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December 9, 2019

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**RE: Data Repository
Chesapeake Energy Center
2701 Vepco Street
Chesapeake, Virginia 23323**

Dear Library Manager:

Please find attached, one document related to Dominion Energy's Chesapeake Energy Center (CEC) industrial landfill. The Major Hillard Library is the public data repository for information submitted by Dominion Energy to the Virginia Department of Environmental Quality relating to the CEC landfill Corrective Action Monitoring Program (CAMP). Throughout the life of the program, Dominion Energy will place on file with the Library copies of associated materials, which should be made available for public viewing until Dominion Energy provides notice. Please include the following document with related CEC materials currently being held for public viewing at the library:

*Summary of Corrective Action Monitoring Data
2019 2nd Semi-Annual Monitoring (September 16-19, 2019)
Chesapeake Energy Center Landfill - Permit No. 440
Chesapeake, Virginia*

Thank you for your assistance and please do not hesitate to call Mr. Donald Hintz of Dominion Energy's Environmental Department at (804) 273-3552 should there be any questions and/or comments.

Sincerely,

A handwritten signature in blue ink that reads "Lisa C. Messinger".

Lisa C. Messinger
Director, Environmental Services

Attachment

*Data Repository
Chesapeake Energy Center
Chesapeake, Virginia
December 9, 2019*

cc (cover letter only):

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Table 1
Summary of Corrective Action Monitoring Data
2019 2nd Semi-Annual Monitoring Event (September 2019)
Chesapeake Energy Center Industrial Landfill - Permit #440
Chesapeake, Virginia

Groundwater Monitoring Wells

Sample ID: Sample Date:	MW-5 9/16/2019				MW-5D 9/16/2019				CECW-1 9/19/2019				CECW-1D 9/19/2019				CECW-2 9/19/2019				CECW-2D 9/19/2019				CECW-3 9/18/2019				CECW-3D 9/18/2019			
	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Primary Performance Parameters (µg/L)																																
Antimony, Total	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	NS	--	--	< 0.57	0.57	2.0		
Antimony, Dissolved	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	NS	--	--	< 0.57	0.57	2.0		
Arsenic, total	7.9		0.75	5.0	2.0 J		0.75	5.0	34		0.75	5.0	49		0.75	5.0	9.1		0.75	5.0	150		0.75	5.0	NS	--	--	180	0.75	5.0		
Arsenic, dissolved	7.5		0.75	5.0	1.8 J		0.75	5.0	31		0.75	5.0	51		0.75	5.0	2.0 J		0.75	5.0	140		0.75	5.0	NS	--	--	170	0.75	5.0		
Arsenic III (dissolved)	3.3		0.2	0.2	0.48		0.04	0.04	30.4		2	2	19.1		1	1	1.6		0.1	0.1	113		5	5	NS	--	--	144	5	5		
Arsenic V (dissolved)	4.1		0.4	0.4	1.8		0.1	0.1	< 2		2	2	16.7		2	2	< 0.1		0.1	0.1	< 5		5	5	NS	--	--	< 5	5	5		
Beryllium, total	< 0.31		0.31	1.0	0.67 J		0.31	1.0	0.42 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	NS	--	--	0.44 J	0.31	1.0		
Beryllium, dissolved	0.90 J		0.31	1.0	0.60 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	NS	--	--	0.31 J	0.31	1.0		
Cobalt, total	0.98 J		0.19	1.0	16		0.19	1.0	0.22 J		0.19	1.0	0.42 J		0.19	1.0	3.0		0.19	1.0	< 0.19		0.19	1.0	NS	--	--	0.37 J	0.19	1.0		
Cobalt, dissolved	0.81 J		0.19	1.0	18		0.19	1.0	< 0.19		0.19	1.0	0.42 J		0.19	1.0	0.29 J		0.19	1.0	< 0.19		0.19	1.0	NS	--	--	< 0.19	0.19	1.0		
Selenium, total	1.8 J		0.89	5.0	1.4 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	NS	--	--	< 0.89	0.89	5.0		
Selenium, dissolved	1.8 J		0.89	5.0	0.96 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	NS	--	--	< 0.89	0.89	5.0		
Sulfide	1500 J		1400	3000	< 1400		1.4	3.0	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	NS	--	--	< 1400	1400	3000		
Sulfide, dissolved	< 1400		1400	3000	1500 J		1.4	3.0	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	NS	--	--	< 1400	1400	3000		
beta-BHC	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	NS	--	--	< 0.0044	0.0044	0.048		
Performance Parameters (µg/L)																																
Iron, total	5400		47	100	16000		47	100	1900		47	100	8800		47	100	14000		47	100	10000		47	100	NS	--	--	600	47	100		
Iron, dissolved	5000		47	100	17000		47	100	1300		47	100	9200		47	100	12000		47	100	9000		47	100	NS	--	--	< 47	47	100		
Manganese	41		2.1	5.0	750		2.1	5.0	130		2.1	5.0	440		2.1	5.0	180		2.1	5.0	300		2.1	5.0	NS	--	--	11	2.1	5.0		
Field Measurements																																
Dissolved Oxygen (mg/L)	0.67		0.01	0.01	0.56		0.01	0.01	0.57		0.01	0.01	0.84		0.01	0.01	0.57		0.01	0.01	0.85		0.01	0.01	--	--	--	0.97	0.01	0.01		
Oxidation Reduction Potential (mV)	13.9		0.1	0.1	40.7		0.1	0.1	-146.4		0.1	0.1	-17.9		0.1	0.1	-178.7		0.1	0.1	-180.9		0.1	0.1	--	--	--	-131.7	0.1	0.1		
pH (S.U.)	5.72		0.01	0.01	5.85		0.01	0.01	6.56		0.01	0.01	6.17		0.01	0.01	5.70		0.01	0.01	6.37		0.01	0.01	--	--	--	7.44	0.01	0.01		
Specific Conductance (uS/cm)	347.4		0.1	0.1	2717		0.1	0.1	3321		0.1	0.1	18667		0.1	0.1	7026		0.1	0.1	26610		0.1	0.1	--	--	--	1426	0.1	0.1		
Temperature (Degrees Celsius)	21.0		0.01	0.01	21.5		0.01	0.01	21.3		0.01	0.01	19.4		0.01	0.01	20.8		0.01	0.01	18.1		0.01	0.01	--	--	--	18.7	0.01	0.01		
Turbidity (NTU)	20.6		0.1	0.1	7.25		0.1	0.1	19.73		0.1	0.1	6.9		0.1	0.1	30.1		0.1	0.1	7.2		0.1	0.1	--	--	--	15.7	0.1	0.1		

