



## Department of Energy

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APR 27 2017

Mr. Brian Begley  
Federal Facility Agreement Manager  
Division of Waste Management  
Kentucky Department for Environmental Protection  
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PPPO-02-4137330-17B

Ms. Julie Corkran  
Federal Facility Agreement Manager  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303

Dear Mr. Begley and Ms. Corkran:

**TRANSMITTAL OF ERRATA PAGES AND COMPLETE CORRECTED DOCUMENTS  
FOR THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION  
PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT  
FOR THE FIRST HALF OF FISCAL YEAR 2015, PADUCAH, KENTUCKY  
(DOE/LX/07-2181/V1)**

Reference: Letter from J. Woodard to J. Corkran 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 2015, Paducah, Kentucky, (DOE/LX/07-2181/V1)," (PPPO-02-2898875-15), dated April 27, 2015

Enclosed are the certified errata pages and complete corrected document (i.e., with errata pages included) for the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2015, Paducah, Kentucky*, DOE/LX/07-2181/V1. The enclosed errata pages have been prepared to correct reporting errors related to the volume of trichloroethene (TCE) removed from the Northwest and Northeast Plume Pump-and-Treat Systems. The errors resulted from the application of inconsistent methodologies for calculating and compiling TCE volumes removed from the Northwest and Northeast Plumes. The errors were discovered during an independent assessment of the data presented in Table 2 of the report that was conducted in February 2017.

If you have any questions or require additional information, please contact me at (270) 441-6862.

Sincerely,



Tracey Duncan  
Federal Facility Agreement Manager  
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. Errata page for FFA Semiannual Progress Report for the First Half of FY 2015
3. Errata pages for FFA Semiannual Progress Report for the First Half of FY 2015, DOE/LX/07-2181/V1—Redline
4. FFA Semiannual Progress Report for the First Half of FY 2015, DOE/LX/07-2181/V1—Complete Corrected Document

e-copy w/enclosures:

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## CERTIFICATION

**Document Identification:** *U.S. Department of Energy Paducah Gaseous Diffusion Plant  
Federal Facility Agreement Semiannual Progress Report for  
the First Half of Fiscal Year 2015, Paducah, Kentucky  
(DOE/LX/07-2181/V1)*

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.

Fluor Federal Services, Inc.



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Myrna E. Redfield, Director  
Environmental Management




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Date Signed

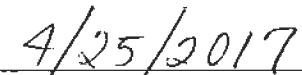
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible 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



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Jennifer Woodard, Paducah Site Lead  
Portsmouth/Paducah Project Office



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Date Signed

## **ERRATA SHEET**

***U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2015  
Paducah, Kentucky  
DOE/LX/07-2181/V1, issued April 2015***

The following six corrections should be incorporated into the document.

1. Cover Page: The cover was modified to indicate errata were issued for this report.
2. Title Page: The title page was modified to indicate errata were issued for this report on the date specified.
3. Groundwater Operable Unit, page 5, Table 2: Corrected cumulative trichloroethene (TCE) removed for Northwest Plume Pump-and-Treat and Northeast Plume Pump-and-Treat and total volume for all projects.
4. Northeast Plume IRA, page 18, first paragraph: Deleted text.
5. Northwest Plume IRA, page 24, second paragraph: Deleted text.
6. Appendix B, page B-7, Figure B.5: Corrected graph for Northeast Plume TCE removed.

**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2015  
Paducah, Kentucky**



**CLEARED FOR PUBLIC RELEASE**



**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2015  
Paducah, Kentucky**

Date Issued—April 2015

Errata Issued—April 2017

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 .....	51
ADDITIONAL REPORTING .....	53
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 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
ATU	alternate treatment unit
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
ERH	electrical resistance heating
ESD	explanation of significant differences
EW	extraction well
FFA	Federal Facility Agreement
FPDP	Fluor Federal Services, Inc., Paducah Deactivation Project
FS	feasibility study
FY	fiscal year
GDP	gaseous diffusion plant
GWOU	Groundwater Operable Unit
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
PLC	Programmable Logic Controller
RAR	remedial action report
RAWP	removal action work plan
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	record of decision
SAR	SWMU assessment report
SEC	Senior Executive Committee
SMP	Site Management Plan
SOU	Soils Operable Unit
SSI	Swift and Staley Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
UECA	Uniform Environmental Covenants Act
VOC	volatile organic compound
WAG	waste area group
WDA	Waste Disposal Alternatives

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 schedules<sup>1</sup> of activities to be taken during the upcoming six months. Activities that have taken place after the reporting period end date 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

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<sup>1</sup> 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**

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

\*The Comprehensive Site OU work scope, including GDP shutdown, is defined more clearly in the fiscal year (FY) 2015 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, and a summary of the data associated with the CERCLA outfall for Northeast Plume.



- 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 October 2014. This data currently are collected semiannually. 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 December 2014. Groundwater data from January 2015 through September 2015 will be included in the next semiannual report scheduled for October 2015.
- Appendix F contains a map depicting the C-749 Uranium Burial Ground (SWMU 2) groundwater MWs and a summary of the SWMU 2 trends for TCE and Tc-99 for reporting dates 1993 through January 2015.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**GROUNDWATER OPERABLE UNIT**

The scope of the GWOU includes performing investigations, conducting baseline risk assessments, evaluating removal/remedial alternatives, and selecting 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 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 [TCE values may contain other volatile organic compounds (VOCs)] by various actions through March 31, 2015.

**Table 2. Cumulative TCE Removed at Paducah**

Source Area	Cumulative TCE Removed (gal)*
Northwest Plume Pump-and-Treat	3,166**
Northeast Plume Pump-and-Treat	293**
C-400 Six-Phase Treatability Study	1,900
C-400 Phase I	535
C-400 Phase IIa and Phase IIb	1,137
Dissolved-Phase Plume	N/A
Southwest Plume***	0
SWMU 4***	0
Other sources (i.e., SWMU 91, LASAGNA™)	246
<b>Total</b>	<b>7,277</b>

\*TCE values include liquid VOCs and VOCs on carbon recovered.

\*\*Cumulative through December 31, 2014.

\*\*\*No remedial action selected/implemented to date.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 concurrence on October 9, 2014, from EPA and Kentucky that interim remedial goals for Phase IIa were met.
- Turned off resistance heating on October 9, 2014.
- Shut down groundwater and vapor extraction system on November 5, 2014, after subsurface temperatures fell below 100°F.
- Completed post operational groundwater sampling.
- Completed post operational soil sampling on March 12, 2015.
- Winterized components of the treatment system with potential for future use, and initiated decontamination and demolition of remaining aboveground components of interim remedial action (IRA) system.
- Initiated abandonment of belowground structures associated with Phase I and Phase IIa; completed abandonment of 66 of 214 wells during this period, including those necessary to provide space for Phase IIb Treatability Study installation.

**Phase IIb:**

- Initiated construction for Phase IIb Treatability Study on December 18, 2014.
- Received concurrence from Kentucky and EPA to relocate three temperature monitoring points for safety reasons due to proximity to underground utilities.
- Completed installation of injection well and temperature monitoring points.
- Initiated and completed aboveground construction of steam distribution, injection system, and boiler installation on March 31, 2015.
- Completed procurement and receipt of steam boiler.

- Completed rerouting of large power feeder impacted by ongoing demolition of the C-410/C-420 Complex. Power from this feeder is necessary to operate the steam boiler.

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

- Initiate steam injection operations.
- Complete operations of Phase IIb Treatability Study and demobilize subcontractor.
- Initiate modeling and development of the Treatability Study Report based on data collected during the Phase IIb Treatability Study.
- Receive data from Phase IIa postoperational soil sampling.
- Complete C-400 Phase I well abandonment.

**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 PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management services. Swift & Staley Inc., (SSI) manages the AR and the Environmental Information Center (EIC). During the next reporting period, the performance of these tasks will be assigned the Fluor Federal Services, Inc., Paducah Deactivation Project (FPDP).

**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; however, extensions on document review and modification periods have resulted in an overall impact to the project schedule for the C-400 Phase IIb Treatability Study.

**V. Primary/Secondary Document Tracking System:**

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

- *Remedial Goals Met for Phase IIa of the Interim Remedial Action for Volatile Organic Compound Contamination at the C-400 Cleaning Building, PPPO-02-2572921-14.*

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

- D1 Treatability Study Report is due to EPA and Kentucky 181 calendar days from completion of treatability study data collection.

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

The requirements and schedules are being met for the GWOU C-400 IRA project, consistent with the SMP and as agreed to by the FFA parties; however, extensions on document review and modification periods have resulted in an overall impact to the project schedule for the C-400 Phase IIb Treatability Study. Additionally, results of the treatability study have the potential to impact future remedial schedules associated with the Phase IIb remedial action.

The method for abandonment of certain wells specified in the *Remedial Action Work Plan for 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/07-0004&D2/R2, (RAWP)* cannot be achieved because grout viscosity is too high to allow pumping down the small diameter tubing. Discussions are ongoing with the EPA and Kentucky to determine appropriate measures to develop an approach for the abandonment of these wells.

**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.

The project will conduct routine discussions and updates on Phase IIb Treatability Study progress and results during field activities and data collection.

**VIII. Changes in relevant personnel:**

Julie Corkran was appointed as EPA's FFA Manager.

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

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

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

**SWMU 1**

- Completed procurement to perform implementation of the remedial action at the C-747-C Oil Landfarm (SWMU 1) as described in the *D2 Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1287&D2/A1*, and 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&D2/R1*.
- Subcontractor personnel visited site on December 2 and 3, 2014, to initiate preparation of contract submittals, performance of available off-site training, and equipment/material procurement.
- Initiated field mobilization on February 12, 2015. As of March 31, 2015, the following equipment has been delivered to site:
  - 200-ton crane and soil mixing/drilling assembly and associated downhole equipment
  - Steam generating equipment and associated electrical generation equipment
  - Vapor phase treatment trailer and associated activated carbon vessels
  - Zero-valiant iron and guar gum mixing equipment and associated pumping equipment
  - Data acquisition system trailer
- Completed internal field assessment for readiness successfully on March 25, 2015, and received approval to begin soil mixing once field mobilization is complete, which is expected to be early in the next reporting period.
- Requested modification to use a gas chromatograph flame ionization detector for monitoring air discharge rather than the photoacoustic analyzer. This change was requested due to operational concerns with the photoacoustic analyzer functioning properly in the damp air stream that will be generated by the deep soil mixing process. Kentucky and EPA approved the requested modification on March 3, 2015, and March 13, 2015, respectively.

## **SWMU 211-A and 211-B**

- Completed evaluation and responded to EPA's request for additional work in accordance with Section XIX of the FFA for SWMU 211-A and 211-B on October 29, 2014. Kentucky and EPA provided concurrence with DOE's response on November 10, 2014.
- Developed and submitted to EPA and Kentucky on February 23, 2015, an *Addendum to 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, Sampling and Analysis Plan*, DOE/LX/07-1268&D2/R2/A1, for additional work. Kentucky and EPA approved the addendum on March 6, 2015, and March 9, 2015, respectively.
- Completed and received regulatory approval of revisions of SWMU Assessment Reports (SARs) for SWMU 102-A, SWMU 102-B, SWMU 211-A, and SWMU 211-B as agreed to by the FFA parties during review of the *D1 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision Fiscal Year (FY) 2014*, DOE/LX/07-1292&D1.
- Initiated procurement for a drilling contractor to complete additional groundwater sampling of SWMU 211-A and 211-B to be completed in the next reporting period.

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

- Initiate and complete the soil mixing at the C-747-C Oil Landfarm (SWMU 1).
- Complete demobilization activities for the soil mixing, which includes replacement of SWMU 1 surface soils previously excavated and stockpiled.
- Initiate post-remedial action soil sample collection at SWMU 1 as documented in the *D2 Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1287&D2/A1. This also includes the collection of Surface Soil OU additional data as documented in *Addendum to the Work Plan for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Remedial Investigation 2 Sampling and Analysis Plan*, DOE/LX/07-0120&D2/R2/A1/R1.
- Initiate development of the Remedial Action Completion Report for the SWMU 1 *In Situ* Source Treatment by Deep Soil Mixing remedial action.
- Initiate and complete additional drilling work for SWMU 211-A and 211-B and as documented in an *Addendum to 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*, DOE/LX-D2/R2/A1.
- Initiate the development of an *Addendum to the Final Characterization Report for Solid Waste Management Units 211-A and 211-B Volatile Organic Compound Sources for the*

*Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant* that provides a summary of additional information collected at SWMU 211-A and 211-B.

**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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

**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 planning 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:**

The Addendum to D2 *Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1287&D2/A1/R1, was under development and was approved during this reporting period.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

No activities were performed in support of the Dissolved-Phase Plumes during this reporting period; however, the FFA parties initiated an update of the PGDP Sitewide Groundwater Model. A kick-off meeting was held in Lexington, Kentucky, February 10–11, 2015.

Initiated development of trichloroethene (TCE) and technetium-99 (Tc-99) plume maps for calendar year 2014.

**II. Schedule of activities during upcoming 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 additional activities are scheduled for this project during the upcoming reporting period. Additional meetings of the PGDP Groundwater Modeling Support Group members are being planned for the next 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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

The formal dispute for the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1280&D2*, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1291&D2*, is continuing. The Dispute Resolution Committee members issued a joint decision on the formal dispute on January 13, 2015. DOE was not able to agree with the Decision and, pursuant to Section XXV.B.3 of the FFA, elevated the dispute to the Senior Executive Committee (SEC) on January 26, 2015. The FFA parties have been in consultation evaluating options for potential resolution and, as a result, the SEC members agreed to extend the SEC consultation period to May 9, 2015. The SEC plans to meet April 23, 2015, to resolve the dispute.

During this reporting period, the Northeast Plume Containment System (NEPCS) treated 36,150,100 gal of contaminated groundwater and achieved an operational efficiency of 75.6%. The average system treatment rate for the reporting period was 169 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: October 2014, 99.1%; November 2014, 82.2%; December 2014, 83.3%; January 2015, 11.2%; February 2015, 93.9%; March 2015, 83.9%.

**A) Process Operations:**

The NEPCS consists of two extraction wells (EWs), an underground equalization (EQ) tank, transfer piping, an alternate treatment unit (ATU) for air stripping and suspended solids removal, and MW network.

**B) Process Testing:**

Operation of the NEPCS began February 28, 1997. As of March 31, 2015, the NEPCS has processed a total of approximately 1,473,512,317 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 July through December 2014.

Influent sample results, compared to the effluent sample results, indicated that TCE was effectively removed to 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 December 2014 are presented in Appendix B. Environmental samples were collected monthly from the treatment system influent and weekly from the treatment system effluent for the period of July through December 2014. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3.

**Table 3. TCE Concentrations for Northeast Plume**

	TCE ( $\mu\text{g/L}$ )		
	High	Low	Average
Influent (EQ Tank)	169	108	141
Effluent (CERCLA Outfall)*	7.1	< 1	3.5

\*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 97.5% for TCE.

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. EW331 had an average TCE concentration of 153  $\mu\text{g/L}$ , while EW332 had an average concentration of 159  $\mu\text{g/L}$ .

Treated groundwater for the Northeast Plume is discharged to a CERCLA outfall, and data associated with the CERCLA outfall are included as part of Appendix B of this report.

#### **D) Maintenance Activities:**

##### **Routine Maintenance Activities:**

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Sampling and Analysis and Calibration, and Testing Plan*, PAD-SO-0046, November 2014.

Instances of downtime occurred during the reporting period relating to mechanical failures, routine maintenance, and calibration of system components, weather, and testing of the new ATU.

##### **Nonroutine Maintenance Activities:**

On October 9, 2014, at 1430 hours, the NEPCS had one EW fail because of a faulty pressure switch. The system remained operational, but the influent flow was reduced because of loss of the EW.

On October 29, 2014, at 0900 hours, the NEPCS was shut down to relocate the emergency stop button in the ATU trailer. The emergency stop button was relocated and the system was restarted on October 29, 2014, at 1530 hours.



On November 2, 2014, at 0300 hours, the NEPCS shut down due to a high level alarm at the equalization tank at C-614. This problem is the result of a high pressure alarm on the transfer pump at C-614, which is shutting off the transfer pump and causing the low level alarm on the air stripper at the ATU. While the transfer pump is shut down, the EW pump continues to pump into the equalization tank, which causes the high level alarm in the equalization tank. That, in turn, shuts down the system. The system was restarted on November 3, 2014, at 1400 hours. This was a reoccurring problem for the months of November and December that was corrected with the replacement of the transfer pump and motor pump on January 28, 2015. The following are the shut down and restart dates and times for November and December.

- NEPCS shut down on November 9, 2014, at 2300 hours and restarted on November 10, 2014, at 0900 hours.
- NEPCS shut down on November 13, 2014, at 2200 hours and restarted on November 14, 2014, at 0830 hours.
- NEPCS shut down on November 16, 2014, at 2300 hours and restarted on November 17, 2014, at 0800 hours.
- NEPCS shut down on November 17, 2014, at 2000 hours and restarted on November 18, 2014, at 0900 hours.
- NEPCS shut down on November 18, 2014, at 1800 hours and restarted on November 19, 2014, at 0900 hours.
- NEPCS shut down on November 24, 2014, at 0500 hours and restarted on November 24, 2014, at 0800 hours.
- NEPCS shut down on November 28, 2014, at 2200 hours and restarted on December 1, 2014, at 0800 hours.
- NEPCS shut down on December 11, 2014, at 2100 hours and restarted on December 12, 2014, at 1100 hours.
- NEPCS shut down on December 20, 2014, at 2200 hours and restarted on December 22, 2014, at 0730 hours.
- NEPCS shut down on December 28, 2014, at 2200 hours and restarted on December 29, 2014, at 0800 hours.
- NEPCS shut down on December 29, 2014, at 2130 hours and restarted on December 30, 2014, at 0800 hours.
- NEPCS shut down on December 30, 2014, at 1930 hours and restarted on December 31, 2014, at 1230 hours.

On December 9, 2014, at 0900 hours, the NEPCS was shut down to troubleshoot the issue with the EW pump and the transfer pump. The system was restarted on December 9, 2014, at 1430 hours, but it shut down again at 1530 hours. On December 10, 2014, the pressure switch on EW 232 was replaced; the system was restarted on December 10, 2014, at 0900.

On December 31, 2014, at 1730 hours, the NEPCS shut down due to a high level alarm at the equalization tank at C-614. On January 2, 2015, an attempt to restart the system was not successful. On January 5, 2015, another attempt was made to restart the system and the transfer pump would not start. Electricians troubleshooting the system indicated that the transfer pump and motor had failed. On January 28, 2015, the transfer pump and motor were replaced; the system was restarted on January 28, 2015, at 1300 hours.

On February 24, 2015, at 1600 hours, the NEPCS shut down due to a fault in the transfer pump. On February 25, 2015, troubleshooting by Maintenance personnel indicated the problem was in the programmable logic controller (PLC) control system. On February 26, 2015, troubleshooting continued with Maintenance and Engineering personnel and the problem was found to be in the output card related to the transfer pump. The system was restarted on February 26, 2014, at 0900 hours.

On March 6, 2015, at 1000 hours, the NEPCS shut down due to a fault in the air stripper level controller. The level controller in the air stripper would not operate properly in the automatic control mode and caused the air stripper pump to cycle from low to high speed. Troubleshooting with the electrical and engineering personnel indicated problems in the lines connected to the gauges controlling the system. The system was restarted on March 10, 2015, at 1000 hours in manual mode and was switched to automatic control after the system had stabilized.

On March 16, 2015, at 1630 hours the NEPCS was shut down because of a high pressure differential across the bag filters. The bag filters in the ATU were changed out; the system was restarted on March 17, 2015, at 0830.

**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 third and fourth quarters of calendar year 2014, Tc-99 activity at MW292 was 29.2 and 42.1 pCi/L, respectively.

**F) Modification of the NEPCS Operations or Configuration:**

None.

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

- Continue with negotiations to resolve the FFA formal dispute associated with the D2 *Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2,

and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1291&D2*. Once the dispute is resolved, the following activities will be performed.

- Complete engineering design of the optimized IRA extraction and treatment system.
- Initiate fieldwork for drilling of new optimized EW.
- Complete and issue the D2/R1 RAWP and D2/R1 Explanation of Significant Differences (ESD) in accordance with the terms of the formal dispute resolution.
- Initiate treatment unit and appurtenant equipment construction at off-site and on-site locations.

**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. SSI manages the AR and the EIC. During the next reporting period, the performance of these tasks will be assigned to FPDP.

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

The effluent concentration goal of 30 µg/L for TCE was met during the reporting period. The NEPCS remained operational 75.6% of the time during this reporting period.

**V. Primary/Secondary Document Tracking System:**

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

Proposal for resolution of formal dispute on the D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1280&D2, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1291&D2*.

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

- Resolution of FFA formal dispute associated with the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1280&D2*, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1291&D2*, by May 9, 2015.
- Complete and issue the D2/R1 RAWP and D2/R1 ESD in accordance with the terms of the formal dispute resolution memorandum of agreement.

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

Dispute resolution has resulted in cost and schedule delays. New enforceable milestones will be established as part of dispute resolution.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

**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 \$250,000.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 50,229,040 gal of contaminated groundwater with an average monthly operational efficiency of 94.4%. The average system treatment rate for the reporting period was 199 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: October 2014, 97.7%; November 2014, 99.2%; December 2014, 99.7%; January 2015, 87.5%, February 2015, 95.6%; March 2015, 86.7%.

**A) Process Operations:**

The NWPGS consists of two EWs (EW232 and EW233) located just north of PGDP and underground transfer pipeline for moving contaminated groundwater. The treatment facility has an operational capacity of 220 gpm and utilizes air stripping for removal of TCE in groundwater, ion exchange for removal of Tc-99 in groundwater, and vapor phase carbon for capturing TCE from exhaust of the air stripper. Treated groundwater from the transfer pipeline is released to a tributary flowing to Outfall 001. An MW network is used to evaluate performance. As a result of the 2010 optimization, two of the original four EWs (EW230 and EW231) were placed in standby for use as needed in the future, while the two remaining EWs (EW228 and EW229) and associated transfer pipeline were removed from service.

**B) Process Testing:**

Operation of the NWPGS began on August 28, 1995. As of March 31, 2015, the NWPGS has processed a total of 1,989,425,767 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 July 2014 through December 2014.

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 NWPGS 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.

High, low, and average influent and effluent TCE and Tc-99 concentrations from July through December 2014 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	2,820	1,680	2,206	347	231	299
Effluent	7.85	< 1	2.26	81	43	60

The treatment system influent 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 remove TCE and Tc-99 effectively. The system operated with an average removal efficiency of 99.9% for TCE and 79.9% for Tc-99.

The average TCE effluent concentration for this reporting period was 2.26 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 60 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. EW232 and EW233 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	709	447	578	176	94	135
EW233	4,020	3,050	3,457	579	436	488

**D) Treatment Media:**

**Ion Exchange Resins:**

The NWPGS is equipped with four ion exchange columns used for the removal of Tc-99. Purolite 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 24, 2014, with recycled carbon. The next carbon exchange is planned for April 2015.

### **E) Maintenance Activities:**

#### **Routine Maintenance Activities:**

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Sampling and Analysis and Calibration, and Testing Plan*, PAD-SO-0046, November 2014. Instances of minor downtime occurred during the reporting period relating to power outages, maintenance, and calibration of the system. Carbon will be changed out in the treatment system on April 2015.

During this reporting period, the upgrade and modernization of the C-612 facility began. The C-612 facility was evaluated to identify and prioritize items that are reaching the end of service life, no longer have replacement parts available, or are long lead time items. The following are the specific scope of work items.

- Replace the PLC.
- Perform nondestructive testing and evaluation of the equalization tank (F-001); sand filter system tanks (G-001 and G-002); air stripper system and skid (E-001); backwash tank (F-002) and settling tank (F-008).
- Replace the four ion exchange resin tanks (F-004, F-005, F-006, and F-007) and resin and associated piping with a stand-alone trailer and four ion exchange tanks.
- Replace the process piping in the C-612 Facility.
- Replace the two carbon absorption tanks (AG-001 and AG-002) and necessary piping for the carbon absorption system.
- Remove obsolete equipment in the C-612 Building.

#### **Nonroutine Maintenance Activities:**

On October 1, 2014, at 0700 hours, the NWPGS was shut down to perform quarterly maintenance of the system. The quarterly maintenance was completed, and the system was restarted on October 1, 2014, at 1300 hours.

On October 9, 2014, at 0630 hours, the NWPGS shut down due to a high level alarm in the backwash tank. Troubleshooting of the system indicated a problem with the level indicator or the card used to transmit the level of the tank. The system was restarted on October 9, 2014, at 1500 hours. On October 15, 2014, at 0830 hours the system was shut down to replace the card and calibrate the level control in the backwash tank. The backwash tank became operational, and the system was restarted on October 15, 2014, at 1100 hours.

On November 12, 2014, at 0800 hours, the NWPGS shut down due to a fault in a water trap on the air compressors. After the air compressor trap was repaired, an attempt to restart the system caused a fuse to blow in the air stripper system. The fuse in the air stripper system was replaced and the system was restarted on November 12, 2014, at 1400 hours.

On December 2, 2014, at 0800 hours, the NWPGS was shut down for yearly maintenance to be performed on the system. The yearly maintenance was completed; the system was restarted on December 2, 2014, at 1000 hours.

On January 16, 2015, at 1200 hours, the NWPGS shut down because of a high water level in an EW vault (EW233). The call out system for the facility did not operate properly, and the problem was discovered on the morning of January 20, 2015. The well vault was pumped on January 20, 2015, and the system was restarted at 0800 hours. The call out system for the facility was tested and found to be operational.

On January 29, 2015, at 0700 hours, the NWPGS was shut down to sample the carbon in the carbon absorption tanks in preparation of the upcoming carbon change out. The carbon was sampled and the system was returned to service January 29, 2015, at 0800 hours.

On February 22, 2015, at 0700 hours, the NWPGS shut down because of a low pressure alarm on the air stripper. The system was restarted February 23, 2015, at 0700 hours. It is not known what caused the low pressure alarm, but from discussion with Engineering, it is believed that ice collected on the inlet of the blower because of the extreme cold and this collection of ice caused the low pressure alarm.

On February 25, 2015, at 0130 hours, the NWPGS shut down because of a high water level in an EW vault (EW233). The well vault was pumped on February 26, 2015, and the system was restarted on February 25, 2015, at 0700 hours.

On March 6, 2015, at 1600 hours, the NWPGS shut down because of a power lose to the building due to a transformer change. The work on the transformer change continued on March 7 and March 8, 2015. An attempt made to restart the system on March 9, 2015, was not successful, but there was a failure in an output card in the sand filter PLC panel. The output card in the PLC panel was replaced and the program for the sand filter was reloaded. The system was restarted on March 10, 2015, at 1000 hours.

On March 13, 2015, at 1130 hours, the NWPGS shut down because of a high water level in an EW vault (EW232). The water in the well vault was from snow melt and excessive rain fall. The well vault was pumped on March 13, 2015, and the system was restarted at 1130 hours.

On March 18, 2015, at 0800 hours, the NWPGS was shut down to air gap electrical lines to prepare for removal of obsolete equipment. The maintenance activity was performed, and the system was restarted March 18, 2015, at 1230 hours.

On March 24, 2015, at 0730 hours, the NWPGS was shut down to air gap electrical lines to prepare for removal of obsolete equipment. The maintenance activity was performed, and the system was restarted on March 24, 2015, at 0900 hours.



**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:**

EW232 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 100–115 gpm.

**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. SSI manages the AR and the EIC. During the next reporting period, the performance of these tasks will be assigned to FPDP.

**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 94.4% 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:**

Julie Corkran was appointed as EPA's FFA Manager.

**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 \$250,000.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

- Received conditional concurrence of the *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, Kentucky*, DOE/LX/07-1274&D2 (FS), dated June 12, 2014, from Kentucky and EPA on November 12, 2014, and December 19, 2014, respectively. Received additional conditions for concurrence from Kentucky on January 22, 2015, February 2, 2015, and March 20, 2015. Teleconferences were held with EPA and Kentucky on February 6 and 12, 2015, to resolve some of the conditions on the FS.
- Invoked informal dispute resolution on the *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, Kentucky*, DOE/LX/07-1274&D2, dated June 12, 2014, on March 27, 2015.
- Received Kentucky's conditional concurrence of the *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2, on January 22, 2015. Received additional conditions of concurrence from Kentucky on January 26, 2015, and March 20, 2015. EPA issued conditional approval on October 17, 2013.
- Invoked informal dispute resolution on the *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2, dated July 2013, on March 27, 2015.
- Initiated meetings with EPA and Kentucky legal counsel to discuss Kentucky's additional conditions [Uniform Environmental Covenant Act (UECA)].
- Submitted a revised SAR for C-404 (SWMU 3) to EPA and Kentucky on November 7, 2014.
- Continued collection of monthly water level data from Upper Continental Recharge System wells and initiated development of work control activities for Phase IV and Phase V of the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2.

- SWMU 4 field sampling and analytical laboratory activities associated with additional Phase III scope were completed. Based on sampling results, the FFA parties collaborated to select Phase IV sampling locations. DOE completed procurement and work control documentation to prepare for Phase IV field work.
- Met with the CAB Burial Grounds Subcommittee on January 8, 2015, to provide an overview of the Burial Grounds project and to address questions regarding SWMUs 5 and 6.

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

- Initiate negotiations to resolve the informal dispute associated with the *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, Kentucky*, DOE/LX/07-1274&D2. Once the dispute is resolved, develop and submit a revised *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, Kentucky*, DOE/LX/07-1274&D2/R1.
- Initiate negotiations to resolve the informal dispute associated with the D2 *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2. Once the dispute is resolved, develop and submit a revised *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2/R1.
- Work associated with 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 (assumes FS approval).
- Complete SWMU 4 field sampling and analytical laboratory activities associated with additional Phase IV scope.
- Receive approval of the revised SAR for C-404 (SWMU 3).

