

CH2MHILL • BWXT West Valley, LLC

West Valley Demonstration Project

Ms. Angela M. Cooney, Contracting Officer
U. S. Department of Energy
250 East 5th St., Suite 500
Cincinnati, OH 45202

AC-PRES
WD:2018:0380
April 18, 2018

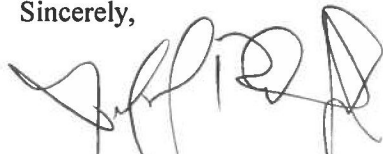
SUBJECT: Contract No. DE-EM0001529, Section J-3, Item 127, State Pollutant Discharge Elimination System (SPDES) Discharge Monitoring Report (DMR)

Dear Ms. Cooney:

This letter is submitted for Contracting Officer Representative's approval to inform you that the SPDES DMR for the reporting period March 1 through March 31, 2018 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 March 1 – March 31, 2018
B) Email Confirmation from NYSDEC

cc: T. Taggart, DOE-EMCBC
B. C. Bower, DOE-WVDP
S. A. Anderson, CHBWV
J. L. Casper, CHBWV
N. Feher, CHBWV
L. K. Hollfelder, CHBWV
W. N. Kean, CHBWV
L. J. Ortega, CHBWV
J. T. Pillittere, CHBWV (Public Reading Room)
D. H. Pritchard, CHBWV
J. E. Wangelin, CHBWV
J. D. Williams, CHBWV
Letter Log (B. Jeffery), CHBWV
CHBWV OITS #1730520

Attachment A
SPDES DMR

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 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 03/01/18 to 03/31/18	DMR Due Date:	04/28/18	Status:	NetDMR Validated

Considerations for Form Completion					
---	--	--	--	--	--

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	Sample	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		
00154	Sulfate [as S]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	22 DAILY MX	19 - mg/L	02/BA - Twice Per Batch	CA - CALCTD
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample						>=	3 MINIMUM							Req Mon MAXIMUM	19 - mg/L	02/BA - Twice Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	10 DAILY MX	19 - mg/L	02/BA - Twice Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00400	pH	1 - Effluent Gross	0	--	Sample						>=	6.5 MINIMUM							<= 8.5 MAXIMUM	12 - SU	01/BA - Once Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample								<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L				02/BA - Twice Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.3 DAILY MX	25 - mL/L	02/BA - Twice Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	15 DAILY MX	19 - mg/L	01/BA - Once Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.1 DAILY MX	19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00620	Nitrogen, nitrate total [as N]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	02/BA - Twice Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00746	Sulfide, dissolved, [as S]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.4 DAILY MX	19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.15 DAILY MX	19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00979	Cobalt, total recoverable	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.005 DAILY MX	19 - mg/L	01/BA - Once Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
00981	Selenium, total recoverable	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG <=	.004 DAILY MX	19 - mg/L	01/BA - Once Per Batch	GR - GRAB
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample													Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	02/BA - Twice Per Batch	24 - COMP24
					Permit Req.													C - No Discharge	C - No Discharge			
					Value NODI																	

DMR Copy of Record

Permit			
Permit #:	NY0000973	Permittee:	U.S. DEPT OF ENERGY
Major:	Yes	Permittee Address:	1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585
Permitted Feature:	007 External Outfall	Discharge:	007-M SANITARY, NC COOLING WATER, UTILITY WASTEWATER, STORMWATER
Facility:		Facility Location:	WEST VALLEY DEMONSTRATION PROJ 10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799

Report Dates & Status			
Monitoring Period:	From 03/01/18 to 03/31/18	DMR Due Date:	04/28/18
Status:	NetDMR Validated		

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

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
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	22 DAILY MX	19 - mg/L		01/30 - Monthly	CA - CALCTD	
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI						>=	3 MINIMUM		Req Mon MAXIMUM	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	10 DAILY MX	19 - mg/L		02/30 - Twice Per Month	24 - COMP24	
00400	pH	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI						>=	6.5 MINIMUM		<=	8.5 MAXIMUM	12 - SU		02/30 - Twice Per Month
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L		02/30 - Twice Per Month
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	.3 DAILY MX	25 - mL/L		02/30 - Twice Per Month	GR - GRAB	
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	15 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB	
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	.1 DAILY MX	19 - mg/L		01/30 - Monthly	24 - COMP24	
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L		01/30 - Monthly	24 - COMP24
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	24 - COMP24
34726	Nitrogen, ammonia, total [as NH3]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							<=	1.49 MO AVG	<=	2.1 DAILY MX	19 - mg/L		02/30 - Twice Per Month
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG		Req Mon DAILY MX	03 - MGD		01/30 - Monthly	CN - CONTIN
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	.1 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB	
70295	Solids, total dissolved	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample													
					Permit Req. Value NODI							Req Mon MO AVG <=	50 DAILY MX	3M - ng/L		01/30 - Monthly	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: 2018-04-16 08:12 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbwv.com
Name: Janice Williams
E-Mail: janice.williams@chbwv.com
Date/Time: 2018-04-17 08:04 (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 WASHINGTON, DC 20585	Facility Location:	10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799
Permitted Feature:	01B Internal Outfall	Discharge:	01B-M MERCURY PRETREATMENT		

