## EDEN NORTH CAROLINA COAL ASH SPILL DRINKING WATER RESULTS

NOTE: The data below represents drinking water samples that were collected on Feb 11, 2014 by EPA SESD (Team 2). Water sample measurement are in milligrams per liter (mg/L), micrograms per liter (ug/L), and nanograms per liter (ng/L) for drinking water samples. The data is being compared to EPA and State Maximum Contaminant Levels (MCLs) and other health based levels. To date, there have been no samples that have exceeded drinking water levels. This sample represents the same water that is being delivered to your tap. Specific qualifiers and footnotes are listed below the summary table.

| Analyte   | Human<br>Screening S<br>for Drinkin<br>Samp | Standard<br>1g Water | Danville Water Plant<br>Finished Water collected<br>at their compliance<br>sampling location |   | South Boston Finished<br>Water, collected from<br>the tap in the plant lab |              |
|---|---|----------------------|--|---|--|--------------|
| Sample Information                                |   |                      |  |   |  |              |
| Sample ID   | -   |                      | DVF02  |   | SBF02  |              |
| Date  | -   |                      | 02/11/2014   |   | 02/11/2014   |              |
| Time  | -   |                      | 1410<br>Validation Complete  |   | 1040<br>Validation Complete  |              |
| Status<br>Media                                   | -   |                      | Validation Complete<br>Drinking Water  |   | Validation Complete<br>Drinking Water                                      |              |
| Volatile Organics                                 | -   |                      |  |   | Drinking water   |              |
| (m- and/or p-)Xylene                              | -   | -                    | _  | - | 1U   | μg/L         |
| 1,1,2-Tetrachloroethane                           | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,1,1-Trichloroethane                             | -   | -                    | -  | - | 2U   | μg/L         |
| 1,1,2,2-Tetrachloroethane                         | -   | -                    | -  | - | 0.5U   | µg/L         |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113) | ) -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,1,2-Trichloroethane                             | -   | -                    | -  | - | 2U   | μg/L         |
| 1,1-Dichloroethane                                | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,1-Dichloroethene (1,1-Dichloroethylene)         | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,1-Dichloropropene<br>1,2,3-Trichlorobenzene     | -   | -                    | -  | - | 0.5U<br>0.5U   | μg/L         |
| 1,2,3-Trichloropropane                            | -   | -                    | -  | - | 2U   | μg/L<br>μg/L |
| 1,2,4-Trichlorobenzene                            | -   | -                    | _  | _ | 0.5U   | μg/L         |
| 1,2,4-Trimethylbenzene                            |   | _                    |  | - | 0.5U   | μg/L         |
| 1,2-Dibromo-3-Chloropropane (DBCP)                | -   | -                    | -  | - | 4U   | μg/L         |
| 1,2-Dibromoethane (EDB)                           | -   | -                    | -  | - | 2U   | μg/L         |
| 1,2-Dichlorobenzene                               | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,2-Dichloroethane                                | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,2-Dichloropropane                               | -   | -                    | -  | - | 0.5U   | μg/L         |
| 1,3,5-Trimethylbenzene<br>1,3-Dichlorobenzene     | -   | -                    | -  | - | 0.5U<br>0.5U   | μg/L         |
| 1,3-Dichloropropane                               | -   | -                    | -  | - | 0.5U   | μg/L<br>μg/L |
| 1,4-Dichlorobenzene                               | -   | -                    | -  | - | 0.5U   | μg/L         |
| 2,2-Dichloropropane                               | -   | -                    | -  | - | 2U   | μg/L         |
| Acetone   | -   | -                    | -  | - | 4U   | μg/L         |
| Benzene   | -   | -                    | -  | - | 0.5U   | μg/L         |
