



Department of Energy

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

OCT 15 2018

Ms. Jamie Nielsen, Supervisor
Permit Administration Section
Division of Waste Management, Solid Waste Branch
Kentucky Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-5193217-19A

Dear Ms. Nielsen:

**C-746-S&T AND C-746-U SOLID WASTE LANDFILLS THIRD QUARTER
CALENDAR YEAR 2018 WASTE OPERATING REPORT, PADUCAH GASEOUS
DIFFUSION PLANT, PADUCAH, KENTUCKY, FRNP-RPT-0032/V3, PERMIT NO.
SW07300014, SW07300015, SW07300045, AGENCY INTEREST NO. 3059**

The U.S. Department of Energy has prepared the third quarter operating report for calendar year 2018 for the C-746-S&T and C-746-U Landfills at the Paducah Gaseous Diffusion Plant. Kentucky Solid Waste Regulation 401 KAR 47:190 § 8(1) and Solid Waste Permit SW07300014, SW07300015, SW07300045, Permit Condition ACTV0006, Special Condition 10, require submittal of quarterly reports from operators of solid waste landfills.

The groundwater data, surface water data, and methane monitoring results are submitted as separate reports for the C-746-S&T Landfills and C-746-U Landfill.

If you have any questions or require additional information, please contact David Dollins at (270) 441-6819.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer Woodard".

Jennifer Woodard
Paducah Site Lead

Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. C-746-S&T and C-746-U Solid Waste Landfills Third Quarter CY 2018 Waste Operating Report, FRNP-RPT-0032/V3

e-copy w/enclosures:

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CERTIFICATION

Document Identification: *C-746-S&T and C-746-U Solid Waste Landfills Third Quarter Calendar Year 2018 Waste Operating Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0032/V3, October 2018*

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 such violations.

Four Rivers Nuclear Partnership, LLC

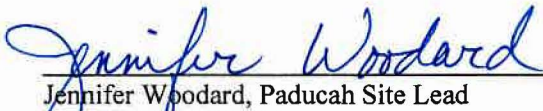


Myra E. Redfield, Deputy Program Manager
Four Rivers Nuclear Partnership, LLC

10/15/18
Date Signed

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

U.S. Department of Energy



Jennifer Woodard, Paducah Site Lead
Portsmouth/Paducah Project Office
U.S. Department of Energy

10/15/18
Date Signed

**C-746-S&T and C-746-U Solid Waste Landfills
Third Quarter Calendar Year 2018
Waste Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**



This document is approved for public release per review by:

David Hayden
FRNP Classification Support

10-16-18
Date

**C-746-S&T and C-746-U Solid Waste Landfills
Third Quarter Calendar Year 2018
Waste Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**

Date Issued—October 2018

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FOUR RIVERS NUCLEAR PARTNERSHIP, LLC,
managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract DE-EM0004895

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CONTENTS

REPORT SUMMARY	v
FACILITY INFORMATION SHEET	1
COVER LOG.....	3
LEACHATE LOG	9
LEACHATE DATA	21

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REPORT SUMMARY

The information contained herein is submitted in accordance with the requirements of Solid Waste Permit Number SW07300014, SW07300015, SW07300045 and 401 KAR 47:190 § 8(1)(a) through (c) and (e), for the third quarter of calendar year 2018 for the Paducah Gaseous Diffusion Plant, McCracken County, Kentucky.

In the third quarter of calendar year 2018, a total of 226.57 tons of industrial waste generated from environmental remediation activities was disposed of in the C-746-U Contained Landfill. No special waste or spill residue-containing materials were placed in the landfill this quarter. There were 2.27 tons of asbestos-containing materials disposed of as part of the 226.57 total tons of waste dispositioned.

The C-746-S Residential Landfill has been inactive since July 1995, and the C-746-T Inert Landfill has been inactive since June 1992.

Analytical results for surface water, groundwater monitoring, and methane monitoring are submitted in separate quarterly Compliance Monitoring Reports for the C-746-U Landfill and C-746-S&T Landfills [401 KAR 47:190 § 8(1)(d)]. No other data/results for site-specific conditions were generated in this reporting period.

Leachate Collection and Disposition

On January 4, 2017, the Landfill Manager notified Kentucky Division of Waste Management (KDWM) that leachate would be transported to the C-615 Wastewater Treatment Facility until further notice. There were 67,000 gal of leachate from the C-746-U Landfill transported and treated at the C-615 Wastewater Treatment Facility during July 2018. The KDWM approved modification to the C-746-U15 Leachate Treatment Facility was completed on August 15, 2018, and KDWM was notified via e-mail on that date that operation of the C-746-U15 Leachate Treatment Facility would be resumed on August 16, 2018, and transportation of leachate to the C-615 Wastewater Treatment Facility would cease. No leachate was treated from August 1–15, 2018. There were 72,300 gal of leachate from the C-746-U Landfill treated at the C-746-U15 Leachate Treatment Facility during the remainder of August and September 2018. There was a total of 139,300 gal of leachate from the C-746-U Landfill treated this quarter.

A sample of the leachate from the C-746-U Landfill that was transported and treated at the C-615 Wastewater Treatment Facility was collected on July 19, 2018. A leachate sample from the C-746-S Landfill also was collected on July 19, 2018. No leachate from the C-746-S Landfill was treated during the quarter. Analytical results of the July sampling events are provided in this report.

The tank volume reported on the leachate log is the volume at the time of measurement. Calculation of the next day tank volume by subtraction of disposal volume may not reflect the measured tank volume because additional leachate had entered the system.

