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SEP 20 2013

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200 Fair Oaks Lane, 2nd Floor
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PPPO-02-2064543-13

Ms. Jennifer Tufts
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4
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Ms. April Webb
Kentucky Department for Environmental Protection
Division of Waste Management
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Frankfort, Kentucky 40601

Dear Mr. Mullins, Ms. Tufts, and Ms. Webb:

**TRANSMITTAL OF REPLACEMENT PAGES FOR APPENDICES C, E, AND F OF
THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT
FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE
SECOND HALF OF FISCAL YEAR 2012 PADUCAH, KENTUCKY
(DOE/LX/07-1278/V2)**

References:

1. Letter from R. Blumenfeld to C. Collins, T. Mullins, and A. Webb, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2013, Paducah, Kentucky (DOE/LX/07-1290/V1)," (PPPO-02-1896411-13), dated April 30, 2013
2. Letter from R. Blumenfeld to T. Ballard, A. Webb, and E. Winner, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2012, Paducah, Kentucky (DOE/LX/07-1278/V2)," (PPPO-02-1698237-13), dated October 30, 2012

Enclosed are the certified replacement pages for Appendices C, E, and F of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2012, Paducah, Kentucky*, DOE/LX/07-1278/V2.

The enclosed replacement pages have been prepared to correct reporting errors that occurred as a result of an unintentionally limiting data query. This error was discovered during an independent assessment conducted in April 2013 of the data tables presented in the appendices (C, E, and F) of the report. The submission of these replacement pages has been previously discussed between the Federal Facilities Agreement parties.

If you have any questions or require additional information, please contact Jennifer Woodard at (270) 441-6820.

Sincerely,



Rachel H. Blumenfeld
Acting Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. Appendix C Replacement Pages—C-746-K Landfill Data
2. Appendix E Replacement Pages—C-400 Project Groundwater Monitoring Wells Data
3. Appendix F Replacement Pages—C-749 Uranium Burial Ground (SWMU 2)
Groundwater Monitoring Wells Data

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CERTIFICATION

Document Identification: Replacement Pages for Appendices C, E, and F of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2012, Paducah, Kentucky* (DOE/LX/07-1278/V2)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

LATA Environmental Services of Kentucky, LLC



Mark J. Duff, Paducah Project Manager

9-20-13

Date Signed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U.S. Department of Energy (DOE)



Rachel H. Blumenfeld, Acting Paducah Site Lead
Portsmouth/Paducah Project Office

9-20-13

Date Signed

**DOE/LX/07-1278/V2
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2012
Paducah, Kentucky**



CLEARED FOR PUBLIC RELEASE

**DOE/LX/07-1278/V2
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2012
Paducah, Kentucky**

Date Issued—October 2012

Prepared for the
U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
LATA Environmental Services of Kentucky, LLC
managing the
Environmental Remediation Activities at the
Paducah Gaseous Diffusion Plant
under contract DE-AC30-10CC40020

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CONTENTS

TABLES	v
ACRONYMS.....	vii
INTRODUCTION	1
GROUNDWATER OPERABLE UNIT	5
BURIAL GROUNDS OPERABLE UNIT	29
SURFACE WATER OPERABLE UNIT	37
SOILS OPERABLE UNIT	41
DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT.....	45
COMPREHENSIVE SITE OPERABLE UNIT	53
ADDITIONAL REPORTING	55
APPENDIX A: NORTHEAST AND NORTHWEST PLUME WATER WITHDRAWAL REPORTS.....	A-1
APPENDIX B: NORTHEAST PLUME AND NORTHWEST PLUME GRAPHS AND MAPS FIGURES B.1 THROUGH B.25.....	B-1
APPENDIX C: C-746-K LANDFILL DATA	C-1
APPENDIX D: ADMINISTRATIVE RECORD AND POST-DECISION RECORD INDICES	D-1
APPENDIX E: C-400 PROJECT GROUNDWATER MONITORING WELLS DATA	E-1
APPENDIX F: C-749 URANIUM BURIAL GROUND (SWMU 2) GROUNDWATER MONITORING WELL DATA	F-1

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TABLES

1.	Operable Units and Corresponding Report Topics	2
2.	Cumulative TCE Removed and Remaining TCE Estimate at Paducah	5
3.	TCE Concentrations for Northeast Plume	18
4.	TCE and Tc-99 Concentrations for Northwest Plume	24
5.	TCE and Tc-99 Concentrations for Northwest Plume EWs	24

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ACRONYMS

AR	Administrative Record
BGOU	Burial Grounds Operable Unit
CAB	Citizens Advisory Board
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRP	Community Relations Plan
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EIC	Environmental Information Center
EPA	U.S. Environmental Protection Agency
EQ	equalization
EW	extraction well
FFA	Federal Facility Agreement
FS	feasibility study
FY	fiscal year
GDP	gaseous diffusion plant
GWOU	Groundwater Operable Unit
HVAC	heating, ventilation, and air conditioning
IRA	interim remedial action
LATA Kentucky	LATA Environmental Services of Kentucky, LLC
MW	monitoring well
NEPCS	Northeast Plume Containment System
NTU	nephelometric turbidity unit
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
OU	operable unit
PGDP	Paducah Gaseous Diffusion Plant
RAWP	Removal Action Work Plan
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	record of decision
SMP	Site Management Plan
SOU	Soils Operable Unit
SST	Swift and Staley, Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
TBD	to be determined
WAG	waste area group

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

INTRODUCTION

The Paducah Gaseous Diffusion Plant (PGDP) was placed on the National Priorities List on May 31, 1994. In accordance with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the U.S. Department of Energy (DOE) entered into a Federal Facility Agreement (FFA) with the U.S. Environmental Protection Agency (EPA) and Kentucky on February 13, 1998. The FFA established one set of consistent requirements for achieving comprehensive site remediation in accordance with the Resource Conservation and Recovery Act and CERCLA, including stakeholder involvement.

Site cleanup activities are being implemented in a sequenced approach consisting of (1) pre-shutdown scope, (2) post-shutdown scope, and (3) Comprehensive Site Operable Unit scope. The pre-shutdown scope is associated with media-specific operable units (OUs) initiated prior to shutdown of the operating gaseous diffusion plant (GDP). The source areas for the pre-GDP shutdown scope have been grouped into these media-specific OUs:

- Groundwater OU (GWOU)
- Burial Grounds OU (BGOU)
- Surface Water OU (SWOU)
- Soils OU (SOU)
- Decontamination and Decommissioning (D&D) OU

Section XXIII of the FFA requires that DOE prepare a regulatory progress report that describes the actions that DOE has taken during the previous six months to implement FFA requirements, as well as the schedules¹ of activities to be taken during the upcoming six months. Activities that have taken place after the reporting period closed are not included in this report. Projects and activities reported in this update are grouped by the media-specific OUs listed in Table 1.

Each section of this update has been divided into nine sections as follows:

- I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan)
- II. Schedules of activities to be performed during next reporting period (including projected work/crucial phases of construction)
- III. Identity and assigned tasks of DOE contractors for work to be performed during this reporting period

¹ Schedules are included for information and planning purposes only; enforceable schedules are established in the Site Management Plan (SMP).

Table 1. Operable Units and Corresponding Report Topics

Operable Unit	Project/Activities
Groundwater Operable Unit	<ul style="list-style-type: none"> • C-400 Interim Remedial Action • Southwest Plume Sources Remedial Action • Dissolved-Phase Plumes Remedial Action • Northeast Plume Interim Remedial Action • Northwest Plume Interim Remedial Action
Burial Grounds Operable Unit	<ul style="list-style-type: none"> • Burial Grounds Operable Unit • C-749 Uranium Burial Ground Solid Waste Management Unit 2
Surface Water Operable Unit	<ul style="list-style-type: none"> • Remedial Action
Soils Operable Unit	<ul style="list-style-type: none"> • Remedial Action
Decontamination and Decommissioning Operable Unit	<ul style="list-style-type: none"> • C-410/420 Complex • C-746-A East End Smelter and C-340 Metals Reduction Plant Complex
Comprehensive Site Operable Unit*	<ul style="list-style-type: none"> • No Projects
Additional Reporting	<ul style="list-style-type: none"> • Waste Area Groups 1 and 7 • Community Relations Plan • Site Management Plan (SMP) • CERCLA Waste Disposal Alternatives Evaluation

*The Comprehensive Site Operable Unit work scope, including GDP shutdown, is defined more clearly in the fiscal year 2012 SMP.

IV. Statement of the manner and extent to which the requirements and time schedules are being met

V. Primary/Secondary Document Tracking System

- A) Documents under review and/or preparation for this reporting period
- B) Due dates for completion of review/modification tasks

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay)

VII. Summary of all contacts with local community, public interest groups, or state government

VIII. Changes in relevant personnel

IX. Actual cost for operation and maintenance (O&M), if appropriate

Each of the sections satisfies a reporting requirement for the FFA semiannual report or the Hazardous Waste Facility Permit and has been formatted in accordance with the template found in Appendix D of the FFA.

This report includes six appendices as follows:

- Appendix A contains Northeast and Northwest Plumes Water Withdrawal Reports for this reporting period.
- Appendix B contains Figures B.1 through B.25, as referenced in the Northeast and Northwest Plume updates.

- Appendix C contains a map depicting the monitoring well (MW) locations; a figure summarizing the trichloroethene (TCE) concentrations in these wells over time; and a summary of the C-746-K Landfill groundwater monitoring data from January 1996 through September 2012. This data currently are collected semiannually. C-746-K Landfill groundwater monitoring data for reporting dates April 2012 through October 2012 will be included in the next semiannual report scheduled for April 2013. Sampling of these MWs is outlined in the Record of Decision (ROD) for Waste Area Groups (WAGs) 1 and 7.
- Appendix D contains updates to the Administrative Record (AR) index since the last progress report. This is required by the Paducah FFA (Section XXXII.F).
- Appendix E contains a map depicting the C-400 MW location; and a summary of the C-400 groundwater MW data trending TCE and technetium-99 (Tc-99) from 2000 through March 2012. Groundwater data from April 2012 through September 2012 will be included in the next semiannual report scheduled for April 2013.
- Appendix F contains a map depicting the C-749 Uranium Burial Ground [Solid Waste Management Unit (SWMU) 2] groundwater MWs and a summary of the SWMU 2 trends for TCE and Tc-99 for reporting dates 1996 through July 2012.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT

The scope of the GWOU includes investigation, a baseline risk assessment, evaluation of removal/remedial alternatives, and selection and implementation of actions necessary to achieve protection of human health and the environment from exposure to groundwater contamination that could result in an unacceptable risk.

Within the GWOU are these projects: C-400 Interim Remedial Action (IRA) Phases, Southwest Plume Sources Remediation, Dissolved-Phase Plumes, Northeast Plume IRA, and Northwest Plume IRA.

The overall objective of the GWOU is to remove/mitigate ongoing sources and to remediate the groundwater to target contaminant concentrations. The most predominant contaminant of concern in the groundwater of all three plumes is TCE. Table 2 provides an overall broad picture of the TCE mass removed by various actions through September 30, 2012. Additionally, the table provides the current understanding of the remaining masses yet to be addressed. Some of the components still are being estimated and are listed as to be determined (TBD).

Table 2. Cumulative TCE Removed and Remaining TCE Estimate at Paducah

Source Area	Cumulative TCE Removed (gal)*	Remaining TCE Estimate (gal)
Northwest Plume Pump-and-Treat	2,793	TBD
Northeast Plume Pump-and-Treat	277	TBD
C-400 Six-Phase Treatability Study	1,900	N/A
C-400 Phase I	535	TBD
C-400 Phase IIa and Phase IIb	0	600–7,000**
Dissolved-Phase Plume	N/A	1,600
Southwest Plume***	0	70
SWMU 4***	0	TBD
Other sources (i.e., SWMU 91, LASAGNA™)	246	TBD
Total	5,751	2,200–8,600

* Cumulative through September 30, 2012.

** This estimate is currently under review.

*** Additional investigation is ongoing.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT PROJECT: C-400 IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

Phase IIa:

- Received comments from Kentucky and EPA on April 9, 2012, and April 19, 2012, respectively, on the *D1 Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D1*.
- Submitted the *D2 Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D2*, to EPA and Kentucky on June 18, 2012.
- Received comments on the *D2 Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D2*, from EPA on July 30, 2012; Kentucky granted approval on July 17, 2012.
- Submitted replacement pages for the *D2/R1 Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D2/R1*, to EPA and Kentucky on August 24, 2012.
- Received approvals from EPA and Kentucky on September 10, 2012, and September 18, 2012, respectively, on the *D2/R1 Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D2/R1*.
- Submitted the *D1 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1271&D1*, to EPA and Kentucky on April 30, 2012.

- Received comments from EPA and Kentucky on June 1, 2012, on the *D1 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D1.
- Submitted the *D2 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D2, to EPA and Kentucky on July 2, 2012.
- Received comments from EPA on July 31, 2012, on the *D2 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D2.
- Submitted replacement pages for the *D2/R1 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D2/R1, to EPA and Kentucky on August 24, 2012.
- Received approvals from EPA and Kentucky on September 10, 2012, and September 18, 2012, respectively, on the *D2/R1 Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D2/R1.
- Completed procurement, work control, design, and other required activities and initiated fieldwork on September 27, 2012, for the installation of electrodes, Digitams[®], vacuum extraction wells (EWs), and other remediation equipment as part of construction of the Phase IIa IRA.

Phase IIb:

- Met with EPA and Kentucky on May 9, 2012, and May 10, 2012, in Nashville to discuss technical implementation of the preferred alternative contained in the *D1 Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1263&D1, as submitted in December 2011.
- Conducted supplemental technical evaluations of *in situ* chemical oxidation and steam enhanced extraction in response to direction from EPA and Kentucky as received at the technical meeting in Nashville on May 9, 2012, and May 10, 2012.
- Issued the Supplemental Technical and Cost Evaluations of the *In Situ* Chemical Oxidation and Steam Enhanced Extraction for the Phase IIb Portion of the C-400 Interim Remedial Action to EPA and Kentucky on September 12, 2012.
- Continued coordination with the FFA parties for the development of remedial technology support material that will support the *Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1263&D2.

- Continued groundwater monitoring for the C-400 project required by the *Remedial Action Work Plan for the Interim Remedial Action the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0004&D2/R2. The TCE and Tc-99 groundwater monitoring trends from October 2011 through April 2012 are included as Appendix E of this report.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Continue construction activities associated with the implementation of Phase IIa IRA at the C-400 Building.
- Continue working decision elements associated with selection of a remedial measure for Phase IIb and development of necessary decision documents supporting that selection. The remedial design phase and procurement for the selected IRA for Phase IIb currently is scheduled to be initiated during the next reporting period.
- Continue design of the aboveground treatment system for Phase IIa.
- Continue procurement of equipment and materials in preparation for Phase IIa implementation.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the GWOU belongs to LATA Environmental Services of Kentucky, LLC, (LATA Kentucky) as the DOE prime remediation contractor at the PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management services. Swift & Staley Inc., (SST) manages the AR and the Environmental Information Center (EIC).

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and schedules are being met for the GWOU C-400 phased IRA subproject, consistent with the SMP and as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *The Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1271&D2/R1.
- *The Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package for the Groundwater Operable Unit for the Phase IIa, Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1272&D2/R1.

- The *Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant*, DOE/LX/07-1263&D1.

B) Due dates for completion of review/modification tasks:

Not applicable.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

Electrical Resistance Heating did not reach target temperature in the lower Regional Gravel Aquifer (RGA). DOE conducted an evaluation of the Phase I IRA (detailed in the Technical Evaluation Report). DOE has evaluated other viable technologies for addressing the RGA. This evaluation resulted in the bifurcation of the C-400 IRA, which was approved by EPA and Kentucky during this reporting period. The D1 version of the Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building was issued during the previous reporting period. Further discussions and evaluations for the remedial technology to be applied to the Phase IIb area have been continuing with the FFA parties through this current reporting period. The FFA parties will continue the evaluation of technologies into the next reporting period.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site Citizens Advisory Board (CAB), FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Sampling of the C-400 wells has been incorporated into the Environmental Monitoring Program. O&M cost is not broken out separately.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT PROJECT: Southwest Plume Sources

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Issued the *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1268&D2/R1, to EPA and Kentucky on April 26, 2012. [Note: Conditional concurrence was received in the previous reporting period for this D2 document on March 19, 2012, and March 20, 2012, by the EPA and Kentucky, respectively.]
- Received conditional approval on the *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1268&D2/R1, from EPA on May 30, 2012.
- Issued replacement pages that addressed conditions of EPA approval on the *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1268&D2/R1, on June 25, 2012, resulting in issuance of a D2/R2 document.
- Issued the *30% Remedial Design Report In Situ Source Treatment Using Deep Soil Mixing for the Southwest Groundwater Plume Volatile Organic Compound Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1, to EPA and Kentucky on June 6, 2012.
- Received comments from EPA on the *30% Remedial Design Report In Situ Source Treatment Using Deep Soil Mixing for the Southwest Groundwater Plume Volatile Organic Compound Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1, on July 13, 2012. Approval was received from Kentucky on August 28, 2012.
- Initiated field activities for implementing the Southwest Plume Final Characterization and the Remedial Design Support Investigation on July 18, 2012. As of September 30, 2012, all monitoring wells for SWMU 1 and C-720 Northeast and Southeast locations have been installed. In addition, all SWMU 1 borings, including contingencies, and 30 of 31 borings at the C-720 Northeast Site have been completed. Field activities are expected to continue into early portions of the next reporting period.

- Issued the 60% *Remedial Design Report In Situ Source Treatment Using Deep Soil Mixing for the Southwest Groundwater Plume Volatile Organic Compound Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1276&D1*, to EPA and Kentucky on September 25, 2012.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Complete fieldwork for Southwest Plume Final Characterization and Remedial Design Support Investigation.
- Complete development of the Final Characterization Report during the next reporting period. The report will be used by the FFA parties in selecting the remedial measure for the C-720 Building SWMUs 211A and 211B.
- Complete remedial design development and initiate procurement activities for the remedial action to be implemented at the SWMU 1 Oil Landfarm as part of the Southwest Plume remedial action.
- Initiate development of the Remedial Action Work Plan.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the GWOU belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and schedules are being met for the Southwest Plume Sources remedial action subproject consistent with the SMP and as agreed to by the FFA parties. Development and submittal of decision documents for the Southwest Plume source areas are being met consistent with the negotiated timelines as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- Draft versions of the *Remedial Design Report In Situ Source Treatment Using Deep Soil Mixing for the Southwest Groundwater Plume Volatile Organic Compound Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1276&D1*.
- The *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, with Remedial Design Support Investigation and Final Characterization as an attachment.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.
- Jeffery Gibson replaced Todd Mullins as Kentucky's Project Manager for the Southwest Plume Sources.

IX. Actual cost for O&M, if appropriate:

None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT PROJECT: Dissolved-Phase Plumes

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

None. This project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

II. Schedule of activities during upcoming reporting period (including projected work/crucial phases of construction):

This project has been resequenced and no activities are scheduled for this project during the upcoming reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the GWOU belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

Project implementation has been resequenced as described in Section II.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

None.

VIII Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT PROJECT: Northeast Plume IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

Initiated and rescheduled the development of the remedial action work plan for the optimization of the Northeast Plume IRA. The development has been extended to allow for additional modeling. The potential revised issuance date for the document is February 18, 2013. Activities associated with the optimization of the Northeast Plume IRA have included the following:

- Performed a calibration of the groundwater model for the RGA at PGDP;
- Performed a wellfield design analysis to support optimization decision making;
- Held briefing via the internet with EPA and the Commonwealth on July 26, 2012, to provide information on the performance of the recalibration and wellfield design; and
- Performed preliminary engineering analysis to evaluate potential extraction well sites and treatment system placement.

During this reporting period, the Northeast Plume Containment System (NEPCS) treated 45,591,635 gal of contaminated groundwater and achieved an operational efficiency of 97.7%. The average system treatment rate for the reporting period was 188 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: April, 100%; May, 98%; June, 90%; July, 100%; August, 98%; and September 2012, 100%.

During the reporting period, preliminary design modeling was conducted using the 2008 PGDP sitewide groundwater flow model to test initial design concepts for optimization of the Northeast Plume wellfield. The results of preliminary modeling and observations stemming from implementation of the Northwest Plume optimization indicated that model recalibration was needed before detailed wellfield design could be completed. Briefings to regulatory personnel were held in December 2011 and January 2012 to convey this information. Additionally, information was requested and obtained from the Kentucky Research Consortium for Energy and Environment regarding updated lithologic mapping to incorporate into the recalibration effort.

A) Process Operations:

The NEPCS consists of two EWs, an underground equalization (EQ) tank, transfer piping, a cooling tower for air stripping, and MW network.

B) Process Testing:

Operation of the NEPCS began February 28, 1997. As of March 31, 2012, the NEPCS has processed a total of approximately 1,275,217,326 gal of water. The monthly withdrawal volumes this reporting period are presented in Appendix A, Table A.1, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

C) NEPCS Influent, Effluent, and Extraction Well Testing:

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2012.

Influent sample results, compared to the effluent (cooling tower shower) sample results, indicated that TCE was effectively removed below the operational goal of 5 micrograms/liter ($\mu\text{g/L}$). The influent flow is a composite from two EWs. Influent TCE analytical data from 1997 through the end of June 2012 are presented in Appendix B. Environmental samples were collected monthly from the treatment system influent and effluent for the period of January through June 2012. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3. Values reported as less than the reporting limit of 1 $\mu\text{g/L}$ are considered to be 1 $\mu\text{g/L}$ for averaging and graphing purposes.

Table 3. TCE Concentrations for Northeast Plume

	TCE ($\mu\text{g/L}$)		
	High	Low	Average
Influent (EQ Tank)	170	120	153
Effluent (Cooling Tower Effluent)*	< 1	< 1	< 1

*For the purpose of determining efficiency, a reading of < 1 is assumed to be zero.

As presented in Table 3, the NEPCS continued to remove TCE effectively. The system operated with an average removal efficiency of approximately 100% for TCE. All effluent TCE samples showed less than the reporting limit.

The EWs were sampled quarterly during this reporting period. The results of the sampling showed no significant change in TCE levels since the last reporting period. Extraction well EW331 had an average TCE concentration of 123 $\mu\text{g/L}$, while EW332 had an average concentration of 165 $\mu\text{g/L}$.

Concentrations of Tc-99 in water samples collected from the EQ tank did not exceed shut down action level of 3,600 pCi/L. The highest Tc-99 concentration from the EQ tank was 27.9 pCi/L.

D) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-ENM-001, September 2010.

Instances of downtime occurred during the reporting period relating to power outages, lightning strikes, routine maintenance, and calibration of system components.

Nonroutine Maintenance Activities:

On May 20, 2012, the system shutdown due to a lightning strike. The system was restarted on May 21, 2012, after being down for 17.5 hours.

On June 2, 2012, the system lost its program due to electrical surges and shutdown. Hardware was installed to reload the program each time power is lost. The system was shutdown for 72 hours.

On the evening of August 1, 2012, the power was interrupted at the Northeast Plume Treatment Facility. The circuit breaker was reset on the Northeast Plume Transfer Pump, and the system was restarted on August 2, 2012. The Northeast Plume was out of service for approximately 17 hours.

E) Effectiveness Monitoring—Monitoring Well Results:

Figure B.1, included in Appendix B, shows locations of the MWs and EWs. Figure B.2 shows the location of the MWs with the top of McNairy topography. Figures B.3 shows system influent TCE concentrations, and Figure B.4 includes a summary of the TCE in the Northeast Plume EWs. Figure B.5 shows the estimated cumulative amount of TCE removed since the NEPCS began operations in 1997. Figures B.6 through B.10 presented in Appendix B, show TCE concentrations and Tc-99 activities in MWs downgradient and upgradient and the EWs.

MW292 is located approximately 1,200 ft upgradient of the pumping wells to provide an early detection point for Tc-99 migration. During the first and second quarters of calendar year 2012, Tc-99 activity at MW292 was 43.4 and 78.2 pCi/L, respectively.

F) Modification of the NEPCS Operations or Configuration:

No modifications were made to the NEPCS operation or configuration during the reporting period.

II. Schedule of activities during upcoming reporting period (including projected work/crucial phases of construction):

- Issue the D1 Remedial Action Work Plan for the Optimization of the Northeast Plume IRA by February 18, 2013.
- The project team will continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operations, as specified within the *Operations and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1535&D3.
- Complete recalibration of the 2008 PGDP sitewide groundwater flow model, complete wellfield design, engineering design, submit the D1 Removal Action Work Plan (RAWP) for Northeast Plume Optimization, and conduct procurement planning and bid package development for drilling and construction subcontracts for Northeast Plume Optimization.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the NEPCS belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The effluent concentration goal of 5 µg/L for TCE was met during the reporting period. The NEPCS remained operational 97.7% of the time during this reporting period.

On February 17, 2012, the regulatory milestone date of March 30, 2012, for submittal of the D1 RAWP for Northeast Plume Optimization was extended to August 30, 2012, to allow time to complete the model recalibration to support the wellfield design. Since that time, the milestone date has been revised to February 18, 2013, to allow for agency review of the model calibration and design modeling results. The February 18, 2013, date also takes into consideration recent funding constraints associated with the Paducah Site.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

No future operational problems or delays are anticipated.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Actual costs for O&M of the Northwest/Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was \$220,000.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

GROUNDWATER OPERABLE UNIT PROJECT: Northwest Plume IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- During this reporting period, the Northwest Plume Groundwater System (NWPGS) treated 55,607,910 gal of contaminated groundwater with an average monthly operational efficiency of 96.6%. The average system treatment rate for the reporting period was 211 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: April, 100%; May, 95%; June, 100%; July, 100%; August, 94%; and September 2012, 100%.

A) Process Operations:

The NWPGS previously consisted of two EW fields (north and south with each field having two EWs), for a total of four wells, underground pipeline, treatment facility, and MW network. In August 2010, two new EWs (EW232 and EW233) became operational in the south well field near the north fence line of PGDP. The north well field EWs (EW228 and EW229) were removed from service in August 2010, and the new EWs were placed into operation at that time. EW230 and EW231, also located in the south well field, are kept in standby mode and may be returned to service, if needed.

B) Process Testing:

Operation of the NWPGS began on August 28, 1995. As of March 31, 2012, the NWPGS has processed a total of 1,721,862,336 gal of water. The monthly withdrawal volumes for the reporting period are presented in Appendix A, Table A.2, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

C) NWPGS Influent, Effluent, and Extraction Well Testing:

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2012.

Figure B.11, included in Appendix B, shows locations of the Northwest Plume MWs. Figure B.12 shows the location of the MWs with the top of McNairy topography. Influent TCE and Tc-99 analytical data are presented in Appendix B on Figures B.13 and B.14. Figures B.15 and B.16 includes a summary of the TCE and Tc-99 concentrations of the effluent versus time at the Northwest Treatment System. Figure B.17 shows the cumulative estimated amount of TCE removed since the Northwest Plume system began operations in 1995. The

influent sample results, compared to the NWPGS effluent results, indicated that the NWPGS continues to effectively remove TCE and Tc-99.

TCE values reported as less than the reporting limit of 1 µg/L are considered to be 1 µg/L for averaging and graphing purposes. High, low, and average influent and effluent TCE and Tc-99 concentrations from January through June 2012 are presented in Table 4.

Table 4. TCE and Tc-99 Concentrations for Northwest Plume

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
Influent	2,700	2100	2,422	412	342	365
Effluent	6.6	2.5	4.15	43.3	16.3	28.3

The treatment system influent, a composite from two EWs, was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the revised O&M Plan for the Northwest Plume Groundwater System IRA D4/R5, which DOE submitted on September 13, 2010, and was approved in correspondence from Kentucky on October 4, 2010, with concurrence from EPA on October 8, 2010. As presented in Table 4, the NWPGS continued to effectively remove TCE and Tc-99. The system operated with an average removal efficiency of 99.83% for TCE and 92.2% for Tc-99.

The average TCE effluent concentration for this reporting period was 4.14 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 28.3 pCi/L, which is less than the operational goal of 900 pCi/L, during the reporting period.

High, low, and average sample results for this reporting period at the EWs are shown in Table 5. EWs 228 and 229 were removed from operation in August 2010. These wells are not tied physically into the Northwest Plume Treatment Facility and no longer are sampled. EWs 230 and 231 also were removed from operation in August 2010. These wells, however, are sampled only when they are operated (these wells were not operated during this reporting period). EWs 232 and 233 were sampled quarterly in accordance with the revised O&M Plan for the Northwest Plume.

Table 5. TCE and Tc-99 Concentrations for Northwest Plume EWs

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
EW232	1,600	1,600	1,600	229	146	185
EW233	6,100	4,300	5,200	611	514	554

D) Treatment Media:

Ion Exchange Resins:

The NWPGS is equipped with four ion exchange columns used for the removal of Tc-99. Puro-lite A-520-E resin is used in the columns, which are arranged in a lead/lag configuration on two parallel skids. No resin changes were required during this reporting period.

Activated Carbon Media:

The NWPGS is equipped with two carbon columns containing granular activated carbon for adsorption of volatile organic compounds from the vapor-phase effluent of the air stripper unit. The carbon in each column is replaced routinely. The carbon in both columns was replaced on September 26, 2012, with new and recycled carbon.

E) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-ENM-0001, September 2010. Instances of minor downtime occurred during the reporting period relating to power outages, maintenance, and calibration of the system.

Nonroutine Maintenance Activities:

At approximately 2130 hours on May 20, 2012, the electrical power to the C-612 Treatment Facility was interrupted due to a lightning strike. Components were replaced and the system was brought back on line on May 22, 2012, after being down for 93 hours.

On August 18, 2012, the system was shut down due to a planned power outage. The system was down for 28 hours.

On August 29, 2012, a power outage occurred due to a lightning strike the power was restored and four surge protectors that were destroyed were replaced. The system was brought back into operation after 16 hours; however EW232 is not working. The flow to EW233 has been increased to 212 gpm until EW232 is repaired.

F) Effectiveness Monitoring—Monitoring Well Results:

Figures B.18 through B.25 presented in Appendix B, show TCE and Tc-99 concentrations in MWs at the south and north fields of the Northwest Plume and the EWs, respectively. These graphs show all data since monitoring began in 1995 and indicate the position of the MWs relative to the extraction.

G) Modification of the NWPGS Operations or Configuration:

EW 232 and EW233, became operational on August 24, 2010. These EWs replace the previous EWs for recovery of TCE contaminated groundwater from the Northwest Plume. Each of the new wells has a design capacity of 220 gal per minute and is operated full time at approximately 110–115 gpm. EW228 and EW229 have been disconnected from the

Northwest Plume Treatment facility. EW230 and EW231 are kept in standby mode and can be operated, as needed.

II. Schedules of activities during upcoming reporting period (including projected work/crucial phases of construction):

The project team will continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operation, as specified in the *Operations and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1253&D4/R5.

Hydraulic and chemical effectiveness monitoring, as described in the D4/R5 O&M Plan for the Northwest Plume Groundwater System IRA, was initiated during the reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the NWPGS belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition LATA Kentucky provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The average NWPGS water effluent concentrations met the operational goals of 5 µg/L for TCE and 900 pCi/L for Tc-99 during the reporting period. The NWPGS has remained operational 98.2% of the time during this reporting period.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, and reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Actual costs for O&M of the Northwest/Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was \$203,000.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

BURIAL GROUNDS OPERABLE UNIT

The scope of the BGOU includes a remedial investigation (RI), baseline human health risk assessment, evaluation of remedial alternatives, remedy selection, and implementation of actions, as necessary, for protection of human health and the environment for the following burial grounds: C-749 (SWMU 2); C-404 (SWMU 3); C-747/C-748-B (SWMU 4); C-746-F (SWMU 5); C-747-B (SWMU 6); C-747-A (SWMUs 7 and 30), which includes the area beneath C-747-A (SWMU 12); the residential/inert borrow area (SWMU 145); and the C-746-S&T Landfills (SWMUs 9 and 10, respectively).

This section also includes information on the sampling activities being conducted at the C-749 Uranium Burial Ground, as required in the *Record of Decision for Interim Remedial Action at Solid Waste Management Units 2 and 3 of Waste Area Group 22 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, signed in 1995.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

**BURIAL GROUNDS OPERABLE UNIT PROJECT: C-749 (SWMU 2); C-404 (SWMU 3);
C-747/C-748-B (SWMU 4); C-746-F (SWMU 5); C-747-B (SWMU 6); C-747-A (SWMUs 7 and 30),
which includes the area beneath C-747-A (SWMU 12); the Residential/Inert Borrow Area
(SWMU 145); and the C-746-S&T Landfills (SWMUs 9 and 10)**

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Prepared and submitted the D2/R1 Feasibility Study (FS) for SWMUs 5 and 6 to EPA and Kentucky on August 6, 2012, for review and approval.
- Prepared and submitted the D1 FS for SWMUs 2, 3, 7, and 30 to EPA and Kentucky on April 30, 2012, for review and approval. Received comments from Kentucky on August 22, 2012; EPA comments pending.
- Prepared and submitted the D2/A2/R1 SWMU 4 Work Plan addendum to EPA and Kentucky on April 24, 2012, for review and approval.
- Prepared and submitted the D2/A2/R2 SWMU 4 Work Plan addendum to EPA and Kentucky on June 29, 2012, for review and approval.
- Prepared and submitted the D1 Proposed Plan for SWMUs 5 and 6 to EPA and Kentucky on August 29, 2012, for review and approval.
- Initiated field start activities associated with Phase I of the SWMU 4 Work Plan addendum on August 1, 2012.
- Received nonconcurrence and invocation of informal dispute on the D2/R2 FS for SWMUs 5 and 6 from EPA and Kentucky on September 18, 2012, and September 26, 2012.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Resolve informal dispute on the D2/R2 FS for SWMUs 5 and 6.
- Resolve comments on the D1 FS for SWMUs 2, 3, 7, and 30 and submit the D2 FS to EPA and Kentucky within 60 days of receipt of comments.
- Resolve comments on the D1 Proposed Plan for SWMUs 5 and 6 and submit the D2 Proposed Plan to EPA and Kentucky within 60 days of receipt of comments or in accordance with the terms of the dispute resolution.

- Complete Phase I sampling (exclusive of test pits) and initiate field activities associated with Phase II of the SWMU 4 Work Plan Addendum.
- Work associated SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of BGOU belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC, and maintains existing burial ground caps.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met; however, extensions on document review and modification periods, as well as resolution of dispute, have resulted in an overall impact to the project schedule for the BGOU.
- Work associated SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation during this reporting period:

- D1 FS for SWMUs 2, 3, 7, and 30
- D1 Proposed Plan for SWMUs 5 and 6
- D2/R2 FS for SWMUs 5 and 6

B) Due dates for completion of review/modification tasks:

- The D2 Proposed Plan for SWMUs 5 and 6 will be submitted to EPA and Kentucky 60 days after receipt of EPA and Kentucky comments on the D1 Proposed Plan or in accordance with the terms of the dispute resolution.
- The D2 FS for SWMUs 2, 3, 7, and 30 will be submitted to EPA and Kentucky 60 days after receipt of EPA and Kentucky comments on the D1 FS.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- Invocation of informal dispute on the D2/R2 FS for SWMUs 5 and 6 by EPA will result in delays in the review and submittal of the Proposed Plan and the subsequent FFA documents associated with SWMUs 5 and 6.

- Additional review time has been requested by EPA on the D1 FS for SWMUs 2, 3, 7, and 30, resulting in the delay of comment resolution and resubmittal of the D2 FS.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

BURIAL GROUNDS OPERABLE UNIT PROJECT: C-749 Uranium Burial Ground (SWMU 2)

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

Groundwater monitoring continued at the C-749 Uranium Burial Ground, as required by the *Record of Decision for Interim Remedial Action at Solid Waste Management Unit 2 and 3 of Waste Area Group 22 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1351&D1. The results for the groundwater monitoring from May 1993, through July 31, 2012, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through July 2012 are presented in Appendix F.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

Groundwater monitoring will continue at the C-749 Uranium Burial Ground, as required by the ROD.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of C-749 Uranium Burial Ground belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC, and maintains existing burial ground cover.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation during this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

None.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Sampling of the C-749 Uranium Burial Ground has been incorporated into the Environmental Monitoring Program. O&M cost is approximately \$1,000.00 per year.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

SURFACE WATER OPERABLE UNIT

The SWOU includes the Surface Water Removal Action and Surface Water Remedial Action projects. Additionally, O&M is performed on North-South Diversion Ditch Sections 1 and 2 and institutional controls, as required by the *Operations and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch*, DOE/OR/07-2057&D2, and *Operations and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1904&D1; and O&M activities for the C-613 Basin are maintained in accordance with the *Operations and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2044&D1/R4, respectively. Inspection reports are filed in the Document Management Center, managed by SST. The estimated annual cost of this O&M is \$66,000.