| Bromobenzene                                      | -   | -                    | -  | - | 0.5U   | μg/L         |
| Bromochloromethane                                | -   | -                    | -  | - | 0.5U   | μg/L         |
| Bromodichloromethane                              | 80  | μg/L                 | -  | - | 8.2  | μg/L         |
| Bromoform<br>Bromomethane                         | -   | -                    | -  | - | 4U<br>2U   | μg/L         |
| Carbon disulfide                                  | -   | -                    | -  | - | 20<br>2U   | μg/L<br>μg/L |
| Carbon Tetrachloride                              | -   | -                    | _  | _ | 2U<br>2U   | μg/L         |
| Chlorobenzene                                     | -   | -                    | -  | - | 0.5U   | μg/L         |
| Chloroethane                                      | -   | -                    | -  | - | 2U   | μg/L         |
| Chloroform  | 80  | µg/L                 | -  | - | 5.6  | μg/L         |
| Chloromethane                                     | -   | -                    | -  | - | 0.5U   | μg/L         |
| cis-1,2-Dichloroethene                            | -   | -                    | -  | - | 0.5U   | μg/L         |
| cis-1,3-Dichloropropene                           | -   | -                    | -  | - | 0.5U   | μg/L         |
| Cyclohexane<br>Dibromochloromethane               | - 80  | -<br>μg/L            | -  | - | 0.5U<br>4.6  | μg/L<br>μg/L |
| Dibromoethane                                     | -   | μg/L<br>-            | -  | - | 0.5U   | μg/L<br>μg/L |
| Dichlorodifluoromethane (Freon 12)                | -   | -                    | _  | - | 2U   | μg/L         |
| Ethyl Benzene                                     | -   | -                    | -  | - | 0.5U   | μg/L         |
| Hexachlorobutadiene                               | -   | -                    | -  | - | 0.5U   | μg/L         |
| Isopropylbenzene                                  | -   | -                    | -  | - | 0.5U   | μg/L         |
| Methyl Acetate                                    | -   | -                    | -  | - | 4U   | μg/L         |
| Methyl Butyl Ketone                               | -   | -                    | -  | - | 1U   | μg/L         |
| Methyl Ethyl Ketone                               | -   | -                    | -  | - | 4U   | μg/L         |
| Methyl Isobutyl Ketone                            | -   | -                    | -  | - | 1U<br>0.5U   | μg/L         |
| Methyl T-Butyl Ether (MTBE)<br>Methylcyclohexane  | -   | -                    | -  | - | 0.5U   | μg/L<br>μg/L |
| Methylene Chloride                                | -   | -                    | -  | - | 0.5U   | μg/L<br>μg/L |
| n-Butylbenzene                                    | -   | -                    | _  | _ | 0.5U   | μg/L         |
| n-Propylbenzene                                   | -   | -                    | -  | - | 0.5U   | μg/L         |
| o-Chlorotoluene                                   | -   | -                    | -  | - | 0.5U   | μg/L         |
| o-Xylene  | -   | -                    | -  | - | 0.5U   | μg/L         |
| p-Chlorotoluene                                   | -   | -                    | -  | - | 0.5U   | μg/L         |
| p-Isopropyltoluene                                | -   | -                    | -  | - | 0.5U   | μg/L         |
| sec-Butylbenzene                                  | -   | -                    | -  | - | 0.5U   | μg/L         |
| Styrene<br>tert-Butylbenzene                      | -   | -                    | -  | - | 0.5U<br>0.5U   | μg/L<br>μg/L |
| Tetrachloroethene (Tetrachloroethylene)           | -   | -                    | -  | - | 0.5U   | μg/L<br>μg/L |
| Toluene   | -   | -                    | -  | - | 0.5U   | μg/L<br>μg/L |
| trans-1,2-Dichloroethene                          | -   | -                    | _  | - | 0.5U   | μg/L<br>μg/L |
| trans-1,3-Dichloropropene                         | -   | -                    | -  | - | 0.5U   | μg/L         |
| uais-1,5-Dicitoropropetie                         |   |                      |  |   |  |              |
| Trichloroethene (Trichloroethylene)               | -   | -                    | -  | - | 0.5U   | μg/L         |