**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. SSI manages the AR and the EIC, and maintains existing burial ground caps. During the next reporting period, the performance of these tasks will be assigned to FPDP.

**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 have resulted in an overall impact to the project schedule for the BGOU. Additionally, dispute resolution for BGOU SWMUs 2, 3, 7, and 30 and BGOU SWMUs 5 and 6 has resulted in additional cost and schedule delays.

- Work associated with 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 (assumes FS approval).

**V. Primary/Secondary Document Tracking System:**

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

- *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, Kentucky, DOE/LX/07-1274&D2.*
- *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6, DOE/LX/07-1275&D2.*
- *Record of Decision for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1282&D1.*
- *Land Use Control Implementation Plan for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1293&D1.*
- *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan, DOE/OR/07-2179&D2/A2/R3.*
- Proposal for resolution of informal dispute on the *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, Kentucky, DOE/LX/07-1274&D2.*
- Proposal for resolution of informal dispute on the *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6, DOE/LX/07-1275&D2.*
- “Transmittal of Record of Conversation Concerning Use of Direct Push Technology on Phase IV of the Solid Waste Management Unit 4 Remedial Investigation,” PPPO-02-2745728-15, dated February 13, 2015.

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

- Resolution of informal dispute on the *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, Kentucky, DOE/LX/07-1274&D2, by April 26, 2015.*

- Resolution of informal dispute on the *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2, by April 26, 2015.
- Complete and issue the D2/R1 *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2/R1, in accordance with the terms of the dispute resolution memorandum of agreement.
- The *Record of Decision for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1282&D1, is due to EPA and Kentucky May 22, 2015.
- Complete and issue the D2/R1 *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, Kentucky*, DOE/LX/07-1274&D2/R1, in accordance with the terms of the dispute resolution memorandum of agreement.

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

Dispute resolution for BGOU SWMUs 2, 3, 7, and 30 and BGOU SWMUs 5 and 6 has resulted in cost and schedule delays. Current enforceable milestones (if applicable) have been stayed and will be reestablished in accordance with the terms of the dispute resolution.

**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, a series of Web-based meetings with EPA and Kentucky were conducted to reach consensus on the quantity and location of additional SWMU 4 Phase IV borings and the required document revisions. Met with the Citizens Advisory Board (CAB) Burial Grounds Subcommittee on January 8, 2015, to provide an overview of the Burial Grounds project and to address questions regarding SWMUs 5 and 6.

**VIII. Changes in relevant personnel:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None. [Refer to the following section of this report for information regarding O&M costs for the IRA at the C-749 Uranium Burial Ground (SWMU 2).]



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

Continued groundwater monitoring 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 August 2014, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through January 2015 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. SSI manages the AR and the EIC, and maintains existing burial ground cover. During the next reporting period, performance of these tasks will be assigned to FPDP.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

**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  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 SSI. 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. An update to the existing linear regression model was performed in March 2015, and the current maximum discharge limit for turbidity is 100 nephelometric turbidity units (NTU), with a 30-day average not to exceed 45 NTU.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

- Continued to revise the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2600&D1*, in conjunction with the CERCLA Five-Year Review.

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

- Finalize and issue the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2600&D1*.
- 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 additional activities are scheduled for this project during the upcoming reporting period.
- Initiate and obtain approval of the revision to the SAR for SWMU 526 and submit to EPA and Kentucky. Per agreement, the SAR will include a revised map identifying all the associated internal plant ditches that comprise SWMU 526.

**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. SSI manages the AR and the EIC. During the next reporting period, the performance of these tasks will be assigned to FPDP.

**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:**

- *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2600&D1*, has been under development during this reporting period.
- Revised SAR for SWMU 526, Internal Plant Drainage Ditches, has been under development during this reporting period.

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

The Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2600&D1, is scheduled to receive regulatory approval after submittal of the D2/R2 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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 Hydrogen Fluoride (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 24 of the 86 SWMUs have been deferred to Soils and Slabs OU. Of the remaining 62 SWMUs, 50 will be addressed as part of the Soils OU FS. The remaining 12 SWMUs will be evaluated further under a subsequent Soils OU RI and addressed by a subsequent Soils OU FS.

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

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**SOILS OPERABLE UNIT PROJECT: Remedial Action**

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

- Inspected and sampled SWMU 27, C-722 Acid Neutralization Tank.
- Initiated development of the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D1.*
- Initiated development of the *Sitewide Evaluation Report for the Soils Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1256&D1.*
- Finalized revisions of SARs for SWMU 99-A, SWMU 99-B, SWMU 225-A, SWMU 225-B, and SWMU 474, as agreed to by the FFA parties during comment resolution of the D1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D1.* Kentucky approved the revised SARs on November 5, 2014.

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

- Finalize the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D1.*
- Finalize the *Sitewide Evaluation Report for the Soils Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1256&D1.*
- Begin development of the addendum to the *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1.*

**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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

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

Based on additional funding received by DOE for FY 2014, this project is being accelerated. 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:**

*Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D1.*

- *Sitewide Evaluation Report for the Soils Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1256&D1.*

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

- Submittal of the *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1*, is due to EPA and Kentucky no later than August 31, 2015.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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 facility:

- C-410/C-420 Feed Plant Complex

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

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

The scope of this project includes D&D of the C-410 UF<sub>6</sub> 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/C-420 Complex:**

- Completed construction of a barrier wall between Zone 22 and Zone 26 and transferred collected storm water from Zone 22 to Zone 26.
- Completed placement of flowable fill in Zone 22.
- Completed removal of transite siding from C-420.
- Completed removal of superheaters, screw reactors, redactors, and UF<sub>6</sub> reactors from C-420.
- Completed abatement of asbestos materials throughout the C-420 building.
- Completed removal of loose paint, vacuuming, fixative application, and final survey in preparation for demolition of C-420.
- Completed demolition of C-420 stacks.
- Completed demolition of Zone 21 Boundary Control Station on March 13, 2015.
- Continued shipment of gondolas of demolition debris off-site for disposal.
- Scheduled multiple teleconferences with EPA and Kentucky to address EPA's Stop Work Order and Kentucky's letter concerning DOE's intended discharge of C-410 water that was received on November 26, 2014.
- Responded to EPA's November 21, 2014, letter disapproving the discharge of water from C-410.
- Submitted a proposal for disposition of contaminated water collected and contained in Zone 26 of C-410 to EPA and Kentucky on January 29, 2015.
- Reviewed EPA's proposal for disposition of contaminated water collected and contained in Zone 26 of C-410 that was received on February 2, 2015.

- Initiated development of D1 Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2182&D1.

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

- Scrabble pad at C-410/C-420.
- Complete shipment of gondolas of demolition waste off-site for disposal.
- Initiate and complete flowable fill in Zone 26.
- Complete demolition of C-420 Building, propane tank, and railroad ties.
- Complete disposal of remaining waste.
- Plan to determine a path forward on the disposition of C-410 water during the next reporting period.
- Complete development of D1 Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2182&D1, for submittal to EPA and Kentucky by June 30, 2015.

**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. SSI 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 currently are being met; however, EPA's November 26, 2015, Stop Work letter associated with discharge of approximately 200,000 gal of storm water from the basement of the C-410 Building has had a significant impact on DOE's ability to perform decommissioning and demolition activities. As a result, submittal of the D1 Remedial Action Report (RAR), due by June 30, 2015, will be impacted. The FFA parties agreed on March 2, 2015, that impacts to the project have occurred and that good cause exists for an extension of the submittal date for the D1 RAR. The parties agreed to evaluate the length of extension warranted once a decision has been reached concerning disposition of the C-410 water.

**V. Primary/Secondary Document Tracking System:**

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

- "Response to U.S. Environmental Protection Agency Disapproval of the Discharge of Wastewater from Building C-410 Removal Action, Paducah Gaseous Diffusion Plant," PPPO-02-2571461-15, November 21, 2014.

- “EPA Issuance of Stop Work Order on the Discharge of Wastewater from Building C-410 Removal Action, Paducah Gaseous Diffusion Plant,” November 26, 2014.
- “Intended Discharge of Radioactively Contaminated Waters Generated from C-410 Complex CERCLA Response Action,” November 26, 2014.
- “U.S. Department of Energy Proposal to Disposition Contaminated Water Collected and Contained in the Zone 26 Basement Pit of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2745135-15, January 29, 2014.
- ”EPA’s Proposed Agreement on the U.S. Department of Energy Disposition of Contaminated Water Collected in Basement Pit of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” February 2, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2818180-15, March 9, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2851317-15, March 27, 2015.
- *D1 Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2182&D1.*

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

- *D1 Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2182&D1, is due to EPA and Kentucky by June 30, 2015.*
- Determine a path forward on disposition of C-410 water.

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

Asbestos containing materials and equipment have been discovered throughout the building. Remediation and removal of these materials have delayed the project three months. In addition, EPA’s November 26, 2015, Stop Work letter associated with the discharge of approximately 200,000 gal of storm water from the basement of the C-410 Building has had a significant impact on DOE’s ability to perform decommissioning and demolition activities. As a result, submittal of the D1 RAR, due by June 30, 2015, will be impacted. The FFA parties agreed on March 2, 2015, that impacts to the project have occurred and that good cause exists for an extension of the submittal date for the D1 RAR. The parties agreed to evaluate the length of extension warranted once a decision has been reached concerning disposition of the C-410 water.

**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.

**VIII. Changes in relevant personnel:**

Julie Corkran was appointed as EPA's FFA Manager.

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

None.



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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, CERCLA Waste Disposal Alternatives Evaluation, and CERCLA Five-Year Review.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**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):**

Continued surface water and groundwater monitoring 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 October 2014 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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

**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  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**PROJECT: Community Relations Plan**

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

Initiated development of Revision 9 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2009&D2/R9, including updates to Appendix A to reflect changes to key contracts for PGDP and updates to Appendix B to reflect more recent significant activities in public involvement history. The FFA parties 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 PGDP and Appendix B—Public Involvement History).

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

Submit Revision 9 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2009&D2/R9, to EPA and Kentucky for comment and/or approval no later than July 1, 2015.

**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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDG.

The FFA parties 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). Revision 10 to the CRP is due in July 2017.

**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:**

*Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2009&D2/R9.

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

Revision 9 of the CRP is due to EPA and Kentucky no later than July 1, 2015.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

Not applicable.



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**PROJECT: Site Management Plan**

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

- Developed and submitted the D1 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2015*, DOE/LX/07-1301&D1, to EPA and Kentucky on November 14, 2014.
- DOE received comments on the D1 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2015*, DOE/LX/07-1301&D1, from Kentucky and EPA on December 15, 2014, and February 6, 2015, respectively.
- The FFA parties held clarification and comment resolution meetings on January 15, 2015, and March 4, 2015, and the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision FY 2015*, DOE/LX/07-1301&D2, was submitted to EPA and Kentucky for review on March 27, 2015.

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

Initiate scoping discussions and development of the FY 2016 D1 SMP for submittal to EPA and Kentucky on or before November 15, 2015.

**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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

**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 2015 SMP has been under development and EPA and Kentucky review during this reporting period.

- The D2 FY 2015 SMP has been under development and EPA and Kentucky review during this reporting period.

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

- EPA and Kentucky concurrence, conditional concurrence, or nonconcurrence on the D2 FY 2015 SMP is due April 26, 2015.
- D1 FY 2016 SMP is due to EPA and Kentucky no later than November 15, 2015.
- Comments on the D1 FY 2016 SMP are due to DOE within 30 days of the document's being issued or December 15, 2015.
- D2 FY 2016 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):**

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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

Not applicable.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**PROJECT: CERCLA Waste Disposal Alternatives Evaluation**

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

- Continued development of the D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1.
- Received additional conditions for concurrence on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, from Kentucky on January 28, 2015, and March 20, 2015.
- Invoked informal dispute resolution on D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, on March 27, 2015, with a request to incorporate these conditions into the current informal dispute resolution.
- Continued dispute resolution meetings among the FFA parties to resolve conditions received on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2.
- Received EPA's request for hydrologic conditions information for the WDA candidate sites on February 10, 2015.
- Initiated clarification meetings and joint discussions among the FFA parties to discuss EPA's February 10, 2015, request for hydrologic conditions information for the waste disposal alternatives (WDA) candidate sites.
- Initiated meetings with EPA and Kentucky legal counsel to discuss Kentucky's additional conditions (UECA).

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

- Develop and submit the D2/R1 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2/R1, to EPA and Kentucky for review in accordance with the date to be established by the FFA parties as part of dispute resolution.

- Develop and submit the D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, to EPA and Kentucky for review in accordance with the date established by the FFA parties as part of dispute resolution.
- Conduct a Public Information Workshop upon finalization and approval of the RI/FS Report. DOE is co-sponsoring the workshop 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.
- Continue negotiations to resolve the informal dispute associated with D2/R1 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2.
- Continue discussions with EPA and Kentucky to jointly scope the specific details associated with EPA's request for additional hydrologic conditions information for the WDA candidate sites.
- Provide written acceptance or rejection of EPA's request for hydrologic conditions information for the WDA candidate sites by April 14, 2015.

### **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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

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

DOE invoked informal dispute on of the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, on May 19, 2014. Numerous dispute resolution meetings between the FFA parties to resolve conditions received on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, have been held throughout this reporting period. Current enforceable milestone dates have been stayed and new enforceable milestone dates will be established as part of dispute resolution.

### **V. Primary/Secondary Document Tracking System:**

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

- The conditional approval of the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, including Kentucky's January 28, 2015, additional condition on UECA, has been evaluated as part of dispute resolution during this reporting period.

- The D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, has been under development during this reporting period.
- EPA's request for hydrologic conditions information for the WDA candidate sites dated February 10, 2015.

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

- Informal dispute resolution for the *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2/R1, must be resolved no later than May 14, 2015.
- D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, is due to EPA and Kentucky in accordance with the date established by the FFA parties as part of dispute resolution.
- EPA's request for hydrologic conditions information for the WDA candidate sites dated February 10, 2015.

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

The project currently is experiencing significant cost and schedule delays associated with informal dispute. Should the FFA parties enter into formal dispute resolution, the project will continue to experience cost and schedule delays. Current enforceable milestones have been stayed, and new enforceable milestone dates will be established as part of dispute resolution.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

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

Not applicable.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FIRST HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/1/2014–3/31/2015**

**PROJECT: CERCLA Five-Year Review**

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

- Initiated scoping meetings with the FFA parties to discuss the additional actions required to address the deferred protectiveness statements for received from EPA on September 30, 2014, concerning C-400 and the Water Policy.

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

- Finalize scoping discussions with EPA and Kentucky to address the deferred protectiveness statements received from EPA on September 30, 2014, concerning C-400 and the Water Policy.
- Begin development of a sampling and analysis plan and project-specific quality assurance program plan for additional actions agreed to for the Water Policy.

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

Responsibility for the CERCLA Five-Year Review 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. SSI manages the AR and the EIC. During the next reporting period, performance of these tasks will be assigned to FPDP.

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

This Five-Year Review encompasses the remedial actions that DOE has taken under the OUs identified at the Paducah Site, plus the Water Policy removal action, Surface Water Interim Corrective Measures, and Surface Water On-Site Sediment Removal. It covers activities associated with response actions from January 2008 through December 2012. The last CERCLA Five-Year Review at the Paducah Site was conducted in 2008 for the period January 2003 through December 2007. While the requirements and time schedules are being met, extensions on document review and modification periods have occurred.

**V. Primary/Secondary Document Tracking System:**

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

- Sampling and Analysis Plan and project-specific Quality Assurance Project Plan for Water Policy Vapor Intrusion associated with the Five-Year Review.
- Addendum to the D2/R1 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1289&D2/R1.

**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:**

Julie Corkran was appointed as EPA's FFA Manager.

**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	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015
1	334,800	133,875	20,450	67,400	328,125	296,525
2	314,800	133,875	196,000	0	328,125	296,525
3	331,950	133,875	151,600	0	339,000	392,100
4	331,950	197,400	188,100	0	317,300	378,500
5	331,950	188,500	191,525	0	337,800	205,400
6	331,950	181,400	191,525	0	327,275	205,400
7	339,400	142,600	191,525	0	327,275	205,400
8	324,800	142,600	191,525	0	327,275	0
9	234,000	142,600	181,000	0	327,275	0
10	180,150	142,600	228,800	0	340,300	0
11	180,150	188,700	314,900	0	310,800	252,800
12	180,150	201,100	284,275	0	339,900	326,600
13	180,150	187,600	284,275	0	297,417	305,750
14	182,600	45,800	284,275	0	297,417	305,750
15	178,000	45,800	284,275	0	297,417	305,750
16	193,000	45,800	169,500	0	297,417	305,750
17	189,925	45,800	344,000	0	283,731	84,300
18	189,925	86,000	329,900	0	301,700	399,700
19	189,925	70,400	245,417	0	287,900	265,200
20	189,925	150,100	245,417	0	334,425	334,175
21	185,600	169,425	128,050	0	334,425	334,175
22	170,400	169,425	245,417	0	334,425	334,175
23	190,300	169,425	300,000	0	334,425	334,175
24	191,575	169,425	333,517	0	291,600	408,300
25	191,575	217,400	333,517	0	0	245,000
26	191,575	20,450	333,517	0	287,400	358,910
27	191,575	20,450	333,517	0	296,525	336,923
28	195,700	20,450	333,517	0	296,525	336,923
29	186,200	20,450	333,517	280,900		336,923
30	146,500	20,450	214,300	328,125		336,923
31	133,875		174,400	328,125		324,600
Monthly Total	6,884,375	3,603,775	7,581,550	1,004,550	8,523,200	8,552,650
*Daily Average	222,077	120,126	244,566	251,138	315,674	305,452
Days water pumped	31	30	31	4	27	28

\*Value based on number of days water was pumped

**TABLE 2. NORTHWEST PLUME GROUNDWATER SYSTEM  
WATER WITHDRAWAL REPORTING FORM**

Day	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015
1	295,110	281,353	299,733	309,054	300,583	293,065
2	251,210	281,353	259,410	309,054	300,583	293,065
3	317,588	281,353	229,760	309,054	290,060	363,100
4	317,588	273,240	307,210	309,054	296,990	306,360
5	317,588	296,110	311,750	309,054	301,850	72,763
6	317,588	284,260	311,750	244,570	299,263	72,763
7	329,950	301,193	311,750	283,000	299,263	72,763
8	318,740	301,193	311,750	294,180	299,263	0
9	286,690	301,193	269,435	299,238	299,263	0
10	315,130	301,193	269,435	299,238	299,990	40,220
11	315,130	298,010	300,370	299,238	329,170	248,930
12	315,130	299,980	300,550	299,238	268,580	302,780
13	315,130	245,160	300,550	299,110	300,160	289,008
14	74,720	303,058	300,550	301,090	300,160	289,008
15	210,990	303,058	300,550	290,860	300,160	289,008
16	264,400	303,058	303,100	295,000	300,160	289,008
17	279,885	303,058	294,510	54,060	296,570	277,150
18	279,885	296,580	286,510	0	295,630	299,340
19	279,885	318,180	302,255	0	294,320	237,960
20	279,885	304,650	302,255	0	288,480	303,023
21	281,500	322,110	302,255	287,840	288,480	303,023
22	282,390	322,110	302,255	298,090	0	303,023
23	281,500	322,110	313,660	299,255	0	303,023
24	280,573	322,110	294,605	299,255	298,770	287,500
25	280,573	367,020	294,605	299,255	314,540	278,650
26	280,573	299,733	294,605	299,255	94,620	299,110
27	280,573	299,733	294,605	298,910	293,065	304,633
28	288,120	299,733	294,605	379,400	293,065	304,633
29	276,410	299,733	294,605	212,460		304,633
30	287,920	299,733	290,060	300,583		304,633
31	281,353		315,640	300,583		295,120
Monthly Total	8,783,703	9,031,354	9,164,683	8,078,975	7,543,035	7,627,290
*Daily Average	283,345	301,045	295,635	288,535	290,117	263,010
Days water pumped	31	30	31	28	26	29

\*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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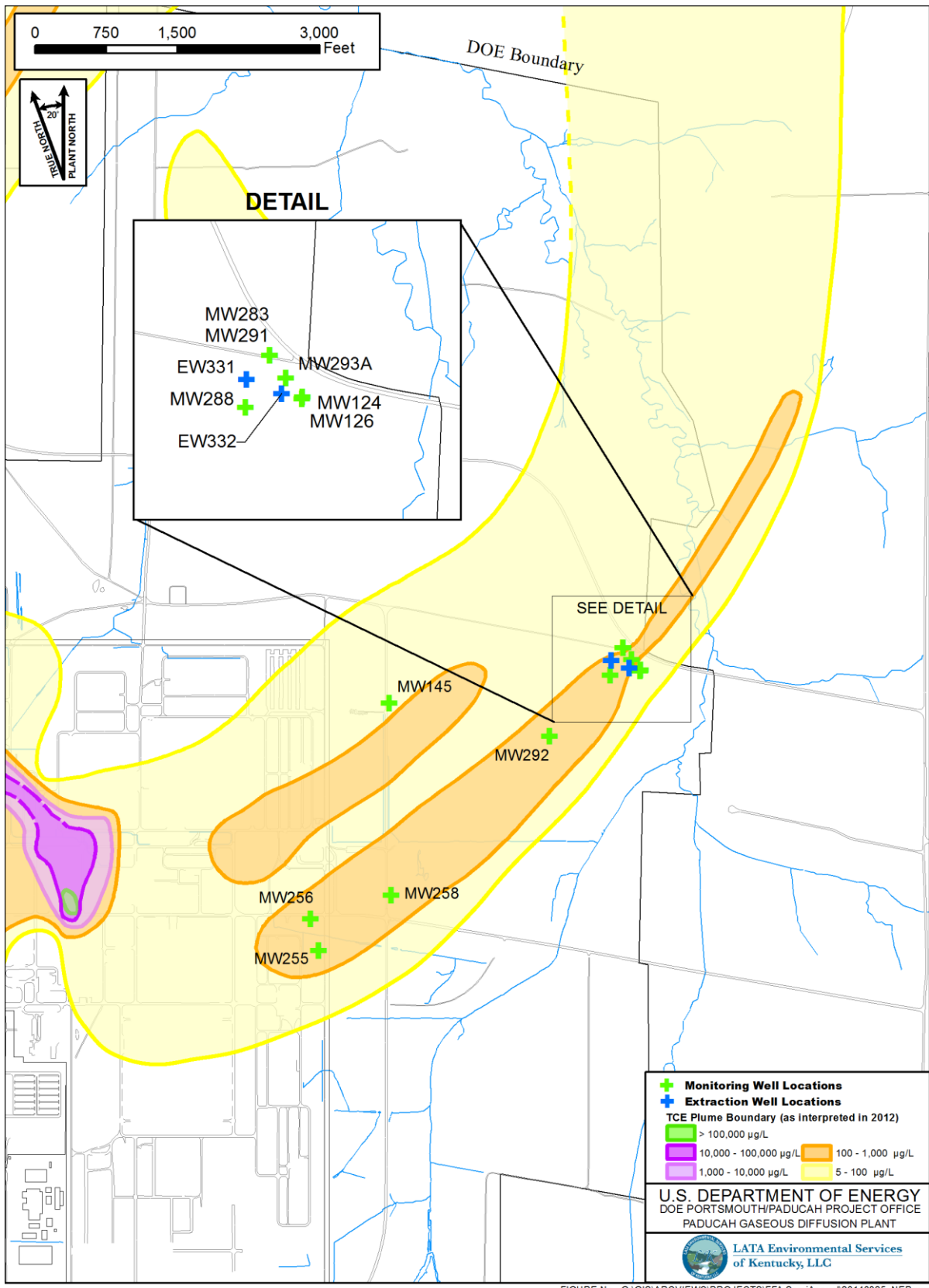


FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20140325\_NEP.mxd  
DATE 3/25/2014

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

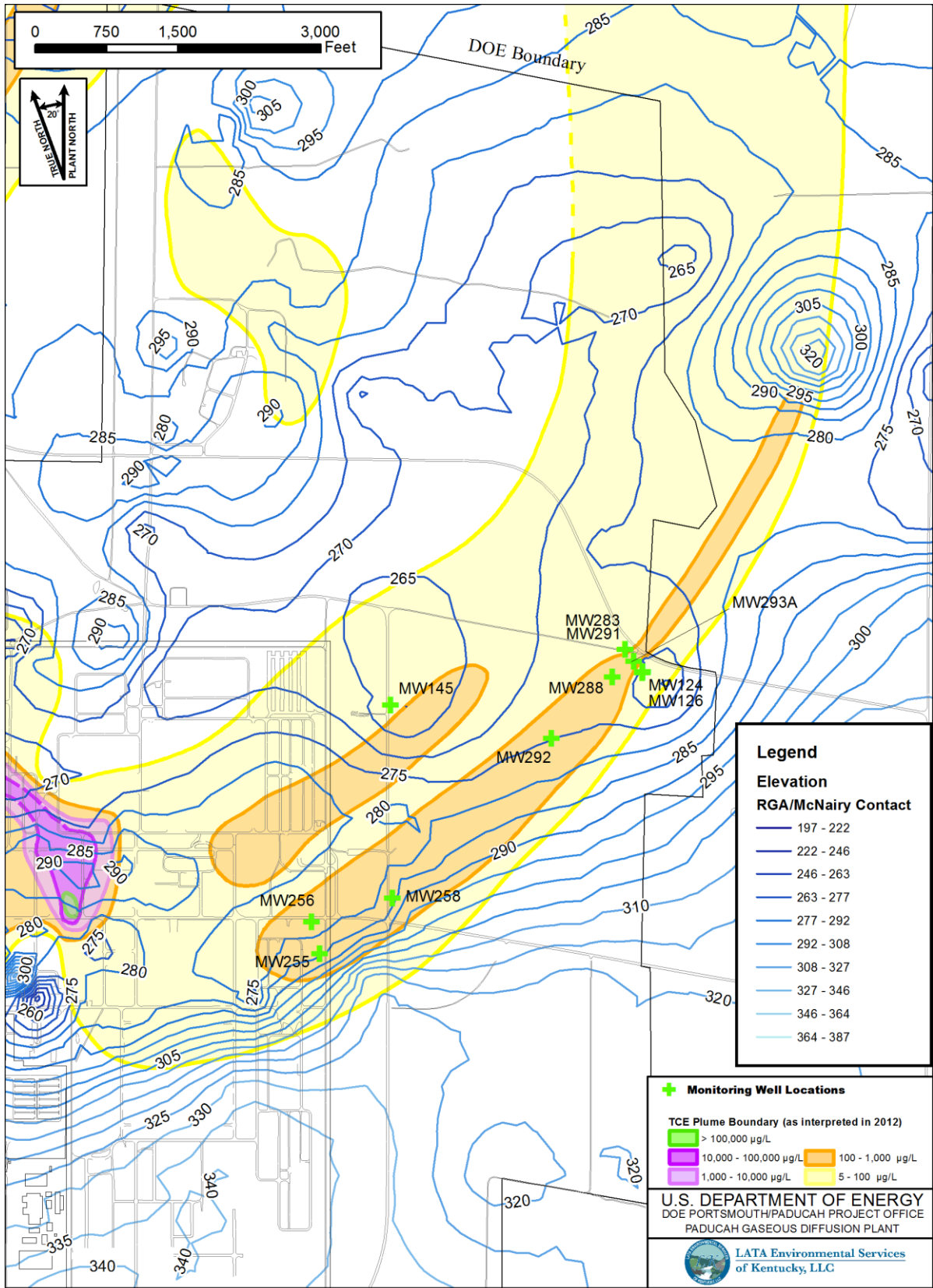
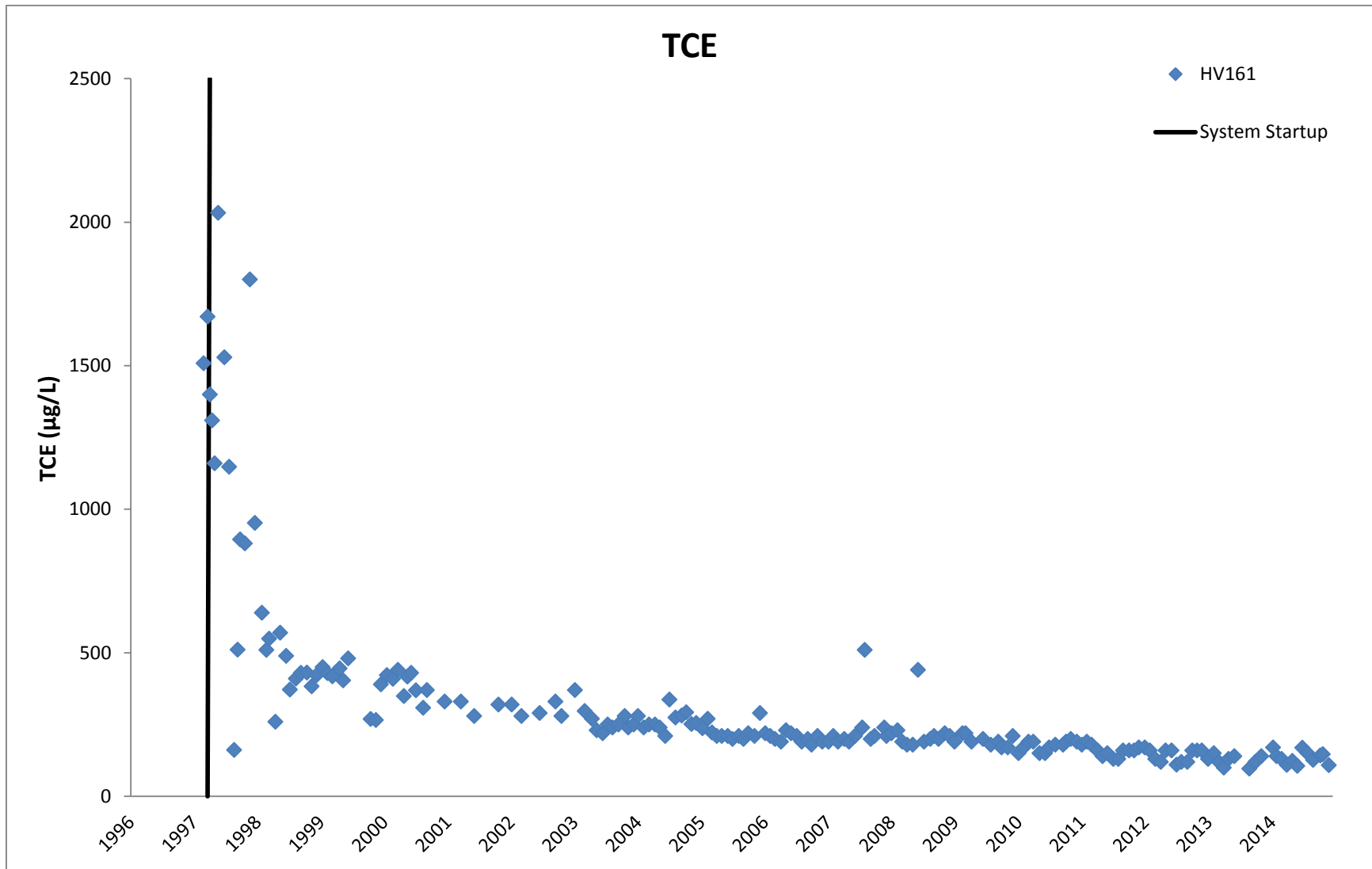