Per the *Operations and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2044&D1/R4, the relationship of turbidity to total suspended solids is compared on a quarterly basis. No change in the existing linear regression model has occurred since July 2009 and the current maximum discharge limit for turbidity is 53 nephelometric turbidity units (NTU) with a 30-day average not to exceed 29 NTU.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

SURFACE WATER OPERABLE UNIT PROJECT: Remedial Action

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- The D2/R1 SWOU RI/FS Work Plan was submitted to EPA and Kentucky on June 13, 2012. Approval was received from Kentucky and EPA on June 19, 2012, and June 27, 2012, respectively.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Revise the O&M Plan for the SWOU as required by the CERCLA Five-Year Review.
- Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no activities are scheduled for this project during the upcoming reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the SWOU Remedial Action belongs to LATA Kentucky, as the DOE prime remediation contractor at the PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window. No activities are scheduled for this project during the upcoming reporting period.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- The O&M Plan for the SWOU has been under development during this reporting period.
- The D2/R1 SWOU RI/FS Work Plan has been under development and EPA and Kentucky review during this reporting period.

B) Due dates for completion of review/modification tasks:

- The O&M Plan for the SWOU is scheduled to receive regulatory approval prior to the submittal of the D1 CERCLA Five-Year Review.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

SOILS OPERABLE UNIT

The SOU is being implemented in a phased approach (i.e., pre-GDP shutdown and post-GDP shutdown). The SOU consists of 86 SWMUs/areas of concern; three inactive facilities [C-218 Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), C-410-B HF Neutralization Lagoon (SWMU 19)]; and the soil/rubble areas that have been identified to date. Prior to GDP shutdown, the SOU will focus on accessible plant surface soils (ground surface to 10 ft below ground surface and 16 ft below ground surface in the vicinity of pipelines) not associated with PGDP operations. Following PGDP shutdown, slabs and underlying soils associated with facilities that have undergone D&D will be addressed as part of a subsequent action (e.g., post-GDP shutdown for the Soils and Slabs OU). Actions to address a total of 20 of the 86 SWMUs have been deferred to Soils and Slabs OU. Of the 66 SWMUs remaining, 50 will be addressed as part of the Soils OU FS. The remaining 16 SWMUs will be further evaluated under a subsequent Soils OU RI and addressed by a subsequent Soils OU feasibility study.

Due to interferences from ongoing United States Enrichment Corporation operations, implementation of the response action pursuant to an approved Action Memorandum (*Action Memorandum for Soils Operable Unit Inactive Facilities*, DOE/LX/07-0121&D2/R1), for SWMU 40 will occur after GDP shutdown. Implementation of the SWMU 40 response will be reinstated with development, review, and approval of a RAWP.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

SOILS OPERABLE UNIT PROJECT: Remedial Action

I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):

- Completed comment resolution meetings for the D2 SOU RI Report. Revised and submitted the D2 SOU RI Report to EPA and Kentucky on October 1, 2012, for review and approval.
- Submitted a SWMU Assessment Report to EPA and Kentucky on April 16, 2012, that requested SWMU 12 be classified as a No Further Action status. A No Further Action status was granted by Kentucky on April 24, 2012.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no activities are scheduled for this project during the upcoming reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of the SOU RI belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The D2 SOU RI Report submittal date has been extended by 47 days to September 30, 2012. As a result, the milestone dates for subsequent documents have been modified to reflect the 47-day extension.
- With the exception of finalization of the D2 SOU RI Report, additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- The D2 SOU RI Report has been under development during this reporting period.

B) Due dates for completion of review/modification tasks:

- The D2 SOU RI Report is due to EPA and Kentucky by September 30, 2012. (Note: Since the regulatory due date falls on a Saturday, the document will be submitted on October 1, 2012, which occurs during the next reporting period.)

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- The milestone dates for the SOU Remedial Action have been modified by 47 days to allow for a 47-day extension for the Soils RI Report.
- With the exception of finalization of the D2 SOU RI Report, additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT

The D&D OU will employ the CERCLA removal action process to decommission excess buildings (i.e., inactive with no reuse potential) that have a known or potential release of contamination to the environment. Consistent with the 1995 DOE and EPA Memorandum, *Policy on Decommissioning DOE Facilities under CERCLA*, DOE will employ the CERCLA Non-Time-Critical Removal Action framework when appropriate. In instances where facilities do not have a known or potential release, DOE may decommission the facility as a non-CERCLA demolition action using National Environmental Policy Act documentation.

The remaining scope of the D&D OU prior to PGDP shutdown consists of the following inactive DOE facilities:

- C-410/420 Feed Plant Complex
- C-340 Metals Reduction Complex

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

D&D OPERABLE UNIT: C-410/420 Complex

The scope of this project includes D&D of the C-410 Uranium Hexafluoride (UF₆) Feed Plant, using CERCLA removal actions implemented in accordance with the FFA and consistent with the 1995 EPA and DOE Joint Policy Statement on decommissioning activities.

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan) for the C-410/420 Complex:

- RAWP requires removal of cold traps:
 - Completed isolation of the last 9 of the 15 cold traps during this reporting period.
 - Initiated final capping of cold traps in preparation for placement of cold traps into storage containers and relocation of outside of C-410 during this reporting period.
- RAWP requires removal or stabilization of the UF₆ production system. With the exception of the cold traps, this system was completed during this reporting period.
 - Completed stabilization and removed removal of UF₆ pipe in Zones 22, 23, 24, and 26.
 - A total of approximately 9,000 ft of UF₆ containing piping in C-410 has been removed, with over 2,600 ft removed during this reporting period.
 - Completed stabilization and preparation for demolition of the UF₆ surge tank, an approximate 1,000 gal tank that contained residual UF₆.
 - Completed stabilization of 8 UF₆ production towers and filters.
 - Completed approximately 1,800 ft of UF₆ ash conveyor removal and/or stabilization.
- RAWP requires removal of the fluorine system.
 - Completed fluorine cleanup reactor stabilization during this reporting period. Approximately 400 linear ft of fluorine piping remain to be stabilized and removed to complete the removal of this system.
- RAWP requires heating, ventilation, and air-conditioning (HVAC) system stabilization and or removal in all 65 zones.
 - Completed HVAC stabilization in Zones 22, 23, 24, 25, 26, 31, 42, 43, and 51, or approximately 13% of the zones during this period.

— HVAC stabilization/removal required in eight zones to complete the HVAC system removal.

- Completed the removal or stabilization of the vacuum system, as required to comply with the RAWP. A total of 41 zones contained vacuum piping or vacuum equipment, and the last 8 zones were completed during this period.
- Completed asbestos removal (except for asbestos insulated electrical wire) in Zones 2, 9, 12, 14, 26.
- Initiated stabilization of 13 abandoned UF₆ sample cylinders.

II. Schedules of activities to be performed during next reporting period (including projected work/crucial phases of construction):

- Continue waste management activities for the HVAC system and UF₆ piping.
- Cold traps:
 - Containerize cold traps in Zones 23, 24, 27, and 39.
 - Move cold traps to C-746-Q.
- Complete stabilization and removal of the last 400 ft of fluorine piping (this pipe will be managed as potentially containing UF₆, based upon location and prior experience with similar piping).
- Continue asbestos insulated electrical wire removal.
- Initiate vacuuming and fixative application in preparation for demolition.
- Complete stabilization of the 13 UF₆ sample cylinders present in C-410.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of D&D belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

Identified levels of plutonium contamination in UF₆ piping in C-410 that exceeded levels observed in available characterization data. This resulted in implementing additional work controls and characterization and developing of plans and protocols for a potential plutonium exposure. Additional time and resources were required to safely stabilize and remove the UF₆ piping impacted by the plutonium. Approximately 400 ft of this line required workers to perform work in air lines.

Substantial quantities of UF₆ that was not anticipated originally have been encountered in several UF₆ lines and have required additional time and resources to complete adequate stabilization (purging out any gaseous UF₆ and then sweeping air through the lines to stabilize solid UF₆ residuals) of the lines to allow cutting and removal of the piping. To date, between one and two tons of UF₆ has been removed from UF₆ lines. The estimated schedule impact due to the UF₆ holdup is 10 to 12 months; however, achieving the September 30, 2013, FFA milestone for the submittal of a removal action report still is projected.

VII. Summary of all contacts with local community, public interest groups, or state government:

Provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, congressional staff, and D&D Tri-Party Working Group.

Briefed FFA managers on plans for relocating UF₆ cold traps to C-746-Q for storage; provided FFA managers with a video presentation of activities required to stabilize and remove UF₆ piping; and provided a briefing on achieving completion of the DOE Capital Asset Project portion of the C-410 D&D project.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

**D&D OPERABLE UNIT: C-746-A East End Smelter and
C-340 Metals Reduction Plant Complex**

The scope of this project includes demolition of the C-746-A East End Smelter and C-340 Uranium Metals Reduction Complex, using CERCLA removal actions implemented in accordance with the FFA and consistent with the 1995 EPA and DOE Joint Policy Statement on decommissioning activities. The C-746-A East End Smelter has been demolished and all wastes appropriately dispositioned in fiscal year (FY) 2011. As a result, the following discussion pertains to the C-340 Complex only.

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan) for the C-340 Complex:

- Completed interior fixative application and equipment demobilization, consistent with the RAWP.
- Completed evaluation of PCB sample data. Used this data to develop strategy to segregate wastes from the C-340 Demolition project between C-746-U Landfill disposal and off-site disposal.
- Initiated manual transite removal on the C-340 Complex on August 22, 2012, as defined in the RAWP. Transite removal is approximately 40% complete at this time.
- Mobilized demolition subcontractor and initiated demolition of September 26, 2012.

II. Schedules of activities to be performed during next reporting period (including projected work/crucial phases of construction):

- Complete C-340 Complex structural demolition, slab preparation and fixative application, and waste disposition.
- Initiate development of the removal action completion letter.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of D&D belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

Provided routine updates on the subproject to the Paducah Site CAB, FFA managers, local elected officials, Congressional staff, and D&D Tri-Party Working Group.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

COMPREHENSIVE SITE OPERABLE UNIT

There were no reportable activities for the Comprehensive Site Operable Unit during this reporting period.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

ADDITIONAL REPORTING

Presented in this section are updates for WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites, Underground Storage Tanks, and Kentucky Ordnance Works sites), the Community Relations Plan (CRP), the SMP, and CERCLA Waste Disposal Alternatives Evaluation.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

**PROJECT: WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites,
Underground Storage Tanks, and Kentucky Ordnance Works Sites)**

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

Surface water and groundwater monitoring continued around the C-746-K Landfill and in Bayou Creek, as required by the *Record of Decision for Waste Area Groups 1 and 7 at PGDP, Paducah, Kentucky*, DOE/OR/06-1470&D3. WAGs 1 and 7 ROD requires these data to be submitted semiannually. The results of the groundwater monitoring data from January 1995 through September 2012 are presented graphically in Appendix C.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

Surface water and groundwater monitoring will continue around C-746-K Landfill and in Bayou Creek, as required by the ROD. This monitoring is conducted and reported in accordance with other PGDP programs, such as the Groundwater Protection Program, Environmental Monitoring Program, and Kentucky Pollutant Discharge Elimination System Permit.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the day-to-day operations of WAGs 1 and 7 belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

None.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Sampling of the surface water for the C-746-K Landfill has been incorporated into the Environmental Monitoring Program. O&M cost is not broken out separately.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

PROJECT: Community Relations Plan

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

None.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

Initiate development of Revision 8 of the CRP. The FFA parties have agreed to revise and submit the CRP for review and approval on a biannual basis (i.e., status of major projects in Chapter 2, Appendix A—Key Contacts for the PGDP and Appendix B—Public Involvement History). The next revision to the CRP (Revision 8) is due in July 2013.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the maintenance of the CRP belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

Not applicable.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

None.

B) Due dates for completion of review/modification tasks:

Revision 8 of the CRP is due to EPA and Kentucky by July 31, 2013.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

None.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Not applicable.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

PROJECT: Site Management Plan

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- During this reporting period, the D1 FY 2013 SMP was under development. DOE worked closely with the FFA managers and their respective senior managers to develop enforceable milestones for FY 2013, FY 2014, and FY 2015. These milestones were developed to achieve continuous progress at the site, while optimizing the existing workforce and effectively utilizing the limited funding available to the Paducah site.
- The FFA parties and their respective senior managers reached agreement on these enforceable milestones at a meeting held on August 30, 2012. These enforceable milestones will be documented in Appendix 5 of the FY 2013 SMP. On October 26, 2012, DOE submitted a modification request for Appendix C of the FFA, reflecting this agreement.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

Finalize and transmit the FY 2013 SMP to EPA and Kentucky on or before November 15, 2012.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the maintenance of the SMP belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

FFA Section XVIII requires submittal of the SMP by November 15 of each year.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- The D1 FY 2013 SMP has been under development during this reporting period.

B) Due dates for completion of review/modification tasks:

- D1 FY 2013 SMP is due to EPA and Kentucky no later than November 15, 2012.

- Comments on the D1 FY 2013 SMP are due to DOE within 30 days of the document's being issued or December 15, 2012.
- D2 FY 2013 SMP, if required, is due within 15 days of receipt of regulatory comments on the D1 SMP.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

Funding impacts on enforceable milestones continues to be an issue for the FFA managers and their respective senior managers. In particular, the FFA managers, along with their senior management, must reach consensus on a path forward for establishing out-year enforceable milestone time frames. Inability to reach consensus on the time frame required for the out-year enforceable milestones may result in potential delays associated with finalization and approval of the FY 2013 SMP.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.

IX. Actual cost for O&M, if appropriate:

Not applicable.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2012**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period:4/1/2012–9/30/2012**

PROJECT: CERCLA Waste Disposal Alternatives Evaluation

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Submitted the D1 RI/FS Report to Kentucky and EPA on May 8, 2012. Comments were received from Kentucky and EPA on September 6, 2012, and September 12, 2012, respectively. EPA plans to submit additional comments on the D1 RI/FS Report by the end of October, resulting in a day-for-day delay in submittal of the D2 RI/FS Report.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Develop and submit the D2 RI/FS Report to EPA and Kentucky for review during the next reporting period.
- Develop and submit the D1 Proposed Plan to EPA and Kentucky by January 7, 2013, which will be impacted by the day-for-day delay associated with the D2 RI/FS Report.
- Develop and submit the D1 ROD to EPA and Kentucky by August 20, 2013, which will be impacted by the day-for-day delay associated with the D2 RI/FS Report.
- Conduct a Public Information Workshop within the next reporting period. DOE is co-sponsoring with the Paducah CAB and partnering with Kentucky and EPA. The purpose of the workshop is to summarize the content of the RI/FS Report and solicit feedback.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

Responsibility for the CERCLA waste disposal evaluation belongs to LATA Kentucky, as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

EPA plans to submit additional comments on the D1 RI/FS Report by the end of October, resulting in a day-for-day delay in submittal of the D2 RI/FS Report.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- The D1 RI/FS Report has been under development during this reporting period.
- The D1 Proposed Plan has been under development during this reporting period.

B) Due dates for completion of review/modification tasks:

The D2 RI/FS Report will be prepared and issued to EPA and Kentucky within 60 days of receipt of EPA and Kentucky comments on the RI/FS Report.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

EPA plans to submit additional comments on the D1 RI/FS Report by the end of October, resulting in a day-for-day delay in submittal of the D2 RI/FS Report and subsequent FFA documents.

VII. Summary of all contacts with local community, public interest groups, or state government:

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

In addition, DOE provided a briefing on the current project status to Secretary Len Peters of the Kentucky Energy and Environment Cabinet on July 11, 2012.

VIII. Changes in relevant personnel:

- Jennifer Woodard replaced Reinhard Knerr as DOE's FFA Manager.
- Rachel Blumenfeld replaced Reinhard Knerr as DOE's Dispute Resolution Committee member.
- Jon Richards replaced Turpin Ballard as EPA's Project Manager for the CERCLA Waste Disposal Alternatives Evaluation.

IX. Actual cost for O&M, if appropriate:

Not applicable.

APPENDIX A

**NORTHEAST AND NORTHWEST PLUME
WATER WITHDRAWAL REPORTS**

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**Table 1. Northeast Plume Containment System
Water Withdrawal Reporting Form (gallons of water pumped)**

Day	April 2012	May 2012	June 2012	July 2012	August 2012	September 2012
1	46,525	145,600	195,400	244,909	245,100	209,360
2	251,900	204,800	0	244,909	250,000	209,360
3	263,800	267,575	0	244,909	248,900	209,360
4	202,180	267,575	0	244,909	255,300	253,800
5	202,180	267,575	218,900	244,909	255,300	253,700
6	202,180	267,575	270,300	244,909	255,300	215,925
7	202,180	265,000	262,700	244,909	255,300	215,925
8	202,180	226,500	269,267	244,909	240,700	215,925
9	209,900	261,600	269,267	264,200	255,600	215,925
10	235,700	266,950	269,267	256,700	255,100	272,800
11	249,300	266,950	261,800	245,100	251,325	282,900
12	258,675	266,950	267,700	256,375	251,325	206,200
13	258,675	266,950	265,000	256,375	251,325	254,175
14	258,675	262,900	265,100	256,375	251,325	254,175
15	258,675	264,100	271,567	256,375	245,100	254,175
16	265,800	270,800	271,567	250,800	262,200	254,175
17	259,900	285,275	271,567	249,800	243,000	258,700
18	263,900	285,275	251,900	258,700	209,360	253,900
19	265,050	285,275	260,700	257,575	209,360	253,100
20	265,050	285,275	268,900	257,575	317,280	245,425
21	265,050	0	250,800	257,575	320,130	245,425
22	265,050	274,100	259,667	257,575	317,470	245,425
23	260,600	273,300	259,667	249,300	318,853	245,425
24	267,100	252,220	259,667	250,600	318,853	245,400
25	269,300	252,220	249,300	260,300	318,853	282,000
26	264,150	252,220	281,800	258,325	318,853	180,100
27	264,150	252,220	216,300	258,325	321,320	259,200
28	264,150	252,220	244,909	258,325	319,080	259,200
29	264,150	262,500	244,909	258,325	319,820	259,200
30	263,200	261,400	244,909	249,200	316,800	259,200
31		265,100		253,800	316,800	
Monthly Total	7,269,325	7,778,000	6,922,827	7,836,873	8,515,030	7,269,580
*Daily Average	242,311	259,267	266,263	252,802	283,834	242,319
Days water pumped	30	30	26	31	30	30

*Value based on number of days water was pumped.

**Table 2. Northwest Plume Groundwater System
Water Withdrawal Reporting Form**

Day	April 2012	May 2012	June 2012	July 2012	August 2012	September 2012
1	0	317,830	318,360	320,422	320,280	92,400
2	320,600	318,640	318,360	320,422	316,690	239,400
3	258,630	318,250	318,360	320,422	316,690	302,400
4	307,598	318,250	258,710	320,422	316,690	301,990
5	304,938	318,250	288,600	320,422	316,690	279,660
6	304,938	318,250	328,560	320,422	312,900	265,863
7	304,938	320,900	319,830	320,422	318,220	265,863
8	304,938	312,980	322,263	320,422	313,080	265,863
9	388,070	315,230	322,263	318,330	314,548	265,863
10	279,230	318,243	322,263	313,610	314,548	304,850
11	317,230	318,243	309,160	317,480	314,548	286,830
12	319,290	318,243	329,970	317,275	314,548	305,550
13	319,290	318,243	320,520	317,275	306,560	301,280
14	319,290	315,970	320,710	317,275	305,330	301,280
15	319,290	316,910	325,530	317,275	309,720	301,280
16	317,810	320,870	325,530	316,460	219,753	301,280
17	318,460	349,323	325,530	316,260	219,753	305,560
18	318,940	349,323	301,720	317,390	219,753	301,660
19	318,760	349,323	320,860	314,228	219,753	300,740
20	318,760	0	320,930	314,228	317,280	301,570
21	318,760	0	320,470	314,228	320,130	301,570
22	318,760	236,720	322,797	314,228	317,470	301,570
23	290,400	320,410	322,797	314,010	318,853	301,570
24	319,240	318,846	322,797	316,950	318,853	301,480
25	320,530	318,846	313,670	318,360	318,853	298,600
26	316,335	318,846	353,430	307,025	318,853	209,060
27	316,335	318,846	290,620	307,025	321,320	302,400
28	316,335	318,846	320,422	307,025	319,080	302,400
29	316,335	318,350	320,422	307,025	319,820	302,400
30	318,890	318,190	320,422	317,220	316,800	302,400
31		318,890		316,710	316,800	
Monthly Total	9,112,920	9,240,060	9,525,875	9,800,265	9,414,160	8,514,630
*Daily Average	303,764	318,623	317,529	316,138	313,805	283,821
Days water pumped	30	29	30	31	30	30

*Value based on number of days water was pumped.

APPENDIX B

**NORTHEAST PLUME AND NORTHWEST PLUME GRAPHS
AND MAPS FIGURES B.1 THROUGH B.25**

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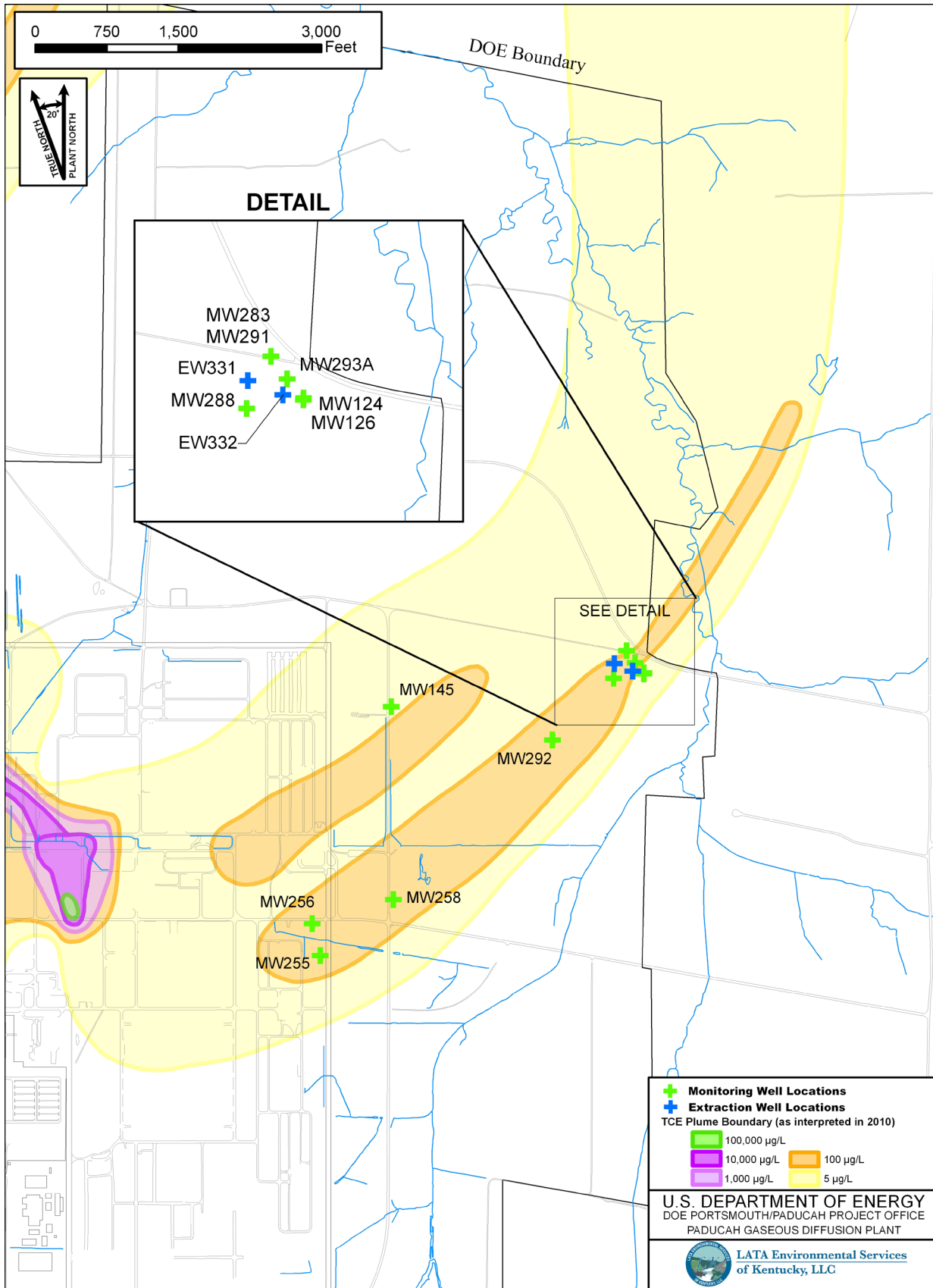


FIGURE No. FFA SemiAnnual20110906_NEP_R0.mxc
DATE 09-06-2011

Figure B.1. Northeast Plume Groundwater Wells and Extraction Wells

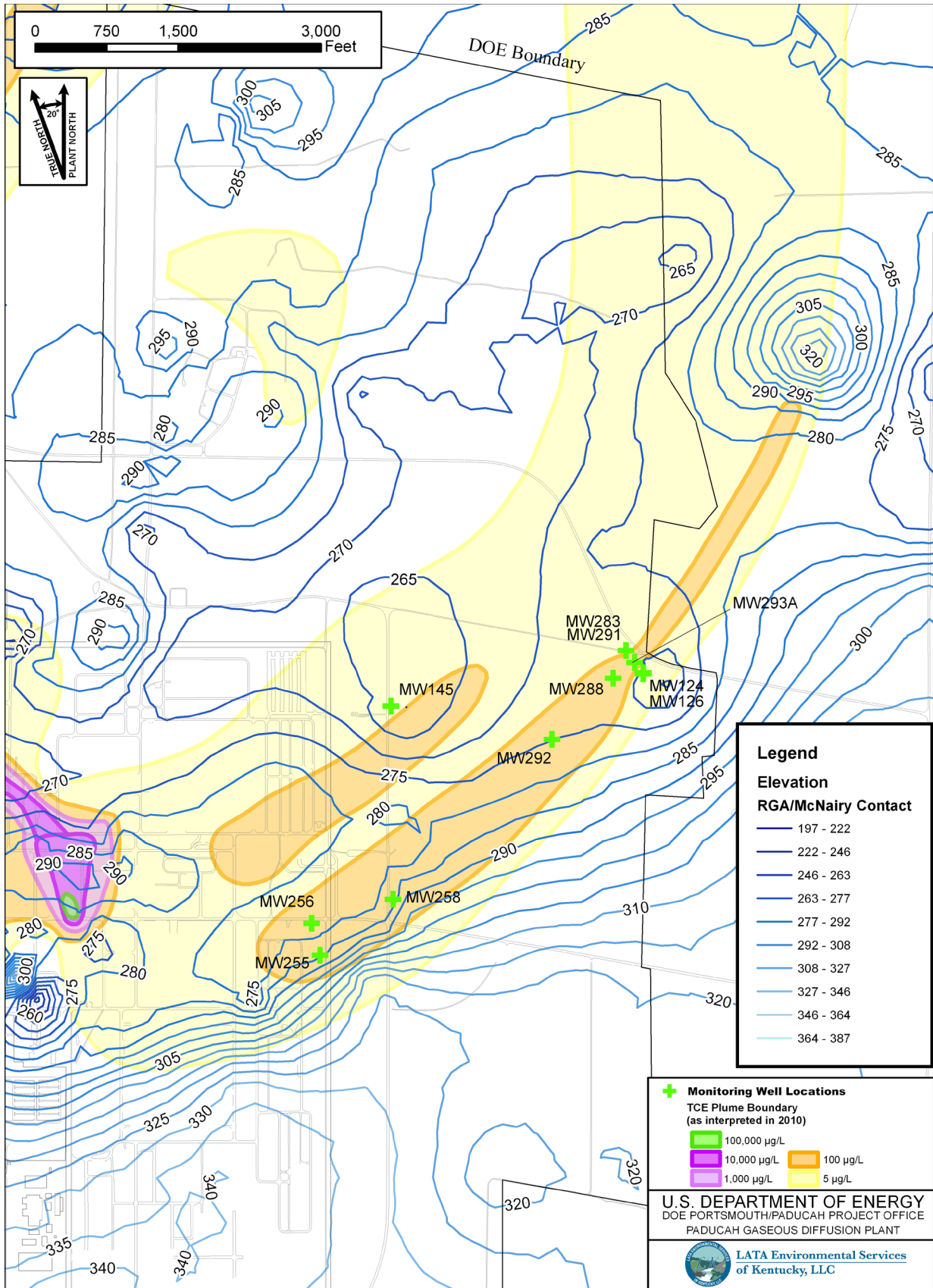
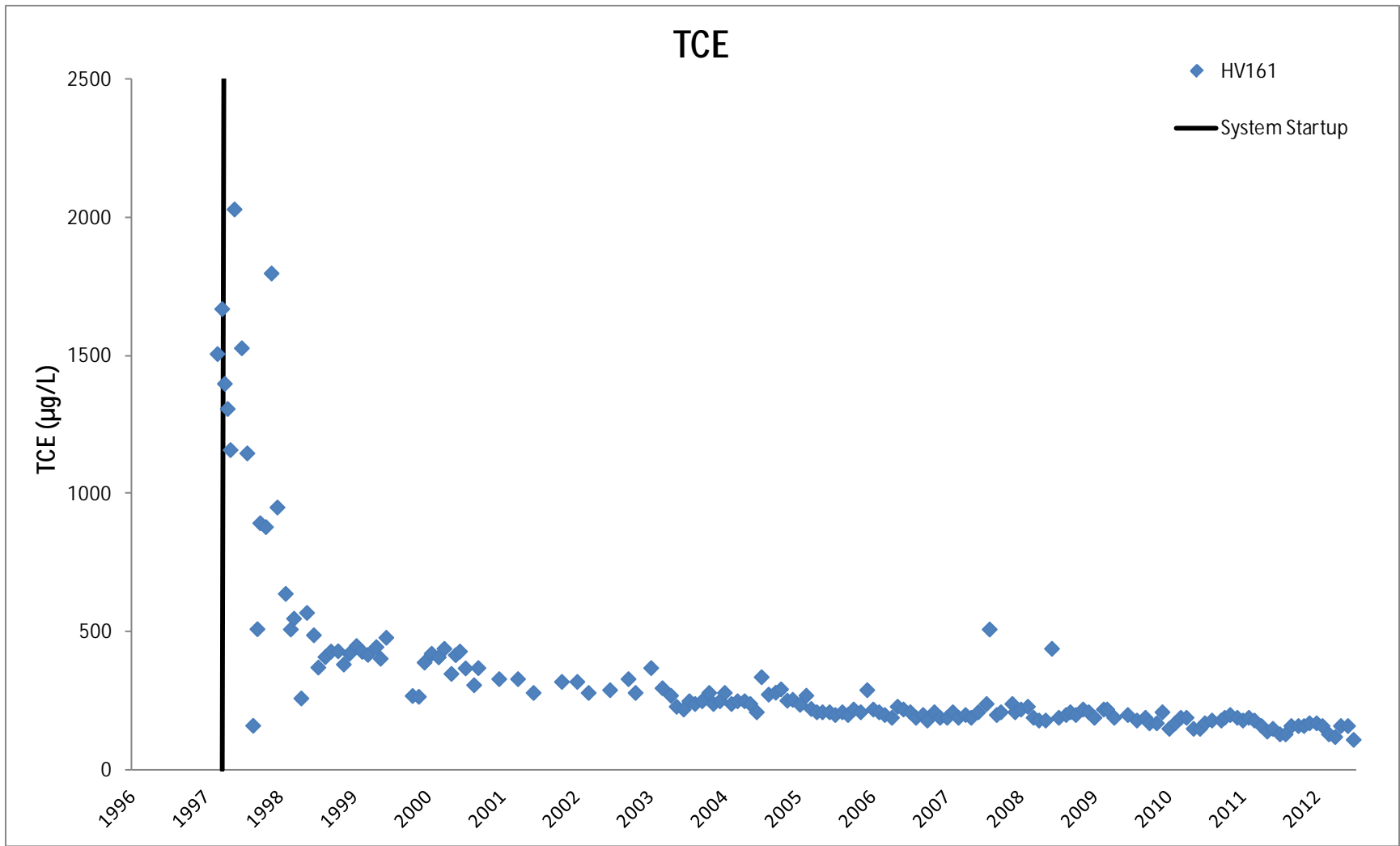


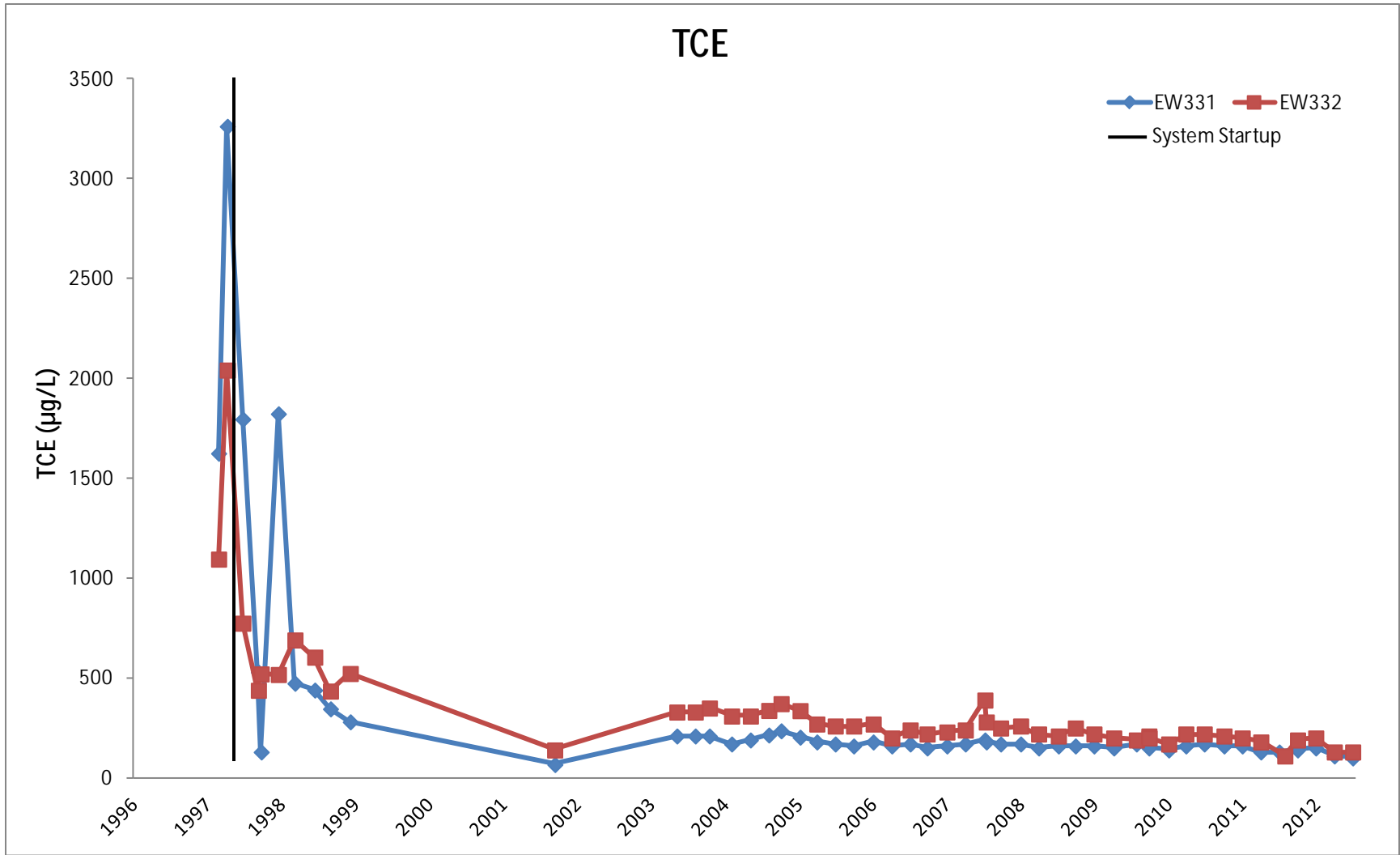
FIGURE No. FFA SemiAnnual20110906_NEP RGA_R0.mxc
DATE 09-06-2011