## EDEN NORTH CAROLINA COAL ASH SPILL DRINKING WATER RESULTS

| Analyte  | Human Health<br>Screening Standard<br>for Drinking Water<br>Samples <sup>1</sup> |                              | Danville Water Plant<br>Finished Water collected<br>at their compliance<br>sampling location |              | South Boston Finished<br>Water, collected from<br>the tap in the plant lab |              |
|--|--|------------------------------|--|--------------|--|--------------|
| Sample Information                                   |  |                              |  |              |  |              |
| Sample ID  | -  |                              | DVF0   | 2            | SBF02  |              |
| Semi Volatile Organics                               |  |                              |  |              |  |              |
| Acenaphthene   | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Acenaphthylene                                       | -  | -                            | 1U   | µg/L         | 1U   | μg/L         |
| Anthracene   | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Benzo(a)anthracene                                   | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Benzo(a)pyrene                                       | -  | -                            | 0.2U   | µg/L         | 0.21U  | µg/L         |
| Benzo(b)fluoranthene                                 |  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Benzo(g,h,i)perylene                                 | -  | -                            | 1U   | µg/L         | 1U   | μg/L         |
| Benzo(k)fluoranthene                                 | -  | -                            | 1U   | μg/L         | 1U<br>1U   | μg/L         |
| Benzyl butyl phthalate<br>Bis-(2-Ethylhexyl) Adipate | -  | -                            | 1U<br>1U,J,QL-1  | μg/L         |  | μg/L         |
| Bis(2-ethylhexyl) phthalate                          |  | -                            | 10,J,QL-1<br>1U  | µg/L         | 1U,J,QL-1<br>1U  | μg/L         |
| Chrysene   |  | -                            | 1U<br>1U   | μg/L<br>μg/L | 1U<br>1U   | μg/L<br>μg/L |
| Dibenz(a,h)anthracene                                |  | _                            | 1U   | μg/L<br>μg/L | 1U   | μg/L<br>μg/L |
| Diethyl phthalate                                    |  | _                            | 1U   | μg/L<br>μg/L | 10<br>1U   | μg/L<br>μg/L |
| Dimethyl phthalate                                   |  | -                            | 1U   | μg/L<br>μg/L | 1U   | μg/L<br>μg/L |
| Di-n-butylphthalate                                  |  | -                            | 10<br>1U   | μg/L<br>μg/L | 1U<br>1U   | μg/L<br>μg/L |
| Di-n-octylphthalate                                  | -  | -                            | 1U   | μg/L<br>μg/L | 1U   | μg/L         |
| Fluoranthene   | -  | -                            | 1U   | μg/L         | 1U   | μg/L         |
| Fluorene   | -  | -                            | 1U   | μg/L         | 1U   | μg/L         |
| Hexachlorobenzene (HCB)                              | -  | -                            | 1U,J,QL-1  | μg/L         | 1U,J,QL-1  | μg/L         |
| Indeno (1,2,3-cd) pyrene                             | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Naphthalene  | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Phenanthrene   | -  | -                            | 1U   | µg/L         | 1U   | μg/L         |
| Pyrene   | -  | -                            | 1U   | µg/L         | 1U   | µg/L         |
| Total Metals   |  |                              |  |              |  |              |
