



Department of Energy

Portsmouth/Paducah Project Office
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513
(859) 219-4000

JUL 15 2013

Mr. Todd Mullins, FFA Manager
Kentucky Department for Environmental Protection
Division of Waste Management
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-1995312-13

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

Dear Mr. Mullins and Ms. Tufts:

**MODIFICATION APPROVAL AND TRANSMITTAL OF REPLACEMENT PAGES
FOR APPENDIX 5 OF THE SITE MANAGEMENT PLAN, PADUCAH GASEOUS
DIFFUSION PLANT, PADUCAH, KENTUCKY, ANNUAL REVISION—FY 2013
(DOE/LX/07-1284&D2/R1)**

References:

1. Letter from W. Ballard to R. Blumenfeld, Untitled [Subject: EPA Approval, FY 2013 Site Management Plan for the Paducah Gaseous Diffusion Plant, DOE/LX/07-1284&D2], dated January 29, 2013
2. Letter from A. Webb to R. Blumenfeld, "Approval of the *Site Management Plan Paducah Gaseous Diffusion Plant Paducah, Kentucky Annual Revision—FY 2013* (DOE/LX/07-1284&D2), Paducah Gaseous Diffusion Plant, Paducah, McCracken County, Kentucky, KY8-890-008-982," dated December 20, 2012
3. Letter from J. Woodard to W. Ballard and T. Mullins, "Transmittal of the D2 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2013 (DOE/LX/07-1284&D2)," (PPPO-02-1747378-13), dated December 17, 2012

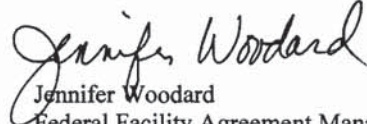
As requested by the Federal Facility Agreement (FFA) Managers, enclosed are the certified replacement pages for Appendix 5 of the *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision FY 2013, DOE/LX/07-1284&D2/R1* (SMP). The enclosed replacement pages for Appendix 5 of the SMP have been prepared to reflect the milestone modifications that have occurred since the D2 SMP was approved by the Kentucky Department for Environmental Protection (KDEP) on December 20, 2013, and the U.S. Environmental Protection Agency (EPA) on January 29, 2013. As discussed with the FFA

Managers and following approval by KDEP and EPA, the D2/R1 SMP will be used for updating (1) Appendix B, RCRA/CERCLA Unit List; (2) Appendix C, Current Year Timetables and Deadlines; and (3) Appendix G, Site Management Plan of the FFA.

A redline version of Appendix 5 has been provided for your convenience. Please sign the enclosed modification approval and return it to the U.S. Department of Energy.

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

Sincerely,


Jennifer Woodard
Federal Facility Agreement Manager
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. Appendix 5 Replacement Pages – Clean
3. Appendix 5 Replacement Pages – Redline
4. Modification Approval Form

e-copy w/enclosures:

brain.begley@ky.gov, KDEP/Frankfort
brandy.mitchell@lataky.com, LATA/Kevil
christie.lamb@lataky.com, LATA/Kevil
dave.dollins@lex.doe.gov, PPPO/PAD
gaye.brewer@ky.gov, KDEP/Paducah
jana.white@lataky.com, LATA/Kevil
jennifer.woodard@lex.doe.gov, PPPO/PAD
leo.williamson@ky.gov, KDEP/Frankfort
lisa.santoro@lex.doe.gov, PPPO/PAD
mark.duff@lataky.com, LATA/Kevil
myrna.redfield@lataky.com, LATA/Kevil
pad.dmc@swiftstaley.com, SST/Kevil
rachel.blumenfeld@lex.doe.gov, PPPO/PAD
reinhard.knerr@lex.doe.gov, PPPO/PAD
richards.jon@epamail.epa.gov, EPA/Atlanta
rob.seifert@lex.doe.gov, PPPO/PAD
stephaniec.brock@ky.gov, KYRHB/Frankfort
todd.mullins@ky.gov, KDEP/Frankfort
tufts.jennifer@epamail.epa.gov, EPA/Atlanta

CERTIFICATION

Document Identification: *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision FY 2013, DOE/LX/07-1284&D2/R1, July 2013*

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 ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