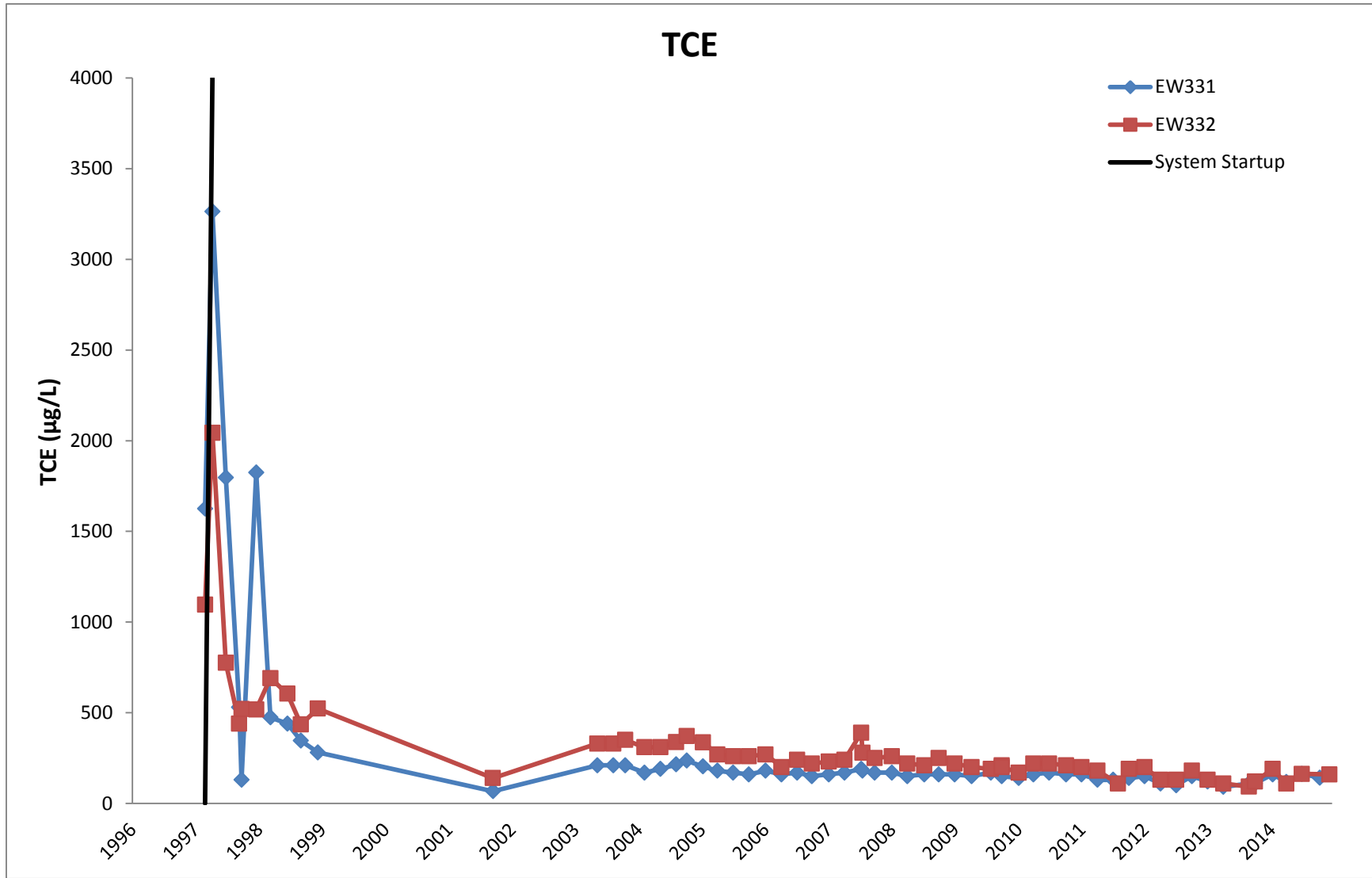
Figure B.2. Northeast Plume with McNairy Topography





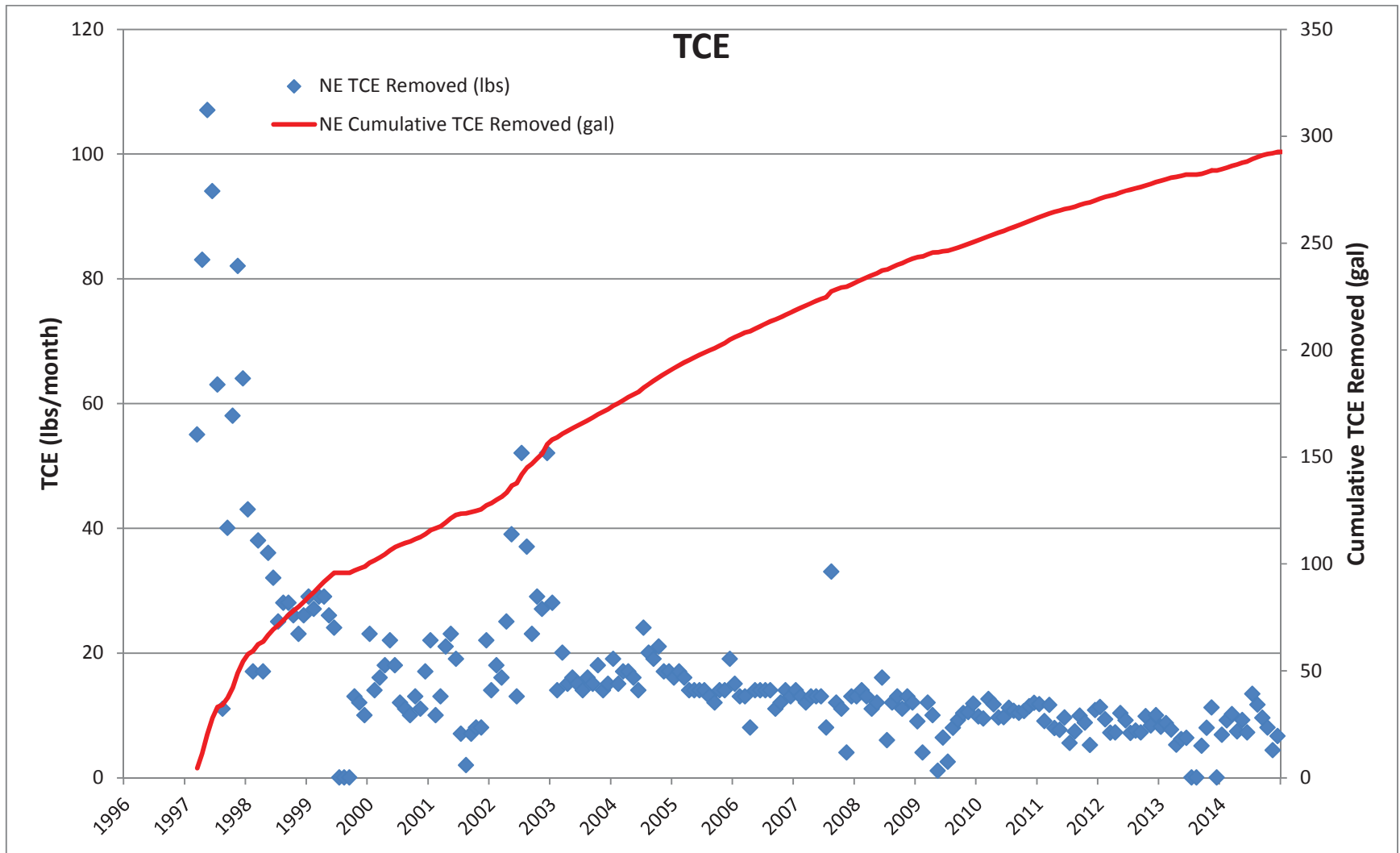
NOTE: Data rejected by validation or assessment have not been graphed.

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



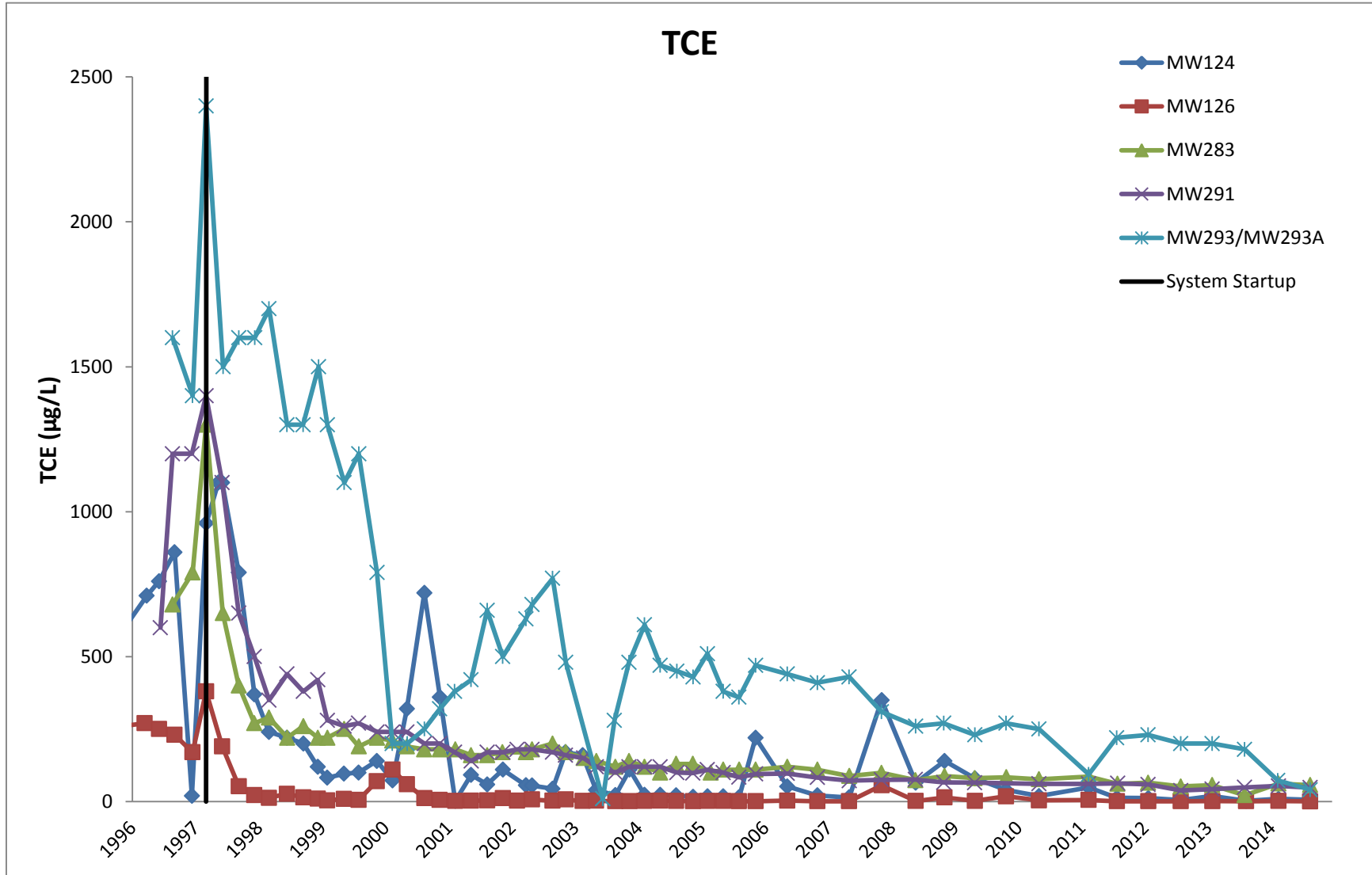
NOTE: Data rejected by validation or assessment have not been graphed.

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



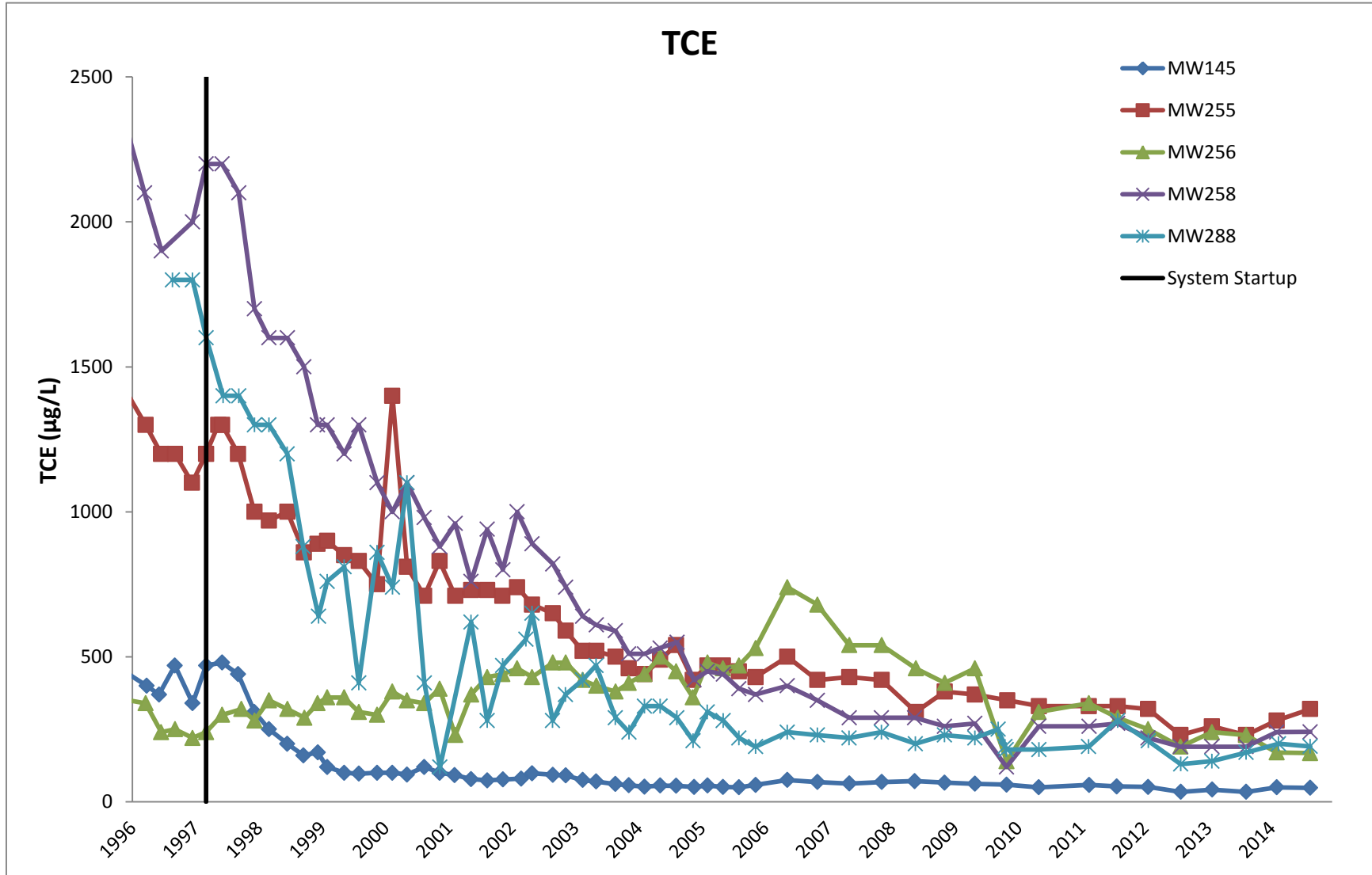
NOTE: Data rejected by validation or assessment are not included on the graph.

Figure B.5. Northeast Plume Containment System TCE Removed



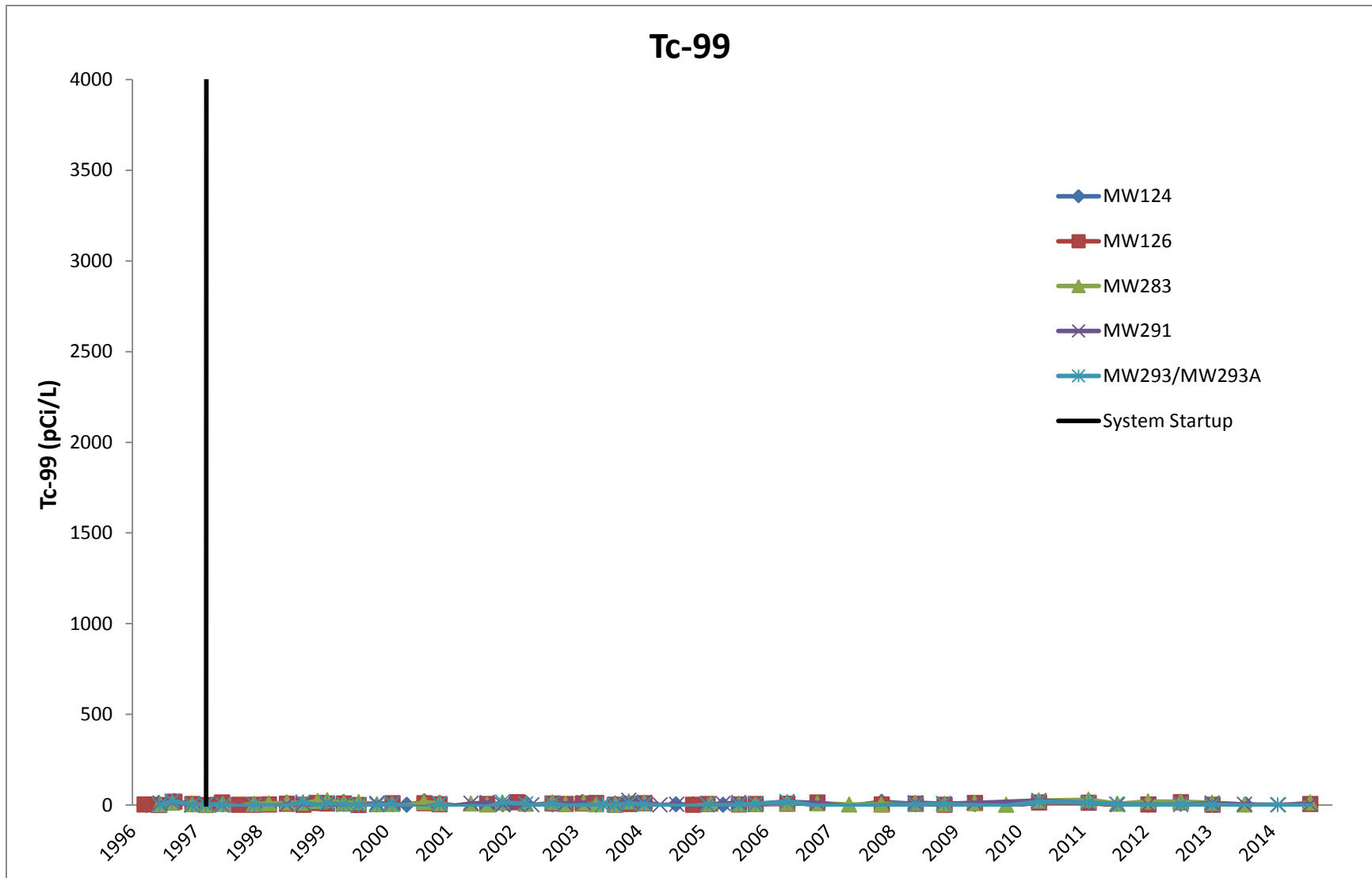
NOTE: Data rejected by validation or assessment have not been graphed.

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



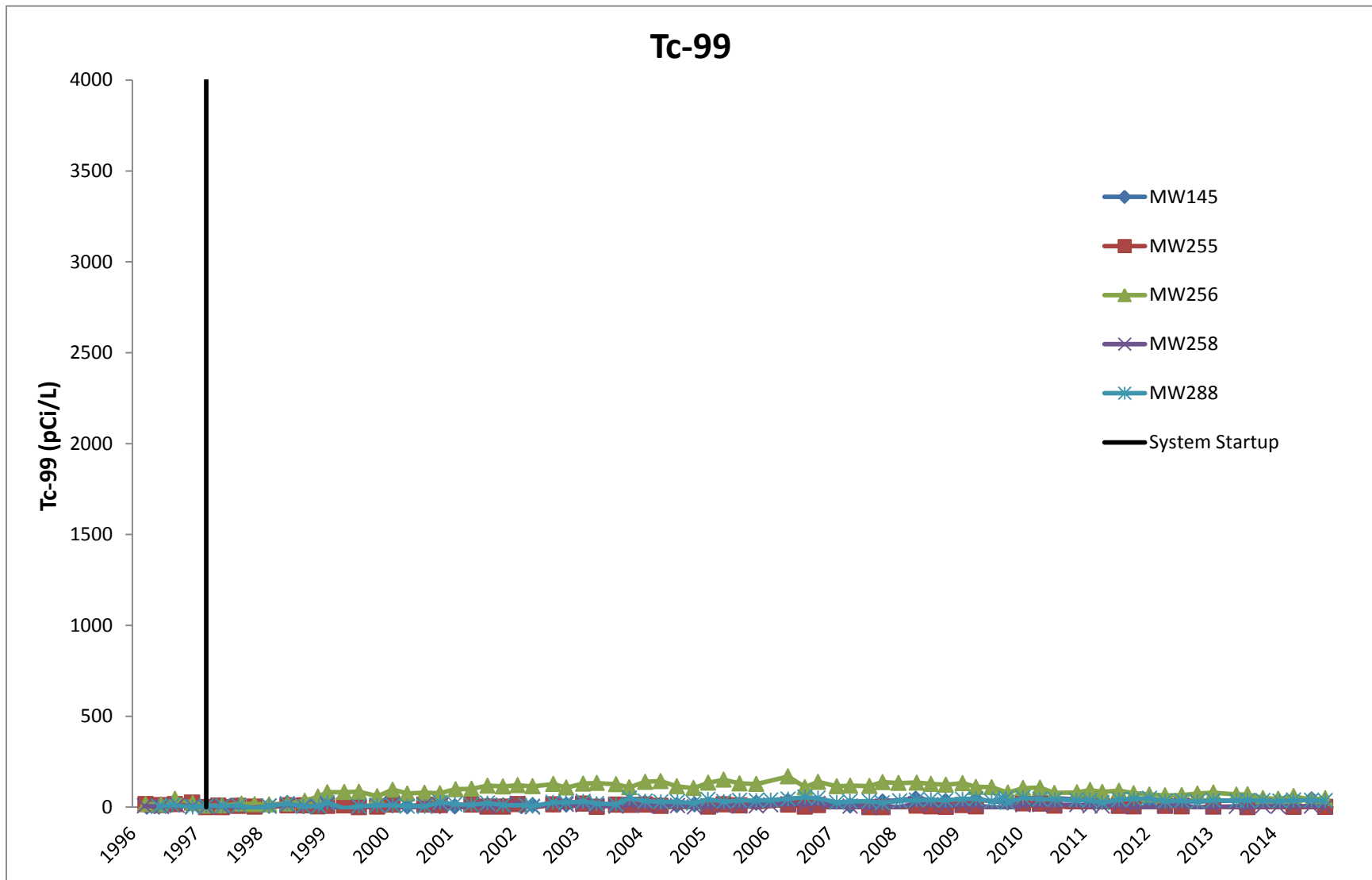
NOTE: Data rejected by validation or assessment have not been graphed.

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



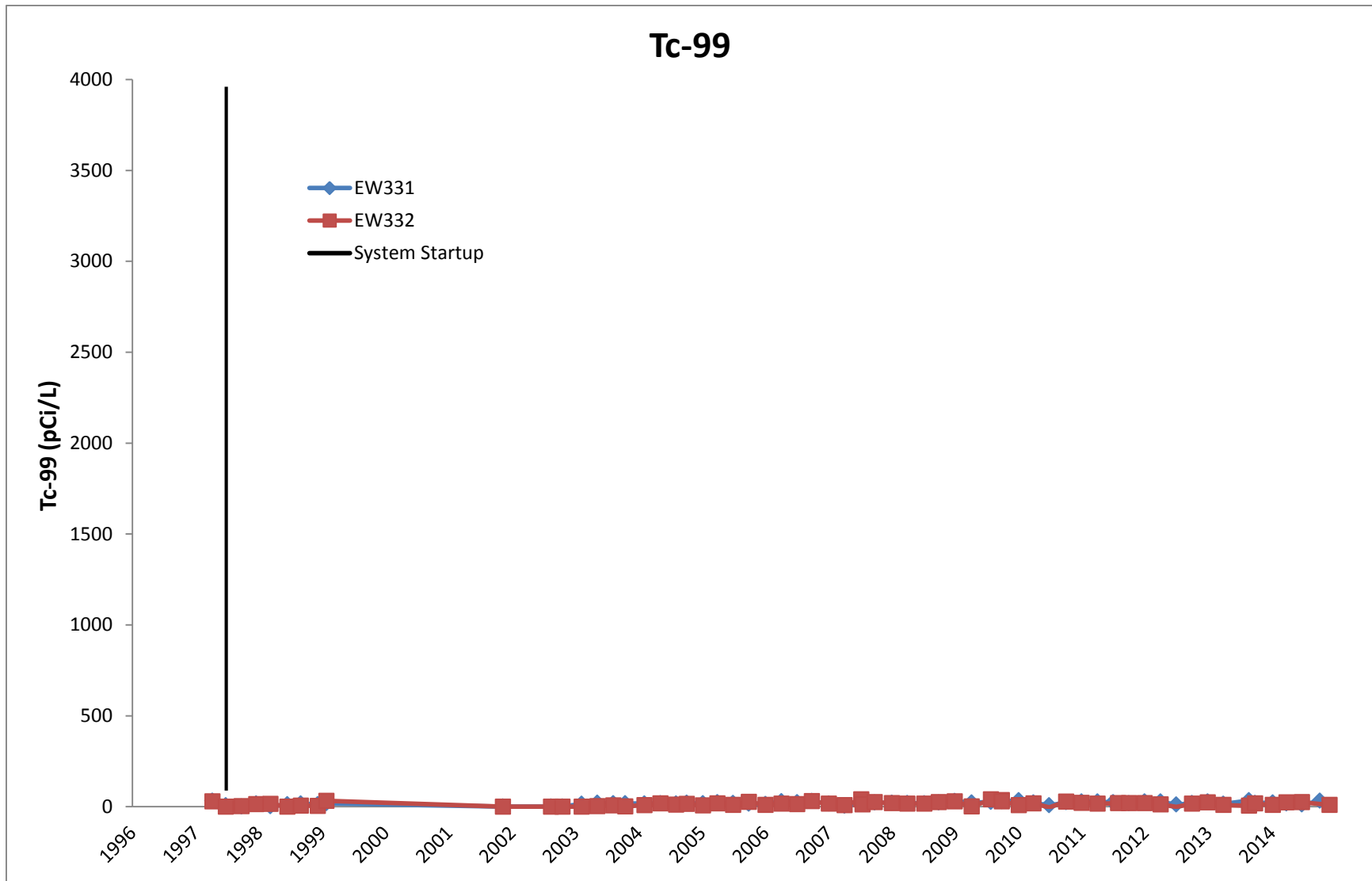
NOTE: Data rejected by validation or assessment have not been graphed.