Construction Activities and Cover Maintenance

Modification of the C-746-U15 Leachate Treatment Facility at the C-746-U Landfill was completed on August 15, 2018, in accordance with the KDWM-approved permit modification dated June 12, 2018 [401 KAR 47:190 § 8(1)(a)]. The June 12, 2018, permit modification was revised to correct administrative errors and reissued on July 11, 2018, but did not affect the leachate collection and treatment system modification. The leachate collection and treatment system was modified to remove apatite media and to install additional carbon filtration media downstream of the exiting ion exchange vessel. The carbon

filtration media was installed in the vessels that formerly contained the apatite media. Leachate collection and treatment at C-746-U15 were resumed on August 16, 2018, following notification to KDWM via e-mail.

The landfill was inspected for subsidence in accordance with the cover requirements [401 KAR 48:080 § 9(6)(f)]. No repairs were necessary during the quarter.

There were no construction activities for either the C-746-S or C-746-T Landfills. The landfills were inspected for subsidence in accordance with the cover requirements [401 KAR 48:080 § 9(6)(f)]. No repairs were necessary during the quarter.

FACILITY INFORMATION SHEET

Sampling Date: July 19, 2018
County: McCracken Permit No.: SW07300014, SW07300015,
SW07300045
Facility Name: U.S. Department of Energy—Paducah Gaseous Diffusion Plant
(as officially shown on DWM permit face)
Site Address: 5501 Hobbs Road Kevil, Kentucky 42053
Street City/State Zip
Phone No.: (270) 441-6800 Latitude: N 37° 07' 45" Longitude: W 88° 47' 55"

OWNER INFORMATION

Facility Owner: U.S. DOE—Robert E. Edwards III, Manager Phone No.: (859) 227-5020
Contact Person: James Miller Phone No.: (270) 441-5068
Contact Person Title: Director, Waste, Materials, and Environmental Services Project,
Four Rivers Nuclear Partnership, LLC
Mailing Address: 5511 Hobbs Road Kevil, Kentucky 42053
Street City/State Zip

SAMPLING PERSONNEL (if other than landfill or laboratory)

Company: GEO Consultants, LLC
Contact Person: Sam Martin Phone No. (270) 441-6755
Mailing Address: 325 Kentucky Avenue Kevil, Kentucky 42053
Street City/State Zip

LABORATORY RECORD #1

Laboratory: GEL Laboratories, LLC Lab ID No.: KY90129
Contact Person: Valerie Davis Phone No.: (843) 769-7391
Mailing Address: P.O. Box 30712 Charleston, South Carolina 29417
Street City/State Zip

LABORATORY RECORD #2

Laboratory: N/A Lab ID No.: N/A
Contact Person: N/A Phone No.: N/A
Mailing Address: N/A
Street City/State Zip

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COVER LOG

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CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY

PERMIT NUMBER: 073-00045

COUNTY: McCracken

Month & Year: July 2018

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3						
4						
5						
6						
7						
8						
9	D-4,C-3,D-3	YES	YES	NO	NO	YES
10	D-4, D-3	YES	YES	NO	NO	YES
11						
12						
13						
14						
15						
16						
17						
18						
19	D-4	YES	NO	NO	NO	YES
20						
21						
22						
23	D-4	YES	YES	NO	NO	YES
24						
25						
26						
27						
28						
29						
30						
31						

CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY
COUNTY: McCracken

PERMIT NUMBER: 073-00045
Month & Year: August 2018

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
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There were no waste disposal or cover activities during the month of August 2018

CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY
 COUNTY: McCracken

PERMIT NUMBER: 073-00045
 Month & Year: September 2018

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11	D-3	YES	NO	NO	NO	YES
12	D-3	YES	NO	NO	NO	YES
13	D-3	YES	YES	NO	NO	YES
14						
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LEACHATE LOG

