

CH2MHILL • BWXT West Valley, LLC

West Valley Demonstration Project

Ms. Bridget M. Purdy, Contracting Officer
U. S. Department of Energy
West Valley Demonstration Project
10282 Rock Springs Road
West Valley, New York 14171-9799

AC-PRES
WD:2017:1083
October 25, 2017

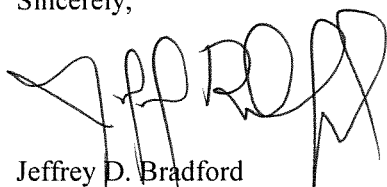
SUBJECT: Contract No. DE-EM0001529, Section J-3, Item 127, State Pollutant Discharge Elimination System (SPDES) Discharge Monitoring Report (DMR)

Dear Ms. Purdy:

This letter is submitted for Contracting Officer Representative's approval to inform you that the SPDES DMR for the reporting period September 1 through September 30, 2017 has been submitted electronically. A copy of this submittal is attached as well as a copy of the email confirmation from the New York State Department of Environmental Conservation (NYSDEC).

If you have any questions, please contact William Kean at extension 4865 or Janice Williams at extension 2913.

Sincerely,



Jeffrey D. Bradford
President & General Manager

JDB:WNK:bnj

Attachments: A) SPDES DMR for September 1 – September 30, 2017
B) Email Confirmation from NYSDEC

cc: B. C. Bower, DOE-WVDP
S. A. Anderson, CHBWV
J. J. Baker, CHBWV
J. L. Casper, CHBWV
C. Dayton, CHBWV (Public Reading Room)
N. Feher, CHBWV
L. K. Hollfelder, CHBWV
W. N. Kean, CHBWV
L. J. Ortega, CHBWV
D. H. Pritchard, CHBWV
J. E. Wangelin, CHBWV
J. D. Williams, CHBWV
Letter Log (B. Jeffery), CHBWV
CHBWV OITS #1630398

Attachment A
SPDES DMR

Permit					
Permit #:	NY0000973	Permittee:	U.S. DEPT OF ENERGY	Facility:	WEST VALLEY DEMONSTRATION PROJ
Major:	Yes	Permittee Address:	1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585	Facility Location:	10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799
Permitted Feature:	001 External Outfall	Discharge:	001-M OUTFALL 001 MONTHLY PROC WW, GW, STORM		
Report Dates & Status					
Monitoring Period:	From 09/01/17 to 09/30/17	DMR Due Date:	10/28/17	Status:	Not DMR Validated
<i>Considerations for Form Completion</i>					
Principal Executive Officer					
First Name:	Bryan C.	Title:	Director, USDOE-WVDP	Telephone:	716-942-4368
Last Name:	Bower				
No Data Indicator (NODI)					
Form NODI:	--				

[illegible]

01105 Aluminum, total [as Al]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	0.22	=	0.22	19 - mg/L	01/BA - Once Per Batch 24 - COMP24
					<=	2 MO AVG	<=	4 DAILY MX	19 - mg/L 0	01/BA - Once Per Batch 24 - COMP24
01128 Vanadium, total recoverable	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	<	0.0015	<	0.0015	19 - mg/L	01/BA - Once Per Batch GR - GRAB
						Req Mon MO AVG	<=	.014 DAILY MX	19 - mg/L 0	01/BA - Once Per Batch GR - GRAB
34726 Nitrogen, ammonia, total [as NH3]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	0.019	=	0.022	19 - mg/L	02/BA - Twice Per Batch 24 - COMP24
					<=	1.5 MO AVG	<=	2.1 DAILY MX	19 - mg/L 0	02/BA - Twice Per Batch 24 - COMP24
50050 Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	0.238	=	0.32	03 - MGD	02/BA - Twice Per Batch CN - CONTIN
						Req Mon MO AVG		Req Mon DAILY MX	03 - MGD	02/BA - Twice Per Batch CN - CONTIN
50060 Chlorine, total residual	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	0.05	=	0.05	19 - mg/L	01/BA - Once Per Batch GR - GRAB
						Req Mon MO AVG	<=	.1 DAILY MX	19 - mg/L 0	01/BA - Once Per Batch GR - GRAB
70295 Solids, total dissolved	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	589	=	906	19 - mg/L	02/BA - Twice Per Batch GR - GRAB
						Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L 0	02/BA - Twice Per Batch GR - GRAB
71900 Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	3.8	=	3.8	3M - ng/L	01/BA - Once Per Batch GR - GRAB
					<=	50 MO AVG		Req Mon DAILY MX	3M - ng/L 0	01/BA - Once Per Batch GR - GRAB
81646 Surfactants [linear alkylate sulfonate]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	=	0.01	=	0.01	19 - mg/L	01/BA - Once Per Batch GR - GRAB
						Req Mon MO AVG	<=	.04 DAILY MX	19 - mg/L 0	01/BA - Once Per Batch GR - GRAB

