

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:2020:0354
April 16, 2020

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, 2020

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, 2020 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 4602.

Sincerely,

Approval Obtained Electronically

John D. Rendall
President & General Manager

JDR:WNK:bnj

Attachments: A) SPDES DMR for March 1 – March 31, 2020
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
J. K. Mantione, CHBWV
L. J. Ortega, CHBWV
J. T. Pillittere, CHBWV (Public Reading Room)
T. Stapleton, CHBWV
J. D. Williams, CHBWV
Letter Log (B. Jeffery), CHBWV
CHBWV OITS #1930164

Attachment A
SPDES DMR

ATTACHMENT

SPDES DISCHARGE MONITORING REPORT - MARCH 1 THROUGH MARCH 31, 2020
NET IRON EFFLUENT CONCENTRATION CALCULATION
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

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

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

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

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.

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

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:

001
External Outfall

Discharge:

001-M
OUTFALL 001 MONTHLY PROC WW, GW, STORM

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

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		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				
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. Value NODI										C - No Discharge		C - No Discharge				
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample										Req Mon MO AVG	<=	22.0 DAILY MX	19 - mg/L		02/BA - Twice Per Batch	CA - CALCTD
					Permit Req. Value NODI										C - No Discharge		C - No Discharge				
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample												Req Mon MAXIMUM	19 - mg/L		02/BA - Twice Per Batch	GR - GRAB
					Permit Req. Value NODI					>=	3.0 MINIMUM						C - No Discharge				
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample										Req Mon MO AVG	<=	10.0 DAILY MX	19 - mg/L		02/BA - Twice Per Batch	24 - COMP24
					Permit Req. 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. Value NODI					>=	6.5 MINIMUM				<=	8.5 MAXIMUM		C - No Discharge			
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample													19 - mg/L		02/BA - Twice Per Batch	24 - COMP24
					Permit Req. Value NODI								<=	30.0 MO AVG	<=	45.0 DAILY MX					
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample													25 - mL/L		02/BA - Twice Per Batch	GR - GRAB
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.3 DAILY MX				
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample															01/BA - Once Per Batch	GR - GRAB
					Permit Req. Value NODI										Req Mon MO AVG	<=	15.0 DAILY MX	19 - mg/L			
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample															01/BA - Once Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.1 DAILY MX	19 - mg/L			
00620	Nitrogen, nitrate total [as N]	1 - Effluent Gross	0	--	Sample													19 - mg/L		01/BA - Once Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG		Req Mon DAILY MX				
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample													19 - mg/L		02/BA - Twice Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG		Req Mon DAILY MX				
00746	Sulfide, dissolved, [as S]	1 - Effluent Gross	0	--	Sample													19 - mg/L		01/BA - Once Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.4 DAILY MX				
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample													19 - mg/L		01/BA - Once Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.15 DAILY MX				
00979	Cobalt, total recoverable	1 - Effluent Gross	0	--	Sample													19 - mg/L		01/BA - Once Per Batch	GR - GRAB
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.005 DAILY MX				
00981	Selenium, total recoverable	1 - Effluent Gross	0	--	Sample													19 - mg/L		01/BA - Once Per Batch	GR - GRAB
					Permit Req. Value NODI										Req Mon MO AVG	<=	0.004 DAILY MX				
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample													19 - mg/L		02/BA - Twice Per Batch	24 - COMP24
					Permit Req. Value NODI										Req Mon MO AVG		Req Mon DAILY MX				