| Aluminum   | 47,000   | μg/L                         | 100U   | µg/L         | 100U   | μg/L         |
| Antimony   | 6  | μg/L                         | 1U   | μg/L         | 1U   | μg/L         |
| Arsenic  | 5  | μg/L                         | 1U   | µg/L         | 1U   | μg/L         |
| Barium   | 2,000  | μg/L                         | 25   | µg/L         | 23   | μg/L         |
| Beryllium  | 4  | μg/L                         | 0.5U   | µg/L         | 0.5U   | µg/L         |
| Boron  | 9,300  | µg/L                         | 150<br>0.5U  | µg/L         | 120  | μg/L         |
| Cadmium  |  | 5 μg/L                       |  | µg/L         | 0.5U   | μg/L         |
| Calcium<br>Chromium                                  |  | Essential nutrient<br>3 µg/L |  | μg/L         | 7,200  | μg/L         |
| Cobalt   | 14   | μg/L                         | 1.1U,J<br>5U   | μg/L         | 1.1U,J<br>5U   | μg/L         |
| Copper   | 1,300  | μg/L<br>μg/L                 | 3.8  | μg/L<br>μg/L | 3.8  | μg/L<br>μg/L |
| Iron   | 33,000   | μg/L<br>μg/L                 | 100U   | μg/L<br>μg/L | 100U   | μg/L<br>μg/L |
| Lead   | 15   | μg/L                         | 0.4U   | μg/L         | 0.4U   | μg/L         |
| Magnesium  |  | Essential nutrient           |  | μg/L<br>μg/L | 2,700  | μg/L         |
| Manganese  | 970  | µg/L                         | 2,600<br>5U  | μg/L         | 5U   | μg/L         |
| Mercury  | 2,000  | ng/L                         | 0.1U   | μg/L         | 0.1U   | μg/L         |
| Molybdenum   | 78   | μg/L                         | 10U  | μg/L         | 10U  | μg/L         |
| Nickel   | 910  | μg/L                         | 10U  | μg/L         | 10U  | μg/L         |
| Potassium  | Essential n  |                              | 1,600  | μg/L         | 1,600  | μg/L         |
| Selenium   | 50   | μg/L                         | 2U   | µg/L         | 2U   | µg/L         |
| Silver   | 210  | µg/L                         | 0.013U,J   | µg/L         | 0.013U,J   | μg/L         |
| Sodium   | Essential n  | utrient                      | 5,100  | µg/L         | 30,000   | μg/L         |
| Strontium  | -  | -                            | 49   | μg/L         | 78   | μg/L         |
| Thallium   | 0.5  | µg/L                         | 0.2U   | μg/L         | 0.2U   | μg/L         |
| Tin  | -  | -                            | 15U  | µg/L         | 15U  | µg/L         |
| Titanium   |  | -                            | 5U   | μg/L         | 5U   | μg/L         |
| Vanadium   | 190  | µg/L                         | 5U   | μg/L         | 5U   | μg/L         |
| Yttrium  |  | -                            | 3U   | µg/L         | 3U   | µg/L         |
| Zinc   | 14,000   | µg/L                         | 10U  | μg/L         | 76   | μg/L         |
| Classical/Nutrient Analyses                          | 1  | 1                            |  | 1            |  |              |
| Cyanide (total)                                      | 200  | µg/L                         | 15U,J,QM-1   | μg/L         | 15U  | μg/L         |
| Nitrate as N   | 10   | mg/L                         | 0.31J,H-1  | mg/L         | 0.36J,H-1  | mg/L         |
| Nitrate/Nitrite as N                                 | -  | -                            | 0.31   | mg/L         | 0.36   | mg/L         |
| Nitrite as N   | 1  | mg/L                         | 0.05U,J,H-1  | mg/L         | 0.05U,J,H-1  | mg/L         |
|  | -  | -                            | 82J,QR-1   | mg/L         | 140J,QR-1  | mg/L         |
| Total Dissolved Solids<br>Total Organic Carbon       |  | -                            | 1U   | mg/L         | 1U   | mg/L         |

