

Final Results From Appalachian Voices Sampling at Dan River Coal Ash Spill

Sample ID									Dan Up 01	Dan Upsite 2	Dan Spill 01	Dan Draper 01	Dan Draper 02	Danville Dam 01	Danville 02	Dan Outfall 01
Location Description									2.25 mi. upstream	3 mi. upstream	Directly below spill	2 mi. downstream	2 mi. downstream	23 mi. downstream, Danville drinking water intake	23 mi. downstream, Danville drinking water intake	NPDES second ash pond discharge
Time									0:19	10:00	13:40	1:00	8:30	1:30	16:25	14:15
Method	Parameters	Units	Report Limit	Method Detection Limit	Dilution Factor	Basis	EPA MCL Drinking Water Standard	Results	Results	Results	Results	Results	Results	Results	Results	
EPA 200.7	Aluminum	ug/L	100	25	1	NA	200	444	470	3510	884	543	770	877	144	
EPA 200.7	Antimony	ug/L	5	2.6	1	NA	5.6	ND	ND	ND	ND	ND	ND	ND	6	
EPA 200.7	Arsenic	ug/L	10	2.7	1	NA	10	ND	ND	95.1	13.5	ND	16.5	15.4	23.5	
EPA 200.7	Barium	ug/L	5	0.2	1	NA	2000	23.3	24.7	425	101	50.6	83	86.2	120	
EPA 200.7	Beryllium	ug/L	1	0.1	1	NA	4	ND	ND	1.8	ND	ND	ND	ND	ND	
EPA 200.7	Boron	ug/L	50	4.7	1	NA	None	175	185	129	129	116	150	141	199	
EPA 200.7	Cadmium	ug/L	1	0.5	1	NA	5	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.7	Calcium	ug/L	100	27	1	NA	None	7500	7490	11000	7610	7080	8250	7830	25100	
EPA 200.7	Chromium	ug/L	5	0.4	1	NA	100	ND	ND	12.6	ND	ND	ND	ND	ND	
EPA 200.7	Cobalt	ug/L	5	0.6	1	NA	None	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.7	Copper	ug/L	5	0.3	1	NA	1300	ND	ND	44.8	6.6	ND	6.1	7	ND	
EPA 200.7	Iron	ug/L	50	14	1	NA	300	746	705	2180	904	676	649	721	451	
EPA 200.7	Lead	ug/L	5	4	1	NA	15	ND	ND	7.5	ND	ND	ND	ND	ND	
EPA 200.7	Magnesium	ug/L	100	3	1	NA	None	2580	2560	3160	2660	2500	2730	2740	6420	
EPA 200.7	Manganese	ug/L	5	0.3	1	NA	50	30.8	28.8	110	58.8	35.2	34.5	27	70.4	
EPA 200.7	Molybdenum	ug/L	5	1.1	1	NA	None	ND	ND	ND	ND	ND	ND	ND	18.1	
EPA 200.7	Nickel	ug/L	5	1.7	1	NA	None	ND	ND	6	ND	ND	ND	ND	7.8	
EPA 200.7	Potassium	ug/L	5000	3	1	NA	None	ND	ND	ND	ND	ND	ND	ND	5110	
EPA 200.7	Selenium	ug/L	10	3.8	1	NA	50	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.8	Selenium	ug/L	1.0*	0.5*	1*	NA	50	ND	ND	16.3*	4.1	1.7	2.5	2.3	4.9	
EPA 200.7	Silicon	ug/L	100	2.3	1	NA	None	7100	7220	10300	7630	7210	7690	7590	2250	
EPA 200.7	Silver	ug/L	5	0.1	1	NA	100	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.7	Sodium	ug/L	5000	2.5	1	NA	None	ND	ND	6120	5050	6000	5150	5800	10200	
EPA 200.7	Strontium	ug/L	5	0.01	1	NA	None	46.6	47.5	172	65.7	52	70.9	70.8	399	
EPA 200.7	Thallium	ug/L	10	3	1	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.7	Tin	ug/L	5	1.8	1	NA	None	ND	ND	ND	ND	ND	ND	ND	ND	
EPA 200.7	Titanium	ug/L	5	0.1	1	NA	None	20.7	18.6	194	53	30.1	46.6	55	ND	
EPA 200.7	Vanadium	ug/L	5	0.2	1	NA	None	ND	ND	46.9	10.2	ND	9.2	11.1	ND	
EPA 200.7	Zinc	ug/L	10	0.4	1	NA	5000	ND	ND	31.7	14.8	ND	16.6	ND	14.2	
EPA 245.1	Mercury	ug/L	0.2	0.07	1	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	
SM 2540D	Total Suspended Solids	mg/L	5	5	1	NA	None	15.2	22.1	1530	367	138	214	208	3	

All results are unfiltered, total (not dissolved) metals. All samples were taken by Eric Chance and Matt Wasson on Tuesday February 4, 2014. Laboratory analysis was completed by Pace Analytics, a nationally certified laboratory. Highlighted cells indicate exceedances of drinking water standards or values of particular ecological concern

* Sample 'Dan Spill 01' was diluted due to the presence of high levels of non-target analytes or other matrix interference. For this sample the report limit is 5 ug/l, the method detection limit is 2.5 ug/L, and the dilution factor is 5.