

Table 1
Summary of Corrective Action Monitoring Data
2012 3rd Quarter (August 13-15, 2012)
Chesapeake Energy Center Industrial Landfill - Permit #440
Chesapeake, Virginia

Groundwater Monitoring Wells

Parameter Name	LOD	LOQ	MW-5 8/14/2012	MW-5D 8/14/2012	CECW-1 8/14/2012	CECW-1D 8/14/2012	CECW-2 8/14/2012	CECW-2D 8/14/2012	CECW-3 8/14/2012	CECW-3D 8/14/2012	CECW-6I 8/14/2012	CECW-6D 8/14/2012	CECW-8 8/13/2012	CECW-8D 8/15/2012	CECW-10R 8/14/2012	CECW-15 8/14/2012	PO-8 8/14/2012	PO-8D 8/14/2012	PO-10 8/14/2012	PO-10D 8/14/2012	FIELD BLANK 8/13/2012
Sample Date																					
Primary Performance Parameters ($\mu\text{g/L}$)																					
Arsenic, total	3	10	5 J	<3	67	29	38	96	29	193	231	31	5 J	16	131	<3	20	3 J	164	287	<3
Arsenic, dissolved	3	10	6 J	<3	38	25	24	87	20	191	237	27	<3	13	118	<3	19	3 J	152	265	<3
Arsenic III	0.0007	0.033	2.12	0.937	42.1	35.8	15.5	62.5	1.29	139	210	23.2	0.218	14.0	3.91	0.445	0.640	2.99	52.1	112	<0.0007 U
Arsenic V	0.0003	0.016	3.01	0.440	4.33	8.87	1.24	2.14	24.2	3.22	4.56	1.23	<0.0003 U	2.34	0.638	<0.0003 U	0.154	0.449	4.28	1.67	<0.0003 U
Beryllium, total	0.2	1	<0.2	0.3 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3 J	<0.2	<0.2	<0.2	0.3 J	<0.2	<0.2	<0.2	<0.2	<0.2	
Beryllium, dissolved	0.2	1	<0.2	0.3 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3 J	<0.2	<0.2	<0.2	0.3 J	<0.2	<0.2	<0.2	<0.2	<0.2	
Cobalt, total	0.6	3	0.7 J	52.0	<0.6	0.7 J	7.4	<0.6	4.7	<0.6	1.7 J	5.7	<0.6	<0.6	<0.6	1.7 J	<0.6	7.2	<0.6	<0.6	
Cobalt, dissolved	0.6	3	<0.6	50.4	<0.6	<0.6	5.2	<0.6	1 J	<0.6	1.4 J	5.3	<0.6	<0.6	<0.6	1.5 J	<0.6	8.3	<0.6	<0.6	
Sulfide	0.0002	200	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	184,000	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
Sulfide, dissolved	0.0002	200	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	180,000	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
Performance Parameters (mg/L)																					
Iron, total	0.05	0.25	0.65	89.40	8.50	8.06	56.40	11.70	0.44	0.74	12.05	8.72	0.27	24.80	0.36	27.70	<0.05	5.94	0.96	2.02	<0.05
Iron, dissolved	0.05	0.25	1.13	88.40	7.20	6.90	55.80	13.45	<0.05	0.63	11.80	8.62	0.11 J	24.10	0.30	27.50	<0.05	7.10	0.71	1.85	<0.05
Manganese	0.02	0.05	0.02 J	2.24	0.19	0.52	0.81	0.42	0.05	0.08	0.35	0.35	0.05	0.34	0.15	0.36	0.28	0.18	0.13	0.08	<0.02
Field Measurements																					
Dissolved Oxygen (mg/L)	N/A	N/A	0.33	0.47	0.39	1.28	0.72	0.38	3.24	0.55	0.55	0.46	0.10	0.52	0.52	0.83	0.43	0.49	0.20	0.48	--
Oxidation Reduction Potential (mV)	N/A	N/A	44	19	-133	-140	-261	-240	-16	-239	-192	111	-373	-7	-264	16	-220	20	-198	-266	--
pH (S.U.)	N/A	N/A	5.73	5.81	6.58	6.53	5.99	6.58	6.80	7.28	6.49	5.60	8.11	6.08	6.47	4.92	6.81	6.44	6.64	6.77	--
Specific Conductance (uS/cm)	N/A	N/A	589	13520	6080	20200	16500	30300	11390	27100	8760	20500	28800	28900	26600	29500	3240	3100	25900	29600	--
Temperature (Degrees Celsius)	N/A	N/A	23.17	20.2	20.0	21.23	21.21	19.69	19.5	19.6	18.4	19.15	26.63	18.6	23.5	18.2	21.43	19.67	22.82	20.5	--
Turbidity (NTU)	N/A	N/A	12.00	2.27	1.80	3.54	7.86	3.39	15.55	2.28	1.36	2.17	9.06	6.66	6.26	0.51	1.34	4.44	3.39	1.13	--

Surface Water

Parameter Name	Sample Date	LOD	LOQ	SW-1	SW-2	SW-2 DUP	SW-3	SW-4	SW FIELD BLK
				8/13/2012	8/13/2012	8/13/2012	8/13/2012	8/13/2012	8/13/2012
Primary Constituents (µg/L)									
Arsenic, total		3	10	<3	<3	<3	<3	<3	<3
Arsenic III		0.0007	0.033	0.400	0.382	0.295	0.168	0.235	<0.0007 U
Arsenic V		0.0003	0.016	1.36	1.47	1.79	1.42	1.04	<0.0003 U
Beryllium, total		0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt, total		0.6	3	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Sulfide, dissolved		0.0002	200	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Water Quality Parameters (mg/L)									
Iron, total		0.05	0.25	0.48	1.03	1.05	0.87	0.69	<0.05
Total Suspended Solids		1	1	6.8	21.7	22.0	17.5	16.0	<1
Field Measurements									
Dissolved Oxygen (mg/L)	N/A	N/A		2.22	8.23	7.29	9.71	9.20	--
Oxidation Reduction Potential (mV)	N/A	N/A		145	-108	-109	116	140	--
pH (S.U.)	N/A	N/A		6.55	7.22	7.45	7.92	8.02	--
Specific Conductance (µS/cm)	N/A	N/A		36500	25300	24500	24200	26000	--
Temperature (Degrees Celsius)	N/A	N/A		31.62	31.35	31.52	32.21	31.38	--
Turbidity (NTU)	N/A	N/A		4.51	8.71	8.90	15.92	5.47	--

Notes:

LOD = Limit of detection

LOQ = Limit of quantitation

mg/L = Milligrams per liter

mV = Millivolts

N/A = Not applicable

NTU = Nephelometric

S.U. = Standard

$\mu\text{g/L}$ = Micrograms per liter

$\mu\text{S}/\text{cm}$ = MicroSi

Bold font = Detected concentration

Data Qualifiers:

J = Concentration is between LOD

U = Not detected.