

DWR Data from Ash Release at Duke Energy Dan River Station
DOWNSTREAM OF RELEASE AT VIRGINIA LINE

| | | Sampling Dates and Sample ID | | | | | | | | | | | | | | | | | | Above standard or screening level | | |
|---------------------------|---------------|------------------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|---------------------|---------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|---|-----------------------|---------|
| Report # | | 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 | |
| Parameter | Units/Hg 1631 | AC04607 | AC04665 | AC04676 | AC04731 | AC04811 | AC04837 | AC04854 | AC04880 | AC04972 | 9:45 AM AC05053# | 12:20 PM AC05068 | AC05112 | AC05221 | AC05259 | AC05357 | AC05568 | AC05798 | AC06100 | | | |
| | | NS | NS | AC04677 | AC04733 | AC04813 | AC04838 | AC04855 | AC04881 | AC04973 | NS | NS | AC05069 | AC05113 | AC05222 | AC05260 | AC05358 | AC05569 | AC05799 | | | AC06102 |
| | | NS | NS | | | AC04818 | AC04847 | AC04867 | AC04926 | NS | NS | AC05096 | AC05122 | AC05238 | AC05269 | AC05367 | | | | | | AC06148 |
| Chloride | mg/L | 14 | 14 | 12 | 12 | 10 | 9.2 | 10 | 10 | 8.3 | 14 | 13 | 14 | 12 | 10 | 6.9 | | | | 230 | Aquatic Life | |
| Fluoride | mg/L | 0.4 UJ2 | 0.4 UJ2 | 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 | mg/L | | | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 U | 0.02 U | 0.02 U | | | | | | | | | | | | |
| NO2 plus NO3 as N | mg/L | 0.44 | 0.40 | 0.33 | 0.34 | 0.32 | 0.30 | 0.31 | 0.31 | 0.33 | | | | | | | | | | | | |
| P:Total P | mg/L | 0.14 | 0.14 | 0.07 | 0.06 | 0.04 | 0.04 | 0.03 | 0.02 | 0.03 | | | | | | | | | | | | |
| Residue_Suspended | mg/L | 329 | 256 | 66 | 40 | 24 | 17 | 11 | 12 U,P | 11 | 52 | 38 | 27 | 110 | 238 | 98 | 17 | 9.2 | 18 | N | | |
| Residue_Total | mg/L | | | 150 | 107 | 90 | 84 | 78 | | 80 | 126 | 136 | 111 | 156 | 274 | 164 | 78 | 66 | | N | | |
| Sulfate | mg/L | 5.1 | 4.7 | 3.6 | 4.1 | 5.9 | 5.6 | 5.8 | 5.3 | 5.3 | 4.4 | 4.1 | 4.0 | 4.8 | 3.5 | 7.2 | | | | | | |
| Total Dissolved Solids | mg/L | | | | | | | | 74 | 59 | | 80 | 78 | 77 | 69 | 62 | | | | | | |
| TKN as N | mg/L | 0.58 | 0.41 | 0.34 | 0.29 | 0.20 | 0.20 | 0.2 U | 0.20 | 0.24 | | | | | | | | | | | | |
| Turbidity | NTU | | | 45 | 35 | 23 | 12 | 8.8 | 10 | 11 | | 30 | 27 | 30 | 85 | 75 | | | | 50 | Aquatic Life | |
| Aluminum_Al | ug/L | 5800 | 4900 | 2000 | 1500 | 940 | 680 | 470 | 430 | 440 | 1700 | 2000 | 1500 | 2000 | 4700 | 3400 | 880 | 500 | 1200 | 87* | Aquatic Life | |
| Antimony_Sb | ug/L | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | | | | | | | | | | 640 ** | Human Health | |
| Arsenic_As | ug/L | 13 | 10 | 2.6 | 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 | 2.9 | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 10 | Human Health | |
| Barium_Ba | ug/L | 210 | 170 | 67 | 45 | 35 | 33 | 30 | 28 | 28 | 39 | 42 | 35 | 62 | 99 | 63 | | | | 200,000 | Human Health | |
| Beryllium_Be | ug/L | 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 | ug/L | 170 | 140 | 90 | 120 | 110 | 110 | 140 | 140 | 110 | 92 | 90 | 110 | 74 | 50 U | 50 U | | | | 750,000 | Aquatic Life | |