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CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month July Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
07-02-18	1,2,3,4,5	F-001		600		
07-02-18	1,2,3,4,5	F-002		30400	7500	W
07-02-18	1,2,3,4,5	F-007		0		
07-02-18	1,2,3,4,5	F-008		0		
07-02-18	1,2,3,4,5	F-009		500		
07-03-18	1,2,3,4,5	F-001		2500		
07-03-18	1,2,3,4,5	F-002		22900	6400	W
07-03-18	1,2,3,4,5	F-007		0		
07-03-18	1,2,3,4,5	F-008		0		
07-03-18	1,2,3,4,5	F-009		500		
07-05-18	1,2,3,4,5	F-001		6800		
07-05-18	1,2,3,4,5	F-002		16500	6300	W
07-05-18	1,2,3,4,5	F-007		0		
07-05-18	1,2,3,4,5	F-008		0		
07-05-18	1,2,3,4,5	F-009		500		
07-09-18	1,2,3,4,5	F-001		13400		
07-09-18	1,2,3,4,5	F-002		10200	6100	W
07-09-18	1,2,3,4,5	F-007		0		
07-09-18	1,2,3,4,5	F-008		0		
07-09-18	1,2,3,4,5	F-009		500		
07-10-18	1,2,3,4,5	F-001		16300	2800	W
07-10-18	1,2,3,4,5	F-002		4100	3600	W
07-10-18	1,2,3,4,5	F-007		0		
07-10-18	1,2,3,4,5	F-008		0		
07-10-18	1,2,3,4,5	F-009		500		
07-11-18	1,2,3,4,5	F-001		13500	7700	W
07-11-18	1,2,3,4,5	F-002		1000		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month July Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
07-11-18	1,2,3,4,5	F-007		0		
07-11-18	1,2,3,4,5	F-008		0		
07-11-18	1,2,3,4,5	F-009		500		
07-12-18	1,2,3,4,5	F-001		5800	5300	W
07-12-18	1,2,3,4,5	F-002		2500		
07-12-18	1,2,3,4,5	F-007		0		
07-12-18	1,2,3,4,5	F-008		0		
07-12-18	1,2,3,4,5	F-009		500		
07-16-18	1,2,3,4,5	F-001		500		
07-16-18	1,2,3,4,5	F-002		8200	6300	W
07-16-18	1,2,3,4,5	F-007		0		
07-16-18	1,2,3,4,5	F-008		0		
07-16-18	1,2,3,4,5	F-009		500		
07-17-18	1,2,3,4,5	F-001		1400		
07-17-18	1,2,3,4,5	F-002		1900	1400	W
07-17-18	1,2,3,4,5	F-007		0		
07-17-18	1,2,3,4,5	F-008		0		
07-17-18	1,2,3,4,5	F-009		500		
07-18-18	1,2,3,4,5	F-001		4600	4100	W
07-18-18	1,2,3,4,5	F-002		500		
07-18-18	1,2,3,4,5	F-007		0		
07-18-18	1,2,3,4,5	F-008		0		
07-18-18	1,2,3,4,5	F-009		500		
07-19-18	1,2,3,4,5	F-001		500		
07-19-18	1,2,3,4,5	F-002		2100		
07-19-18	1,2,3,4,5	F-007		0		
07-19-18	1,2,3,4,5	F-008		0		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month July Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
07-19-18	1,2,3,4,5	F-009		500		
07-23-18	1,2,3,4,5	F-001		5000	3000	W
07-23-18	1,2,3,4,5	F-002		2100	1600	W
07-23-18	1,2,3,4,5	F-007		0		
07-23-18	1,2,3,4,5	F-008		0		
07-23-18	1,2,3,4,5	F-009		500		
07-24-18	1,2,3,4,5	F-001		2000		
07-24-18	1,2,3,4,5	F-002		1700		
07-24-18	1,2,3,4,5	F-007		0		
07-24-18	1,2,3,4,5	F-008		0		
07-24-18	1,2,3,4,5	F-009		500		
07-25-18	1,2,3,4,5	F-001		2000	1500	W
07-25-18	1,2,3,4,5	F-002		3900	3400	W
07-25-18	1,2,3,4,5	F-007		0		
07-25-18	1,2,3,4,5	F-008		0		
07-25-18	1,2,3,4,5	F-009		500		
07-26-18	1,2,3,4,5	F-001		1400		
07-26-18	1,2,3,4,5	F-002		500		
07-26-18	1,2,3,4,5	F-007		0		
07-26-18	1,2,3,4,5	F-008		0		
07-26-18	1,2,3,4,5	F-009		500		
07-30-18	1,2,3,4,5	F-001		5600		
07-30-18	1,2,3,4,5	F-002		500		
07-30-18	1,2,3,4,5	F-007		0		
07-30-18	1,2,3,4,5	F-008		0		
07-30-18	1,2,3,4,5	F-009		500		
		<i>Jammy Smith</i>		<i>7-30-18</i>		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month August Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
08-01-18	1,2,3,4,5	F-001		7000		
08-01-18	1,2,3,4,5	F-002		500		
08-01-18	1,2,3,4,5	F-007		0		
08-01-18	1,2,3,4,5	F-008		0		
08-01-18	1,2,3,4,5	F-009		500		
08-02-18	1,2,3,4,5	F-001		9700		
08-02-18	1,2,3,4,5	F-002		500		
08-02-18	1,2,3,4,5	F-007		0		
08-02-18	1,2,3,4,5	F-008		0		
08-02-18	1,2,3,4,5	F-009		500		
08-06-18	1,2,3,4,5	F-001		11900		
08-06-18	1,2,3,4,5	F-002		500		
08-06-18	1,2,3,4,5	F-007		0		
08-06-18	1,2,3,4,5	F-008		0		
08-06-18	1,2,3,4,5	F-009		500		
08-07-18	1,2,3,4,5	F-001		12700		
08-07-18	1,2,3,4,5	F-002		500		
08-07-18	1,2,3,4,5	F-007		0		
08-07-18	1,2,3,4,5	F-008		0		
08-07-18	1,2,3,4,5	F-009		500		
08-08-18	1,2,3,4,5	F-001		14700		
08-08-18	1,2,3,4,5	F-002		500		
08-08-18	1,2,3,4,5	F-007		0		
08-08-18	1,2,3,4,5	F-008		0		
08-08-18	1,2,3,4,5	F-009		500		
08-09-18	1,2,3,4,5	F-001		16200		
08-09-18	1,2,3,4,5	F-002		500		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month August Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
08-09-18	1,2,3,4,5	F-007		0		
08-09-18	1,2,3,4,5	F-008		0		
08-09-18	1,2,3,4,5	F-009		500		
08-13-18	1,2,3,4,5	F-001		17900		
08-13-18	1,2,3,4,5	F-002		500		
08-13-18	1,2,3,4,5	F-007		0		
08-13-18	1,2,3,4,5	F-008		0		
08-13-18	1,2,3,4,5	F-009		500		
08-14-18	1,2,3,4,5	F-001		19100		
08-14-18	1,2,3,4,5	F-002		500		
08-14-18	1,2,3,4,5	F-007		0		
08-14-18	1,2,3,4,5	F-008		0		
08-14-18	1,2,3,4,5	F-009		500		
08-15-18	1,2,3,4,5	F-001		20300		
08-15-18	1,2,3,4,5	F-002		500		
08-15-18	1,2,3,4,5	F-007		0		
08-15-18	1,2,3,4,5	F-008		0		
08-15-18	1,2,3,4,5	F-009		500		
08-16-18	1,2,3,4,5	F-001		22500	5800	L
08-16-18	1,2,3,4,5	F-002		500		
08-16-18	1,2,3,4,5	F-007		0		
08-16-18	1,2,3,4,5	F-008		0		
08-16-18	1,2,3,4,5	F-009		500		
08-20-18	1,2,3,4,5	F-001		16700	7200	L
08-20-18	1,2,3,4,5	F-002		4000		
08-20-18	1,2,3,4,5	F-007		0		
08-20-18	1,2,3,4,5	F-008		0		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month August Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
08-20-18	1,2,3,4,5	F-009		500		
08-21-18	1,2,3,4,5	F-001		9500		
08-21-18	1,2,3,4,5	F-002		5100		
08-21-18	1,2,3,4,5	F-007		0		
08-21-18	1,2,3,4,5	F-008		0		
08-21-18	1,2,3,4,5	F-009		500		
08-22-18	1,2,3,4,5	F-001		9500		
08-22-18	1,2,3,4,5	F-002		5600		
08-22-18	1,2,3,4,5	F-007		0		
08-22-18	1,2,3,4,5	F-008		0		
08-22-18	1,2,3,4,5	F-009		500		
08-23-18	1,2,3,4,5	F-001		9500		
08-23-18	1,2,3,4,5	F-002		6000		
08-23-18	1,2,3,4,5	F-007		0		
08-23-18	1,2,3,4,5	F-008		0		
08-23-18	1,2,3,4,5	F-009		500		
08-27-18	1,2,3,4,5	F-001		9500		
08-27-18	1,2,3,4,5	F-002		10500		
08-27-18	1,2,3,4,5	F-007		0		
08-27-18	1,2,3,4,5	F-008		0		
08-27-18	1,2,3,4,5	F-009		500		
08-28-18	1,2,3,4,5	F-001		9500	2400	L
08-28-18	1,2,3,4,5	F-002		11300		
08-28-18	1,2,3,4,5	F-007		0		
08-28-18	1,2,3,4,5	F-008		0		
08-28-18	1,2,3,4,5	F-009		500		
08-29-18	1,2,3,4,5	F-001		7100	6600	L