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



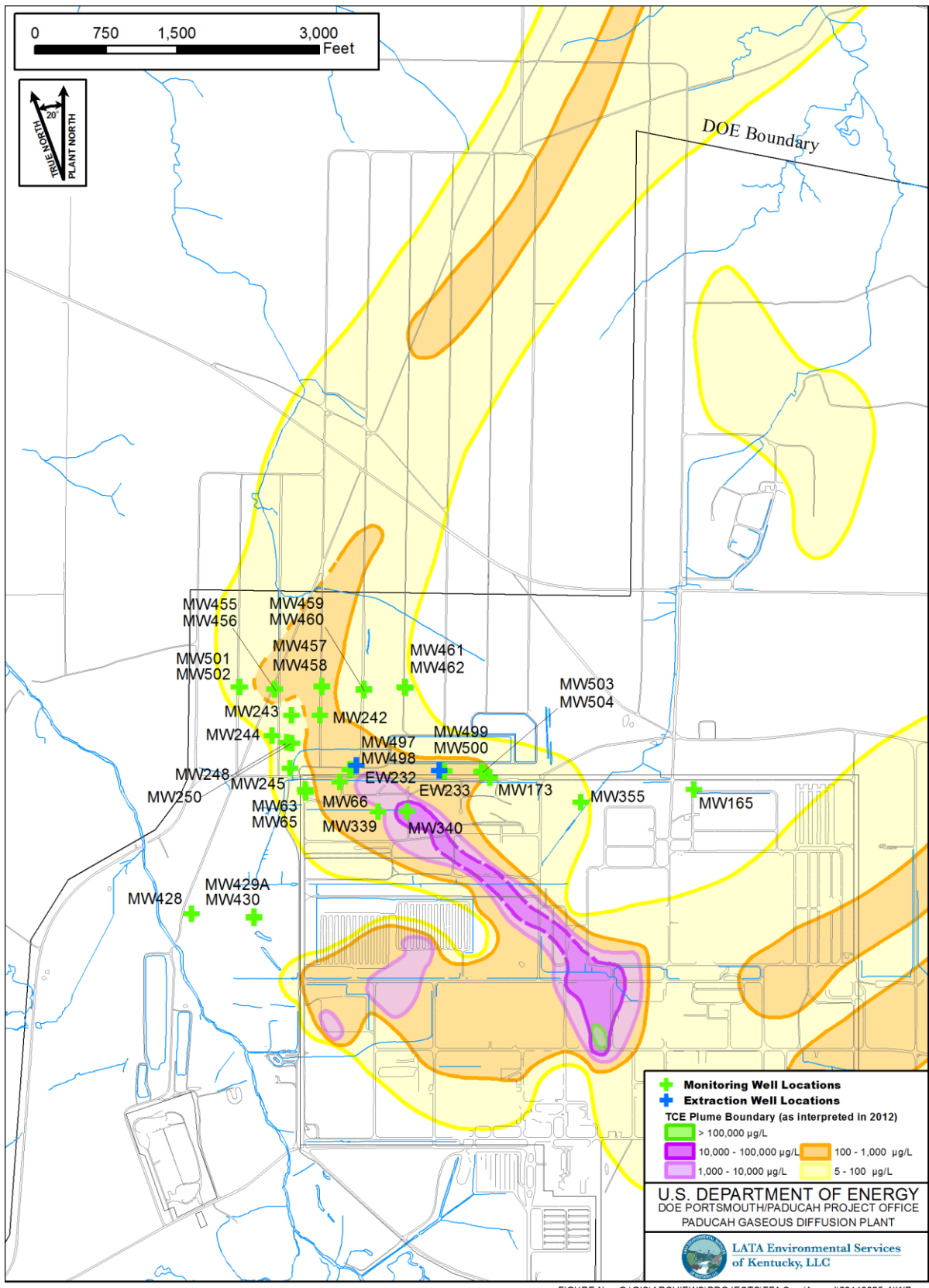


FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20140325\_NWP.mxd  
DATE 3/25/2014

Figure B.11. Northwest Plume Groundwater Wells

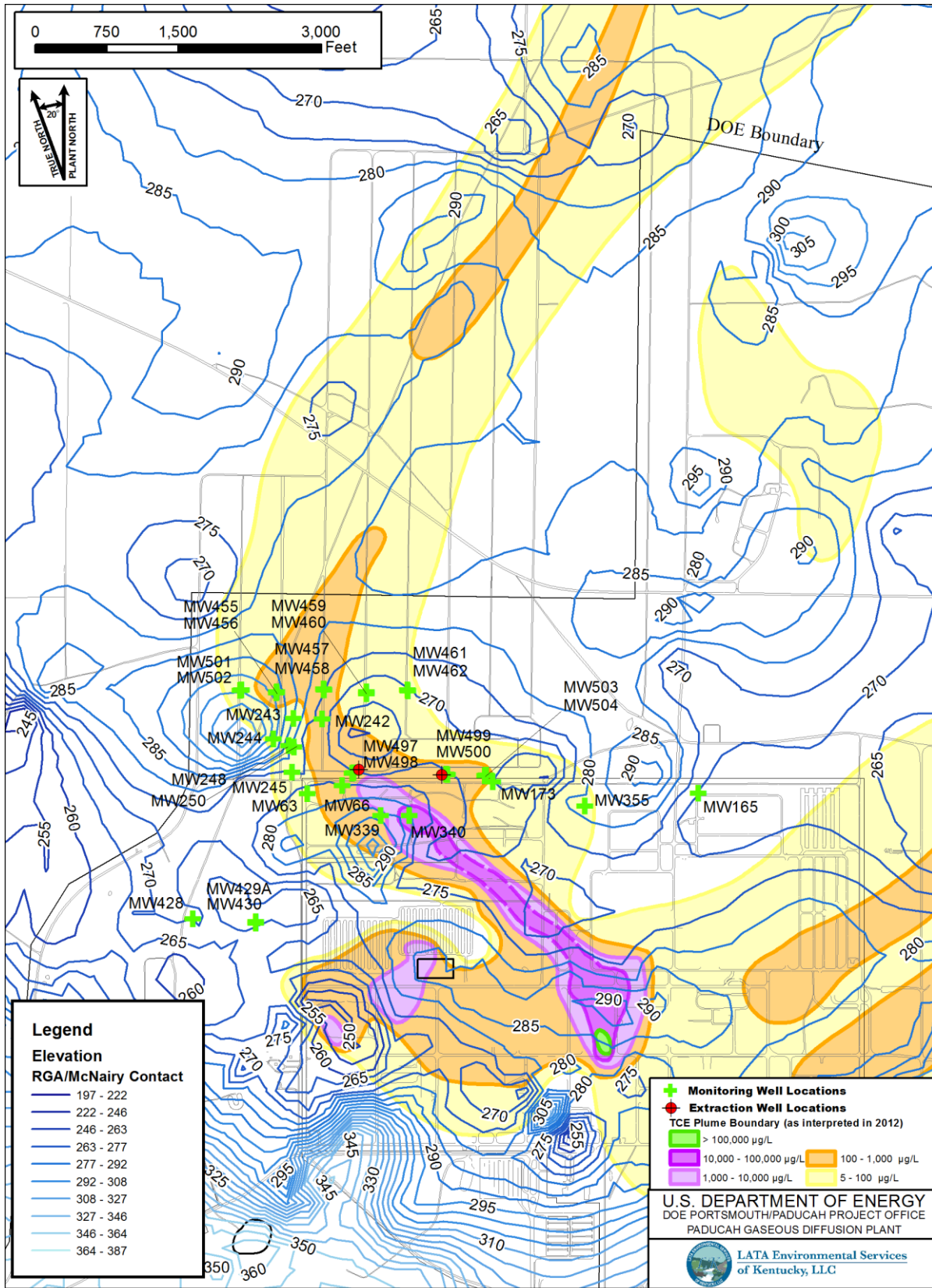
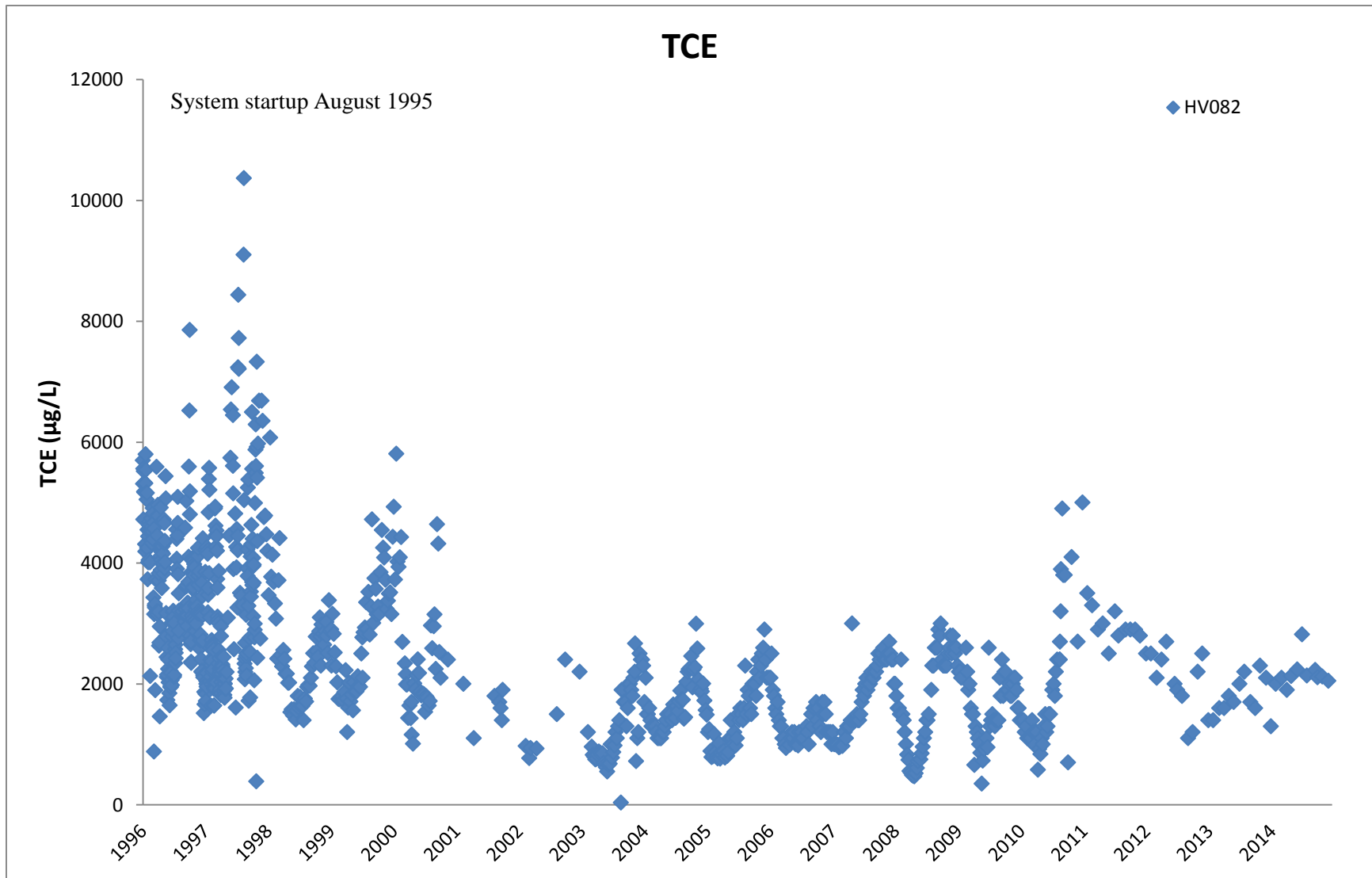
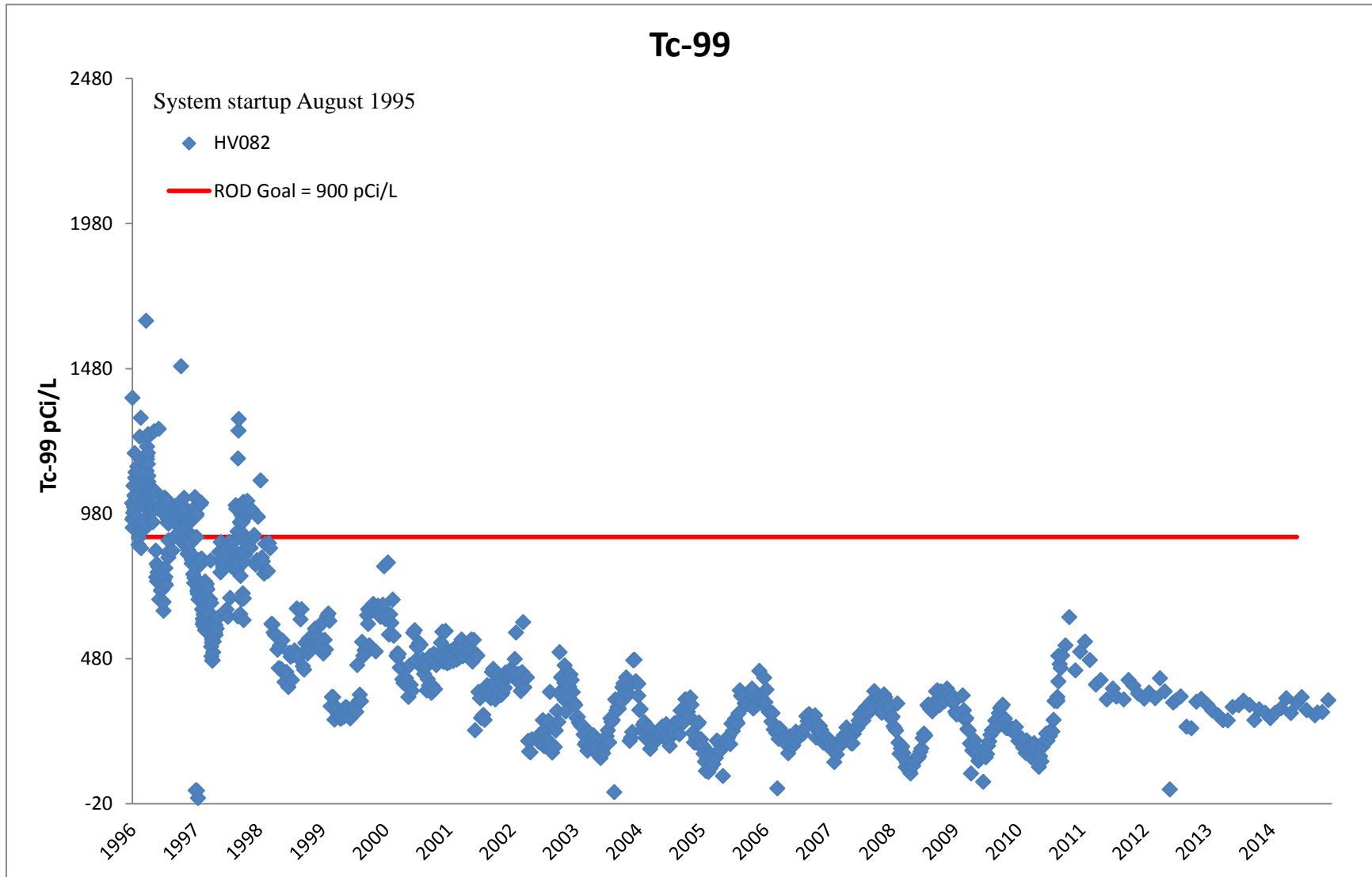


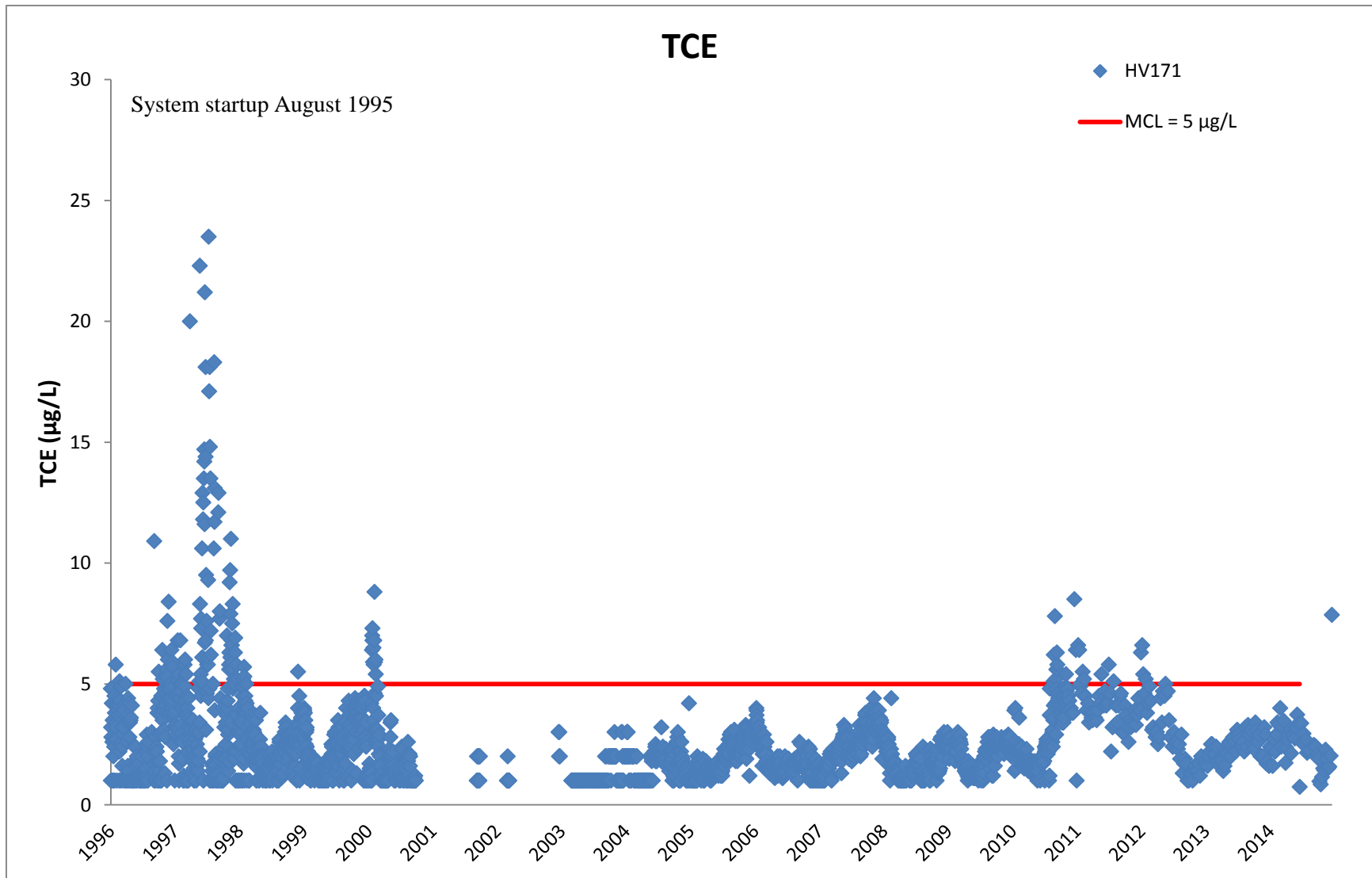
Figure B.12. Northwest Plume with Top of McNairy Topography



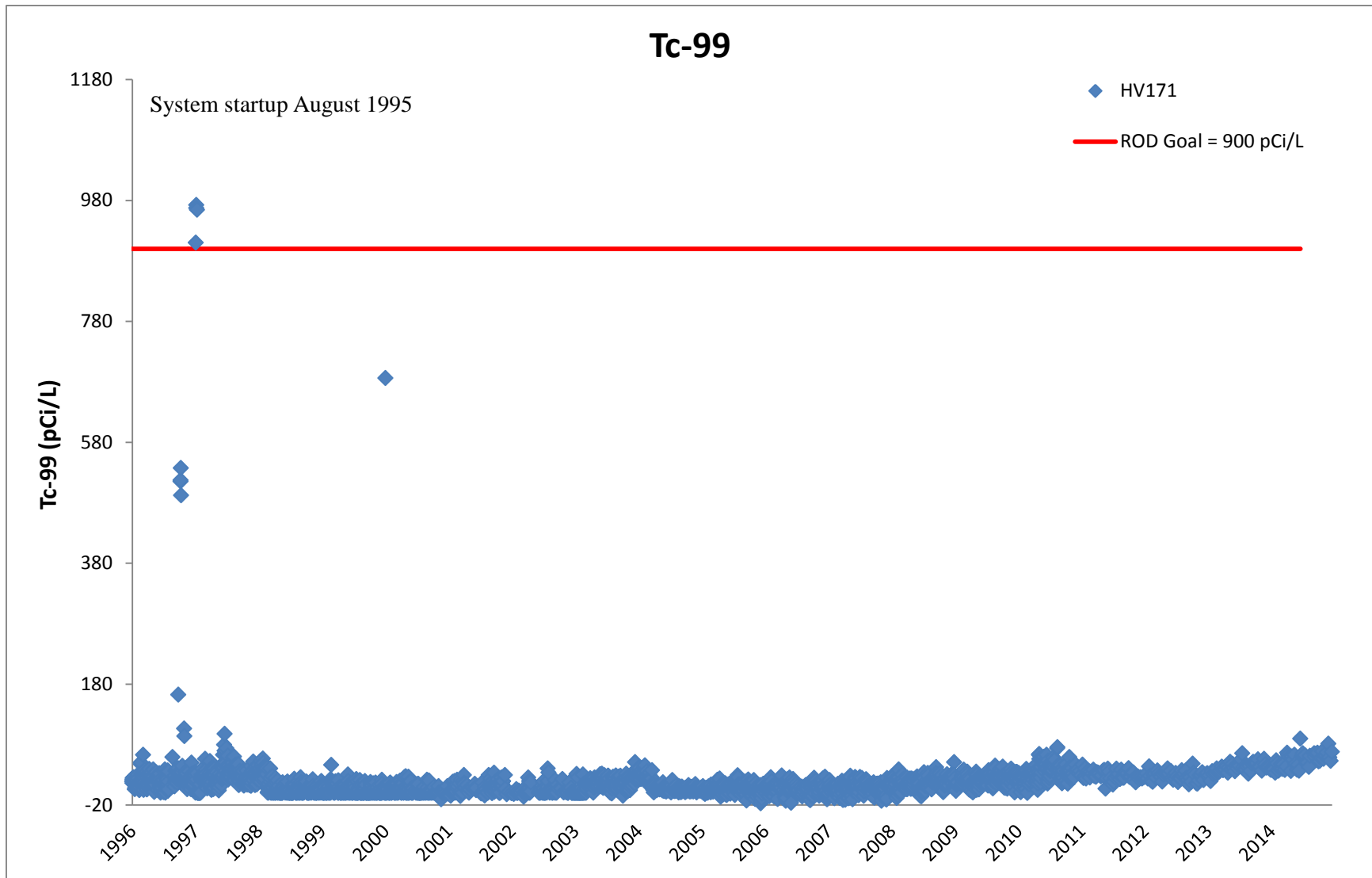
**Figure B.13. Northwest Plume Groundwater System Influent TCE Concentrations**



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

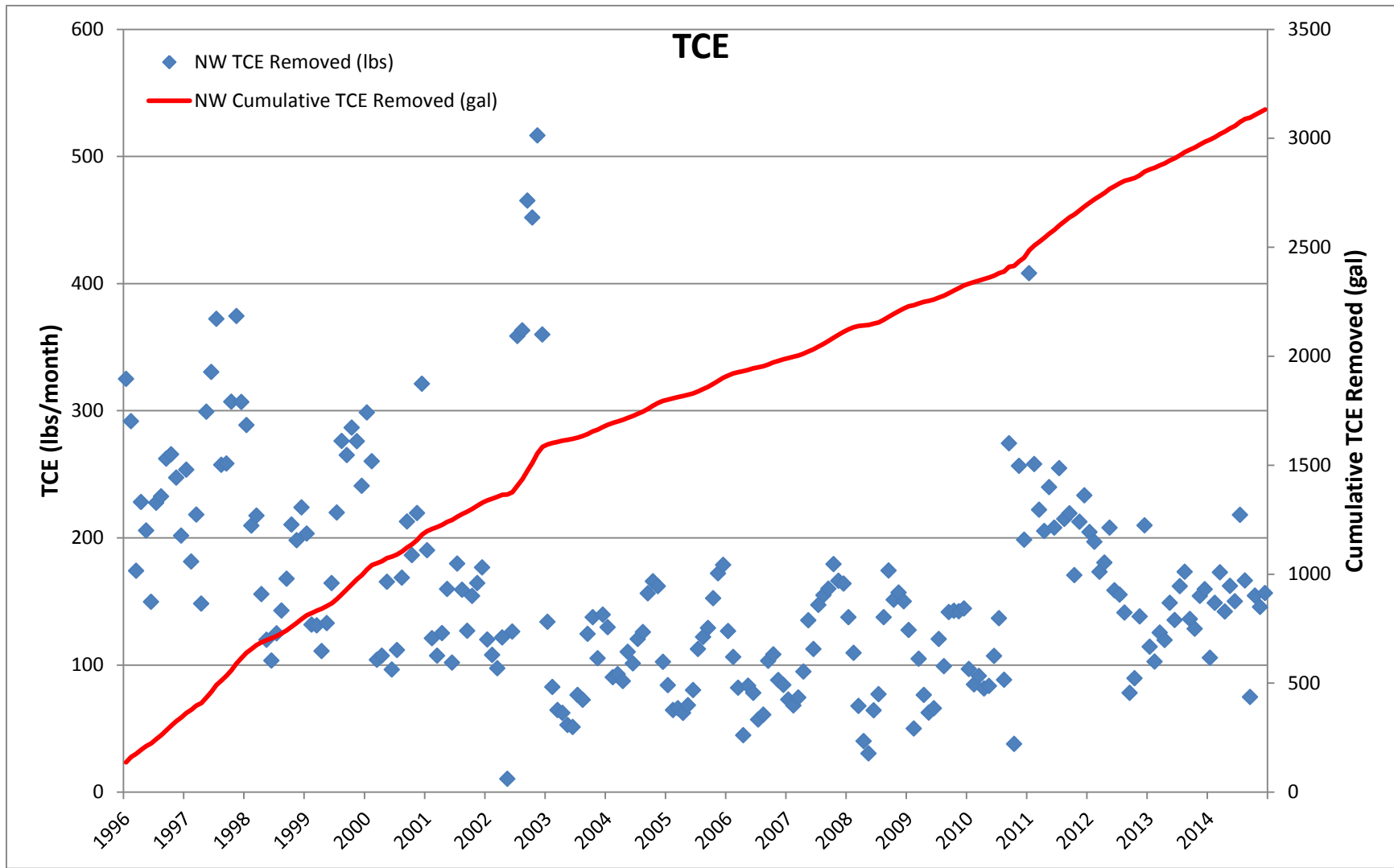


**Figure B.15. Northwest Plume Groundwater System Effluent TCE Concentrations**

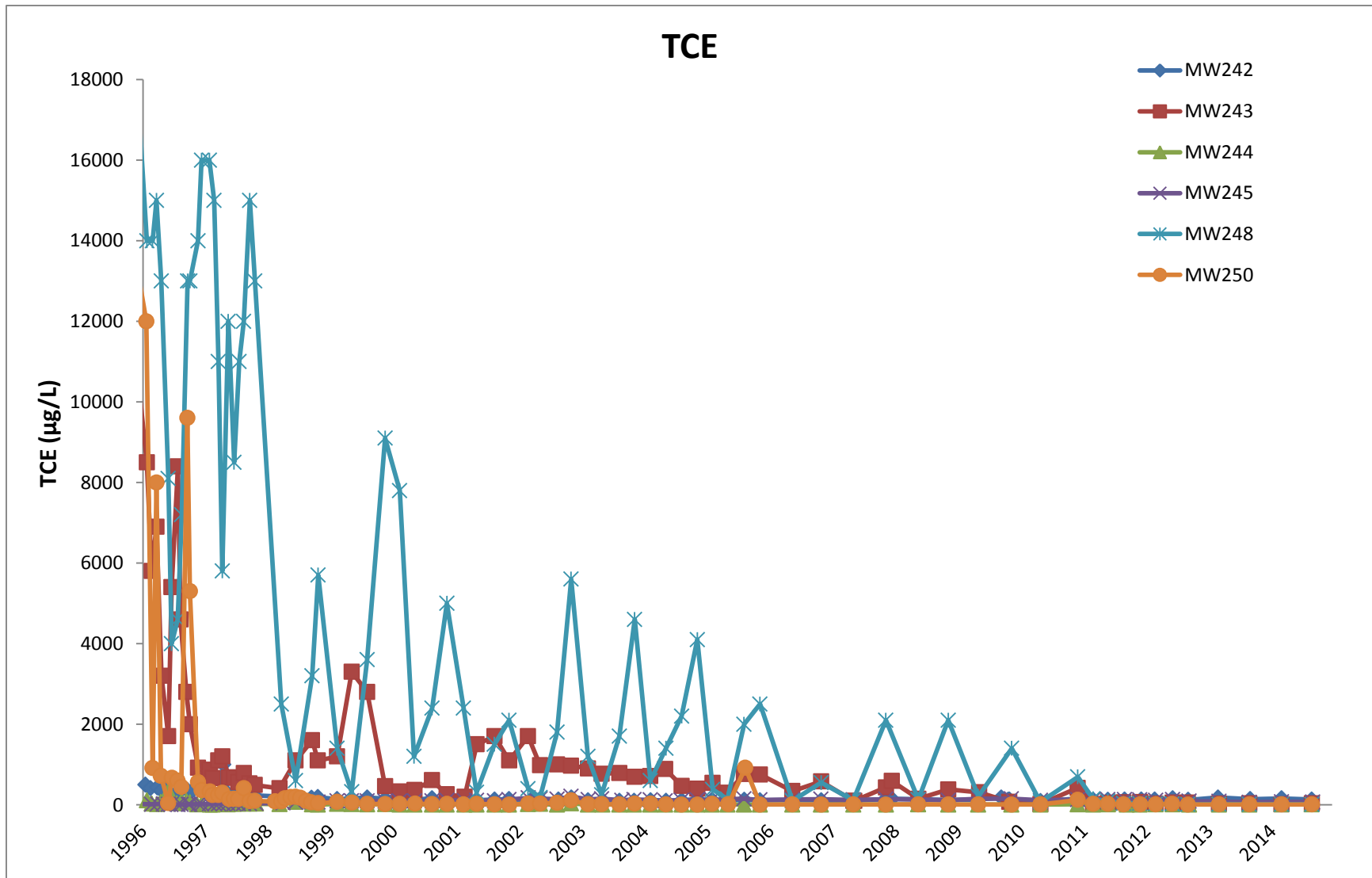


NOTE: Data rejected by validation or assessment have not been graphed.