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

As required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2.5(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WVDP DMR's are as follows: 1) TestAmerica: NY Lab No. 10026; and 2) General Engineering Laboratory: NY Lab No. 11501. Also, NYCRR Part 750-2.5(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. to that end, the MDLs for Total Residual Chlorine analysis, performed by the CHBWV wastewater treatment operators is 0.01 mg/L.

Attachments

No attachments.

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
Name: William Kean
E-Mail: william.kean@chbwv.com
Date/Time: 2017-10-24 06:54 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
Name: Janice Williams
E-Mail: janice.williams@chbwv.com
Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit

Permit #: NY0000973
 Major: Yes
 Permittee: U.S. DEPT OF ENERGY
 Permittee Address: 1000 INDEPENDENCE AVE SW
 WASHINGTON, DC 20585
 Facility: WEST VALLEY DEMONSTRATION PROJ
 Facility Location: 10282 ROCK SPRINGS ROAD
 WEST VALLEY, NY 14171-9799

Permitted Feature: SUM
 Internal Outfall
 Discharge: SUM-N
 SUM OF OUTFALLS 1 & 7

Report Dates & Status

Monitoring Period: From 09/01/17 to 09/30/17
 DMR Due Date: 10/28/17
 Status: NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

First Name: Bryan C.
 Last Name: Bower
 Title: Director, USDOE-WVDP
 Telephone: 716-942-4368

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Monitoring Location	Season #	Param. NODI	Quantity or Loading	Quality or Concentration	# of Ex.	Frequency of Analysis	Sample Type
Name				Qualifier 1 Value 1 Qualifier 2 Value 2 Units	Qualifier 1 Value 1 Qualifier 2 Value 2			
01045 Iron, total [as Fe] 2 - Effluent Net	0	-		Sample Permit Req. Value NODI	= 0.49 Req Mon MO AVG <=	= 0.49	19 - mg/L 01/30 - Monthly	CA - CALCTD
							1 DAILY MX 19 - mg/L 0 01/30 - Monthly	CA - CALCTD

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

As required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2.5(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) Identification numbers for Laboratories performing analysis for the WVDP DMR's are as follows: 1) TestAmerica: NY Lab No. 10026; and 2) General Engineering Laboratory: NY Lab No. 11501. Also, NYCRR Part 750-2.5(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP: to that end, the MDLs for Total Residual Chlorine analysis, performed by the CHBWV wastewater treatment operators is 0.01 mg/L.

Attachments

Name	Type	Size
WVDP-SEPTEMBER-2017-NET-IRON-CALC.pdf	pdf	30200

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
 Name: William Kean
 E-Mail: william.kean@chbwv.com
 Date/Time: 2017-10-24 06:53 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
 Name: Janice Williams
 E-Mail: janice.williams@chbwv.com
 Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit

Permit #: NY0000973
Major: Yes

Permittee: U.S. DEPT OF ENERGY
Permittee Address: 1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585
Discharge: 116-M
PSEUDO MON. POINT @FRANKS CRK

Facility: WEST VALLEY DEMONSTRATION PROJ
Facility Location: 10282 ROCK SPRINGS ROAD
WEST VALLEY, NY 14171-9799

Report Dates & Status

Monitoring Period: From 09/01/17 to 09/30/17

DMR Due Date: 10/28/17

Status: NetDMR Validated

Considerations for Form Completion

IF PSUEDO MONITORING POINT REPORT IS NOT REQUIRED DURING THE MONITORING PERIOD, EITHER CHECK THENO DISCHARGE BOX OR ENTER 'NODI A'IN PLACE OF A MEASUREMENT TO INDICATE A GENERAL PERMIT EXEMPTION.