Groundwater Monitoring Wells

Sample ID: Sample Date:	CECW-6I 9/17/2019				CECW-6D 9/17/2019				CECW-8 9/25/2019				CECW-8D 9/19/2019				CECW-10R 9/17/2019				CECW-15 9/18/2019				PO-8 9/16/2019				PO-8D 9/16/2019			
	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Primary Performance Parameters (µg/L)																																
Antimony, Total	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57	0.57	2.0	
Antimony, Dissolved	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57	0.57	2.0	
Arsenic, total	190		0.75	5.0	86		0.75	5.0	2.3 J		0.75	5.0	37		0.75	5.0	60		0.75	5.0	2.4 J		0.75	5.0	19		0.75	5.0	0.84 J	0.75	5.0	
Arsenic, dissolved	170		0.75	5.0	82		0.75	5.0	2.5 J		0.75	5.0	26		0.75	5.0	56		0.75	5.0	4.0 J		0.75	5.0	13		0.75	5.0	1.0 J	0.75	5.0	
Arsenic III (dissolved)	189		10	10	85.1		5	5	20.5		2	2	19.3		1	1	49.9		4	4	0.05		0.04	0.04	5.2		0.2	0.2	0.39	0.04	0.04	
Arsenic V (dissolved)	< 10		10	10	11.4		10	10	< 2		2	2	< 1		1	1	< 4		4	4	0.67		0.04	0.04	0.6		0.4	0.4	0.57	0.1	0.1	
Beryllium, total	0.36 J		0.31	1.0	0.37 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	0.60 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31	0.31	1.0	
Beryllium, dissolved	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31	0.31	1.0	
Cobalt, total	1.5		0.19	1.0	4.7		0.19	1.0	0.36 J		0.19	1.0	0.46 J		0.19	1.0	1.0		0.19	1.0	1.2		0.19	1.0	< 0.19		0.19	1.0	2.0	0.19	1.0	
Cobalt, dissolved	1.4		0.19	1.0	4.9		0.19	1.0	0.34 J		0.19	1.0	0.46 J		0.19	1.0	0.41 J		0.19	1.0	1.3		0.19	1.0	< 0.19		0.19	1.0	2.0	0.19	1.0	
Selenium, total	1.8 J		0.89	5.0	< 0.89		0.89	5.0	2.0 J		0.89	5.0	< 0.89		0.89	5.0	2.9 J		0.89	5.0	1.1 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89	0.89	5.0	
Selenium, dissolved	1.0 J		0.89	5.0	< 0.89		0.89	5.0	2.1 J		0.89	5.0	< 0.89		0.89	5.0	3.1 J		0.89	5.0	2.5 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89	0.89	5.0	
Sulfide	< 1400		1400	3000	< 1400		1400	3000	45000		1400	3000	< 1400		1400	3000	< 1400		1400	3000	2000 J		1400	3000	2700 J		1400	3000	1500 J	1400	3000	
Sulfide, dissolved	< 1400		1400	3000	< 1400		1400	3000	61000		1400	3000	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	1500 J	1400	3000	
beta-BHC	< 0.0044		0.0044	0.048	< 0.0045		0.0045	0.049	< 0.0049		0.0049	0.054	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0045		0.0045	0.049	< 0.0044	0.0044	0.048	
Performance Parameters (µg/L)																																
Iron, total	10000		47	100	12000		47	100	490		47	100	25000		47	100	3700		47	100	22000		47	100	78 J		47	100	730	47	100	
Iron, dissolved	10000		47	100	12000		47	100	140		47	100	24000		47	100	1400		47	100	21000		47	100	66 J		47	100	550	47	100	
Manganese	240		2.1	5.0	380		2.1	5.0	170		2.1	5.0	260		2.1	5.0	37		2.1	5.0	300		2.1	5.0	330		2.1	5.0	45	2.1	5.0	
Field Measurements																																
Dissolved Oxygen (mg/L)	0.72		0.01	0.01	0.77		0.01	0.01	0.40		0.01	0.01	0.63		0.01	0.01	0.43		0.01	0.01	0.51		0.01	0.01	0.58		0.01	0.01	1.02	0.01	0.01	
Oxidation Reduction Potential (mV)	-86.9		0.1	0.1	43.6		0.1	0.1	-345.0		0.1	0.1	-2.0		0.1	0.1	-260.1		0.1	0.1	106.6		0.1	0.1	-117.3		0.1	0.1	76.4			