Notes

1

Value obtained from EPA Maximum Contaminant

Level (MCL), Removal Management Levels,

Secondary MCL, and Lifetime Health Advisory

values

EPA U.S. Environmental Protection Agency

μg/L micrograms per liter

mg/L milligrams per liter

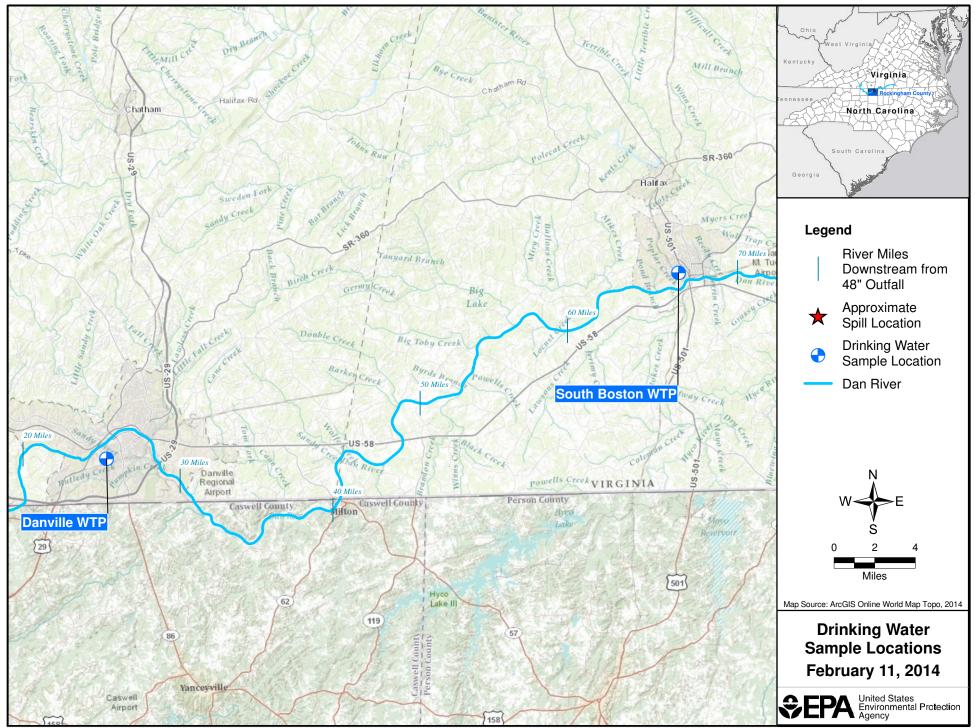
ng/L nanograms per liter



## DATA QUALIFIER DEFINITIONS

- B-2 Reporting level elevated due to trace amounts of analyte present in the method blank
- B-3 Level in blank does not impact data quality
- B-4 Level in blank impacts MRLs
- B-5 Qualitative evidence of contamination in the blank at a concentration less than the MDL
- C-2 Improper sample container used
- H-1 Recommended holding time exceeded
- J The identification of the analyte is acceptable; the reported value is an estimate
- MRL-1 MRL verification for Potable Water matrix (Drinking Water)
- MRL-2 MRL verification for Non-Potable Water matrix
- MRL-3 MRL verification for Soil matrix
- MRL-6 MRL verification for Waste matrix
- N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification
- NA-5 Not Analyzed. Cannot exceed TCLP regulatory levels based on Total Scan analyses
- NA-9 Not Analyzed. No sample container received.
- NJ Presumptive evidence that the analyte is present; reported as a tentative identification with an estimated value
- P-6 Incorrect reagent or technique used to preserve sample
- Q-2 Result greater than MDL but less than MRL
- QC-1 Analyte concentration low in continuing calibration verification standard
- QC-2 Analyte concentration high in continuing calibration verification standard
- QC-5 Calibration check standard less than method control limits
- QC-6 Calibration check standard greater than method control limits
- QI-1 Internal standard was outside of method control limits
- QL-1 Laboratory Control Spike Recovery less than method control limits
- QL-2 Laboratory Control Spike Recovery greater than method control limits
- QL-3 Laboratory Control Spike Precision outside of method control limits
- QM-1 Matrix Spike Recovery less than method control limits
- QM-2 Matrix Spike Recovery greater than method control limits
- QM-3 Matrix Spike Precision outside method control limits
- QR-1 MRL verification recovery less than lower control limits
- QR-2 MRL verification recovery greater than upper control limits
- Tentatively Identified Compound AN analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.
- U The analyte was not detected at or above the reporting limit
- XD-2 Duplicate results less than 5X MRL
- XM-1 Sample background/spike ratio higher than method evaluation criteria





File: C:\Eden\_Coal\_Ash\Sediment\_Maps\Updated\_Sediment\_Maps\DrinkingWaterSampleLocations\_021711\_2.mxd