Report Dates & Status

Monitoring Period:	From 03/01/18 to 03/31/18	DMR Due Date:	04/28/18	Status:	NetDMR Validated
--------------------	---------------------------	---------------	----------	---------	------------------

Considerations for Form Completion

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					# 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				
00056	Flow rate	1 - Effluent Gross	0	--	Sample																		
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	07 - gal/d											01/07 - Weekly	CN - CONTIN	
					Value NODI		C - No Discharge		C - No Discharge														
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample																		
					Permit Req.								Req Mon MO AVG <=	50 DAILY MX	3M - ng/L							02/BA - Twice Per Batch	GR - GRAB
					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@chbvv.com
 Name: William Kean
 E-Mail: william.kean@chbvv.com
 Date/Time: 2018-04-16 08:12 (Time Zone: -04:00)

Report Last Signed By

User: janice.williams@chbvv.com
 Name: Janice Williams
 E-Mail: janice.williams@chbvv.com
 Date/Time: 2018-04-17 08:04 (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 WASHINGTON, DC 20585					Facility Location:	10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799									
Permitted Feature:	116 Internal Outfall	Discharge:	116-M PSEUDO MON. POINT @FRANKS CRK															
Report Dates & Status																		
Monitoring Period:	From 03/01/18 to 03/31/18		DMR Due Date:	04/28/18				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.		Title:	Director, USDOE-WVDP					Telephone:	716-942-4368								
Last Name:	Bower																	
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	Qualifier 3	Value 3	Units			
70295	Solids, total dissolved	Z - Instream Monitoring	0	--														
				Sample														
				Permit Req.									Req Mon MO AVG <=	500 DAILY MX	19 - mg/L		02/DS - Twice Per Discharge	
				Value NODI									C - No Discharge	C - No Discharge			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																		
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:	2018-04-16 08:12 (Time Zone: -04:00)																	
Report Last Signed By																		
User:	janice.williams@chbwv.com																	
Name:	Janice Williams																	
E-Mail:	janice.williams@chbwv.com																	
Date/Time:	2018-04-17 08:04 (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 WASHINGTON, DC 20585				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 03/01/18 to 03/31/18				DMR Due Date:	04/28/18				Status:	NetDMR Validated							
Considerations for Form Completion																		
Principal Executive Officer																		
First Name:	Bryan C.				Title:	Director, USDOE-WVDP				Telephone:	716-942-4368							
Last Name:	Bower																	
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	Qualifier 3	Value 3	Units			
01045	Iron, total [as Fe] 2 - Effluent Net	0	--	Sample														
				Permit Req.									Req Mon MO AVG <=	1 DAILY MX	19 - mg/L		01/30 - Monthly	CA - CALCTD
				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																		
												Name	Type	Size				
												WVDP_March_2018_Net_Iron_Calc.pdf	pdf	28041				
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:	2018-04-16 08:12 (Time Zone: -04:00)																	
Report Last Signed By																		
User:	janice.williams@chbwv.com																	
Name:	Janice Williams																	
E-Mail:	janice.williams@chbwv.com																	
Date/Time:	2018-04-17 08:04 (Time Zone: -04:00)																	

ATTACHMENT

SPDES DISCHARGE MONITORING REPORT - MARCH 1 THROUGH MARCH 31, 2018
NET IRON EFFLUENT CONCENTRATION CALCULATION
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

$$\begin{aligned} \text{OUTFALL 001} &= M1 = \frac{(X1 + X2) V1}{2} = 0 \text{ mg/month} \\ X1 &= 0.00 \text{ mg/L} \\ X2 &= 0.00 \text{ mg/L} \\ V1 &= 0.00 \text{ L/month} \end{aligned}$$

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

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.

$$\text{IRON DISCHARGE CONCENTRATION} = \frac{M1 + M7 - MRW}{V1 + V7} = 0.00 \text{ mg/L}$$