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



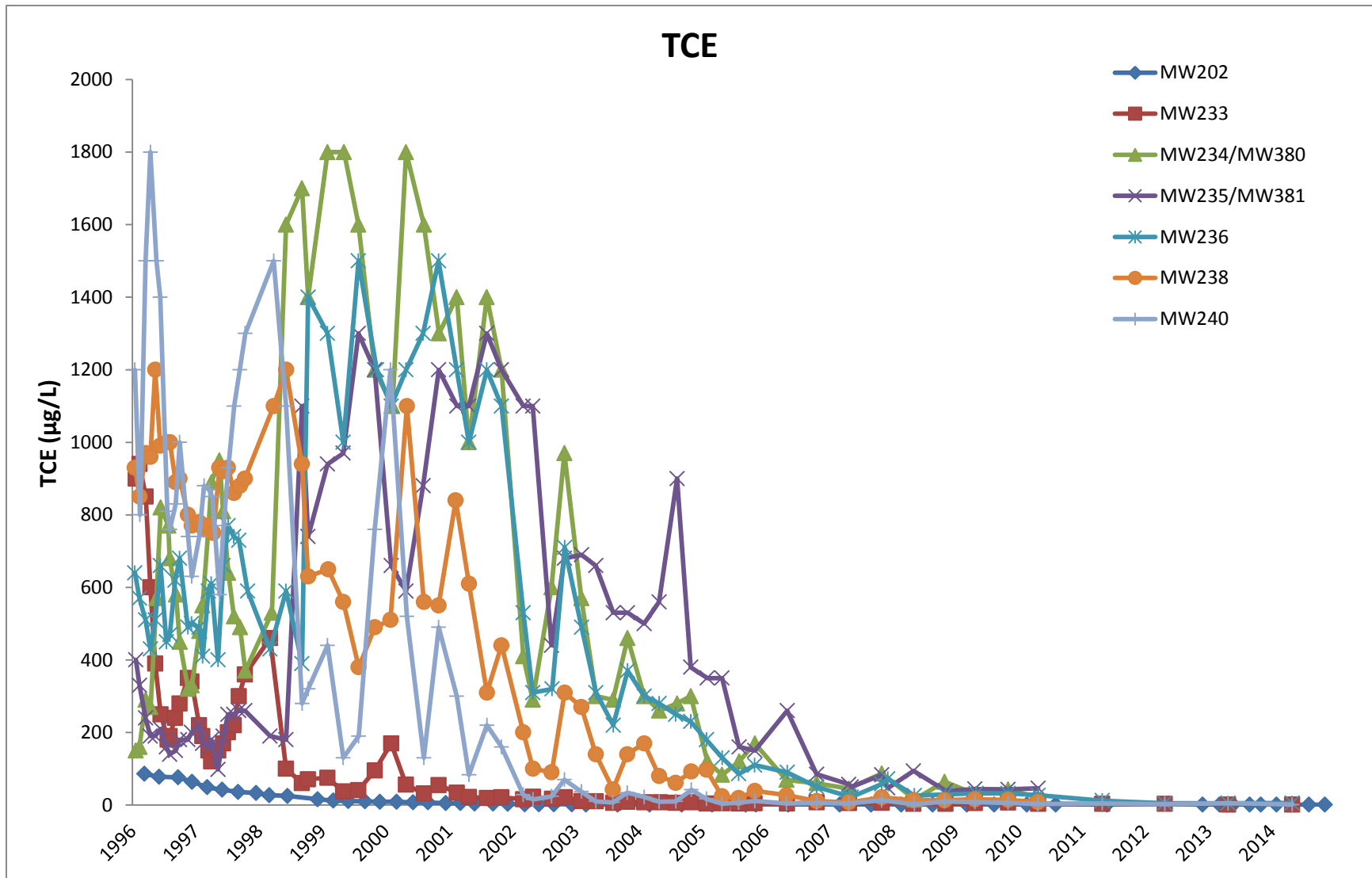
**Figure B.17. Northwest Plume Groundwater System TCE Removed**



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

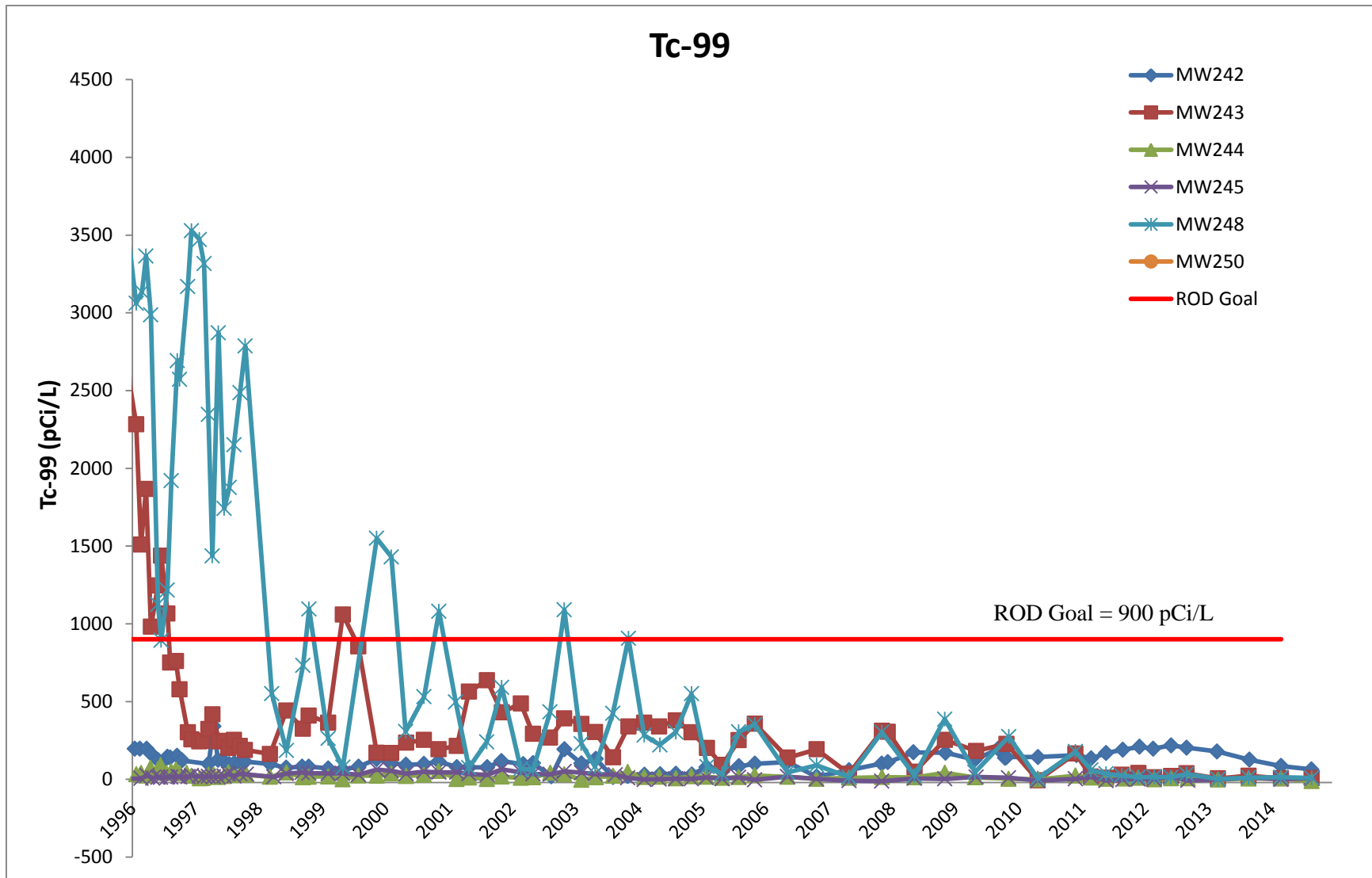


Figure B.20. Northwest Plume—South Well Field Tc-99 Activities

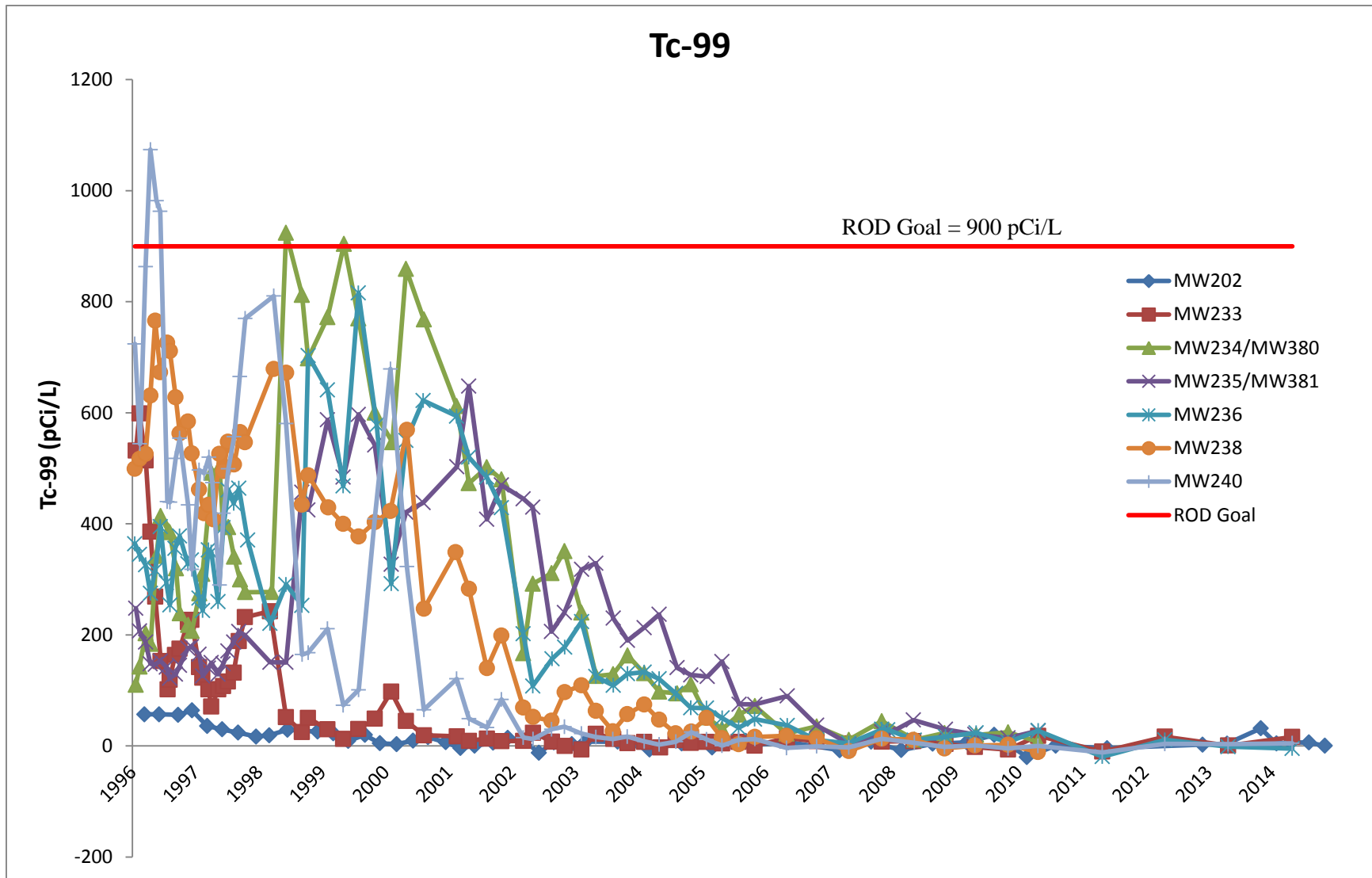


Figure B.21. Northwest Plume—North Well Field Tc-99 Activities

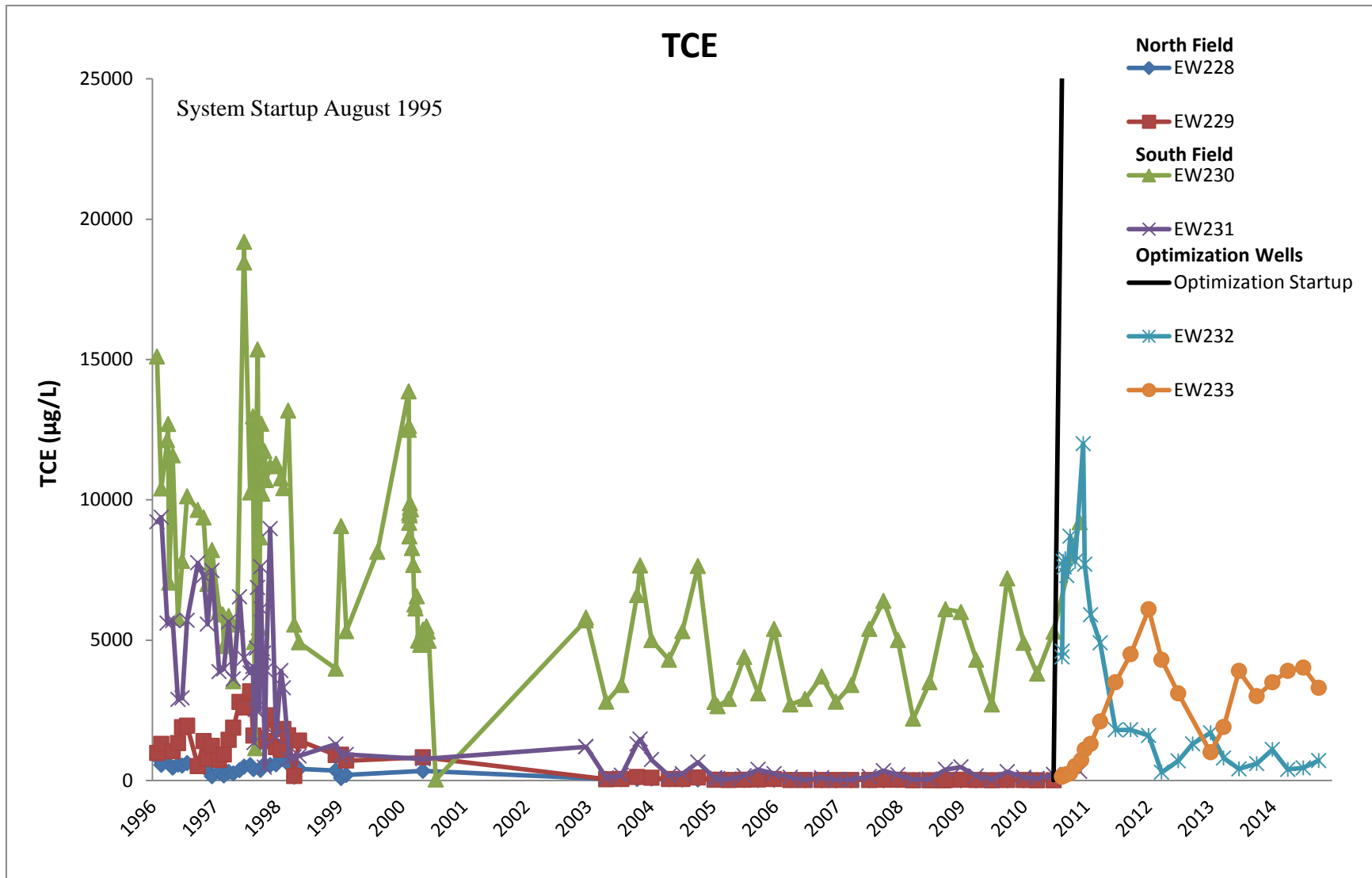
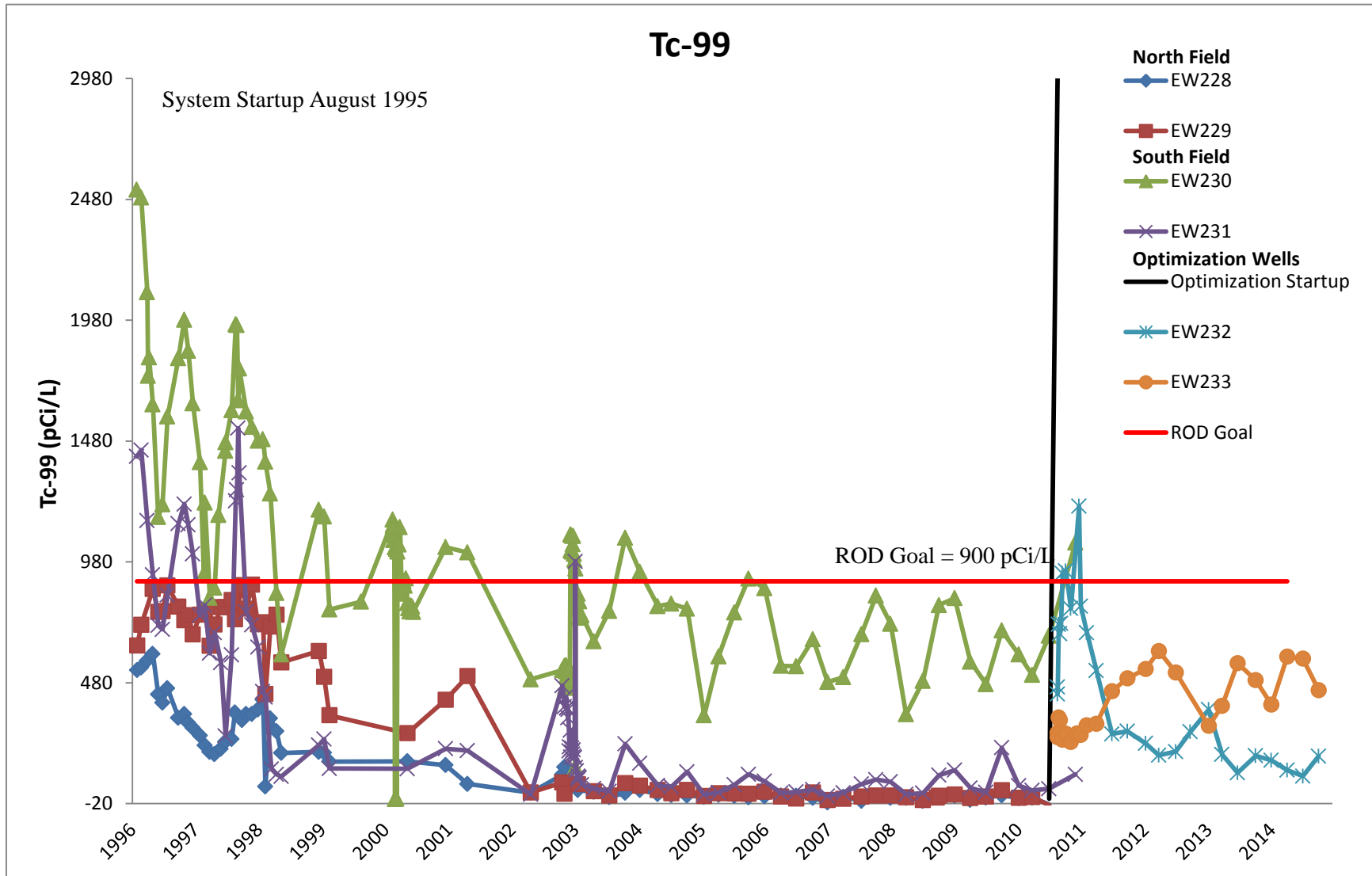
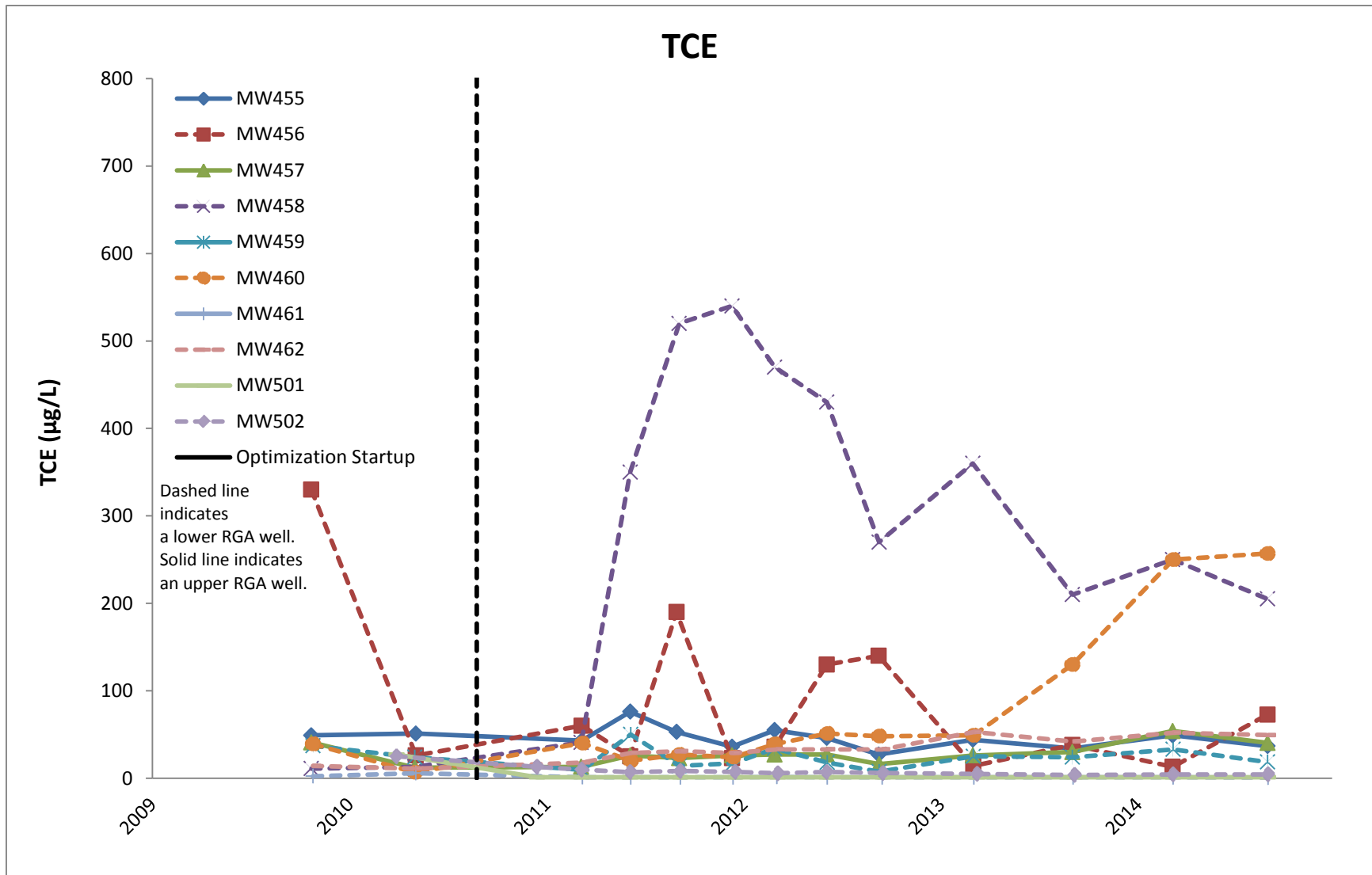


Figure B.22. Northwest Plume—TCE Concentrations in Extraction Wells



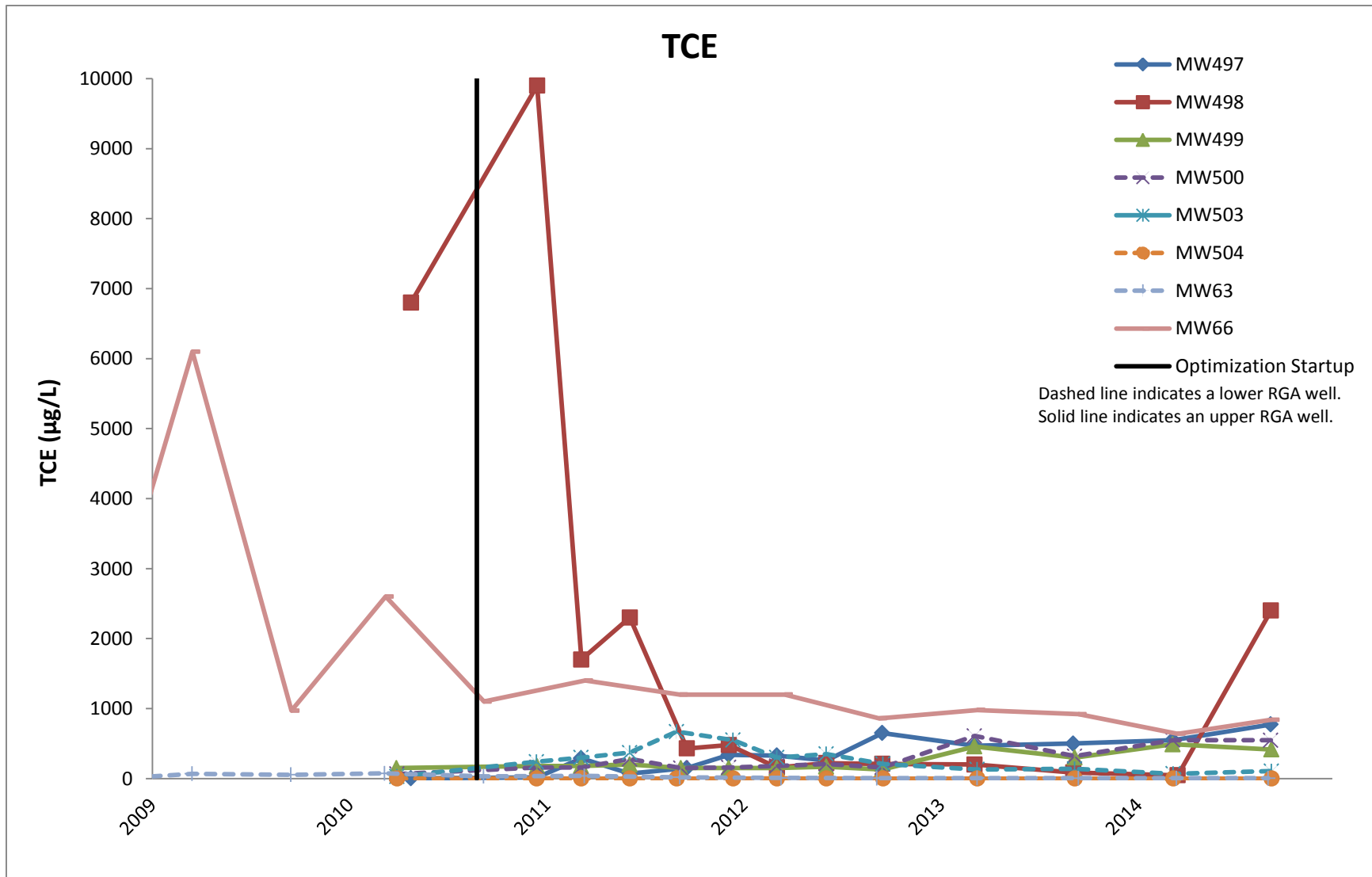
NOTE: Data rejected by validation or assessment have not been graphed.

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



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

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



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

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

**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 12/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
9/3/2013	6.3	< 1					C13246018001
9/10/2013	10	< 5					C13253015001
9/10/2013	9.4	< 5					C13253015002
9/13/2013				< 1		< 1	QTXC0019-13
9/16/2013	9	< 5					C13259014001
9/23/2013	8.3	< 5					C13266024001
10/3/2013			16.2				C13276015001
10/3/2013	9.4	< 1					C13276032002
10/7/2013	6.6	< 1					C13280028001
10/14/2013	3.8	< 1					C13287017001
10/21/2013	< 1	< 1					C13294018001
10/25/2013				< 1		< 1	QTXC00110-13
10/28/2013	2.9	< 5					C13301021001
11/4/2013			20.2				C13308024001
11/4/2013	3	< 5					C13308025001
11/11/2013	3.3	< 5					C13315031001
11/11/2013	3.4	< 5					C13315031002
11/20/2013	3	< 5					C13324011001
11/25/2013	< 1	< 1					C13329036001
12/2/2013	< 1	< 1					C13336090001
1/21/2014	3.7	< 1					C14021029001

B-28



**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 12/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
1/21/2014			19.1				C14021027002
1/21/2014			21.2				C14021027001
1/27/2014	3.5	< 1					C14027014001
1/31/2014				< 1		< 1	QTXC0011-14
2/5/2014	< 1	< 1					C14036044001
2/10/2014	4.7	< 1					C14041021001
2/17/2014	5.4	< 1					C14048023001
2/17/2014	5.7	< 1					C14048023002
2/24/2014	4.8	< 1					C14055021001
3/4/2014	4.6	< 1					C14063020001
3/10/2014	5.2	< 1					C14069033001
3/17/2014	4.8	< 1					C14076022001
3/24/2014	2.5	< 1					C14083021001
4/1/2014	2.68	< 1					345636002
4/10/2014			< 10.5				346575006
4/10/2014	3.05	< 1					346575008
4/14/2014	3.42	< 1					346699001
4/23/2014	3.48	< 1					347434001
4/28/2014	3.63	< 1					347629001
5/7/2014	4.29	< 1					348446001
5/7/2014	4.17	< 1					348446002

B-29

**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 12/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
5/12/2014	5.02	< 1					348596001
5/19/2014	5.4	< 1					349038001
5/27/2014	11.1	< 1					349629001
6/2/2014	15	< 1					349858001
6/10/2014	4.1	< 1					350426001
6/16/2014	4.5	< 1					350780001
6/23/2014	5.79	< 1					351207001
6/29/2014				< 1		< 1	QTXC0016-14
6/30/2014	6.56	< 1					351615001
7/8/2014	5.68	< 1					352237001
7/14/2014	4.73	< 1					352624001
7/21/2014	3.73	< 1					353177001
7/21/2014			< 12.7				353177002
7/25/2014				< 1		< 1	QTXC0017-14
7/29/2014	4.95	< 1					353694001
8/5/2014	7.05	< 1					354137001
8/11/2014	4.35	< 1					354637001
8/18/2014	4.57	< 1					355052001
8/25/2014	6.14	< 1					355488001
9/2/2014	5.39	< 1					355872001
9/8/2014	4.55	< 1					356338001

B-30

**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 12/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
9/15/2014	4.6	< 1					356868001
9/23/2014	3.92	< 1					357338002
9/29/2014	4.44	< 1					357703001
10/7/2014	6.35	< 1					358590002
10/13/2014	.52	< 1	31.3				358950002
10/20/2014	.51	< 1					359488004
10/27/2014	2.07	< 1					360011002
10/31/2014				< 1		< 1	QTXC001-1014
11/4/2014	< 1	< 1					360615002
11/11/2014	.33	< 1					361080002
11/17/2014	< 1	< 1					361458002
11/17/2014	< 1	< 1					361458003
11/24/2014	< 1	< 1					361948003
12/1/2014	.35	< 1					362225002
12/9/2014	< 1	< 1					362804003
12/15/2014	5.35	< 1					363245004
12/22/2014	5.34	< 1					363660002
12/29/2014	3.26	< 1					363851002

B-31

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**APPENDIX C**

**C-746-K LANDFILL DATA**

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C-746-K Landfill groundwater data for reporting period 4/29/14-10/7/14 have been included.

