

### **Department of Energy**

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APR 2 7 2017

Mr. Brian Begley Federal Facility Agreement Manager Division of Waste Management Kentucky Department for Environmental Protection 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601 PPPO-02-4137330-17F

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 SECOND HALF OF FISCAL YEAR 2016, PADUCAH, KENTUCKY (DOE/LX/07-2404/V2)

Reference: Letter from T. Duncan to B. Begley and J. Corkran, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2016, Paducah, Kentucky, (DOE/LX/07-2404/V2)," (PPPO-02-3816220-17), dated October 26, 2016

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 Second Half of Fiscal Year 2016, Paducah, Kentucky, DOE/LX/07-2404/V2. 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 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,

Traccy Duncan Federal Facility Agreement Manager Portsmouth/Paducah Project Office

Enclosures:

- 1. Certification Page
- 2. Errata page for FFA Semiannual Progress Report for the Second Half of FY 2016
- 3. Errata pages for FFA Semiannual Progress Report for the Second Half of FY 2016, DOE/LX/07-2404/V2—Redline
- 4. FFA Semiannual Progress Report for the Second Half of FY 2016, DOE/LX/07-2404/V2—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 Second Half of Fiscal Year 2016, Paducah, Kentucky (DOE/LX/07-2404/V2)

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

Fluor Federal Services, Inc.

Myrna E. Redfield, Director **Environmental Management** 

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

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imprisonment for knowing violations.

ennifer Woodard, Paducah Site Lead Portsmouth/Paducah Project Office

25/2017

### ERRATA SHEET

### U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2016 Paducah, Kentucky DOE/LX/07-2404/V2, issued October 2016

The following ten 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, last paragraph: Corrected date for cumulative trichloroethene (TCE) removed in Table 2.
- 4. Groundwater Operable Unit, page 5, Table 2: Corrected cumulative TCE removed for Northwest Plume Pump-and-Treat and Northeast Plume Pump-and-Treat and total volume for all projects.
- 5. Groundwater Operable Unit, page 5, Table 2: Corrected date in second table note.
- 6. Northeast Plume IRA, page 18, item C, second paragraph: Deleted text.
- 7. Northwest Plume IRA, page 22, second paragraph: Deleted text.
- 8. Northwest Plume IRA, page 22, Table 4: Corrected TCE and technetium-99 values.
- 9. Northwest Plume IRA, page 22, third paragraph: Corrected technetium-99 value.
- 10. Northwest Plume IRA, page 22, Table 5: Corrected TCE value.

DOE/LX/07-2404/V2 Errata Secondary Document

U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2016 Paducah, Kentucky



### **CLEARED FOR PUBLIC RELEASE**

### DOE/LX/07-2404/V2 Errata Secondary Document

U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2016 Paducah, Kentucky

Date Issued—October 2016

Errata Issued—April 2017

U.S. DEPARTMENT OF ENERGY Office of Environmental Management

Prepared by FLUOR FEDERAL SERVICES, INC., Paducah Deactivation Project managing the Deactivation Project at the Paducah Gaseous Diffusion Plant under Task Order DE-DT0007774

### **CLEARED FOR PUBLIC RELEASE**

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### ACRONYMS

AOC	area of concern
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
DOE	U.S. Department of Energy
EIC	Environmental Information Center
EPA	U.S. Environmental Protection Agency
E/PP	excavation/penetration permit
EQ	equalization
EW	extraction well
FFA	Federal Facility Agreement
FFS	Fluor Federal Services, Inc.
FS	feasibility study
FY	fiscal year
GDP	gaseous diffusion plant
GWOU	Groundwater Operable Unit
IRA	interim remedial action
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
RI	remedial investigation
ROD	record of decision
SMP	Site Management Plan
SOU	Soils Operable Unit
SSI	Swift and Staley Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
VOC	volatile organic compound
WAG	waste area group

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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-gaseous diffusion plant (GDP) shutdown scope, (2) post-GDP shutdown scope, and (3) Comprehensive Site Operable Unit scope. The pre-GDP shutdown scope is associated with media-specific operable units (OUs) initiated prior to shutdown of the operating 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 OU

The GDP ceased uranium enrichment operations in May 2013; DOE property leased to the United States Enrichment Corporation was returned to DOE in October 2014. In order to reflect better that the GDP no longer is operating, all activities previously identified as post-GDP shutdown scope now are identified as Remaining Remediation Scope. The Remaining Remediation Scope has been grouped into these media-specific OUs:

- Remaining Remediation Groundwater OU
- Remaining Remediation Burial Grounds Sources OU
- Remaining Remediation Lagoons and Ditches OU
- Remaining Remediation Soils and Slabs OU
- Remaining Remediation Decontamination and Decommissioning 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.

<sup>&</sup>lt;sup>1</sup> Schedules are included for information and planning purposes only; enforceable schedules are established in the Site Management Plan (SMP).

Operable Unit	Project/Activities		
Groundwater Operable Unit	• C-400 Interim Remedial Action (IRA)		
	Southwest Plume Sources Remedial Action		
	<ul> <li>Dissolved-Phase Plumes Remedial Action</li> </ul>		
	Northeast Plume IRA		
	Northwest Plume IRA		
Burial Grounds Operable Unit	Burial Grounds Operable Unit		
	C-749 Uranium Burial Ground Solid Waste		
	Management Unit (SWMU) 2		
Surface Water Operable Unit	Remedial Action		
Soils Operable Unit	Remedial Action		
Decontamination and Decommissioning Operable Unit	• C-410/C-420 Complex		
Additional Reporting	Waste Area Groups 1 and 7		
	Community Relations Plan		
	Site Management Plan		
	CERCLA Waste Disposal Alternatives		
	Evaluation		
	CERCLA Five-Year Review		

#### Table 1. Operable Units and Corresponding Report Topics

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
- 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 May 1994 through June 2016. These 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. Groundwater data from July through September 2016 will be included in the next semiannual report scheduled for April 2017.
- 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 June 2009 through June 2016. Groundwater data from July through September 2016 will be included in the next semiannual report scheduled for April 2017.
- 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 June 2016. Groundwater data from July through September 2016 will be included in the next semiannual report scheduled for April 2017.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016–09/30/2016

#### **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 predominant contaminant of concern in the groundwater of all three plumes is TCE. Table 2 provides an overall picture of the TCE mass removed [TCE values may contain other volatile organic compounds (VOCs)] by various actions through June 30, 2016.

Source Area	Cumulative TCE Removed (gal)*		
Northwest Plume Pump-and-Treat	3,348**		
Northeast Plume Pump-and-Treat	305**		
C-400 Six-Phase Treatability Study	1,900		
C-400 Phase I	535		
C-400 Phase IIa	1,137		
Southwest Plume (SWMU 1)	24***		
Other sources (i.e., SWMU 91, LASAGNA <sup>TM</sup> )	246		
Total	7,495		

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

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

\*\*Cumulative through June 30, 2016.

\*\*\*Removed during deep soil mixing operations.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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 IIb:

- Held comment resolution meetings with EPA and Kentucky on April 5 and 15, 2016, for the D1 Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2202&D1.
- Received Kentucky and EPA approval on April 18, 2016, and April 28, 2016, respectively, on the extension of the submittal date of the *Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2202&D2, from April 20, 2016, to May 11, 2016.
- Developed and issued to EPA and Kentucky on May 10, 2016, the *Treatability Study Report* for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2202&D2. Received approval from Kentucky and EPA on May 27, 2016, and June 9, 2016, respectively.
- Held a meeting with EPA and Kentucky on June 20 and 27, 2016, to discuss DOE's proposal to integrate C-400 Phase IIb with a Final Remedial Action for the C-400 Complex. Senior management from DOE, EPA, and Kentucky are scheduled to meet on October 12, 2016, to further discuss the proposal.
- Submitted a milestone modification request to EPA and Kentucky on September 6, 2016, to extend the submittal date of the *Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-2407&D1, by 120 days, from September 27, 2016, to January 25, 2017.
- Received nonconcurrence from EPA and Kentucky on September 26, 2016, and September 27, 2016, respectively, on the milestone modification request for issuance of the *Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2407&D1.

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

DOE has until October 11, 2016, to invoke informal Dispute Resolution for EPA and Kentucky's nonconcurrence on DOE's September 6, 2016, milestone modification request for the *Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-2407&D1. Senior management from DOE, EPA, and Kentucky are scheduled to meet on October 12, 2016, to further discuss DOE's proposal to integrate C-400 Phase IIb and a Final Remedial Action at the C-400 Complex.

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

Reporting responsibility for the work to be performed in support of the GWOU belongs to Fluor Federal Services, Inc. (FFS). In addition, FFS provides programmatic and technical support, analytical services, and business management services. Swift & Staley Inc., (SSI) manages the AR and the Environmental Information Center (EIC).

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

EPA and Kentucky senior managers currently are evaluating DOE's June 2016 proposal for site reprioritization. An extension to the C-400 Phase IIb Proposed Plan was requested to allow time for EPA and Kentucky senior management to respond to DOE's proposal to integrate the Phase IIb Proposed Plan and a Final Remedial Action for the C-400 Complex. Senior management from DOE, EPA, and Kentucky are scheduled to meet on October 12, 2016, to discuss DOE's proposal and determine a path forward for C-400.

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

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

Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2202&D2, was developed and EPA and Kentucky reviewed and concurred during this reporting period.

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

D1 Revised Proposed Plan is due to EPA and Kentucky no later than September 27, 2016. A milestone modification request has been submitted to extend the date from September 27, 2016, to January 25, 2017. A nonconcurrence was received from EPA and Kentucky on September 26, 2016. DOE currently is evaluating any impacts on the C-400 Revised Proposed Plan from the nonconcurrence received on the milestone modification request.

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

EPA and Kentucky senior managers currently are evaluating DOE's June 2016 proposal for site reprioritization. An extension to the C-400 Phase IIb Proposed Plan was requested to allow time

for EPA and Kentucky senior management to respond to DOE's proposal to integrate the Phase IIb Proposed Plan and a Final Remedial Action for the C-400 Complex. Senior management from DOE, EPA, and Kentucky are scheduled to meet on October 12, 2016, to discuss DOE's proposal and determine a path forward for C-400.

#### 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

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

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

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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

- Verified continuing presence of warning signs at the soil mixing area at SWMU 1, SWMU 211-A, and SWMU 211-B as required by the *Record of Decision for Solid Waste* Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0365&D2/R1. The warning signs provide information to alert industrial workers of the presence of the contamination in the area.
- Completed installation and development of six MWs at SWMU 1 on April 22, 2016.
- Completed seeding and mulching of the SWMU 1 area on July 14, 2016, after sample collection was completed.
- Completed disposition of waste generated from the SWMU 1 soil mixing remedial action and MW installation activities on August 19, 2016.
- Performed first and second quarter sampling of SWMU 1 MWs, as required by the *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. Analytical results for the first quarter event are being reviewed. Laboratory analysis is ongoing for the second quarter samples.
- Completed and issued to EPA and Kentucky on September 1, 2016, the *Remedial Action Completion Report for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-74-C Oil Landfarm (Solid Waste Management Unit 1), at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2405&D1.

#### SWMUs 211-A and 211-B

• Revised and issued to EPA and Kentucky on April 25, 2016, the Addendum to 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, Paducah, Kentucky, DOE/LX/07-1288&D2/A1/R1, addressing EPA and

Kentucky comments. Received Kentucky approval on May 23, 2016. Received additional EPA comments on May 25, 2016.

• Issued to EPA and Kentucky on September 30, 2016, responses to additional comments from EPA received May 25, 2016, on the Addendum to 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, Paducah, Kentucky, DOE/LX/07-1288&D2/A1/R2.

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

- Finalize the Remedial Action Completion Report 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/07-2405&D1, based upon comments received from EPA and Kentucky.
- Establish path forward for SWMUs 211-A and 211-B with EPA and Kentucky.

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

Reporting responsibility for the work to be performed in support of the GWOU belongs to FFS. FFS also provides programmatic and technical support, analytical services, and business management services. 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 for the SWMU 1 portion of the Southwest Plume sources remedial action subproject are being met consistent with the SMP and as agreed to by the FFA parties.

The requirements for the SWMUs 211-A and 211-B portion of the Southwest Plume subproject are being met consistent with the SMP and as agreed to by the FFA parties.

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

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

Remedial Action Completion Report 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/07-2405&D1, has been under development and under EPA and Kentucky review during this reporting period.

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

Comments on the Remedial Action Completion Report 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/07-2405&D1, are due to DOE within 90 days of document issuance or November 30, 2016.

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

EPA and Kentucky have requested tri-party discussions to determine the appropriate response actions (e.g., path forward of SWMU 211-A, invalidation of the Conceptual Site Model at SWMU 211-B) for SWMUs 211-A and 211-B. Decisions that will result from these discussions are necessary to complete the Final Characterization Notification for SWMUs 211-A and 211-B adequately.

#### 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

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

None.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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):

- The Modeling Working Group continued an update of the PGDP Sitewide Groundwater Model. The Groundwater Project Team held two meetings during this reporting period. The first meeting was held in Nashville, TN, on June 14, 2016, and the second meeting was held in Paducah, KY, on August 24, 2016. In addition, 11 teleconferences were held during the reporting period.
- Developed and issued to the Modeling Working Group on July 29, 2016, a draft modeling report (primary components only).

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

- Additional meetings of the PGDP Modeling Working Group are being planned for the next reporting period.
- The Modeling Working Group will finalize the modeling report.

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

Reporting responsibility for the work to be performed in support of the GWOU belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management services. SSI manages the AR and the EIC.

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

No requirements are scheduled for this project during the upcoming reporting period. The Modeling Working Group will continue to support the finalization of the PGDP Sitewide Groundwater Model.

#### 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:

None.

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

Not applicable.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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 FFA parties agreed on March 31, 2016, to evaluate whether modifications to the *Addendum to the Remedial Action Work Plan for Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-1280&D2/R2/A1, are required as a result of EPA and Kentucky comments received on Appendix D, Quality Assurance Project Plan (QAPP).
- Submitted a schedule modification to EPA and Kentucky on April 11, 2016, extending the submittal date of the *Addendum to the Remedial Action Work Plan for Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2/R2/A1, by 24 days, from April 3, 2016, to April 27, 2016.
- Held a comment resolution meeting with EPA and Kentucky on April 18, 2016, for the *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/R3.
- Developed and issued to EPA and Kentucky on April 27, 2016, the *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/R3, which includes the revised Appendix D, *Quality Assurance Project Plan*. Received concurrence from Kentucky and EPA on May 20, 2016.
- Initiated fieldwork for the Northeast Plume Optimization on July 19, 2016. Completed fieldwork, including installation of seven transect MWs and two piezometers, on September 21, 2016.
- During this reporting period, the Northeast Plume Containment System (NEPCS) treated 48,758,115 gal of contaminated groundwater and achieved an average operational efficiency of 95%. The average system treatment rate for the reporting period was 185 gal/min and was calculated assuming 95% operational uptime. Operational online efficiencies for the reporting period were as follows: April 2016, 100%; May 2016, 96%; June 2016, 84%; July 2016, 99%; August 2016, 91%; September 2016, 100%.

#### 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 September 30, 2016, the NEPCS has processed a total of approximately 1,628,889,631 gal of water. The monthly withdrawal volumes this reporting period are presented in Appendix A, Table A.1, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2016.

The influent flow is a composite from two EWs. Influent TCE analytical data from 1997 through the end of June 2016 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 January through June 2016. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3.

		TCE (µg/L)	)
	High	Low	Average
Influent (EQ Tank)	131	99.6	119.6
Effluent (CERCLA Outfall)*	6.13	2.42	3.47

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

\*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 97.1% for TCE.

The EWs were sampled quarterly during this reporting period. EW331 had an average TCE concentration of 103  $\mu$ g/L, while EW332 had an average concentration of 129  $\mu$ 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 *Northwest/Northeast Plume Daily Operational Data Collection and Maintenance*, CP4-ER-0017, February 2016.

No instances of downtime due to routine maintenance occurred during the reporting period.

#### Nonroutine Maintenance Activities:

On May 26, 2016, the Northeast Plume system shut down due to storm damage. The system was restarted on May 27, 2016, for a period of 30 hours downtime.

On May 28, 2016, the Northeast Plume system shut down due to storm damage. The system was restarted on June 1, 2016, for a period of 108 hours downtime.

On July 7, 2016, the Northeast Plume system shut down due to a power outage; work was performed in less than 6 hours and the system was placed back on line.

On August 5, 2016, the Northeast Plume system shut down due to a power outage. The system was restarted on August 8, 2016, for a period of 54 hours downtime.

#### E) Effectiveness Monitoring—Monitoring Well Results:

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

MW292 is located approximately 1,200 ft upgradient of the pumping wells to provide an early detection point for Tc-99 migration. During the first and second quarters of calendar year 2016, Tc-99 activity at MW292 was 33.5 and 43.9 pCi/L, respectively.