Principal Executive Officer

First Name: Bryan C.
Last Name: Bower

Title: Director, USDOE-WVDP

Telephone: 716-942-4368

No Data Indicator (NODI)

Form NODI: --

Parameter	Monitoring Location	Season #	Param. NODI	Quantity or Loading				Quality or Concentration				# of Ex.	Frequency of Analysis	Sample Type
Code	Name			Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	
70295	Solids, total dissolved Z - Instream Monitoring	0	--											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

As required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2.5(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WVDP DMR's are as follows: 1) TestAmerica: NY Lab No. 10026; and 2) General Engineering Laboratory: NY Lab No. 11501. Also, NYCRR Part 750-2.5(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. to that end, the MDLs for Total Residual Chlorine analysis, performed by the CHBWV wastewater treatment operators is 0.01 mg/L.

Attachments

Name	Type	Size
WVDP-SEPTEMBER-2017-TDS-CALC.pdf	pdf	31855

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
Name: William Kean
E-Mail: william.kean@chbwv.com
Date/Time: 2017-10-24 06:53 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
Name: Janice Williams
E-Mail: janice.williams@chbwv.com
Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit		Permittee:		Facility:	
Permit #:	NY0000973	Permittee:	U.S. DEPT OF ENERGY	Facility:	WEST VALLEY DEMONSTRATION PROJ
Major:	Yes	Permittee Address:	1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585	Facility Location:	10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799
Permitted Feature:		Discharge:			
007 External Outfall		007-M SANITARY, NC COOLING WATER, UTILITY WASTEWATER, STORMWATER			
Report Dates & Status					
Monitoring Period:		DMR Due Date:		Status:	
From 09/01/17 to 09/30/17		10/28/17		NetDMR Validated	
Considerations for Form Completion					
Principal Executive Officer					
First Name:		Title:		Telephone:	
Bryan C.		Director, USDOE-WVDP		716-942-4368	
Last Name:		Bower			
No Data Indicator (NODI)					
Form NODI: -					

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading				Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type	
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	22 DAILY MX	19 - mg/L	01/30 - Monthly	CA - CALCTD	
					Permit Req. Value NODI									C - No Discharge					
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample				>=	3 MINIMUM				Req Mon MAXIMUM	19 - mg/L		02/30 - Twice Per Month	GR - GRAB	
					Permit Req. Value NODI					C - No Discharge				C - No Discharge					
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	10 DAILY MX	19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge					
00400	pH	1 - Effluent Gross	0	--	Sample				>=	6.5 MINIMUM				<=	8.5 MAXIMUM	12 - SU	02/30 - Twice Per Month	GR - GRAB	
					Permit Req. Value NODI					C - No Discharge					C - No Discharge				
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample							<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	.3 DAILY MX	25 - mL/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	15 DAILY MX	19 - mg/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	.1 DAILY MX	19 - mg/L	01/30 - Monthly	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
34726	Nitrogen, ammonia, total [as NH3]	1 - Effluent Gross	0	--	Sample							<=	1.49 MO AVG	<=	2.1 DAILY MX	19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample												01/30 - Monthly	CN - CONTIN	
					Permit Req. Value NODI														
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	.1 DAILY MX	19 - mg/L	01/30 - Monthly	GR - GRAB	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
70295	Solids, total dissolved	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample									Req Mon MO AVG <=	50 DAILY MX	3M - ng/L	01/30 - Monthly	GR - GRAB	
					Permit Req. Value NODI									C - No Discharge	C - No Discharge				

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
Name: William Kean
E-Mail: william.kean@chbwv.com
Date/Time: 2017-10-24 08:53 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
Name: Janice Williams
E-Mail: janice.williams@chbwv.com
Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit
 Permit #: NY0000973
 Major: Yes
 Permitted Feature: 001
 External Outfall
 Report Dates & Status
 Monitoring Period: From 07/01/17 to 09/30/17
 Considerations for Form Completion
 SEE PERMIT FOOTNOTES FOR WET TESTING REQUIREMENTS
 Principal Executive Officer
 First Name: Bryan C.
 Last Name: Bower
 No Data Indicator (NODI)
 Form NODI: --