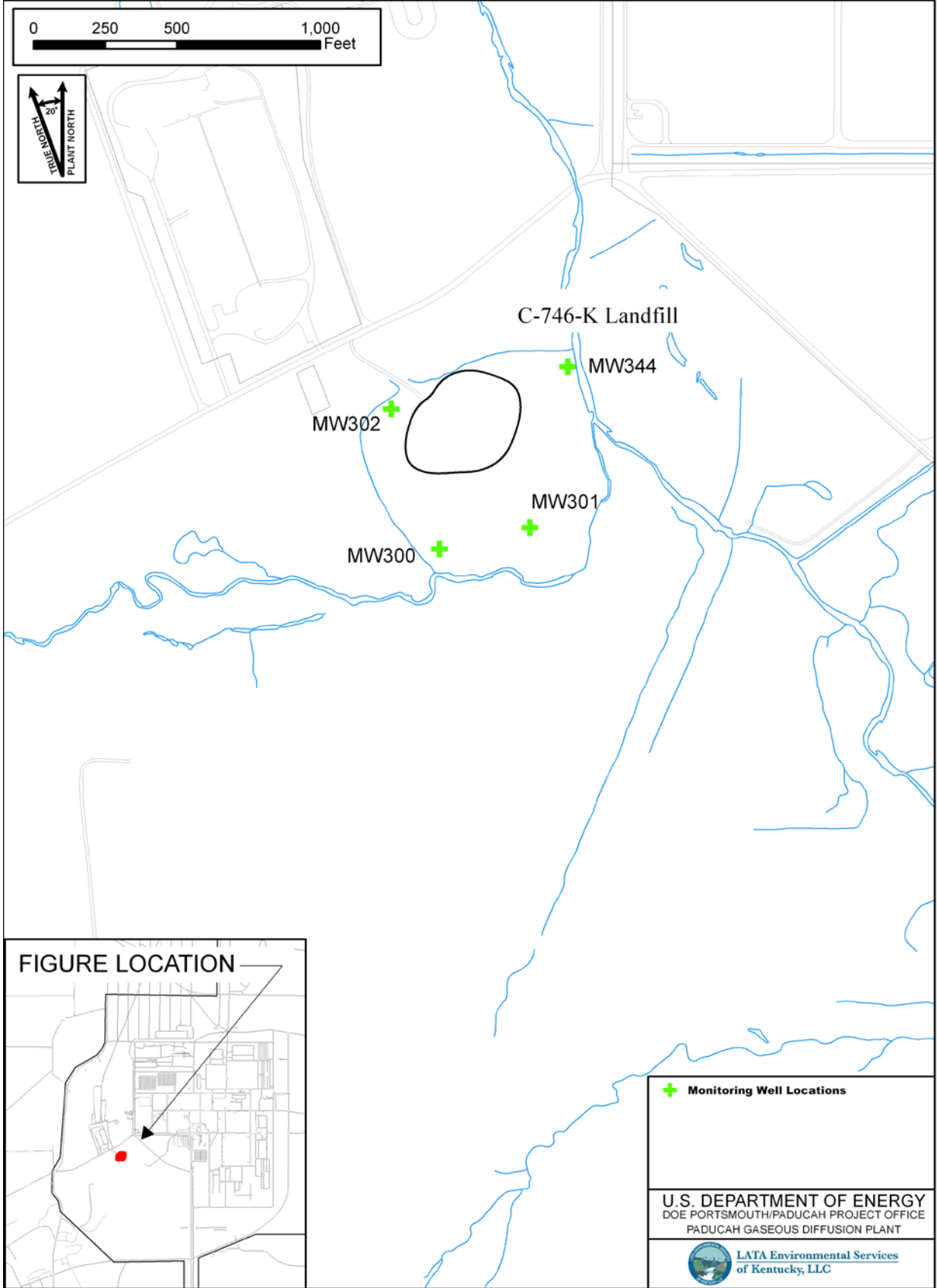
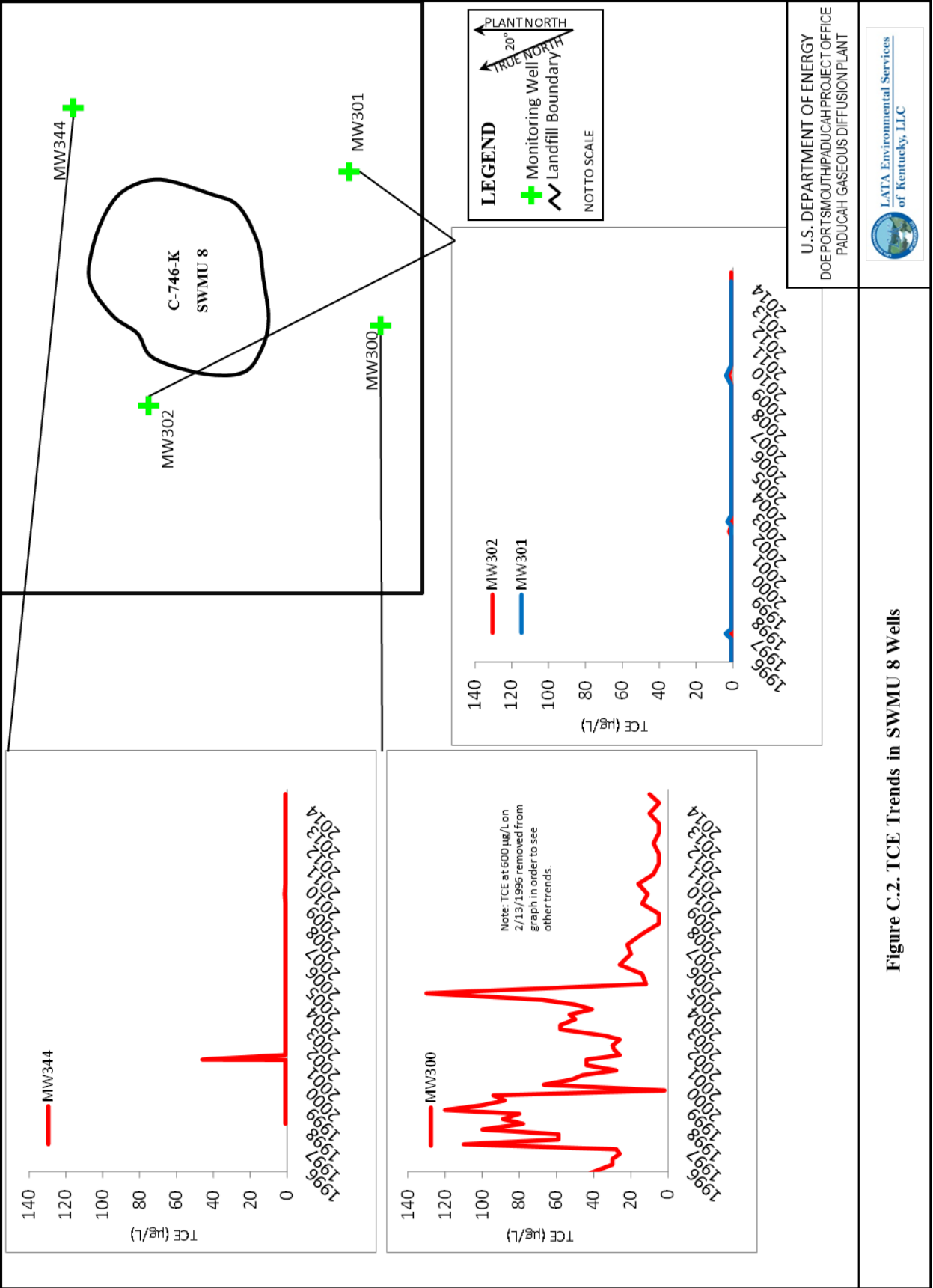


Figure C.1. Monitoring Well Locations





**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**MW300**

C-6

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	19.2	303	20.8	< -2.5	< 24.46	< 8.53	C000130120
1/13/2000	2	< 5	< 5	< 5	< 5	15.9	301	19	< -4.85	< -7.6	< 8.59	C000130123
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-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003
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	42	< 100	< 100	< 100	< 100	21.9	409	27	< 9.4	< 48.7	< 1.31	C032110044
7/30/2003	50	< 100	< 100	< 100	< 100	14.3	382	25.4	< 51.5	53.5	< 4.26	C032110045
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	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
10/25/2007	14	120	77	< 5	< 5	< .2	162	19.7	< -.658	< 25.1	< 1.82	C072980183
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	68	42	< 5	< 5	.558	155	18.4	< 2.93	65.7	< .89	C11292015001

C-7

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	71	44	< 5	< 5	.358	78.8	15.8	< 13.2	53.9	< -4.3	C11292015002
4/24/2012	7.8	100	59	< 5	< 5	< 2	218	18.2	< 3.57	80.6	< 3.84	C12115011001
10/29/2012	< 5	100	69	< 5	< 5	1.65	217	25.3	< 12.6	57.8	< -2.74	C12303019002
10/29/2012	< 5	93	56	< 5	< 5	.271	222	25.5	< 1.27	49.6	< -4.68	C12303019003
4/23/2013	< 5	93	73	< 5	< 5	< .2	292	23.6	< 4.25	< 42	< -2.67	C13113007001
10/21/2013	< 10	76	52	< 10	< 2	< .2	208	20.7	< -6.52	< 36.5	< 11.5	C13294037003
10/21/2013	< 10	76	53	< 10	2.2	< .2	201	21.4	< 3.28	61.9	< .287	C13294037002
4/29/2014	4.9	82.4	56.8	< 10	< 10	.0253	276	19.3	< 10.4	37.4	< .00258	347676009
10/7/2014	< 10	64.3	55.2	< 10	< 10	< .05	236	18.9	< 5	23.5	< -2.04	358703001
10/7/2014	< 10	66.7	54	< 10	< 10	.0224	253	19.5	< 2.03	29.1	< -4.11	358703003

C-8

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	.231	128	13.8	< 11.1	30.1	< 5.23	C011060088
4/16/2001	< 1	< 5	< 5	< 5	< 5	1.86	139	13.8	< 16.1	32.7	< 10.7	C011060087
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**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**MW301**

C-10

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	4.5	4.4	< 1	< 1	< .2	160	14.5	< 17.8	85	< 12.3	C09120015003
4/30/2009	< 1	3.8	3.9	< 1	< 1	< .2	228	15.9	< 7.32	71	< 7.74	C09120015002
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	3	< 5	< 1	< .2	198	13.8	< 11.5	50.7	< -8.41	C10110009004
4/20/2010	< 1	< 5	2.9	< 5	< 1	< .2	196	13.7	< -7.51	45.2	< -8.84	C10110009005
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-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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
10/29/2012	< 1	< 1	< 1	< 1	< 1	6.98	163	8.35	< 15.1	58.9	< 1.99	C12303019004
4/23/2013	< 1	1.2	1.4	< 1	< 1	.216	120	9.8	< 10.1	< 46.9	< .0556	C13113007002
10/21/2013	< 1	2.4	2.2	< 1	< 1	10.9	200	10.7	< 6.61	< 54.4	< 8.32	C13294037004
4/29/2014	< 1	1.73	1.95	< 1	< 1	.0277	121	8.95	6.95	52.9	< 2.71	347676005

C-11

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	< .05	12.3	5	11	960821-020
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.058	4.4	6	6	960821-022
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	.114	< 1.8	< 0	< 5	C980370102
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	< .1	< 1.2	< 4	< -2	C980370103
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.164	< 2.3	37	< 2.1	C981400088
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.167	< -9	8	< 2.8	C981400087
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**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	.101	< -4.7	< 3.52	< 2.65	C010100095
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.112	< .329	< 5.56	< 8.77	C010100096
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	2	< 5	< 5	< 5	< 5	< .2	< .2	.062	< 2.37	< -2.75	< -3.64	C021010051
4/10/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.054	< 5.56	< -1.95	< 4.88	C021010050
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	.611	1.63	< 6.89	< -1.62	< -.819	C041130035
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.302	1.71	< -1.61	< -.897	< 5.4	C041130036
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**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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
10/29/2012	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.0704	< .308	< -.308	< -6.18	C12303019001
4/23/2013	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.0804	< 3.53	< 1.37	< -2.15	C13113007003
10/21/2013	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.19	< 2.39	< 2.41	< 1.2	C13294037001
4/29/2014	< 1	< 1	< 1	< 1	< 1	.0339	.112	.156	< -.306	< 2.95	< 2.13	347676007
10/7/2014	< 1	< 1	< 1	< 1	< 1	.0573	.163	.414	< -1.1	< 1.86	< 12.8	358703005

C-14

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	.00323	.00478	.366	< 2.54	< 2.37	< 13.8	C022760031
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00423	.00456	.323	< 5.83	< 5.09	18.5	C022760030
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**

**Sample Date Range: 5/31/1994 - 10/7/2014**

**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	4.39	7.54	.167	< 3.64	< 3.59	< -.511	C12115011004
4/24/2012	< 1	< 1	< 1	< 1	< 1	3.92	6.46	.118	< 6.28	< 5.53	< 7.1	C12115011005
10/29/2012	< 1	< 1	< 1	< 1	< 1	2.12	3.89	.143	< .405	< 3.49	< -8.39	C12303019005
4/23/2013	< 1	< 1	< 1	< 1	< 1	2.65	4.66	.116	< 4.97	< 3.39	< -3.25	C13113014001
4/23/2013	< 1	< 1	< 1	< 1	< 1	2.77	3.82	.107	< 1.89	< 3.93	< -1.43	C13113014002
10/21/2013	< 1	< 1	< 1	< 1	< 1	8.79	6.63	.185	< 4.86	4.56	< 4.93	C13294037005
4/29/2014	< 1	< 1	< 1	< 1	< 1	3.92	9.31	.138	9.05	7.89	< 1.14	347676001
4/29/2014	< 1	< 1	< 1	< 1	< 1	4.42	10.1	.139	6.34	9.4	< -2.93	347676003
10/7/2014	< 1	< 1	< 1	< 1	< 1	3.61	8.09	.253	< .965	< 11	< 3.57	358703007

C-16

**APPENDIX D**

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

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## Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF C-410	11/14/14	PPPO-02-2571461-15	RESPONSE TO U.S. ENVIRONMENTAL PROTECTION AGENCY DISAPPROVAL OF THE DISCHARGE OF WASTEWATER FROM BUILDING C-410 REMOVAL ACTION, PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00782
ARF C-410	11/26/14	KY-15-0919	INTENDED DISCHARGE OF RADIOACTIVELY CONTAMINATED WATERS GENERATED FROM C-410 COMPLEX CERCLA RESPONSE ACTION, PGDP, PADUCAH, MCCRACKEN COUNTY, KENTUCKY, KY8-890-008-982	KDWM	DOE-PPPO	No	ENV 1.A-00783
ARF C-410	11/26/14	KY-15-0920	EPA ISSUANCE OF STOP WORK ORDER ON THE DISCHARGE OF WASTEWATER FROM BUILDING C-410 REMOVAL ACTION, PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00784
ARF4-1	08/01/14	PPPO-02-2419206-14,DOE/OR/07-2179&D2/A2/R3	TRANSMITTAL OF THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT PGDP SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN, DOE/OR/07-2179&D2/A2/R3	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00724
ARF4-1	08/01/14	PPPO-02-2439470-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNIT 4 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00725
ARF4-1	08/29/14	KY-14-0862	EPA APPROVAL OF THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PGDP, SWMU 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R3)	USEPA-4	DOE-PPPO	No	ENV 1.A-00750
ARF4-1	09/16/14	PPPO-02-2530266-14,DOE/OR/07-2179&D2/R2	TRANSMITTAL OF THE REVISED WASTE MANAGEMENT PLAN (SECTION 13) OF THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY (DOE/OR/07-2179&D2/R2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00726
ARF4-1	09/18/14	KY-14-0875	CONCURRENCE WITH THE REVISED WASTE MANAGEMENT PLAN (SECTION 13) OF THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/OR/07-2179&D2/R2)	KDWM	DOE-PPPO	No	ENV 1.A-00743
ARF4-1	09/19/14	KY-14-0877	EPA APPROVAL OF THE REVISED WASTE MANAGEMENT PLAN (SECTION 13) OF THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY AT PGDP (DOE/OR/07-2179&D2/A2/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00744
ARFBGOU	02/20/14	KY-14-0854	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-BURIAL GROUNDS, SWMUs 5 AND 6, DTD 2/20/14	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00746
ARFBGOU	03/28/14	MEM-14-0085	E-MAIL RE:PPPO-02-2219887-14, REQUESTED MODIFICATION TO THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUND OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY AT PGDP, SWMU 4 SAMPLING	USEPA-4	DOE-PPPO	No	ENV 1.A-00747

D-3

## Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	07/02/14	KY-14-0806	EXTENSION REQUEST FOR REVIEW OF THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-1274&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00714
ARFBGOU	07/17/14	KY-14-0825	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX (SWMUs 5 AND 6)	DOE-PPPO	USEPA-4	No	ENV 1.A-00715
ARFBGOU	07/23/14	PPPO-02-2431018-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00721
ARFBGOU	07/28/14	KY-14-0822	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANagements UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00716
ARFBGOU	07/28/14	KY-14-0824	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SWMUs 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00717
ARFBGOU	08/18/14	PPPO-02-2451286-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00722
ARFBGOU	08/21/14	KY-14-0856	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00748
ARFBGOU	08/21/14	KY-14-0857	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-BURIAL GROUNDS, SWMUs 5 AND 6, DTD 8/21/14	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00749
ARFBGOU	08/28/14	KY-14-0859	CONCURRENCE WITH 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/R3), PGDP, PADUCAH, MCCRACKEN COUNTY, KENTUCKY, KY8-890-008-982	KDWM	DOE-PPPO	No	ENV 1.A-00772
ARFBGOU	08/28/14	KY-14-0860	EXTENSION REQUEST FOR SUBMITTAL OF COMMENTS ON 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)	KDWM	DOE-PPPO	No	ENV 1.A-00751
ARFBGOU	09/11/14	KY-14-0869	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00752
ARFBGOU	10/03/14	PPPO-02-2538551-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	DOE-PPPO,USEPA-4	No	ENV 1.A-00753

D-4



## Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	10/06/14	KY-14-0890	EXTENSION REQUEST FOR ADDITIONAL 30 DAYS FOR REVIEW OF THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PGDP (DOE/LX/07-1274&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00754
ARFBGOU	10/07/14	KY-14-0891	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SWMUs 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00757
ARFBGOU	10/10/14	KY-14-0895	EXTENSION REQUEST 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&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00759
ARFBGOU	10/10/14	KY-14-0894	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-SWMUs 5 AND 6	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00758
ARFBGOU	10/27/14	KY-14-0898	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00760
ARFBGOU	11/07/14	PPPO-02-2586394-15,DOE/LX/07-1289&D1	TRANSMITTAL OF REVISED SOLID WASTE MANAGEMENT UNIT ASSESSMENT REPORT FOR SOLID WASTE MANAGEMENT UNIT 3	DOE-PPPO	KDWM,USEPA-4,KDWM	No	ENV 1.A-00761
ARFBGOU	11/10/14	KY-15-0908	EXTENSION REQUEST FOR ADDITIONAL 30 DAYS FOR REVIEW OF THE BURIAL GROUNDS OPERABLE UNIT 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, KENTUCKY (DOE/LX/07-1274&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00777
ARFBGOU	11/12/14	KY-15-0910	CONDITIONAL CONCURRENCE TO THE FEASIBILITY STUDY FOR THE SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00778
ARFBGOU	11/18/14	PPPO-02-2628192-15	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00779
ARFBGOU	11/19/14	KY-15-0916	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT-BGOU 5 AND 6	DOE-PPPO	USEPA-4	No	ENV 1.A-00780
ARFBGOU	11/21/14	KY-15-0917	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00781
ARFC-340	05/16/14	KY-14-0846	REMOVAL ACTION REPORT FOR THE C-340 METALS REDUCTION PLANT (DOE/LX/07-1286-D2)	KDWM	DOE-PPPO	No	ENV 1.A-00723

D-5

## Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFCC	08/25/14	PPPO-02-2467637-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00728
ARFCC	09/24/14	PPPO-02-2537398-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00742
ARFCC	09/29/14	KY-14-0884	EPA DISAPPROVAL OF THE DISCHARGE OF WASTEWATER FROM BUILDING C-410 REMOVAL ACTION, PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00729
ARFREF	08/01/14	PPPO-02-2413881-14	TRANSMITTAL OF THE RECORD OF CONVERSATION CONCERNING THE U.S. ENVIRONMENTAL PROTECTION AGENCY RECOMMENDATION FOR MODIFICATION AND ADDITIONAL ACTION TO THE FIVE-YEAR REVIEW	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00730
ARFREF	08/25/14	PPPO-02-2483666-14,DOE/LX/07-1292&D2/R1	MODIFICATION APPROVAL AND TRANSMITTAL OF REPLACEMENT PAGES FOR APPENDIX 5 OF THE SITE MANAGEMENT PLAN, PGDP, ANNUAL REVISION-FY 2014 (DOE/LX/07-1292&D2/R1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00731
ARFREF	08/28/14	KY-14-0795	COMMENTS TO THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY, VOLUME 1, HUMAN HEALTH (DOE/LX/07-0107&D2/R3/V1)	KDWM	DOE-PPPO	No	ENV 1.A-00732
ARFREF	09/02/14	KY-14-0865	APPROVAL OF THE 2014 SITE MANAGEMENT PLAN-APPENDIX 5 REPLACEMENT PAGES (DOE/LX/07-1292&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00773
ARFREF	09/05/14	PPPO-02-2294170-14	STORAGE OF COLD TRAPS-C-410 INFRASTRUCTURE REMOVAL AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00733
ARFREF	09/08/14	KY-14-0868	CLARIFICATION CONCERNING COMMENTS SUBMITTED TO THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PGDP VOLUME 1. HUMAN HEALTH (DOE/LX/07-0107&D2/R3/V1)	KDWM	DOE-PPPO	No	ENV 1.A-00774
ARFREF	09/15/14	PPPO-02-2507815-14,DOE/LX/07-0107&D2/R4/V1	TRANSMITTAL OF REPLACEMENT PAGES FOR METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, VOLUME 1, HUMAN HEALTH, (DOE/LX/07-0107&D2/R4/V1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00734
ARFREF	09/29/14	PPPO-02-2524836-14	PADUCAH FEDERAL FACILITY AGREEMENT-NOTIFICATION OF CHANGE IN CONTACT INFORMATION FOR THE U.S. DEPARTMENT OF ENERGY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00735

D-6

## Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFREF	10/30/14	PPPO-02-2583493-15,DOE/LX/07-1292&D2/R1	PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION-FISCAL YEAR 2014 SITE MANAGEMENT PLAN AND ENFORCEABLE COMMITMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00785
ARFREF	11/05/14	KY-14-0906	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE 2014 SITE MANAGEMENT PLAN	KDWM	DOE-PPPO	No	ENV 1.A-00775
ARFREF	11/10/14	KY-15-0909	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX - SITE MANAGEMENT PLAN APPENDICES C AND G	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00786
ARFREF	11/14/14	PPPO-02-2590549-15,DOE/LX/07-1297	SOLID WASTE MANAGEMENT UNIT ASSESSMENT REPORTS-SOLID WASTE MANAGEMENT UNITS 102-A, 102-B, 211-A AND 211-B	DOE-PPPO	KDWM	No	ENV 1.A-00755
ARFREF	11/14/14	PPPO-02-2628058-15B	TRANSMITTAL OF THE D1 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00756
ARFSOU	08/29/14	PPPO-02-2445067 - 14,DOE/LX/07-0120&D2/R2/A1/R1	TRANSMITTAL OF THE ADDENDUM TO THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT PGDP REMEDIAL INVESTIGATION 2, SAMPLING AND ANALYSIS PLAN (DOE/LX/07-0120&D2/R2/A1/R1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00727
ARFSOU	09/19/14	KY-14-0878	EPA APPROVAL OF THE ADDENDUM TO THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL/INVESTIGATION/FEASIBILITY STUDY AT THE PGDP, PADUCAH, KENTUCKY, REMEDIAL INVESTIGATION #2 SAMPLING AND ANALYSIS PLAN (DOE/LX/07-0120&D2/R2/A1/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00738
ARFSOU	09/25/14	KY-14-0881	CONCURRENCE WITH THE ADDENDUM TO THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY REMEDIAL INVESTIGATION #2 SAMPLING AND ANALYSIS PLAN (DOE/LX/07-0120&D2/R2/A1/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00739
ARFSWOU	11/07/14	PPPO-02-2586394-15,DOE/LX/07-1289&D1	TRANSMITTAL OF REVISED SOLID WASTE MANAGEMENT UNIT ASSESSMENT REPORT FOR SOLID WASTE MANAGEMENT UNIT 3	DOE-PPPO	KDWM,USEPA-4,KDWM	No	ENV 1.A-00762

D-7

## Paducah Documents Added to the Post-Decision Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
6PHASE-PD	07/22/14	KY-14-0853	EPA APPROVAL OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIb STEAM INJECTION TREATABILITY STUDY AT PGDP (DOE/LX-07-1295&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00767
6PHASE-PD	08/08/14	PPPO-02-2439486-14	MILESTONE MODIFICATION FOR THE C-400 PHASE IIb TREATABILITY STUDY CONSTRUCTION START	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00718
6PHASE-PD	08/13/14	KY-14-0841	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR CONSTRUCTION START FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIb STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-1295&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00719
6PHASE-PD	08/14/14	KY-14-0842	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX (C-400 PHASE IIb TREATABILITY STUDY)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00720
6PHASE-PD	10/09/14	KY-14-0892	APPROVAL OF THE REMEDIAL GOALS MET FOR THE 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 (DOE/LX/07-1272&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00768
6PHASE-PD	10/09/14	KY-14-0893	EPA APPROVAL OF DOE'S OCTOBER 3, 2014 POSITION LETTER, REMEDIAL GOALS MET FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING	USEPA-4	DOE-PPPO	No	ENV 1.A-00769
6PHASE-PD	10/24/14	PPPO-02-2616385-15	MILESTONE MODIFICATION FOR THE C-400 PHASE IIb TREATABILITY STUDY CONSTRUCTION START	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00770
6PHASE-PD	10/29/14	KY-14-0899	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR CONSTRUCTION START FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIb STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-1295&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00771
6PHASE-PD	11/10/14	KY-15-0911	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT-C-400 PHASE IIb TREATABILITY STUDY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00787
6PHASE-PD	11/25/14	PPPO-02-2670797-15	TREATABILITY STUDY AT THE C-400 BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00788
GW3-PD	10/01/14	PPPO-02-2537779-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00745

D-8

## Paducah Documents Added to the Post-Decision Files- Fourth Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
GW3-PD	10/08/14	PPPO-02-2588867-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00763
GW3-PD	11/21/14	PPPO-02-2658158-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00776
SWP-PD	08/28/14	PPPO-02-2460425-14	IMPLEMENTATION OF ADDITIONAL SOIL SAMPLING OF HISTORIC AERIAL PHOTO AND WASTE AREA GROUP 27 TEST PIT AREAS	DOE-PPPO	DOE-PPPO	No	ENV 1.A-00740
SWP-PD	08/29/14	PPPO-02-2446017-14,DOE/LX/07-1288&D2	TRANSMITTAL OF THE SITE WIDE EVALUATION WORK PLAN FOR ANOMALIES LOCATED OUTSIDE THE LIMITED AREA AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1288&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00741
SWP-PD	09/19/14	KY-14-0876	EPA APPROVAL OF THE SITEWIDE EVALUATION WORK PLAN (DOE/LX/07-1288&D1), PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00736
SWP-PD	09/25/14	KY-14-0880	APPROVAL OF THE SITEWIDE EVALUATION WORK PLAN FOR ANOMALIES LOCATED OUTSIDE THE LIMITED AREA (DOE/LX/07-1288&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00737
SWP-PD	10/29/14	PPPO-02-2238593-15	REQUESTED MODIFICATION TO THE REMEDIAL DESIGN WORK PLAN FOR SWMUS 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PGDP (DOE/LX/07-1268&D2/R2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00766
SWP-PD	11/06/14	PPPO-02-2629364-15	MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT SOUTHWEST PLUME SOURCES SOLID WASTE MANAGEMENT UNIT 1 REMEDIAL ACTION COMPLETION REPORT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00764
SWP-PD	11/06/14	PPPO-02-2629686-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSIDERATION OF ADDITIONAL WORK FOR THE REMEDIAL DESIGN WORK PLAN FOR THE SOUTHWEST GROUNDWATER PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00765