| Cadmium_Cd | ug/L | 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 | 0.5 U | 0.5 U | 0.50 U | 2 | Aquatic Life | |
| Calcium_Ca | mg/L | 10 | 9.1 | 8.1 | 7.4 | 7.7 | 7.8 | 8.2 | 8.2 | 7.9 | 7.0 | 7.1 | 7.2 | 7.3 | 6.3 | 6.4 | | | | | | |
| Chromium_Cr | ug/L | 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 | | | | 50 | Aquatic Life | |
| Cobalt_Co | ug/L | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U | | | | | | | | | | | 4 | Human Health | |
| Copper_Cu | ug/L | 19 | 16 | 4.2 | 3.2 | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.6 | 2.3 | 2.0 U | 4.1 | 7.3 | 3.8 | 2.0 U | 2.0 U | 2.0 U | 7 | Aquatic Life | |
| Iron_Fe | ug/L | 3500 | 3400 | 2400 | 1800 | 1300 | 1100 | 850 | 810 | 770 | 2100 | 2200 | 1800 | 2600 | 6000 | 4700 | 1200 | 770 | 1400 | 1000 | Aquatic Life | |
| Lead_Pb | ug/L | 7.9 | 6.5 | 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 | 5.1 | 2.7 | | | | 25 | Aquatic Life | |
| Lithium_Li | ug/L | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | | | | | | | | | | | | |
| Magnesium_Mg | mg/L | 3.7 | 3.4 | 3.2 | 2.8 | 2.9 | 3.0 | 3.0 | 3.0 | 3.0 | 2.9 | 2.9 | 2.9 | 3.1 | 3.1 | 3.0 | | | | | | |
| Manganese_Mn | ug/L | 65 | 63 | 55 | 34 | 29 | 28 | 24 | 30 | 26 | 42 | 45 | 32 | 67 | 160 | 100 | | | | | | |
| Mercury_Hg 245.1 | ug/L | 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 | ug/L | | | | | 0.005 | 0.003 | 0.002 | 0.002 | | | 0.006 | 0.004 | 0.012 | 0.021 | 0.010 | | | 0.0029 | 0.012 | Aquatic Life | |
| Molybdenum_Mo | ug/L | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | | | | | | | | | | | 2000 | Human Health | |
| Nickel_Ni | ug/L | 8.9 | 8.4 | 2.4 | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.8 | 2.2 | 4.2 | 2.5 | 2.0 U | 2.0 U | 2.0 U | 88 | Aquatic Life | |
| Potassium_K | mg/L | 2.8 | 2.5 | 2.1 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.6 | 2.1 | 2.0 | 1.9 | 2.0 | 2.4 | 2.7 | | | | | | |
| Selenium_Se | ug/L | 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 | ug/L | 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 | mg/L | 7.1 | 7.0 | 6.9 | 5.7 | 5.4 | 5.5 | 5.1 | 5.1 | 7.3 | 7.2 | 6.8 | 5.8 | 4.8 | 4.9 | | | | | | | |
| Strontium_Sr | ug/L | 130 | 110 | 55 | 52 | 49 | 47 | 48 | 49 | 44 | 47 | 47 | 44 | 47 | 44 | 36 | | | | 40,000 | Human Health | |
| Thallium_Tl | ug/L | 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 | ug/L | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | | | | | | | | | | | 800 | Human Health | |
| Titanium_Ti | ug/L | 370 J2 | 310 | 98 | 82 | 49 | 40 | 40 | 32 | 21 | 74 | 79 | 57 | 170 | 400 | 190 | | | | | | |
| Vanadium_V | ug/L | 25 | 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 | ug/L | 29 | 20 | 16 | 14 | 10 U | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 13 | 17 | 10 U | 10 U | 10 U | 50 | Aquatic Life | |

U = Indicates that the analyte was analyzed 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 Recommended Water Quality Criteria
 ** National Recommended Water Quality Criteria
 # Sediment sample also taken (AC05427)