Permittee: U.S. DEPT OF ENERGY
 Permittee Address: 1000 INDEPENDENCE AVE SW
 WASHINGTON, DC 20585
 Discharge: 001-W
 OUTFALL 001 WET TESTING QUARTERLY
 Facility: WEST VALLEY DEMONSTRATION PROJ
 Facility Location: 10282 ROCK SPRINGS ROAD
 WEST VALLEY, NY 14171-9799
 DMR Due Date: 11/28/17
 Status: NetDMR Validated
 Title: Director, USDOE-WVDP
 Telephone: 716-942-4368

Parameter		Monitoring Location		Season #	Param. NODI	Quantity or Loading				Quality or Concentration				# of Ex.	Frequency of Analysis	Sample Type	
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units
61425	Toxicity [acute], Ceriodaphnia dubia	V - See Comments	0	--	Sample						=	0.3	2F - tox acute				01/90 - Quarterly
					Permit Req. Value NODI						<=	.3	MAXIMUM 2F - tox acute	0			01/90 - Quarterly
X 61426	Toxicity [chronic], Ceriodaphnia dubia	V - See Comments	0	--	Sample						=	2	2G - tox chronic				01/90 - Quarterly
					Permit Req. Value NODI						<=	1	MAXIMUM 2G - tox chronic	1			01/90 - Quarterly
61427	Toxicity [acute], Pimephales promelas [Fathead Minnow]	V - See Comments	0	--	Sample						=	0.3	2F - tox acute				01/90 - Quarterly
					Permit Req. Value NODI						<=	.3	MAXIMUM 2F - tox acute	0			01/90 - Quarterly
61428	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	V - See Comments	0	--	Sample						=	1	2G - tox chronic				01/90 - Quarterly
					Permit Req. Value NODI						<=	1	MAXIMUM 2G - tox chronic	0			01/90 - Quarterly

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Code	Parameter Name	Monitoring Location	Field	Type	Description	Acknowledge
61426	Toxicity [chronic], Ceriodaphnia dubia	V - See Comments	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes

Comments

As required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2.5(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WVDP DMR's are as follows: 1) TestAmerica: NY Lab No. 10026; and 2) General Engineering Laboratory: NY Lab No. 11501. Also, NYCRR Part 750-2.5(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. To that end, the MDLs for Total Residual Chlorine analysis, performed by the CHBWV wastewater treatment operators is 0.01 mg/L. Please note that the Whole Effluent Summary pages attached to this DMR were previously attached to the August 2017 Discharge Monitoring Report submitted in September 2017, for sampling that was conducted in July, 2017. The full report has been sent under separate cover to Ms. Nicole Wright of NYSDEC's Toxicity Testing Unit on October 11, 2017. As you will note, the testing results for the Ceriodaphnia dubia (Water Flea) failed the Chronic reporting limit.

Attachments

Name	Type	Size
WVDP_JULY_2017_WHOLE_EFFLUENT_TOXICITY_SUMMARY.pdf	pdf	853731

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
 Name: William Kean
 E-Mail: william.kean@chbwv.com
 Date/Time: 2017-10-24 07:11 (Time Zone: -04:00)

Report Last Signed By

User: jenice.williams@chbwv.com
 Name: Jenice Williams
 E-Mail: jenice.williams@chbwv.com
 Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit
 Permit #: NY0000973
 Major: Yes
 Permitted Feature: 01B
 Internal Outfall
 Report Dates & Status
 Monitoring Period: From 09/01/17 to 09/30/17
 Considerations for Form Completion
 Discharge: 01B-M
 MERCURY PRETREATMENT
 Facility: WEST VALLEY DEMONSTRATION PROJ
 Facility Location: 10282 ROCK SPRINGS ROAD
 WEST VALLEY, NY 14171-9799
 DMR Due Date: 10/28/17
 Status: NetDMR Validated

