

CCR Rule Groundwater Protection Standard Exceedance Notification

Chesterfield Power Station – Upper Ash Pond Chester, Virginia

The 2018 second semi-annual assessment monitoring groundwater samples were collected from the Chesterfield Power Station Upper Ash Pond’s groundwater monitoring network in accordance with the federal Coal Combustion Residuals (CCR) Rule. The analytical results from this sampling event were compared to applicable groundwater protection standards (GWPS) and constituent concentrations above GWPS were identified. The wells in which these constituent were above GWPS are located inside the Chesterfield Power Station property. Groundwater within the property and downgradient of the property is not used as drinking water and as such does not present a risk to drinking water quality.

40 CFR §257.95(g) requires the owner or operator of an existing CCR unit that is monitoring groundwater in accordance with the assessment monitoring program and has exceeded a GWPS to prepare a notification identifying the Appendix IV constituents that have exceeded the GWPS. The notification is complete when it is placed in the facility’s operating record as required by 40 CFR §257.105(h)(8). The following constituent was detected at levels above the GWPS.

CCR Rule Groundwater Protection Standard Exceedances

Constituent	GWPS (parts per billion)	Aquifer	Downgradient Monitoring Well(s)	Concentration (parts per billion)
Arsenic	19.8	Columbia	MW-8R	21.4
			MW-13	82.2
Cobalt	7.4	Columbia	MW-2	10.3
			MW-3	9.28
			MW-5	19.9
			MW-9R	7.94
			MW-12	16.8
			MW-13	67.9
			MW-15	45.8
	6.9	Potomac	MW-16	20.9
			MW-17S	12.4
			MW-1D	11.8
			MW-4	65.9
Lithium	40	Columbia	MW-6D	39.8
			MW-10	15.5
			MW-5	43.6
		Potomac	MW-13	84.7
			MW-16	117
			MW-4	62.9
Radium 226 & 228	5	Columbia	MW-6	148
			MW-6D	195
			MW-1	5.34 (pCi/L)
		Potomac	MW-2	7.56 (pCi/L)
			MW-17S	5.47 (pCi/L)
			MW-1D	9.98 (pCi/L)

The Commonwealth of Virginia adopted by reference the October 4, 2016 version of the federal CCR rule 40 CFR §257 into 9VAC20-81-800 of the Virginia Solid Waste Management Regulations. Amendments to 40 CFR §257 after October 4, 2016 were not incorporated into 9VAC20-81-800. As a result, health-based GWPSs adopted under the August 29, 2018 amendment to the federal CCR Rule are not applicable to 9VAC20-81-800. Under 9VAC20-81-800, the following constituent was detected in one or more downgradient wells above the Virginia CCR Rule GWPS.

Virginia CCR Rule Groundwater Protection Standard Exceedances

Constituent	GWPS (parts per billion)	Aquifer	Downgradient Monitoring Well(s)	Concentration (parts per billion)
Arsenic	19.8	Columbia	MW-8R	21.4
			MW-13	82.2
Cobalt	7.4	Columbia	MW-2	10.3
			MW-3	9.28
			MW-5	19.9
			MW-9R	7.94
			MW-12	16.8
			MW-13	67.9
			MW-15	45.8
			MW-16	20.9
	6.9	Potomac	MW-17S	12.4
			MW-1D	11.8
			MW-4	65.9
			MW-6D	39.8
			MW-10	15.5
Lithium	50 ⁽¹⁾	Columbia	MW-13	84.7
			MW-16	117
		Potomac	MW-4	62.9
			MW-6	148
			MW-6D	195
Molybdenum	10 ⁽¹⁾	Columbia	MW-3	82.5
			MW-16	12.8
		Potomac	MW-3D	12.9
Radium 226 & 228	5	Columbia	MW-1	5.34 (pCi/L)
			MW-2	7.56 (pCi/L)
			MW-17S	5.47 (pCi/L)
		Potomac	MW-1D	9.98 (pCi/L)

⁽¹⁾ = Values represent highest laboratory Quantitation Limit (QL) for the constituent based on background data. Future QL values are subject to change; however, GWPS cannot be less than the value listed.

An assessment of corrective measures was initiated on January 30, 2019, in response to 2018 first semi-annual GWPS exceedances and will include the constituent and wells listed in this notification.