DWR Data from Ash Release at Duke Energy Dan River Station
DRAPER LANDING DOWNSTREAM OF RELEASE DAN RIVER
All metals are as total metals (unfiltered)
Sampling Dates and Sample ID

Above standard or screening level

Parameter	2/3/2014	2/4/2014	2/5/2014	2/6/2014	2/7/2014		2/8/2014	2/9/2014	2/10/2014	2/11/2014	2/17/2014	2/18/2014	2/19/2014	2/20/2014	2/21/2014	2/26/2014	3/5/2014	3/12/2014	Applicable Water Quality Standard	Basis for Standard
					10:40 AM	3:10 PM														
	AC04606	AC04664	AC04673	AC04734	AC04808	AC05050#	AC04834	AC04851	AC04877	AC04969	AC05065	AC05109	AC05218	AC05256	AC05354	AC05565	AC05795	AC06099		
	NS	NS	AC04674	AC04736	AC04809	NS	AC04835	AC04852	AC04878	AC04970	AC05066	AC05110	AC05219	AC05257	AC05355	AC05566	AC05796	AC06097		
	NS	NS	NS	AC04738	AC04816	NS	AC04845	AC04865	AC04924	NS	AC05094	AC05120	AC05236	AC05267	AC05365			AC06146		
Chloride	14	13	9.8	12	11	13	9.3	10	10	9.7	14	13	11	9.9	9.2				230	Aquatic Life
Fluoride	0.4 U,J2	0.4 U,J2	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U				1.8	Aquatic Life
NH3 as N			0.02	0.02	0.02		0.02	0.02 U	0.02 U	0.02 U										
NO2 plus NO3 as N	0.40	0.39	0.33	0.34	0.34		0.31	0.30	0.30	0.32										
P:Total P	0.26	0.10	0.06	0.05	0.04		0.03	0.02	0.02	0.02										
Residue_Suspended	855	164	35	27	18	26	16	11		6.5	33	19	67	121	66	14	14	19	N	
Residue_Total			111	102	87	182	77	75		74	124	109	135	198	140	77	68		N	
Sulfate	4.6	4.1	5.1	3.8	4.4	5.2	5.1	5.4	5.6	5.4	4.2	4.2	4.8	3.4	3.6					
Total Dissolved Solids									62	56	78	80	76	79	63			70		
TKN as N	0.74	0.31	0.28	0.29	0.22		0.2 U	0.2 U	0.20	0.20										
Turbidity			35	36	19		8.7	7.3	11	8.7	31	25	36	75	60				50	Aquatic Life
Aluminum_Al	16000	3000	1800 U	1400	710	1500	490	400	370	390	1600	1600	2000	4500	3000	780	630	1100	87*	Aquatic Life
Antimony_Sb	10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U										640 **	Human Health
Arsenic_As	40	6.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10	Human Health
Barium_Ba	530	100	50	37	29	37	28	26	26	26	38	34	53	80	46				200,000	Human Health
Beryllium_Be	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		5.0 U	5.0 U	5.0 U										6.5	Aquatic Life
Boron_B	210	140	110	130	140	110	150	160	150	150	100	110	87	51	50 U				750,000	Aquatic Life
Cadmium_Cd	0.69	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2	Aquatic Life
Calcium_Ca	12	7.8	7.9	7.4	7.8	7.0	8.1	8.2	8.1	8.3	6.9	7.0	7.2	6.0	5.9					
Chromium_Cr	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U				50	Aquatic Life
Cobalt_Co	50 U	50 U	50 U	50 U	50 U		50 U	50 U	50 U										4	Human Health
Copper_Cu	46	13	2.6	2.1	2.0 U	4.1	2.0 U	2.0 U	2.0 U	2.0 U	2.5	2.0 U	3.7	5.7	3.0	2.0 U	2.0 U	2.0 U	7	Aquatic Life
Iron_Fe	7800	2400	2100	1600	1100	2000	860	770	790	890	2200	1800	2500	5700	3800	1100	900	1400	1000	Aquatic Life
Lead_Pb	23	4.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.2	4.2	2.3				25	Aquatic Life
Lithium_Li	25 U	25 U	25 U	25 U	25 U		25 U	25 U	25 U											
Magnesium_Mg	4.6	2.9	3.0	2.8	2.8	2.8	3.0	3.0	2.9	3.0	2.9	2.9	3.0	2.9	2.7					
Manganese_Mn	120	48	43	31	27	38	27	26	28	29	42	32	58	130	77					
Mercury_Hg 245.1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U		0.20 U	0.20 U	0.20 U										0.012	Aquatic Life
Mercury_Hg 1631 Low Level				0.006	0.006		0.003	0.002	0.002		0.005	0.004	0.011	0.019	0.008			0.003	0.012	Aquatic Life
Molybdenum_Mo	10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U										2000	Human Health
Nickel_Ni	21	7.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.2	3.5	2.0	2.0 U	2.0 U	2.0 U	88	Aquatic Life
Potassium_K	4.7	1.9	2.0	1.8	1.6	1.9	1.6	1.6	1.6	1.5	2.0	1.9	2.0	2.3	2.3					
Selenium_Se	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5..0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U				5	Aquatic Life