Figure B.2. Northeast Plume with McNairy Topography



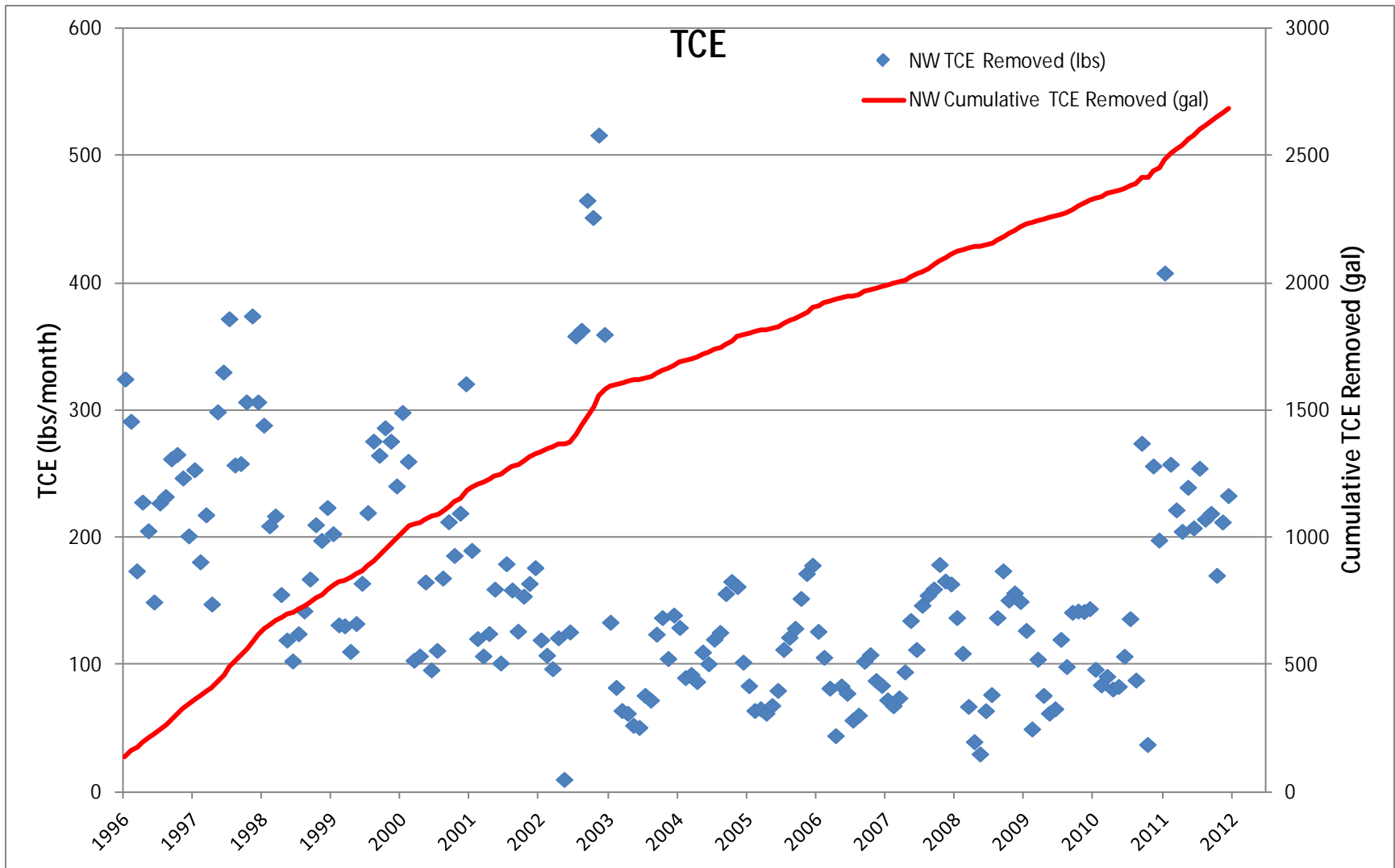
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.3. Northeast Plume Containment System Influent TCE Concentrations



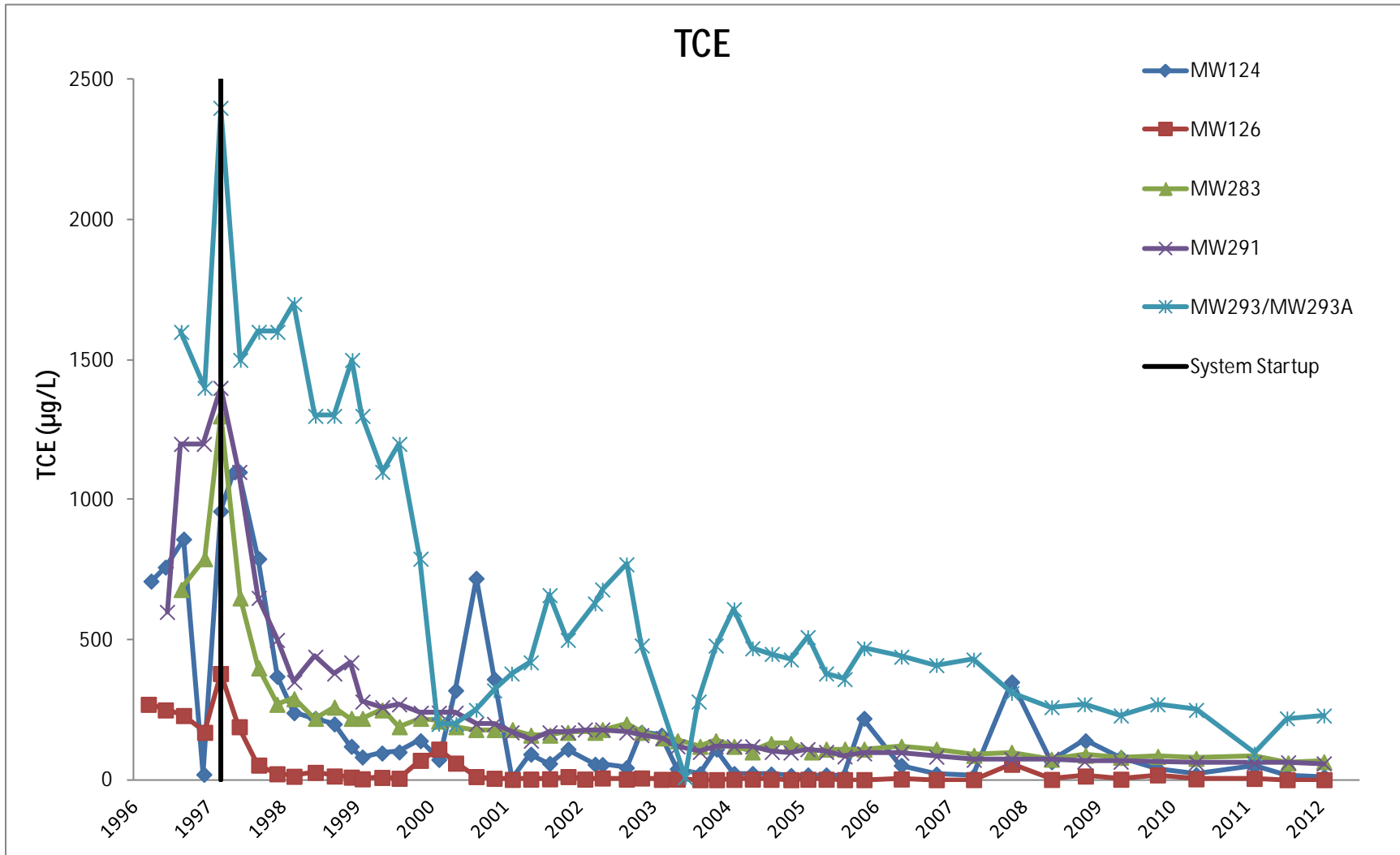
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.4. Northeast Plume—TCE Concentrations in Extraction Wells



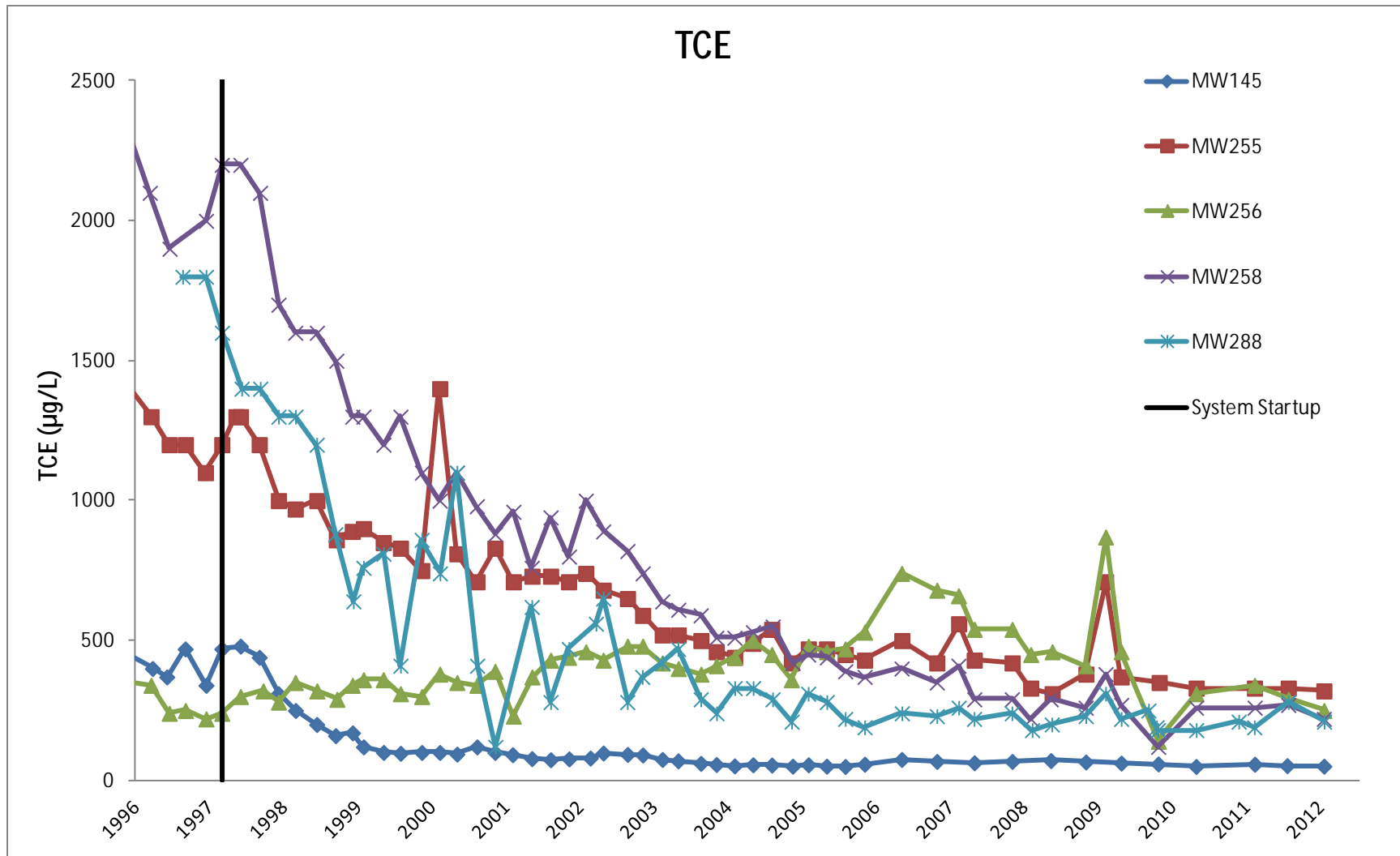
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.5. Northeast Plume Containment System TCE Removed



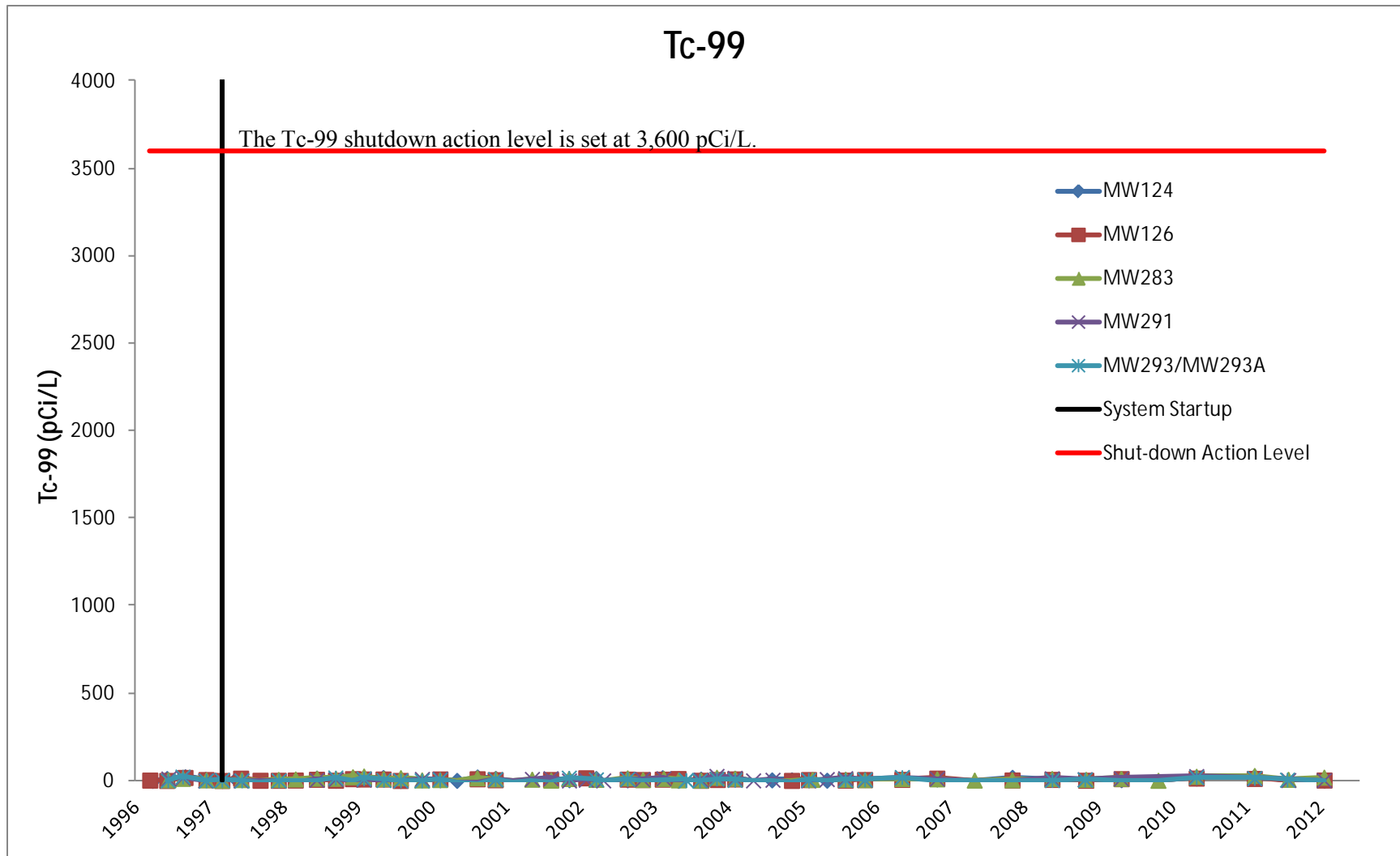
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.6. Northeast Plume—TCE Concentrations in Downgradient Wells



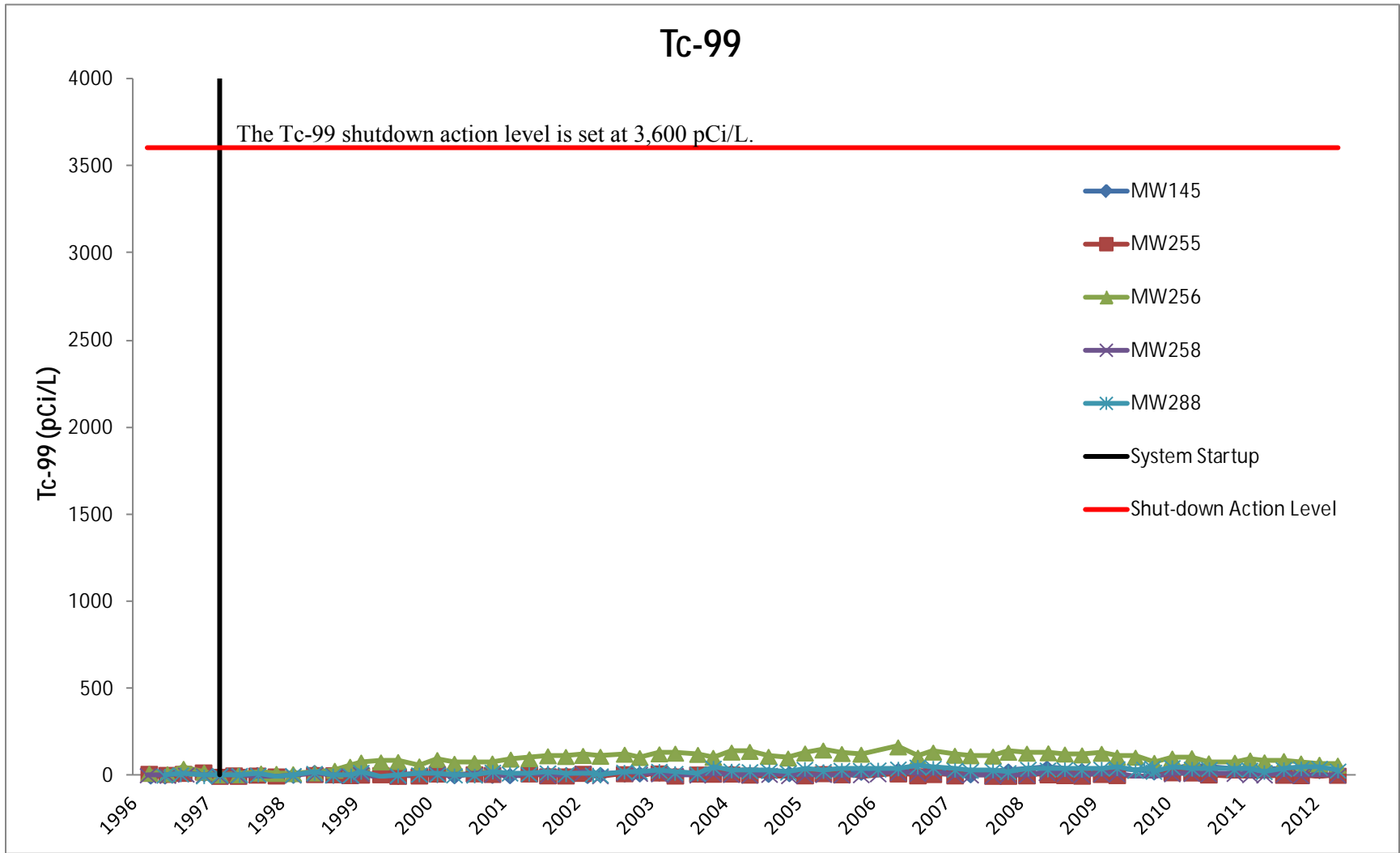
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.7. Northeast Plume—TCE Concentrations in Upgradient Wells



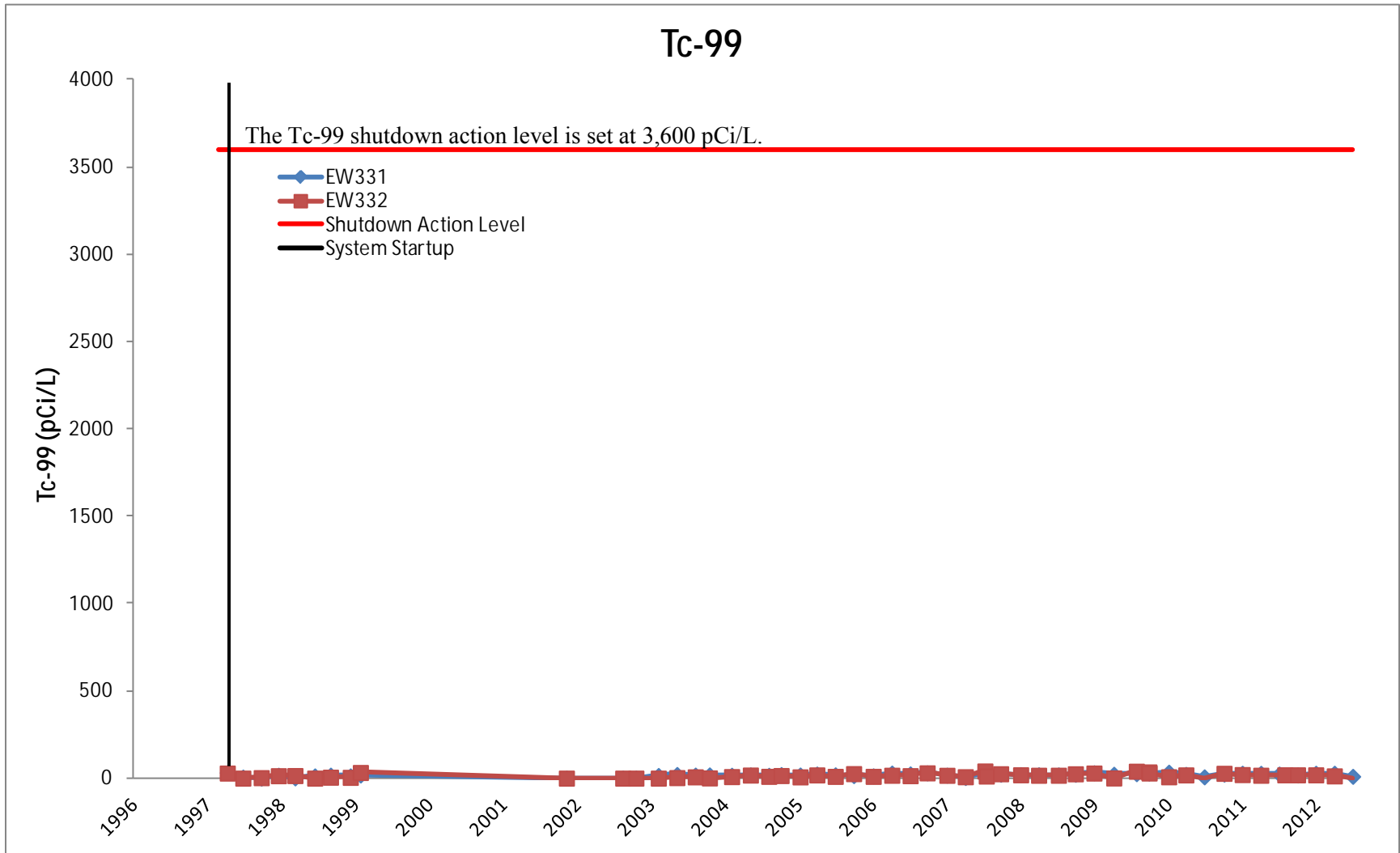
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.8. Northeast Plume—Tc-99 Activities in Downgradient Wells



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.9. Northeast Plume—Tc-99 Activities in Upgradient Wells



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.10. Northeast Plume—Tc-99 Activities in Extraction Wells

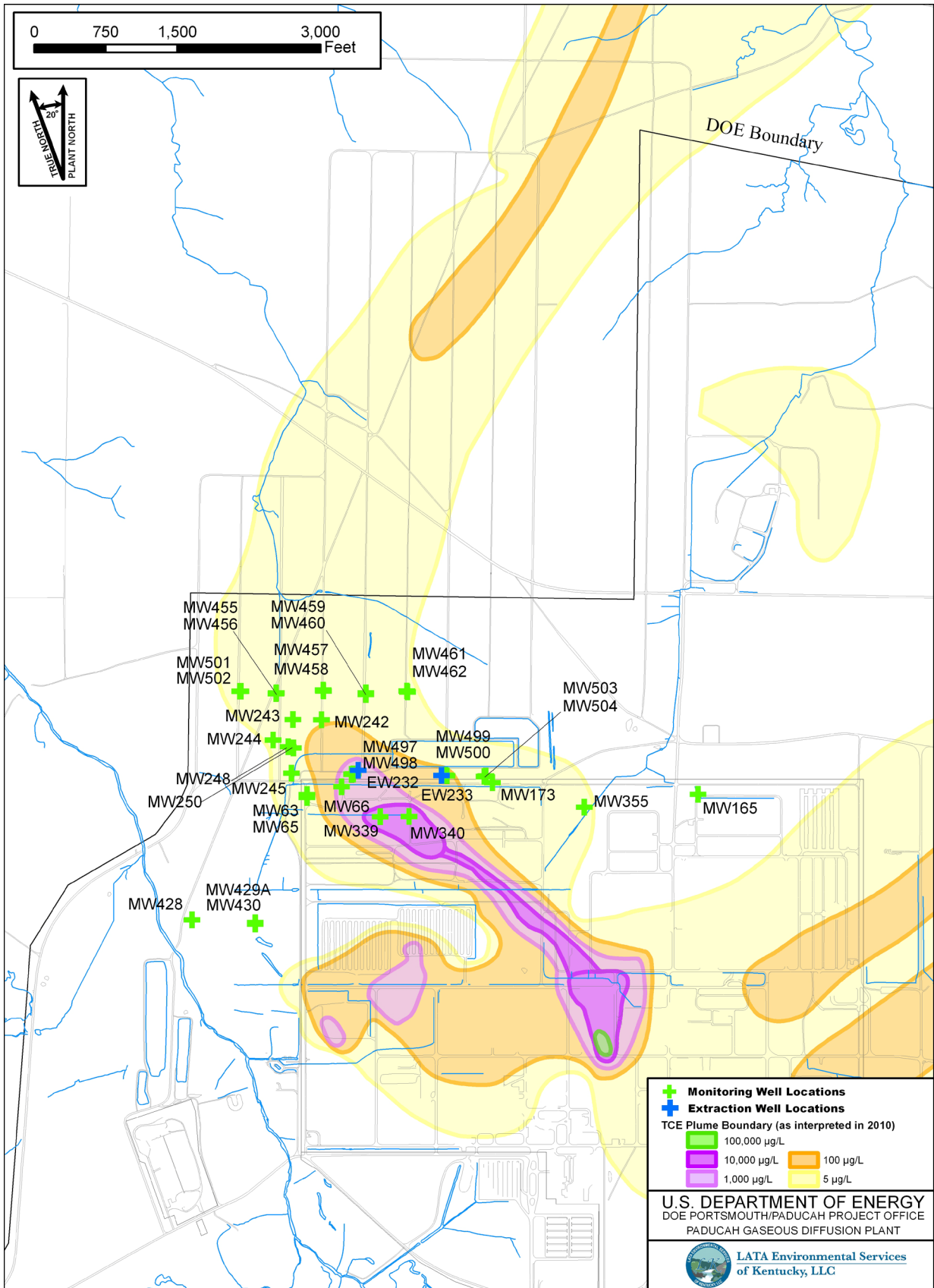


FIGURE No. FFA SemiAnnual20110906_NWP_R1.mxd
DATE 09-15-2011

Figure B.11. Northwest Plume Groundwater Wells

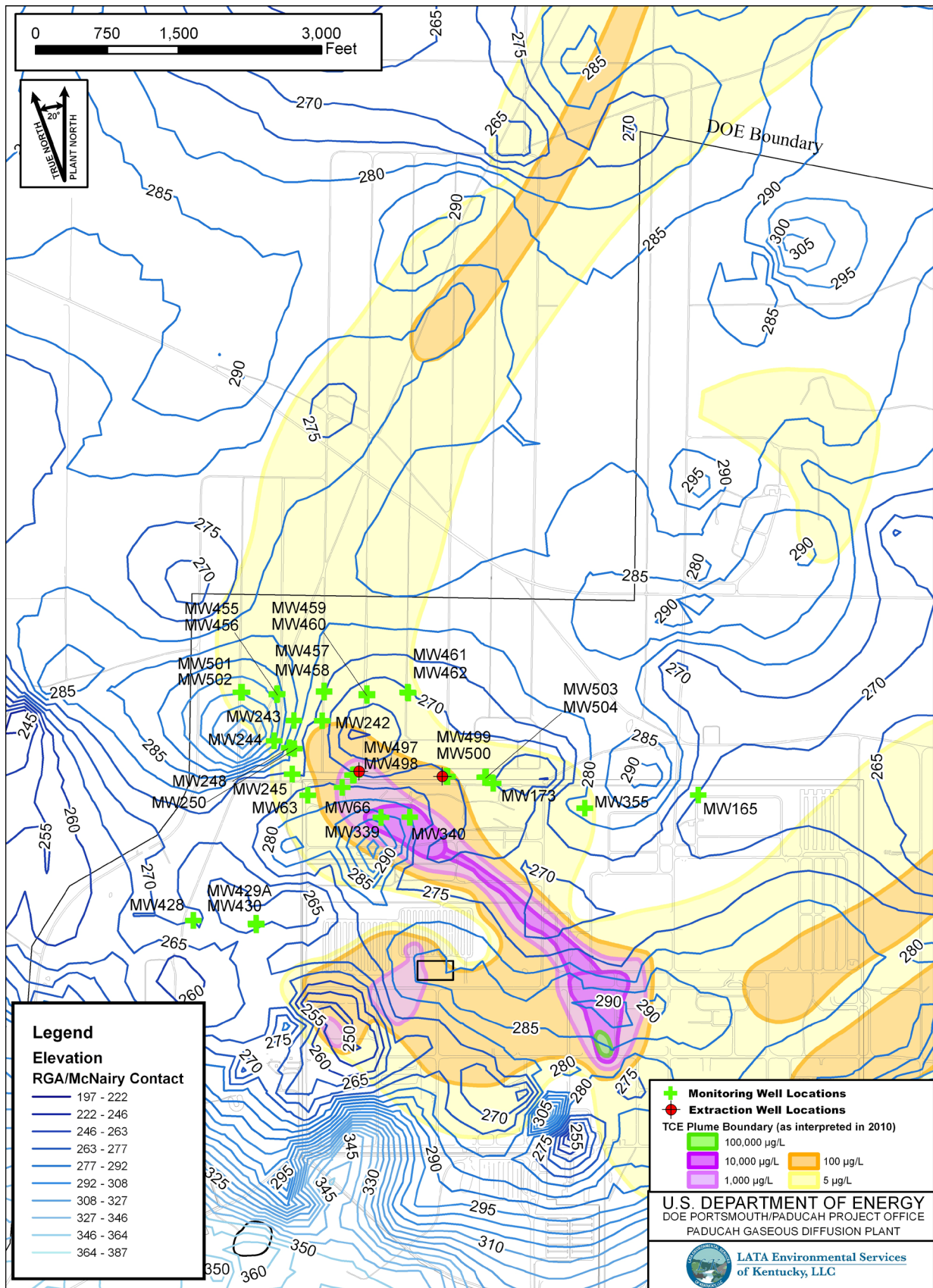
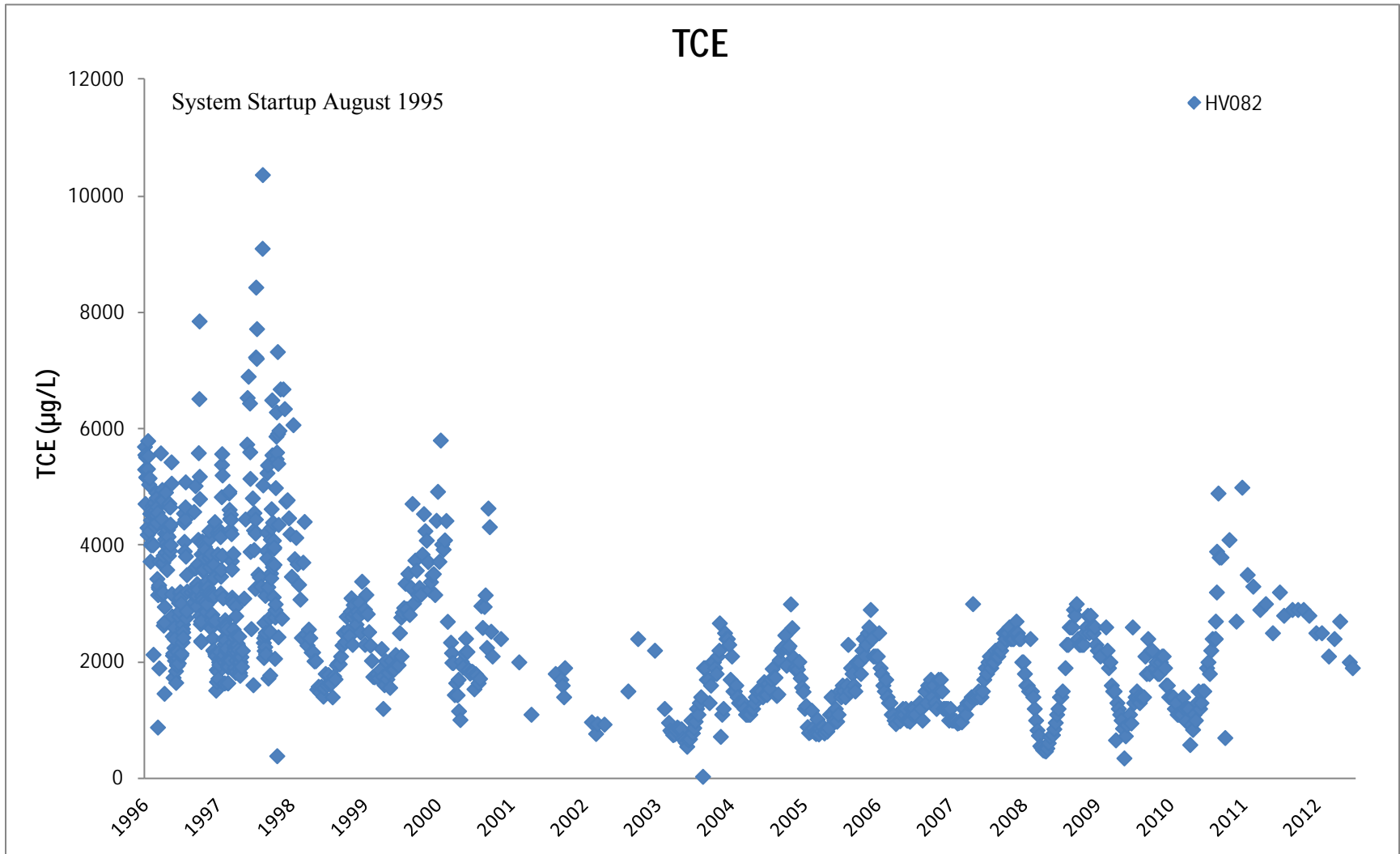


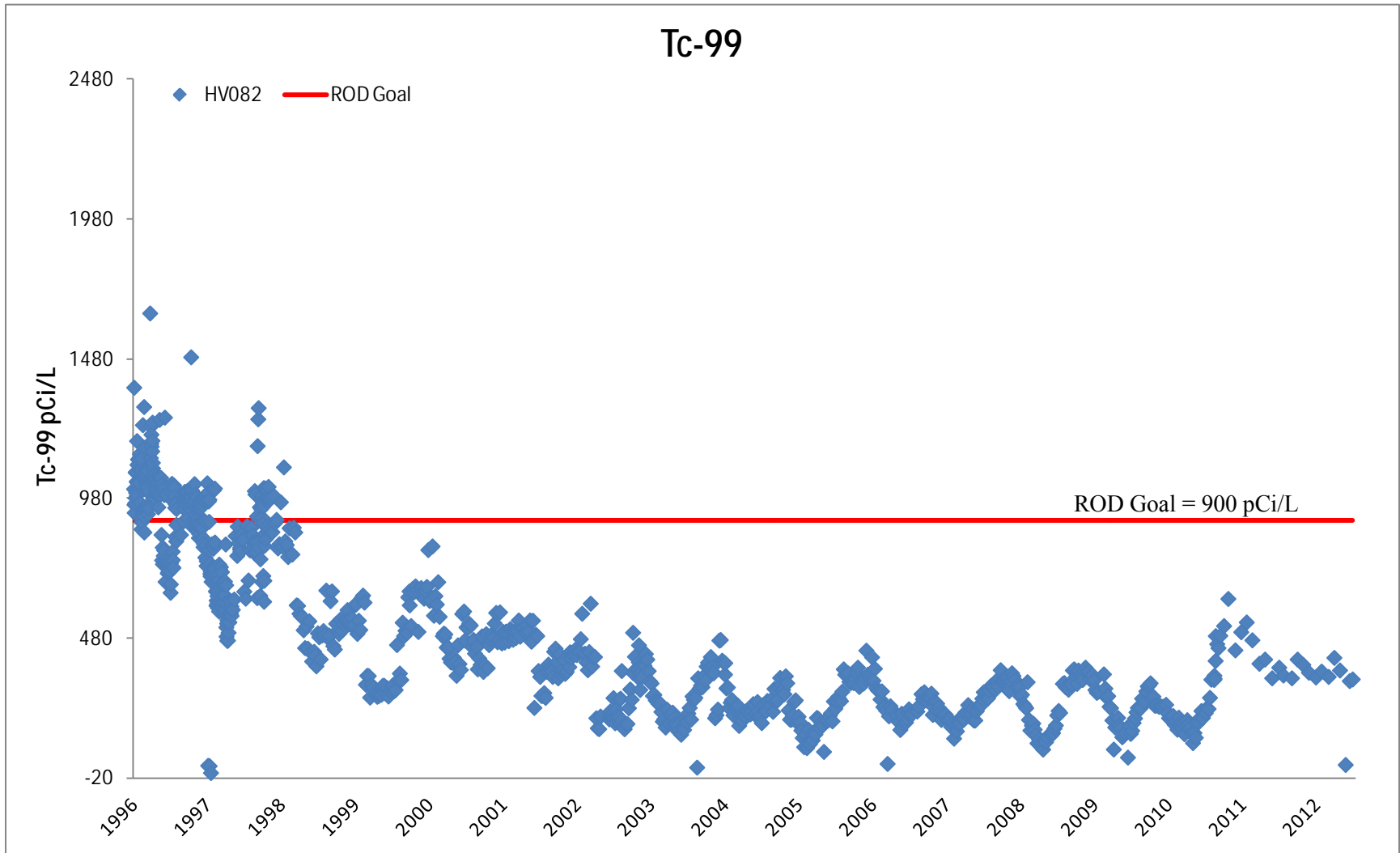
FIGURE No. FFA SemiAnnual20110906_NWP RGA_R1.mxc
DATE 09-15-2011