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month August Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
08-29-18	1,2,3,4,5	F-002		11900	1200	L
08-29-18	1,2,3,4,5	F-007		0		
08-29-18	1,2,3,4,5	F-008		0		
08-29-18	1,2,3,4,5	F-009		500		
<p data-bbox="641 1102 933 1417"><i>Jimmy Smith 8-29-18</i></p>						

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month September Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
09-04-18	1,2,3,4,5	F-001		6300		
09-04-18	1,2,3,4,5	F-002		11100	6200	L
09-04-18	1,2,3,4,5	F-007		0		
09-04-18	1,2,3,4,5	F-008		0		
09-04-18	1,2,3,4,5	F-009		500		
09-05-18	1,2,3,4,5	F-001		6400		
09-05-18	1,2,3,4,5	F-002		4900	1000	L
09-05-18	1,2,3,4,5	F-007		0		
09-05-18	1,2,3,4,5	F-008		0		
09-05-18	1,2,3,4,5	F-009		500		
09-06-18	1,2,3,4,5	F-001		7100	4300	L
09-06-18	1,2,3,4,5	F-002		3900		
09-06-18	1,2,3,4,5	F-007		0		
09-06-18	1,2,3,4,5	F-008		0		
09-06-18	1,2,3,4,5	F-009		500		
09-10-18	1,2,3,4,5	F-001		2800		
09-10-18	1,2,3,4,5	F-002		7800	7300	L
09-10-18	1,2,3,4,5	F-007		0		
09-10-18	1,2,3,4,5	F-008		0		
09-10-18	1,2,3,4,5	F-009		500		
09-11-18	1,2,3,4,5	F-001		3900		
09-11-18	1,2,3,4,5	F-002		500		
09-11-18	1,2,3,4,5	F-007		0		
09-11-18	1,2,3,4,5	F-008		0		
09-11-18	1,2,3,4,5	F-009		500		
09-12-18	1,2,3,4,5	F-001		5400	4900	L
09-12-18	1,2,3,4,5	F-002		500		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month September Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
09-12-18	1,2,3,4,5	F-007		0		
09-12-18	1,2,3,4,5	F-008		0		
09-12-18	1,2,3,4,5	F-009		500		
09-13-18	1,2,3,4,5	F-001		500		
09-13-18	1,2,3,4,5	F-002		1400	900	L
09-13-18	1,2,3,4,5	F-007		0		
09-13-18	1,2,3,4,5	F-008		0		
09-13-18	1,2,3,4,5	F-009		500		
09-17-18	1,2,3,4,5	F-001		3700	3200	L
09-17-18	1,2,3,4,5	F-002		500		
09-17-18	1,2,3,4,5	F-007		0		
09-17-18	1,2,3,4,5	F-008		0		
09-17-18	1,2,3,4,5	F-009		500		
09-18-18	1,2,3,4,5	F-001		500		
09-18-18	1,2,3,4,5	F-002		1100		
09-18-18	1,2,3,4,5	F-007		0		
09-18-18	1,2,3,4,5	F-008		0		
09-18-18	1,2,3,4,5	F-009		500		
09-19-18	1,2,3,4,5	F-001		500		
09-19-18	1,2,3,4,5	F-002		2000		
09-19-18	1,2,3,4,5	F-007		0		
09-19-18	1,2,3,4,5	F-008		0		
09-19-18	1,2,3,4,5	F-009		500		
09-20-18	1,2,3,4,5	F-001		500		
09-20-18	1,2,3,4,5	F-002		3100	2600	L
09-20-18	1,2,3,4,5	F-007		0		
09-20-18	1,2,3,4,5	F-008		0		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month September Year 2018

