

# CH2MHILL • BWXT West Valley, LLC

*West Valley Demonstration Project*

Ms. Angela M. Cooney, Contracting Officer  
U. S. Department of Energy  
550 Main St., Room 7-010  
Cincinnati, OH 45202

AC-PRES  
WD:2021:0326  
April 12, 2021

Attention: M. N. Maloney

SUBJECT: Contract No. DE-EM0001529, Section J-3, Item 127, State Pollutant Discharge Elimination System (SPDES) Discharge Monitoring Report (DMR) for the Period March 1 through March 31, 2021

This letter is being submitted for Contracting Officer Representative's approval to inform you that the SPDES DMR for the reporting period March 1 through March 31, 2021 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 (716) 946-8825 or Elizabeth Lowes at (716) 481-0429.

Sincerely,

Approval Obtained Electronically

John D. Rendall  
President & General Manager

JDR:WNK:bnj

Attachment: A) SPDES DMR for March 1 through March 31, 2021  
B) Email Confirmation from NYSDEC

cc: B. C. Bower, DOE-WVDP  
C. Chun, CHBWV  
L. K. Hollfelder, CHBWV  
W. N. Kean, CHBWV  
D. P. Klenk, CHBWV  
E. A. Lowes, CHBWV  
J. K. Mantione, CHBWV  
J. T. Pillittere, CHBWV (Public Reading Room)  
M. A. Rodges, CHBWV  
T. Stapleton, CHBWV  
K. A. Wooley, CHBWV  
Letter Log (B. Jeffery), CHBWV  
CHBWV OITS #2030233

**Attachment A**  
**SPDES DMR**

ATTACHMENT

SPDES DISCHARGE MONITORING REPORT - MARCH 1 THROUGH MARCH 31, 2021  
NET IRON EFFLUENT CONCENTRATION CALCULATION  
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

$$\text{OUTFALL 001} = M1 = \frac{(X1 + X2) V1}{2} = 0 \text{ mg/month}$$

$$X1 = 0.00 \text{ mg/L}$$

$$X2 = 0.00 \text{ mg/L}$$

$$V1 = 0.00 \text{ L/month}$$

Note: There was no discharge from outfall 001 during this monitoring period.

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

$$X1 = 0.00 \text{ mg/L}$$

$$X2 = 0.00 \text{ mg/L}$$

$$V7 = 0.00 \text{ L/month}$$

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

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

$$X1 = 0.00 \text{ mg/L}$$

$$X2 = 0.00 \text{ mg/L}$$

$$X3 = 0.00 \text{ mg/L}$$

$$X4 = 0.00 \text{ mg/L}$$

$$\text{VRW} = 0.00 \text{ L/month}$$

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.

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

DMR Copy of Record

<b>Permit</b>			
Permit #:	NY0000973	Permittee:	U.S. DEPT OF ENERGY
Major:	Yes	Permittee Address:	1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585
Permitted Feature:	001 External Outfall	Discharge:	001-M OUTFALL 001 MONTHLY PROC WW, GW, STORM
Facility:	WEST VALLEY DEMONSTRATION PROJ		
Facility Location:	10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799		

<b>Report Dates &amp; Status</b>			
Monitoring Period:	From 03/01/21 to 03/31/21	DMR Due Date:	04/28/21
Status:	NetDMR Validated		

Considerations for Form Completion

<b>Principal Executive Officer</b>			
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				Units	
00154	Sulfate [as S]	1 - Effluent Gross	0	--	Sample													19 - mg/L	01/BA - Once Per Batch	24 - COMP24
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/BA - Twice Per Batch	CA - CALCTD	
					Permit Req.						Req Mon MO AVG	<=	22.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/BA - Twice Per Batch	GR - GRAB	
					Permit Req.						>=	3.0 MINIMUM		Req Mon MAXIMUM						
					Value NODI						C - No Discharge		C - No Discharge							
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/BA - Twice Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	10.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00400	pH	1 - Effluent Gross	0	--	Sample												12 - SU	01/BA - Once Per Batch	GR - GRAB	
					Permit Req.						>=	6.5 MINIMUM		<=	8.5 MAXIMUM					
					Value NODI						C - No Discharge		C - No Discharge							
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/BA - Twice Per Batch	24 - COMP24	
					Permit Req.						<=	30.0 MO AVG	<=	45.0 DAILY MX						
					Value NODI						C - No Discharge		C - No Discharge							
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample												25 - mL/L	02/BA - Twice Per Batch	GR - GRAB	
					Permit Req.						Req Mon MO AVG	<=	0.3 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/BA - Once Per Batch	GR - GRAB	
					Permit Req.						Req Mon MO AVG	<=	15.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/BA - Once Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	0.1 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00620	Nitrogen, nitrate total [as N]	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/BA - Once Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/BA - Twice Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00746	Sulfide, dissolved, [as S]	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/BA - Once Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	0.4 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/BA - Once Per Batch	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	0.15 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							