Figure B.12. Northwest Plume with Top of McNairy Topography



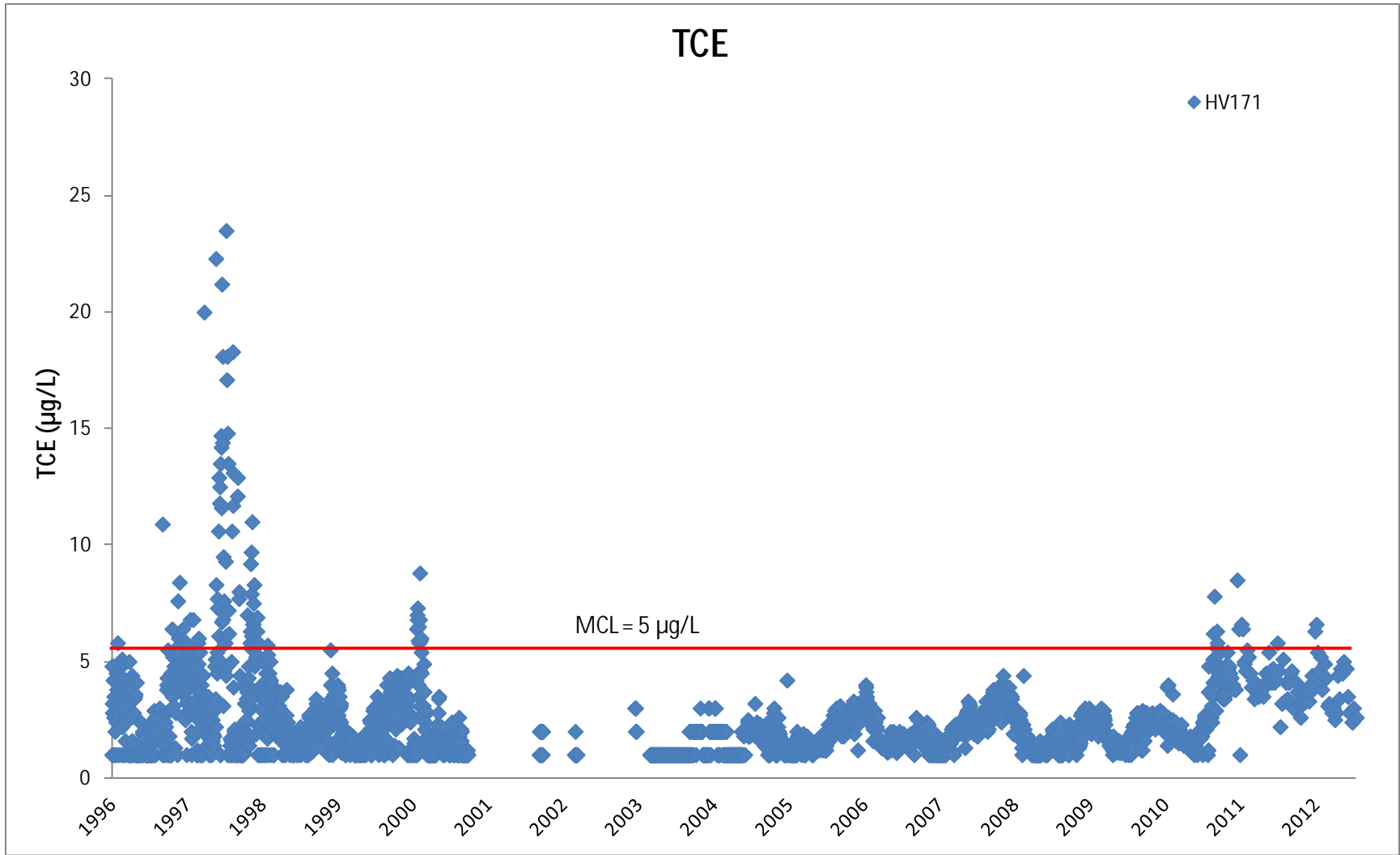
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.13. Northwest Plume Groundwater System Influent TCE Concentrations



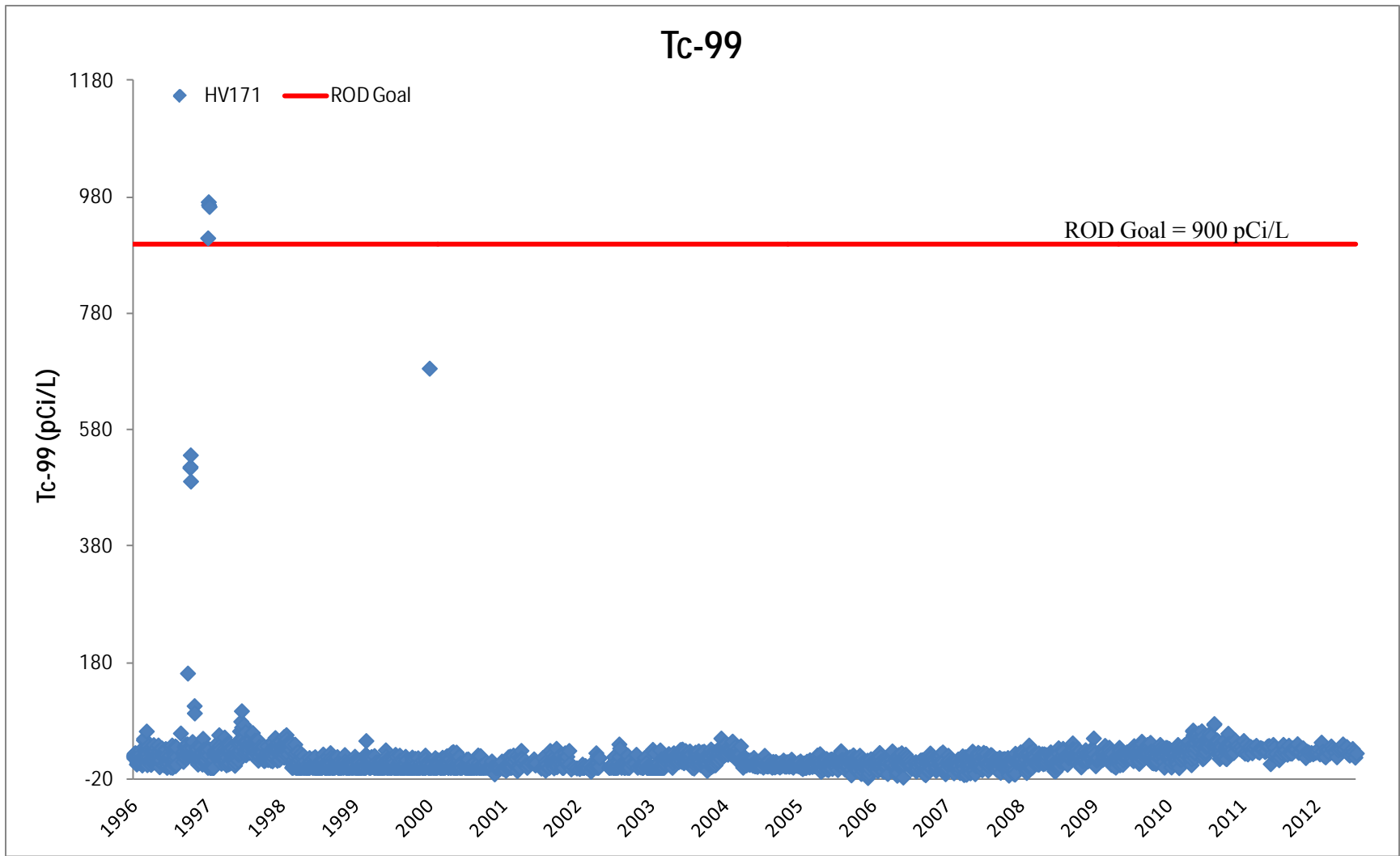
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.14. Northwest Plume Groundwater System Influent Tc-99 Activities



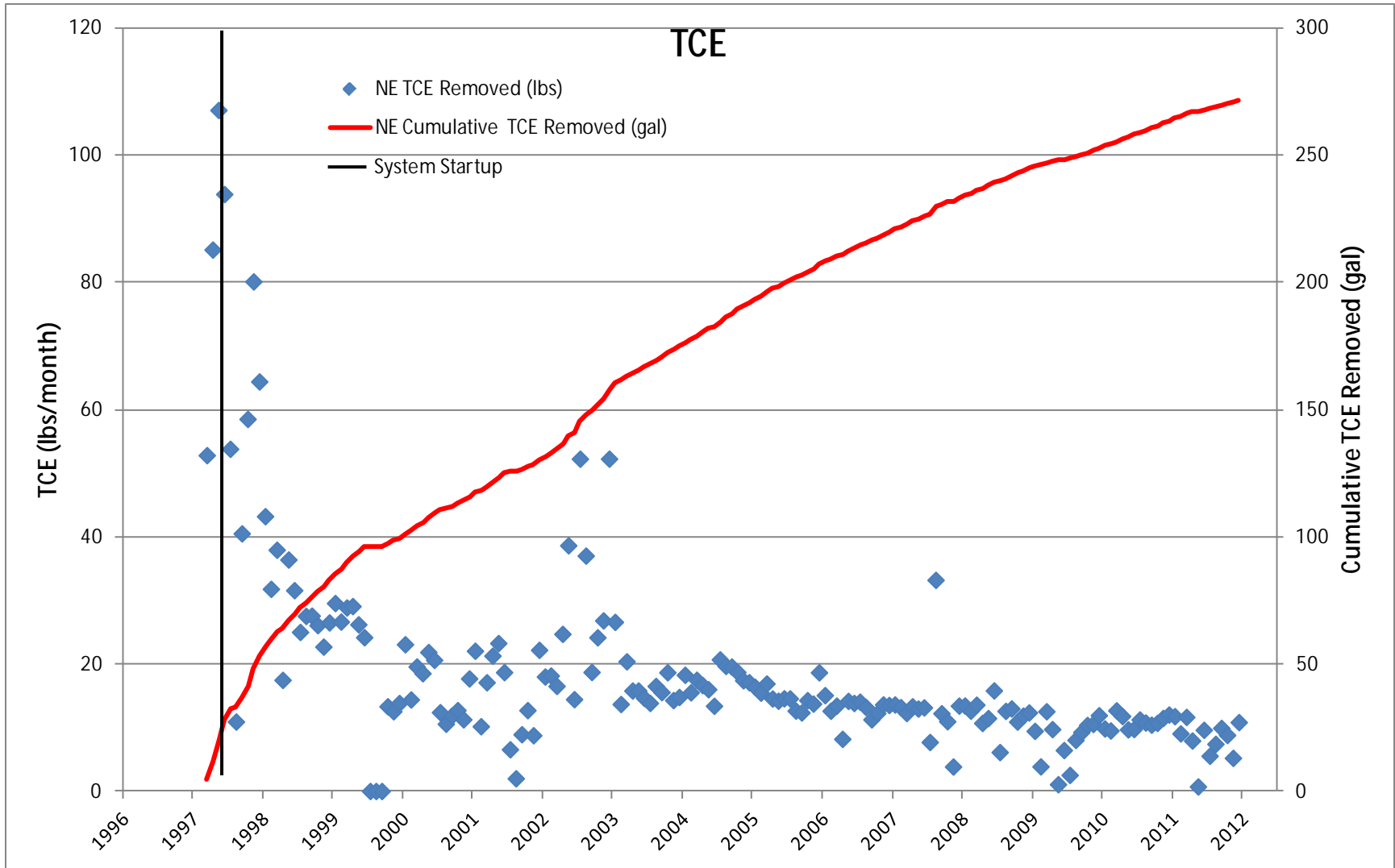
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.15. Northwest Plume Groundwater System Effluent TCE Concentrations



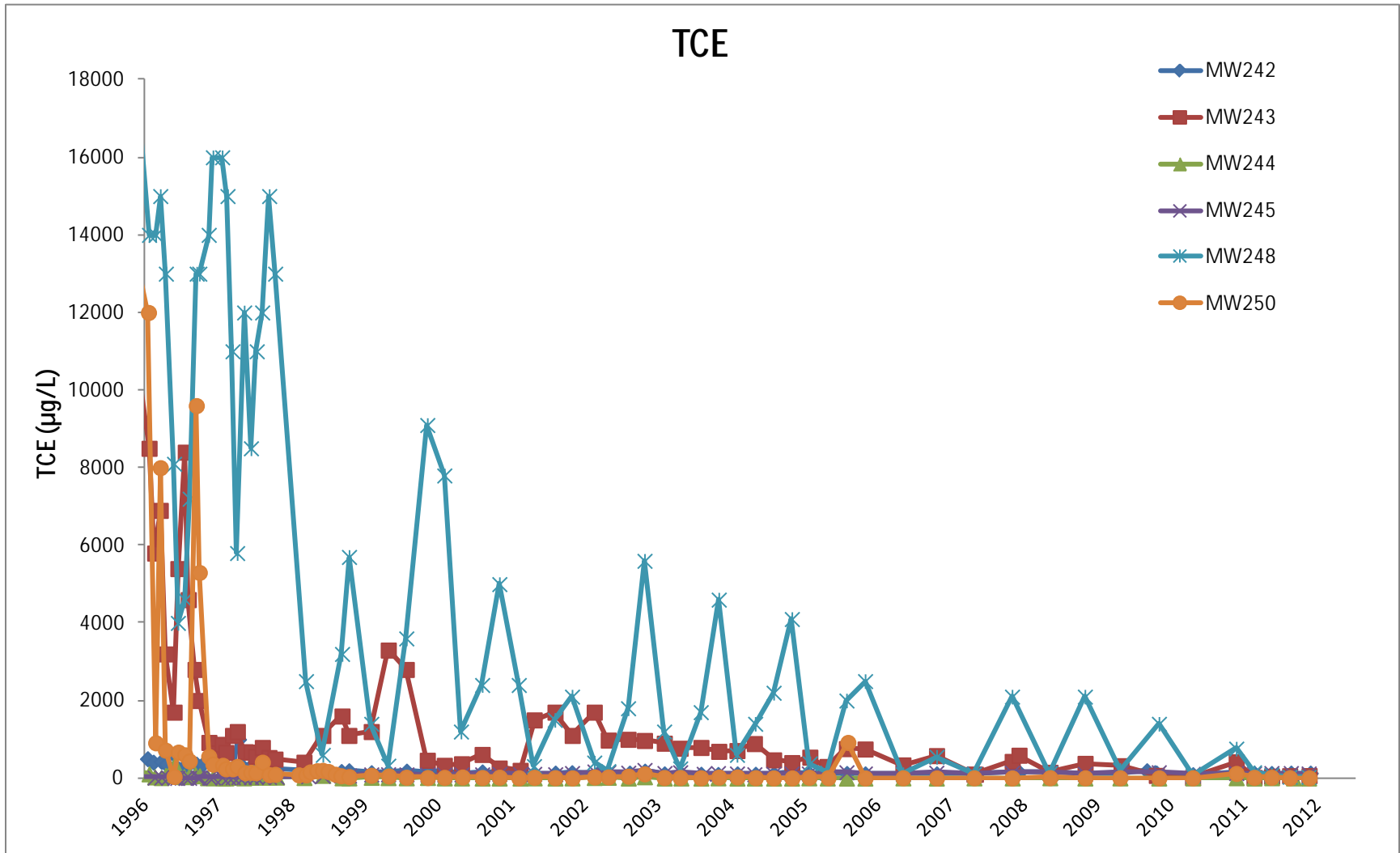
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.16. Northwest Plume Groundwater System Effluent Tc-99 Activities



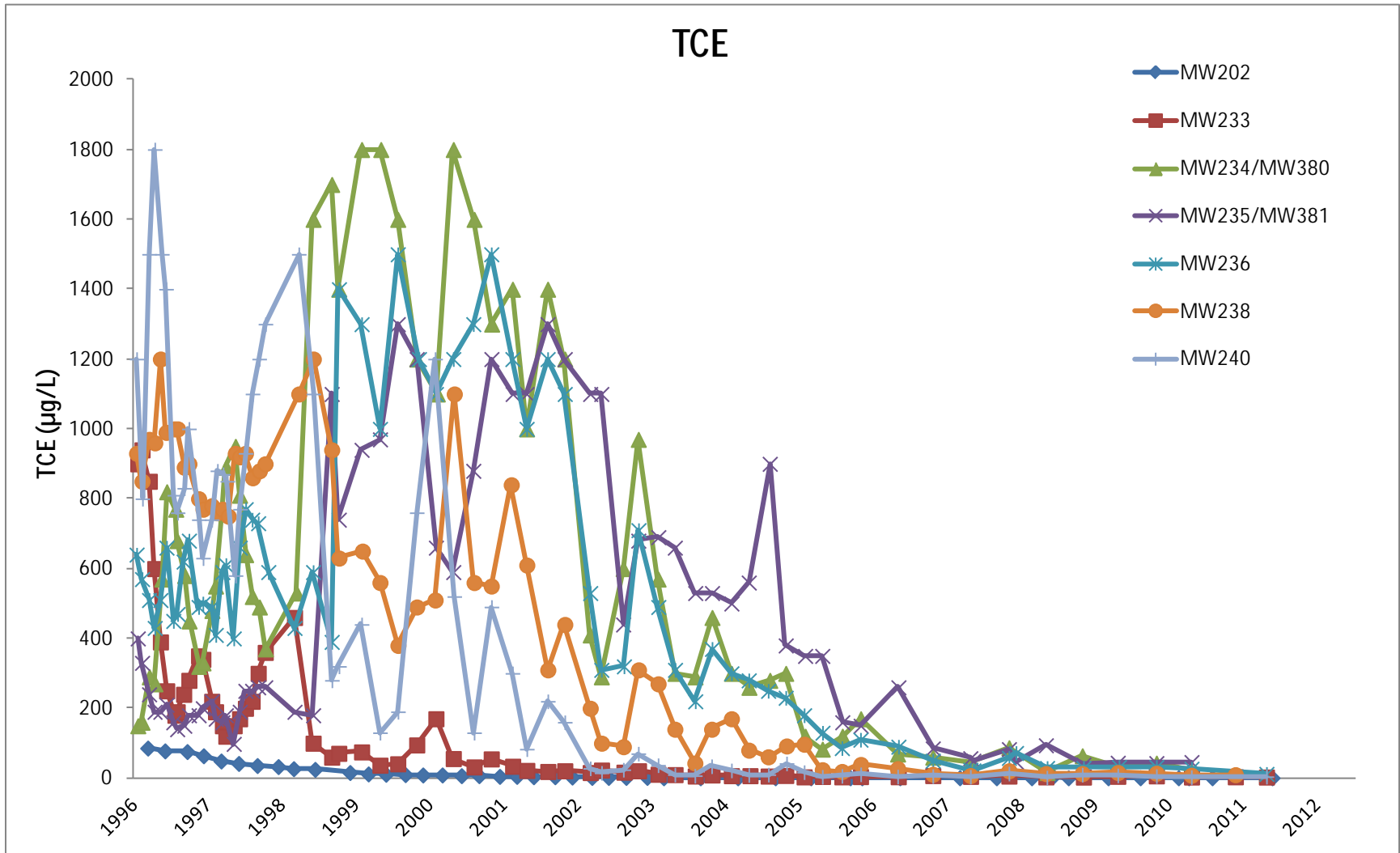
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.17. Northwest Plume Groundwater System TCE Removed



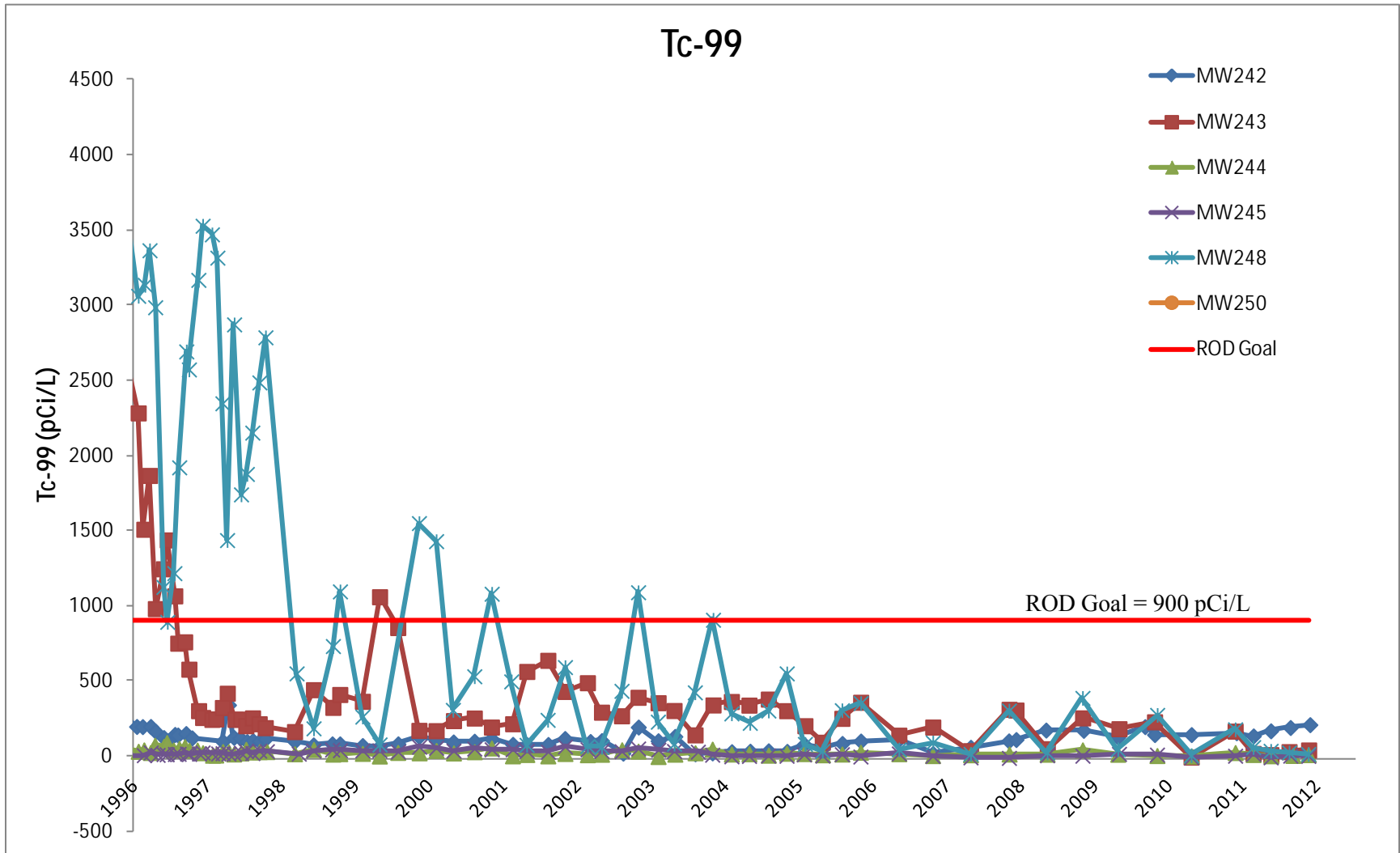
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.18. Northwest Plume—South Well Field TCE Concentrations



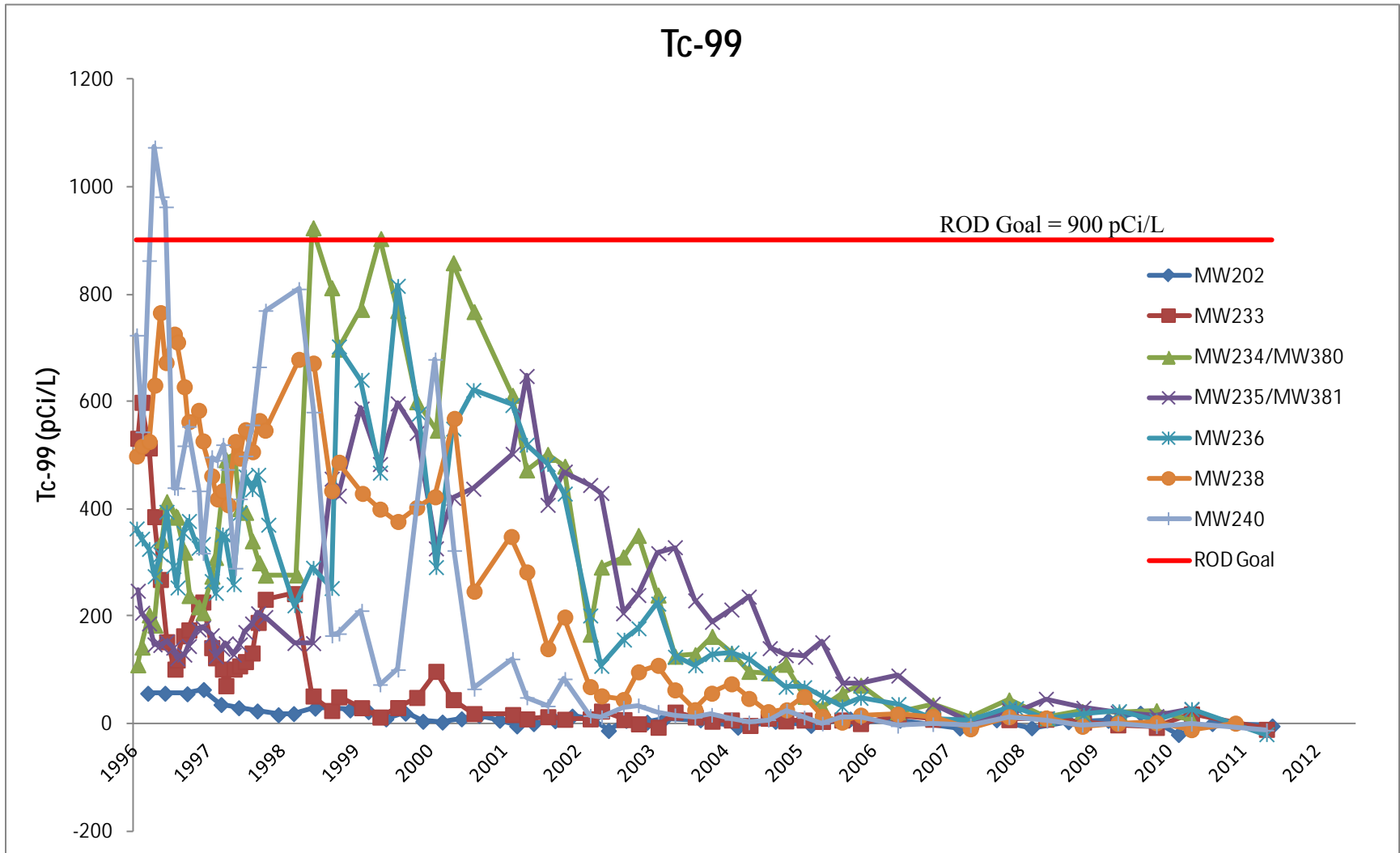
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.19. Northwest Plume—North Well Field TCE Concentrations



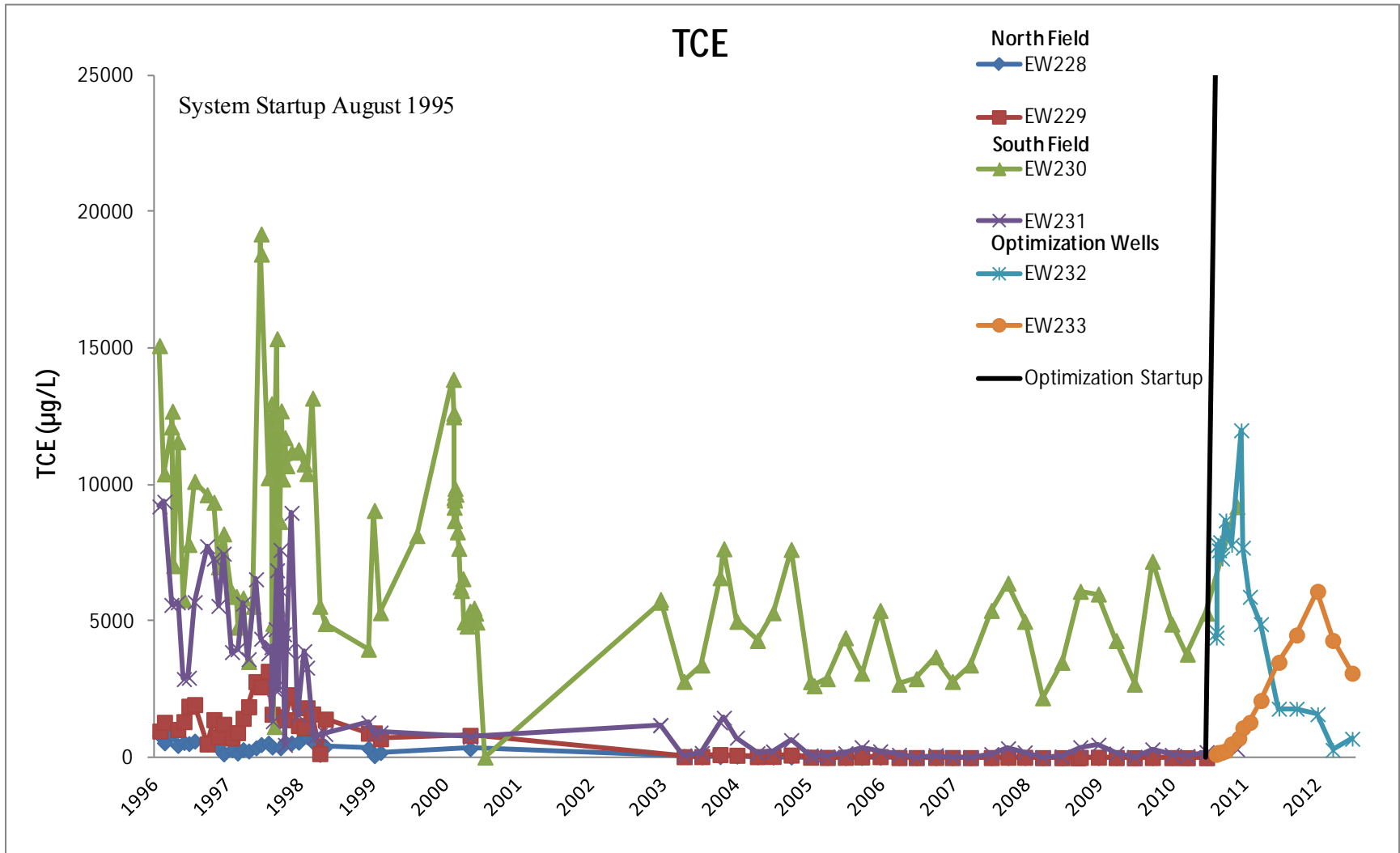
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.20. Northwest Plume—South Well Field Tc-99 Activities



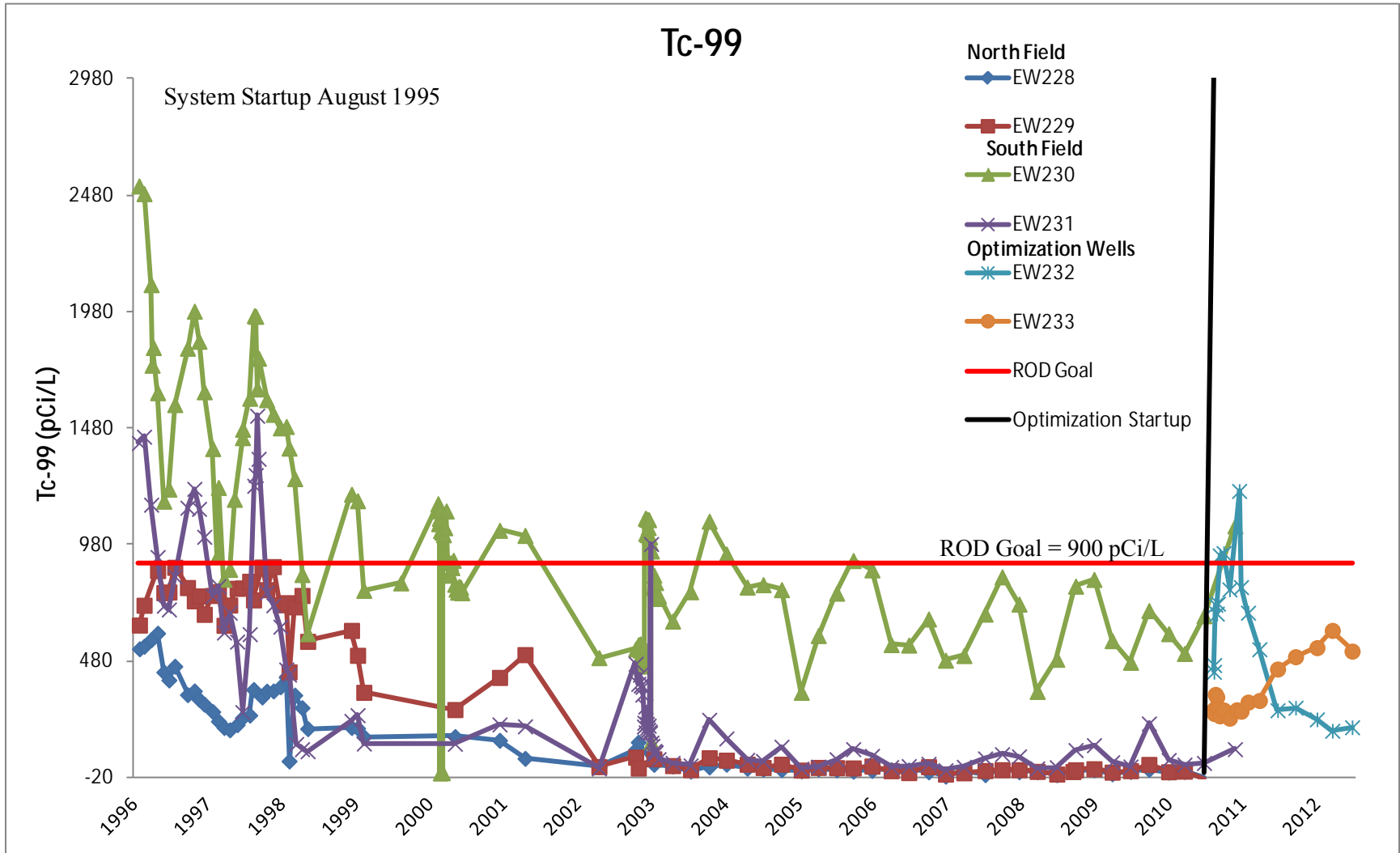
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.21. Northwest Plume—North Well Field Tc-99 Activities



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.22. Northwest Plume—TCE Concentrations in Extraction Wells



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.23. Northwest Plume—Tc-99 Activities in Extraction Wells

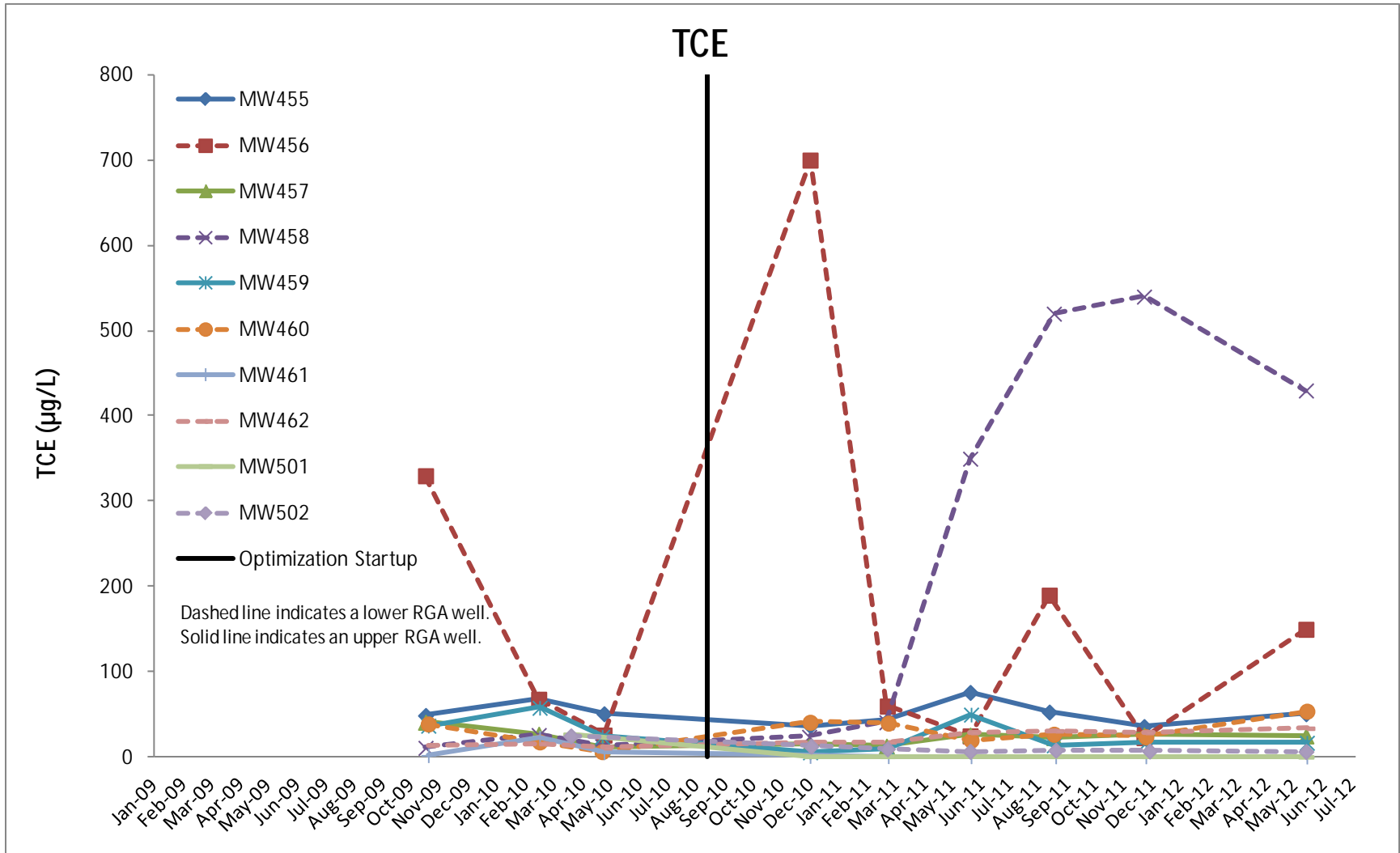


Figure B.24. Northwest Plume—New Well Field TCE Concentrations

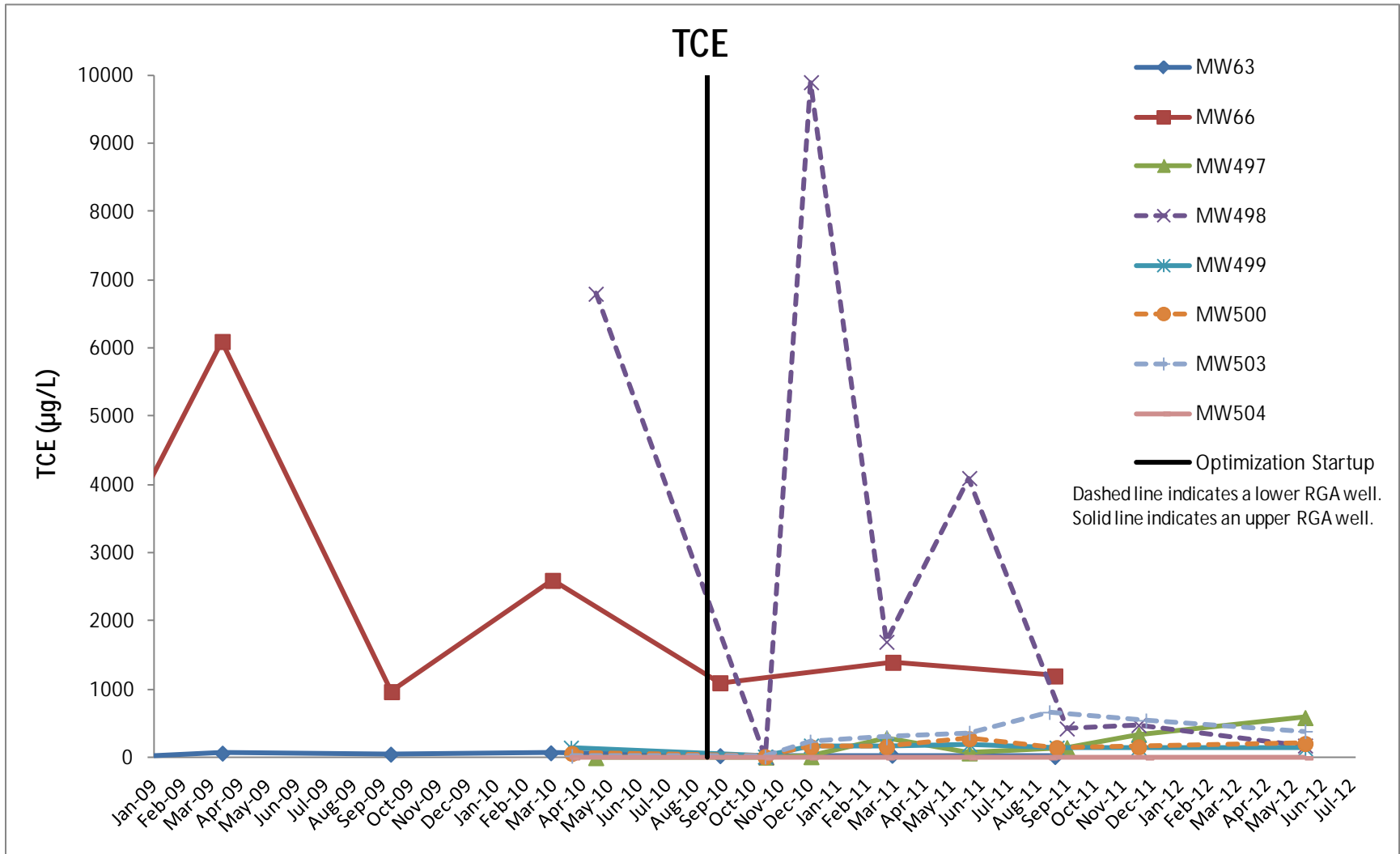


Figure B.25. Northwest Plume—Additional Well Field TCE Concentrations

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APPENDIX C

C-746-K LANDFILL DATA

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C-746-K Landfill groundwater data for reporting period 10/1/2011–3/31/2012 have been included.