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

Installation of seven transect MWs (see Figure B.1) and two piezometers was completed on September 21, 2016, with the intent to increase volatile organic compound mass removal and enhance capture of contaminants migrating in the Northeast Groundwater Plume.

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

- Initiate four consecutive quarters of transect MW sampling.
- Initiate development of the revised Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-1535&D3/R5.
- Finalize location of extraction and remaining well network after second quarter sampling, data validation, and FFA parties review/consensus.

- Once consensus is obtained for finalizing the location of EW and remaining well network, the following activities will be performed.
  - Initiate fieldwork for drilling the EW and remaining well network.
  - Initiate fieldwork for aboveground construction.

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

Reporting responsibility for the work to be performed in support of the NEPCS belongs to FFS. In addition, FFS also provides programmatic and technical support, analytical services, and business management services. 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 effluent concentration goal of 30  $\mu$ g/L for TCE was met during the reporting period. The NEPCS remained operational 95% of the time during this reporting period.

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

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

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/R3, including the Appendix D, Quality Assurance Project Plan, was developed and EPA and Kentucky reviewed and concurred 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

#### 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 \$378,000.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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 50,707,404 gal of contaminated groundwater with an average monthly operational efficiency of 98.8%. The average system treatment rate for the reporting period was 192 gal/min and was calculated assuming 98.8% operational uptime. Operational efficiencies for the reporting period were as follows: April 2016, 100%; May 2016, 97%; June 2016, 99%; July 2016, 97%; August 2016, 100%; September 2016, 100%.

#### 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 gal/min 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.

#### **B) Process Testing:**

Operation of the NWPGS began on August 28, 1995. As of September 30, 2016, the NWPGS has processed a total of approximately 2,095,000,764 gal of water. The monthly withdrawal volumes for the reporting period are presented in Appendix A, Table A.2, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2016.

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.

For radionuclides, all reported values, including negative values, are used to derive averages. Negative Tc-99 results may be reported due to a statistical determination of the counts seen by a detector, minus a background count. High, low, and average influent and effluent TCE and Tc-99 concentrations from January through June 2016 are presented in Table 4.

	TCE (µg/L)			TCE (μg/L) Tc-99 (pC			Tc-99 (pCi/L	.)
	High	Low	Average	High	Low	Average		
Influent	2,290	1,940	2,139	305	260	282		
Effluent	3.06	1.4	1.95	17.4	-14.4	-0.1		

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

The treatment system influent was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the O&M Plan for the Northwest Plume Groundwater System IRA D4/R5. 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 100% for Tc-99. Of note, the increase in Tc-99 efficiency from 87.4% during the last reporting period to 100% this reporting period reflects the use of the new ion exchange unit with new media during the entire six months of this reporting period.

The average TCE effluent concentration for this reporting period was 1.95  $\mu$ g/L, which is less than the treatment goal of 5  $\mu$ g/L. The average Tc-99 effluent value was -0.1 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 O&M Plan for the Northwest Plume.

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
EW232	590	265	428	145	74	109
EW233	3,940	3,030	3,485	482	398	440

Table 5. TCE and Tc-99 Concentrations for Northwest Plume EWs
#### **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 in a new trailer. 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 VOCs 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 with recycled carbon on July 28, 2016, and the columns were placed back in-service the same day. The next carbon exchange is planned for January 2017.

## E) Maintenance Activities:

## **Routine Maintenance Activities:**

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Northwest/Northeast Plume Daily Operational Data Collection and Maintenance*, CP4-ER-0017, February 2016, and *Monthly, Quarterly, and Annual Maintenance at the C-612 Northwest Plume Groundwater System*, CP4-ER-0016, March 2016.

On June 1, 2016, the Northwest Plume system was shut down for a planned outage; work was performed in less than 8 hours and the system was placed back on line.

#### Nonroutine Maintenance Activities:

On May 14, 2016, the Northwest Plume system shut down due to a power outage. The system was restarted on May 15, 2016, following a period of 26 hours downtime.

#### 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:

None.

## 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.

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

Reporting responsibility for the work to be performed in support of the NWPGS belongs to FFS as the DOE prime remediation contractor at PGDP. In addition FFS provides programmatic and technical support, analytical services, and business management services. 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 average NWPGS water effluent concentrations met the operational goals of 5  $\mu$ g/L for TCE and 900 pCi/L for Tc-99 during the reporting period. The NWPGS has remained 98.8% operational 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

#### 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 \$378,000.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **BURIAL GROUNDS OPERABLE UNIT**

The scope of the BGOU includes an 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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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

### 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):

- Continued negotiations to resolve the Dispute Resolution Committee (DRC)-level formal 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.
- Continued negotiations to resolve the Senior Executive Committee (SEC)-level formal dispute associated with 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. This dispute was resolved on January 25, 2016.
- Held the 45-day public comment period for 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/R1, on March 21 through May 5, 2016. Requested an extension to the public comment period on March 22, 2016. As a result, the comment period was extended 30 days through June 4, 2016.
- Initiated development of 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.
- Demobilized equipment associated with the fieldwork conducted pursuant 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 and Analysis Plan, DOE/OR/07-2179&D2/A2/R3.
- Completed disposal of SWMU 4 RI waste.
- Developed and issued to Kentucky and EPA on August 2, 2016, the Addendum to the Remedial Investigation Report for the Burial Grounds Operable Unit Solid Waste Management Unit 4 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0030&D2/R1/A1.

• Initiated development of the Feasibility Study for SWMU 4 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky.

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

- Once the dispute is resolved, develop and issue 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.
- Complete development of 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.
- Finalize the Addendum to the Remedial Investigation Report for the Burial Grounds Operable Unit Solid Waste Management Unit 4 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0030&D2/R1/A1 based on comments from EPA and Kentucky.
- Issue D1 SWMU 4 Feasibility Study of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky.

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

Reporting responsibility for the work to be performed in support of BGOU belongs to FFS. In addition, FFS also provides programmatic and technical support, analytical services, and business management. SSI manages the AR and the EIC, and maintains existing burial ground caps.

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

The requirements and time schedules are being met; however, extensions related to the dispute resolution process for SWMUs 5 and 6 and SWMUs 2, 3, 7, and 30 have resulted in an overall impact to the project schedule for the BGOU.

#### 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/R1.
- 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.

- Addendum to the Remedial Investigation Report for the Burial Grounds Operable Unit Solid Waste Management Unit 4 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0030&D2/R1/A1.
- Feasibility Study for SWMU 4 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky.

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

- Resolution of DRC-level formal 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 November 13, 2016.
- Issue 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, by December 1, 2016.
- 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.
- Comments are due on the SWMU 4 addendum to the *Remedial Investigation Report for the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-0030&D2/R1/A1, to DOE within 90 days of document issuance, or October 31, 2016.
- Issue the Feasibility Study for SWMU 4 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, by March 2, 2017.

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

Dispute resolutions for BGOU SWMUs 2, 3, 7, and 30 and BGOU SWMUs 5 and 6 have resulted in cost and schedule delays. Current enforceable or FFA milestones (if applicable) have been stayed and will be/have been 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

#### 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).]

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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## 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 January 2016, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through June 2016 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:

Reporting responsibility for the work to be performed in support of C-749 Uranium Burial Ground belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI manages the AR and the EIC, and maintains existing burial ground cover.

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

The requirements and time schedules are being met.

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

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

None.

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

None.

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

None.

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

None.

VIII. Changes in relevant personnel:

None.

#### 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 not broken out separately.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **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 September 2016, and the current maximum discharge limit for turbidity is 98 nephelometric turbidity units (NTU), with a 30-day average not to exceed 45 NTU.

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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## 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):

No activities were scheduled for this project during this reporting period.

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

No activities are scheduled for this project during the upcoming reporting period.

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

Reporting responsibility for the work to be performed in support of the SWOU Remedial Action belongs to FFS. In addition, FFS 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:

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:

No activities were scheduled for this project during this reporting period.

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

No activities are scheduled for this project during the upcoming reporting period.

## 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 project managers, FFA senior managers, local elected officials, and congressional staff.

## VIII. Changes in relevant personnel:

None.

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

O&M activities have been incorporated into the Environmental Monitoring Program. O&M cost is not broken out separately.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### 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 (AOCs); 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 focused 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 decontamination and decommissioning 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 Feasibility Study (FS). The remaining 12 SWMUs were evaluated further under a subsequent Soils OU RI and will be 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 be implemented as part of the Remaining Remediation Scope phase (*Action Memorandum for Soils Operable Unit Inactive Facilities*, DOE/LX/07-0121&D2/R1). Implementation of the SWMU 40 response will be reinstituted with development, review, and concurrence of a removal action work plan.

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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## SOILS OPERABLE UNIT PROJECT: Remedial Action

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

#### **Remediation Investigation 2**

• Received Kentucky and EPA concurrence on April 26, 2016, and May 18, 2016, respectively, for the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2306&D2.

## **SWMU 27**

- Developed and issued to EPA and Kentucky on June 21, 2016, the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D1. Received EPA and Kentucky comments on July 20, 2016, and July 22, 2016, respectively.
- Held comment resolution meetings on the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D1, with EPA and Kentucky on August 30, 2016, September 1, 2016, and September 8, 2016.
- Revised and issued to EPA and Kentucky on September 8, 2016, the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2. Received EPA and Kentucky concurrence on September 9, 2016.
- Initiated removal activities on September 13, 2016, for SWMU 27, as specified in the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2.
- Completed removal activities on September 21, 2016, for SWMU 27, as specified in the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2.
- Initiated disposal of waste generated by the Time-Critical Removal Action for SWMU 27.
- Prepared a draft of the public notice announcing the public comment period for the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2.

#### **SWMU 229**

- Received EPA and Kentucky comments on June 14, 2016, and June 15, 2016, respectively, on the *Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2306&D2/A1.
- Held comment resolution meeting on *Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2306&D2/A1, with EPA and Kentucky on July 18, 2016.
- Revised and issued to EPA and Kentucky on August 12, 2016, the Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2/A1/R1. Received Kentucky concurrence on September 9, 2016. EPA concurrence, conditional concurrence, or nonconcurrence is pending.

#### SWMU 1

- Completed RI activities in June 2016 for SWMU 1, as specified in the 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.
- Initiated development of the Addendum to the Soils Operable Unit Remedial Investigation Report for Solid Waste Management Unit 1 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1/A2.

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

- Initiate, within 30 days after the close of the public comment period, a Time-Critical Removal Action Responsiveness Summary in response to any public comments received on the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2.
- Finalize the public notice for the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2.
- Complete disposal of wastes generated by the Time-Critical Removal Action for SWMU 27.
- Initiate development of the Removal Action Report for SWMU 27 Time-Critical Removal Action.
- Finalize the Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2/A1/R1.

• Complete the development of the Addendum to the Soils Operable Unit Remedial Investigation Report for Solid Waste Management Unit 1 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1/A2.

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

Reporting responsibility for the work to be performed in support of the SOU RI belongs to FFS. In addition, FFS 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 schedules are being met for the SOU consistent with the SMP and as agreed to by the FFA parties.

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

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

- Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion *Plant, Paducah, Kentucky,* DOE/LX/07-2306&D2 has been under EPA and Kentucky review during this reporting period.
- Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2/A1, has been under development and EPA and Kentucky review during this reporting period.
- Revisions to the Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2/A1/R1, have been under development during this reporting period.
- Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2406&D1, has been under development and EPA and Kentucky review during this reporting period.
- Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2406&D2, has been under development and EPA and Kentucky review during this reporting period.
- Public notice for the *Removal Notification for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2406&D2, has been under development during this reporting period.

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

Comments on the D2/A1/R1 Addendum to the Soils Operable Unit Remedial Investigation 2 Report for Solid Waste Management Unit 229 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2/A1, were due to DOE within 30 days of document issuance or September 11, 2016. Received Kentucky concurrence on September 9, 2016. EPA concurrence, conditional concurrence, or nonconcurrence is pending.

## 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

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

None.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

#### **DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT**

The Decontamination and Decommissioning OU will employ the CERCLA removal action process to decommission excess buildings (i.e., inactive with no reuse potential) that have a release or substantial threat of release of hazardous substances to the environment and a response action is necessary to protect public health, welfare, or 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 release or substantial threat of release of hazardous substances to the environment and a response action is necessary to protect public health, welfare, or the environment, DOE may decommission the facility as a non-CERCLA action under DOE's Atomic Energy Act authority.

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed.

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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## **DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT: C-410/C-420 Complex**

The scope of this project includes decontamination and decommissioning 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 disposal of 2,050 gal of water generated during decontamination of equipment on April 8, 2016.
- Developed and issued to EPA and Kentucky on April 11, 2016, the Decontamination and Decommissioning OU Completion Notification letter.
- Developed and issued to EPA and Kentucky on April 11, 2016, the *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. Received Kentucky and EPA approval on June 3, 2016, and June 9, 2016, respectively.

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

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed. No activities are scheduled for this project during the upcoming reporting period.

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

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed. No activities are scheduled for this project during the upcoming reporting period.

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

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed. 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:

- Decontamination and Decommissioning OU Completion Notification letter has been under development and review by EPA and Kentucky during this reporting period.
- 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 has been under development and review by EPA and Kentucky during this reporting period.

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

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed. No activities are scheduled for this project during the upcoming reporting period.

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

The scope of the pre-GDP shutdown Decontamination and Decommissioning OU has been completed. No activities are scheduled for this project during the upcoming reporting period.

## 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 project managers, FFA senior managers, local elected officials, congressional staff, and Decontamination and Decommissioning Tri-Party Working Group.

## VIII. Changes in relevant personnel:

None.

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

None.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

### **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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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## **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 May 1994 through June 2016 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:

Reporting responsibility for the work to be performed in support of WAGs 1 and 7 belongs to FFS as the DOE prime remediation contractor at PGDP. In addition, FFS also 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 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:

None.

#### 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.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## **PROJECT: Community Relations Plan**

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

- Held clarification and comment resolution meetings on *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/LX/07-2401&D2, with EPA and Kentucky on April 7, 2016; April 27, 2016; and April 28, 2016.
- Revised and issued to EPA and Kentucky on May 16, 2016, the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/LX/07-2401&D2/R1. Received EPA and Kentucky concurrence on May 18, 2016.

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

None.

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

Reporting responsibility for the work to be performed in support of the CRP belongs to FFS. SSI manages the AR and the EIC.

The FFA parties agreed to revise and issue the CRP for review and concurrence on a biennial basis (i.e., status of major projects in Chapter 2, Appendix A—Key Contacts for the PGDP and Appendix B—Public Involvement History).

## 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:

The next D1 Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant is due to EPA and Kentucky no later than July 1, 2017.

## 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 project managers, local elected officials, and congressional staff.

### VIII. Changes in relevant personnel:

None.

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

Not applicable.

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

### **PROJECT: Site Management Plan**

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

- Requested on April 13, 2016, to extend the submittal date of the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016,* DOE/LX/07-2400&D2, by 60 days, from April 21, 2016, to June 20, 2016. EPA and Kentucky approved the request on April 13, 2016.
- Requested on June 10, 2016, to extend the submittal date of the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016,* DOE/LX/07-2400&D2, by 30 days, from June 20, 2016, to July 20, 2016. EPA and Kentucky approved the request on June 14, 2016, and June 20, 2016, respectively.
- Developed and issued to EPA and Kentucky on July 19, 2016, the D2 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016, DOE/LX/07-2400&D2.
- Received on August 16, 2016, EPA's and Kentucky's requests to extend the submittal date for concurrence, conditional concurrence, or nonconcurrence on the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016*, DOE/LX/07-2400&D2, from August 18, 2016, to September 17, 2016.
- Received on September 14, 2016, EPA's and Kentucky's requests to extend the submittal date for concurrence, conditional concurrence, or nonconcurrence on the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY* 2016, DOE/LX/07-2400&D2, from September 17, 2016, to October 26, 2016.

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

- Evaluate EPA and Kentucky concurrence or conditional concurrence on the D2 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016, DOE/LX/07-2400&D2.
- Begin scoping and development of the D1 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2017.

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

Reporting responsibility for the work to be performed in support of the SMP belongs to FFS. In addition, FFS 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:

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

The requirements and time schedules are being met; however, extensions have resulted in an overall impact to finalizing the FY 2016 SMP. Delays in finalizing the FY 2016 SMP also may impact submittal of the FY 2017 SMP.

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

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

The D2 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2016, DOE/LX/07-2400&D2, has been under development and under EPA and Kentucky review during this reporting period.