LATA Environmental Services of Kentucky, LLC



Mark J. Duff, Paducah Project Manager

7-15-13
Date Signed

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

U.S. Department of Energy



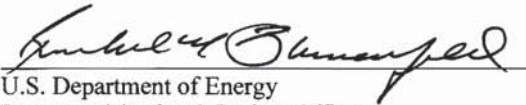
Rachel H. Blumenfeld, Acting Paducah Site Lead
Portsmouth/Paducah Project Office

7-15-13
Date Signed

MODIFICATION APPROVAL

*Site Management Plan
Paducah Gaseous Diffusion Plant
Paducah, Kentucky*
Annual Revision—Fiscal Year 2013

**DOE/LX/07-1284&D2/R1
July 2013**


U.S. Department of Energy
Portsmouth/Paducah Project Office
Acting Paducah Site Lead

7-15-13
Date Signed

Kentucky Department for Environmental Protection
Division of Waste Management Director

Date Signed

U.S. Environmental Protection Agency
Remedial Project Manager

Date Signed

**Site Management Plan
Paducah Gaseous Diffusion Plant
Paducah, Kentucky**

Annual Revision—FY 2013



CLEARED FOR PUBLIC RELEASE

**Site Management Plan
Paducah Gaseous Diffusion Plant
Paducah, Kentucky**

Annual Revision—FY 2013

Date Issued—July 2013

Prepared for
U.S. Department of Energy
PADUCAH GASEOUS DIFFUSION PLANT
Paducah, Kentucky 42002
by
LATA ENVIRONMENTAL SERVICES OF KENTUCKY, LLC
under contract DE-AC30-10CC40020
with contributions by
U.S. Environmental Protection Agency
Kentucky Energy and Environment Cabinet
Kentucky Cabinet for Health and Family Services

CLEARED FOR PUBLIC RELEASE

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX 5

ENFORCEABLE TIMETABLES AND DEADLINES; PLANNING DATES WITH LONG-TERM TARGETS

THIS PAGE INTENTIONALLY LEFT BLANK

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
GWOU	Southwest Plume Sources—SWMU 1 (Soil Mixing)	D1 Remedial Design Report	2/16/13			
		D1 Remedial Action Work Plan	7/21/13			Thirty (30) days following submittal of the D2 Remedial Design Report.
		D1 Remedial Action Completion Report	10/24/15			D1 Remedial Action Completion Report is submitted 150 days after Remedial Action is completed.
	Southwest Plume Sources—SWMUs 211 A and 211 B (Enhanced <i>In Situ</i> Bioremediation)	D1 Final Characterization Report	6/26/13			
		Letter Notification	7/10/13			
		D1 Remedial Design Report	1/21/15			
		D1 Remedial Action Work Plan	2/12/15			
		D1 Remedial Action Completion Report			5/22/17 ³	
	C-400—Phase Iib	D1 Record of Decision	TBD			D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D). EPA’s schedule extension automatically tolls the milestones dates. The actual enforceable dates will be determined when the full impact of the regulatory review on the project schedule is known.

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
GWOU	C-400—Phase IIb	D1 Remedial Design Work Plan	TBD			EPA’s schedule extension automatically tolls the milestones dates. The actual enforceable dates will be determined when the full impact of the regulatory review on the project schedule is known.
		D1 Remedial Design Report	TBD			
		D1 Remedial Action Work Plan	TBD			
	C-400	D1 Remedial Action Completion Report			TBD	EPA’s schedule extension automatically tolls the milestones dates. The actual enforceable dates will be determined when the full impact of the regulatory review on the project schedule is known.
	NE Plume	D1 Northeast Plume Remedial Action Work Plan	3/28/13			
	Dissolved-Phase Plumes	D1 RI/FS Work Plan			4 th Quarter 2026	Project scoping will consider the available information from ongoing projects including the TCE degradation study results, NW Plume Optimization, SW Plume Sources action, NE Plume Optimization, and C-400 Source action.
		D1 Remedial Investigation Report			1 st Quarter 2028	

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
GWOU	Dissolved-Phase Plumes	D1 Feasibility Study Report			4 th Quarter 2028	D1 Feasibility Study is submitted 60 days after EPA and KY approve the RI Report.
		D1 Proposed Plan			2 nd Quarter 2029	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD			4 th Quarter 2029	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan			4 th Quarter 2029	
		D1 Remedial Design Report			4 th Quarter 2030	
		D1 Remedial Action Work Plan			4 th Quarter 2030	
GWOU	GWOU	D1 Interim Remedial Action Completion Report		9/30/32		D1 Remedial Action Completion Report is submitted 150 days after Remedial Action is completed.
D&D OU	Disposition of Inactive Facilities at PGDP	D&D OU D1 Completion Notification Letter		9/30/13		D1 Removal Action Completion Letter will be submitted after the final removal action for the D&D OU facilities is completed.