Principal Executive Officer
 First Name: Bryan C.
 Last Name: Bower
 Title: Director, USDOE-WVDP
 Telephone: 716-942-4368
 No Data Indicator (NODI)
 Form NODI: -

Parameter Code	Monitoring Location	Season #	Param. NODI	Quantity or Loading	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1 Value 1	Qualifier 2 Value 2	Qualifier 3 Value 3	Qualifier 3 Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00056 Flow rate	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG	C - No Discharge	Req Mon DAILY MX	07 - gal/d								01/07 - Weekly	CN - CONTIN
71900 Mercury, total [as Hg]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG <=	C - No Discharge	50 DAILY MX	3M - ng/L								02/BA - Twice Per Batch	GR - GRAB

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
 Name: William Kean
 E-Mail: william.kean@chbwv.com
 Date/Time: 2017-10-24 06:53 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
 Name: Janice Williams
 E-Mail: janice.williams@chbwv.com
 Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

DMR Copy of Record

Permit

Permit #: NY0000973 Permittee: U.S. DEPT OF ENERGY Facility: WEST VALLEY DEMONSTRATION PROJ
Major: Yes Permittee Address: 1000 INDEPENDENCE AVE SW Facility Location: 10282 ROCK SPRINGS ROAD
WASHINGTON, DC 20585 WEST VALLEY, NY 14171-9799
Permitted Feature: 007 Discharge: 007-W
External Outfall OUTFALL 007 WET TESTING QUARTERLY

Report Dates & Status

Monitoring Period: From 07/01/17 to 09/30/17 DMR Due Date: 11/28/17 Status: NetDMR Validated

Considerations for Form Completion

SEE PERMIT FOOTNOTES FOR WET TESTING REQUIREMENTS

Principal Executive Officer

First Name: Bryan C. Title: Director, USDOE-WVDP Telephone: 716-942-4368
Last Name: Bower

No Data Indicator (NODI)

Form NODI: -

Code	Parameter Name	Monitoring Location	Season	# Param.	NODI	Quantity or Loading				Quality or Concentration				Units	# of Ex.	Frequency of Analysis	Sample Type
						Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 1	Value 1	Qualifier 2	Value 2				
61425	Toxicity [acute], Ceriodaphnia dubia	V - See Comments	0	-	-	Sample											
						Permit Req.				<=	.3 MAXIMUM	2F - tox acute			01/90 - Quarterly	24 - COMP24	
						Value NODI						C - No Discharge					
61426	Toxicity [chronic], Ceriodaphnia dubia	V - See Comments	0	-	-	Sample											
						Permit Req.				<=	1 MAXIMUM	2G - tox chronic			01/90 - Quarterly	24 - COMP24	
						Value NODI						C - No Discharge					
61427	Toxicity [acute], Pimephales promelas [Fathead Minnow]	V - See Comments	0	-	-	Sample											
						Permit Req.				<=	.3 MAXIMUM	2F - tox acute			01/90 - Quarterly	24 - COMP24	
						Value NODI						C - No Discharge					
61428	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	V - See Comments	0	-	-	Sample											
						Permit Req.				<=	1 MAXIMUM	2G - tox chronic			01/90 - Quarterly	24 - COMP24	
						Value NODI						C - No Discharge					

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbwv.com
Name: William Kean
E-Mail: william.kean@chbwv.com
Date/Time: 2017-10-24 06:53 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
Name: Janice Williams
E-Mail: janice.williams@chbwv.com
Date/Time: 2017-10-24 14:50 (Time Zone: -04:00)

ATTACHMENT

SPDES DISCHARGE MONITORING REPORT - SEPTEMBER 1 THROUGH SEPTEMBER 30, 2017
NET IRON EFFLUENT CONCENTRATION CALCULATION
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

$$\begin{aligned}\text{OUTFALL 001} &= M1 = \frac{(X1 + X2) V1}{2} = 2478789.70 \text{ mg/month} \\ X1 &= 0.491 \text{ mg/L} \\ X2 &= 0.482 \text{ mg/L} \\ V1 &= 5095148.40 \text{ L/month}\end{aligned}$$

$$\begin{aligned}\text{OUTFALL 007} &= M7 = \frac{(X1 + X2) V7}{2} = 0.00 \text{ mg/month} \\ X1 &= 0.00 \text{ mg/L} \\ X2 &= 0.00 \text{ mg/L} \\ V7 &= 0.00 \text{ L/month}\end{aligned}$$