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
09-20-18	1,2,3,4,5	F-009		500		
09-24-18	1,2,3,4,5	F-001		7500	7000	L
09-24-18	1,2,3,4,5	F-002		500		
09-24-18	1,2,3,4,5	F-007		0		
09-24-18	1,2,3,4,5	F-008		0		
09-24-18	1,2,3,4,5	F-009		500		
09-25-18	1,2,3,4,5	F-001		500		
09-25-18	1,2,3,4,5	F-002		7400	6900	L
09-25-18	1,2,3,4,5	F-007		0		
09-25-18	1,2,3,4,5	F-008		0		
09-25-18	1,2,3,4,5	F-009		500		
09-26-18	1,2,3,4,5	F-001		4200	3700	L
09-26-18	1,2,3,4,5	F-002		1600	1100	L
09-26-18	1,2,3,4,5	F-007		0		
09-26-18	1,2,3,4,5	F-008		0		
09-26-18	1,2,3,4,5	F-009		500		
09-27-18	1,2,3,4,5	F-001		2400		
09-27-18	1,2,3,4,5	F-002		500		
09-27-18	1,2,3,4,5	F-007		0		
09-27-18	1,2,3,4,5	F-008		0		
09-27-18	1,2,3,4,5	F-009		500		

Sammy Smith 9-27-18

* R – Re-circulated to Working Phas
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

LEACHATE DATA

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Paducah OREIS Report for USL18-03

USL18-03-02

from: C-746-S

on 7/19/2018

Media: WW

SmpMethod: GR

Comments: C-746-S Landfill, Cell #2. Mostly clear water. CH 7-19-18. C-746-S Landfill Leachate

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.102	mg/L	JW		0.2			SW846-9056	GEL	/X/
Chloride	14.6	mg/L			0.4			SW846-9056	GEL	/X/
Fluoride	0.773	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	0.514	mg/L	H		0.4			SW846-9056	GEL	/X/
Sulfate	20.5	mg/L	W		0.8			SW846-9056	GEL	/X/
FS										
Conductivity	687	umho/cm						FS	FS	//
Dissolved Oxygen	6.56	mg/L						FS	FS	//
pH	7.08	Std Unit						FS	FS	//
Redox	330	mV						FS	FS	//
Temperature	79.5	deg F						FS	FS	//
Turbidity	1.3	NTU						FS	FS	//
METAL										
Aluminum	0.05	mg/L	U		0.05			SW846-6020	GEL	/X/
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium	0.269	mg/L			0.002			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0277	mg/L			0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	143	mg/L			2			SW846-6020	GEL	/X/
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Cobalt	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Copper	0.000632	mg/L	J		0.001			SW846-6020	GEL	/X/
Iron	0.1	mg/L	U		0.1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	18.7	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.0294	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.00122	mg/L			0.0005			SW846-6020	GEL	/X/
Nickel	0.000896	mg/L	J		0.002			SW846-6020	GEL	/X/
Phosphorous	0.0222	mg/L	BJ		0.05			EPA-365.4	GEL	/X/
Potassium	1.22	mg/L			0.3			SW846-6020	GEL	/X/
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Selenium	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Sodium	34.4	mg/L			0.25			SW846-6020	GEL	/X/
Tantalum	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Titanium	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.00487	mg/L			0.0002			SW846-6020	GEL	/X/
Vanadium	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Zinc	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.271	mg/L			0.002			SW846-6020	GEL	/X/
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/

Paducah OREIS Report for USL18-03

Chromium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Cobalt, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X/
Copper, Dissolved	0.00117	mg/L		0.001			SW846-6020	GEL	/ X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X/
Manganese, Dissolved	0.0168	mg/L		0.005			SW846-6020	GEL	/ X/
Nickel, Dissolved	0.000972	mg/L	J	0.002			SW846-6020	GEL	/ X/
Selenium, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X/
Silver, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X/
Tin, Dissolved	0.00187	mg/L	J	0.005			SW846-6020	GEL	/ X/
Titanium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Uranium, Dissolved	0.00471	mg/L		0.0002			SW846-6020	GEL	/ X/
Vanadium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Zinc, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/

OTHOR

Oil and Grease	4.03	mg/L	U	4.03			EPA-1664A	GEL	/ X/
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PCCB

PCB-1016	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1221	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1232	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1242	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1248	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1254	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1260	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
PCB-1268	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/
Polychlorinated biphenyl	0.0943	ug/L	U	0.0943			SW846-8082	GEL	/ X/

RADS

Alpha activity	3.25	pCi/L	U	11	5.92	5.95	SW846-9310	GEL	/ X/
Americium-241	0.0974	pCi/L	U	1.29	0.629	0.63	HASL 300, Am-05-RC M	GEL	/ X/
Beta activity	-6.03	pCi/L	U	10.4	4.96	4.96	SW846-9310	GEL	/ X/
Cesium-137	0.259	pCi/L	U	1.51	0.872	0.88	EPA-901.1	GEL	/ X/
Cobalt-60	0.695	pCi/L	U	1.73	0.925	0.979	EPA-901.1	GEL	/ X/
Neptunium-237	-0.0637	pCi/L	U	1.07	0.44	0.44	ASTM-1475-00aM	GEL	/ X/
Plutonium-239/240	-0.178	pCi/L	U	1.57	0.603	0.604	HASL 300, Pu-11-RC M	GEL	/ X/
Radium-226	0.262	pCi/L	U	0.612	0.394	0.418	AN-1418	GEL	/ X/
Strontium-90	-0.457	pCi/L	U	3.26	1.57	1.57	EPA-905.0-M	GEL	/ X/
Technetium-99	4.68	pCi/L	U	12.5	7.36	7.38	DOE TC-02-RC	GEL	/ X/
Thorium-230	0.282	pCi/L	U	1.23	0.702	0.706	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234	45.1	pCi/L	U	125	116	118	EPA-901.1	GEL	/ X/
Total Uranium	3.97	pCi/L	U	4.17	3.12	3.17	HASL 300, U-02-RC M	GEL	/ X/
Tritium	-2.13	pCi/L	U	220	125	125	EPA-906.0-M	GEL	/ X/
Uranium-233/234	2.46	pCi/L	U	3.08	2.38	2.43	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235/236	-0.0594	pCi/L	U	2.08	0.985	0.989	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238	1.51	pCi/L	U	1.89	1.76	1.79	HASL 300, U-02-RC M	GEL	/ X/