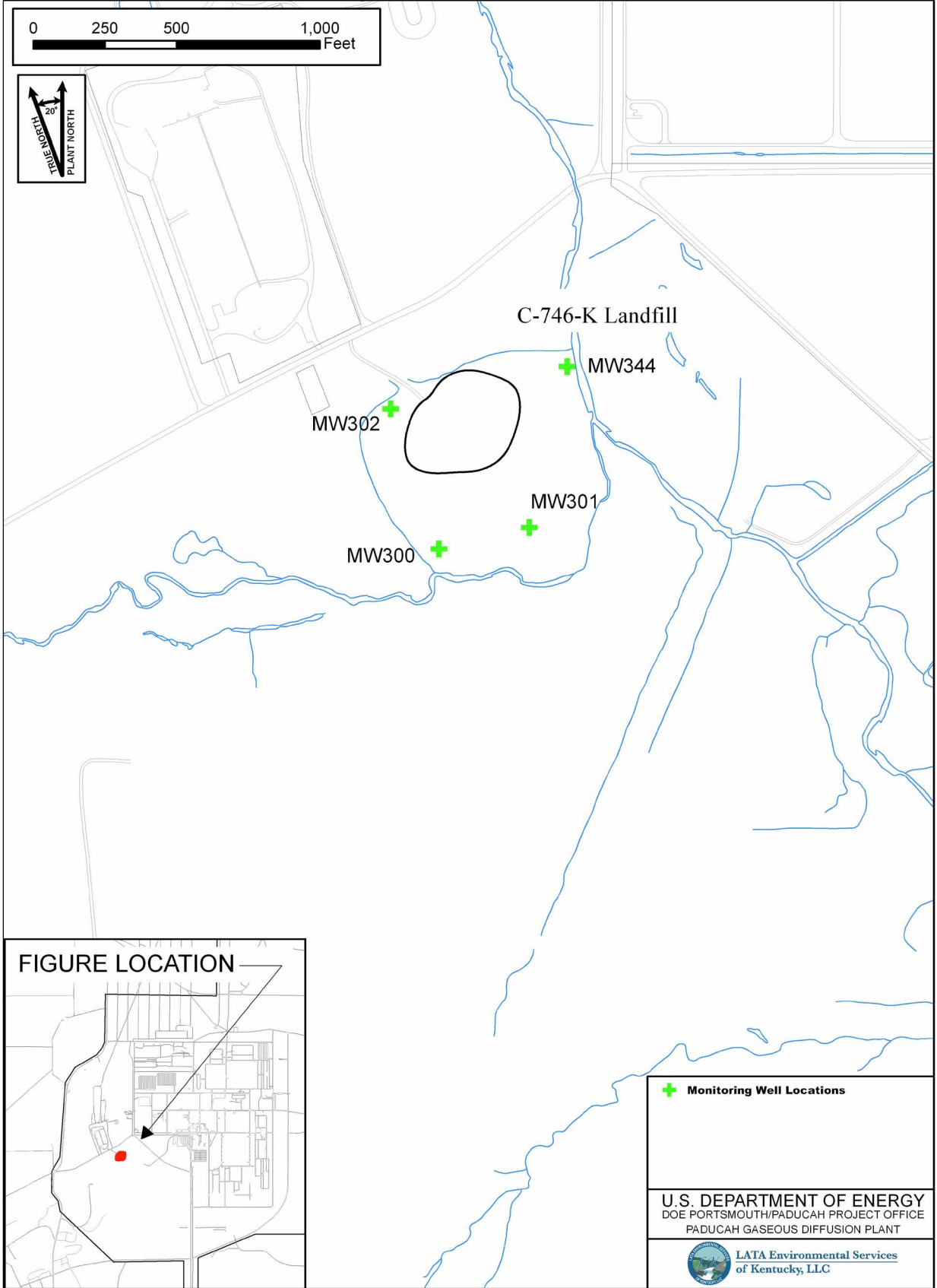
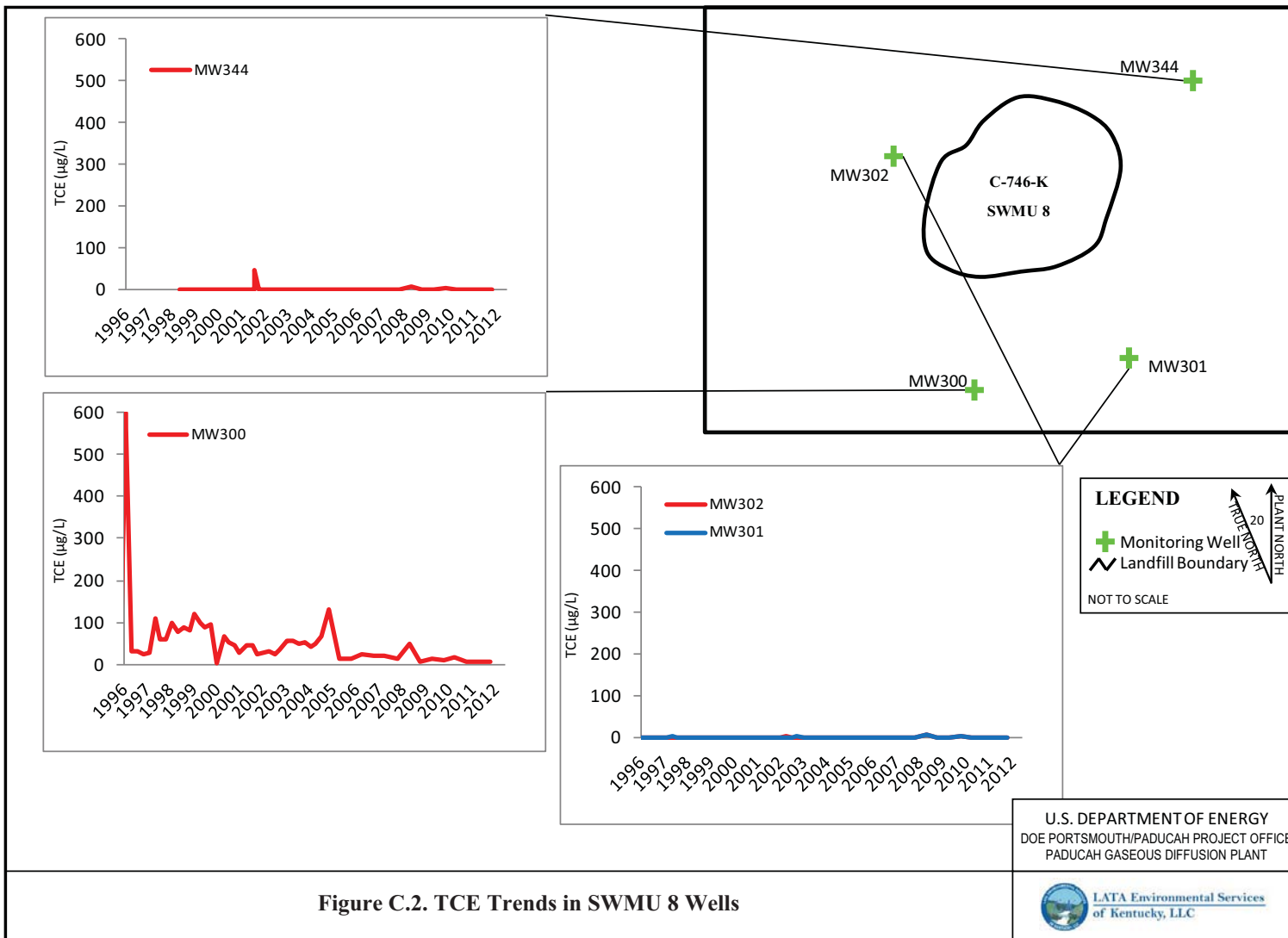


FIGURE No. FFA SemiAnnual20110401_746K_R0.mxc
DATE 04-01-2011

Figure C.1. Monitoring Well Locations



C-746-K Landfill Monitoring

Water Quality Records for

MW300

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
5/31/1994	27	18	23	< 5		87.7	1230	50.7	25.8	< 31.3	7.68	3220303
3/21/1995	52	72	61	< 50	< 50		973	49	33.8	27	1	950322-056
7/12/1995	38	< 50	< 50	< 50	< 50		761	52.4	47	143	3	950713-153
9/12/1995	38	< 50	< 50	< 50	< 50	52.8	679	57.5	24	33	12	950913-029
12/7/1995	42	56	47	< 5	< 5		767	44.6	59.9	-6	0	951211-006
2/13/1996	600	54	< 50	< 50	< 50	64.5	985	60			4	960214-062
5/9/1996	30	< 50	< 50	< 50	< 50	44.9	792	44.9	.4	16	2	960513-011
8/19/1996	30	< 50	< 50	< 50	< 50	37.2	568	44.4	22.9	31.5	0	960819-088
11/18/1996	26	< 50	< 50	< 50	< 50	35.8	570	37.5	7.4	48	0	961118-095
2/10/1997	28	49	30	< 25	< 25	21.3	412	20.6	5	45	0	970211-009
5/13/1997	110	120	61	< 50	< 50	31.3	518	27.6	5.2	11	0	970514-042
8/7/1997	59	< 50	68	< 50	< 50	27	497	31.2	12	13	0	970807-104
11/10/1997	59	110	66	< 25	< 25	31.8	521	32.3	-7.7	6	4	971110-114
2/4/1998	100	240	140	< 50	< 50	36.2	674	33.8	< -4	< 2	< -2	C980370056
5/19/1998	78	460	< 250	< 250	< 250	30.8	534	30.5	< 6.3	< 54	< 4.8	C981400029
8/11/1998	89	230	120	< 5	< 5	27.3	532	31	< 37.7	< 11	< 9.2	C982240047
11/16/1998	80	< 250	< 250	< 250	< 250	25.2	406	28.1	32.52	< 37.03	< -4.1	C983200080
1/25/1999	120	250	< 250	< 250	< 250	27	490	27.4	< 1.11	< 4.76	< -8.4	C990250154
4/19/1999	100	240	110	< 100	< 100	26.7	559	25.7	< 28.48	< 55.05	< -4.95	C991090060
7/15/1999	88	210	< 100	< 100	< 100	24.8	506	28.3	< 2.73	< -19.36	< 3.06	C991960146
10/14/1999	94	210	< 200	< 200	< 200	23.2	500	27.2	< 18.8	< 40.17	< -1.57	C992870104
1/13/2000	2	< 5	< 5	< 5	< 5	15.9	301	19	< -4.85	< -7.6	< 8.59	C000130123
1/13/2000	2	< 5	< 5	< 5	< 5	19.2	303	20.8	< -2.5	< 24.46	< 8.53	C000130120
4/27/2000	67	130	80	< 50	< 50	18.2	310	21.4	< 10.97	66.12	< -1.63	C001190009
7/27/2000	52	< 100	< 100	< 100	< 100	15.2	318	23.7	< 15.87	< 55.01	< 11.9	C002090106
10/16/2000	46	100	60	< 5	< 5	14.8	278	23	< 8.41	< 36.69	< 2.75	C002910044
1/10/2001	28	64	39	< 5	< 5	10.3	217	18	< -9.46	< 4.09	< 2.2	C010100097
4/16/2001	44	100	64	< 50	< 50	15	340	24.1	< -7.63	< 25.6	< 27.4	C011060085
7/24/2001	44	93	59	< 50	< 50	16.4	331	28.6	< 27	< 8.41	< 7.99	C012060008
10/15/2001	26	< 50	< 50	< 50	< 50	10.6	220	18.8	< 32.5	33.9	< -2.48	C012880074
1/22/2002	29	< 100	< 100	< 100	< 100	10	286	20.9	< 43.8	< 19.4	< 3.36	C020220046
4/10/2002	30	57	< 50	< 50	< 50	13	381	26.6	< -15.1	< 50.8	< 2.75	C021010048

C-6

C-746-K Landfill Monitoring

Water Quality Records for

MW300

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003
7/24/2002	26	< 100	< 100	< 100	< 100	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
10/3/2002	34	66	< 50	< 50	< 50	.0101	.33	36.9	< 26.9	< 24.9	17.5	C022760027
1/30/2003	58	160	100	< 50	< 50	10.8	395	23.5	< 3.65	< 3.52	< 1.19	C030310020
4/15/2003	58	180	< 100	< 100	< 100	6.86	437	22.9	< 2.47	< 20.3	< 4.19	C031050068
7/30/2003	50	< 100	< 100	< 100	< 100	14.3	382	25.4	< 51.5	53.5	< 4.26	C032110045
7/30/2003	42	< 100	< 100	< 100	< 100	21.9	409	27	< 9.4	< 48.7	< 1.31	C032110044
10/21/2003	53	92	63	< 50	< 50	.55	497	24.9	< 39.1	< 38	< -4.59	C032950017
1/26/2004	41	120	< 100	< 100	< 100	.471	414	1.91	< 50.1	< 1.36	< 6.71	C040260079
4/21/2004	50	140	< 100	< 100	< 100	.591	327	17.2	< -5.55	< 8.26	< -1.58	C041130033
7/15/2004	68	160	< 100	< 100	< 100	.69	424	24.2	< 21.8	< -11.1	< -7.47	C041970166
7/15/2004	55	140	< 100	< 100	< 100	.882	396	22.9	< 15	< 17.4	< -6.91	C041970167
11/9/2004	130	110	< 100	< 100	< 100	.99	369	22.9	< 12	< 29.7	< -2.6	C043150018
4/27/2005	12	51	< 50	< 50	< 50	.289	126	11.8	< 19.1	39.8	< -2.41	C051170049
10/25/2005	14	65	< 50	< 50	< 50	.344	178	15.2	< 2.14	29.6	< 6.49	C052990006
10/25/2005	13	55	< 50	< 50	< 50	.259	199	16.1	< 18.1	38.4	< 8.37	C052990007
4/11/2006	26	120	77	< 50	< 50	< .2	161	16.5	< .896	< 28.2	< -2.86	C061020009
10/23/2006	< 20	< 100	< 100	< 100	< 100	.334	124	16.2	< -.251	< 16.2	< 8.62	C062960050
4/12/2007	22	120	60	< 50	< 50	< .2	203	18.1	< -3.16	< 33.1	< -1.66	C071030007
10/25/2007	14	120	77	< 5	< 5	< .2	162	19.7	< -.658	< 25.1	< 1.82	C072980183
10/25/2007	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
4/28/2008	< 5	42	34	< 25	< 5	< .2	117	16.8	< -.155	64.4	< .8	C081200001
10/29/2008	< 5	48	32	< 25	< 5	< .2	63.9	15	< 6.06	43.7	< 11.7	C08304013001
10/29/2008	< 5	46	29	< 25	< 5	< .2	110	16.9	< 5.22	34.8	< 6.45	C08304013002
4/30/2009	14	93	52	< 5	< 5	< .2	104	27.4	< -.39	37	< 5.55	C09120015001
10/19/2009	11	39	24	< 2	< 2	< .2	36.9	11.2	< -1.13	28.4	< -8.36	C09292035001
10/19/2009	9	41	24	< 2	< 2	< .2	65	9.73	< -2.41	27.1	< -8.19	C09292035002
4/20/2010	16	130	58	< 25	< 5	< .2	121	19.2	< -4.11	33.6	< -1.74	C10110009002
10/13/2010	8	130	72	< 25	< 5	< .4	241	27.2	< 21.9	48.4	< -7.38	C10286021002
10/13/2010	8	140	78	< 25	< 5	< .4	165	25.5	< 2.34	62.3	< -3.09	C10286021003
4/26/2011	< 5	68	44	< 25	< 5	.625	129	14.1	< .246	34.3	< -.327	C11116009001
10/19/2011	< 5	71	44	< 5	< 5	.358	78.8	15.8	< 13.2	53.9	< -4.3	C11292015002

C-7

C-746-K Landfill Monitoring

Water Quality Records for

MW300

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 5	68	42	< 5	< 5	.558	155	18.4	< 2.93	65.7	< .89	C11292015001
4/24/2012	7.8	100	59	< 5	< 5	< 2	218	18.2	< 3.57	80.6	< 3.84	C12115011001

C-8

C-746-K Landfill Monitoring

Water Quality Records for

MW301

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
6/1/1994	< 5	< 5	3	< 5		.823	470	28.3	< 10.4	< 19.4	5.07	3220101
3/21/1995	< 1	< 5	< 5	< 5	< 5		236	22	-5.9	34	3	950322-052
7/12/1995	< 1	< 5	< 5	< 5	< 5		249	22.1	14	102	9	950713-157
9/12/1995	< 1	< 5	< 5	< 5	< 5	< .625	171	17.8	-2.6	17	3	950913-025
12/7/1995	1	< 5	< 5	< 5	< 5		99	12.3	30.3	49	6	951211-014
2/13/1996	< 1	< 5	< 5	< 5	< 5	.766	166	18.9	6.3	82	0	960214-066
5/9/1996	< 1	< 5	< 5	< 5	< 5	.975	224	18	.3	22	3	960513-010
8/19/1996	< 1	< 5	< 5	< 5	< 5	1.58	284	21.3	5.5	42.4	7	960819-087
11/18/1996	< 1	< 5	< 5	< 5	< 5	1.32	175	19.5	-1.4	47	0	961118-096
11/18/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	< .05	6	15	0	961118-097
2/10/1997	< 1	< 5	< 5	< 5	< 5	1.13	225	19.8	12.6	47	0	970211-015
5/13/1997	4	< 5	< 5	< 5	< 5	< .75	248	22	-11	45	0	970514-043
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	203	17.2	19.2	160	0	970807-105
11/10/1997	< 1	< 5	< 5	< 5	< 5	< 1	72.4	10	4.3	18	3	971110-115
2/4/1998	< 1	< 5	< 5	< 5	< 5	2.44	160	15.8	< -11.3	106	< 4	C980370057
5/19/1998	< 1	< 5	< 5	< 5	< 5	< 1	169	17.4	< -2.3	< 25	< 8.2	C981400028
8/11/1998	< 1	< 5	< 5	< 5	< 5	2.13	170	16.3	< -2.3	< 35	< 4.3	C982240046
11/16/1998	< 1	< 5	< 5	< 5	< 5	< 1	102	12.8	< 11.32	55.82	< -15.9	C983200081
1/25/1999	< 1	< 5	< 5	< 5	< 5	< 1	138	14.9	< 3.83	< 52.42	< -5.8	C990250155
4/19/1999	< 1	< 5	< 5	< 5	< 5	< .2	203	18.2	< -6.97	< 49.78	< -10.6	C991090061
7/15/1999	< 1	< 5	< 5	< 5	< 5	< .2	210	17.5	< -12.3	< 32.1	< -6.69	C991960147
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	73.1	10.3	< 1.83	41.56	< .419	C992870105
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	73.7	10.6	17.2	50.79	< 2.57	C992870106
1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	77.8	9.32	< 6.93	52.05	< 6.54	C000130122
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	152	15.6	< 4.87	< -6.93	< -12.6	C001190010
7/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	135	14.9	< 2.09	< 4.03	< -2.23	C002090105
10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	70.6	10.6	< -16.56	63.66	< -2.02	C002910045
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	95.6	12.2	< 6.56	27.9	< -1.62	C010100098
4/16/2001	< 1	< 5	< 5	< 5	< 5	1.86	139	13.8	< 16.1	32.7	< 10.7	C011060087
4/16/2001	< 1	< 5	< 5	< 5	< 5	.231	128	13.8	< 11.1	30.1	< 5.23	C011060088
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	106	13.1	< -.871	54.4	< 7.08	C012060010
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	107	12.8	< 21.9	37.9	< 5.53	C012880075

C-9

C-746-K Landfill Monitoring

Water Quality Records for

MW301

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	146	14.5	< 3.69	< 28.3	< 2.51	C020250055
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	154	15.4	< -2.44	51.6	< 6.3	C020250056
4/10/2002	< 1	< 5	< 5	< 5	< 5	.317	172	16.2	< 19	< 5.09	< .617	C021010049
7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	186	15.4	< 36.1	< 23.5	17.8	C022060005
10/3/2002	3	< 5	< 5	< 5	< 5	< .002	< .2	14.5	< 5.72	46.8	< 15	C022760029
1/30/2003	< 1	< 5	< 5	< 5	< 5	.287	166	15.5	< -1.71	< 6.29	< -.324	C030310017
1/30/2003	< 1	< 5	< 5	< 5	< 5	4.62	203	16.1	< .197	< 3.65	< 3.3	C030310018
4/14/2003	< 1	< 5	< 5	< 5	< 5	1.03	232	17.2	< .227	< 37.1	< -.162	C031040077
7/30/2003	< 1	< 5	< 5	< 5	< 5	.71	218	15.4	< 32.9	50.2	< 2.84	C032110046
10/21/2003	< 1	< 5	< 5	< 5	< 5	< .2	257	17.4	< 9.47	< 31.4	< 0	C032950018
1/26/2004	< 1	< 5	< 5	< 5	< 5	.39	267	19.6	< 14.9	53.3	< 10.8	C040260080
1/26/2004	< 1	< 5	< 5	< 5	< 5	.577	266	19.3	< 17.7	73	< 11.7	C040260081
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	238	18	< 9.42	< 42.4	< -3	C041130034
7/15/2004	< 1	5	5	< 5	< 5	< .2	277	19.8	< 17.3	< 40.3	< -12.4	C041970168
10/19/2004	< 1	< 5	< 5	< 5	< 5	< .2	152	13.7	< -32.8	< 33.7	< -1.56	C042940033
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	232	20.1	< -.987	129	< -6.58	C051170050
10/25/2005	< 1	5.1	5.6	< 5	< 5	< .2	289	19.9	< -12.7	51.3	< 4.49	C052990008
4/11/2006	< 1	< 5	5.2	< 5	< 5	< .2	287	20.9	< 8.03	50.9	< -2.97	C061020010
4/11/2006	< 1	< 5	5.4	< 5	< 5	< .2	279	19.6	< 3.04	62	< 8.86	C061020011
10/23/2006	< 1	5.9	5.8	< 5	< 5	.76	295	20.5	< 13.7	< 31.7	< 15.3	C062960051
4/12/2007	< 1	< 5	< 5	< 5	< 5	2.42	265	15.8	< 7.86	60.8	< 4.66	C071030005
10/25/2007	< 1	3.6	3.1	< 1	< 1	1.06	117	8.42	< 1.59	39.3	< -9.49	C072980109
4/28/2008	< 1	< 1	2.8	< 5	< 1		185	14.7	< 20.4	79.9	< -4.91	C081190048
4/28/2008	< 1	< 1	2.9	< 5	< 1		192	15.3	< 25.6	45.9	< -3.1	C081190047
10/29/2008	< 1	3.8	3.9	< 5	< 1	< .2	240	16.3	< 7.81	77.1	< 5.16	C08304013003
4/30/2009	< 1	3.8	3.9	< 1	< 1	< .2	228	15.9	< 7.32	71	< 7.74	C09120015002
4/30/2009	< 1	4.5	4.4	< 1	< 1	< .2	160	14.5	< 17.8	85	< 12.3	C09120015003
10/19/2009	3.8	5.5	4.8	< 1	< 1	< .2	208	14	< .393	58.6	< -1.75	C09292035003
4/20/2010	< 1	< 5	2.9	< 5	< 1	< .2	196	13.7	< -7.51	45.2	< -8.84	C10110009005
4/20/2010	< 1	< 5	3	< 5	< 1	< .2	198	13.8	< 11.5	50.7	< -8.41	C10110009004
10/13/2010	< 1	< 5	1.9	< 5	< 1	< .4	133	11	< -.711	56.4	< -4.72	C10286021005
4/26/2011	< 1	< 5	< 1	< 5	< 1	.247	176	14.5	< 8.21	68	< -13.4	C11116009002

C-10

C-746-K Landfill Monitoring

Water Quality Records for

MW301

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 1	< 5	1.7	< 1	< 1	.298	183	11.8	< 8.7	86.5	< 4.3	C11292015003
4/24/2012	< 1	2.1	< 1	< 1	< 1	< 2	119	9.63	< 5.31	< 35.7	< 2.86	C12115011002

C-11

C-746-K Landfill Monitoring

Water Quality Records for

MW302

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
6/1/1994	< 5	< 5	< 5	< 5		.415	.238	.189	< 3.09	< 3.11	< .94	3220301
3/21/1995	< 1	< 5	< 5	< 5	< 5		2.6	.26	2.2	5	8	950322-048
7/12/1995	< 1	< 5	< 5	< 5	< 5		.702	.175	4	13	6	950713-149
9/11/1995	< 1	< 5	< 5	< 5	< 5	1.3	1.06	.139	7.2	2	13	950912-007
12/7/1995	< 1	< 5	< 5	< 5	< 5		2.39	.087	6.2	3	2	951211-018
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.14	1.68	.08	-6	-2	1	960214-054
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.61	2.14	.099	-5.4	-4	0	960214-058
5/9/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.041	.9	17	6	960513-009
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.058	4.4	6	6	960821-022
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	< .05	12.3	5	11	960821-020
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	.31	.157	-.2	1	0	970211-011
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	1.64	.19	2.9	3	0	970211-010
5/13/1997	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.099	5.9	3	10	970514-044
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	< .1	2.8	1	0	970807-144
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.12	1.6	1	2	970807-145
11/10/1997	< 1	< 5	< 5	< 5	< 5	1.02	1.09	.11	9.8	14	0	971110-118
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	< .1	< 1.2	< 4	< -2	C980370103
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	.114	< 1.8	< 0	< 5	C980370102
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.167	< -9	8	< 2.8	C981400087
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.164	< 2.3	37	< 2.1	C981400088
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.173	< 7.6	11	< -7.6	C982240043
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.143	< 1	< 4	< -1	C982240044
11/16/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.1	< 3.6	8.03	< -7.2	C983200082
1/25/1999	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.11	< .86	< .3	< -19.8	C990250156
4/19/1999	< 1	< 5	< 5	< 5	< 5	.22	< .2	.122	< 1.67	< 4.72	< -18.5	C991090062
7/15/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.157	< .82	< -20.12	< 5.04	C991960148
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.069	< 4.18	< 3.33	< -1.15	C992870107
1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	.381	.05	< .05	< 5.09	< 1.59	C000130119
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.11	< 4.56	< 2.89	< -21.3	C001190011
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.118	< 1.91	< 4.14	< -16.4	C001190012
7/27/2000	< 1	< 5	< 5	< 5	< 5	.203	.315	.185	< 6.72	< 4.08	< -2.03	C002090104
10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.08	< 2.79	22.54	< 5.95	C002910046

C-12

C-746-K Landfill Monitoring

Water Quality Records for

MW302

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.112	< .329	< 5.56	< 8.77	C010100096
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.101	< -4.7	< 3.52	< 2.65	C010100095
4/16/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.068	< -4.37	< 1	< 12.2	C011060086
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.053	< 1.09	< 1.72	< 12.4	C012060011
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.207	< 2.32	< .344	< 4.48	C012880076
1/22/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.047	< 5.75	< 1.7	< 11.5	C020220047
4/10/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.054	< 5.56	< -1.95	< 4.88	C021010050
4/10/2002	2	< 5	< 5	< 5	< 5	< .2	< .2	.062	< 2.37	< -2.75	< -3.64	C021010051
7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.056	9.53	< 2.21	< 14.7	C022060006
10/3/2002	< 1	< 5	< 5	< 5	< 5	< .002	< .002	.0688	< 9.5	< 2.76	< 10.1	C022760028
1/30/2003	< 1	< 5	< 5	< 5	< 5	.639	.762	.144	< -.209	< 1.74	< 2.05	C030310021
4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0607	< 2.62	< 1.04	< 4.54	C031050066
4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0609	< -4.39	43.1	16.2	C031050067
7/30/2003	< 1	< 5	< 5	< 5	< 5	< .2	.523	1.3	< 6.9	< 4.11	< -9.55	C032110047
10/21/2003	< 1	< 5	< 5	< 5	< 5	< .2	5.77	1.88	< 4.13	< 2.82	< -6.62	C032950016
1/26/2004	< 1	< 5	< 5	< 5	< 5	< .2	2.64	1.98	< -3.37	9.48	< 6.25	C040260078
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.302	1.71	< -1.61	< -.897	< 5.4	C041130036
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.611	1.63	< 6.89	< -1.62	< -.819	C041130035
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	1.18	1.63	< 5.85	< -.825	< -12.4	C041970169
10/19/2004	< 1	< 5	< 5	< 5	< 5	< .2	.244	1.06	< -4.94	< 3.65	< 4.4	C042940032
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	.154	.708	< .394	< .723	< 15.5	C051170051
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	.675	< 1.48	< 3.76	< 15.3	C051170052
10/25/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	1.35	< -1.17	< .46	< 9.83	C052990009
4/11/2006	< 1	< 5	< 5	< 5	< 5	.418	1.02	.572	< -1.64	< 3.54	< .914	C061020008
10/26/2006	< 1	< 5	< 5	< 5	< 5	< .2	.128	.986	< -3.44	< 2.09	< 8.97	C062990103
10/26/2006	< 1	< 5	< 5	< 5	< 5	.347	.479	.99	< -.702	< 3.23	< 8.62	C062990102
4/12/2007	< 1	< 5	< 5	< 5	< 5	< .2	.131	.345	< 4.96	< 3.59	< 13.1	C071030006
10/25/2007	< 1	< 1	< 1	< 1	< 1	< .2	.317	.622	< 3.48	< 4.7	< -3.38	C072980110
4/28/2008	< 1	< 1	< 1	< 5	< 1	< .1	< .1	.263	< 3.99	< -.184	< -5.34	C081190049
10/29/2008	< 1	< 1	< 1	< 5	< 1	.23	.281	.319	< 1.16	< .994	< 10.6	C08304013004
4/30/2009	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.215	< 1.78	< 1.17	< 1.39	C09120016001
10/19/2009	2.1	< 1	< 1	< 1	< 1	.493	.425	.433	< .942	< 1.51	< -6.33	C09292035004

C-13

C-746-K Landfill Monitoring

Water Quality Records for

MW302

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
4/20/2010	< 1	< 5	< 1	< 5	< 1	.933	1.5	1.01	< 1.13	< 1.46	< .868	C10110009001
10/13/2010	< 1	< 5	< 1	< 5	< 1	< .4	.21	.245	< 4.95	< 2.61	< 2.66	C10286021004
4/26/2011	< 1	< 5	< 1	< 5	< 1	< .2	.112	.095	< .402	< 3.67	< .163	C11116009003
10/19/2011	< 1	< 5	< 1	< 1	< 1	< .2	.235	.208	< 1.9	6.89	< 2.99	C11292015004
4/24/2012	< 1	< 1	< 1	< 1	< 1	< .4	.333	.163	< .867	< .188	< 3.89	C12115011003