Note: There was no discharge from outfall 007 during this monitoring period.

$$\begin{aligned}\text{RAW WATER} &= MRW = \frac{(X1 + X2 + X3 + X4) VRW}{4} = 0.00 \text{ mg/month} \\ X1 &= 0.00 \text{ mg/L} \\ X2 &= 0.00 \text{ mg/L} \\ X3 &= 0.00 \text{ mg/L} \\ X4 &= 0.00 \text{ mg/L} \\ VRW &= 0.00 \text{ L/month}\end{aligned}$$

Note: Raw water from the reservoir system is no longer used for process water since the site installed two groundwater wells. This eliminated the need to collect raw water samples on a weekly basis and altered the iron discharge concentration equation as the mass of iron entering the system is no longer necessary.

$$\text{IRON DISCHARGE CONCENTRATION} = \frac{M1 + M7 - MRW}{V1 + V7} = 0.49 \text{ mg/L}$$

ATTACHMENT (Cont'd)

SPDES DISCHARGE MONITORING REPORT - SEPTEMBER 1 THROUGH SEPTEMBER 30, 2017
TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATION CALCULATION - MONITORING POINT 116
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT No. NY-0000973

Date: September 20, 2017

$$\begin{aligned} C4 &= ((Q1)(C1) + (Q2)(C2) + (Q3)(C3)) / Q4 \\ &= ((0.238 \text{ MGD})(906 \text{ mg/L}) + (0.059 \text{ MGD})(457 \text{ mg/L}) + (0.324 \text{ MGD})(169 \text{ mg/L})) / (0.621 \text{ MGD}) \\ &= 479 \text{ mg/L} \end{aligned}$$

Date: September 25, 2017

$$\begin{aligned} C4 &= ((Q1)(C1) + (Q2)(C2) + (Q3)(C3)) / Q4 \\ &= ((0.238 \text{ MGD})(872 \text{ mg/L}) + (0.059 \text{ MGD})(197 \text{ mg/L}) + (0.324 \text{ MGD})(132 \text{ mg/L})) / (0.621 \text{ MGD}) \\ &= 422 \text{ mg/L} \end{aligned}$$

-
- Q1 = Flow at Outfall 001, million gallons per day (MGD).
- C1 = Total Dissolved Solids (TDS) concentration at Outfall 001, mg/L.
- Q2 = Flow in Franks Creek, MGD (without Outfall 001), measured at WNSP006 just prior to, and shortly after the discharge event.
- C2 = TDS concentration in Franks Creek measured at WNSP006 just prior to, and shortly after the discharge event.
- Q3 = Flow of augmentation water, MGD, if required.
- C3 = TDS concentration in augmentation water, MGD.
- Q4 = Q1 + Q2 + Q3, MGD (Flow in Franks Creek, including Outfall 001).
- C4 <= 500 mg/L (calculated TDS concentration at 116 in Franks Creek, which includes Outfall 001).

NEW ENGLAND BIOASSAY, A DIVISION OF GZA EPA TEST SUMMARY SHEET

Facility Name: West Valley Demonstration Project Test Start Date: 7/14/17
 NPDES Permit Number: NY0000973 Pipe Number: 001

Test Type	Test Species	Sample Type	Sample Method
☐ Acute	☐ Fathead Minnow	☐ Prechlorinated	☐ Grab
☐ Chronic	☒ Ceriodaphnia	☐ Dechlorinated	☒ Composite
☒ Modified	☐ Daphnia Pulex	☐ Chlorine Spiked in Lab	☐ Flowthru
(chronic reporting	☐ Mysid Shrimp	☐ Chlorinated on site	☐ Other
acute values)	☐ Sheepshead	☒ Unchlorinated	
☐ 24hr screening	☐ Menidia		
	☐ Sea Urchin		
	☐ Champia	TRC: <u>0.015</u> mg/L	
	☐ Selenastrum		