RADS-D

Americium-241, Dissolved	0.385	pCi/L	U	1.6	0.886	0.887	HASL 300, Am-05-RC M	GEL	/ X/
Cesium-137, Dissolved	-1.74	pCi/L	U	8.71	4.88	4.95	EPA-901.1	GEL	/ X/
Cobalt-60, Dissolved	-6.5	pCi/L	U	10.4	6.68	7.33	EPA-901.1	GEL	/ X/
Dissolved Alpha	4.83	pCi/L	U	11.1	6.49	6.54	SW846-9310	GEL	/ X/
Dissolved Beta	-0.903	pCi/L	U	10.7	5.57	5.57	SW846-9310	GEL	/ X/
Neptunium-237, Dissolved	-0.239	pCi/L	U	2.02	0.816	0.816	ASTM-1475-00aM	GEL	/ X/
Plutonium-239/240, Dissolved	-0.223	pCi/L	U	1.3	0.422	0.424	HASL 300, Pu-11-RC M	GEL	/ X/
Technetium-99, Dissolved	0.0279	pCi/L	U	12.6	7.26	7.26	DOE TC-02-RC	GEL	/ X/
Thorium-230, Dissolved	0.193	pCi/L	U	1.29	0.694	0.697	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234, Dissolved	87.1	pCi/L	U	509	421	423	EPA-901.1	GEL	/ X/
Total Uranium, Dissolved	7.58	pCi/L		3.78	3.82	3.92	HASL 300, U-02-RC M	GEL	/ X/

Paducah OREIS Report for USL18-03

Uranium-233/234, Dissolved	2.56	pCi/L		2.28	2.14	2.19	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235/236, Dissolved	3.47	pCi/L		2.11	2.64	2.71	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238, Dissolved	1.55	pCi/L	U	2.16	1.75	1.78	HASL 300, U-02-RC M	GEL	/ X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dibromo-3-chloropropane	0.0197	ug/L	U	0.0197			SW846-8011	GEL	/ X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Ethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Iodomethane	5	ug/L	U	5			EPA-624.1	GEL	/ X/
m,p-Xylene	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Methylene chloride	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Styrene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Tetrachloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Toluene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Total Xylene	3	ug/L	U	3			EPA-624.1	GEL	/ X/
trans-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Trichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trichlorofluoromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Vinyl acetate	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Vinyl chloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/

WETCHEM

Paducah OREIS Report for USL18-03

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	UX	2	SM-5210 B	GEL	/ X /
Chemical Oxygen Demand (COD)	24.3	mg/L	B	20	EPA-410.4	GEL	/ X /
Cyanide	0.005	mg/L	U	0.005	SW846-9012B	GEL	/ X /
Dissolved Solids	514	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	372	mg/L		2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	UW	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	5	mg/L	U	5	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	3.44	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	30.2	ug/L		10	SW846-9020B	GEL	/ X /

Paducah OREIS Report for USL18-03

USL18-03-01

from: C-746-U

on 7/19/2018

Media: WW

SmpMethod: GR

Comments: C-746-U Landfill, F002 Tank. Brown colored water. After bottles set an hour, brown sediment has formed on bottom of sample. F002 tank had approx 2,000 gallons of water in it and was circulating 1 1/2 hrs prior to sampling. CH 7-19-18. C-746-U Landfill Leachate

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.42	mg/L	W		0.4			SW846-9056	GEL	/X/
Chloride	45.4	mg/L			4			SW846-9056	GEL	/X/
Fluoride	0.68	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	3.17	mg/L			2			SW846-9056	GEL	/X/
Sulfate	206	mg/L	W		8			SW846-9056	GEL	/X/
FS										
Conductivity	1438	umho/cm						FS	FS	//
Dissolved Oxygen	6.32	mg/L						FS	FS	//
pH	7.39	Std Unit						FS	FS	//
Redox	341	mV						FS	FS	//
Temperature	71.5	deg F						FS	FS	//
Turbidity	145	NTU						FS	FS	//
METAL										
Aluminum	5.74	mg/L			0.05			SW846-6020	GEL	/X/
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic	0.00436	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium	0.142	mg/L			0.002			SW846-6020	GEL	/X/
Beryllium	0.000986	mg/L			0.0005			SW846-6020	GEL	/X/
Boron	0.98	mg/L			0.15			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	148	mg/L			2			SW846-6020	GEL	/X/
Chromium	0.00757	mg/L	J		0.01			SW846-6020	GEL	/X/
Cobalt	0.00674	mg/L			0.001			SW846-6020	GEL	/X/
Copper	0.00416	mg/L			0.001			SW846-6020	GEL	/X/
Iron	4.69	mg/L			0.1			SW846-6020	GEL	/X/
Lead	0.00257	mg/L			0.002			SW846-6020	GEL	/X/
Magnesium	38	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.276	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.000857	mg/L			0.0005			SW846-6020	GEL	/X/
Nickel	0.011	mg/L			0.002			SW846-6020	GEL	/X/
Phosphorous	0.183	mg/L	B		0.05			EPA-365.4	GEL	/X/
Potassium	5.33	mg/L			0.3			SW846-6020	GEL	/X/
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Selenium	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Sodium	94.5	mg/L			2.5			SW846-6020	GEL	/X/
Tantalum	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Titanium	0.064	mg/L			0.01			SW846-6020	GEL	/X/
Uranium	0.144	mg/L			0.0002			SW846-6020	GEL	/X/
Vanadium	0.0119	mg/L			0.01			SW846-6020	GEL	/X/
Zinc	0.0579	mg/L			0.01			SW846-6020	GEL	/X/
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.136	mg/L			0.002			SW846-6020	GEL	/X/
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/