C-14

C-746-K Landfill Monitoring

Water Quality Records for

MW344

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
5/20/1998	< 1	< 5	< 5	< 5	< 5	5.43	11.2	.663	< 4	24	< -2.8	C981400089
8/11/1998	< 1	< 5	< 5	< 5	< 5	7.65	13.1	.946	< 3.2	11	< -1.3	C982240042
11/16/1998	< 1	< 5	< 5	< 5	< 5	2.65	12.2	.83	< 5.66	8.45	< 6.8	C983200078
11/16/1998	< 1	< 5	< 5	< 5	< 5	2.43	9.51	.65	< 2.27	9.59	< -3.1	C983200079
1/25/1999	< 1	< 5	< 5	< 5	< 5	8.54	13	.79	< .1	14.19	< 8.4	C990250157
4/19/1999	< 1	< 5	< 5	< 5	< 5	9.26	16.1	.827	< 4.05	8.24	< -9.06	C991090063
7/15/1999	< 1	< 5	< 5	< 5	< 5	3.21	13.6	.756	< 3.29	< 3.03	< 7.03	C991960149
10/14/1999	< 1	< 5	< 5	< 5	< 5	8.76	13.1	.871	5.38	< 5.75	< 7.28	C992870108
1/13/2000	< 1	< 5	< 5	< 5	< 5	1.35	9.06	.565	< .74	12.89	< 6.94	C000130121
4/27/2000	< 1	< 5	< 5	< 5	< 5	3.68	10.8	.523	< 2.81	19.31	< -2.65	C001190013
7/27/2000	< 1	< 5	< 5	< 5	< 5	1.92	8.16	.531	7.68	12.31	< 10.4	C002090102
7/27/2000	< 1	< 5	< 5	< 5	< 5	1.27	6.22	.404	< 4.3	14.19	< -6.62	C002090103
10/16/2000	< 1	< 5	< 5	< 5	< 5	1.92	6.81	.525	< 1.79	15.94	< .674	C002910047
10/16/2000	< 1	< 5	< 5	< 5	< 5	1.5	5.4	.37	< -9	21.88	< 1.57	C002910048
1/10/2001	< 1	< 5	< 5	< 5	< 5	4.4	6.02	.396	< .529	< 1.5	< 4.46	C010100099
4/16/2001	< 1	< 5	< 5	< 5	< 5	2.3	7.02	.411	< 1.98	6.24	< -7.79	C011060089
7/19/2001	< 1	< 5	< 5	< 5	< 5	1.83	5.1	.355	< -2.34	< 1.95	< 7.79	C012010060
7/24/2001	46	100	59	< 50	< 50	15.8	315	27.7	< 32.1	< 25.1	< 12.4	C012060009
10/15/2001	< 1	< 5	< 5	< 5	< 5	.655	3.55	.399	< 4.6	< 2.4	< -2	C012880066
10/15/2001	< 1	< 5	< 5	< 5	< 5	.797	3.79	.329	< .901	9.99	< -8.48	C012880067
1/22/2002	< 1	< 5	< 5	< 5	< 5	1.37	5.33	.366	< 5.38	6.15	< 6.69	C020220045
4/10/2002	< 1	< 5	< 5	< 5	< 5	1.63	7.58	.378	< -.899	< 2.73	< 4.04	C021010052
7/24/2002	< 1	< 5	< 5	< 5	< 5	2.07	5.44	.49	10.2	< 6.95	< 4.82	C022060007
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00423	.00456	.323	< 5.83	< 5.09	18.5	C022760030
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00323	.00478	.366	< 2.54	< 2.37	< 13.8	C022760031
1/30/2003	< 1	< 5	< 5	< 5	< 5	1.68	4.16	.378	< -2.18	< .631	< 2	C030310019
4/14/2003	< 1	< 5	< 5	< 5	< 5	3.92	3.28	.268	< .0183	< 8.74	20.4	C031040078
7/30/2003	< 1	< 5	< 5	< 5	< 5	21.9	35.4	6.18	< 12.1	< 6.22	< 12.3	C032110048
10/21/2003	< 1	< 5	< 5	< 5	< 5	4.19	32.6	.388	< 5.8	< 4.3	< 3.31	C032950014
10/21/2003	< 1	< 5	< 5	< 5	< 5	3.63	34.8	3.99	< 3.45	< 3.49	< -1.39	C032950015
1/26/2004	< 1	< 5	< 5	< 5	< 5	4.22	18.2	2.32	10.1	7.74	< 5.32	C040260082
4/21/2004	< 1	< 5	< 5	< 5	< 5	2.91	13.3	1.23	< 2.26	< 1.95	< -4.04	C041130037

C-15

C-746-K Landfill Monitoring

Water Quality Records for

MW344

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	12.9	1.61	< .82	< 2.89	< -8.52	C041970170
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.51	13.2	1.56	< -.79	9.99	< -3.88	C042940034
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.99	11.8	1.63	< -2.19	< .172	< 4.34	C042940035
4/27/2005	< 1	< 5	< 5	< 5	< 5	3.67	7.9	.692	< .794	5.87	< 10.7	C051170053
10/25/2005	< 1	< 5	< 5	< 5	< 5	1.49	5.25	.714	< 2.1	< 5.13	< 8.07	C052990010
4/11/2006	< 1	< 5	< 5	< 5	< 5	2.55	6.79	.419	< 2.13	< 5.53	< .686	C061020012
10/26/2006	< 1	< 5	< 5	< 5	< 5	4.32	5.55	.472	< 2.45	< 5.05	< 13.9	C062990104
4/12/2007	< 1	< 5	< 5	< 5	< 5	13.5	7.9	.279	< 6.28	< 4.88	< -3.22	C071030003
4/12/2007	< 1	< 5	< 5	< 5	< 5	7.87	6.28	.286	8.77	< 7.36	< 7.1	C071030004
10/25/2007	< 1	< 1	< 1	< 1	< 1	5.46	4.1	.217	< 2.24	< 2.43	< 1.88	C072980185
4/28/2008	< 1	< 1	< 1	< 5	< 1		.947	.183	< 1.35	< 4.02	< 2.67	C081200002
10/29/2008	< 1	< 1	< 1	< 5	< 1	3.36	3.64	.256	< 2.88	< 4.82	< .645	C08304013005
4/30/2009	< 1	< 1	< 1	< 1	< 1	4	3.56	.19	< 2.62	5.57	< 10.1	C09120016002
10/19/2009	1.3	< 1	< 1	< 1	< 1	3.55	3.04	.299	< 1.6	< 4.25	< -.283	C09292035005
4/20/2010	< 1	< 5	< 1	< 5	< 1	11.5	22	.262	9.17	8.43	< 10	C10110009003
10/13/2010	< 1	< 5	< 1	< 5	< 1	9.93	13.8	.233	8.01	9.96	< -7.65	C10286021001
4/26/2011	< 1	< 5	< 1	< 5	< 1	4.7	8.17	.154	< -.331	< 5.11	< -7.02	C11116009004
4/26/2011	< 1	< 5	< 1	< 5	< 1	4.48	7.89	.155	< .101	5.63	< -3.92	C11116009005
10/19/2011	< 1	< 5	< 1	< 1	< 1	2.86	7.14	.188	< 2.34	9.7	< 2.78	C11292015005
4/24/2012	< 1	< 1	< 1	< 1	< 1	3.92	6.46	.118	< 6.28	< 5.53	< 7.1	C12115011005
4/24/2012	< 1	< 1	< 1	< 1	< 1	4.39	7.54	.167	< 3.64	< 3.59	< -.511	C12115011004

C-16

APPENDIX D

**ADMINISTRATIVE RECORD AND
POST-DECISION RECORD INDICES**

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Paducah Documents Added to the Administrative Record Files- Second Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	02/29/12	PPPO-02-1309238-12	FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-0130a&D2/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00171
ARFBGOU	03/13/12	KY-12-0267	(KDWM) CONDITIONAL CONCURRENCE WITH THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) 5 & 6 OF THE BURIAL GROUNDS OPERABLE UNIT (BGOU) (DOE/LX/07-0130a&D2/R1)	KDEP,KDWM	DOE-PPPO	No	ENV 1.A-00159
ARFBGOU	03/22/12	KY-12-0252	FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130&D2/R1)	KDEP	DOE-PPPO	No	ENV 1.A-00145
ARFBGOU	03/29/12	KY-12-0258	(EPA) REVIEW OF THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT(DOE/LX/07-0130A&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00146
ARFBGOU	03/30/12	PPPO-02-1435849-12	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 DOCUMENTS (DOE/LX/07-130a&D2/R1) (DOE/LX/07-130&D2/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00147
ARFBGOU	04/09/12	KY-12-0265	(KDEP) APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2/R1 FEASIBILITY STUDY FOR SWMUs 5 AND 6 BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130&D2/R1) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00153
ARFBGOU	04/16/12	MEM-12-0046	EPA APPROVAL OF BURIAL GROUND OPERABLE UNIT FEASIBILITY STUDY FOR SWMUs 5&6, MILESTONE MODIFICATION (RECORD OF CONVERSATION DOE/LX/07-0130a)	USEPA-4	DOE-PPPO	No	ENV 1.A-00172
ARFBGOU	05/07/12	KY-12-0280	(UNTITLED) EPA COMMENTS - CONDITIONAL APPROVAL OF FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) 5 AND 6 OF BURIAL GROUNDS OPERABLE UNIT (BGOU) AT PGDP (DOE/LX/07-0130a&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00178
ARFBGOU	05/24/12	KY-12-0285	CONDITIONAL CONCURRENCE ON THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (SWMU 4 SAMPLING AND ANALYSIS PLAN) (DOE/OR/07-2179&D2/A2/R1)	KDEP	DOE-PPPO	No	ENV 1.A-00182
ARFBGOU	05/25/12	PPPO-02-1474713-12	EXTENSION REQUEST FOR SUBMITTAL OF FEASIBILITY STUDY (FS) FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2); EXTENSION OF DEADLINE FOR INVOKING DISPUTE RESOLUTION REGARDING CONDITIONAL CONCURRENCE OF D2 FS; AND MILESTONE MODIFICATION OF SUBSEQUENT SWMUs 5 AND 6 DOCUMENTS	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00188
ARFBGOU	05/30/12	KY-12-0287	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2/R2 FEASIBILITY STUDY FOR SWMUs 5 AND 6 BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00183

Paducah Documents Added to the Administrative Record Files- Second Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	06/01/12	MEM-12-0052	(RECORD OF CONVERSATION) EPA SIGNED MILESTONE MODIFICATION REGARDING SWMU 5-6 PROPOSED PLAN-ROD (REF:DOE/LX/07-0130&D2/R2)	USEPA-4	LATA	No	ENV 1.A-00189
ARFC-340	04/18/12	KY-12-0274	EPA RESPONSE TO ACTION MEMORANDUM ADDENDUM FOR THE C-340 METAL REDUCTION PLANT COMPLEX AT PGDP (DOE/LX/07-0290&D2/A1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00165
ARFREF	03/13/11	KY-12-0244	EPA COMMENTS ON DOE LETTER "PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES" DATED FEBRUARY 15, 2012, FOR PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00138
ARFREF	03/23/11	PPPO-02-1136228-11B	TRANSMITTAL OF THE D2 FISCAL YEAR 2011 SITE MANAGEMENT PLAN, PGDP, PADUCAH, KY.	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00143
ARFREF	05/25/11	PPPO-02-1195593-11	TRANSMITTAL OF THE D2/R1 FISCAL YEAR 2011 SITE MANAGEMENT PLAN, PGDP, PADUCAH, KY.	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00144
ARFREF	02/24/12	PPPO-02-1355246-12C	TRANSMITTAL OF THE D2 FISCAL YEAR 2012 SITE MANAGEMENT PLAN, PGDP, PADUCAH, KY (DOE/LX/07-1264&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00139
ARFREF	03/14/12	KY-12-0246	PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES	KDEP	DOE-PPPO	No	ENV 1.A-00140
ARFREF	03/20/12	KY-12-0250	EPA APPROVAL OF THE 2012 SITE MANAGEMENT PLAN (DOE/LX/07-1264&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00141
ARFREF	03/22/12	KY-12-0253	(KDEP) APPROVAL OF THE 2012 SITE MANAGEMENT PLAN ANNUAL REVISION (DOE/LX/07-1264&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00142
ARFREF	04/09/12	PPPO-02-1427382-12	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETING CONDUCTED JANUARY 19, 2012	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00154
ARFREF	04/16/12	KY-12-0270	[KDEP] APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE FISCAL YEAR 2012 SITE MANAGEMENT PLAN, ENFORCEABLE COMMITMENTS, AND LIST OF SOLID WASTE MANAGEMENT UNITS/AREAS OF CONCERN	KDEP	DOE-PPPO	No	ENV 1.A-00162
ARFREF	04/19/12	PPPO-02-1267048-12	TRANSMITTAL OF THE PADUCAH GASEOUS DIFFUSION PLANT PROGRAMMATIC QUALITY ASSURANCE PROJECT PLAN (DOE/LX/07-1269&D1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00184
ARFREF	04/24/12	PPPO-02-1449991-12B	U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST HALF OF FISCAL YEAR 2012 PADUCAH, KY (DOE/LX/07-1278/V1)	DOE-PPPO	USEPA-4,KDEP,KDEP	No	ENV 1.A-00179
ARFREF	05/15/12	PPPO-02-1466564-12	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-FISCAL YEAR 2014 BUDGET TARGET FUNDING GUIDANCE NOTIFICATION	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00185
ARFREF	05/29/12	PPPO-02-1473410-12	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-PRELIMINARY ASSESSMENT OF FISCAL YEAR 2014 BUDGET TARGET FUNDING GUIDANCE	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00186
ARFREF	06/08/12	PPPO-02-1468385-12B	DESIGNATION OF PROJECT MANAGER FOR THE PADUCAH FEDERAL FACILITY AGREEMENT	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00190

Paducah Documents Added to the Administrative Record Files- Second Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFS0U	03/20/12	KY-12-0249	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00134
ARFS0U	04/16/12	PPPO-02-1432933-12	TRANSMITTAL OF THE REVISED C-747-A UF4 DRUM YARD (SOLID WASTE MANAGEMENT UNIT 12) SWMU ASSESSMENT REPORT	DOE-PPPO	USEPA-4,KDEP,KDEP	No	ENV 1.A-00173
ARFS0U	04/16/12	MEM-12-0044	EPA APPROVAL-EXTENSION REQUEST OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP AND SUBSEQUENT DOCUMENTS, DOE/LX/07-0358&D2 (RECORD OF CONVERSATION)	USEPA-4,LATA	DOE-PPPO,LATA	No	ENV 1.A-00163
ARFS0U	04/23/12	PPPO-02-1452142-12	EXTENSION REQUEST OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0358&D2) AND SUBSEQUENT SOILS OPERABLE UNIT DOCUMENTS	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00164
ARFS0U	04/24/12	KY-12-0277	NO FURTHER ACTION STATUS DETERMINATION FOR SWMU 12	KDEP	DOE-PPPO	No	ENV 1.A-00174
ARFS0U	04/26/12	MEM-12-0047	(RECORD OF CONVERSATION) USEPA-4 APPROVAL OF MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2)	LATA,USEPA-4	LATA	No	ENV 1.A-00177
ARFS0U	04/26/12	KY-12-0278	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00175
ARFSWOU	03/22/12	KY-12-0251	[KDEP/KDWM] APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION / FEASIBILITY STUDY (RI/FS) (DOE/LX/07-0361&D2/R1)	KDEP,KDWM	DOE-PPPO	No	ENV 1.A-00155
ARFSWOU	03/30/12	MEM-12-0043	RECORD OF CONVERSATION (ROC) - (EPA APPROVAL) EXTENSION REQUEST FOR SUBMITTAL OF WORK PLAN FOR THE SWOU REMEDIAL INVESTIGATION / FEASIBILITY STUDY (DOE/LX/07-0361&D2/R1)	USEPA-4,LATA	DOE-PPPO	No	ENV 1.A-00156
ARFSWOU	04/16/12	KY-12-0269	EPA APPROVAL OF EXTENSION REQUEST FOR SUBMITTAL OF WORK PLAN FOR THE SWOU REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/LX/07-0361&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00170
ARFSWOU	06/19/12	KY-12-0300	[KDEP] APPROVAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (DOE/LX/07-0361&D2/R1)	KDEP	DOE-PPPO	No	ENV 1.A-00187
ARFSWOUOSD	03/16/12	PPPO-02-1415937-12	EXTENSION REQUEST FOR SUBMITTAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/LX/07-0361&D2/R1) AND EXTENSION OF THE DEADLINE FOR INVOKING DISPUTE RESOLUTION REGARDING CONDITIONAL CONCURRENCE ON THE D2 WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/LX/07-0361&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00133

Paducah Documents Added to the Post-Decision Files- Second Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
6PHASE-PD	03/26/12	KY-12-0256	EPA COMMENTS ON DRAFT REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BLDG AT PGDP (DOE/LX/07-1263&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00132
6PHASE-PD	03/28/12	PPPO-02-1433537-12	NOTIFICATION OF SCHEDULE EXTENSION FOR THE GROUNDWATER OPERABLE UNIT REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP, PADUCAH, KY (DOE/LX/07-1263&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00148
6PHASE-PD	04/03/12	KY-12-0261	APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1263&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00151
6PHASE-PD	04/09/12	KY-12-0264	SUBMITTAL OF COMMENTS TO THE REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE, FOR THE GROUNDWATER OPERABLE UNIT FOR THE PHASE IIa VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1272&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00152
6PHASE-PD	04/09/12	KY-12-0266	EPA EXTENSION REQUEST FOR REVIEW OF REMEDIAL DESIGN REPORT FOR C-400 INTERIM REMEDIAL ACTION (DOE/LX/07-1272&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00150
6PHASE-PD	04/12/12	PPPO-02-1448013-12	MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 (CLEANING BUILDING) PHASE IIa INTERIM REMEDIAL ACTION - FIELD START	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00157
6PHASE-PD	04/16/12	KY-12-0272	[KDEP] APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 PHASE IIa INTERIM REMEDIAL ACTION-FIELD START	KDEP	DOE-PPPO	No	ENV 1.A-00166
6PHASE-PD	04/18/12	PPPO-02-1450959-12	MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 PHASE IIb RECORD OF DECISION AND SUBSEQUENT DOCUMENTS	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00167
6PHASE-PD	04/19/12	KY-12-0275	EPA COMMENTS ON REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION FOR GWOU C-400 CLEANING BLDG AT PGDP, DOE/LX/07-1272&D1	USEPA-4	DOE-PPPO	No	ENV 1.A-00168
6PHASE-PD	04/20/12	KY-12-0276	[KDEP] APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 PHASE IIb INTERIM REMEDIAL ACTION RECORD OF DECISION (AND SUBSEQUENT DOCUMENTS)	KDEP	DOE-PPPO	No	ENV 1.A-00169
6PHASE-PD	04/26/12	KY-12-0279	(UNTITLED) USEPA-4 EXTENSION REQUEST FOR REGULATORY REVIEW OF REVISED PROPOSED PLAN (RPP) FOR VOLATILE ORGANIC COMPOUND CONTAMINATION (VOCC) AT THE C-400 CLEANING BUILDING AT PGDP (DOE/LX/07-1263&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00176

Paducah Documents Added to the Post-Decision Files- Second Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
6PHASE-PD	05/18/12	PPPO-02-1469660-12	NOTIFICATION OF SCHEDULE EXTENSION AND MILESTONE MODIFICATION FOR REMEDIAL DESIGN REPORT....FOR GROUNDWATER OPERABLE UNIT FOR PHASE II VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG AT PGDP (DOE/LX/07-1272&D2) AND C-400 PHASE IIa INTERIM REMEDIAL ACTION FIELD START	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00196
6PHASE-PD	05/18/12	PPPO-02-1467500-12	MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 PHASE IIb INTERIM REMEDIAL ACTION	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00191
6PHASE-PD	05/22/12	KY-12-0282	[KDEP] APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT C-400 PHASE IIa INTERIM REMEDIAL ACTION FIELD START	KDEP	DOE-PPPO	No	ENV 1.A-00192
6PHASE-PD	05/23/12	KY-12-0283	(UNTITLED) EPA APPROVAL OF FFA MILESTONE MODIFICATION FOR THE GWOU C-400 PHASE IIa INTERIM REMEDIAL ACTION "a" FIELD START (DOE/LX/07 -1272&02)	USEPA-4	DOE-PPPO	No	ENV 1.A-00193
6PHASE-PD	05/30/12	KY-12-0289	APPROVAL OF THE MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT PHASE IIb REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BLDG (DOE/LX/07-1263&D2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00197
6PHASE-PD	05/31/12	KY-12-0293	EPA EXTENSION NOTIFICATION FOR SUBMITTAL OF COMMENTS ON REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF INTERIM REMEDIAL ACTION FOR VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG (DOE/LX/07-1271&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00198
6PHASE-PD	05/31/12	MEM-12-0050	RECORD OF CONVERSATION-RE:KDWM APPROVAL OF MILESTONE MODIFICATION FOR THE GWOU PHASE IIb REVISED PROPOSED PLAN FOR VOC CONTAMINATION AT C-400 CLEANING BLDG (DOE/LX/07-1263&D2)	USEPA-4	KDEP	No	ENV 1.A-00199
6PHASE-PD	05/31/12	KY-12-0290	REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1271&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00194
6PHASE-PD	06/01/12	KY-12-0294	(UNTITLED) EPA COMMENTS ON REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF INTERIM REMEDIAL ACTION FOR VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG(DOE/LX/07-1271 &01)	USEPA-4	DOE-PPPO	No	ENV 1.A-00195
6PHASE-PD	06/04/12	KY-12-0295	EPA CLARIFICATION OF SCHEDULE EXTENSION OF REGULATORY REVIEW PERIOD AND REQUEST FOR ADDITIONAL INFORMATION REGARDING REVISED PROPOSED PLAN FOR C-400 INTERIM REMEDIAL ACTION (DOE/LX/07-1263)	USEPA-4	DOE-PPPO	No	ENV 1.A-00200
GW3-PD	02/17/12	PPPO-02-1383892-12	MILESTONE MODIFICATION REQUEST FOR THE D1 NORTHEAST PLUME REMEDIAL ACTION WORK PLAN FOR THE GROUNDWATER OPERABLE UNIT REMEDIAL ACTION AT PGDP, PADUCAH, KY	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00135

Paducah Documents Added to the Post-Decision Files- Second Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
GW3-PD	02/22/12	KY-12-0234	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 NORTHEAST PLUME REMEDIAL ACTION WORK PLAN FOR THE GROUNDWATER OPERABLE UNIT REMEDIAL ACTION	KDEP	DOE-PPPO	No	ENV 1.A-00136
GW3-PD	02/27/12	MEM-12-0040	RECORD OF CONVERSATION-2012 NORTHEAST PLUME MILESTONE MODIFICATION FORM	LATA		No	ENV 1.A-00137
SWP-PD	02/08/12	PPPO-02-1362034-12B	TRANSMITTAL OF THE REMEDIAL DESIGN SUPPORT INVESTIGATION CHARACTERIZATION PLAN FOR THE C-747-C OIL LANDFARM AND C-720 NORTHEAST AND SOUTHEAST SITES AT PGDP, PADUCAH, KY (DOE/LX/07-0350&D1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00131
SWP-PD	03/19/12	KY-12-0247	(EPA) CONDITIONAL CONCURRENCE OF THE REMEDIAL DESIGN WORK PLAN FOR SWMUs 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1268&D2) AND THE REMEDIAL DESIGN SUPPORT INVESTIGATION CHARACTERIZATION PLAN FOR THE C-747-C OIL LANDFARM AND C-720 NORTHEAST AND SOUTHEAST SITES AT PGDP, PADUCAH, KY (DOE/LX/07-0350&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00126
SWP-PD	03/30/12	KY-12-0260	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2 REMEDIAL DESIGN WORK PLAN FOR SWMUs 1, 211-A AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1268&D2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00149
SWP-PD	04/12/12	PPPO-02-1447569-12	EXTENSION REQUEST FOR SUBMITTAL OF THE REMEDIAL DESIGN WORK PLAN FOR SWMU 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND (VOC) SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1268&D2/R1) AND EXTENSION OF THE DEADLINE FOR INVOKING DISPUTE RESOLUTION REGARDING CONDITIONAL CONCURRENCE ON THE D2 RDWP FOR (SWMUs) 1, 211-A, 211-B (VOC) SOURCES FOR THE SW GW PLUME (DOE/LX/07-1268&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00158
SWP-PD	04/16/12	MEM-12-0045	EPA APPROVAL OF MILESTONE MODIFICATION FOR SOUTHWEST PLUME SOURCES (DOE/LX/07-1268&D2)	USEPA-4,LATA	DOE-PPPO,LATA	No	ENV 1.A-00161
SWP-PD	04/16/12	KY-12-0268	[KDEP]APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE REMEDIAL DESIGN WORK PLAN (RDWP) FOR SWMUs 1, 211-A AND 211-B VOLATILE ORGANIC COMPOUND SOURCES (VOC) FOR SOUTHWEST GROUNDWATER PLUME (SWP)(DOE/LX/07-1268&D2/R1) & EXTENSION OF DEADLINE FOR INVOKING DISPUTE RESOLUTION CONDITIONAL CONCURRENCE ON RDWP FOR SWMUs 1, 211-A & 211-B VOC FOR SWP (DOE/LX/07-1268&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00160

Paducah Documents Added to the Post-Decision Files- Second Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
SWP-PD	05/30/12	KY-12-0292	EPA COMMENTS ON THE REMEDIAL DESIGN WORK PLAN FOR SWMUs 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP, DOE/LX/07-1268&D2/R1	USEPA-4	DOE-PPPO	No	ENV 1.A-00180
SWP-PD	05/31/12	KY-12-0291	APPROVAL OF THE REMEDIAL DESIGN WORK PLAN FOR SWMUs 1, 211A, AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1268&D2/R1)	KDEP	DOE-PPPO	No	ENV 1.A-00181

Paducah Documents Added to the Administrative Record Files- Third Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	08/31/11	MEM-12-0057	(RECORD OF CONVERSATION) SWMU 5 AND 30 SEEP INFORMATION	USEPA-4	KDEP	No	ENV 1.A-00226
ARFBGOU	10/24/11	MEM-12-0056	(RECORD OF CONVERSATION) BURIAL GROUNDS OPERABLE UNIT APRIL 2011 INVESTIGATION OF "SEEPS" SAMPLING EVENT	LATA	LATA	No	ENV 1.A-00227
ARFBGOU	04/24/12	PPPO-02-1391229-12	ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00234
ARFBGOU	04/30/12	PPPO-02-1433854-12	FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-1274&D1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00235
ARFBGOU	06/29/12	PPPO-02-1474831-12	TRANSMITTAL OF THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R2) [REPLACEMENT PAGES FOR THE D2/A2/R1 DOCUMENT]	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00236
ARFBGOU	07/09/12	KY-12-0309	CONCURRENCE WITH THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION / FEASIBILITY STUDY - SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R2)	KDEP	DOE-PPPO	No	ENV 1.A-00204
ARFBGOU	07/23/12	KY-12-0317	EPA APPROVAL OF THE SAMPLING AND ANALYSIS PLAN FOR BGOU SWMU 4 AT PGDP (DOE/OR/07-2179&D2/A2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00205
ARFBGOU	07/23/12	KY-12-0316	EPA EXTENSION NOTIFICATION FOR REGULATORY REVIEW OF FEASIBILITY STUDY FOR SWMUS 2, 3, 7 AND 30 OF BGOU AT PGDP (DOE/LX/07-1274&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00202
ARFBGOU	07/30/12	KY-12-0323	NOTICE OF EXTENSION OF REVIEW PERIOD FOR THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00219
ARFBGOU	08/06/12	KY-12-0329	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2 FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2) AND SUBSEQUENT DOCUMENTS	KDEP	DOE-PPPO	No	ENV 1.A-00220
ARFBGOU	08/10/12	KY-12-0330	EXTENSION NOTIFICATION FOR REVIEW OF THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00237
ARFBGOU	08/29/12	PPPO-02-1561099-12B	TRANSMITTAL OF THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY: SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1275&D1	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00238

D-10

Paducah Documents Added to the Administrative Record Files- Third Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFCC	05/08/12	PPPO-02-1262227-12B	TRANSMITTAL OF THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0244&D1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00215
ARFCC	07/24/12	KY-12-0318	NOTIFICATION OF 30-DAY EXTENSION FOR REVIEW OF REMEDIAL INVESTIGATION / FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00203
ARFREF	03/30/12	KY-12-0307	(EPA SIGNED) MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT REGARDING FY 2012 SITE MANAGEMENT PLAN (SMP)	USEPA-4	DOE-PPPO	No	ENV 1.A-00223
ARFREF	06/25/12	KY-12-0302	EPA COMMENTS ON PGDP PROGRAMMATIC QUALITY ASSURANCE PROJECT PLAN (DOE/LX/07-1269&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00224
ARFREF	07/10/12	PPPO-02-1484950-12	FEDERAL FACILITY AGREEMENT BUDGET NOTIFICATION- CONTINUING RESOLUTION IMPACTS PREDICTED FOR FISCAL YEAR 2013	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00201
ARFREF	08/03/12	PPPO-02-1507176-12	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETING CONDUCTED FEBRUARY 16, 2012	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00229
ARFREF	08/23/12	PPPO-02-1561599-12	TRANSMITTAL OF THE PADUCAH GASEOUS DIFFUSION PLANT PROGRAMMATIC QUALITY ASSURANCE PROJECT PLAN (DOE/LX/07-1269&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00242
ARFS0U	08/06/10	PPPO-02-561-10	TRANSMITTAL OF THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, VOLUME 1, HUMAN HEALTH, AND VOLUME 2, ECOLOGICAL (DOE/LX/07-0107&D2/V1&V2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00230
ARFS0U	03/04/11	PPPO-02-1157663-11	TRANSMITTAL OF THE REVISED METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, VOLUME 1, HUMAN HEALTH, (DOE/LX/07-0107&D2/R1/V1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00231
ARFS0U	07/26/12	PPPO-02-1511759-12	EXTENSION REQUEST FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-0358&D2) AND SUBSEQUENT SOILS OPERABLE UNIT DOCUMENTS	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00232
ARFS0U	08/06/12	KY-12-0328	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2) AND SUBSEQUENT DOCUMENTS	WEBB A.J.	DOE-PPPO	No	ENV 1.A-00233
ARFSWOU	06/13/12	PPPO-02-1405829-12	TRANSMITTAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0361&D2/R1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00222

Paducah Documents Added to the Administrative Record Files- Third Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFSWOU	06/27/12	KY-12-0306	EPA APPROVAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0361&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00206

Paducah Documents Added to the Post-Decision Files- Third Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
6PHASE-PD	03/07/12	PPPO-02-1383672-12	REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE, FOR THE GROUNDWATER OPERABLE UNIT FOR PHASE IIa VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP, PADUCAH, KY (DOE/LX/07-1272&D1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00221
6PHASE-PD	07/02/12	PPPO-02-1478095-12B	TRANSMITTAL OF REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1271&D2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00216
6PHASE-PD	07/05/12	KY -12-0308	EPA ADDITIONAL EXTENSION FOR REGULATORY REVIEW OF REVISED PROPOSED PLAN FOR VOC CONTAMINATION AT C-400 CLEANING BLDG AT PGDP (DOE/LX/07-1263&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00207
6PHASE-PD	07/17/12	KY -12-0315	APPROVAL OF THE REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE, FOR THE GROUNDWATER OPERABLE UNIT FOR THE PHASE IIa VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1272&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00208
6PHASE-PD	07/30/12	KY-12-0326	REMEDIAL DESIGN REPORT PACKAGE FOR THE GROUNDWATER OPERABLE UNIT (OU19) AT THE C-400 CLEANING BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH KY (DOE/LX/07-1272&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00228
6PHASE-PD	07/30/12	KY-12-0325	APPROVAL OF THE REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1271&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00217
6PHASE-PD	07/31/12	KY-12-0327	EPA - CONDITIONAL APPROVAL OF REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF INTERIM REMEDIAL ACTION FOR VOC CONTAMINATION AT C-400 CLEANING BLDG (DOE/LX/07-1271&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00218
6PHASE-PD	08/24/12	PPPO-02-1547681-12	TRANSMITTAL OF PAGE CHANGES FOR REMEDIAL ACTION WORK PLAN FOR PHASE IIA OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT THE PGDP, PADUCAH, KY (DOE/LX/07-1271&D2/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00240
6PHASE-PD	08/24/12	PPPO-02-1545749-12	TRANSMITTAL OF PAGE CHANGES FOR REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE, FOR THE GROUNDWATER OPERABLE UNIT FOR THE PHASE IIA VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP, PADUCAH, KY (DOE/LX/07-1272&D2/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00239

Paducah Documents Added to the Post-Decision Files- Third Quarter CY2012

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
6PHASE-PD	09/10/12	KY-12-0346	EPA APPROVAL OF REMEDIAL ACTION WORK PLAN FOR PHASE IIA OF INTERIM REMEDIAL ACTION FOR VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG (DOE/LX/07-1271&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00241
GW1-PD	08/02/12	PPPO-02-1506916-12	NO LONGER CONTAINS/NOT CONTAMINATED WITH DETERMINATION FOR SOIL, CONCRETE, PERSONAL PROTECTIVE EQUIPMENT, PLASTIC, AND CLOTH FILTERS GENERATED DURING THE INSTALLATION OF NEW EXTRACTION WELLS	DOE-PPPO	KDEP	No	ENV 1.A-00225
SWP-PD	04/26/12	PPPO-02-1429858-12	TRANSMITTAL OF REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP, PADUCAH, KY (DOE/LX/07-1268&D2/R1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00213
SWP-PD	06/06/12	PPPO-02-1440658-12B	TRANSMITTAL OF THE 30% REMEDIAL DESIGN REPORT IN SITU TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT THE C-747-C OIL LAND FARM (SOLID WASTE MANAGEMENT UNIT 1) AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1276&D1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00209
SWP-PD	06/25/12	PPPO-02-1478193-12	REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP, PADUCAH, KENTUCKY(DOE/LX/07-1268&D2/R2) REPLACEMENT PAGES	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00214
SWP-PD	06/26/12	KY-12-0303	EPA APPROVAL OF THE REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP, PADUCAH, KY, DOE/LX/07-1268&D2/R2	USEPA-4	DOE-PPPO	No	ENV 1.A-00210
SWP-PD	06/27/12	KY-12-0305	APPROVAL OF THE REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1268&D2/R2)	KDEP	DOE-PPPO	No	ENV 1.A-00211
SWP-PD	07/13/12	KY-12-0314	EPA COMMENTS ON THE 30% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT THE C-747-C OIL LANDFARM (SWMU 1) AT PGDP PADUCAH, KY, DOE/LX/07-1276&D1	USEPA-4	DOE-PPPO	No	ENV 1.A-00212

APPENDIX E

C-400 PROJECT GROUNDWATER MONITORING WELLS DATA

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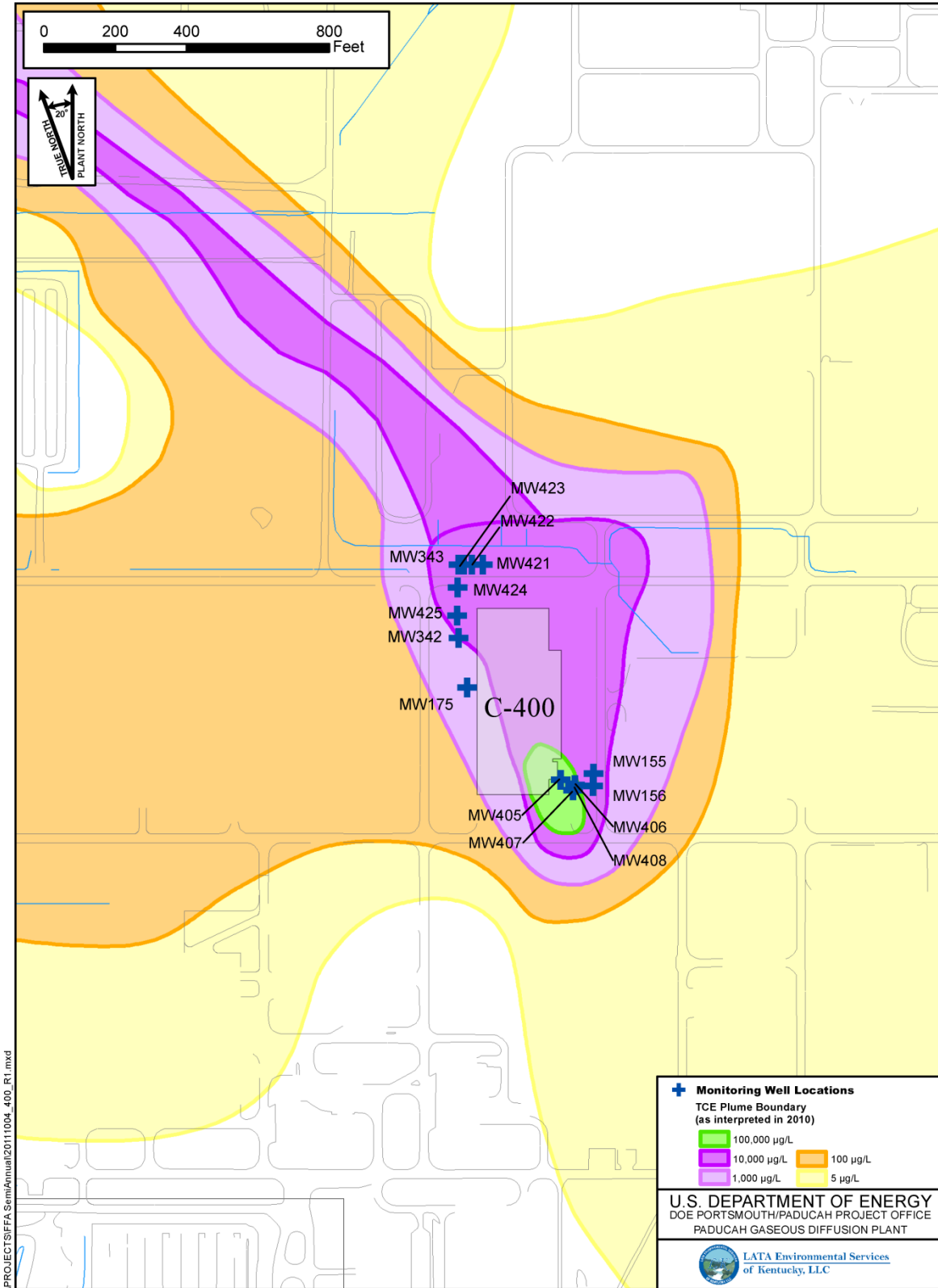