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

- Concurrence, conditional concurrence, or nonconcurrence on the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY* 2016, DOE/LX/07-2400&D2, is due to DOE no later than October 26, 2016, based upon EPA and Kentucky extension requests dated September 14, 2016.
- D1 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2017, is due to EPA and Kentucky no later than November 15, 2016.
- Comments on the D1 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2017, are due to DOE within 30 days of document issuance or December 15, 2016.
- D2 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2017, 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):

The requirements and time schedules are being met; however, extensions have resulted in an overall impact to finalizing the FY 2016 SMP. EPA and Kentucky Senior Managers currently are evaluating DOE's June 2016 proposal for site reprioritization. Extensions have been needed in order to allow time for DOE, EPA, and Kentucky senior management to discuss the priorities for the Paducah Site. Tri-party senior management guidance and direction that will result from these

discussions is necessary to respond adequately to comments received on the FY 2016 SMP and to establish a path forward for scoping of the FY 2017 SMP.

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

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

#### VIII. Changes in relevant personnel:

None.

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

Not applicable.

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#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## 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 DRC-level and SEC-level dispute resolution meetings among the FFA parties to resolve conditions received on 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.

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

- Continue negotiations to resolve the DRC-level and SEC-level formal disputes associated with *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2.
- Develop, following resolution of the current dispute, the revised *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.
- Incorporate the results of the Sites 5A and 11 hydrologic investigations into the revised *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.

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

Reporting responsibility for the work to be performed in support of CERCLA waste disposal belongs to FFS. In addition, FFS 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:

DOE initially invoked informal dispute on 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, on May 19, 2014. Numerous dispute resolution meetings between the FFA parties to resolve the disputed conditions 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. DOE elevated the formal dispute on the additional EPA condition regarding the discharge of wastewater and effluent limits for radionuclides from the DRC-level to the SEC-level on June 1, 2016.

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

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

- 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, has been placed on hold until the current disputes are resolved.
- The draft report for the Sites 5A and 11 investigation will be included in Appendix E of the forthcoming Remedial *Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, after the current RI/FS disputes are resolved.

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

- The period for DRC-level and SEC-level formal disputes 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, currently are scheduled to end November 13, 2016, and October 27, 2016, respectively.
- The Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1279&D1, will be due to EPA and Kentucky in accordance with the date established by the FFA parties as part of dispute resolution.

## 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 DRClevel and SEC-level formal disputes. 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 project managers, FFA senior managers, local elected officials, and congressional staff.

#### VIII. Changes in relevant personnel:

None.

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

Not applicable.
## FEDERAL FACILITY AGREEMENT SEMIANNUAL REPORT SECOND HALF OF FISCAL YEAR 2016

#### Facility: Paducah Gaseous Diffusion Plant Plant EPA I.D. No.: KY8-890-008-982 Reporting Period: 04/01/2016-09/30/2016

## **PROJECT: CERCLA Five-Year Review**

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

- Continued scoping meetings with the FFA parties to discuss the additional actions required to address the deferred protectiveness statements received from EPA on September 30, 2014, concerning C-400 Cleaning Building.
- Requested on September 9, 2016, to extend the submittal date of the addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1/A2/R1, by 45 days, from September 12, 2016, to October 27, 2016.
- Received EPA comments on July 29, 2016, for the addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-1289&D2/R1/A2. Received Kentucky concurrence on June 30, 2016.
- Revised the addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-1289&D2/R1/A2/R1, based on comments received from EPA on July 30, 2016. Held a comment resolution meeting with EPA and Kentucky on September 7, 2016.
- Developed and issued to EPA and Kentucky on April 29, 2016, the *C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2403&D1. Received Kentucky and EPA comments on July 29, 2016, and August 8, 2016, respectively.
- Held clarification meetings with EPA and Kentucky on September 19 and 26, 2016, on the *C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2403&D1.
- Verbally requested and received EPA and Kentucky approval on September 13, 2016, to extend submittal date of the *C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2403&D2, by 14 days, from September 22, 2016, to October 6, 2016. Documented extension request on September 15, 2016.
- Verbally requested and received EPA and Kentucky approval on September 26, 2016, to extend the submittal date of the C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion

*Plant, Paducah, Kentucky*, DOE/LX/07-2403&D2, by 14 days, from October 6, 2016, to October 20, 2016. Documented extension request on September 29, 2016.

# 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 Cleaning Building.
- Finalize the C-400 Vapor Instruction Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2403&D1.
- Finalize the addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1/A2/R1.

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

Reporting responsibility for the work to be performed in support of the CERCLA Five-Year Review belongs to FFS. In addition, FFS 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:

This Five-Year Review encompasses the interim and final 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:

- Addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1/A2, has been under EPA and Kentucky review during this reporting period.
- Addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1/A2/R1, has been under development during this reporting period.
- The C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2403&D1, has been under development and EPA and Kentucky review during this reporting period.

• The C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2403&D2, has been under development during this reporting period.

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

- The Addendum to the *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1/A2/R1, is due to EPA and Kentucky no later than October 27, 2016.
- The C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2403&D2, is due to EPA and Kentucky no later than October 20, 2016.

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

Extensions to the C-400 Vapor Intrusion Study Work Plan to Support the Additional Actions for the CERCLA Five-Year Review at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2403&D2, were requested to allow for additional time needed to continue discussions concerning the approach (i.e., sub-slab sampling) for the Vapor Intrusion Study.

## 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 project managers, FFA senior managers, local elected officials, and congressional staff.

## VIII. Changes in relevant personnel:

None.

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

Not applicable.

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# **APPENDIX A**

# NORTHEAST AND NORTHWEST PLUME WATER WITHDRAWAL REPORTS

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#### Table A.1. Northeast Plume Containment System Water Withdrawal Reporting Form (Gallons of Water Pumped)

Day	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016
1	310,500	285,767	36,550	283,160	240,800	225,400
2	311,467	285,767	36,552	283,160	281,500	284,680
3	311,467	273,900	287,025	283,160	282,600	284,680
4	311,467	281,100	287,025	283,160	291,500	284,680
5	328,100	286,000	287,025	283,160	99,425	284,680
6	244,600	324,200	287,025	295,100	99,425	284,680
7	309,300	271,500	266,700	55,000	99,425	281,100
8	101,100	271,500	296,200	292,575	99,425	288,100
9	311,067	271,500	288,200	292,575	273,300	289,250
10	311,067	276,100	280,625	292,575	288,000	289,250
11	311,067	287,300	280,625	292,575	296,300	289,250
12	303,500	275,000	280,625	265,900	282,900	289,250
13	313,500	287,900	280,625	291,000	282,900	284,100
14	305,400	281,500	272,600	283,700	282,900	278,200
15	311,600	281,500	278,400	287,075	282,900	291,200
16	308,767	281,500	280,600	287,075	286,500	286,650
17	308,767	279,300	282,600	287,075	306,700	286,650
18	308,767	283,800	282,600	287,075	243,000	286,650
19	310,800	278,800	282,600	285,000	243,125	286,650
20	305,200	279,600	282,600	284,000	243,125	283,000
21	305,000	259,800	274,700	284,700	243,125	281,100
22	319,100	259,800	299,200	268,650	243,125	270,700
23	309,433	259,800	283,700	268,650	283,600	274,325
24	309,433	278,900	270,075	268,650	288,500	274,325
25	309,433	295,000	270,075	268,650	292,800	274,325
26	308,000	286,900	270,075	288,100	284,500	274,325
27	274,500	65,800	270,075	276,300	284,500	180,800
28	289,700	36,550	282,300	287,700	284,500	187,100
29	274,100	36,550	279,900	240,800	284,500	183,400
30	285,767	36,550	288,000	240,800	278,500	184,615
31		36,550		240,800	351,100	
Monthly Total	8,921,967	7,495,732	7,944,901	8,427,900	7,924,500	8,043,115
*Daily Average	297,399	241,798	264,830	271,868	255,629	268,104
Water Pumped	30	31	30	31	31	30

\*Value based on number of days water was pumped.

Days

## Table A.2. Northwest Plume Groundwater System Water Withdrawal Reporting Form (Gallons of Water Pumped)

Day	April 2016 May 2016 June 2016 July 2016 August 2016		August 2016	September 2016		
1	279,450	289,817	189,070	283,980	283,573	286,740
2	202,837	289,817	144,454	283,980	276,290	286,740
3	202,837	279,149	136,729	283,980	288,510	286,740
4	202,837	287,250	136,729	283,980	288,070	286,740
5	232,220	283,310	136,729	283,980	285,558	286,740
6	270,930	287,360	136,729	299,210	285,558	286,740
7	283,070	288,730	277,150	279,500	285,558	279,000
8	283,200	288,730	293,740	281,985	285,558	259,930
9	289,977	288,730	291,820	281,985	285,950	285,398
10	289,977	280,690	285,653	281,985	286,000	285,398
11	289,977	243,710	285,653	281,985	292,740	285,398
12	283,730	285,800	285,653	281,790	283,658	285,398
13	290,590	291,830	285,653	291,830	283,658	284,360
14	284,210	158,430	282,260	282,320	283,658	280,500
15	288,930	158,430	286,820	221,378	283,658	288,340
16	286,803	158,430	289,970	221,378	283,990	285,605
17	286,803	276,230	287,513	221,378	296,010	285,605
18	286,803	286,680	287,513	221,378	268,490	285,605
19	290,360	287,410	287,513	283,680	286,080	285,605
20	282,630	298,610	287,513	286,920	286,080	280,980
21	287,190	281,280	283,650	282,480	286,080	287,670
22	287,820	281,280	297,090	286,443	286,080	275,920
23	288,310	281,280	286,310	286,443	286,900	286,900
24	288,310	219,000	287,913	286,443	290,400	286,900
25	288,310	298,350	287,913	286,443	290,650	286,900
26	283,180	278,980	287,913	292,140	283,498	286,900
27	289,810	283,332	287,913	280,840	283,498	294,130
28	287,640	283,332	288,640	275,660	283,498	0
29	282,600	283,332	280,020	283,573	283,498	0
30	289,817	283,332	290,740	283,573	267,320	0
31		283,332		283,573	285,090	
Monthly Total	8,281,157	8,365,973	7,772,960	8,566,208	8,825,153	7,682,880
*Daily Average	276,039	269,870	259,099	276,329	284,682	256,096
Days Water Pumped	30	31	30	31	31	30

\*Value based on number of days water was pumped.

# **APPENDIX B**

# NORTHEAST PLUME AND NORTHWEST PLUME GRAPHS AND MAPS (FIGURES B.1 THROUGH B.25)

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Figure 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.





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.





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 B.11. Northwest Plume Groundwater Wells









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





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

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









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





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

Figure B.17. Northwest Plume Groundwater System TCE Removed



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





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





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

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



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

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



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





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.



# Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

C001

		Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Radiological LaboratoryChronic ToxicityAnalysis ResultsAnalysis Results			
Sa	mple Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc Pimep	hales Promelas TUc	Lab Sample ID*
B-28	9/3/2013	6.3	< 1				C	213246018001
	9/10/2013	10	< 5				C	213253015001
	9/10/2013	9.4	< 5				C	213253015002
	9/13/2013				< 1		< 1	TXC0019-13
	9/16/2013	9	< 5				C	213259014001
	9/23/2013	8.3	< 5				C	213266024001
	10/3/2013			16.2			C	213276015001
	10/3/2013	9.4	< 1				C	213276032002
	10/7/2013	6.6	< 1				C	213280028001
	10/14/2013	3.8	< 1				C	213287017001
	10/21/2013	< 1	< 1				C	213294018001
	10/25/2013				< 1		< 1	TXC00110-13
	10/28/2013	2.9	< 5				C	213301021001
	11/4/2013			20.2			C	213308024001
	11/4/2013	3	< 5				C	213308025001
	11/11/2013	3.3	< 5				0	213315031001
	11/11/2013	3.4	< 5				C	213315031002
	11/20/2013	3	< 5				C	213324011001
	11/25/2013	< 1	< 1				0	213329036001
12/2/2013		< 1	< 1				C	213336090001

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Tuesday, September 20, 2016

\* Project Sample ID is used if Lab Sample ID is not available.

NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Prepared by: **FLUOR**.
Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

C001

		Org Ai	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results		Chronic Toxici Analysis Resul	ity Its	
Sa	imple Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
	1/21/2014	3.7	< 1					C14021029001
	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
<b>B-</b> 2	2/17/2014	5.4	< 1					C14048023001
69	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

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Prepared by: **FLUOR**.

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Org Ai	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results		Chronic Toxicit Analysis Result	y s	
Sa	imple Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
	5/7/2014	4.29	< 1					348446001
	5/7/2014	4.17	< 1					348446002
	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
B-3	6/16/2014	4.5	< 1					350780001
0	6/23/2014	5.79	< 1					351207001
	6/29/2014				< 1		< 1	QTXC001-0614
	6/30/2014	6.56	< 1					351615001
	7/8/2014	5.68	< 1					352237001
	7/14/2014	4.73	< 1					352624001
	7/21/2014			< 12.7				353177002
	7/21/2014	3.73	< 1					353177001
	7/25/2014				< 1		< 1	QTXC001-0714
	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

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Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Org A	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results		Chronic Toxicit Analysis Result	y S	
Sampl	le Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
8/	/25/2014	6.14	< 1					355488001
!	9/2/2014	5.39	< 1					355872001
9	9/8/2014	4.55	< 1					356338001
9/	/15/2014	4.6	< 1					356868001
9/	/23/2014	3.92	< 1					357338002
9/	/29/2014	4.44	< 1					357703001
1	0/7/2014	6.35	< 1					358590002
B-3	/13/2014	.52	< 1					358950002
10	/13/2014			31.3				358950004
10	/20/2014	.51	< 1					359488004
10	/27/2014	2.07	< 1					360011002
10	/31/2014				< 1		< 1	QTXC001-1014
1	1/4/2014	< 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
1	2/1/2014	.35	< 1					362225002
1	2/9/2014	< 1	< 1					362804003
12	/15/2014	5.35	< 1					363245004

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Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Orga An	anic Laboratory alysis Results	Radiological Laboratory Analysis Results		Chronic Toxicity Analysis Results	7	
Sa	mple Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
	12/22/2014	5.34	< 1					363660002
	12/29/2014	3.26	< 1					363851002
	1/29/2015	7.68	< 1					366169002
	2/2/2015	5.58	< 1					366311002
	2/4/2015			22.5				366545001
	2/4/2015			23.4				366545002
	2/6/2015				< 1		< 1	QTXC001-0215
B-3	2/10/2015	3.96	< 1					366969005
3	2/18/2015	3.81	< 1					367365003
	2/18/2015	3.45	< 1					367365002
	2/23/2015	3	< 1					367607002
	3/2/2015	3.36	< 1					367959002
	3/11/2015	4.63	< 1					368692003
	3/16/2015	1.19	< 1					368893002
	3/16/2015	1.13	< 1					368893003
	3/23/2015	4.16	< 1					369408002
	3/30/2015	4.45	< 1					369759002
	4/7/2015	5.84	< 1					370571006
	4/13/2015	5.78	< 1					370982003
	4/20/2015			18.2				371423001

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Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

C001

		Org Ai	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results	C A	Chronic Toxicity Analysis Results	
Sai	nple Date	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc Pimephales Promelas TUc	Lab Sample ID*
	4/20/2015	4.83	< 1				371423003
	4/24/2015				< 1	< 1	QTXC001-0415
	4/28/2015	4.26	< 1				371963002
	5/5/2015	5.31	< 1				372605002
	5/5/2015	4.94	< 1				372605003
	5/11/2015	4.8	< 1				372848003
	5/18/2015	4.1	< 1				373300002
B-3	5/26/2015	5.68	< 1				373775002
ω	6/2/2015	5.36	< 1				374232002
	6/8/2015	6.39	< 1				374647003
	6/15/2015	7.27	< 1				375139002
	6/22/2015	6.12	< 1				375551002
	6/29/2015	6.74	< 1				375908003
	7/6/2015	6.47	< 1				376221002
	7/13/2015			38			377120004
	7/13/2015	7.59	< 1				377120006
	7/17/2015				< 1	< 1	QTXC001-0715
	7/20/2015	7.72	< 1				377564002
	7/30/2015	7.86	< 1				378414002
	8/3/2015	7.15	< 1				378504001

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\* Project Sample ID is used if Lab Sample ID is not available.

NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Prepared by: **FLUOR**.

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Org Ai	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results		Chronic Toxicit Analysis Result	y S	
Sa	mple Date	TCE μg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
	8/11/2015	7.6	< 1					379137003
	8/17/2015	6.16	< 1					379518002
	8/24/2015	5.1	< 1					379891004
	8/31/2015	7.58	< 1					380316002
	9/8/2015	8.55	< 1					380778002
	9/15/2015	6.68	< 1					381232003
	9/21/2015	5.86	< 1					381607002
B-3	9/28/2015	6.48	< 1					381967002
4	10/6/2015	6.11	< 1					382713002
	10/13/2015	5.06	< 1					383173005
	10/19/2015	3.12	< 1					383605003
	10/19/2015			< 13.3				383605001
	10/23/2015				< 1		< 1	QTXC001-1015
	10/26/2015	3.34	< 1					384073001
	11/3/2015	3.72	< 1					384687002
	11/9/2015	3.29	< 1					385132003
	11/16/2015	3.33	< 1					385708002
	11/16/2015	3.23	< 1					385708003
	11/23/2015	3.14	< 1					386250003
	11/30/2015	3.52	< 1					386486002

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\* Project Sample ID is used if Lab Sample ID is not available.



Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Orga Ar	anic Laboratory nalysis Results	Radiological Laboratory Analysis Results		Chronic Toxicity Analysis Results		
Sample	Date	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
12	/7/2015	3.62	< 1					386947002
12/1	14/2015	6.21	< 1					387486003
12/2	21/2015	3.44	< 1					387961002
12/2	28/2015	4.04	< 1					388160002
1.	/4/2016			< 16.3				388627005
1.	/4/2016	3.09	< 1					388627007
1.	/4/2016			< 18.3				388627004
B 1/1	1/2016	5.15	< 1					389075002
ъ <sub>1/1</sub>	19/2016	2.9	< 1					389669002
1/2	25/2016	3.36	< 1					390034002
1/2	29/2016				< 1		< 1	QTXC001-0116
2	/1/2016	3.33	< 1					390453002
2	/8/2016	3.3	< 1					390933003
2/1	17/2016	3.24	< 1					391578002
2/1	17/2016	3.24	< 1					391578003
2/2	22/2016	3.04	< 1					391842002
2/2	29/2016	3.41	< 1					392231002
3.	/8/2016	4.14	< 1					392896004
3/1	14/2016	3.72	< 1					393230001
3/2	21/2016	2.82	< 1					393611002

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\* Project Sample ID is used if Lab Sample ID is not available.



Water Quality Records for

Sample Date Range: 9/3/2013 - 6/27/2016

#### C001

		Organic Laboratory Analysis Results	Radiological Laboratory Analysis Results		Chronic Toxicity Analysis Results	y S	
Sample Date	TCE μg/L	1,1-DCE μg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	Lab Sample ID*
3/28/20	5.09	< 1				2	93963002
4/5/20	2.66	< 1				3	394654001
4/5/20	2.66	< 1				3	94654002
4/5/20	16		< 16.5			3	94654006
4/11/20	3.69	< 1				3	95009002
4/18/20	3.84	< 1				3	895559002
4/22/20	16			< 1		< 1	QTXC001-0416
₩ 4/26/20	6.13	< 1				3	96121001
5 5/3/20	2.55	< 1				3	96568003
5/9/20	3.2	< 1				3	97075002
5/16/20	2.42	< 1				3	97535002
5/23/20	2.95	< 1				3	897984002
6/7/20	3.2	< 1				3	398913002
6/13/20	3.58	< 1				3	899291002
6/20/20	3.68	< 1				3	399780002
6/27/20	3.44	< 1				2	00228002

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\* Project Sample ID is used if Lab Sample ID is not available.



# **APPENDIX C**

# C-746-K LANDFILL DATA

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Figure C.1. Monitoring Well Locations



C-4

#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW300

				Organi Anal	c Laboratory ysis Results		<b>Ino</b> A	rganic Lab Analysis Re	oratory esults	Radio A	logical Laboı nalysis Resul	ratory ts	
	Sample Date	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	Lab Sample ID
	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
Ω	11/10/1997	59	110	66	< 25	< 25	31.8	521	32.3	-7.7	6	4	971110-114
γ	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
	7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW300

				Organi Analy	c Laboratory ysis Results		Ino A	rganic Labo Analysis Res	oratory sults	Radio	logical Labor nalysis Result	ratory ts	
	Sample Date	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	Lab Sample ID
	7/24/2002	26	< 100	< 100	< 100	< 100	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
	10/3/2002	34	66	< 50	< 50	< 50	.0101	.33	36.9	< 26.9	< 24.9	17.5	C022760027
	1/30/2003	58	160	100	< 50	< 50	10.8	395	23.5	< 3.65	< 3.52	< 1.19	C030310020
	4/15/2003	58	180	< 100	< 100	< 100	6.86	437	22.9	< 2.47	< 20.3	< 4.19	C031050068
	7/30/2003	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
Ω	4/27/2005	12	51	< 50	< 50	< 50	.289	126	11.8	< 19.1	39.8	< -2.41	C051170049
9	10/25/2005	13	55	< 50	< 50	< 50	.259	199	16.1	< 18.1	38.4	< 8.37	C052990007
	10/25/2005	14	65	< 50	< 50	< 50	.344	178	15.2	< 2.14	29.6	< 6.49	C052990006
	4/11/2006	26	120	77	< 50	< 50	< .2	161	16.5	< .896	< 28.2	< -2.86	C061020009
	10/23/2006	< 20	< 100	< 100	< 100	< 100	.334	124	16.2	<251	< 16.2	< 8.62	C062960050
	4/12/2007	< 22	< 120	< 60	< 50	< 50	< .2	203	18.1	< -3.16	< 33.1	< -1.66	C071030007
	10/25/2007	14	120	77	< 5	< 5	< .2	162	19.7	<658	< 25.1	< 1.82	C072980183
	10/25/2007	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
	4/28/2008	< 5	42	34	< 25	< 5		117	16.8	<155	64.4	< .8	C081200001
	10/29/2008	< 5	46	29	< 25	< 5	< .2	110	16.9	< 5.22	34.8	< 6.45	C08304013002
	10/29/2008	< 5	48	32	< 25	< 5	< .2	63.9	15	< 6.06	43.7	< 11.7	C08304013001
	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
	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

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

#### MW300

	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radio A			
Sample Date	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	Lab Sample ID
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	53	< 10	2.2	< .2	201	21.4	< 3.28	61.9	< .287	C13294037002
10/21/2013	< 10	76	52	< 10	< 2	< .2	208	20.7	< -6.52	< 36.5	< 11.5	C13294037003
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	66.7	54	< 10	< 10	.0224	253	19.5	< 2.03	29.1	< -4.11	358703003
10/7/2014	< 10	64.3	55.2	< 10	< 10	< .05	236	18.9	< 5	23.5	< -2.04	358703001
4/28/2015	3.9	< 1	< 1	< 1	< 1	< .05	26.9	3.38	< 1.86	21.2	< 3.96	371985001
10/27/2015	2.56	46.6	35.9	< 1	.51	< .5	192	16.8	< 6.99	30.2	< 4.16	384156001
4/13/2016	.94	22.1	16.7	< 1	< 1	.0364	99.1	10.8	< -4.3	31.5	< -4.87	395245003
4/13/2016	.97	22	17.2	< 1	< 1	.0608	92.1	10.5	< -4.61	27.8	< -5.55	395245005



#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW301

				Organi Analy	c Laboratory ysis Results		Ino A	rganic Lab Analysis Re	oratory sults	Radio A	ological Laboi nalysis Resul	ratory ts	
	Sample Date	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	Lab Sample ID
	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
Ω	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
	1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	146	14.5	< 3.69	< 28.3	< 2.51	C020250055

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW301

				Organi Analy	c Laboratory ysis Results		Ino A	rganic Labo Analysis Res	oratory sults	Radio A	logical Labor nalysis Result	atory ts	
	Sample Date	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	Lab Sample ID
	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	4.62	203	16.1	< .197	< 3.65	< 3.3	C030310018
	1/30/2003	< 1	< 5	< 5	< 5	< 5	.287	166	15.5	< -1.71	< 6.29	<324	C030310017
	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
Ω	7/15/2004	< 1	5	5	< 5	< 5	< .2	277	19.8	< 17.3	< 40.3	< -12.4	C041970168
-9	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	2.9	< 5	< 1		192	15.3	< 25.6	45.9	< -3.1	C081190047
	4/28/2008	< 1	< 1	2.8	< 5	< 1		185	14.7	< 20.4	79.9	< -4.91	C081190048
	10/29/2008	< 1	3.8	3.9	< 5	< 1	< .2	240	16.3	< 7.81	77.1	< 5.16	C08304013003
	4/30/2009	< 1	3.8	3.9	< 1	< 1	< .2	228	15.9	< 7.32	71	< 7.74	C09120015002
	4/30/2009	< 1	4.5	4.4	< 1	< 1	< .2	160	14.5	< 17.8	85	< 12.3	C09120015003
	10/19/2009	3.8	5.5	4.8	< 1	< 1	< .2	208	14	< .393	58.6	< -1.75	C09292035003
	4/20/2010	< 1	< 5	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
	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

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

MW301	
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			Inor A	rganic Lab Analysis Re	oratory sults	Radio A						
Sample Date	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	Lab Sample ID
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



#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### **MW302**

				Organi Analy	c Laboratory ysis Results		Ino A	rganic Lab Analysis Re	oratory sults	Radio	logical Labor nalysis Result	ratory ts	
	Sample Date	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	Lab Sample ID
	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	1.64	.19	2.9	3	0	970211-010
	2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	.31	.157	2	1	0	970211-011
2	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	.12	1.6	1	2	970807-145
	8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	< .1	2.8	1	0	970807-144
	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	.167	<9	8	< 2.8	C981400087
	5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.164	< 2.3	37	< 2.1	C981400088
	8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.173	< 7.6	11	< -7.6	C982240043
	8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.143	< 1	< 4	< -1	C982240044
	11/16/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.1	< 3.6	8.03	< -7.2	C983200082
	1/25/1999	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.11	< .86	< .3	< -19.8	C990250156
	4/19/1999	< 1	< 5	< 5	< 5	< 5	.22	< .2	.122	< 1.67	< 4.72	< -18.5	C991090062
	7/15/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.157	< .82	< -20.12	< 5.04	C991960148
	10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.069	< 4.18	< 3.33	< -1.15	C992870107
	1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	.381	.05	< .05	< 5.09	< 1.59	C000130119
	4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.11	< 4.56	< 2.89	< -21.3	C001190011
	4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.118	< 1.91	< 4.14	< -16.4	C001190012
	7/27/2000	< 1	< 5	< 5	< 5	< 5	.203	.315	.185	< 6.72	< 4.08	< -2.03	C002090104
	10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.08	< 2.79	22.54	< 5.95	C002910046
	1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.101	< -4.7	< 3.52	< 2.65	C010100095

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW302

				Organi Analy	c Laboratory vsis Results		Ino	rganic Labo Analysis Res	oratory sults	Radiol Aı	ogical Labor 1alysis Resulf	atory is	
	Sample Date	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	Lab Sample ID
	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	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.054	< 5.56	< -1.95	< 4.88	C021010050
	4/10/2002	2	< 5	< 5	< 5	< 5	< .2	< .2	.062	< 2.37	< -2.75	< -3.64	C021010051
	7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.056	9.53	< 2.21	< 14.7	C022060006
	10/3/2002	< 1	< 5	< 5	< 5	< 5	< .002	< .002	.0688	< 9.5	< 2.76	< 10.1	C022760028
	1/30/2003	< 1	< 5	< 5	< 5	< 5	.639	.762	.144	<209	< 1.74	< 2.05	C030310021
	4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0609	< -4.39	43.1	16.2	C031050067
	4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0607	< 2.62	< 1.04	< 4.54	C031050066
Ċ	7/30/2003	< 1	< 5	< 5	< 5	< 5	< .2	.523	1.3	< 6.9	< 4.11	< -9.55	C032110047
·12	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	.347	.479	.99	<702	< 3.23	< 8.62	C062990102
	10/26/2006	< 1	< 5	< 5	< 5	< 5	< .2	.128	.986	< -3.44	< 2.09	< 8.97	C062990103
	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	.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
	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

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

#### MW302

			Organi Analy	c Laboratory ysis Results		Inorganic Laboratory Analysis Results			Radio A			
Sample Date	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	Lab Sample ID
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
4/28/2015	< 1	< 1	< 1	< 1	< 1	.0504	.106	.674	< 7.44	< 3.78	<946	371985003
10/27/2015	< 1	< 1	< 1	< 1	< 1	.0205	.13	.402	< -2.37	< -2.28	< 3.12	384156003
10/27/2015	< 1	< 1	< 1	< 1	< 1	.0272	.157	.454	< -3.02	< -1.71	< -2.76	384156005
4/13/2016	< 1	< 1	< 1	< 1	< 1	.0496	.275	.326	< 3.35	8.77	< -11	395245001

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#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

FLUOR.

Prepared by:

#### MW344

				Organi Analy	c Laboratory vsis Results		Ino	rganic Labo Analysis Res	oratory sults	Radio A	logical Labor nalysis Result	atory ts	
	Sample Date	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	Lab Sample ID
	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
Ģ	10/16/2000	< 1	< 5	< 5	< 5	< 5	1.92	6.81	.525	< 1.79	15.94	< .674	C002910047
14	10/16/2000	< 1	< 5	< 5	< 5	< 5	1.5	5.4	.37	<9	21.88	< 1.57	C002910048
	1/10/2001	< 1	< 5	< 5	< 5	< 5	4.4	6.02	.396	< .529	< 1.5	< 4.46	C010100099
	4/16/2001	< 1	< 5	< 5	< 5	< 5	2.3	7.02	.411	< 1.98	6.24	< -7.79	C011060089
	7/19/2001	< 1	< 5	< 5	< 5	< 5	1.83	5.1	.355	< -2.34	< 1.95	< 7.79	C012010060
	7/24/2001	46	100	59	< 50	< 50	15.8	315	27.7	< 32.1	< 25.1	< 12.4	C012060009
	10/15/2001	< 1	< 5	< 5	< 5	< 5	.655	3.55	.399	< 4.6	< 2.4	< -2	C012880066
	10/15/2001	< 1	< 5	< 5	< 5	< 5	.797	3.79	.329	< .901	9.99	< -8.48	C012880067
	1/22/2002	< 1	< 5	< 5	< 5	< 5	1.37	5.33	.366	< 5.38	6.15	< 6.69	C020220045
	4/10/2002	< 1	< 5	< 5	< 5	< 5	1.63	7.58	.378	<899	< 2.73	< 4.04	C021010052
	7/24/2002	< 1	< 5	< 5	< 5	< 5	2.07	5.44	.49	10.2	< 6.95	< 4.82	C022060007
	10/3/2002	< 1	< 5	< 5	< 5	< 5	.00423	.00456	.323	< 5.83	< 5.09	18.5	C022760030
	10/3/2002	< 1	< 5	< 5	< 5	< 5	.00323	.00478	.366	< 2.54	< 2.37	< 13.8	C022760031
	1/30/2003	< 1	< 5	< 5	< 5	< 5	1.68	4.16	.378	< -2.18	< .631	< 2	C030310019
	4/14/2003	< 1	< 5	< 5	< 5	< 5	3.92	3.28	.268	< .0183	< 8.74	20.4	C031040078
	7/30/2003	< 1	< 5	< 5	< 5	< 5	21.9	35.4	6.18	< 12.1	< 6.22	< 12.3	C032110048
	10/21/2003	< 1	< 5	< 5	< 5	< 5	4.19	32.6	.388	< 5.8	< 4.3	< 3.31	C032950014
	10/21/2003	< 1	< 5	< 5	< 5	< 5	3.63	34.8	3.99	< 3.45	< 3.49	< -1.39	C032950015
	1/26/2004	< 1	< 5	< 5	< 5	< 5	4.22	18.2	2.32	10.1	7.74	< 5.32	C040260082
	4/21/2004	< 1	< 5	< 5	< 5	< 5	2.91	13.3	1.23	< 2.26	< 1.95	< -4.04	C041130037
	7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	12.9	1.61	< .82	< 2.89	< -8.52	C041970170

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Tuesday, September 20, 2016

#### Water Quality Records for

## Sample Date Range: 5/31/1994 - 4/13/2016

#### MW344

				Organic Analy	c Laboratory vsis Results		Ino A	rganic Labo Analysis Res	oratory sults	Radio A	logical Labo nalysis Resul	ratory Its	
	Sample Date	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	Lab Sample ID
	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
Ģ	10/19/2009	1.3	< 1	< 1	< 1	< 1	3.55	3.04	.299	< 1.6	< 4.25	<283	C09292035005
أح	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
	4/28/2015	.87	12.6	7.7	< 1	< 1	1.37	3.05	.116	< .878	< 5.5	<00901	371985005
	4/28/2015	< 1	< 1	< 1	< 1	< 1	.906	1.78	.0971	< -1.64	< 5.21	< -3.42	371985007
	10/27/2015	< 1	< 1	< 1	< 1	< 1	1.71	4.22	.138	< 2.02	< 3.58	<265	384156007
	4/13/2016	< 1	< 1	< 1	< 1	< 1	2.07	4.76	.153	< 10	26	<-15.1	395245007



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# **APPENDIX D**

# ADMINISTRATIVE RECORD AND POST-DECISION RECORD INDICES

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## Enclosure 1 Paducah Documents Added to the Administrative Record Files - Second Quarter CY2016