Paducah OREIS Report for USL18-03

Chromium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Cobalt, Dissolved	0.000444	mg/L	J	0.001			SW846-6020	GEL	/ X/
Copper, Dissolved	0.00125	mg/L		0.001			SW846-6020	GEL	/ X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X/
Manganese, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X/
Nickel, Dissolved	0.00319	mg/L		0.002			SW846-6020	GEL	/ X/
Selenium, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X/
Silver, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X/
Tin, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X/
Titanium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Uranium, Dissolved	0.158	mg/L		0.0002			SW846-6020	GEL	/ X/
Vanadium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Zinc, Dissolved	0.00787	mg/L	J	0.01			SW846-6020	GEL	/ X/

OTHOR

Oil and Grease	4.03	mg/L	U	4.03			EPA-1664A	GEL	/ X/
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PCCB

PCB-1016	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1221	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1232	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1242	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1248	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1254	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1260	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
PCB-1268	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/
Polychlorinated biphenyl	0.0952	ug/L	U	0.0952			SW846-8082	GEL	/ X/

RADS

Alpha activity	83.8	pCi/L		13.3	21.7	25.6	SW846-9310	GEL	/ X/
Americium-241	-0.142	pCi/L	U	1.25	0.48	0.48	HASL 300, Am-05-RC M	GEL	/ X/
Beta activity	81.2	pCi/L		9.04	12.1	18.1	SW846-9310	GEL	/ X/
Cesium-137	-0.0742	pCi/L	U	1.57	0.872	0.873	EPA-901.1	GEL	/ X/
Cobalt-60	-0.243	pCi/L	U	1.45	0.83	0.838	EPA-901.1	GEL	/ X/
Neptunium-237	-0.0859	pCi/L	U	0.979	0.388	0.389	ASTM-1475-00aM	GEL	/ X/
Plutonium-239/240	0.322	pCi/L	U	1.25	0.73	0.732	HASL 300, Pu-11-RC M	GEL	/ X/
Radium-226	0.372	pCi/L	U	0.487	0.391	0.445	AN-1418	GEL	/ X/
Strontium-90	0.069	pCi/L	U	3.67	1.88	1.88	EPA-905.0-M	GEL	/ X/
Technetium-99	27.5	pCi/L		13.5	8.77	9.28	DOE TC-02-RC	GEL	/ X/
Thorium-230	0.472	pCi/L	U	1.49	0.88	0.887	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234	0	pCi/L	UI	129	143	167	EPA-901.1	GEL	/ X/
Total Uranium	59	pCi/L		4.8	10.3	14	HASL 300, U-02-RC M	GEL	/ X/
Tritium	5.77	pCi/L	U	227	129	129	EPA-906.0-M	GEL	/ X/
Uranium-233/234	9.23	pCi/L		2.91	4.16	4.54	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235/236	1.99	pCi/L	U	2.78	2.41	2.44	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238	47.8	pCi/L		2.63	9.08	13	HASL 300, U-02-RC M	GEL	/ X/

RADS-D

Americium-241, Dissolved	-0.595	pCi/L	U	1.72	0.474	0.475	HASL 300, Am-05-RC M	GEL	/ X/
Cesium-137, Dissolved	0.0486	pCi/L	U	8.8	4.42	4.42	EPA-901.1	GEL	/ X/
Cobalt-60, Dissolved	-3.18	pCi/L	U	8.6	4.99	5.2	EPA-901.1	GEL	/ X/
Dissolved Alpha	78.3	pCi/L		14.9	18.4	22.5	SW846-9310	GEL	/ X/
Dissolved Beta	29.7	pCi/L		6.18	6.32	8.08	SW846-9310	GEL	/ X/
Neptunium-237, Dissolved	-0.248	pCi/L	U	1.28	0.4	0.401	ASTM-1475-00aM	GEL	/ X/
Plutonium-239/240, Dissolved	0.453	pCi/L	U	1.46	0.902	0.906	HASL 300, Pu-11-RC M	GEL	/ X/
Technetium-99, Dissolved	27.4	pCi/L		12	7.89	8.45	DOE TC-02-RC	GEL	/ X/
Thorium-230, Dissolved	0.643	pCi/L	U	1.54	1.02	1.03	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234, Dissolved	231	pCi/L	U	549	579	582	EPA-901.1	GEL	/ X/
Total Uranium, Dissolved	65.6	pCi/L		3.86	9.62	13.6	HASL 300, U-02-RC M	GEL	/ X/