Figure E.1. C-400 Monitoring Wells

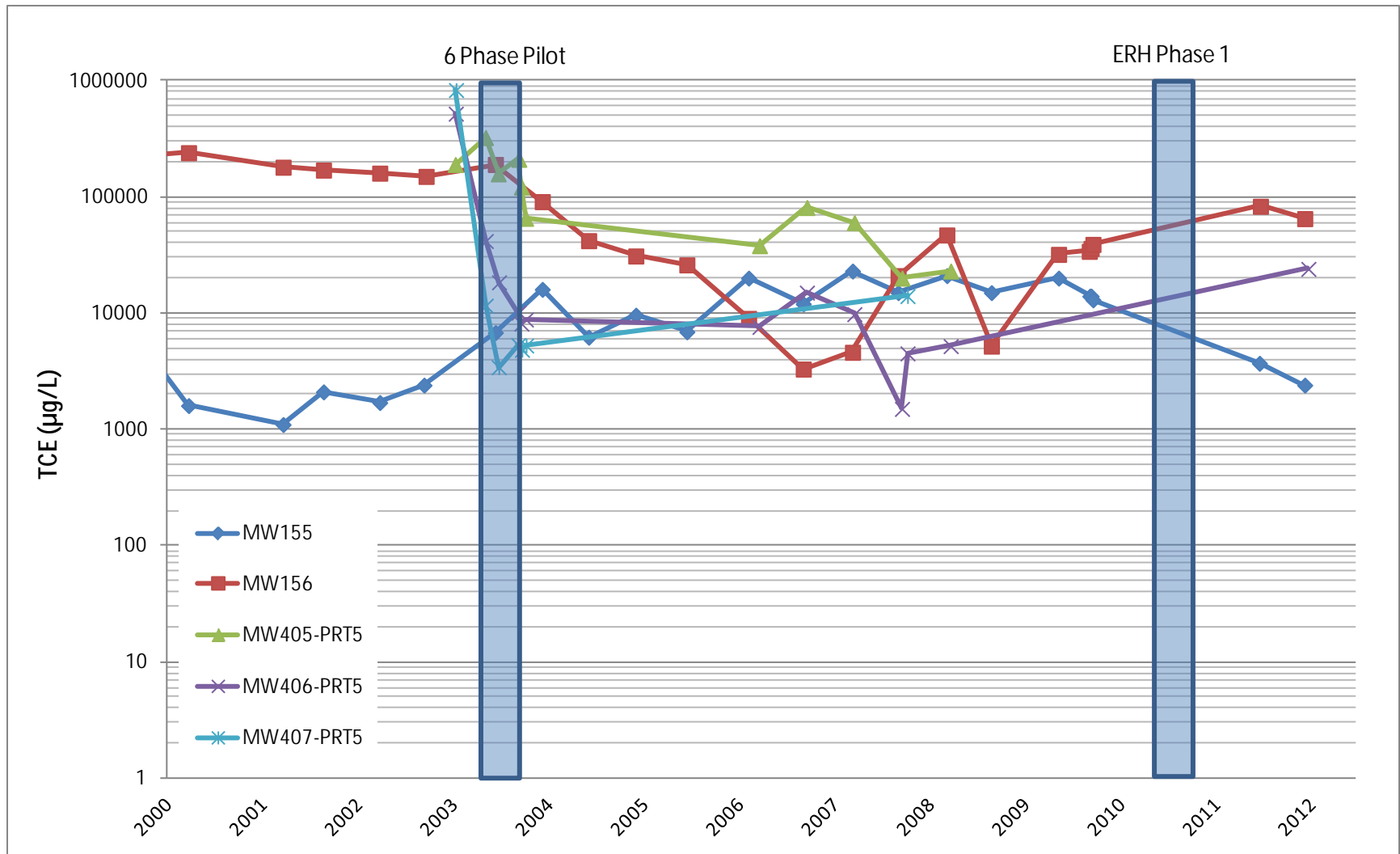


Figure E.2. C-400 TCE Trends in MWs in Source Areas

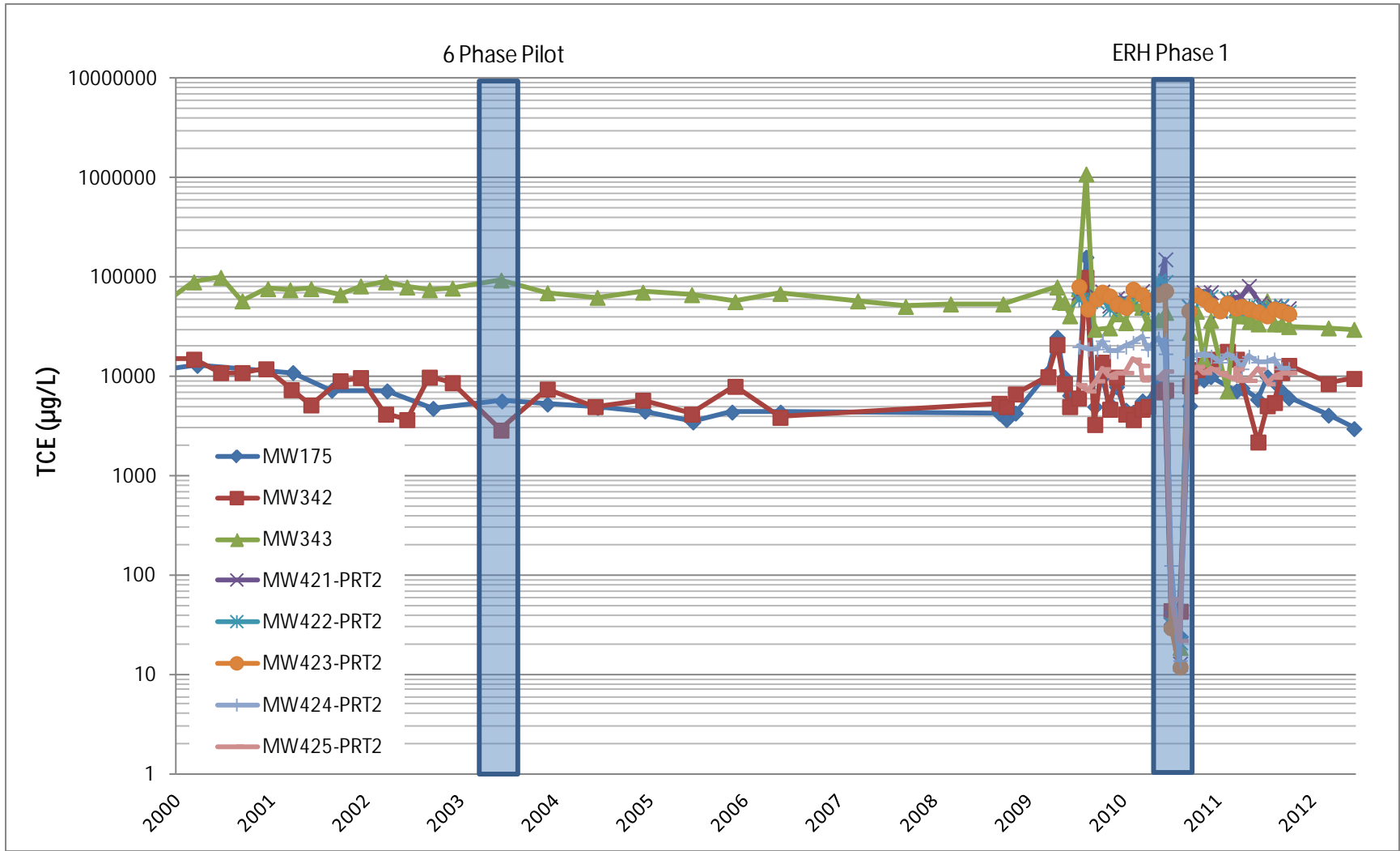


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Areas

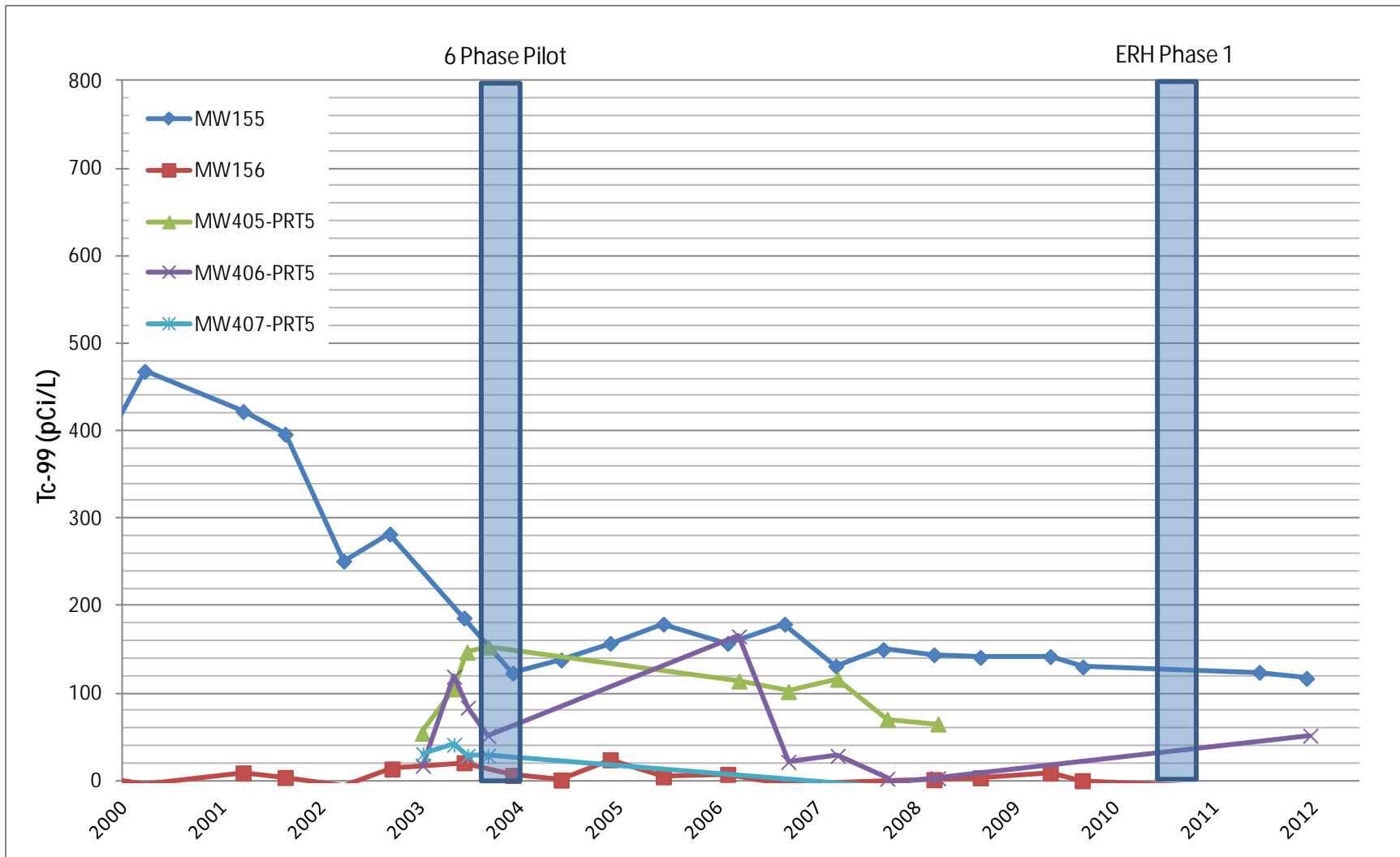


Figure E.4. C-400 Tc-99 Trends in MWs in Source Areas

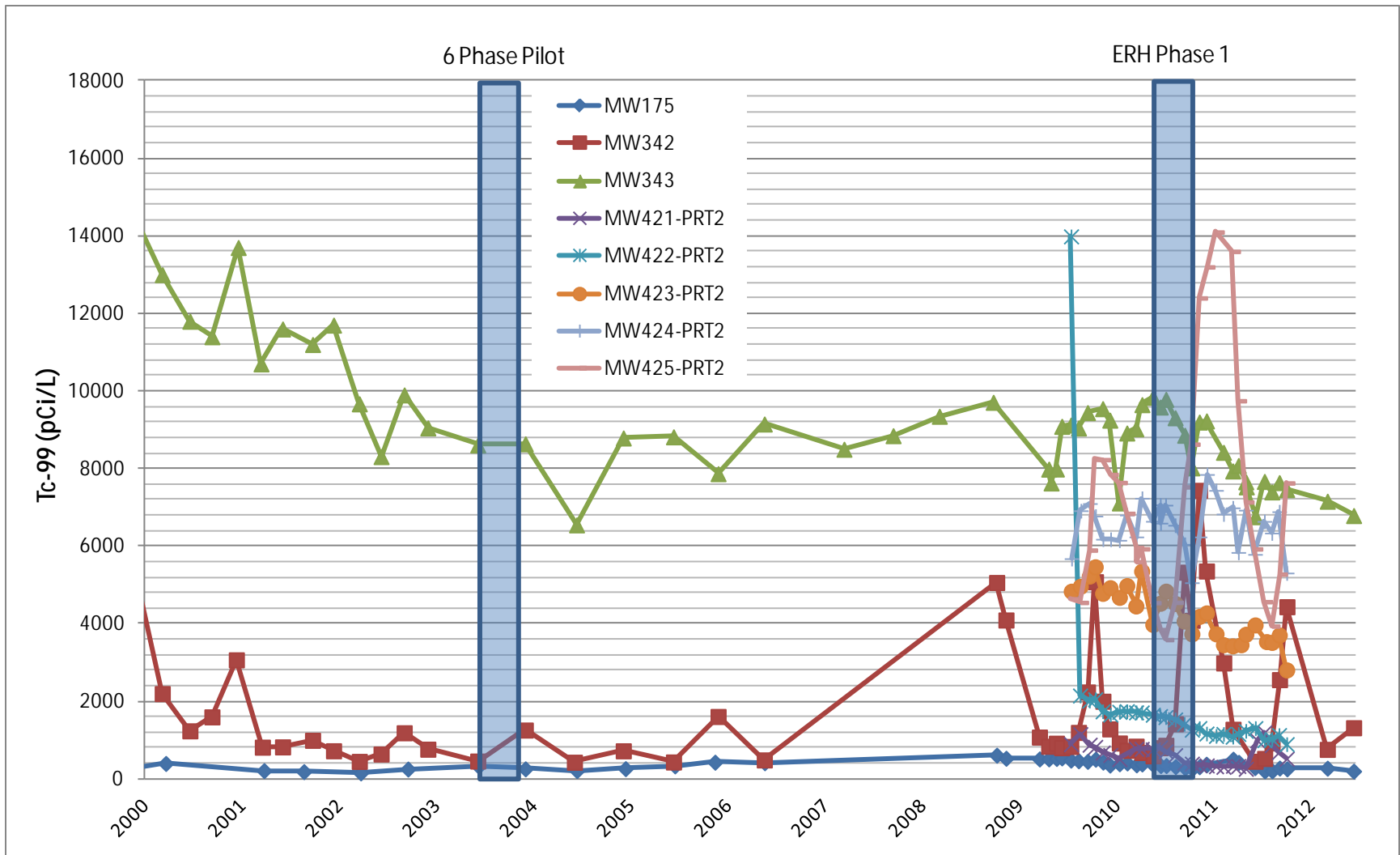


Figure E.5. C-400 Tc-99 Trends in MWs Downgradient of Source Areas

C-400 Monitoring
Water Quality Records for
MW155

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
9/10/2009	14000	< 1000			< 1000													C09254002003
9/10/2009	14000	< 200	< 200	< 200	< 200	< 1.12	93.2	130	< .005									C09253025001
9/15/2009	14000	< 500			< 500													C09258030001
9/22/2009	13000	< 500			< 500													C09265022002
6/23/2011	3700	< 100	< 20	< 20	< 20	7.65	130	124	< .005									C11174017005
12/14/2011	2400	< 500			< 100	< 3.61	111	117	< .005									C11348018003
3/13/2012	2400	< 50			< 50	< 2.35	89.7	137	< .005									C12073014001
6/19/2012	1900	< 250			< 50	6.46	121	110	< .005									C12171014003

E-8

C-400 Monitoring
Water Quality Records for
MW156

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
9/8/2009	34000	< 2000	< 2000	< 2000	< 2000	< 3.89	4.01	< .0531	< .005									C09252004001
9/8/2009	34000	< 5000			< 5000													C09252006001
9/15/2009	36000	< 5000			< 5000													C09258030002
9/22/2009	39000	< 5000			< 5000													C09265022001
6/27/2011	83000	< 5000	< 1000	< 1000	< 1000	< 3.86	5.6	< -8.94	< .005									C11178014001
12/14/2011	65000	< 5000			< 1000	< 2.55	7.54	< -5.13	< .005									C11348018004
3/13/2012	62000	< 2000			< 2000	6.83	< 4.93	< 6.21	< .005									C12073014002
6/19/2012	64000	< 5000			< 1000	< 6.32	< 6.31	< 9.77	< .005									C12171014004

E-9

C-400 Monitoring
Water Quality Records for
MW175

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	4900	< 50			< 50	11.7	447	508	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09168007001
7/20/2009	4400	< 250			< 50	< 3.65	415	438	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09201015001
8/18/2009	4400	< 50			< 50	9.43	416	375	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023001
12/14/2009	7900	< 250			< 50	< -7.22	363	357	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024001
3/24/2010	5600	< 50			< 50	< 1.61	211	360	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023001
6/23/2010	4800	< 250			< 50	< 4.95	292	343	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017001
6/23/2010	5100	< 250			< 50	12.9	301	315	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017002
9/23/2010	5100	< 250			< 50	7.46	226	275	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013001
12/13/2010	9800	< 250			< 50	26.6	274	363	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023005
3/23/2011	5800	< 100			< 100	24.3	366	488	< .005	< 167	< 176	< 137	< 98	< 118	< 68.6		< 88.2	C11082024002
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
6/13/2011	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
6/13/2011	5900	< 250			< 50	13.5	201	292	< .005									C11165011004
9/14/2011	6900	< 250			< 50	< -1.01	218	228	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087005
3/12/2012	3700	< 50			< 50	< 5.16	156	279	< .005									C12072031011

E-10

C-400 Monitoring
Water Quality Records for
MW342

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	3000	< 50			< 50	16.7	616	805	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168006001
7/20/2009	4300	< 250			< 50	< -785	510	837	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09201016001
8/18/2009	5800	< 50			< 50	16	985	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230024001
12/14/2009	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
12/14/2009	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
3/23/2010	4700	< 50			< 50	10.3	386	827	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025007
6/22/2010	5400	< 250			< 50	11.4	642	750	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173039001
9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
E-11 9/23/2010	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
12/13/2010	12000	< 200			< 200	41	4120	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023002
12/13/2010	12000	< 200			< 200	56	3960	5190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023003
3/23/2011	8100	< 100			< 100	26.8	835	980	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.32	< .09	C11082024001
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-01
6/14/2011	2100	< 500			< 100	28.8	457	456	< .005									C11165038001
9/14/2011	11000	< 250			< 50	< -9.47	1800	2150	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087003
9/14/2011	10000	< 250			< 50	< -4.68	1750	1930	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087004
3/12/2012	7500	< 100			< 100	< 2.56	420	678	< .005									C12072031010

C-400 Monitoring
Water Quality Records for
MW343

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	41000	< 500			< 500	82.1	6710	9090	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168007002
7/20/2009	31000	< 2500			< 500	< 4.65	6730	9010	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09201066001
8/18/2009	31000	< 400			< 400	19.7	7420	8770	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023002
9/21/2009	27000	< 1000	< 200	< 1000	< 200	< -119	6980	9230	< .005									C09265006005
12/14/2009	43000	< 2000			< 400	< -176	6970	9250	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09348027001
3/22/2010	37000	< 400	< 250	< 250	< 250	< -90.6	5370	8960	< .005									C10082002001
3/22/2010	37000	< 250			< 250	37.4	6850	8920	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005001
3/22/2010	37000	< 250			< 250	92.1	5660	9010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005002
E-12 6/22/2010	32000	< 2500			< 500	22	6440	9250	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173027001
9/22/2010	28000	< 2500			< 500	< -114	6340	8860	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020004
12/13/2010	34000	< 2500			< 500	< -77.3	6970	9230	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023006
3/22/2011	39000	< 400			< 400	134	5310	7600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.53	< .09	C11081023003
3/22/2011	47000	< 400			< 400	46.5	6570	7610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.13	< .09	C11081023004
5/12/2011	36000	< 2500	< 500	< 500	< 500	150	5510	7530	< .005									C11132027003
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-02
6/15/2011	33000	< 2000			< 400	< -4.39	7110	6760	< .005									C11166026001
9/13/2011	34000	< 2000			< 400	< -144	6990	7550	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012004
3/12/2012	28000	< 400			< 400	< -85.1	4680	8320	< .005									C12072031006
3/12/2012	29000	< 400			< 400	< -56.9	4670	7030	< .005									C12072031007

C-400 Monitoring
Water Quality Records for
MW405

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/23/2011	52000	< 2500	< 500	< 500	< 500	8.66	22.7	< 16.1	.014									C11174017004

E-13

C-400 Monitoring
Water Quality Records for
MW405-PRT5

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/20/2012	97000	< 5000			< 1000	< 4.86	15.7	< -4.94	< .005									C12172011001

E-14

C-400 Monitoring
Water Quality Records for
MW406

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/23/2011	6500	< 500	< 100	< 100	< 100	11.4	45.5	47.7	< .005									C11174017003

E-15

C-400 Monitoring
Water Quality Records for
MW406-PRT5

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
12/28/2011	24000	< 500			< 100	7.77	54.5	51.5	< .005									C11362008002
3/15/2012	10000	< 100			< 100	< -2.11	45.3	48.6	< .005									C12075015001
6/20/2012	5100	< 500			< 100	< 1.89	23.6	< 17.5	< .005									C12172011002

E-16

C-400 Monitoring
Water Quality Records for
MW407-PRT4

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L		PCB 1268 μg/L
12/28/2011	4900	< 500			< 100	< 3.09	10.7	< 5.26	< .005									C11362008001
3/14/2012	14000	< 100			< 100	< 3.36	5.57	< -5.15	< .005									C12074017002
6/20/2012	13000	< 500			< 100	< 4.76	8.43	< 8.61	< .005									C12172011003

E-17

C-400 Monitoring
Water Quality Records for
MW408

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/23/2011	95000	< 5000	< 1000	< 1000	< 1000	< 2.51	13.3	< 14.5	< .005									C11174017001

E-18

C-400 Monitoring
Water Quality Records for
MW408-PRT5

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
12/14/2011	71000	< 5000			< 1000	< 1.93	32.9	23.2	< .005									C11348026001
6/20/2012	390000	< 20000			< 4000	< 3.79	12.2	< 1.58	< .005									C12172011004

E-19

C-400 Monitoring
Water Quality Records for
MW421-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
7/21/2009	20000	< 1000			< 200	38	1780	1650	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027001
8/25/2009	21000	< 200			< 200	< -377	1300	1670	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09237029001
9/29/2009	22000	< 200			< 200	33	878	1240	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002001
12/16/2009	27000	< 1000			< 200	27.7	906	1160	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09350025004
3/23/2010	24000	< 200			< 200	15.5	1180	1780	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025004
6/23/2010	58000	< 500			< 500	18.4	1710	2340	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026001
9/21/2010	34000	< 500			< 500	15.1	826	1190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016001
12/14/2010	28000	< 2500			< 500	9.44	789	916	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026001
E-20 3/23/2011	28000	< 250			< 250	< 4.35	623	859	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.06	< .09	C11082024003
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-01
6/22/2011	29000	< 2000			< 400	< -121	3300	3930	< .005									C11173026001
9/12/2011	32000	< 1000			< 200	9.06	2190	2500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015001

C-400 Monitoring
Water Quality Records for
MW421-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	52000	< 2500			< 500	15.2	830	856	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09202027002
8/25/2009	53000	< 500			< 500	6.73	865	1120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237029002
9/29/2009	53000	< 500			< 500	27.9	639	882	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002002
12/16/2009	62000	< 2500			< 500	4.74	475	618	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025005
3/23/2010	55000	< 500			< 500	12.7	417	777	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025005
6/21/2010	51000	< 500			< 500	26.9	514	813	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026002
9/21/2010	51000	< 500			< 500	8.44	255	416	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016002
12/14/2010	62000	< 500			< 500	10.4	280	348	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026002
E-21 3/23/2011	62000	< 500			< 500	8.6	220	340	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C11082024004
6/22/2011	55000	< 2500			< 500	< -24.9	853	996	< .005									C11173026002
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-02
9/12/2011	51000	< 2000			< 400	14.5	582	694	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015002

C-400 Monitoring
Water Quality Records for
MW421-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
7/21/2009	63000	< 2500			< 500	< 3.73	327	302	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027003
8/25/2009	66000	< 500			< 500	< 3.62	398	451	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237029003
9/29/2009	61000	< 500			< 500	8.99	323	335	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273002003
12/16/2009	77000	< 2500			< 500	4.67	226	345	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025006
3/23/2010	70000	< 500			< 500	12.8	218	376	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025006
6/21/2010	68000	< 500			< 500	< 4.02	278	251	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001001
9/21/2010	64000	< 500			< 500	6.83	215	285	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016003
12/14/2010	65000	< 500			< 500	< 5.08	209	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026003
E-22 3/23/2011	61000	< 500			< 500	19	186	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.34	< .09	C11082024005
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-03
6/22/2011	72000	< 2500			< 500	15.7	289	399	< .005									C11173026003
9/12/2011	67000	< 2500			< 500	5.7	272	313	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015003
3/12/2012	73000	< 500			< 500	5.39	177	283	< .005									C12072031003

C-400 Monitoring
Water Quality Records for
MW422-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	10000	< 500			< 100	< -96.7	10400	13600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202018001
8/24/2009	13000	< 100			< 100	95	12900	15600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237007001
9/28/2009	12000	< 100			< 100	59.7	14200	16900	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021004
12/16/2009	16000	< 1000			< 200	< -15.7	10200	13900	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025001
3/23/2010	14000	< 100			< 100	< -25.6	8460	13400	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025001
6/21/2010	14000	< 100			< 100	< -60.6	11600	15500	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173001002
9/20/2010	15000	< 200			< 200	< -51	8500	12900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039004
12/13/2010	23000	< 1000			< 200	< -3.47	5090	6610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024004
E-23 3/22/2011	20000	< 200			< 200	87.5	4860	6410	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11081023005
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-03
6/15/2011	14000	< 1000			< 200	< -13.8	7910	9730	< .005									C11166026002
9/12/2011	16000	< 1000			< 200	< -54.7	10600	12300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022001

C-400 Monitoring
Water Quality Records for
MW422-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	43000	< 2500			< 500	32.8	1570	1970	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019001
8/24/2009	47000	< 500			< 500	28.2	1650	2150	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008001
9/28/2009	45000	< 500			< 500	18.5	1490	2020	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021005
12/16/2009	53000	< 2500			< 500	16.1	1110	1660	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025002
3/23/2010	51000	< 500			< 500	24	823	1600	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025002
6/21/2010	90000	< 400			< 400	17.5	1060	1620	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001003
9/20/2010	51000	< 1000			< 1000	9.61	808	1420	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039005
12/13/2010	54000	< 2500			< 500	41.2	789	1170	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024005
E-24 3/22/2011	40000	< 500			< 500	27.3	823	1090	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.44	< .09	C11081023006
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-04
6/15/2011	50000	< 2500			< 500	35.3	1000	1310	< .005									C11166026003
9/12/2011	52000	< 2000			< 400	10.6	900	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022002

C-400 Monitoring
Water Quality Records for
MW422-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	45000	< 2500			< 500	< -.394	1650	2310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019002
8/24/2009	46000	< 500			< 500	15.4	1380	1960	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008002
9/28/2009	45000	< 500			< 500	15.5	1560	1940	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021006
12/16/2009	58000	< 2500			< 500	20.7	1230	1630	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025003
3/23/2010	53000	< 500			< 500	19.6	866	1490	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025003
6/21/2010	72000	< 1000			< 1000	15.1	883	1520	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173001004
9/20/2010	61000	< 1000			< 1000	16.3	777	1320	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039006
12/13/2010	54000	< 2500			< 500	22.6	782	1070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024006
E-25 3/22/2011	54000	< 500			< 500	23.3	677	1010	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.36	< .09	C11081023007
6/15/2011	49000	< 2500			< 500	13.5	864	1140	< .005									C11166026004
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-05
9/12/2011	53000	< 2000			< 400	7.69	718	910	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022003
3/12/2012	69000	< 500			< 500	< 4.11	575	774	< .005									C12072031004

C-400 Monitoring
Water Quality Records for
MW423-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	13000	< 500			< 100	< -60	8610	10400	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203009001
8/25/2009	12000	< 200			< 200	81	9720	12100	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09237022001
9/28/2009	11000	< 100			< 100	87.3	11100	14000	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09271021001
12/15/2009	15000	< 1000			< 200	< -236	11500	14400	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09349015001
3/22/2010	15000	64			< 25	45.5	8550	13800	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005003
6/22/2010	12000	< 500			< 100	< -79.6	10100	13400	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027002
9/20/2010	12000	< 200			< 200	52.9	9500	16000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039001
12/13/2010	18000	< 500			< 100	< -161	8180	10800	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024001
E-26 3/21/2011	15000	< 200			< 200	95.2	6870	8960	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11080075002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-06
6/14/2011	15000	< 500			< 100	< -273	9620	9790	< .005									C11165038005
9/13/2011	14000	< 1000			< 200	< -18.7	8820	10500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012001

C-400 Monitoring
Water Quality Records for
MW423-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	42000	< 2500			< 500	< -8.97	3760	4840	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09203009002
8/25/2009	47000	< 500			< 500	34.3	3420	4880	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237022002
9/28/2009	44000	< 500			< 500	35.8	3820	5230	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09271021002
12/15/2009	54000	< 2500			< 500	< -51.8	3650	4930	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09349015002
3/22/2010	52000	< 500			< 500	40.2	2260	4310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005004
6/22/2010	45000	< 2500			< 500	< -2.09	3050	4530	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027003
9/20/2010	46000	< 500			< 500	14.3	2590	4070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039002
12/13/2010	52000	< 2500			< 500	42.7	2070	4280	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024002
E-27 3/21/2011	41000	< 500			< 500	114	1990	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C11080075003
6/14/2011	43000	< 2500			< 500	< -23.6	2810	3970	< .005									C11165038006
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-07
9/13/2011	46000	< 2000			< 400	< -37.2	2730	3710	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012002

C-400 Monitoring
Water Quality Records for
MW423-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
7/22/2009	42000	< 2500			< 500	< -4.38	2660	4350	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09203009003
8/25/2009	47000	< 500			< 500	23.4	2850	4440	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237022003
9/28/2009	14000	< 500			< 500	97.8	10600	13500	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021003
12/15/2009	53000	< 2500			< 500	< -48.6	2970	4030	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09349015003
3/22/2010	51000	< 500			< 500	43.5	1960	3810	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005005
6/22/2010	49000	< 2500			< 500	5.16	2930	3850	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027004
9/20/2010	50000	< 500			< 500	34.3	2080	3730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039003
12/13/2010	50000	< 2500			< 500	19	2120	3140	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C10347024003
E-28 3/21/2011	41000	< 500			< 500	89.1	1880	2900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.12	< .09	C11080075004
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-08
6/14/2011	43000	< 2500			< 500	< -17.1	2540	3680	< .005									C11165038007
9/13/2011	47000	< 2000			< 400	< -27.3	2490	2990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012003
3/12/2012	37000	< 500			< 500	< -9.6	1620	2350	< .005									C12072031005

C-400 Monitoring
Water Quality Records for
MW424-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	7200	< 500			< 100	< -7	2300	1790	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204021001
8/27/2009	7100	< 50			< 50	< 3.09	2680	3330	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09239018001
9/30/2009	7700	< 100			< 100	125	4580	6150	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273021001
12/17/2009	9200	< 100			< 100	< -31.9	7760	10000	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09351022002
3/24/2010	7900	< 100			< 100	86.8	4420	6540	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10083023002
6/23/2010	7900	< 250			< 50	14	4020	5080	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017003
9/22/2010	7900	< 1000			< 200	< -79.8	7420	10300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020001
12/15/2010	8400	< 100			< 100	< -325	9940	13900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020001
E-29 6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-09
6/14/2011	7900	< 500			< 100	< -211	7890	8220	< .005									C11165038002
9/13/2011	9000	< 500			< 100	< -150	5730	6730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019001

C-400 Monitoring
Water Quality Records for
MW424-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	17000	< 1000			< 200	< -29.4	4170	5680	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09204022001
8/27/2009	16000	< 200			< 200	< -4.44	6130	5900	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09239019001
9/30/2009	16000	< 200			< 200	91.8	5200	7100	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273023001
12/17/2009	18000	< 200			< 200	7.27	4010	6180	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022003
3/24/2010	17000	< 250			< 250	52.8	2940	6240	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023003
6/22/2010	17000	< 1000			< 200	12.7	5150	7070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017004
9/22/2010	15000	< 1000			< 200	< -41.8	4000	6040	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020002
12/15/2010	14000	< 200			< 200	< -161	5510	7850	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020002
E-30 3/22/2011	12000	< 100			< 100	170	4620	6990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.26	< .09	C11081023001
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-10
6/14/2011	14000	< 500			< 100	< -51.5	4820	5790	< .005									C11165038003
9/13/2011	12000	< 500			< 100	< -138	5900	6890	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019002

C-400 Monitoring
Water Quality Records for
MW424-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	22000	< 1000			< 200	< -7.72	1900	2770	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204023001
8/27/2009	23000	< 200			< 200	< 5.21	3400	4970	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09239020001
9/30/2009	23000	< 250			< 250	78.9	3350	4660	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273024001
12/17/2009	23000	< 200			< 200	12.3	2960	4500	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09351022004
3/24/2010	23000	< 250			< 250	< -39.3	2810	4600	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023004
6/23/2010	21000	< 1000			< 200	10.2	3160	4740	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017005
9/22/2010	21000	< 1000			< 200	< -14.6	2650	4440	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020003
12/15/2010	19000	< 200			< 200	< -54.8	2840	4300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020003
3/22/2011	16000	< 200			< 200	93.3	2580	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.28	< .09	C11081023002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-11
6/14/2011	18000	< 1000			< 200	< -23	2990	3940	< .005									C11165038004
9/13/2011	16000	< 1000			< 200	< -42.4	2720	4190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019003
3/12/2012	12000	< 200			< 200	15.3	2120	3500	< .005									C12072031008

E-31

C-400 Monitoring
Water Quality Records for
MW425-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	5100	< 250			< 50	< 2.26	755	789	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09203011001
8/26/2009	8200	< 100			< 100	9.62	4390	3870	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024001
9/29/2009	11000	< 100			< 100	107	6500	8580	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273002004
12/16/2009	13000	< 500			< 100	26.5	6360	9490	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025007
3/23/2010	8900	< 100			< 100	51.4	2200	3010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005006
6/22/2010	8300	< 500			< 100	25	1340	1330	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039002
9/21/2010	12000	< 500			< 100	< -221	10000	12700	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016004
12/15/2010	13000	< 200			< 200	< -819	15000	18300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020004
3/21/2011	11000	< 100			< 100	81.2	10800	14000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.17	< .09	C11080075005
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-03
6/13/2011	7600	< 500			< 100	75.3	2130	2530	< .005									C11165011005
9/14/2011	12000	< 500			< 100	< -143	7140	9190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087006

E-32

C-400 Monitoring
Water Quality Records for
MW425-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	6300	< 250			< 50	< 3.37	2930	4460	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09203011002
8/26/2009	6100	< 50			< 50	< -19.6	3370	4550	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09238024002
9/29/2009	7500	< 50			< 50	121	4600	5900	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002005
12/16/2009	11000	< 500			< 100	< -17.7	5550	7850	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09350025008
3/23/2010	9300	< 50			< 50	49.5	3710	5600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005007
6/22/2010	8400	< 250			< 50	43.7	2900	3850	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039003
9/21/2010	10000	< 500			< 100	< -37.4	4910	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016005
12/15/2010	11000	< 100			< 100	< -456	9930	13200	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020005
3/21/2011	9200	< 100			< 100	28.2	8260	12500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.36	< .09	C11080075006
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-04
6/13/2011	8700	< 500			< 100	< -26.5	4870	5930	< .005									C11165011006
9/14/2011	10000	< 500			< 100	< -98.5	4370	4600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087007

E-33

C-400 Monitoring
Water Quality Records for
MW425-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	6200	< 250			< 50	< .86	3380	4420	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203011003
8/26/2009	4700	< 50			< 50	< -23.2	3770	4120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024003
9/29/2009	6900	< 50			< 50	96.2	3490	4570	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002006
12/17/2009	8100	< 100			< 100	39.3	3620	5210	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022001
3/23/2010	7600	< 50			< 50	57	2590	4290	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005008
6/22/2010	7700	< 250			< 50	33.6	2790	3760	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039004
9/21/2010	8500	< 500			< 100	< -22.6	3270	5070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016006
12/15/2010	9100	< 100			< 100	< -325	7150	8570	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020006
E-34 6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-05
6/13/2011	7400	< 500			< 100	< -23.1	3310	4310	< .005									C11165011007
9/14/2011	8500	< 500			< 100	< -99.4	4540	4360	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087008
3/12/2012	8000	< 100			< 100	< -25.1	3230	5410	< .005									C12072031009