Document	Document	Document ID	Title	Author	To Affiliation	Notes	Name
Status	Date			Affiliation			
ARF C-410	04/11/16	PPPO-02-3334049-16	PADUCAH FEDERAL FACILITY AGREEMENT - DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT COMPLETION NOTIFICATION LETTER	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01082
ARF4-1	03/09/16	PPPO-02-3398113-16A	RESPONSE TO THE KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION REQUEST FOR ADDITIONAL WORK AT SOLID WASTE MANAGEMENT UNIT 4	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01076
ARF4-1	03/01/16	PPPO-02-3425217-16	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY AND KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION REQUEST FOR A WRITTEN SUMMARY OF EVENTS ASSOCIATED WITH FIELDWORK AT SOLID WASTE MANAGEMENT UNIT 4	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01075
ARF4-1	02/25/16	FFS-E-0001	EMAIL SWMU 4 TEST PIT #5	FPDP	KDEP	No	ENV 1.A-01074
ARF4-1	02/25/16	FFS-E-0002	EMAIL - SWMU 4 WORK	KDEP	KDEP, USEPA-4	No	ENV 1.A-01073
ARFBGOU	05/24/16	FFS-16-0249	COMMENTS ON THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 & 6	САВ		No	ENV 1.A-01105
ARFBGOU	05/19/16	FFS-16-0250	MINOR MODIFICATION FOR THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY DOE/LX/07-1274&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01104
ARFBGOU	05/01/16	FFS-16-0237	U.S. DEPARTMENT OF ENERGY PUBLIC NOTICE FOR THE EXTENSION OF THE PUBLIC COMMENT PERIOD FOR THE PROPOSED PLAN FOR THE REMEDIAL ACTION AT SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO		No	ENV 1.A-01103
ARFBGOU	01/07/16	FFS-16-0088	MINOR MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT, KENTUCKY: SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01078
ARFBGOU	03/31/16	PPPO-02-3476883-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1275&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01081
ARFBGOU	03/18/16	FFS-16-0236	U.S. DEPARTMENT OF ENERGY PUBLIC NOTICE FOR THE PROPOSED PLAN FOR THE REMEDIAL ACTION AT SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS UNITS AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO		No	ENV 1.A-01079
ARFBGOU	03/22/16	FFS-16-0192	REQUEST FOR EXTENSION OF PUBLIC COMMENT PERIOD: PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT, KENTUCKY: SOLID WASTE MANAGEMENT UNITS 5 & 6, DOE/LX/07- 1275&D2/R1	САВ	DOE-PPPO	No	ENV 1.A-01080

Document	Document	Document ID	Title	Author	To Affiliation	Notes	Name
Status	Date			Affiliation			
ARFBGOU	09/21/15	FFS-15-0019	MINOR MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT PGDP KENTUCKY: SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO, KDWM, USEPA- 4		No	ENV 1.A-01077
ARFBGOU	03/18/16	FFS-16-0179	MINOR MODIFICATION FOR THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY DOE/LX/07-1274&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01058
ARFCC	05/13/16	PPPO-02-3238019-16	WRITTEN STATEMENT INITIATING FORMAL DISPUTE RESOLUTION ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-0244&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01106
ARFCC	04/12/16	FFS-16-0223	MINOR MODIFICATION 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	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01086
ARFCC	03/25/16	PPPO-02-3475753-16	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	KDEP, USEPA-4	No	ENV 1.A-01085
ARFCC	03/03/16	PPPO-02-3433587-16	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	KDEP, USEPA-4	No	ENV 1.A-01083
ARFCC	03/25/16	PPPO-02-3477474-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01084
ARFCC	12/10/15	PPPO-02-3305307-16	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMATION 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	KDEP, USEPA-4	No	ENV 1.A-01059
ARFCC	03/17/16	FFS-16-0175	MINOR MODIFICATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP DOE/LX/07-0244&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01060

Document	Document	Document ID	Title	Author	To Affiliation	Notes	Name
Status	Date			Affiliation			
ARFCC	03/18/16	FFS-16-0180	MINOR MODIFICATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP DOE/LX/07-0244&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01061
ARFREF	05/18/16	FFS-16-0241	EPA APPROVAL: COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-2401&D2/R1 PRIMARY DOCUMENT (PREVIOUSLY DOE/OR/07-2099&D2/R9), TRANSMITTAL DATED MAY 16, 2016 (PPPO-02-3406326-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01110
ARFREF	05/18/16	FFS-16-0243	CONCURRENCE TO THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07- 2401&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01109
ARFREF	05/16/16	PPPO-02-3406326-16, DOE/LX-07-2401&D2/R1	TRANSMITTAL OF THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07- 2401&D2/R1) (PREVIOUSLY DOE/OR-07-2099&D2/R9)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01108
ARFREF	11/16/15	PPPO-02-3233844-16B, DOE/LX/07-2400&D1	TRANSMITTAL OF THE D1 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, ANNUAL REVISION -FY 2016 (DOE/LX/07-2400&D1)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01107
ARFREF	04/11/16	FFS-16-0222	MINOR MODIFICATION FOR THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT DOE/LX/07-2401&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01092
ARFREF	04/29/16	DOE/LX/O7-2404/V1, PPPO-02-3510205-16	U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST HALF OF FISCAL YEAR 2016, PADUCAH, KENTUCKY (DOE/LX/O7-2404/V1)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01093
ARFREF	03/31/16	FFS-16-0214	MINOR MODIFICATION FOR THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT, DOE/LX/07-2401&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01090
ARFREF	03/25/16	PPPO-02-3456947-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY GASEOUS DIFFUSION PLANT (DOE/LX/07- 2401&D2)	DOE-PPPO	KDEP, USEPA-4	Νο	ENV 1.A-01089
ARFREF	09/10/15	FFS-15-0015	COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2099&D2/R9)	USEPA-4	DOE-PPPO	No	ENV 1.A-01087

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFREF	03/07/16	PPPO-02-3307761-16	NOTIFICATION OF SCHEDULE EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2016 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX07-2400&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01088
ARFREF	04/01/16	PPPO-02-3497018-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY GASEOUS DIFFUSION PLANT (DOE/LX/07- 2401&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01091
ARFSOU	05/18/16	FFS-16-0242	EPA APPROVAL: ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2306&D2), PRIMARY DOCUMENT TRANSMITTAL DATED MARCH 28, 2016 (PPPO- 02-3181534-16A)	USEPA-4	DOE-PPPO	No	ENV 1.A-01111
ARFSOU	03/09/16	PPPO-02-3305131-16	TRANSMITTAL OF THE RESPONSE TO REGULATOR COMMENTS ON THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT FOR SOLID WASTE MANAGEMENT UNIT 27	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01095
ARFSOU	09/30/15	FFS-15-0034	SUBMITTAL OF COMMENTS TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT (DOE/LX/07-2306&D1)	KDWM	DOE-PPPO	No	ENV 1.A-01094
ARFSOU	03/28/16	DOE/LX/07-2306&D2, PPPO-02-3181534-16A	SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2306&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01096
ARFSOU	03/18/16	FFS-16-0176	EPA CONCURRENCE; ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT FOR SOLID WASTE MANAGEMENT UNIT 27 AT PGDP PADUCAH, KY (DOE/LX/07- 0358&D2/R1/A1)	USEPA-4	DOE-PPPO	No	ENV 1.A-01063
ARFSOU	03/14/16	FFS-16-0170	LETTER OF CONCURRENCE ON THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT FOR SWMU 27 (DOE/LX/07-0358&D2/R1/A1)	KDWM	DOE-PPPO	No	ENV 1.A-01062

Document	Document	Document ID	Title	Author	To Affiliation	Notes	Name
Status	Date			Affiliation			
ARF4-1	06/23/16	PPPO-02-3624433-16	MILESTONE MODIFICATION OF THE D1 ADDENDUM TO THE REMEDIAL INVESTIGATION REPORT FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNIT 4	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01160
ARF4-1	09/13/16	PPPO-02-3751481-16	SOLID WASTE MANAGEMENT UNIT 4 CONTAINED-IN DETERMINATION AND SUPPORTING ANALYTICAL DATA IN ACCORDANCE WITH 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	KDEP	Νο	ENV 1.A-01162
ARF4-1	08/02/16	DOE/LX/07- 0030&D2/R1/A1, PPPO- 02-3553949-16B	ADDENDUM TO THE REMEDIAL INVESTIGATION REPORT FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNIT 4 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-0030&D2/R1/A1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01161
ARF4-1	06/01/16	PPPO-02-3583994-16	MILESTONE MODIFICATION REQUEST FOR THE D1 ADDENDUM TO THE REMEDIAL INVESTIGATION REPORT FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNIT 4 AND SUBSEQUENT SOLID WASTE MANAGEMENT UNIT 4 DOCUMENT (D1 FEASIBILITY STUDY)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01131
ARFBGOU	07/29/16	FFS-16-0349	MINOR MODIFICATION FOR THE RECORD OF DECISION FOR SWMUS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KY DOE/LX/07-0282&D1	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01165
ARFBGOU	09/15/16	PPPO-02-3769639-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE FEASIBILITY STUDY FOR SWMUS 2, 3, 7, AND 30 FOR THE BGOU AT PGDP, PADUCAH, KY DOE/LX/07-1274&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01168
ARFBGOU	09/12/16	FFS-16-0352	MINOR MODIFICATION FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01172
ARFBGOU	09/09/16	FFS-16-0350	MINOR MODIFICATION FOR THE RECORD OF DECISION FOR SWMUS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KY DOE/LX/07-1282&D1	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01167
ARFBGOU	07/29/16	PPPO-02-3686790-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MOD TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE FEASIBILITY STUDY FOR SWMUS 2, 3, 7, AND 30 FOR THE BGOU AT PGDP, PADUCAH, KY, DOE/LX/07-1274&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01164
ARFBGOU	09/09/16	PPPO-02-3764162-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATIONS TO EXTEND THE SUBMITTAL DATE FOR THE D1 RECORD OF DECISION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1282&D1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01166
ARFBGOU	07/29/16	PPPO-02-3687634-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATIONS TO EXTEND THE SUBMITTAL DATE FOR THE DI RECORD OF DECISION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1282&D1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01163

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	07/25/16	FFS-16-0318	MINOR MODIFICATION FOR THE FEASIBILITY STUDY FOR SWMUS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1274&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01137
ARFBGOU	08/26/14	FFS-E-0004	E-MAIL: SWMU 5 SURFACE WATER	LATA	KDEP	No	ENV 1.A-01138
ARFBGOU	06/29/16	FFS-E-0007	EPA REQUEST FOR ELECTRONIC COPY OF MOST CURRENT VERSION OF TRI-PARTY INFORMAL DISPUTE WORK PRODUCT BGOU 2, 3, 7, AND 30 APPENDIX F TABLE (FROM MEETINGS ON OR AFTER AUGUST 7, 2015)	USEPA-4	DOE-PPPO, DOE- PPPO	No	ENV 1.A-01135
ARFBGOU	07/22/16	PPPO-02-3585356-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATIONS TO EXTEND THE SUBMITTAL DATE FOR THE RECORD OF DECISION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6, DOE/LX/07-1281&D1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01136
ARFBGOU	06/01/16	PPPO-02-3591764-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE FEASIBILITY STUDY FOR SWMUS 2, 3, 7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/1274&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01132
ARFBGOU	06/20/16	PPPO-02-3618623-16	PADUCAH FFA - MINOR MOD TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 FOR THE BURIAL GROUND OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1274&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01133
ARFBGOU	06/24/16	FFS-16-0320	MINOR MODIFICATION FOR THE RECORD OF DECISION FOR SWMUS 5 AND 6 OF THE BGOU AT PGDP, PADUCAH, KY, DOE/LX/07-1282&D2	DOE-PPPO, KDEP, USPEA-4		No	ENV 1.A-01134
ARFBGOU	06/20/16	FFS-16-0282	MINOR MODIFICATION FOR THE D1 REMEDIAL INVESTIGATION REPORT ADDENDUM	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01119
ARFCC	06/20/16	PPPO-02-3619331-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MOD TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY DOE/LX/07-0244&D2	DOE-PPPO	KDEP, USEPA-4	Νο	ENV 1.A-01169
ARFCC	09/12/16	FFS-16-0351	MINOR MODIFICATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY, DOE/LX/07-0244&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01173

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Status	Date			Affiliation			
ARFCC	07/06/16	PPPO-02-3648150-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY, DOE/LX/07- 0244&D2	DOE-PPPO	KDEP, USEPA-4	Νο	ENV 1.A-01170
ARFCC	07/29/16	PPPO-02-3687117-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MOD TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY DOE/LX/07-0244&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01171
ARFCC	09/15/16	PPPO-02-3770470-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY DOE/LX/07-0244&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01175
ARFCC	06/01/16	PPPO-02-3588044-16	ELEVATION TO THE SENIOR EXECUTIVE COMMITTEE THE FORMAL DISPUTE ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-0244&D2	DOE-PPPO	USEPA-4, KDEP	No	ENV 1.A-01140
ARFCC	07/25/16	FFS-16-0319	MINOR MODIFICATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY DOE/LX/07-0244&D2	DOE-PPPO, KDEP, USEPA-4		No	ENV 1.A-01145
ARFCC	04/15/16	PPPO-02-3522532-16	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	KDEP, USEPA-4	No	ENV 1.A-01139
ARFCC	05/31/16	FFS-16-0259	RECORD CLARIFICATION: DEPARTMENT OF ENERGY CORRESPONDENCE (PPPO-02-3238019-16) MAY, 2016 - WRITTEN STATEMENT INITIATING FORMAL DISPUTE RESOLUTION ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0244&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-01120
ARFREF	09/15/16	PPPO-02-3771091-16	EXTENSION FOR SUBMITTAL OF THE ADDENDUM TO THE FIVE-YEAR REVIEW FOR REMEDIAL ACTIONS AT PGDP, PADUCAH, KY (DOE/LX/07- 1289&D2/R1/A2/R1)	DOE-PPPO -	KDEP, USEPA-4	No	ENV 1.A-01174

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Status	Date			Affiliation			
ARFREF	06/22/16	DOE/LX/07- 0107&D2/R7/V1, PPPO- 02-3624889-16	TRANSMITTAL OF THE UPDATED 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/R7/V1)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01176
ARFREF	09/14/16	FFS-16-0355	EXTENSION REQUEST FOR REVIEW OF THE 2016 SITE MANAGEMENT PLAN (DOE/LX/07-2400&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01181
ARFREF	07/19/16	DOE/LX/07-2400&D2, PPPO-02-3310806-16	TRANSMITTAL OF THE D2 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, ANNUAL REVISION - FISCAL YEAR 2016 (DOE/LX/07-2400&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01177
ARFREF	09/14/16	FS-16-0353	EXTENSION REQUEST: EPA COMMENTS ON D2 SITE MANAGEMENT PLAN, PGDP, PADUCAH, KY, ANNUAL REVISION - FISCAL YEAR 2016 (DOE/LX/07-2400&D2), DATE ISSUED JULY 19, 2016 (PPPO-02-3310809- 16) EPA ID DY88900008982, MCCRACKEN COUNTY, KY	USEPA-4	DOE-PPPO	No	ENV 1.A-01180
ARFREF	08/16/16	FFS-16-0337	NOTIFICATION OF EXTENSION FOR REVIEW OF THE 2016 SITE MANAGEMENT PLAN (DOE/LX/07-2400&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01179
ARFREF	08/16/16	FFS-16-0336	EXTENSION NOTIFICATION FOR EPA COMMENTS ON: D2 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, ANNUAL REVISION - FISCAL YEAR 2016 (DOE/LX/07-	USEPA-4	DOE-PPPO	No	ENV 1.A-01178
ARFREF	04/22/16	PPPO-02-3524266-16	EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2016 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY DOE/LX/07-2400&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01143
ARFREF	04/15/16	PPPO-02-3516177-16	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE COMMUNITY RELATIONS PLAN UNDER THE FEDERAL FACILITY AGREEMENT AT THE U.S. DEPARTMENT OF ENERGY GASEOUS DIFFUSION PLANT (DOE/LX/07- 2401&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01142
ARFREF	07/10/16	PPPO-02-3605143-16	EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2016 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY DOE/LX/07-2400&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01144
ARFREF	07/29/16	FFS-16-0311	EPA COMMENTS: APPENDIX C - WATER POLICY ADDITIONAL ACTIONS: ADDENDUM TO THE FIVE-YEAR REVIEW FOR REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1289&D2/R1/A2, TRANSMITTAL DATED MARCH 30, 2016 (PPPO-02-3467420-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01146
ARFREF	03/30/16	DOE/LX/07- 1289&D2/R1/A2, PPPO- 02-3467420-16	TRANSMITTAL OF THE ADDENDUM TO THE FIVE-YEAR REVIEW FOR REMEDIAL ACTIONS AT PGDP, PADUCAH, KY, (DOE/LX/07- 1289&D2/R1/A2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01141
ARFREF	06/14/16	FFS-16-0274	EPA APPROVAL: EXTENSION FOR THE SUBMITTAL OF THE D2 FISCAL YEAR 2016 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-2400&D2), TRANSMITTAL DATE JUNE10, 2016 (PPPO-02-3605143-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01121