Silver_Ag	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U										0.06	Aquatic Life
Sodium_Na	6.4	5.5	6.0	5.2	4.7	6.7	4.9	4.7	4.7	4.9	6.9	6.4	5.5	4.8	4.5					
Strontium_Sr	260	84	47	48	47	46	45	47	49	44	43	42	44	40	35				40,000	Human Health
Thallium_Tl	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U				0.47 **	Human Health
Tin_Sn	10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U										800	Human Health
Titanium_Ti	980	200	85 J2	74	33	80	47	32	30	14	86	53	190	400	170					
Vanadium_V	67	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U					
Zinc_Zn	44	19	14	13	10 U	12	10 U	10 U	10 U	10 U	10 U	10 U	11	14	13	10 U	10 U	10	50	Aquatic Life
Aluminum_Al Dissolved			50 U	50 U	150		50 U	50 U	50 U	50 U	50 U	85	91	50 U	120	50 U	50 U	140	*No NC standards for dissolved metals*	
Antimony_Sb Dissolved			10 U	10 U	10 U		10 U	10 U	10 U											
Arsenic_As Dissolved			2.0 U	2.0 U	2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
Barium_Ba Dissolved			23	22	22		21	22	22	22	22	22	24	20	21					
Beryllium_Be Dissolved			5.0 U	5.0 U	5.0 U		5.0 U	5.0 U	5.0 U											
Boron_B Dissolved			110	130	130		130	140	150	150	100	100	93	57	52					
Cadmium_Cd Dissolved			0.50 U	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U		
Calcium_Ca_Dissolved			7.3	7.4	7.6		7.6	7.9	8.1	8.3	6.6	6.6	6.9	5.3	5.4					
Chromium_Cr_Dissolved			10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U					
Cobalt_Co Dissolved			50 U	50 U	50 U		50 U	50 U	50 U											
Copper_Cu_Dissolved			2.0 U	2.0 U	2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
Iron_Fe Dissolved			50 U	50 U	200		83	85	72	61	60	120	110	76	120	50 U	50 U	160		
Lead_Pb Dissolved			2.0 U	2.0 U	2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U					
Lithium_Li Dissolved			25 U	25 U	25 U		25 U	25 U	25 U											
Magnesium_Mg Dissolved			2.7	2.7	2.7		2.7	2.9	2.9	3.0	2.6	2.6	2.7	2.1	2.2					
Manganese_Mn Dissolved			13	13	16		15	17	18	17	11	12	15	15	10 U					
Mercury_Hg Dissolved			0.20 U	0.20 U	0.20 U		0.20 U	0.20 U	0.20 U											
Molybdenum_Mo Dissolved			10 U	10 U	10 U		10 U	10 U	10 U											
Nickel_Ni Dissoved			2.0 U	2.0 U	2.0 U		2.0 U	2.0 U	2.0 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
Potassium_K Dissolved			1.7	1.6	1.5		1.5	1.5	1.5	1.5	1.7	1.7	1.7	1.6	1.9					
Selenium_Se Dissolved			5.0 U	5.0 U	5.0 U		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U					
Silver_Ag_Dissolved			1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U											
Sodium_Na Dissolved			5.7	5.1	4.8		4.7	4.5	4.8	5.0	6.8	6.0	5.5	4.5	4.3					
Strontium_Sr Dissolved			42	43	47		46	48	49	49	46	43	45	35	36					
Thallium_Tl Dissolved			2.0 U	2.0 U	2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U					
Tin_Sn Dissolved			10 U	10 U	10 U		10 U	10 U	10 U											
Titanium_Ti Dissolved			10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U					
Vanadium_V Dissolved			25 U	25 U	25 U		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U					
Zinc_Zn Dissolved			10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		

U = Indicates that the analyte was annlyzed for but not detected above the reported practical quantitation limit.
J2 = Quality control failure(estimated reported value).

N = Narrative standard per 15A NCAC 02B .0211(3)(c)- Floating solids, settleable solids, or sludge deposits: only such amounts attributable to sewage, industrial wastes or other wastes as shall not make the water unsafe or unsuitable for aquatic life and wildlife or impair the water for any designated uses
* Aluminum is pH and hardness dependent and is based on National Reccomended Water Quality Criteria
** National Recommended Water Quality Criteria
# Sediment sample also taken (AC05427)