DMR Copy of Record

<b>Permit</b>			
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:	WEST VALLEY DEMONSTRATION PROJ		Facility Location:
		10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799	

<b>Report Dates &amp; Status</b>			
Monitoring Period:	From 03/01/21 to 03/31/21	DMR Due Date:	04/28/21
Status:	NetDMR Validated		

Considerations for Form Completion

<b>Principal Executive Officer</b>			
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				Units	
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample													19 - mg/L	01/30 - Monthly	CA - CALCTD
					Permit Req.						Req Mon MO AVG	<=	22.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req.						>=	3.0 MINIMUM		Req Mon MAXIMUM						
					Value NODI						C - No Discharge		C - No Discharge							
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	10.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00400	pH	1 - Effluent Gross	0	--	Sample												12 - SU	02/30 - Twice Per Month	GR - GRAB	
					Permit Req.						>=	6.5 MINIMUM		<=	8.5 MAXIMUM					
					Value NODI						C - No Discharge		C - No Discharge							
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req.						<=	30.0 MO AVG	<=	45.0 DAILY MX						
					Value NODI						C - No Discharge		C - No Discharge							
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample												25 - mL/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req.						Req Mon MO AVG	<=	0.3 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	GR - GRAB	
					Permit Req.						Req Mon MO AVG	<=	15.0 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/30 - Monthly	24 - COMP24	
					Permit Req.						Req Mon MO AVG	<=	0.1 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/30 - Monthly	24 - COMP24	
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
34726	Nitrogen, ammonia, total [as NH3]	1 - Effluent Gross	0	--	Sample												19 - mg/L	02/30 - Twice Per Month	24 - COMP24	
					Permit Req.						<=	1.49 MO AVG	<=	2.1 DAILY MX						
					Value NODI						C - No Discharge		C - No Discharge							
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample												03 - MGD	01/30 - Monthly	CN - CONTIN	
					Permit Req.						Req Mon MO AVG		Req Mon DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample												19 - mg/L	01/30 - Monthly	GR - GRAB	
					Permit Req.						Req Mon MO AVG	<=	0.1 DAILY MX							
					Value NODI						C - No Discharge		C - No Discharge							



## DMR Copy of Record

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			
00056	Flow rate	1 - Effluent Gross	0	--	Sample													01/07 - Weekly	CN - CONTIN
					Permit Req.	Req Mon MO AVG		Req Mon DAILY MX	07 - gal/d										
					Value NODI	C - No Discharge		C - No Discharge											
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample													02/BA - Twice Per Batch	GR - GRAB
					Permit Req.								Req Mon MO AVG	<=	50.0 DAILY MX	3M - ng/L			
					Value NODI								C - No Discharge		C - No Discharge				

**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 03/01/21 to 03/31/21** | DMR Due Date: **04/28/21** | 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: **--**

**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: **2021-04-08 16:22 (Time Zone: -04:00)**

**Report Last Signed By**  
 User: **ELIZABETH.LOWES@CHBWV.COM**  
 Name: **Elizabeth Lowes**  
 E-Mail: **elizabeth.lowes@chbwv.com**  
 Date/Time: **2021-04-09 12:56 (Time Zone: -04:00)**



## DMR Copy of Record

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	<b>Solids, total dissolved</b>	Z - Instream Monitoring	0	--															
					Sample														
					Permit Req.								Req Mon MO AVG	<=	500.0 DAILY MX	19 - mg/L		02/DS - Twice Per Discharge	CA - CALCTD
					Value NODI								C - No Discharge		C - No Discharge				

**Permit**  
 Permit #: **NY0000973**  
 Major: Yes  
 Permitted Feature: 116  
 Internal Outfall

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 03/01/21 to 03/31/21  
 DMR Due Date: 04/28/21  
 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: --

**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: 2021-04-08 16:22 (Time Zone: -04:00)

**Report Last Signed By**  
 User: ELIZABETH.LOWES@CHBWV.COM  
 Name: Elizabeth Lowes  
 E-Mail: elizabeth.lowes@chbwv.com  
 Date/Time: 2021-04-09 12:56 (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 03/01/21 to 03/31/21			DMR Due Date:	04/28/21				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	<=	1.0 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_2021_Net_Iron_Calculation.pdf	pdf	120410.0					
Report Last Saved By																		
<b>U.S. DEPT OF ENERGY</b>																		
User:	william.kean@chbwv.com																	
Name:	William Kean																	
E-Mail:	william.kean@chbwv.com																	
Date/Time:	2021-04-08 16:23 (Time Zone: -04:00)																	
Report Last Signed By																		
User:	ELIZABETH.LOWES@CHBWV.COM																	
Name:	Elizabeth Lowes																	
E-Mail:	elizabeth.lowes@chbwv.com																	
Date/Time:	2021-04-09 12:56 (Time Zone: -04:00)																	