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ARFREF	06/20/16	FFS-16-0283	APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE SITE MANAGEMENT PLAN, PGDP - ANNUAL REVISION FY2016 (DOE/LX/07-2400&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01122
ARFSOU	08/12/16	DOE/LX/07- 2306&D2/A1/R1, PPPO- 02-3613659-16A	TRANSMITTAL OF THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT FOR SOLID WASTE MANAGEMENT UNIT 229 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2306&D2/A1/R1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01182
ARFSOU	09/08/16	FFS-16-0346	CONCURRENCE WITH THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT FOR SWMU 229 (DOE/LX/07-2306&D2/A1/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01183
ARFSOU	03/18/16	DOE/LX/07-2306&D2/A1, PPPO-02-3458054-16	TRANSMITTAL OF THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT FOR SOLID WASTE MANAGEMENT UNIT 229 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2306&D2/A1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01150
ARFSOU	06/14/16	FFS-16-0275	SUBMITTAL OF COMMENTS TO THE ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT FOR SWMU 229 (DOE/LX/2306&D2/A1)	KDWM	DOE-PPPO	No	ENV 1.A-01124
ARFSOU	04/26/16	FFS-16-0232	CONCURRENCE WITH THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT (DOE/LX/07-2306&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01123
ARFSOU	06/15/16	FFS-16-2076	EPA COMMENTS: ADDENDUM TO THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT FOR SOLID WASTE	USEPA-4	DOE-PPPO	No	ENV 1.A-01125
ARFSOU	07/02/16	PPPO-02-2880977-15B, DOE/LX/07-2306&D1	TRANSMITTAL OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 REPORT AT PGDP, PADUCAH, KY (DOE/LX/07- 2306&D1); SWMU ASSESSMENT REPORT FOR SWMU 32 (DOE/LX/07- 2183&D1); AND SWMU ASSESSMENT REPORT FO SWMU 33 (DOE/LX- 97-2184&D1); RESPONSES TO COMMENTS FROM KDEP AND EPA ON THE SITE EVALUATION REPORT FOR SWMU 13, BGOU, PGDP, PADUCAH, KY, DOE/LX/07-1259&D1 PARTS A-L	DOE-PPPO	USEPA-4, KDWM	No	ENV 1.A-01126
ARFSWMU2 7	08/19/16	PPPO-02-3728780-16	NOTIFICATION OF SCHEDULE EXTENSION FOR SUBMITTAL OF THE REMOVAL NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 27	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01185
ARFSWMU2 7	07/20/16	FFS-16-0344	EPA COMMENTS: REMOVAL NOTIFICATION FOR SWMU 27 AT PGDP, PADUCAH, KY DOE/LX/07-2406&D1, TRANSMITTAL DATED JUNE 21, 2016 (PPPO-02-3536729-16C)	USEPA-4	DOE-PPPO	No	ENV 1.A-01184
ARFSWMU2 7	09/09/16	FFS-16-0348	APPROVAL OF THE REMOVAL NOTIFICATION FOR SWMU 27 (DOE/LX/07-2406&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01188
ARFSWMU2 7	09/09/16	FFS-16-0347	EPA APPROVAL: REMOVAL NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 27 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LS/07-2406&D2) TRANSMITTAL DATED SEPTEMBER 8, 2016 (PPPO-02-3675584-16B)	USEPA-4	DOE-PPPO	No	ENV 1.A-01187
ARFSWMU2 7	09/08/16	DOE/LX/07-2406&D2, PPPO-02-3675584-16B	REMOVAL NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 27 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, ,KENTUCKY, DOE/LX/07-2406&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01186

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Status	Date			Affiliation			
ARFSWMU2 7	06/02/92	FFS-16-0322	RCRA LESS THAN 90-DAY CLOSURE OF THE C-722 NEUTRALIZATION UNIT, SWMU NO. 27	MMES	MMES	No	ENV 1.A-01147
ARFSWMU2 7	07/22/16	FFS-16-0307	SUBMITTAL OF COMMENTS ON THE REMOVAL NOTIFICATION FOR SWMU 27 (DOE/LX/07-2406&D1)	KDWM	DOE-PPPO	No	ENV 1.A-01149
ARFSWMU2 7	06/21/16	DOE/LX/07-2406&D1, PPPO-02-3536729-16C	REMOVAL NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 27 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2406&D1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01148
## Enclosure 2 Paducah Documents Added to the Post-Decision Files- Second Quarter CY2016

Document Document ID Title   Status Date Philo FFS-16-0254 RESPONSE TO THE EXPEDITED REVIEW REQUEST FOR TH 400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT TH 400 VAPOR INTRUSION STUDY WORK PLAN TO SUPORT TH 400 VAPOR INTRUS SUPPORT TH 400 VAPOR INTRUS SUPPORT TH 400 VAPOR INTRUS SUPPORT	Author Affiliation	To Affiliation	Notes	Name			
6PHASE-PD	05/25/16	FFS-16-0254	RESPONSE TO THE EXPEDITED REVIEW REQUEST FOR THE C- 400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE-YEAR REVIEW AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07- 2403&D1)	KDWM	DOE-PPPO	No	ENV 1.A-01113
6PHASE-PD	04/11/16	DOE/LX/07-2182&D1, PPPO-02-3370234-16C	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)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01112
6PHASE-PD	05/26/16	FFS-16-0255	EPA ACKNOWLEDGEMENT: TRANSMITTAL OF THE C-400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE-YEAR REVIEW AT PGDP, PADUCAH, KY (DOE/LX/07-2403&D1), TRANSMITTAL DATED APRIL 29, 2016 (PPPO-02-3455524-16B)	USEPA-4	DOE-PPPO	No	ENV 1.A-01114
6PHASE-PD	04/26/16	PPPO-02-3477232-16	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGARDING THE PATH FORWARD FOR A VAPOR INTRUSION STUDY AT THE C-400 MAINTENANCE BUILDING	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01098
6PHASE-PD	03/16/16	PPPO-02-3450298-16	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY STATUS REQUEST FOR THE VAPOR INTRUSION STUDY AT THE C 400 MAINTENANCE BUILDING	DOE-PPPO -	KDEP, USEPA-4	No	ENV 1.A-01097
6PHASE-PD	03/22/16	FFS-16-0182	EPA REPLY TO: RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY STATUS REQUEST FOR THE VAPOR INTRUSION STUDY AT THE C-400 MAINTENANCE BUILDING, U.S. DOE PPPO-02-344502298-16	USEPA-4	DOE-PPPO	No	ENV 1.A-01066
6PHASE-PD	03/22/16	FFS-16-0181	FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PGDP C-400 BUILDING VAPOR INTRUSION STUDY ADDENDUM (DOE/LX/07- 1289&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01065
6PHASE-PD	03/08/16	FFS-16-0159	APPROVAL OF THE WATER POLICY AREA VAPOR INTRUSION SCREENING STUDY REPORT FOR FIVE-YEAR REVIEW OF REMEDIAL ACTIONS (1289&D2/R1/A1/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01064
GW3-PD	05/20/16	FFS-16-0246	EPA APPROVAL: REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION AT PGDP, PADUCAH, KY (DOE/LX/07-1280&D2/R3) PRIMARY DOCUMENT, TRANSMITTAL DATED APRIL 27, 2016 (PPPO-02-3449802-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01116
GW3-PD	05/20/16	FFS-16-0247	APPROVAL OF THE REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION (1280&D2/R3) AND THE INCORPORATED ADDENDUM TO THE REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION - APPENDIX D QUALITY ASSURANCE PROJECT PLAN (1280&D2/R2/A2)	KDWM	DOE-PPPO	No	ENV 1.A-01115
GW3-PD	04/11/16	PPPO-02-3504107-16	EXTENSION FOR THE SUBMITTAL OF THE D2/R3 REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION (DOE/LX/07-1280&D2/R3)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01101

# Paducah Documents Added to the Post-Decision Files- Second Quarter CY2016

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
GW3-PD	09/30/15	FFS-15-0035	CONDITIONAL CONCURRENCE TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES TO THE RECORD OF DECISION FOR THE INTERIM REMEDIAL ACTION OF THE NORTHWEST PLUME (DOE/LX/07-1291&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01099
GW3-PD	09/30/15	FFS-15-0025	EPA REGION 4 CONDITIONAL CONCURRENCE ON EXPLANATION OF SIGNIFICANT DIFFERENCE TO THE RECORD OF DECISION FOR THE INTERIM REMEDIAL ACTION OF THE NORTHEAST PLUME PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07- 1291&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-01100
GW3-PD	03/28/16	FFS-16-0191	U.S. EPA REGION 4 COMMENTS ON: APPENDIX D - NORTHEAST PLUME OPTIMIZATION QUALITY ASSURANCE PROJECT PLAN FOR THE REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION AT PGDP, PADUCAH, KY (DOE/LX/07-1280&D2/R2/A1), FEBRUARY 2106	USEPA-4	DOE-PPPO	No	ENV 1.A-01069
GW3-PD	03/08/16	FFS-16-0160	APPROVAL OF THE REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION (1289&D2/R2)	KDWM	DOE-PPPO	No	ENV 1.A-01067
GW3-PD	03/09/16	FFS-16-0163	SUBMITTAL OF COMMENTS TO THE ADDENDUM TO THE REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION - APPENDIX D QUALITY ASSURANCE PROJECT PLAN (1280&D2/R2/A1)	KDWM	DOE-PPPO	No	ENV 1.A-01068
SWP-PD	05/25/16	FFS-16-0251	EPA COMMENTS: ADDENDUM TO THE FINAL CHARACTERIZATION REPORT FOR SOLID WASTE MANAGEMENT UNITS 211A AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE U.S. DEPARTMENT OF ENERGY PGDP (DOE/LX/07-1288&D2/A1/R1), SECONDARY DOCUMENT, TRANSMITTAL DATED APRIL 25, 2016 (PPPO-02- 3444761-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01118
SWP-PD	05/23/16	FFS-16-0248	APPROVAL OF THE ADDENDUM TO THE FINAL CHARACTERIZATION REPORT FOR SOLID WASTE MANAGEMENT UNITS 211A AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-1288&D2/A1/R1)	KDWM	DOE-PPPO	No	ENV 1.A-01117
SWP-PD	04/25/16	DOE/LX/07- 1288&D2/R1,PPPO-02- 3444761-16	TRANSMITTAL OF THE ADDENDUM TO THE FINAL CHARACTERIZATION REPORT FOR SOLID WASTE MANAGEMENT UNITS 211-A AND 211-B AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY DOE/LX/07-1288&D2/R1	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01102
SWP-PD	03/18/16	FFS-16-0174	EPA ACKNOWLEDGEMENT OF RECEIPT: FINAL CHARACTERIZATION NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 211-A AND SOLID WASTE MANAGEMENT UNIT 211-B AT THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (PPPO-02- 3287657-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01072

# Paducah Documents Added to the Post-Decision Files- Second Quarter CY2016

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
SWP-PD	03/16/16	FFS-16-0172	FINAL CHARACTERIZATION NOTIFICATION FOR SOLID WASTE MANAGEMENT UNIT 211 A AND SOLID WASTE MANAGEMENT UNIT 211B (PPPO-02-3287657-16	KDWM	DOE-PPPO	No	ENV 1.A-01071
SWP-PD	02/02/16	PPPO-02-3369176-16	TRANSMITTAL OF THE RECORD OF CONVERSATION FOR SOLID WASTE MANAGEMENT UNIT 1 POST-TREATMENT SOIL BORING AND MONITORING WELL LOCATIONS	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01070

# Paducah Documents Added to the Post-Decision Files- Third Quarter CY2016

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
6PHASE-PD	12/21/15	DOE/LX/07-2202&D1, PPPO-02-3162756-16C	TRANSMITTAL OF THE TREATABILITY STUDY REPORT FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-2202&D1)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01189
6PHASE-PD	09/15/16	PPPO-02-3772164-16	EXTENSION FOR SUBMITTAL OF THE C-400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE-YEAR REVIEW AT PGDP, PADUCAH, KY (DOE/LX/07-2403&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01193
6PHASE-PD	09/06/16	PPPO-02-3751665-16	MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01192
6PHASE-PD	08/05/16	PPPO-02-360022-16	RESPONSE TO KENTUCKY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENVIRONMENTAL PROTECTION AGENCY CONCERNING APPROVAL OF THE TREATABILITY STUDY REPORT FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PGDP, PADUCAH, KY (DOE/LX/07-2202&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01190
6PHASE-PD	08/08/16	FFS-16-0325	EPA COMMENTS: C-400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE- YEAR REVIEW AT PGDP, PADUCAH, KY (DOE/LX/07-2403&D1), TRANSMITTAL DATED APRIL 29, 2016 (PPPO-02-3455524-16B)	USEPA-4	DOE-PPPO	No	ENV 1.A-01191
6PHASE-PD	05/10/16	DOE/LX/07-2202&D2, PPPO-02-3440759-16	TRANSMITTAL OF THE TREATABILITY STUDY REPORT FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2202&D2	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01156
6PHASE-PD	07/20/16	FFS-16-0317	E-MAIL: INTRUSION STUDY WORK PLAN REVIEW TIMEFRAME	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01157
6PHASE-PD	02/19/16	FFS-16-0315	E-MAIL - RE: D1 TREATABILITY STUDY FOR SEE AT C-400 - EXTENSION REQUEST	USEPA-4	DOE-PPPO, KDEP	No	ENV 1.A-01153
6PHASE-PD	04/29/16	DOE/LX/07-2403&D1, PPPO-02-3455524-16B	TRANSMITTAL OF THE C-400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE-YEAR REVIEW AT PGDP, PADUCAH, KY (DOE/LX/07- 2403&D1)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01155
6PHASE-PD	07/29/16	FFS-16-0310	SUBMITTAL OF COMMENTS ON THE C-400 VAPOR INTRUSION STUDY WORK PLAN TO SUPPORT THE ADDITIONAL ACTIONS FOR THE CERCLA FIVE-YEAR REVIEW (DOE/LX/07-2403&D1)	KDWM	DOE-PPPO	No	ENV 1.A-01158
6PHASE-PD	04/28/16	PPPO-02-3539755-16	EXTENSION FOR SUBMITTAL OF THE D2 TREATABILITY STUDY REPORT FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-2202&D2)	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01154
6PHASE-PD	02/19/16	FFS-16-0314	E-MAIL - RE: D1 TREATABILITY STUDY FOR SEE AT C-400 - EXTENSION REQUEST	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01152
6PHASE-PD	02/19/16	FFS-16-0313	E-MAIL - RE: D1 TREATABILITY STUDY FOR SEE AT C-400 - EXTENSION REQUEST	KDEP	DOE-PPPO, USEPA-4	No	ENV 1.A-01151
6PHASE-PD	05/27/16	FFS-16-0258	APPROVAL OF THE TREATABILITY STUDY REPORT FOR THE C- 400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-2202&D2)	KDWM	DOE-PPPO	No	ENV 1.A-01129

# Paducah Documents Added to the Post-Decision Files- Third Quarter CY2016

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
6PHASE-PD	06/09/16	FFS-16-0271	EPA APPROVAL: TREATABILITY STUDY REPORT FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-2202&D2), TRANSMITTAL DATED MAY 10, 2016 (PPPO- 02-3440759-16)	USEPA-4	DOE-PPPO	No	ENV 1.A-01130
C-410-PD	06/09/16	FFS-16-0270	EPA APPROVAL FOR THE REMOVAL ACTION REPORT FOR THE C- 410 COMPLEX INFRASTRUCTURE D&D PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-2182&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-01128
C-410-PD	06/03/16	FFS-16-0261	APPROVAL OF THE REMOVAL ACTION REPORT FOR THE C-410 COMPLEX INFRASTRUCTURE DECONTAMINATION AND DECOMMISSIONING PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LOX/07-2182&D1)	KDWM	DOE-PPPO	No	ENV 1.A-01127
GW3-PD	04/27/16	DOE/LX/07-1280&D2/R3, PPPO-02-3449802-16	TRANSMITTAL OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION OPTIMIZATION REMEDIAL ACTION WORK PLAN, DOE/LX/07-1280&D2/R3	DOE-PPPO	KDEP, USEPA-4	No	ENV 1.A-01159
SWP-PD	09/01/16	DOE/LX/07-2405&D1, PPPO-02-3567814-16A	TRANSMITTAL OF THE REMEDIAL ACTION COMPLETION REPORT 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/07-2405&D1	DOE-PPPO	KDEP, USEPA-4	Νο	ENV 1.A-01194