Dilution Water

- ☐ receiving water collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination; (Receiving water name: Erdman Brook)
☐ alternate surface water of known quality and a hardness, etc. to generally reflect the characteristics of the receiving water; (Surface water name: _____)
☒ synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;
☐ or artificial sea salts mixed with deionized water;
☐ deionized water and hypersaline brine; or

Effluent sampling date (s): 7/12-13/17 7/16-17/17

Effluent concentrations tested (in%): 0 6.25 12.5 25 50 100
 * Permit limit concentration: TUa ≤ 0.3, TUc ≤ 1.0

Was effluent salinity adjusted? No

Actual effluent concentrations tested after salinity adjustment (%): 0 6.25 12.5 25 50 100

Reference Toxicant test date: 7/5/17

Test Acceptability Criteria

Mean Control Survival: 100% Mean Control Reproduction: 23.1 young/female
 Mean Diluent Survival: 100% Mean Diluent Reproduction: 34.3 young/female

	<u>Limits</u>		<u>Results</u>
LC50	<u>N/A</u>	LC50	<u>>100%</u>
		Upper Value	<u>±∞</u>
		Lower Value	<u>100%</u>
		Data Analysis	
		Method Used	<u>Graphical</u>
TUa	<u>0.3</u>	TUa	<u>0.3</u>
A-NOEC	<u>N/A</u>	A-NOEC	<u>100%</u>
C-NOEC	<u>N/A</u>	C-NOEC	<u>50%</u>
		LOEC	<u>100%</u>
TUc	<u>1.0</u>	TUc	<u>2.0</u>
IC25	<u>N/A</u>	IC25	<u>58.5%</u>
IC50	<u>N/A</u>	IC50	<u>>100%</u>

NEW ENGLAND BIOASSAY, A DIVISION OF GZA EPA TEST SUMMARY SHEET

Facility Name: West Valley Demonstration Project Test Start Date: 7/14/17
 NPDES Permit Number: NY0000973 Pipe Number: 001

Test Type	Test Species	Sample Type	Sample Method
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(chronic reporting	☐ Mysid Shrimp	☐ Chlorinated on site	☐ Other
acute values)	☐ Sheepshead	☒ Unchlorinated	
☐ 24hr screening	☐ Menidia		
	☐ Sea Urchin		
	☐ Champia	TRC: <u>0.015</u> mg/L	
	☐ Selenastrum		

Dilution Water

- ☐ receiving water collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination; (Receiving water name: Erdman Brook)
- ☐ alternate surface water of known quality and a hardness, etc. to generally reflect the characteristics of the receiving water; (Surface water name: _____)
- ☒ synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;
- ☐ or artificial sea salts mixed with deionized water;
- ☐ deionized water and hypersaline brine; or

Effluent sampling date (s): 7/12-13/17 7/16-17/17

Effluent concentrations tested (in%): 0 6.25 12.5 25 50 100

* Permit limit concentration: TUa ≤ 0.3, TUc ≤ 1.0

Was effluent salinity adjusted? No

Actual effluent concentrations tested after salinity adjustment (%): 0 6.25 12.5 25 50 100

Reference Toxicant test date: 7/5/17

Test Acceptability Criteria

Mean Control Survival: 85% Mean Control Weight: 0.633 mg
 Mean Diluent Survival: 95% Mean Diluent Weight: 0.672 mg

	<u>Limits</u>		<u>Results</u>
LC50	<u>N/A</u>	LC50	<u>>100%</u>
		Upper Value	<u>±∞</u>
		Lower Value	<u>100%</u>
		Data Analysis	
		Method Used	<u>Graphical</u>
TUa	<u>0.3</u>	TUa	<u>0.3</u>
A-NOEC	<u>N/A</u>	A-NOEC	<u>100%</u>
C-NOEC	<u>N/A</u>	C-NOEC	<u>100%</u>
		LOEC	<u>>100%</u>
TUc	<u>1.0</u>	TUc	<u>1.0</u>
IC25	<u>N/A</u>	IC25	<u>>100%</u>
IC50	<u>N/A</u>	IC50	<u>>100%</u>