D-9

## Paducah Documents Added to the Administrative Record Files- First Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF C-410	01/29/14	PPPO-02-2745135-15	U.S. DEPARTMENT OF ENERGY PROPOSAL TO DISPOSITION CONTAMINATED WATER COLLECTED AND CONTAINED IN THE ZONE 26 BASEMENT PIT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00819
ARF C-410	12/12/14	KY-15-0951	STATUS ON THE MANAGEMENT OF WASTEWATER FROM BUILDING C-410 REMOVAL ACTION, PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00805
ARF C-410	12/18/14	PPPO-02-2691134-15	EXTENSION FOR SUBMITTAL OF MODIFICATIONS TO THE C-410 ACTION MEMORANDUM AND WORK PLAN REQUESTED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00806
ARF C-410	02/02/15	KY-15-0971	EPA's PROPOSED AGREEMENT ON THE U.S. DEPARTMENT OF ENERGY DISPOSITION OF CONTAMINATED WATER COLLECTED IN BASEMENT PIT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00820
ARF C-410	02/13/15	PPPO-02-2761656-15	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY PROPOSAL FOR DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00821
ARF4-1	02/13/15	PPPO-02-2745728-15	TRANSMITTAL OF RECORD OF CONVERSATION CONCERNING USE OF DIRECT PUSH TECHNOLOGY ON PHASE IV OF THE SOLID WASTE MANAGEMENT UNIT 4 REMEDIAL INVESTIGATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00827
ARFBGOU	03/28/14	MEM-14-0080	E-MAIL: PPPO-02-2219887-14 REQUESTED MODIFICATION TO THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, SOLID WASTE MANAGEMENT UNIT 4 SAMPLING	USEPA-4	DOE-PPPO	No	ENV 1.A-00794
ARFBGOU	12/09/14	KY-15-0923	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00795
ARFBGOU	12/19/14	KY-15-0948	LETTER OF CONDITIONAL CONCURRENCE FOR THE FEASIBILITY STUDY FOR THE SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00796
ARFBGOU	01/05/15	PPPO-02-2695900-15	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00811
ARFBGOU	01/05/15	KY-15-0954	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT - BGOU 5 AND 6	DOE-PPPO		No	ENV 1.A-00810
ARFBGOU	01/08/15	KY-15-0955	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00812

D-10

## Paducah Documents Added to the Administrative Record Files- First Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	01/22/15	KY-15-0964	FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2)- PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS FOR SWMUs 5 AND 6 (DOE/LX/07-1275&D2)- REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00815
ARFBGOU	01/26/15	KY-15-0966	CONDITIONAL CONCURRENCE WITH THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00816
ARFCC	11/05/14	PPPO-02-2630029-15	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00800
ARFCC	12/11/14	PPPO-02-2692299-15	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00799
ARFCC	01/22/15	KY-15-0964	FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2)- PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS FOR SWMUs 5 AND 6 (DOE/LX/07-1275&D2)- REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00817
ARFCC	01/28/15	KY-15-0967	ADDITIONAL CONDITION FOR CONCURRENCE OF THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00822
ARFCC	02/10/15	KY-15-0978	REQUEST FOR HYDROLOGIC CONDITIONS INFORMATION FOR THE CANDIDATE SITES FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES (WDA) EVALUATION, PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00823
ARFCC	02/25/15	PPPO-02-2801570-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00824

D-11

## Paducah Documents Added to the Administrative Record Files- First Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFCC	03/16/15	PPPO-02-2821982-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00825
ARFREF	12/12/98	DOE/OR/07-1707	FEDERAL FACILITY AGREEMENT FOR THE PADUCAH GASEOUS DIFFUSION PLANT (REVISED COPY)	PRS	PGDP	No	ENV 1.A-00792
ARFREF	10/17/14	PPPO-02-2586455-15	FEDERAL FACILITY AGREEMENT BUDGET NOTIFICATION-CONTINUING RESOLUTION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00789
ARFREF	10/24/14	PPPO-02-2594721-15	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY FIVE-YEAR REVIEW PROTECTIVENESS DETERMINATION STATEMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00790
ARFREF	10/27/14	PPPO-02-2599532-15B,DOE/LX/07-1296/V2	U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE SECOND HALF OF FISCAL YEAR 2014, PADUCAH, KENTUCKY (DOE/LX/07-1296/V2)	DOE-PPPO	KDWM,USEPA-4,KDWM	No	ENV 1.A-00791
ARFREF	12/15/14	KY-14-0945	SUBMITTAL OF COMMENTS TO THE 2015 SITE MANAGEMENT PLAN (DOE/LX/07-1301&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00797
ARFREF	12/18/14	KY-14-0947	EXTENSION REQUEST FOR COMMENT SUBMITTAL FOR THE 2015 SITE MANAGEMENT PLAN, PADUCAH, KENTUCKY (DOE/LX/07-1301&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00798
ARFREF	01/20/15	KY-15-0961	EXTENSION REQUEST FOR COMMENT SUBMITTAL FOR THE 2015 SITE MANAGEMENT PLAN, PADUCAH, KENTUCKY (DOE/LX/07-1301&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00818

D-12



## Paducah Documents Added to the Post-Decision Files- First Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
6PHASE-PD	05/23/14	PPPO-02-2344619-14,DOE/LX/07-1295&D2	TRANSMITTAL OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1295&D2	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00793
6PHASE-PD	12/19/14	PPPO-02-2703066-15	NOTIFICATION OF CONSTRUCTION START FOR C-400 PHASE IIB TREATABILITY STUDY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00808
6PHASE-PD	12/24/14	PPPO-02-2711474-15	NOTIFICATION TO RELOCATE TEMPERATURE MONITORING BORINGS ASSOCIATED WITH THE C-400 PHASE IIB TREATABILITY STUDY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00809
GW3-PD	12/18/14	PPPO-02-2701364-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00807
GW3-PD	01/13/15	KY-15-0958	EPA AND KDWM JOINT POSITION ON THE FORMAL DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES FOR THE INTERIM REMEDIAL ACTION OF THE NORTHEAST PLUME FOR THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH KENTUCKY	USEPA-4	DOE-PPPO	No	ENV 1.A-00813
GW3-PD	01/26/15	PPPO-02-2736521-15	ELEVATION TO THE SENIOR EXECUTIVE COMMITTEE OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND THE KENTUCKY DIVISION OF WASTE MANAGEMENT JOINT DECISION ON THE FORMAL DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00814
GW3-PD	02/03/15	PPPO-02-2753941-15	REQUEST FOR CONFERENCE CALL TO ESTABLISH A SCHEDULE FOR THE SENIOR EXECUTIVE COMMITTEE TO DISCUSS/ADDRESS THE FORMAL DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00826
SWP-PD	11/10/14	KY-15-0912	EPA APPROVAL OF REQUESTED MODIFICATION TO THE REMEDIAL DESIGN WORK PLAN FOR SWMUs 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/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00802
SWP-PD	11/10/14	KY-15-0907	APPROVAL OF THE REQUESTED MODIFICATION TO 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)	KDWM	DOE-PPPO	No	ENV 1.A-00801

D-13

## Paducah Documents Added to the Post-Decision Files- First Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
SWP-PD	11/13/14	KY-15-0913	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE GROUNDWATER OPERABLE UNIT SOUTHWEST PLUME SOURCES SOLID WASTE MANAGEMENT UNIT 1 REMEDIAL ACTION COMPLETION REPORT	KDWM	DOE-PPPO	No	ENV 1.A-00803
SWP-PD	11/14/14	KY-15-0914	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT - SWMU 1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00804
SWP-PD	02/19/15	PPPO-02-2771311-15	REQUEST TO SUBSTITUTE GAS CHROMATOGRAPH AND FLAME IONIZATION DETECTOR FOR PHOTOACOUSTIC ANALYZER FOR DEEP SOIL MIXING AT SOLID WASTE MANAGEMENT UNIT 1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00828
SWP-PD	02/23/15	PPPO-02-2689461-15C,DOE/LX/07-1268&D2/R2/A1	TRANSMITTAL OF THE ADDENDUM TO 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, SAMPLING AND ANALYSIS PLAN, DOE/LX/07-1268&D2/R2/A1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00829

D-14

**APPENDIX E**

**C-400 PROJECT GROUNDWATER MONITORING WELLS DATA**

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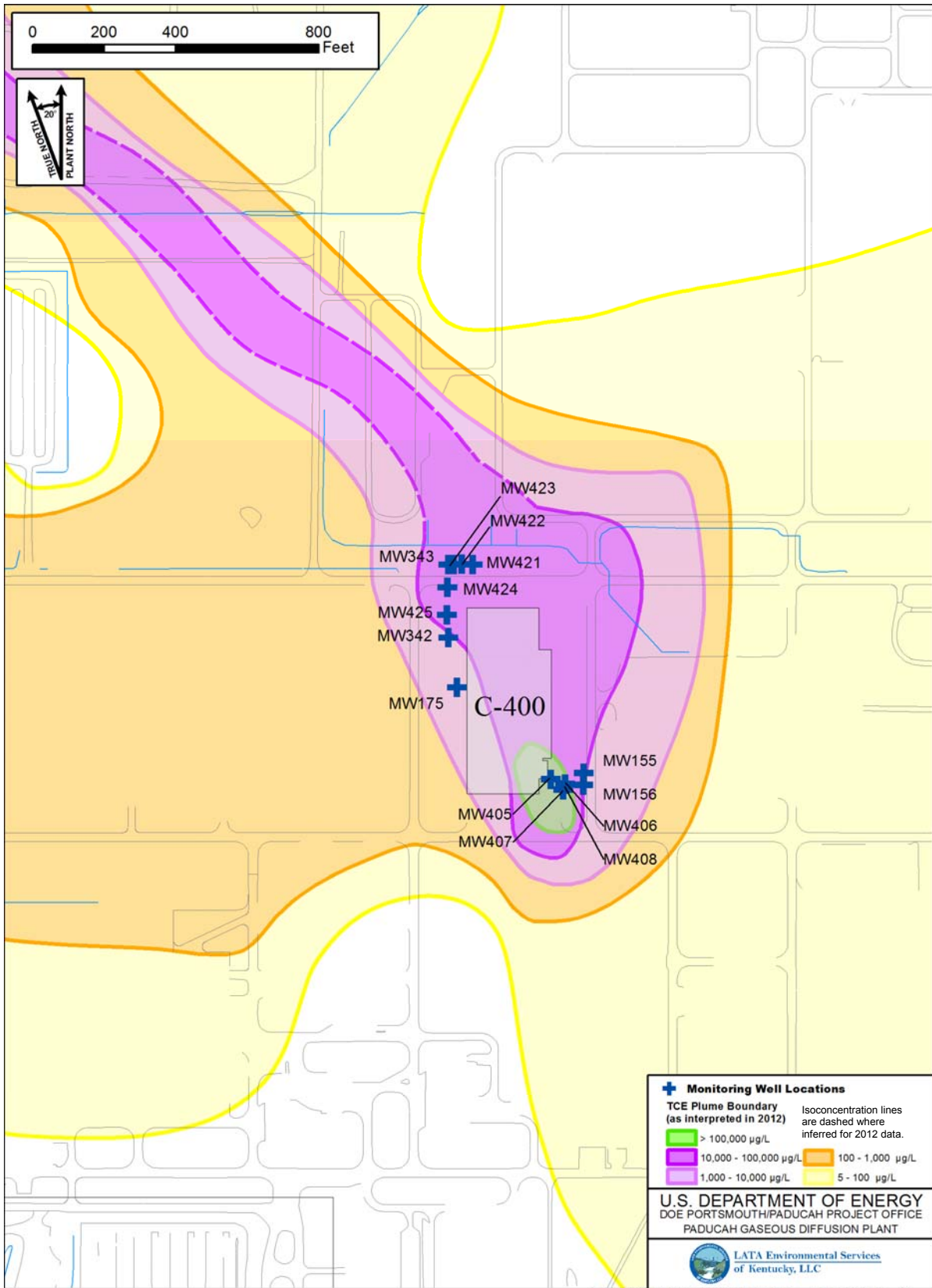


Figure E.1. C-400 Monitoring Wells

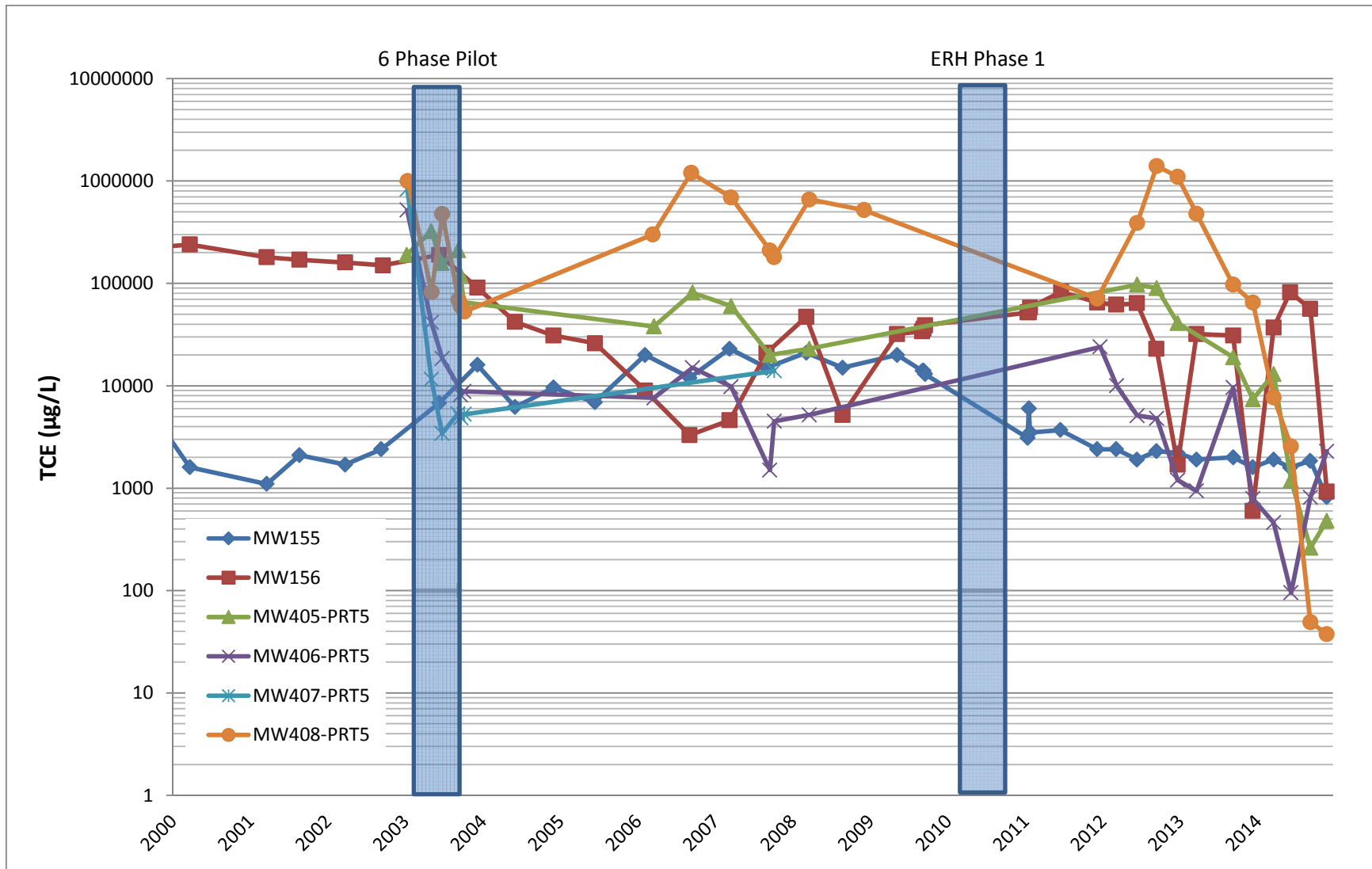


Figure E.2. C-400 TCE Trends in MWs in Source Areas

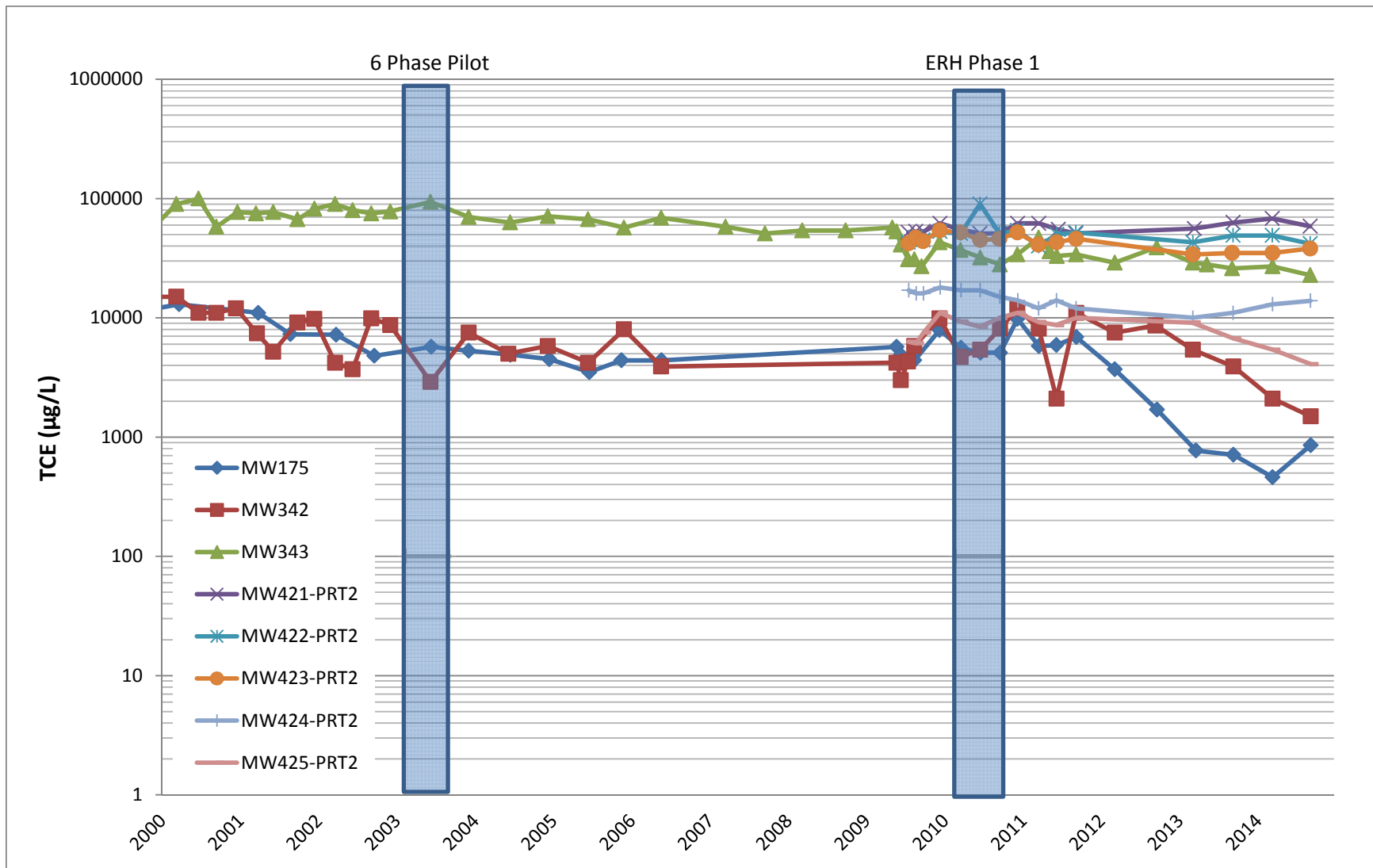


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Areas

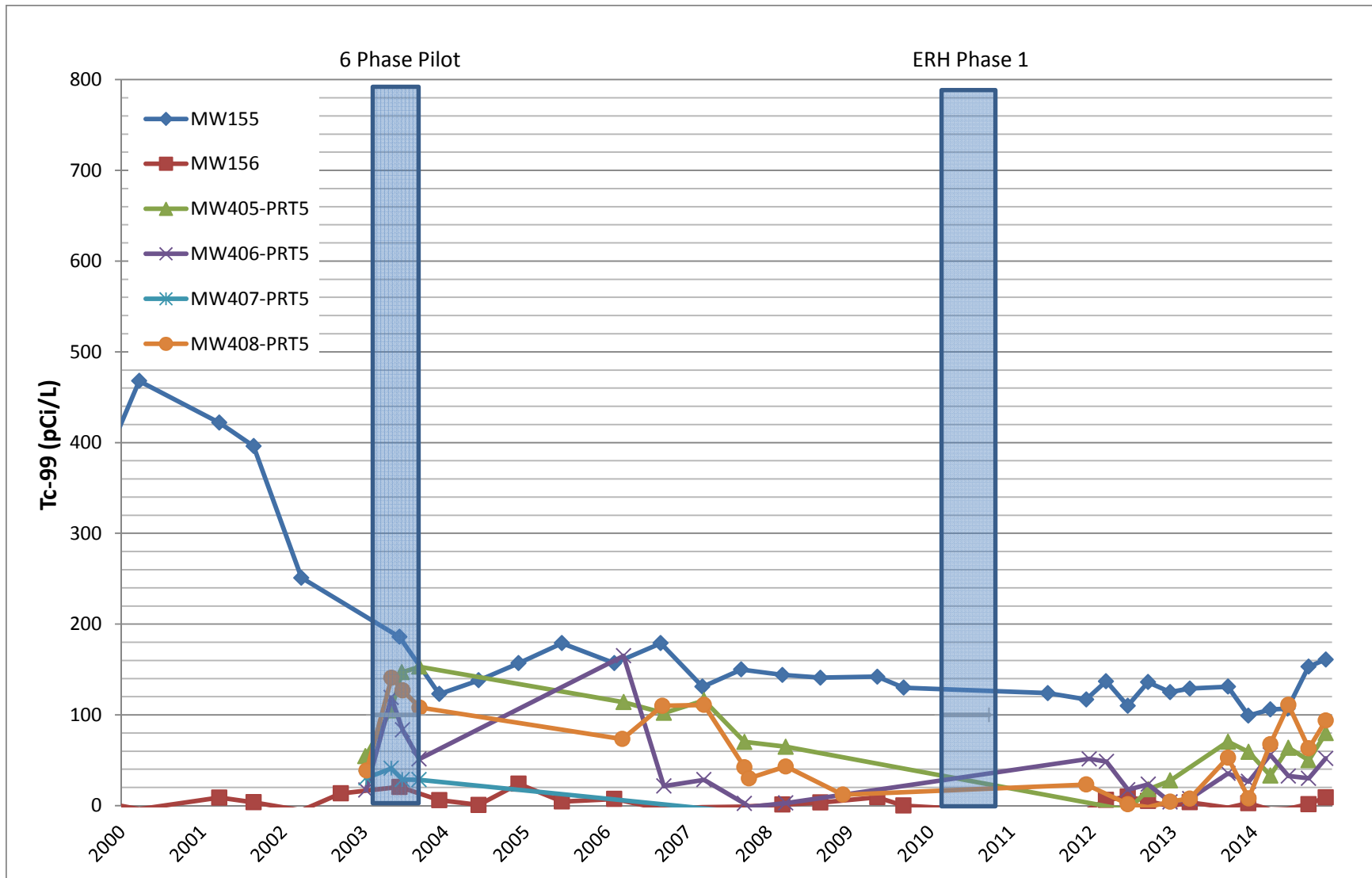


Figure E.4. C-400 Tc-99 Trends in MWs in Source Areas



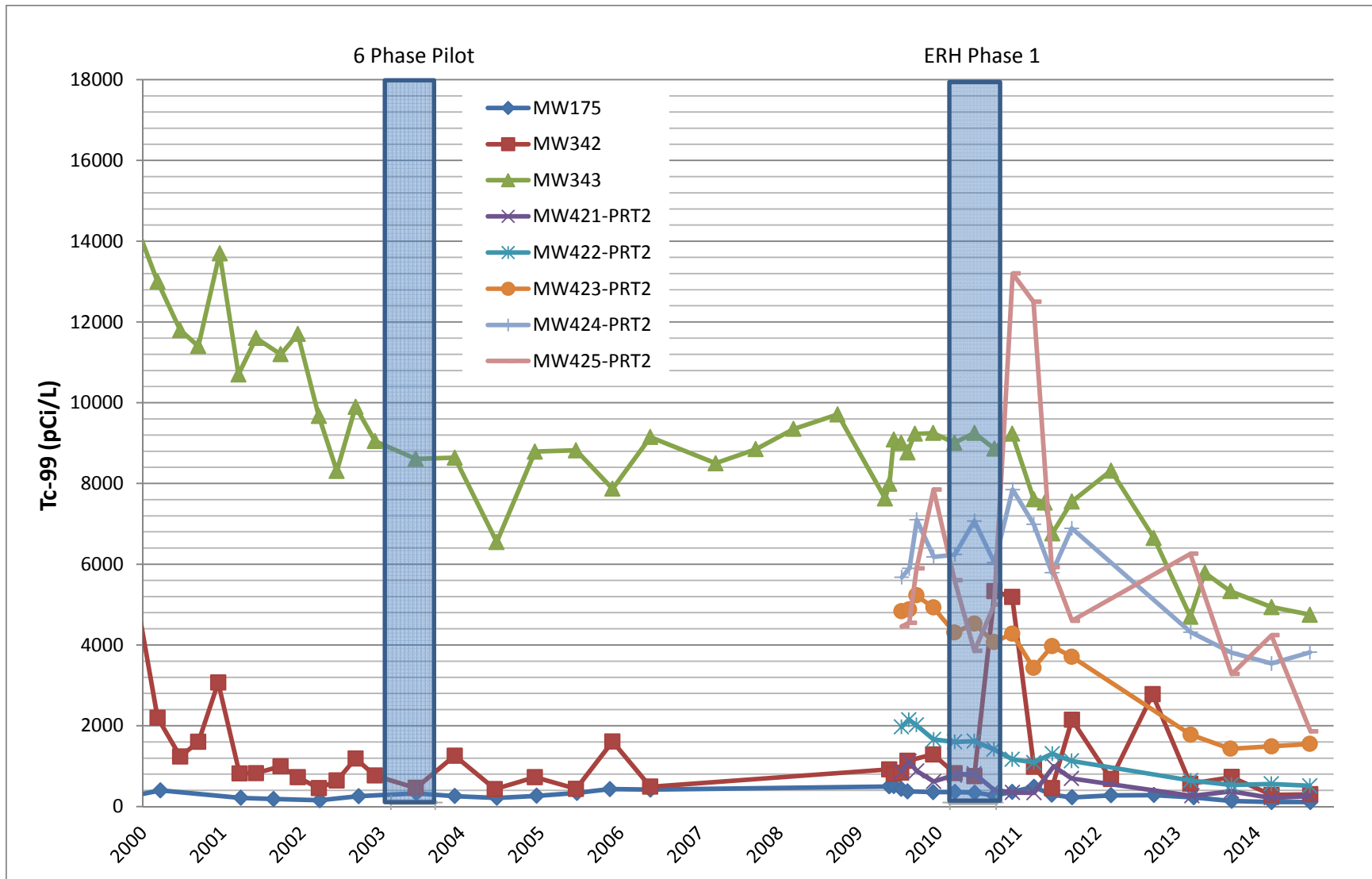


Figure E.5. C-400 Tc-99 Trends in MWs Downgradient of Source Areas

**C-400 Monitoring**  
**Water Quality Records for**  
**MW155**

**Sample Date Range: 6/16/2009 - 12/2/2014**

E-8

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	
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
1/19/2011	3100	< 25			< 25					< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11019028004
1/25/2011	6000	< 250			< 50													C11026001005
1/25/2011	3800	< 250			< 50													C11026001006
1/31/2011	3500	< 250			< 50													C11031038005
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
9/19/2012	2300	< 20			< 20	< 3.19	131	136	< .005									C12263022001
12/28/2012	2200	< 20			< 20			125										C12363012001
12/28/2012	2200	< 20			< 20			120										C12363012002
3/27/2013	1900	< 20			< 20			129										C13086008001
9/16/2013	2000	< 100			< 20			131										C13259034001
12/17/2013	1600	< 20			< 20			98.6										C13351094006
12/17/2013	1600	< 20			< 20			99.1										C13351094007
3/26/2014	1900	< 20			< 20			106										C14085027001
6/12/2014	1590	< 25			< 25			107										350627004
9/15/2014	1850	.44			.31			153										356931002

**C-400 Monitoring**  
**Water Quality Records for**  
**MW155**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
12/2/2014	817	< 1			< 1			160										362435001
12/2/2014	810	< 1			< 1			161										362435002