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**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

Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW155

	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results		Metal			Poly	chlorinate Analysis l	ed biphen Results	yl							
Sample Date	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	Lab Sample ID
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			99.1										C13351094007
12/17/2013	1600	< 20			< 20			98.6										C13351094006
3/26/2014	1900	< 20			< 20			106										C14085027001
6/12/2014	1590	< 25			< 25			107										350627004
9/15/2014	1850	.44			.31			153										356931002

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW155

		Organic Laboratory Analysis Results				Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								
Sample Date	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	Lab Sample ID
12/2/2014	817	< 1			< 1			160										362435001
12/2/2014	810	< 1			< 1			161										362435002
3/31/2015	583	< 10			< 10			142										369938002
6/16/2015	2500	< 50			< 50			110										375398002
9/14/2015	4560	< 100			< 100			76.5										381234002
12/8/2015	4110	< 50			< 50			120										387183002
12/8/2015	4080	< 50			< 50			123										387183003
3/23/2016	3760	< 50			< 50			109										393849001
H 6/6/2016	5370	< 100			< 100			149										398881002

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Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW156

		(	Organic Lab Analysis R	oratory esults		Radiol An	ogical Labo alysis Resu	ratory lts	Metal			Polyo	chlorinate Analysis l	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
8/13/2014	50000	< 20			< 20			< .723										160-7947-6
9/3/2014	57000	< 40			< 40			< 1.81										160-8215-12
9/15/2014	56500	15.2			3.67			< 1.62										356931003
12/2/2014	925	< 500			8.79			< 9.1										362435003

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

MW156	
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	Organic Laboratory Analysis Results				Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results									
Sample Date	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	Lab Sample ID
3/31/2015	3390	< 500			< 500			< -3.32										369938003
6/16/2015	9720	< 500			< 500			< 3.72										375398003
6/16/2015	8270	< 500			< 500			< 1.43										375398004
9/14/2015	1190	< 50			< 50			<-9.6										381234003
12/8/2015	14100	< 500			< 500			<175										387183001
3/23/2016	13100	170			< 50			< -8.5										393849002
6/6/2016	14600	< 500			< 500			< 1.33										398881001
6/6/2016	15300	< 500			< 500			< 2.38										398881003



#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

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Prepared by:

#### MW175

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		Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results		Metal			Polyc	chlorinate Analysis F	ed biphen Results	yl							
	Sample Date	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	Lab Sample ID
	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	<722	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
μ	12/13/2010	9800	< 250			< 50	26.6	274	363	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023005
2	3/23/2011	5800	< 100			< 100	24.3	366	488	< .005	< 167	< 176	< 137	< 98	< 118	< 68.6	6730	< 88.2	C11082024002
	6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
	6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
	6/13/2011	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
	6/13/2011	5900	< 250			< 50	13.5	201	292	< .005									C11165011004
	9/14/2011	6900	< 250			< 50	< -1.01	218	228	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087005
	3/12/2012	3700	< 50			< 50	< 5.16	156	279	< .005									C12072031011
	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

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NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

MW175	
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		(	Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Labor llysis Result	atory is	Metal			Polycl A	hlorinateo nalysis R	l bipheny esults	1			
Sample Date	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	Lab Sample ID
9/15/2014	855	< 10			< 10			111										356931004
3/30/2015	623	< 10			6.1			124										369938005
3/30/2015	575	< 10			5.2			98.2										369938004
3/23/2016	1330	< 20			< 20			167										393849004
3/23/2016	1350	< 20			< 20			160										393849003

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Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

FLUOR.

Prepared by:

MW342

			C	)rganic Labo Analysis Re	oratory esults		Radiolo Ana	gical Laboı alysis Resul	ratory ts	Metal			Polyc	chlorinate Analysis I	ed biphen Results	yl			
	Sample Date	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	Lab Sample ID
	6/16/2009	3000	< 50			< 50	16.7	616	805	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168006001
	7/20/2009	4300	< 250			< 50	<785	510	837	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09201016001
	8/18/2009	5800	< 50			< 50	16	985	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230024001
	12/14/2009	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
	12/14/2009	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
	3/23/2010	4700	< 50			< 50	10.3	386	827	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025007
	6/22/2010	5400	< 250			< 50	11.4	642	750	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173039001
	9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
<u>Е</u> -1	9/23/2010	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
4	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

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NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

MW342
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		(	Organic Lab Analysis Re	oratory esults		Radiolo Ana	gical Laboı llysis Resul	ratory ts	Metal			Polycl A	hlorinate nalysis R	l bipheny esults	l			
Sample Date	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	Lab Sample ID
3/26/2015	1140	5.96			.66			322										369707001
3/23/2016	1800	< 25			< 25			237										393849005



Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

FLUOR.

Prepared by:

#### MW343

			(	Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Labo alysis Resul	ratory ts	Metal			Polyo	chlorinate Analysis I	ed biphen Results	yl			
	Sample Date	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	Lab Sample ID
	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	< 250			< 250	92.1	5660	9010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005002
	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
Ч Ц	6/22/2010	32000	< 2500			< 500	22	6440	9250	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173027001
6	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

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NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

MW343
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		(	Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Labo lysis Resul	ratory Its	Metal			Polyc A	hlorinate Analysis R	d bipheny acsults	1			
Sample Date	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	Lab Sample ID
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
3/26/2015	29300	9.73			2.09			4590										369707002
6/1/2015	28600	< 500	< 500	< 500	< 500			4030										374452006
3/21/2016	27700	.84			10.5			4070										393717001

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Water Quality Records for

Sample Date Range: 6/16/2009 - 6/7/2016

		(	Organic Lal Analysis F	ooratory Results		Radiolo An	ogical Labo alysis Resu	ratory lts	Metal			Polyc A	hlorinate Analysis R	d bipheny asults	1			
Sample Date	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	Lab Sample ID
6/23/2011	52000	< 2500	< 500	< 500	< 500	8.66	22.7	< 16.1	.014									C11174017004

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

MW405-PRT5

			C	)rganic Lab Analysis Ro	oratory esults		Radiolo Ana	gical Laboı llysis Resul	ratory ts	Metal			Polycl A	nlorinated nalysis R	l biphenyl esults	l			
	Sample Date	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	Lab Sample ID
	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
E-1	12/2/2014	481	< 10			< 10			79.8										362435004
9	3/30/2015	1000	< 20			< 20			41.8										369938006
	6/12/2015	4270	< 100	< 100	< 100	< 100			34.4										375135001
	6/12/2015	4010	< 50			< 50			41.9										375132002
	9/15/2015	622	< 10			< 10			< -6.41										381234004
	12/9/2015	663	< 10			< 10			32.5										387183004
	3/23/2016	2930	< 10			< 10			< 10.5										393849006
	6/7/2016	2180	< 50			< 50			29.5										398881004

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Water Quality Records for

Sample Date Range: 6/16/2009 - 6/7/2016

			Organic Lal Analysis F	ooratory Results		Radiolo An	ogical Labo alysis Resul	ratory Its	Metal			Polyc A	hlorinate nalysis R	d bipheny cesults	1			
Sample Date	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	Lab Sample ID
6/23/2011	6500	< 500	< 100	< 100	< 100	11.4	45.5	47.7	< .005									C11174017003

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW406-PRT5

			Organic Lab Analysis R	oratory esults		Radiolo An	ogical Labo alysis Resul	ratory Its	Metal			Polyc A	hlorinate Analysis R	d bipheny tesults	1			
Sample Date	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	Lab Sample ID
12/28/201	1 24000	< 500			< 100	7.77	54.5	51.5	< .005									C11362008002
3/15/2012	2 10000	< 100			< 100	< -2.11	45.3	48.6	< .005									C12075015001
6/20/2012	2 5100	< 500			< 100	< 1.89	23.6	< 17.5	< .005									C12172011002
9/20/2012	2 4800	< 100			< 100	<0458	31.2	23.5	< .005									C12264031002
12/28/2012	2 1200	< 10			< 10			< 4.01										C12363012005
3/27/201	3 940	< 20			< 20			< 7.56										C13086018001
9/16/201	3 9600	< 100			< 20			35.5										C13259034004
12/18/201	3 790	< 10			< 10			26.5										C13353003002
H 3/26/2014	4 460	< 5			< 5			55.9										C14085027004
6/16/2014	4 95.4	< 2			< 2			32.5										350866003
9/16/2014	4 812	< 10			< 10			30.1										356931008
12/2/2014	4 2290	1.1			.87			52										362435005
3/30/201	5 183	< 4			< 4			68.6										369938007
6/12/201	5 100	< 2			< 2			47.1										375132003
6/12/201	5 111	< 2	< 2	< 2	< 2			43.2										375135002
9/15/201	5 12500	< 250			< 250			< 18.3										381234005
12/9/201	5 2660	< 50			< 50			74.3										387183005
3/23/201	6 4120	< 50			< 50			49										393849007
6/7/201	6 9270	< 100			< 100			52.7										398881005

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW407-PRT4

-																			
			(	Organic Lab Analysis R	oratory esults		Radiolo An	ogical Labo alysis Resul	ratory lts	Metal			Polycl A	hlorinate nalysis R	d bipheny esults	1			
	Sample Date	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	Lab Sample ID
	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
E-2	3/26/2014	2300	< 20			< 20			67.6										C14085027005
<sup>N</sup>	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
	3/30/2015	10300	< 200			< 200			45.8										369938008
	6/12/2015	18200	< 250			< 250			< 11.6										375132001
	6/12/2015	18600	< 250	< 250	< 250	< 250			< 11.3										375135003
	9/15/2015	671	< 10			< 10			55.1										381234006
	12/9/2015	544	< 10			< 10			81										387183006
	3/23/2016	3300	< 10			< 10			57.6										393849008
	6/7/2016	9180	< 100			< 100			115										398881006

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Water Quality Records for

Sample Date Range: 6/16/2009 - 6/7/2016

		(	Organic Lab Analysis R	ooratory Results		Radiolo Ana	ogical Labo alysis Resu	ratory lts	Metal			Polyc A	hlorinate nalysis R	d bipheny esults	1			
Sample Date	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	Lab Sample ID
6/23/2011	95000	< 5000	< 1000	< 1000	< 1000	< 2.51	13.3	< 14.5	< .005									C11174017001

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

**MW408-PRT5** 

			C	Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Laboı Ilysis Resul	ratory ts	Metal			Polycl A	hlorinated nalysis R	l biphenyl esults	l			
	Sample Date	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	Lab Sample ID
1	2/14/2011	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
1	2/28/2012	1100000	< 5000			< 5000			< 4.33										C12363012007
	3/27/2013	480000	< 10000			< 10000			< 7.73										C13086018003
	9/16/2013	97000	< 2500			< 500			52.9										C13259034006
1	2/18/2013	65000	< 1000			< 1000			< 8.07										C13353003004
	3/26/2014	7700	< 50			< 50			67.7										C14085027006
E-2.	6/16/2014	2560	< 40			< 40			111										350866001
4	8/13/2014	6000	< 2			< 2			88.2										160-7947-7
	9/3/2014	110	< .08			< .08			102										160-8215-10
	9/16/2014	49.1	< 1			< 1			63										356931010
	12/2/2014	37.6	< 1			< 1			93.7										362435007
	3/30/2015	234	< 4			< 4			103										369938009
	6/12/2015	8990	< 200	< 200	< 200	< 200			36										375135004
	6/12/2015	3490	< 50			< 50			43.1										375132004
	9/15/2015	115	< 2			< 2			51.5										381234001
	12/9/2015	52.4	< 1			< 1			39.5										387183007
	3/23/2016	665	.94			.84			24.5										393849009
	6/7/2016	371	< 5			< 5			71.6										398881007

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW421-PRT1

		(	Organic Lab Analysis R	oratory esults		Radiolo An:	ogical Labo alysis Resul	ratory Its	Metal			Poly	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
3/24/2015	19300	< 500			< 500			892										369707003
3/21/2016	9860	21.5			.54			4160										393717002

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW421-PRT2

		(	Organic Lab Analysis R	oratory esults		Radiolo Ana	ogical Labor alysis Resul	ratory lts	Metal			Polyc	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
H 3/23/2011	62000	< 500			< 500	8.6	220	340	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .15	< .09	C11082024004
o 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
3/24/2015	55900	< 1000			< 1000			249										369707004
3/21/2016	27400	8.01			1.39			1240										393717003

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW421-PRT3

			(	Organic Labo Analysis Ro	oratory esults		Radiolo Ana	ogical Laboı alysis Resul	ratory ts	Metal			Polyc	chlorinate Analysis F	ed biphen Results	yl			
	Sample Date	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	Lab Sample ID
	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
1	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
1	12/14/2010	65000	< 500			< 500	< 5.08	209	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026003
E-2'	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
	3/24/2015	45500	4.96			1.92			200										369707005
	3/21/2016	49300	4.07			1.22			318										393717004

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW422-PRT1

		(	Organic Labo Analysis Re	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory ts	Metal			Polyc	hlorinate Analysis F	d biphen Results	yl			
Sample Date	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	Lab Sample ID
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
H 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
3/24/2015	9330	< 100			< 100			7120										369707006
3/21/2016	4720	43.2			.4			10800										393717005

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW422-PRT2

			Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Labo alysis Resul	ratory Its	Metal			Poly	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
7/21/200	9 43000	< 2500			< 500	32.8	1570	1970	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019001
8/24/200	9 47000	< 500			< 500	28.2	1650	2150	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008001
9/28/200	9 45000	< 500			< 500	18.5	1490	2020	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021005
12/16/200	9 53000	< 2500			< 500	16.1	1110	1660	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025002
3/23/201	0 51000	< 500			< 500	24	823	1600	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025002
6/21/201	0 90000	< 400			< 400	17.5	1060	1620	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001003
9/20/201	0 51000	< 1000			< 1000	9.61	808	1420	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039005
12/13/201	0 54000	< 2500			< 500	41.2	789	1170	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024005
₩ 3/22/201	1 40000	< 500			< 500	27.3	823	1090	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .44	< .09	C11081023006
6/15/201	1									< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-04
6/15/201	1 50000	< 2500			< 500	35.3	1000	1310	< .005									C11166026003
9/12/201	1 52000	< 2000			< 400	10.6	900	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022002
3/13/201	3 43000	< 500			< 500			643										C13072022005
9/17/201	3 49000	< 2000			< 400			535										C13260018005
3/19/201	4 49000	< 400			< 400			559										C14078013008
9/12/201	4 41800	< 50			< 50			514										356931014
3/24/201	5 48700	< 100			< 100			567										369707007
3/21/201	6 38200	3.2			1.2			634										393717006

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#### Water Quality Records for

## Sample Date Range: 6/16/2009 - 6/7/2016

#### MW422-PRT3

		(	Organic Labo Analysis Ro	oratory esults		Radiolo Ana	ogical Laboı alysis Resul	ratory ts	Metal			Polyo	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
7/21/2009	45000	< 2500			< 500	<394	1650	2310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019002
8/24/2009	46000	< 500			< 500	15.4	1380	1960	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008002
9/28/2009	45000	< 500			< 500	15.5	1560	1940	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021006
12/16/2009	58000	< 2500			< 500	20.7	1230	1630	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025003
3/23/2010	53000	< 500			< 500	19.6	866	1490	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025003
6/21/2010	72000	< 1000			< 1000	15.1	883	1520	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173001004
9/20/2010	61000	< 1000			< 1000	16.3	777	1320	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039006
12/13/2010	54000	< 2500			< 500	22.6	782	1070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024006
E 3/22/2011	54000	< 500			< 500	23.3	677	1010	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .36	< .09	C11081023007
6/15/2011	49000	< 2500			< 500	13.5	864	1140	< .005									C11166026004
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-05
9/12/2011	53000	< 2000			< 400	7.69	718	910	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022003
3/12/2012	69000	< 500			< 500	< 4.11	575	774	< .005									C12072031004
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
3/24/2015	44600	< 100			< 100			550										369707008
3/21/2016	37800	3.13			1.09			635										393717007

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#### Water Quality Records for

### Sample Date Range: 6/16/2009 - 6/7/2016

#### MW423-PRT1

		(	Organic Lab Analysis Re	oratory esults		Radiolo An	ogical Labo alysis Resul	ratory Its	Metal			Polyo	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
3/24/2015	8970	35.5			< 50			8220										369707009
3/21/2016	3350	35.7			.4			8560										393717008

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW423-PRT2

		(	Organic Labo Analysis Ro	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory ts	Metal			Polyc	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
H 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
3/24/2015	29900	< 1000			< 1000			1460										369707010
3/21/2016	31900	2.39			1.49			1690										393717009