Table 1
Summary of Corrective Action Monitoring Data
2019 2nd Semi-Annual Monitoring Event (September 2019)
Chesapeake Energy Center Industrial Landfill - Permit #440
Chesapeake, Virginia

Groundwater Monitoring Wells

Sample ID:	PO-10 9/18/2019				PO-10D 9/18/2019				CECW-6I DUP 9/17/2019				FIELD BLANK 9/17/2019			
	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Primary Performance Parameters (µg/L)																
Antimony, Total	< 0.57		0.57	2.0	3.4		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0
Antimony, Dissolved	< 0.57		0.57	2.0	2.9		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0
Arsenic, total	120		0.75	5.0	160		0.75	5.0	210		0.75	5.0	< 0.75		0.75	5.0
Arsenic, dissolved	110		0.75	5.0	160		0.75	5.0	190		0.75	5.0	< 0.75		0.75	5.0
Arsenic III (dissolved)	83.0		5	5	159		10	10	189		10	10	< 0.04		0.04	0.04
Arsenic V (dissolved)	< 5		5	5	< 10		10	10	< 10		10	10	< 0.04		0.04	0.04
Beryllium, total	< 0.31		0.31	1.0	0.41 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0
Beryllium, dissolved	< 0.31		0.31	1.0	0.32 J		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0
Cobalt, total	< 0.19		0.19	1.0	2.9		0.19	1.0	1.6		0.19	1.0	< 0.19		0.19	1.0
Cobalt, dissolved	< 0.19		0.19	1.0	2.3		0.19	1.0	1.5		0.19	1.0	< 0.19		0.19	1.0
Selenium, total	< 0.89		0.89	5.0	1.6 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0
Selenium, dissolved	< 0.89		0.89	5.0	1.2 J		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0
Sulfide	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000	< 1400		1400	3000
Sulfide, dissolved	< 1400		1400	3000	2000 J		1400	3000	< 1400		1400	3000	< 1400		1400	3000
beta-BHC	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048
Performance Parameters (µg/L)																
Iron, total	510		47	100	13000		47	100	12000		47	100	< 47		47	100
Iron, dissolved	130		47	100	9700		47	100	12000		47	100	< 47		47	100
Manganese	24		2.1	5.0	16		2.1	5.0	270		2.1	5.0	< 2.1		2.1	5.0
Field Measurements																
Dissolved Oxygen (mg/L)	0.52		0.01	0.01	0.93		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential (mV)	-228.7		0.1	0.1	-175.8		0.1	0.1	--		--	--	--		--	--
pH (S.U.)	7.17		0.01	0.01	7.65		0.01	0.01	--		--	--	--		--	--
Specific Conductance (uS/cm)	1959		0.1	0.1	1779		0.1	0.1	--		--	--	--		--	--
Temperature (Degrees Celsius)	21.4		0.01	0.01	22.9		0.01	0.01	--		--	--	--		--	--
Turbidity (NTU)	9.9		0.1	0.1	104.89		0.1	0.1	--		--	--	--		--	--

