 Five Year Review

The third five year review process was completed in September 2012. As required by the review, all surface water locations were further evaluated based on annual averages and compared to 50% of the screening assessment level. Drainage channel sampling location (location 144) exceeded this screening assessment level. In accordance with Figure 13 of the IMP PSVP, additional radiological and non-radiological analyses was performed for all 14 alluvial wells, and sampling stations 102D, 122A, 122C, and 103E. Both radiological and non-radiological results for specified surface and ground water monitoring locations appear in Appendix A: Maxey Flats Project Analytical Data 2012; *2012 MFP 5YR Rev Non Rad Analyses.pdf*. Also included in Appendix A is the summary submitted to US EPA with recommendations for further actions as related to the analyses (*2012 MFP VOC Summary to US EPA.pdf*).

The 2012 Five Year Review stated that no recommendations or required actions were needed to correct deficiencies in protectiveness of the selected remedy. The 2012 review stated: “The selected remedy at the MFDS is expected to be protective of human health and the environment at the conclusion of the RA, and in the interim, exposure pathways that could result in unacceptable risks are being controlled.”

16.0 Conclusions

This concludes the textual outlining of the IMP activities at the Maxey Flats Project for 2012. If copies of inspections or deliverables not included in this report are required, please contact the MFP office.