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW423-PRT3

		(	Organic Labo Analysis Re	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory ts	Metal			Polyo	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
7/22/2009	42000	< 2500			< 500	< -4.38	2660	4350	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09203009003
8/25/2009	47000	< 500			< 500	23.4	2850	4440	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237022003
9/28/2009	14000	< 500			< 500	97.8	10600	13500	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021003
12/15/2009	53000	< 2500			< 500	< -48.6	2970	4030	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09349015003
3/22/2010	51000	< 500			< 500	43.5	1960	3810	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005005
6/22/2010	49000	< 2500			< 500	5.16	2930	3850	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027004
9/20/2010	50000	< 500			< 500	34.3	2080	3730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039003
12/13/2010	50000	< 2500			< 500	19	2120	3140	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C10347024003
E-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
3/24/2015	34900	< 1000			< 1000			1470										369707011
3/21/2016	32800	2.35			.98			1820										393717010

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW424-PRT1

		(	Organic Lab Analysis R	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory Its	Metal			Polyc	chlorinate Analysis I	ed bipheny Results	yl			
Sample Date	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	Lab Sample ID
7/23/200	ə 7200	< 500			< 100	<-7	2300	1790	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204021001
8/27/200	9 7100	< 50			< 50	< 3.09	2680	3330	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09239018001
9/30/200	9 7700	< 100			< 100	125	4580	6150	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273021001
12/17/200	9200	< 100			< 100	<-31.9	7760	10000	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09351022002
3/24/201	) 7900	< 100			< 100	86.8	4420	6540	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10083023002
6/23/201	) 7900	< 250			< 50	14	4020	5080	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017003
9/22/201	) 7900	< 1000			< 200	<-79.8	7420	10300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020001
12/15/201	0 8400	< 100			< 100	<-325	9940	13900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020001
円 5 6/14/201	1									< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-09
6/14/201	1 7900	< 500			< 100	<-211	7890	8220	< .005									C11165038002
9/13/201	1 9000	< 500			< 100	<-150	5730	6730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019001
3/13/201	3 7900	< 100			< 100			10300										C13072022001
9/17/201	3 5900	< 250			< 50			5540										C13260018007
3/20/201	4 3900	< 50			< 50			6530										C14079016007
9/13/201	4 2630	18.8			< 25			3070										356931018
3/26/201	5 2520	18.5			< 50			5140										369707012
3/23/201	5 1410	22.2			< 20			2400										393849010

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW424-PRT2

		(	Organic Labo Analysis Ro	oratory esults		Radiolo An:	ogical Labor alysis Resul	ratory Its	Metal			Polyc	chlorinate Analysis I	d biphen Results	yl			
Sample Date	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	Lab Sample ID
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
Щ 3/22/2011	12000	< 100			< 100	170	4620	6990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .26	< .09	C11081023001
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-10
6/14/2011	14000	< 500			< 100	<-51.5	4820	5790	< .005									C11165038003
9/13/2011	12000	< 500			< 100	< -138	5900	6890	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019002
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
3/31/2015	17600	< 250			< 250			3260										369938010
3/23/2016	20600	< 250			< 250			3220										393849011

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW424-PRT3

		(	Organic Labo Analysis Re	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory Its	Metal			Polyo	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
H 3/22/2011	16000	< 200			< 200	93.3	2580	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .28	< .09	C11081023002
6/14/2011	18000	< 1000			< 200	<-23	2990	3940	< .005									C11165038004
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-11
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
3/31/2015	14000	< 250			< 250			2570										369938011
3/23/2016	16800	< 250			< 250			2680										393849012

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#### Water Quality Records for

### Sample Date Range: 6/16/2009 - 6/7/2016

#### MW425-PRT1

		(	Organic Lab Analysis R	oratory esults		Radiolo Ana	ogical Labo alysis Resul	ratory ts	Metal			Poly	chlorinate Analysis l	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
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
μ ω 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
3/26/2015	1820	12.8			< 25			2220										369707013
3/28/2016	1080	14.2			< 20			1040										393954001

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW425-PRT2

		(	Organic Labo Analysis Ro	oratory esults		Radiolo An:	ogical Labor alysis Resul	ratory Its	Metal			Polyc	hlorinate: Analysis F	d biphen Results	yl			
Sample Date	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	Lab Sample ID
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
3/26/2015	3540	< 50			< 50			2750										369707014
3/28/2016	2060	< 25			< 25			1400										393954002

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

#### MW425-PRT3

		(	Organic Lab Analysis R	oratory esults		Radiolo An	ogical Labo alysis Resul	ratory Its	Metal			Polyc	chlorinate Analysis I	ed biphen Results	yl			
Sample Date	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	Lab Sample ID
7/22/20	09 6200	< 250			< 50	< .86	3380	4420	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203011003
8/26/20	09 4700	< 50			< 50	< -23.2	3770	4120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024003
9/29/20	09 6900	< 50			< 50	96.2	3490	4570	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002006
12/17/20	09 8100	< 100			< 100	39.3	3620	5210	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022001
3/23/20	10 7600	< 50			< 50	57	2590	4290	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005008
6/22/20	10 7700	< 250			< 50	33.6	2790	3760	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039004
9/21/20	10 8500	< 500			< 100	< -22.6	3270	5070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016006
12/15/20	10 9100	< 100			< 100	< -325	7150	8570	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020006
H 6/13/20	11									< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-05
<b>6</b> /13/20	11 7400	< 500			< 100	< -23.1	3310	4310	< .005									C11165011007
9/14/20	11 8500	< 500			< 100	< -99.4	4540	4360	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087008
3/12/20	12 8000	< 100			< 100	< -25.1	3230	5410	< .005									C12072031009
9/19/20	12 9900	< 100			< 100	< -28.6	4490	5320	< .005									C12263022004
3/12/20	13 11000	< 100			< 100			4600										C13072002005
9/18/20	13 9600	< 500			< 100			2530										C13261023003
3/20/20	14 9500	< 100			< 100			3230										C14079016003
9/15/20	14 8610	< 100			< 100			1950										356937003
3/26/20	15 7170	< 100			< 100			2340										369707015
3/28/20	16 4430	< 50			< 50			1200										393954003

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#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

			C	Organic Labo Analysis Ro	oratory esults		Radiolo Ana	gical Labor alysis Resul	ratory ts	Metal			Polycl A	hlorinateo nalysis R	l bipheny esults	1			
	Sample Date	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	Lab Sample ID
	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
E-4(	12/17/2013	28	< 1			< 1			56.2										C13351094003
0	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
	3/30/2015	16.3	< 1			< 1			61.1										369938012
	6/16/2015	16.8	< 1			< 1			53.1										375398001
	9/14/2015	19	< 1			< 1			36.5										381234008
	9/14/2015	18.9	< 1			< 1			40.7										381234007
	12/8/2015	49.2	< 1			< 1			56.4										387183008
	3/23/2016	22.6	< 1			< 1			62.2										393849013
	6/6/2016	32.6	< 1			< 1			86.4										398881008



#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

			C	)rganic Lab Analysis Ro	oratory esults		Radiolo An	ogical Labor alysis Resul	ratory ts	Metal			Polycl A	hlorinateo nalysis R	l bipheny esults	1			
	Sample Date	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	Lab Sample ID
	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
E-4	3/19/2014	1200	< 20			< 20			65.4										C14078013002
1	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
	3/30/2015	906	< 10			< 10			66.8										369938001
	6/16/2015	2690	< 50			< 50			73.4										375398005
	9/14/2015	7110	< 100			< 100			46.3										381234009
	12/8/2015	9040	< 100			< 100			72.7										387183009
	3/23/2016	17600	< 100			< 100			54.8										393849014
	6/6/2016	24400	< 250			< 250			108										398881009



#### Water Quality Records for

# Sample Date Range: 6/16/2009 - 6/7/2016

			0	)rganic Lab Analysis Ro	oratory esults		Radiolo Ana	ogical Labor alysis Resul	ratory ts	Metal			Polycl A	hlorinate nalysis R	l bipheny esults	1			
	Sample Date	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	Lab Sample ID
	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
E-42	12/17/2013	870	< 10			< 10			64.6										C13351094005
10	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
	3/30/2015	265	< 5			< 5			74.1										369938013
	6/16/2015	913	< 20			< 20			52.1										375398006
	9/14/2015	2700	< 50			< 50			53.2										381234010
	12/8/2015	6030	< 100			< 100			61.6										387183010
	3/23/2016	6960	< 100			< 100			67.9										393849015
	6/6/2016	9720	< 200			< 200			105										398881010



# **APPENDIX F**

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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

MW226
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				Organic Labor Analysis Res	ratory ults			Radiological Laboratory Analysis Results						
	Sample Date	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	Lab Sample ID	
	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	
F-(	8/16/1993	11							18				930819-067	
0,	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							30				950117-119	
	1/17/1995	17							26				950117-115	
	1/23/1995	17							31				950125-081	



Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

MW226
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			Organic Labo Analysis Res	ratory ults		Radiological Laboratory Analysis Results						
Sample Date	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	Lab Sample ID
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



Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

FLUOR.

Prepared by:

#### MW226

				Organic Labor Analysis Res	ratory sults		Radiological Laboratory Analysis Results						
	Sample Date	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	Lab Sample ID
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
F-1	1/9/2001	81							148				C010100017
7/	11/2001	55							107				C011930007
1	1/8/2002	140							166				C020080098
7/:	22/2002	89							64.7				C022030173
1/2	21/2003	230							134				C030210115
7/:	23/2003	130							98.9				C032040144
1/2	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
1/2	24/2005	440							134	< .0357	< .0147	<0135	C050240045
7/:	27/2005	420							118	< .0346	< .00589	< .00252	C052080180
1/2	24/2006	410							101	< .0973	<0183	< .0768	C060240039
7/	24/2006	550							119	< 1.07	< .187	< .282	C062050057
1/2	24/2007	610							118	< 1.03	<00311	< .21	C070240038
7/:	24/2007	660							112	< .0971	<0355	< .0361	C072060043

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Tuesday, September 20, 2016

Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

				Organic Labor Analysis Res	ratory sults		Radiological Laboratory Analysis Results						
	Sample Date	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	Lab Sample ID
	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
F-0	6/1/2010	640							75.7				C10152026001
U	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
	6/1/2015	267	5.4	< 1	.32	< 1			< 2.55				374452002
	7/11/2015	270							23.2				377100001

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Tuesday, September 20, 2016 NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW226

			Organic Labor Analysis Res	ratory sults								
Sample Date	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	Lab Sample ID
1/25/2016	311							< 14.9				390095001

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

MW227
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		Organic Laboratory Analysis Results											
	Sample Date	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	Lab Sample ID
	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
F-1	11/8/1993	2							0				931109-077
1	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	3	< 5	< 5	< 5	< 5							S408081-01V
	8/10/1994	4							14				940811-063
	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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

				Organic Labor Analysis Res	ratory ults								
	Sample Date	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	Lab Sample ID
	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
F-1	8/7/1995								17				950808-087
2	8/7/1995								14				950808-067
	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



Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

FLUOR.

Prepared by:

#### MW227

				Organic Labor Analysis Res	ratory sults		Radiological Laboratory Analysis Results						
	Sample Date	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	Lab Sample ID
	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
<b>T</b>	7/12/2000	6							< 3.92				C001940099
ω	1/9/2001	3							< 3.82				C010100018
	7/11/2001	7							< 7.5				C011930006
	1/8/2002	23							20.2				C020080097
	7/22/2002	23							33.4				C022030172
	1/21/2003	24							< 9.75				C030210114
	7/23/2003	26							22.5				C032040145
	1/21/2004	31							< 17				C040210091
	7/22/2004	40											C042050003
	7/22/2004	33	< 1	< 1	< 1	< 1	5.9	10.1	< 10.4	< .284	< .00706	< .412	C042050010
	7/27/2004	39							<469				C042090057
	1/24/2005	76							22.8	< .348	<0287	< .122	C050240047
	7/27/2005	45							18.9	< .0822	< .0131	< .0649	C052080181
	1/25/2006	38							20.3	< .0898	< .004	< .0169	C060250133
	7/24/2006	61							< 4.11	< 1.36	< .263	< .298	C062050058
	1/24/2007	180							< 11	< .219	< .0426	< .0696	C070240039

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

				Organic Labo Analysis Res	ratory sults			P	adiological L Analysis F	aboratory Acsults			
	Sample Date	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	Lab Sample ID
	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
F-1	3/9/2010	150	3.5	< 1	< 1	< 1	< 2.74	7.52	< -4.34				C10068052006
4	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
	6/2/2015	110	1.68	< 2	< 2	< 2			< 3.74				374344008

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

			Organic Labo Analysis Res	ratory sults			R	adiological L Analysis R	aboratory Aesults			
Sample Date	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	Lab Sample ID
7/11/2015	94.3							< 7.22				377100002
1/25/2016	110							< -6.66				390095002



Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW333

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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW333

				Organic Labo Analysis Res	ratory sults			P	adiological L Analysis R	aboratory Results			
	Sample Date	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	Lab Sample ID
	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
Ē	2/14/2006	1300	< 50	< 50	< 50	< 50	< 2.43	< 3.19	< 5.18				C060450088
L	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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

				Organic Labo Analysis Re	ratory sults			R	adiological L Analysis R	aboratory esults			
	Sample Date	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	Lab Sample ID
	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
F-1	1/26/2015	10200							70				365824003
8	6/3/2015	10700	< 200	< 200	< 200	< 200			61				374344009
	7/11/2015	9380							85.7				377100003
	1/25/2016	10400							93.9				390095003

Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW337

			Organic Labo Analysis Res	ratory sults			R	adiological L Analysis F	aboratory Results			
Sample Date	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	Lab Sample ID
10/4/1996								14				96M04622-3760
10/4/1996	8.3				< .48							96M04622-3716
10/4/1996									.38		.27	96M04622-3730
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
<u>+</u> 11/17/1998	61	< 5	< 5	< 5	< 5	3.06	37.83	69.2				C983210021
۰ 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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW337

				Organic Labo Analysis Res	ratory sults			R	adiological L Analysis F	aboratory Results			
	Sample Date	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	Lab Sample ID
	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
F-2	9/12/2006	670	< 50	< 50	< 50	< 50	3.19	157	229				C062550177
0	3/19/2007	750	< 5	14	< 5	< 5	< 2.38	163	237				C070790063
	9/19/2007	450	< 5	< 5	< 25	< 5	4.99	123	222				C072630052
	3/6/2008	2000	< 10	< 10	< 50	< 10	4.24	173	224				C080670001
	12/18/2008	640	< 10	< 10	< 10	< 10	< 1.52	97.5	282				C08353022001
	2/10/2009	1600							256				C09041031001
	5/11/2009	2300	< 25	< 25	< 25	< 25	< 1.82	177	205				C09131017003
	7/28/2009	860							282				C09209006001
	9/25/2009	500	< 10	< 10	< 10	< 10	4.01	196	284				C09268025002
	1/27/2010	660							278				C10027031002
	3/16/2010	790	< 50	< 10	< 50	< 10	5.77	191	298				C10075019002
	7/14/2010	840							298				C10195017001
	9/13/2010	900	< 10	< 10	< 10	< 10	< 1.14	155	271				C10256034001
	1/3/2011	820							309				C11003029004
	5/19/2011	1800	< 50	< 10	< 10	< 10	6.63	172	264				C11139019001
	8/10/2011	880							347				C11222050002

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

				Organic Labo Analysis Res	ratory sults			R	adiological L Analysis R	aboratory Aesults			
	Sample Date	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	Lab Sample ID
	8/10/2011	1100							333				C11222050003
	1/23/2012	1300							324				C12023024006
	7/30/2012	810							294				C12212050002
	7/30/2012	800							298				C12212050001
	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
F-2	1/27/2015	1990							298				365920001
1	6/11/2015	1570	.8	< 1	< 1	3.37			254				374981003
	7/20/2015	1430							330				377570001
	1/27/2016	1230							132				390195001

Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW338

			Organic Labo Analysis Res	ratory sults			ŀ	Radiological L Analysis F	aboratory Results			
Sample Date	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	Lab Sample ID
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
F 11/17/1998	< 1	< 5	< 5	< 5	< 5	< 1.15	< 2.58	< -9.2				C983210022
N 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

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### Sample Date Range: 5/6/1993 - 1/27/2016

#### MW338

				Organic Labo Analysis Res	ratory sults			R	adiological L Analysis R	aboratory Results			
	Sample Date	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	Lab Sample ID
	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
F-2	9/12/2006	25	< 5	< 5	< 5	< 5	< .511	7.01	< -7.99				C062550178
ω	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

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Water Quality Records for

### Sample Date Range: 5/6/1993 - 1/27/2016

		Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						
	Sample Date	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	Lab Sample ID
	5/19/2011	1300	< 5	< 1	< 1	< 1	< 1.41	94.2	158				C11139019002
F-24	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
	6/11/2015	963	.71	< 1	< 1	.74			89.3				374981004
	7/20/2015	193							< 16.7				377570002
	1/27/2016	1670							195				390195002