E-9

**C-400 Monitoring**  
**Water Quality Records for**  
**MW156**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
1/20/2011	52000	< 1000			< 1000					< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11020026003
1/25/2011	52000	< 2500			< 500													C11026003001
1/31/2011	58000	< 2500			< 500													C11031038006
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
9/19/2012	23000	< 500			< 500	< 3.24	< 5.54	< 5.12	< .005									C12263022002
12/28/2012	1700	< 500			< 500			< -.798										C12363012003
3/27/2013	32000	< 1000			< 1000			< 3.7										C13086008002
9/16/2013	31000	< 2500			< 500			< -2.19										C13259034002
12/17/2013	600	< 500			< 500			< 2.71										C13351094008
3/26/2014	37000	< 500			< 500			< -4.56										C14085027002
6/12/2014	81800	< 1000			< 1000			< -3.61										350627005
9/15/2014	56500	15.2			3.67			< 1.62										356931003
12/2/2014	925	< 500			8.79			< 9.1										362435003

E-10

**C-400 Monitoring**  
**Water Quality Records for**  
**MW175**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
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
9/25/2012	1700	< 20			< 20	< 3.18	245	282	< .005									C12269015003
9/25/2012	1700	< 20			< 20	< 3.25	245	284	< .005									C12269015004
3/27/2013	770	< 10			< 10			226										C13086008003
9/18/2013	710	< 100			< 20			139										C13261023005
3/20/2014	460	< 5			< 5			110										C14079018001
3/20/2014	460	< 5			< 5			102										C14079018002

E-11

**C-400 Monitoring**  
**Water Quality Records for**  
**MW175**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	
9/15/2014	855	< 10			< 10			111										356931004

E-12

**C-400 Monitoring**  
**Water Quality Records for**  
**MW342**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
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
9/19/2012	8600	< 100			< 100	10.4	2820	2780	< .005									C12263022003
3/12/2013	5400	< 100			< 100			564										C13072002001
9/18/2013	3900	< 500			< 100			728										C13261023004
3/20/2014	2100	< 20			< 20			287										C14079016010
9/15/2014	1490	5.8			.6			303										356931001

E-13

**C-400 Monitoring**  
**Water Quality Records for**  
**MW343**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	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
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
9/24/2012	39000	< 500			< 500	< -23.7	4970	6650	< .005									C12268086002
3/12/2013	29000	< 400			< 400			4700										C13072002002
5/17/2013	28000	< 1000	< 200	< 200	< 200			5790										C13137019001

E-14



**C-400 Monitoring**  
**Water Quality Records for**  
**MW343**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	
9/12/2013	25000	< 1000			< 200			5330										C13255009004
9/12/2013	26000	< 1000			< 200			5150										C13255009005
3/20/2014	27000	< 200			< 200			4940										C14079016011
9/12/2014	22000	< 50			< 50			4750										356931005
9/12/2014	22800	< 50			< 50			4710										356931006

E-15

**C-400 Monitoring**  
**Water Quality Records for**  
**MW405**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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-16

**C-400 Monitoring**  
**Water Quality Records for**  
**MW405-PRT5**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	
6/20/2012	97000	< 5000			< 1000	< 4.86	15.7	< -4.94	< .005									C12172011001
9/20/2012	90000	< 1000			< 1000	< .778	14.6	< 17.9	< .005									C12264031001
12/28/2012	41000	< 1000			< 1000			27.7										C12363012004
9/16/2013	19000	< 1000			< 200			70.4										C13259034003
12/18/2013	7400	< 100			< 100			59.1										C13353003001
3/26/2014	13000	< 100			< 100			33.1										C14085027003
6/16/2014	1190	< 20			< 20			63.8										350866002
9/16/2014	261	2.45			< 5			50										356931007
12/2/2014	481	< 10			< 10			79.8										362435004

E-17

**C-400 Monitoring**  
**Water Quality Records for**  
**MW406**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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-18

**C-400 Monitoring**  
**Water Quality Records for**  
**MW406-PRT5**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
9/20/2012	4800	< 100			< 100	< -.0458	31.2	23.5	< .005									C12264031002
12/28/2012	1200	< 10			< 10			< 4.01										C12363012005
3/27/2013	940	< 20			< 20			< 7.56										C13086018001
9/16/2013	9600	< 100			< 20			35.5										C13259034004
12/18/2013	790	< 10			< 10			26.5										C13353003002
3/26/2014	460	< 5			< 5			55.9										C14085027004
6/16/2014	95.4	< 2			< 2			32.5										350866003
9/16/2014	812	< 10			< 10			30.1										356931008
12/2/2014	2290	1.1			.87			52										362435005

E-19

**C-400 Monitoring**  
**Water Quality Records for**  
**MW407-PRT4**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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	
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
9/20/2012	13000	< 100			< 100	< .291	< 3.11	< -10.2	< .005									C12264031003
12/28/2012	7000	< 50			< 50			< .433										C12363012006
3/27/2013	14000	< 200			< 200			< .435										C13086018002
9/16/2013	24000	< 500			< 100			< 13.4										C13259034005
12/18/2013	7000	< 100			< 100			< 3.81										C13353003003
3/26/2014	2300	< 20			< 20			67.6										C14085027005
6/16/2014	32100	< 500			< 500			58.3										350866004
9/16/2014	23800	< 500			< 500			< 11.5										356931009
12/2/2014	13900	< 1			.8			< 2.74										362435006

E-20

**C-400 Monitoring**  
**Water Quality Records for**  
**MW408**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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-21

**C-400 Monitoring**  
**Water Quality Records for**  
**MW408-PRT5**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
9/20/2012	1400000	< 4000			< 4000	< -1.52	13.4	< -1.7	< .005									C12264031004
12/28/2012	1100000	< 5000			< 5000			< 4.33										C12363012007
3/27/2013	480000	< 10000			< 10000			< 7.73										C13086018003
9/16/2013	97000	< 2500			< 500			52.9										C13259034006
12/18/2013	65000	< 1000			< 1000			< 8.07										C13353003004
3/26/2014	7700	< 50			< 50			67.7										C14085027006
6/16/2014	2560	< 40			< 40			111										350866001
9/16/2014	49.1	< 1			< 1			63										356931010
12/2/2014	37.6	< 1			< 1			93.7										362435007

E-22



**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT1**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
3/19/2013	26000	< 400			< 400			912										C13078013003
9/17/2013	34000	< 2000			< 400			1750										C13260018001
3/19/2014	31000	< 400			< 400			761										C14078013004
9/10/2014	26000	< 500			< 500			944										356723001

E-23

**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT2**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/23/2011	62000	< 500			< 500	8.6	220	340	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .15	< .09	C11082024004
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-02
6/22/2011	55000	< 2500			< 500	< -24.9	853	996	< .005									C11173026002
9/12/2011	51000	< 2000			< 400	14.5	582	694	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015002
3/19/2013	56000	< 500			< 500			265										C13078013004
9/17/2013	63000	< 2000			< 400			377										C13260018002
3/19/2014	68000	< 400			< 400			216										C14078013005
9/12/2014	58600	< 50			< 50			255										356931011

E-24

**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT3**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
9/25/2012	96000	< 1000			< 1000	< 1.59	225	211	< .005									C12270003002
3/19/2013	80000	< 1000			< 1000			216										C13078013005
9/17/2013	63000	< 2500			< 500			191										C13260018003
3/19/2014	67000	< 500			< 500			202										C14078013006
9/12/2014	62800	< 50			< 50			181										356931012

E-25

**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT1**

**Sample Date Range: 6/16/2009 - 12/2/2014**

E-26

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
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
3/13/2013	16000	< 250			< 250			6720										C13072022004
9/17/2013	17000	< 500			< 100			14200										C13260018004
3/19/2014	15000	< 100			< 100			5800										C14078013007
9/12/2014	10800	32.8			< 25			10400										356931013

**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT2**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
3/13/2013	43000	< 500			< 500			643										C13072022005
9/17/2013	49000	< 2000			< 400			535										C13260018005
3/19/2014	49000	< 400			< 400			559										C14078013008
9/12/2014	41800	< 50			< 50			514										356931014

E-27

**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT3**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/22/2011	54000	< 500			< 500	23.3	677	1010	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .36	< .09	C11081023007
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-05
6/15/2011	49000	< 2500			< 500	13.5	864	1140	< .005									C11166026004
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
9/25/2012	48000	< 1000			< 1000	< 4.02	524	631	< .005									C12270003001
3/13/2013	35000	< 500			< 500			559										C13072022006
9/17/2013	47000	< 2000			< 400			535										C13260018006
3/19/2014	49000	< 400			< 400			543										C14078013009
9/12/2014	46700	< 50			< 50			496										356931015

E-28

**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT1**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
3/13/2013	18000	< 200			< 200			9070										C13072009001
9/12/2013	13000	< 1000			< 200			14900										C13255083001
3/20/2014	13000	< 100			< 100			8350										C14079016004
9/12/2014	8980	32.8			< 25			9080										356931016

E-29

**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT2**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/21/2011	41000	< 500			< 500	114	1990	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .15	< .09	C11080075003
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-07
6/14/2011	43000	< 2500			< 500	< -23.6	2810	3970	< .005									C11165038006
9/13/2011	46000	< 2000			< 400	< -37.2	2730	3710	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012002
3/13/2013	34000	< 500			< 500			1780										C13072009002
9/12/2013	35000	< 2000			< 400			1430										C13255083002
3/20/2014	35000	< 400			< 400			1490										C14079016005
9/12/2014	38100	< 500			< 500			1550										356937007

E-30



**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT3**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
9/24/2012	67000	< 500			< 500	19.2	1550	1820	< .005									C12268086001
3/13/2013	34000	< 500			< 500			1800										C13072009003
9/12/2013	35000	< 2000			< 400			1730										C13255083003
3/20/2014	36000	< 400			< 400			1480										C14079016006
9/13/2014	38300	< 50			< 50			1500										356931017

E-31

**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT1**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
6/14/2011	7900	< 500			< 100	< -211	7890	8220	< .005									C11165038002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-09
9/13/2011	9000	< 500			< 100	< -150	5730	6730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019001
3/13/2013	7900	< 100			< 100			10300										C13072022001
9/17/2013	5900	< 250			< 50			5540										C13260018007
3/20/2014	3900	< 50			< 50			6530										C14079016007
9/13/2014	2630	18.8			< 25			3070										356931018

E-32

**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT2**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/22/2011	12000	< 100			< 100	170	4620	6990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .26	< .09	C11081023001
6/14/2011	14000	< 500			< 100	< -51.5	4820	5790	< .005									C11165038003
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-10
9/13/2011	12000	< 500			< 100	< -138	5900	6890	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019002
3/13/2013	10000	< 100			< 100			4320										C13072022002
9/17/2013	11000	< 500			< 100			3810										C13260018008
3/20/2014	13000	< 100			< 100			3540										C14079016008
9/13/2014	13900	< 250			< 250			3820										356931019

E-33

**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT3**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
9/25/2012	11000	< 200			< 200	< -2.6	3010	3600	< .005									C12269015005
3/13/2013	10000	< 100			< 100			3070										C13072022003
9/17/2013	9300	< 500			< 100			2870										C13260018009
3/20/2014	10000	< 100			< 100			2500										C14079016009
9/13/2014	11100	< 250			< 250			2600										356931020

E-34

**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT1**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/12/2013	6500	< 100			< 100			5630										C13072002003
9/18/2013	4600	< 500			< 100			5220										C13261023001
3/20/2014	3000	< 50			< 50			2810										C14079016001
9/15/2014	2260	< 50			< 50			2220										356937001

E-35

**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT2**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
3/12/2013	9100	< 100			< 100			6260										C13072002004
9/18/2013	6700	< 500			< 100			3280										C13261023002
3/20/2014	5400	< 50			< 50			4240										C14079016002
9/15/2014	4080	< 50			< 50			1860										356937002

E-36

**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT3**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
9/19/2012	9900	< 100			< 100	< -28.6	4490	5320	< .005									C12263022004
3/12/2013	11000	< 100			< 100			4600										C13072002005
9/18/2013	9600	< 500			< 100			2530										C13261023003
3/20/2014	9500	< 100			< 100			3230										C14079016003
9/15/2014	8610	< 100			< 100			1950										356937003

E-37

**C-400 Monitoring**  
**Water Quality Records for**  
**MW505**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
9/19/2012	22	< 1			< 1	< 1.39	45.1	61.8	< .005									C12263015001
12/5/2012	22	< 5			< 1			56.2										C12340029002
3/19/2013	34	< 1			< 1			49.2										C13078040001
3/19/2013	32	< 1			< 1			53.9										C13078040002
6/11/2013	31	< 1			< 1			55.5										C13162015006
9/12/2013	26	< 5			< 1			74.3										C13255009001
12/17/2013	28	< 1			< 1			56.2										C13351094003
3/19/2014	23	< 1			< 1			69										C14078013001
6/11/2014	26.2	< 1			< 1			52.8										350627002
9/13/2014	150	< 1			< 1			63.4										356937004
12/2/2014	22.8	< 1			< 1			71.4										362435008

E-38



**C-400 Monitoring**  
**Water Quality Records for**  
**MW506**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
9/19/2012	3700	< 50			< 50	< 3.84	50.8	59	< .005									C12263015002
12/5/2012	4200	< 250			< 50			42.8										C12340029004
3/19/2013	2100	< 50			< 50			49.7										C13078040003
6/11/2013	2400	< 50			< 50			64										C13162015005
9/12/2013	2100	< 100			< 20			63.1										C13255009002
12/17/2013	2000	< 20			< 20			60.9										C13351094004
3/19/2014	1200	< 20			< 20			65.4										C14078013002
6/11/2014	954	< 20			< 20			56.8										350627003
9/13/2014	641	< 10			< 10			59.6										356937005
12/2/2014	1080	< 1			.47			72.7										362435009

E-39

**C-400 Monitoring**  
**Water Quality Records for**  
**MW507**

**Sample Date Range: 6/16/2009 - 12/2/2014**

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
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
9/19/2012	1800	< 10			< 10	< .808	34.4	30.7	< .005									C12263015003
12/5/2012	1900	< 100			< 20			42.9										C12340029005
3/19/2013	770	< 20			< 20			48.3										C13078040004
6/11/2013	1000	< 10			< 10			72.4										C13162015003
6/11/2013	1100	< 10			< 10			65.1										C13162015004
9/12/2013	530	< 50			< 10			86.6										C13255009003
12/17/2013	870	< 10			< 10			64.6										C13351094005
3/19/2014	190	< 1			< 1			82.7										C14078013003
6/12/2014	245	< 5			< 5			77.6										350627001
6/12/2014	260	< 5			< 5			80.4										350627006
9/13/2014	582	< 10			< 10			57.3										356937006
12/2/2014	510	< 1			< 1			71.7										362435010

E-40

**APPENDIX F**

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

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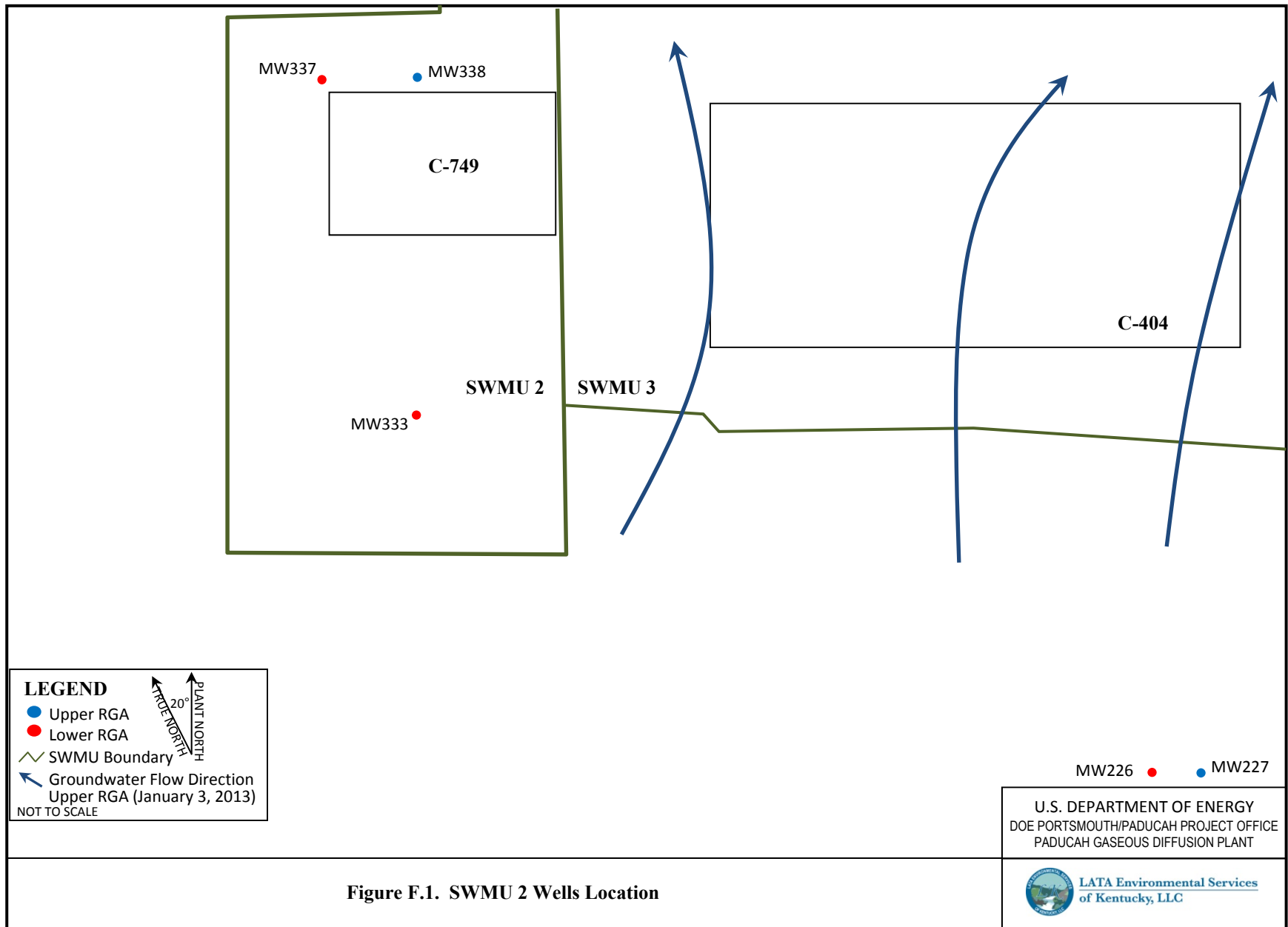


Figure F.1. SWMU 2 Wells Location

MW226 ● MW227 ●  
U.S. DEPARTMENT OF ENERGY  
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE  
PADUCAH GASEOUS DIFFUSION PLANT



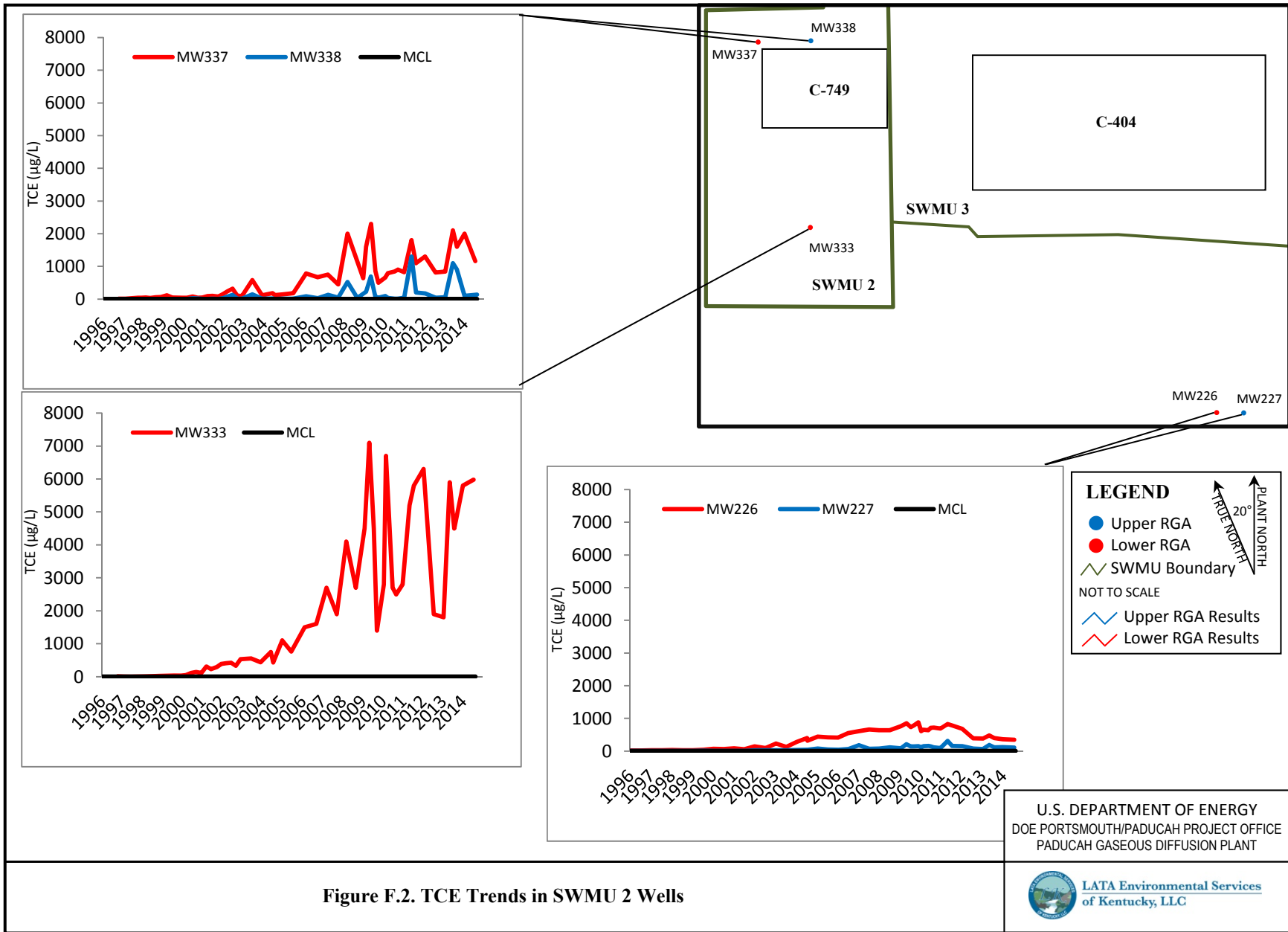


Figure F.2. TCE Trends in SWMU 2 Wells

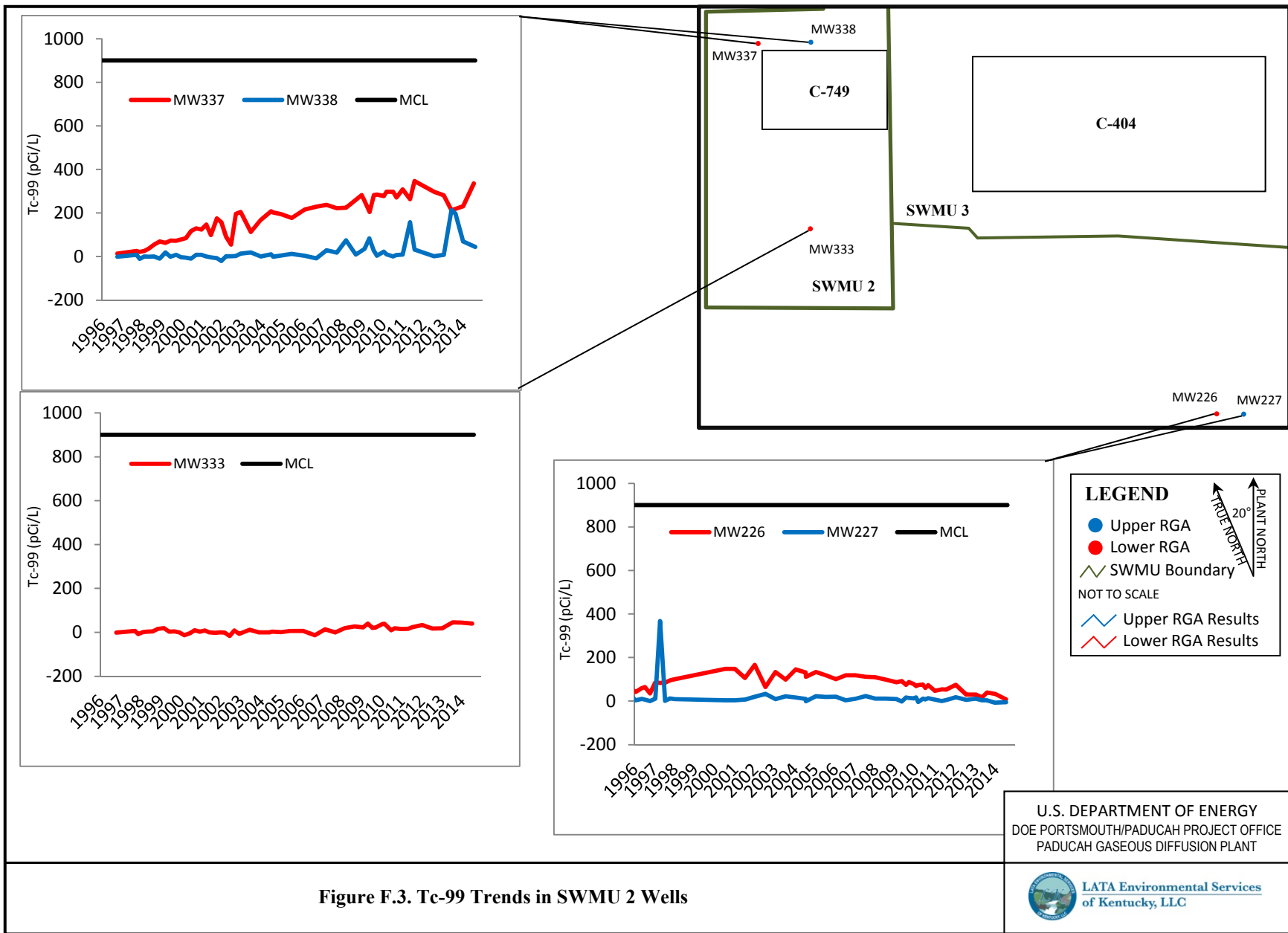


Figure F.3. Tc-99 Trends in SWMU 2 Wells

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

Water Quality Records for

*Sample Date Range: 5/6/1993 - 1/27/2015*

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

*Sample Date Range: 5/6/1993 - 1/27/2015*

**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								43				950509-033
5/8/1995								49				950509-041
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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
1/23/2013	380							30.3				C13023019002
5/14/2013	480	< 25	< 5	< 5	< 5			< 16.5				C13134021006
8/12/2013	400							39.3				C13224030001
1/8/2014	360							33				C14008024003
7/28/2014	350							< 7.97				353626001
1/26/2015	351							20.5				365824001

F-9

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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	3	< 5	< 5	< 5	< 5							S408081-01V
8/10/1994	4							10				940811-075
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

*Sample Date Range: 5/6/1993 - 1/27/2015*

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				951024-032
10/23/1995								0				951024-040
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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	33	< 1	< 1	< 1	< 1	5.9	10.1	< 10.4	< .284	< .00706	< .412	C042050010
7/22/2004	40											C042050003
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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
1/22/2013	63							< 11.8				C13022086002
5/14/2013	190	< 5	< 1	< 1	< 1			< 3.61				C13134021005
8/12/2013	110							< 4.08				C13224030002
1/8/2014	120							< -7.61				C14008024004
7/28/2014	104							< -4.4				353626002
1/26/2015	97.8							< -1.45				365824002

F-13

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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								-1.1				96M04623-3761
10/14/1996	10				< .48							96M04623-3717
10/14/1996									9.66		.14	96M04623-3731
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	33	< 5	< 5	< 5	< 5	< .45	< .49	< -6.17				C993410101
12/7/1999	29	< 5	< 5	< 5	< 5	2.48	< 1.48	< .475				C993410100
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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
1/22/2013	1800							18				C13022086003
5/15/2013	5900	< 250	< 50	< 50	< 50			34.7				C13135012003
8/6/2013	4500							45				C13219005002
1/8/2014	5800							44.4				C14008024002
7/23/2014	5980							40.1				353402002
1/26/2015	10200							70				365824003

F-16

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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									.38		.27	96M04622-3730
10/4/1996								14				96M04622-3760
10/4/1996	8.3				< .48							96M04622-3716
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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	1100							333				C11222050003

F-18

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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	880							347				C11222050002
1/23/2012	1300							324				C12023024006
7/30/2012	800							298				C12212050001
7/30/2012	810							294				C12212050002
1/24/2013	840							281				C13024007001
6/11/2013	2100	< 20	< 20	< 20	< 20			213				C13162014003
8/26/2013	1600							219				C13238022001
1/13/2014	2000							231				C14013030001
7/24/2014	1160							336				353464001
1/27/2015	1990							298				365920001

F-19

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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	.7				< .48							96M04621-3715
10/4/1996									.56		.67	96M04621-3729
10/4/1996								-82				96M04621-3759
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										< 0		C020720127
3/13/2002	78	< 5	< 5	< 5	< 5	< -.652	< 4	< 1.2				C020720128
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**

**Sample Date Range: 5/6/1993 - 1/27/2015**

**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

*Sample Date Range: 5/6/1993 - 1/27/2015*

**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
1/24/2013	54							< 8.03				C13024007002
6/11/2013	1100	< 20	< 20	< 20	< 20			214				C13162014004
8/26/2013	900							197				C13238022002
1/13/2014	100							69.4				C14013030002
8/20/2014								44.4				355247001
8/25/2014	133											355531001
1/27/2015	404							32.6				365920002

F-22