Paducah OREIS Report for USL18-03

Uranium-233/234, Dissolved	10.8	pCi/L		2.44	3.98	4.43	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235/236, Dissolved	2.46	pCi/L		2.22	2.27	2.31	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238, Dissolved	52.3	pCi/L		2.01	8.47	12.6	HASL 300, U-02-RC M	GEL	/ X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dibromo-3-chloropropane	0.0196	ug/L	U	0.0196			SW846-8011	GEL	/ X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Ethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Iodomethane	5	ug/L	U	5			EPA-624.1	GEL	/ X/
m,p-Xylene	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Methylene chloride	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Styrene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Tetrachloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Toluene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Total Xylene	3	ug/L	U	3			EPA-624.1	GEL	/ X/
trans-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Trichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trichlorofluoromethane	1.94	ug/L		1			EPA-624.1	GEL	/ X/
Vinyl acetate	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Vinyl chloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/

WETCHEM

Paducah OREIS Report for USL18-03

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	UX	2	SM-5210 B	GEL	/ X /
Chemical Oxygen Demand (COD)	52.2	mg/L	B	20	EPA-410.4	GEL	/ X /
Cyanide	0.005	mg/L	U	0.005	SW846-9012B	GEL	/ X /
Dissolved Solids	937	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	498	mg/L		2	EPA-130.2	GEL	/ X /
Iodide	0.175	mg/L	JW	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	124	mg/L		25	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	12.3	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	56.7	ug/L		10	SW846-9020B	GEL	/ X /

Paducah OREIS Report for USL18-03

USL18-03-BT

from: QC

on 7/19/2018

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
VOA										
1,1,1,2-Tetrachloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,1-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2,2-Tetrachloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2,3-Trichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dibromo-3-chloropropane	0.0198	ug/L	U		0.0198			SW846-8011	GEL	/X/
1,2-Dibromoethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dimethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,4-Dichlorobenzene	0.4	ug/L	J		1			EPA-624.1	GEL	/X/
2-Butanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
2-Hexanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
4-Methyl-2-pentanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acetone	2.91	ug/L	J		5			EPA-624.1	GEL	/X/
Acrolein	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acrylonitrile	5	ug/L	U		5			EPA-624.1	GEL	/X/
Benzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromodichloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromoform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Carbon disulfide	5	ug/L	U		5			EPA-624.1	GEL	/X/
Carbon tetrachloride	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Ethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Iodomethane	5	ug/L	U		5			EPA-624.1	GEL	/X/
m,p-Xylene	2	ug/L	U		2			EPA-624.1	GEL	/X/
Methylene chloride	2	ug/L	U		2			EPA-624.1	GEL	/X/
Styrene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Tetrachloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Toluene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Total Xylene	3	ug/L	U		3			EPA-624.1	GEL	/X/
trans-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
trans-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U		5			EPA-624.1	GEL	/X/
Trichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trichlorofluoromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Vinyl acetate	5	ug/L	U		5			EPA-624.1	GEL	/X/
Vinyl chloride	1	ug/L	U		1			EPA-624.1	GEL	/X/

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Department of Energy

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

OCT 15 2018

Ms. Jamie Nielsen, Supervisor
Permit Administration Section
Division of Waste Management, Solid Waste Branch
Kentucky Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-5191190-19A

Dear Ms. Nielsen:

**C-746-U SOLID WASTE LANDFILL THIRD QUARTER CALENDAR YEAR 2018
WASTE QUANTITY REPORT, PERMIT NO. SW07300014, SW07300015, SW07300045,
AGENCY INTEREST NO. 3059**

Enclosed is the subject report for the third quarter calendar year 2018. This report is required in accordance with Permit Condition ACTV0006, Special Condition Number 12, of the Solid Waste Landfill Permit No. SW07300014, SW07300015, SW07300045, issued July 11, 2018.

If you have any questions or require additional information, please contact David Dollins at (270) 441-6819.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer Woodard".

Jennifer Woodard
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosure:

C-746-U Solid Waste Landfill Third Quarter Calendar Year 2018 Waste Quantity Report

e-copy w/enclosure:

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Department for Environmental Protection / Division of Waste Management / Solid Waste Branch
 Quarterly Waste Quantity Report - DEP 7046-Q (Revised 2-05)

Page 1 of 1

WASTE ACTIVITY: CONTAINED LANDFILL

Facility Name: U.S. Department of Energy- Paducah Gaseous Diffusion Plant Permit Number: SW07300014, SW07300015, SW07300045
 County where landfill is located: McCracken Agency Interest Number: 3059
 Report for the Months of: July, August, September For the Year of: 2018

Waste Source (County and State)	Type of Waste			**Waste Used as Alternate Daily Cover As Approved (Tons Only)
	*Municipal Solid Waste (Tons Only)	*Industrial Waste (Tons Only)	*Special Waste (Tons Only)	
Paducah Gaseous Diffusion Plant, McCracken County, Kentucky (July)	0.00	177.29	0.00	0.00
Paducah Gaseous Diffusion Plant, McCracken County, Kentucky (August)	0.00	0.00	0.00	0.00
Paducah Gaseous Diffusion Plant, McCracken County, Kentucky (September)	0.00	49.28	0.00	0.00
Total for this page	0.00	226.57	0.00	0.00
Grand Total of all pages	0.00	226.57	0.00	0.00

*Grand Total of Municipal, Industrial, and Special from all pages 226.57

*Does not include waste used as Alternate Daily Cover.

**Indicate the amount of waste used as Alternate Daily Cover. Please note this requires prior approval by the Cabinet.


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 such violations.

Signature: 

Phone Number: (270) 441-5113

Name - Please Print: Myrna E. Redfield

Date: 10/15/18

Signature: 

Phone Number: (270) 441-6800

Name - Please Print: Jennifer Woodard

Date: 10/15/18

This Certification clause shall be signed by the responsible person(s) described in 401 KAR 47:160, Section 6(1), and/or (2) and is required by 401 KAR 47:160, Section 6(4).