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
Waste Disposal Options	Waste Disposal Options	D1 Proposed Plan	9/20/13			D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD	5/3/14			D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan	8/4/14			Follow-on documents currently planned for submittal after the ROD may change based upon the decision documented in the ROD.
		D1 Remedial Design Report			2 nd Quarter 2016	
		D1 Remedial Action Work Plan			3 rd Quarter 2016	Based on the preliminary assessment of the FY 2014 funding guidance, the Remedial Design Support Investigation will be completed; however, the design will be delayed until FY 2015.
SWOU	Remedial Action (Little Bayou and Bayou Creek Watersheds)	D1 Remedial Investigation Report			1 st Quarter 2029	
		D1 Feasibility Study Report			3 rd Quarter 2029	D1 Feasibility Study is submitted 60 days after EPA and KY approve the RI Report.
		D1 Proposed Plan			1 st Quarter 2030	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD			3 rd Quarter 2030	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
SWOU	Remedial Action (Little Bayou and Bayou Creek Watersheds)	D1 Remedial Design Work Plan			3 rd Quarter 2030	
		D1 Remedial Design Report			3 rd Quarter 2031	
		D1 Remedial Action Work Plan			3 rd Quarter 2031	
SWOU	SWOU	D1 Remedial Action Completion Report		9/30/32		D1 Remedial Action Completion Report is submitted 150 days after Remedial Action is completed.
Soils OU	Remedial Action 1 (Pre-GDP Shutdown)	D1 Feasibility Study			3 rd Quarter 2025	D1 Feasibility Study is submitted 60 days after EPA and KY approve the RI Report.
		D1 Proposed Plan			1 st Quarter 2026	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD			3 rd Quarter 2026	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan			4 th Quarter 2026	
		D1 Remedial Design Report			4 th Quarter 2027	
		D1 Remedial Action Work Plan			4 th Quarter 2027	
	Remedial Action 2 (Pre-GDP Shutdown)	Remedial Investigation Work Plan Addendum			3 rd Quarter 2023	
		Remedial Investigation Report			4 th Quarter 2024	

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
Soils OU	Remedial Action 2 (Pre-GDP Shutdown)	D1 Feasibility Study			3 rd Quarter 2025	D1 Feasibility Study is submitted 60 days after EPA and KY approval of the RI Report.
		D1 Proposed Plan			1 st Quarter 2026	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD			3 rd Quarter 2026	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan			4 th Quarter 2026	
		D1 Remedial Design Report			4 th Quarter 2027	
		D1 Remedial Action Work Plan			4 th Quarter 2027	
Soils OU	Soils OU	D1 Remedial Action Completion Report		9/30/30		D1 Remedial Action Completion Report is submitted 150 days after Remedial Action is completed.
Soils OU	Sitewide Walkover ⁴	Site Evaluation Report			3/5/18	Assumes implementation of proposal, dated May 25, 2012, over the next five years.

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments	
			FY 2013–FY 2015	Out-year			
BGOU	SWMUs 5 and 6 Remedial Action	D1 Proposed Plan	5/16/13				
		D1 ROD	11/12/13			D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).	
		D1 Remedial Design Work Plan	12/12/13				
		D1 Remedial Design Report	12/12/14				
		D1 Remedial Action Work Plan	1/11/15				
		Field Start	7/23/15			Based on the preliminary assessment of the FY 2014 funding guidance, the fieldwork will be delayed to begin in FY 2015 with completion in FY 2016.	
		D1 Remedial Action Completion Report				2 nd Quarter 2016	
	SWMUs 2 and 3 Remedial Action	D1 Proposed Plan				2 nd Quarter 2022	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD				4 th Quarter 2022	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan				4 th Quarter 2022	
		D1 Remedial Design Report				4 th Quarter 2023	
		D1 Remedial Action Work Plan				4 th Quarter 2023	