Surface Water

Sample ID: Sample Date:	SW-1 9/17/2019				SW-2 9/17/2019				SW-3 9/17/2019				SW-4 9/17/2019				SW-3 DUP 9/17/2019				FIELD BLANK 9/17/2019			
	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Primary Constituents (µg/L)																								
Antimony	0.72 J		0.57	2.0	0.86 J		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0	< 0.57		0.57	2.0
Arsenic, total	2.5 J		0.75	5.0	3.1 J		0.75	5.0	2.5 J		0.75	5.0	2.0 J		0.75	5.0	2.9 J		0.75	5.0	< 0.75		0.75	5.0
Arsenic III (dissolved)	0.13		0.04	0.04	0.19		0.04	0.04	0.06		0.04	0.04	0.04		0.04	0.04	0.05		0.04	0.04	< 0.04		0.04	0.04
Arsenic V (dissolved)	0.92		0.1	0.1	0.69		0.1	0.1	0.70		0.04	0.04	0.76		0.04	0.04	0.62		0.1	0.1	< 0.04		0.04	0.04
Beryllium, total	1.6 J+		0.31	1.0	1.8 J+		0.31	1.0	0.78 J+		0.31	1.0	0.68 J+		0.31	1.0	0.71 J+		0.31	1.0	< 0.31		0.31	1.0
Cobalt, total	0.64		0.19	1.0	0.72		0.19	1.0	0.55 J		0.19	1.0	0.51 J		0.19	1.0	0.53 J		0.19	1.0	< 0.19		0.19	1.0
Selenium, total	1.1		0.89	5.0	4.0		0.89	5.0	3.6 J		0.89	5.0	3.9 J		0.89	5.0	2.6 J		0.89	5.0	< 0.89		0.89	5.0
Sulfide*	4300 J+		1400	3000	4300 J+		1400	3000	4300 J+		1400	3000	2700 J+		1400	3000	3900 J+		1400	3000	3900		1400	3000
beta-BHC	< 0.0045		0.0045	0.049	< 0.0045		0.0045	0.049	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048	< 0.0044		0.0044	0.048
Water Quality Parameters (µg/L)																								
Iron, total	610		47	100	740		47	100	540		47	100	420		47	100	470		47	100	< 47		47	100
Total Suspended Solids	7000		2200	4000	17000		2200	4000	15000		2200	4000	7000		2200	4000	6000		2200	4000	< 2200		2200	4000
Field Measurements																								
Dissolved Oxygen (mg/L)	7.04		0.01	0.01	6.49		0.01	0.01	6.06		0.01	0.01	6.13		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential (mV)	111.9		0.1	0.1	102.9		0.1	0.1	71.5		0.1	0.1	142.5		0.1	0.1	--		--	--	--		--	--
pH (S.U.)	7.12		0.01	0.01	7.06		0.01	0.01	6.92		0.01	0.01	5.44		0.01	0.01	--		--	--	--		--	--
Specific Conductance (uS/cm)	25425		0.1	0.1	25930		0.1	0.1	28111		0.1	0.1	24183		0.1	0.1	--		--	--	--		--	--
Temperature (Degrees Celsius)	26.2		0.01	0.01	26.5		0.01	0.01	26.3		0.01	0.01	26.5		0.01	0.01	--		--	--	--		--	--
Turbidity (NTU)	12.9		0.1	0.1	16.9		0.1	0.1	15.9		0.1	0.1	16.0		0.1	0.1	--		--	--	--		--	--

Notes:

MDL = Method detection limit
 RL = Reporting limit
 µg/L = Microgram per liter
 mg/L = Milligram per liter
 < = Less than or equal to reporting MDL
 NS = Not sampled, insufficient water
 mV = Millivolt
 S.U. = Standard Unit
 uS/cm = MicroSiemen per centimeter
 NTU = Nephelometric Turbidity Unit
Bold font = Detected concentration

Laboratory Data Qualifiers (Qual):

J = The reported result is an estimated value.
 J+ = The reported result is estimated bias high.

* Sulfide samples were collected on 11/1/2019