DMR Copy of Record

Permit

Permit #:NY0000973

Major:Yes

Permitted Feature:007
External Outfall

Permittee:U.S. DEPT OF ENERGY

Permittee Address:1000 INDEPENDENCE AVE SW
WASHINGTON, DC 20585

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

Report Dates & Status

Monitoring Period:From 03/01/20 to 03/31/20

DMR Due Date:04/28/20

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		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			
00181	Oxygen demand, ultimate	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	CA - CALCTD
					Permit Req.								Req Mon MO AVG	<=	22.0 DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.					>=	3.0 MINIMUM				Req Mon MAXIMUM	19 - mg/L				
					Value NODI						C - No Discharge				C - No Discharge					
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	24 - COMP24
					Permit Req.								Req Mon MO AVG	<=	10.0 DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
00400	pH	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.					>=	6.5 MINIMUM			<=	8.5 MAXIMUM	12 - SU				
					Value NODI						C - No Discharge				C - No Discharge					
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	24 - COMP24
					Permit Req.								<=	30.0 MO AVG	<=	45.0 DAILY MX	19 - mg/L			
					Value NODI								C - No Discharge		C - No Discharge					
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								Req Mon MO AVG	<=	0.3 DAILY MX	25 - mL/L				
					Value NODI								C - No Discharge		C - No Discharge					
00556	Oil & Grease	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								Req Mon MO AVG	<=	15.0 DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
00615	Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	24 - COMP24
					Permit Req.								Req Mon MO AVG	<=	0.1 DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	24 - COMP24
					Permit Req.								Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
01045	Iron, total [as Fe]	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	24 - COMP24
					Permit Req.								Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
34726	Nitrogen, ammonia, total [as NH3]	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	24 - COMP24
					Permit Req.								<=	1.49 MO AVG	<=	2.1 DAILY MX	19 - mg/L			
					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.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD										
					Value NODI		C - No Discharge		C - No Discharge											
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon MO AVG	<=	0.1 DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
70295	Solids, total dissolved	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L				
					Value NODI								C - No Discharge		C - No Discharge					
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	GR - GRAB
					Permit Req.								Req Mon MO AVG	<=	50.0 DAILY MX	3M - ng/L				
					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@chbww.com
Name:	William Kean
E-Mail:	william.kean@chbww.com
Date/Time:	2020-04-15 16:44 (Time Zone: -04:00)

Report Last Signed By

User:	janice.williams@chbww.com
Name:	Janice Williams
E-Mail:	janice.williams@chbww.com
Date/Time:	2020-04-16 06:51 (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:

01B
Internal Outfall

Discharge:

01B-M
MERCURY PRETREATMENT

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

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		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				

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:

2020-04-15 16:44 (Time Zone: -04:00)

Report Last Signed By

User:

janice.williams@chbwv.com

Name:

Janice Williams

E-Mail:

janice.williams@chbwv.com

Date/Time:

2020-04-16 06:51 (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:

116
Internal Outfall

Discharge:

116-M
PSEUDO MON. POINT @FRANKS CRK

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

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	Qualifier 3	Value 3	Units			
70295	Solids, total dissolved	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				

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:

2020-04-15 16:44 (Time Zone: -04:00)

Report Last Signed By

User:

janice.williams@chbwv.com

Name:

Janice Williams

E-Mail:

janice.williams@chbwv.com

Date/Time:

2020-04-16 06:51 (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 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

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	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
					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

Name	Type	Size
WVDP_March_2020_Net_Iron_Calculation.pdf	pdf	119479.0

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:

2020-04-15 16:44 (Time Zone: -04:00)

Report Last Signed By

User:

janice.williams@chbwv.com

Name:

Janice Williams

E-Mail:

janice.williams@chbwv.com

Date/Time:

2020-04-16 06:51 (Time Zone: -04:00)

Attachment B
Email Confirmation from NYSDEC

From: netdmr-notification@epa.gov
To: ewwohlers@cattco.org; [Moirá Maloney](#); R9.NetDMR@dec.ny.gov; [William Kean](#); [Bonnie Jeffery](#); [Michael Pendl](#); [Janice Williams](#); [Joseph Forti](#)
Subject: NetDMR DMR(s) Submittal Passed for: NY0000973
Date: Thursday, April 16, 2020 8:32:25 AM

The following signed 5 DMR(s) were submitted to EPA and were successfully processed:

CDX Transaction ID: _1b588533-7d32-42fa-84a4-4554b8587a77
User ID: janice.williams@chbwv.com
Timestamp: 04/16/2020 06:51:30

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 001
Discharge: M - OUTFALL 001 MONTHLY PROC WW, GW, STORM
Monitoring Period End Date: 03/31/20

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 007
Discharge: M - SANITARY, NC COOLING WATER, UTILITY WASTEWATER, STORMWATER
Monitoring Period End Date: 03/31/20

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 01B
Discharge: M - MERCURY PRETREATMENT
Monitoring Period End Date: 03/31/20

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 116
Discharge: M - PSEUDO MON. POINT @FRANKS CRK
Monitoring Period End Date: 03/31/20

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: SUM
Discharge: N - SUM OF OUTFALLS 1 & 7
Monitoring Period End Date: 03/31/20

Thank you.

This is a submission from the LIVE (Production) site.