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments	
			FY 2013–FY 2015	Out-year			
BGOU	SWMUs 2 and 3 Remedial Action	D1 Remedial Action Completion Report			4 th Quarter 2026		
		D1 Proposed Plan			4 th Quarter 2023	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.	
	SWMUs 7 and 30 Remedial Action	D1 ROD			2 nd Quarter 2024	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).	
		D1 Remedial Design Work Plan			2 nd Quarter 2024		
		D1 Remedial Design Report			2 nd Quarter 2025		
		D1 Remedial Action Work Plan			2 nd Quarter 2025		
		D1 Remedial Action Completion Report			4 th Quarter 2026		
		D1 Remedial Action Completion Report			4 th Quarter 2026		
	SWMU 4 Remedial Action	Remedial Investigation Report Addendum	1/2/15				
		D1 Feasibility Study	8/30/15				
		D1 Proposed Plan			2 nd Quarter 2016	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.	
		D1 ROD			4 th Quarter 2016	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).	
		D1 Remedial Design Work Plan			1 st Quarter 2017		
		D1 Remedial Design Report			1 st Quarter 2018		
		D1 Remedial Action Work Plan			2 nd Quarter 2018		
		D1 Remedial Action Completion Report			4 th Quarter 2022		

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

Operable Unit	Subproject	Deliverable	Enforceable timetable and deadlines ¹		Planning dates with long-term targets for decision documents ²	Comments
			FY 2013–FY 2015	Out-year		
BGOU	SWMUs 9, 10, and 145 Remedial Action	Remedial Investigation Work Plan Addendum			2 nd Quarter 2026	
		Remedial Investigation Report Addendum			3 rd Quarter 2027	
		D1 Feasibility Study			2 nd Quarter 2028	
		D1 Proposed Plan			4 th Quarter 2028	D1 Proposed Plan is submitted 60 days after EPA and KY approval of the Feasibility Study.
		D1 ROD			1 st Quarter 2029	D1 ROD is submitted 30 days after close of public comment period on the Proposed Plan (FFA Section XIV.D).
		D1 Remedial Design Work Plan			2 nd Quarter 2029	
		D1 Remedial Design Report			2 nd Quarter 2030	
		D1 Remedial Action Work Plan			2 nd Quarter 2030	
		D1 Remedial Action Completion Report			4 th Quarter 2031	
BGOU	BGOU	D1 Remedial Action Completion Report		9/30/31		D1 Remedial Action Completion Report is submitted 150 days after Remedial Action is completed.
NA	NA	D1 Five-Year Review	7/15/13			In accordance with the FFA, this is a date for submittal of this statutorily required document. Approval date for this document is 12/30/13.

5-11

¹ Enforceable Timetables and Deadlines are based on the planning scope assumptions contained in Appendix 3 and funding levels. While the FFA parties find these assumptions to be reasonable for bounding cost and schedule forecasts based on existing information, approval of the assumptions does not constitute decision making for the response actions described in this table.

² Not enforceable dates. Used for planning purposes only. The parties further agree that DOE can adjust the planning dates as part of the annual SMP update without having to submit an official request or justify “good cause” in accordance with Section XXIX of the FFA.

³ This date formerly has been associated with the out-year completion date for the GWOU. A new out-year completion date for the Dissolved-Phase Plume that replaces the Southwest Plumes Sources date has been established and represents the final completion date for the GWOU for pre-GDP groundwater scope.

Enforceable Timetables and Deadlines; Planning Dates with Long-Term Targets (Continued)

⁴The FFA parties agree to survey 15 locations with highest counts per minute and 10 locations with the greatest delta in counts per minute per Kentucky's proposal for the Soils OU Sitewide sampling dated May 25, 2012. The locations will be determined by the FFA parties prior to implementation. Upon completion of the survey, the surveys will be mapped, and an X-ray fluorescence sample for total uranium will be collected from the highest survey reading at each of the 25 locations.

BGOU = Burial Grounds Operable Unit
DOE = U.S. Department of Energy
D&D = decontamination and decommissioning
EPA = U.S. Environmental Protection Agency
FFA = Federal Facility Agreement
FS = feasibility study
FY = fiscal year
GDP = gaseous diffusion plant
GWOU = Groundwater Operable Unit
NA = not applicable

OU = operable unit
PGDP = Paducah Gaseous Diffusion Plant
RI = remedial investigation
ROD = record of decision
SMP = Site Management Plan
SWOU = Surface Water Operable Unit
SWMU = solid waste management unit
TBD = to be determined
TCE = trichloroethene

THIS PAGE INTENTIONALLY LEFT BLANK