C-400 Monitoring
Water Quality Records for
MW487

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
12/30/2009	31	< 1	< 1	< 1	< 1	< -0.87	< 2.52	< 10.3	< .005									C09365015001
6/13/2011	14	< 5	< 1	< 1	< 1	< 7.26	< 1.75	< 4.03	< .005									C11164036005

E-35

C-400 Monitoring
Water Quality Records for
MW505

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
3/13/2012	160	< 5			< 5	< -2.14	48.8	51.6	< .005									C12073014003
6/18/2012	18	< 5			< 1	< -1.58	54	51.4	< .005									C12170024001

E-36

C-400 Monitoring
Water Quality Records for
MW506

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
3/13/2012	4300	< 50			< 50	< .856	50.5	62.6	< .005									C12073014004
6/18/2012	4100	< 250			< 50	< 3.44	66.4	59.7	< .005									C12170024002

E-37

C-400 Monitoring
Water Quality Records for
MW507

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
3/13/2012	1200	< 10			< 10	< 3.11	38.7	53.4	< .005									C12073014005
6/18/2012	1200	< 100			< 20	< 5.7	51.2	41.2	< .005									C12170024003

E-38

APPENDIX F

**C-749 URANIUM BURIAL GROUND (SWMU 2)
GROUNDWATER MONITORING WELL DATA**

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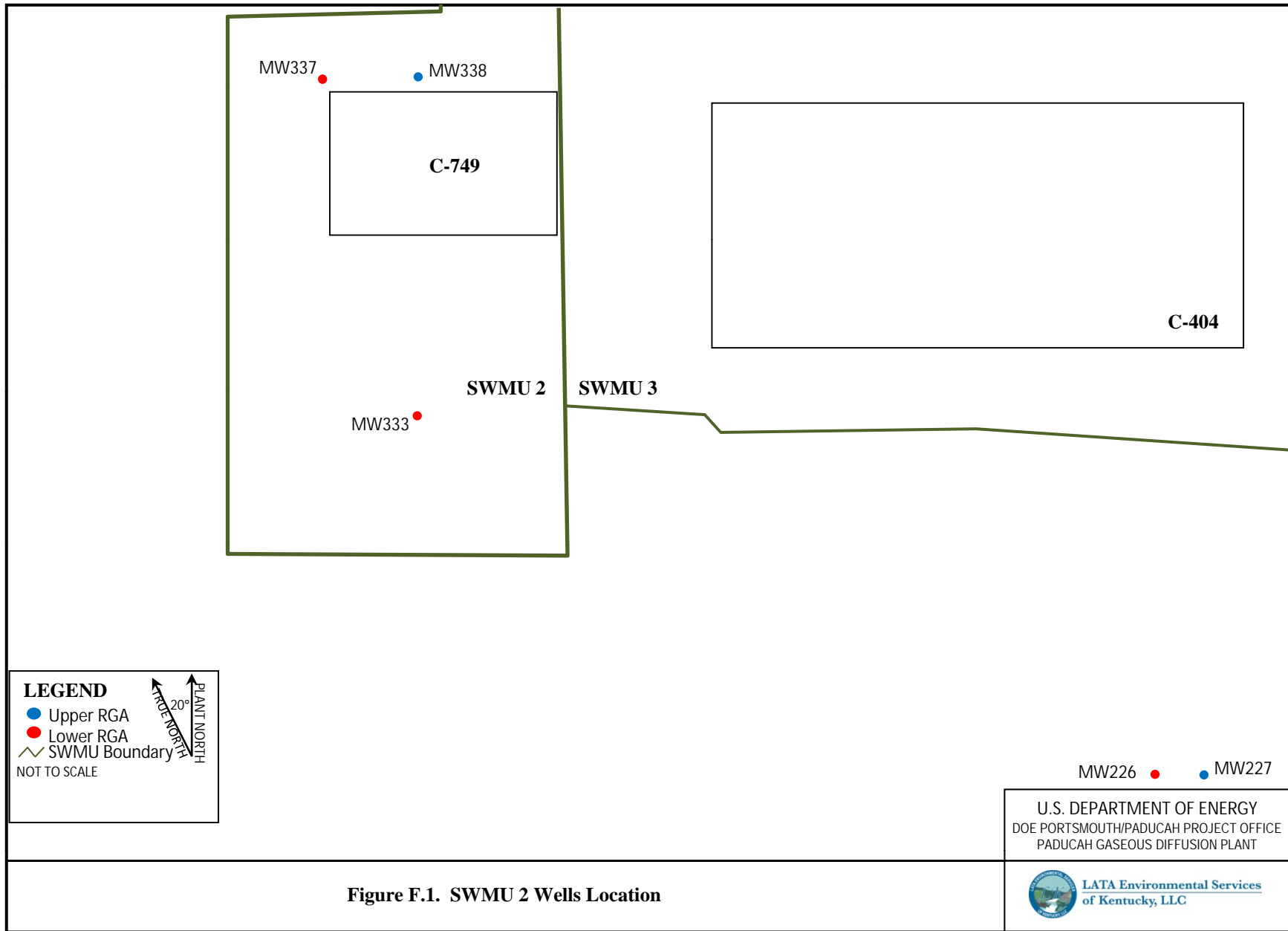


Figure F.1. SWMU 2 Wells Location

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT



LATA Environmental Services
of Kentucky, LLC

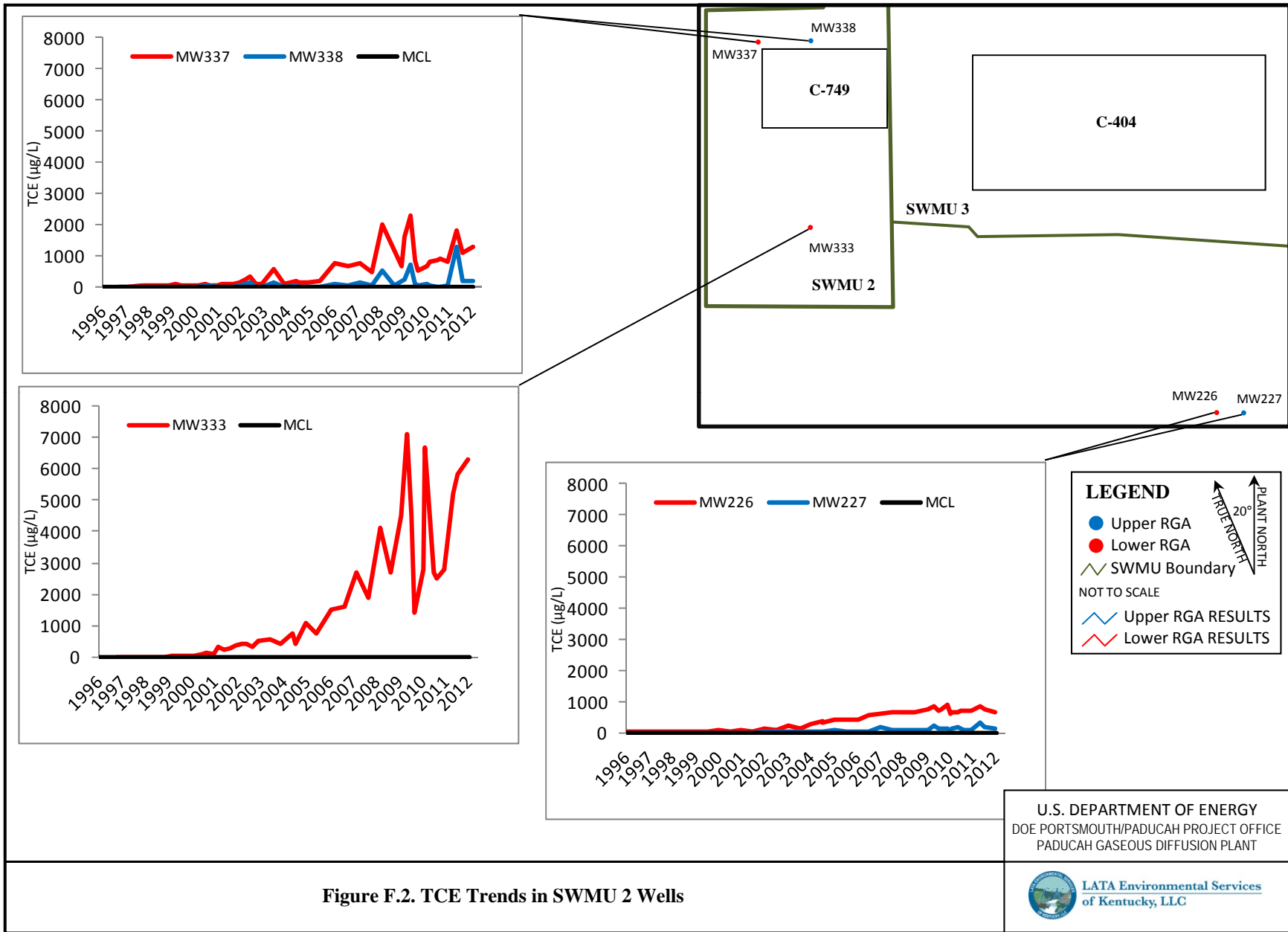


Figure F.2. TCE Trends in SWMU 2 Wells

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT



LATA Environmental Services
of Kentucky, LLC

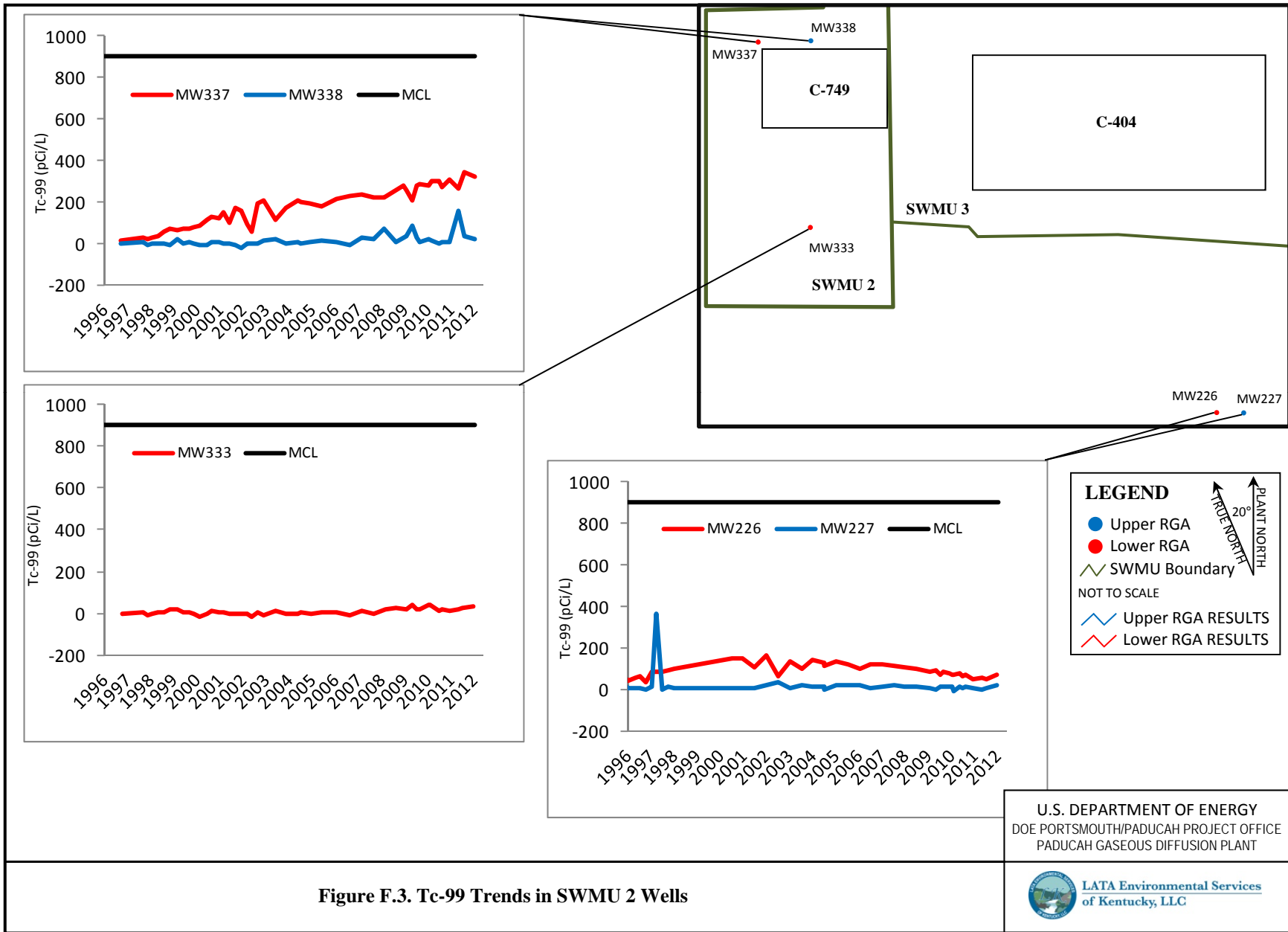


Figure F.3. Tc-99 Trends in SWMU 2 Wells

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/6/1993	8							11				930507-105
5/6/1993	2							6				930507-101
5/13/1993	7							12				930513-235
6/2/1993	8							10				930602-113
6/16/1993	8							8				930617-116
6/16/1993	2											930617-118
7/14/1993	9							16				930715-049
7/20/1993	10							8				930721-106
8/9/1993	11							15				930810-018
8/16/1993	11							18				930819-067
9/30/1993	11							18				930930-169
10/26/1993	12							35				931027-061
11/8/1993	11							32				931109-073
11/16/1993	11							22				931117-105
1/11/1994	11							25				940111-177
1/25/1994	12							13				940126-013
2/8/1994	10							32				940209-005
2/15/1994	12							14				940216-023
7/18/1994	12							18				940719-065
7/26/1994	14							35				940726-198
8/11/1994	15							32				940812-033
8/18/1994	15							15				940818-135
1/17/1995	17							26				950117-115
1/17/1995	17							30				950117-119
1/23/1995	17							31				950125-081

FIG

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
2/6/1995	16							28				950207-055
2/13/1995	16							36				950215-031
4/19/1995								39				950419-194
4/24/1995								44				950425-170
5/3/1995								15				950503-140
5/8/1995								49				950509-041
5/8/1995								43				950509-033
7/19/1995	16							32				950720-047
7/25/1995	11							32				950726-034
8/7/1995								41				950808-083
8/14/1995								43				950815-023
8/14/1995								30				950815-031
10/23/1995								34				951024-036
10/30/1995								40				951031-056
10/30/1995								36				951031-060
11/8/1995								54				951110-059
11/15/1995								55				951116-020
1/22/1996	20							42				960122-119
5/17/1996								59				960521-007
7/10/1996	20							65				960710-204
10/14/1996								35				961015-019
1/16/1997	24							86				970121-043
4/14/1997								84				970414-100
7/14/1997	26							84				970714-133
7/14/1997	27							85				970714-134

F-7

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/14/1997								95				971014-047
1/12/1998	30							101				C980140119
7/13/1998	25											C981960004
7/13/1998	25											C981960005
1/11/1999	26											C990110084
7/20/1999	40											C992020007
7/20/1999	42											C992020008
1/11/2000	71											C000110092
7/12/2000	61							148				C001940098
1/9/2001	81							148				C010100017
7/11/2001	55							107				C011930007
1/8/2002	140							166				C020080098
7/22/2002	89							64.7				C022030173
1/21/2003	230							134				C030210115
7/23/2003	130							98.9				C032040144
1/21/2004	280							146				C040210090
7/22/2004	394											C042050002
7/22/2004	340	12	< 5	< 5	< 5	< .668	57.7	132	< .0902	< .0122	< .348	C042050009
7/27/2004	320							112				C042090056
1/24/2005	440							134	< .0357	< .0147	< -.0135	C050240045
7/27/2005	420							118	< .0346	< .00589	< .00252	C052080180
1/24/2006	410							101	< .0973	< -.0183	< .0768	C060240039
7/24/2006	550							119	< 1.07	< .187	< .282	C062050057
1/24/2007	610							118	< 1.03	< -.00311	< .21	C070240038
7/24/2007	660							112	< .0971	< -.0355	< .0361	C072060043

F-8

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
1/15/2008	640							110	< .0264	< .0644	< .00478	C080160004
7/24/2008	640							98.7	< .0399	< .00678	< -.00253	C082060091
2/5/2009	760							86.5				C09036036004
5/12/2009	850	26	< 5	< 5	< 5	< -.403	49.2	92.3				C09132009001
7/28/2009	730							74.6				C09209020001
9/21/2009	780	< 25	< 5	< 25	< 5	< 2.56	46.3	88.1				C09265006002
12/10/2009	880							79.1				C09344026005
1/26/2010	610							69.3				C10026023001
3/9/2010	650	22	< 10	< 10	< 10	4.2	49.4	74				C10068052005
6/1/2010	640							75.7				C10152026001
7/14/2010	710							60.7				C10195040002
9/7/2010	720	22	< 10	< 10	< 10	< 4.04	38.8	73.8				C10250033001
1/3/2011	690							47.6				C11003029002
5/11/2011	830	28	< 5	< 5	< 5	4.3	41	54.5				C11131023001
7/28/2011	780							53.2				C11209031001
1/20/2012	680							74.7				C12020022001
7/31/2012	390							30.5				C12213022002

F-9

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW227

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/13/1993	2							17				930513-239
6/2/1993	2							0				930602-124
6/16/1993	2							0				930617-138
7/13/1993	2							12				930713-156
7/19/1993	2							10				930721-102
8/9/1993	2							5				930810-014
8/16/1993	2							13				930820-001
9/30/1993	2							13				930930-173
10/26/1993	2							7				931027-053
11/8/1993	2							0				931109-077
11/16/1993	2							9				931117-134
1/11/1994	3							18				940111-181
1/25/1994	3							11				940126-017
2/8/1994	3							0				940209-001
2/15/1994	3							5				940216-019
4/29/1994	4											940429-116
7/18/1994	2							0				940719-061
7/26/1994	3							6				940726-202
8/10/1994	4							14				940811-063
8/10/1994	4							10				940811-075
8/10/1994	3	< 5	< 5	< 5	< 5							S408081-01V
8/18/1994	4							3				940818-131
1/17/1995	4							9				950118-204
1/23/1995	3							18				950125-093
1/23/1995	4							10				950125-097

F-10

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW227

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
2/6/1995	3							9				950207-059
2/13/1995	4							17				950215-027
4/19/1995								16				950419-202
4/24/1995								20				950425-162
4/24/1995								23				950425-178
5/3/1995								5				950503-136
5/8/1995								14				950509-049
7/19/1995	5							6				950720-043
7/25/1995	4							23				950726-038
8/7/1995								14				950808-067
8/7/1995								17				950808-087
8/14/1995								12				950815-027
10/23/1995								0				951024-040
10/23/1995								0				951024-032
10/30/1995								6				951031-064
11/8/1995								7				951110-063
11/15/1995								22				951116-024
1/22/1996	4							3	2.9	.18	6.69	960122-115
1/22/1996	4							4				960122-123
5/17/1996								10				960521-008
7/9/1996	5							7				960709-085
10/14/1996								0				961015-018
1/16/1997	6							11				970121-041
1/16/1997	6							3				970121-042
4/14/1997								367				970414-099

F-11

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW227

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
7/14/1997	6							2				970714-135
10/14/1997								12				971014-048
1/12/1998	4							< 9				C980140120
1/12/1998	4							< 8				C980140122
7/13/1998	6											C981960003
1/11/1999	6											C990110085
1/11/1999	6											C990110086
7/20/1999	8											C992020009
1/11/2000	3											C000110093
7/12/2000	6							< 3.92				C001940099
1/9/2001	3							< 3.82				C010100018
7/11/2001	7							< 7.5				C011930006
1/8/2002	23							20.2				C020080097
7/22/2002	23							33.4				C022030172
1/21/2003	24							< 9.75				C030210114
7/23/2003	26							22.5				C032040145
1/21/2004	31							< 17				C040210091
7/22/2004	40											C042050003
7/22/2004	33	< 1	< 1	< 1	< 1	5.9	10.1	< 10.4	< .284	< .00706	< .412	C042050010
7/27/2004	39							< -.469				C042090057
1/24/2005	76							22.8	< .348	< -.0287	< .122	C050240047
7/27/2005	45							18.9	< .0822	< .0131	< .0649	C052080181
1/25/2006	38							20.3	< .0898	< .004	< .0169	C060250133
7/24/2006	61							< 4.11	< 1.36	< .263	< .298	C062050058
1/24/2007	180							< 11	< .219	< .0426	< .0696	C070240039

F-12

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW227

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
7/24/2007	73							24	< .124	< -.0338	< .0891	C072060044
1/16/2008	79							< 11	< .21	< .00145	< .0742	C080160068
7/24/2008	110							< 10.9	< .0526	< .00769	< -.00691	C082060092
2/5/2009	82							< 9.22				C09036036005
5/12/2009	210	4.2	< 1	< 1	< 1	< 1.54	7.61	< -2.16				C09132009002
7/28/2009	140							16.5				C09209020002
9/21/2009	140	< 5	< 1	< 5	< 1	< .447	7.47	< 14.8				C09265006003
12/10/2009	150							< 12.6				C09344026006
1/26/2010	110							< 17.1				C10026023002
3/9/2010	150	3.5	< 1	< 1	< 1	< 2.74	7.52	< -4.34				C10068052006
6/1/2010	160							< 11.8				C10152026002
7/14/2010	140							< 8.12				C10195040003
9/7/2010	110	2.5	< 1	< 1	< 1	< -.521	5.85	< 13.6				C10250033002
1/3/2011	94							< 7.15				C11003029001
5/11/2011	310	6.2	< 1	< 1	< 1	< .974	10.6	< .676				C11131023002
7/28/2011	160							< 4.69				C11209031002
1/20/2012	150							17.9				C12020022003
7/31/2012	74							< 5.99				C12213022003

F-13

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW333

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/14/1996	10				< .48							96M04623-3717
10/14/1996									9.66		.14	96M04623-3731
10/14/1996								-1.1				96M04623-3761
1/29/1997	5	< 5	< 5	< 5	< 5							970130-051
9/23/1997	5	< 5	< 5	< 5	< 5	-2	2	6				970923-064
11/19/1997	6	< 5	< 5	< 5	< 5	-7	2	-8				971119-080
2/9/1998	8	< 5	< 5	< 5	< 5	< 2.3	< 1	< 1				C980420046
5/4/1998	14	< 5	< 5	< 5	< 5	< 5.1	15	< 3				C981250036
8/10/1998	16	< 5	< 5	< 5	< 5	< 4.3	6	< 3.9				C982220109
11/12/1998	16	< 5	< 5	< 5	< 5	< -1.37	5.36	< 16				C983160089
3/3/1999	30	< 5	< 5	< 5	< 5	< .68	< 2.83	19.27				C990620037
6/4/1999	33	< 5	< 5	< 5	< 5	< 1.23	< .07	< 2.81				C991580024
9/15/1999						< -.79		< 4.13				C992580210
12/7/1999	29	< 5	< 5	< 5	< 5	2.48	< 1.48	< .475				C993410100
12/7/1999	33	< 5	< 5	< 5	< 5	< .45	< .49	< -6.17				C993410101
3/8/2000	46	< 5	< 5	< 5	< 5	< 1.58	< 4.62	< -12.8		< 0		C000680108
6/14/2000	110	< 5	< 5	< 5	< 5	< .52	< -.97	< -4.54				C001670002
9/12/2000	140	< 5	< 5	< 5	< 5	< 2.67	< 3.97	< 9.38				C002560135
12/18/2000	110	< 10	< 10	< 10	< 10	< .462	< .604	< 3.24				C003540006
3/19/2001	310	< 5	< 5	< 5	< 5	< -.5	< .794	< 8.5				C010780093
6/6/2001	230	< 25	< 25	< 25	< 25	< 1.62	4.76	< -.303				C011570178
9/25/2001	290	< 25	< 25	< 25	< 25	< 2.25	< 1.41	< -2.35		< -9.94		C012680234
12/17/2001	390	< 25	< 25	< 25	< 25	< 1.86	< -.125	< -.337				C013510092
3/13/2002										< -3.95		C020720129
3/13/2002	410	< 25	< 25	< 25	< 25	< 1.13	< .94	< -.654				C020720130

F-14

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW333

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
6/10/2002	420	< 50	< 50	< 50	< 50	< 1.57	< -2.59	< -15.7				C021610047
9/5/2002	330	< 50	< 50	< 50	< 50	< -.977	< -.125	< 8.51				C022480132
12/2/2002	530	< 25	< 25	< 25	< 25	< 1.7	< .462	< -6.2				C023370013
6/10/2003	550	< 25	< 25	< 25	< 25	< 1.08	< 1.1	< 12.4				C031620013
12/4/2003	440	< 25	< 25	< 25	< 25	< .213	< 2.21	< 0				C033380096
6/7/2004	750	< 50	< 50	< 50	< 50	< -.231	< -.683	< -.384	< 30	< 2.2	< .35	C041590175
7/20/2004	430	< 10	< 10	< 10	< 10	< 1.44	< 1.43	< 2.73	< .198	< .00505	< .363	C042020116
12/30/2004	1100	< 50	< 50	< 50	< 50	< -.0341	< .436	< 1.21				C043650022
6/14/2005	760	< 50	< 50	< 50	< 50	< .455	< 2.91	< 6.24	< .0723	< -.0127	< .0115	C051650114
2/14/2006	1300	< 50	< 50	< 50	< 50	< 2.43	< 3.19	< 5.18				C060450088
2/14/2006	1500	< 50	< 50	< 50	< 50	< -.267	< 3.66	< 6.25				C060450089
9/12/2006	1600	< 120	< 120	< 120	< 120	< 1.58	4.31	< -12.7				C062550163
3/19/2007	2700	< 100	< 100	< 100	< 100	4.34	8.66	< 13.8				C070780102
9/19/2007	1900	< 20	< 20	< 100	< 20	< 2.81	6.15	< .212				C072630092
3/11/2008	4100	< 25	< 25	< 120	< 25	< 1.75	16.9	19				C080710145
9/3/2008	2700	< 25	< 25	< 120	< 25	< .456	6.72	27.3				C082470086
2/9/2009	4500							22.7				C09040013001
5/7/2009	7100	< 250	< 50	< 250	< 50	< 2.35	22	39.9				C09127062003
7/28/2009	4500							21.1				C09209012001
9/25/2009	1400	< 50	< 50	< 50	< 50	< .535	17.7	21.3				C09268017001
1/26/2010	2800							38.1				C10026023004
3/8/2010	6700	< 50	< 50	< 50	< 50	< .795	24.7	38.6				C10067037002
7/9/2010	2700							< 10.3				C10190027002
9/8/2010	2500	< 50	< 50	< 50	< 50	< 1.48	10.6	18.7				C10251037004
1/4/2011	2800							< 15.6				C11005004006

F-15

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW333

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/11/2011	5200	< 100	< 20	< 20	< 20	< 2.14	13.1	< 16.3				C11131034002
7/28/2011	5800							23.4				C11209031004
1/20/2012	6300							33.7				C12020022002
7/26/2012	1900							< 17.2				C12208015003

F-16

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW337

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/4/1996	8.3				< .48							96M04622-3716
10/4/1996									.38		.27	96M04622-3730
10/4/1996								14				96M04622-3760
1/29/1997	10	< 5	< 5	< 5	< 5							970130-050
9/22/1997	38	< 5	< 5	< 5	< 5	3.8	21	26				970923-040
11/19/1997	41	< 5	< 5	< 5	< 5	.9	22	21				971119-081
2/9/1998	48	< 5	< 5	< 5	< 5	< 1.3	18	26				C980420047
5/4/1998	34	< 5	< 5	< 5	< 5	< 4.4	37	36.8				C981250037
8/10/1998	58	< 5	< 5	< 5	< 5	< .6	35	55.1				C982220110
11/17/1998	61	< 5	< 5	< 5	< 5	3.06	37.83	69.2				C983210021
3/3/1999	110	< 25	< 25	< 25	< 25	< 1.91	< 2.49	62.71				C990620038
6/4/1999	47	< 5	< 5	< 5	< 5	< .4	48.8	73.5				C991580025
9/15/1999						< .8	48.9	72.4				C992580183
12/7/1999	44	< 5	< 5	< 5	< 5	4.34	69.36	77.7				C993410097
3/7/2000	44	< 5	< 5	< 5	< 5	< -.43	79.03	84.8		< -9.63		C000680019
6/14/2000	75	< 5	< 5	< 5	< 5	< 1.02	97.07	117				C001670003
9/12/2000	44	< 5	< 5	< 5	< 5	< 3.09	112.58	129				C002560134
12/18/2000	50	< 5	< 5	< 5	< 5	< -.451	75.1	124				C003540007
3/19/2001	90	< 5	< 5	< 5	< 5	< 1.05	81.1	147				C010780094
6/6/2001	97	< 5	< 5	< 5	< 5	< .921	97.6	98.5				C011570179
9/24/2001	75	< 5	< 5	< 5	< 5	< -2.29	97.2	175		< -8.42		C012680004
12/17/2001	150	< 10	< 10	< 10	< 10	4.96	103	158				C013510093
3/13/2002										< -7.31	< 0	C020720125
3/13/2002	240	< 25	< 25	< 25	< 25	< 4.6	68	91.3				C020720126
6/10/2002	320	< 25	< 25	< 25	< 25	< -1.91	43.3	55.1				C021610048

F-17

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW337

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
9/5/2002	96	< 25	< 25	< 25	< 25	< .989	115	196				C022480133
12/2/2002	100	< 5	< 5	< 5	< 5	< 1.72	127	205				C023370011
6/9/2003	580	< 25	< 25	< 25	< 25	< .265	63.1	113				C031600083
12/4/2003	110	< 25	< 25	< 25	< 25	10.8	159	168				C033380097
6/8/2004	180	< 25	< 25	< 25	< 25	< -1.26	111	208	< 30	< 2.2	< .35	C041600042
7/20/2004	120	< 2	2.2	< 2	< 2	3.45	111	203	< .101	< -.00296	< .275	C042020117
12/8/2004	140	< 10	< 10	< 10	< 10	< -2.1	129	195				C043430086
6/21/2005	180	< 10	< 10	< 10	< 10	4.73	113	177	< .059	< -.0123	< .00534	C051720110
2/14/2006	780	< 25	< 25	< 25	< 25	< .0576	21.5	216				C060450090
9/12/2006	670	< 50	< 50	< 50	< 50	3.19	157	229				C062550177
3/19/2007	750	< 5	14	< 5	< 5	< 2.38	163	237				C070790063
9/19/2007	450	< 5	< 5	< 25	< 5	4.99	123	222				C072630052
3/6/2008	2000	< 10	< 10	< 50	< 10	4.24	173	224				C080670001
12/18/2008	640	< 10	< 10	< 10	< 10	< 1.52	97.5	282				C08353022001
2/10/2009	1600							256				C09041031001
5/11/2009	2300	< 25	< 25	< 25	< 25	< 1.82	177	205				C09131017003
7/28/2009	860							282				C09209006001
9/25/2009	500	< 10	< 10	< 10	< 10	4.01	196	284				C09268025002
1/27/2010	660							278				C10027031002
3/16/2010	790	< 50	< 10	< 50	< 10	5.77	191	298				C10075019002
7/14/2010	840							298				C10195017001
9/13/2010	900	< 10	< 10	< 10	< 10	< 1.14	155	271				C10256034001
1/3/2011	820							309				C11003029004
5/19/2011	1800	< 50	< 10	< 10	< 10	6.63	172	264				C11139019001
8/10/2011	880							347				C11222050002

F-18

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW337

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
8/10/2011	1100							333				C11222050003
1/23/2012	1300							324				C12023024006
7/30/2012	800							298				C12212050001
7/30/2012	810							294				C12212050002

F-19

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW338

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/4/1996									.56		.67	96M04621-3729
10/4/1996								- .82				96M04621-3759
10/4/1996	.7				< .48							96M04621-3715
1/29/1997	< 1	< 5	< 5	< 5	< 5							970130-049
9/22/1997	< 1	< 5	< 5	< 5	< 5	-1.1	3	8				970923-041
11/19/1997	< 1	< 5	< 5	< 5	< 5	.8	2	-10				971119-082
2/9/1998	< 1	< 5	< 5	< 5	< 5	< 4.2	< 5	< 0				C980420048
5/4/1998	2	< 5	< 5	< 5	< 5	< .2	12	< -.6				C981250038
8/6/1998	< 1	< 5	< 5	< 5	< 5	< -1.9	< 3	< .2				C982180120
11/17/1998	< 1	< 5	< 5	< 5	< 5	< 1.15	< 2.58	< -9.2				C983210022
3/3/1999	5	< 5	< 5	< 5	< 5	< .35	< 1.7	19.04				C990620039
6/3/1999	1	< 5	< 5	< 5	< 5	< .96	19.31	< -.869				C991540178
9/15/1999						< 1.1		< 8.63				C992580184
12/7/1999	< 1	< 5	< 5	< 5	< 5	< 1.51	< 2.91	< -2.48				C993410096
3/7/2000	< 1	< 5	< 5	< 5	< 5	< 0	5.93	< -4.97		< -11.6		C000680018
6/14/2000	24	< 5	< 5	< 5	< 5	< 1.83	< -2.5	< -9.54				C001670001
9/12/2000	21	< 5	< 5	< 5	< 5	< 2.6	8.27	< 7.94				C002560133
12/18/2000	< 1	< 5	< 5	< 5	< 5	< 3.14	5.38	< 7.73				C003540008
3/19/2001	5	< 5	< 5	< 5	< 5	< -.418	< .657	< .481				C010780095
6/6/2001	8	< 5	< 5	< 5	< 5	< .866	< 2.9	< -3.53				C011570180
9/24/2001	3	< 5	< 5	< 5	< 5	< -.18	< 2.92	< -7.31		< -4.82		C012680005
12/17/2001	24	< 5	< 5	< 5	< 5	< 1.14	< .738	< -20.6				C013510094
3/13/2002	78	< 5	< 5	< 5	< 5	< -.652	< 4	< 1.2				C020720128
3/13/2002										< 0		C020720127
6/10/2002	130	< 10	< 10	< 10	< 10	< 1.08	< 5.59	< 1.54				C021610049

F-20

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW338

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results							Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L		
9/5/2002	11	< 5	< 5	< 5	< 5	< .0927	< 2.41	< 2.99				C022480134	
12/3/2002	8	< 5	< 5	< 5	< 5	< .447	< 3.19	< 13.4				C023370048	
6/9/2003	140	< 10	< 10	< 10	< 10	< -.525	8.03	18.8				C031600084	
12/4/2003	9	< 5	< 5	< 5	< 5	< 1.42	6.17	< 0				C033380098	
6/8/2004	22	< 5	< 5	< 5	< 5	< -1.41	< .409	< 9.88	< 30	< 2.2	< .35	C041600043	
7/20/2004	4.6	< 1	< 1	< 1	< 1	< .125	< 2.32	< -.111	< .169	< .0261	< .423	C042020118	
12/8/2004	13	< 5	< 5	< 5	< 5	< .742	< 3.48	< 5.2				C043430088	
6/16/2005	11	< 5	< 5	< 5	< 5	< 1.43	< 2.46	< 12.4	< .0101	< -.0133	< -.0335	C051670015	
2/14/2006	82	< 5	< 5	< 5	< 5	< -.143	6.12	< 3.55				C060450091	
9/12/2006	25	< 5	< 5	< 5	< 5	< .511	7.01	< -7.99				C062550178	
3/19/2007	130	< 5	< 5	< 5	< 5	< 1.6	18.3	29.4				C070790064	
9/19/2007	44	< 1	< 1	< 5	< 1	< 1.36	7.27	18.2				C072630053	
9/19/2007	44	< 1	< 1	< 5	< 1	< 2.72	9.39	< 12.3				C072630054	
3/6/2008	520	< 1	< 1	< 5	< 1	< 2.16	60.8	74.6				C080670002	
9/2/2008	33	< 1	< 1	< 5	< 1	< 2.39	7.6	< 9.04				C082460126	
2/9/2009	220							35.1				C09040021003	
5/7/2009	690	< 25	< 5	< 25	< 5	< -.167	64.6	83.5				C09127062004	
7/28/2009	80							26.3				C09209006002	
9/25/2009	40	< 1	< 1	< 1	< 1	< 3.07	< 3.87	< 3.76				C09268017003	
1/27/2010	89							22.4				C10027031001	
3/16/2010	36	< 10	< 2	< 10	< 2	< 1.76	8.45	< 10.3				C10075019003	
7/14/2010	14							< -3.51				C10195017002	
7/14/2010	14							< .779				C10195017003	
9/13/2010	14	< 1	< 1	< 1	< 1	< 1.25	< 3.53	< 7.51				C10256034002	
1/3/2011	39							< 9.16				C11003029005	

F-21

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW338

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/19/2011	1300	< 5	< 1	< 1	< 1	< 1.41	94.2	158				C11139019002
8/10/2011	200							32.7				C11222050004
1/23/2012	170							18				C12023024007
7/30/2012	44							< 2.01				C12212050003

F-22