## North Carolina Coal Ash Pond Groundwater Contamination Analysis February 2013 Update

**Background-** This report is intended to amend and update the previous report released by Appalachian Voices in October 2009 titled "North Carolina Coal Ash Pond Groundwater Contamination Analysis". This report is based on groundwater monitoring data submitted to the North Carolina Department of Environment and Natural Resources (NC DENR) by Duke and Progress Energy for the period of December 2010 through May 2012.

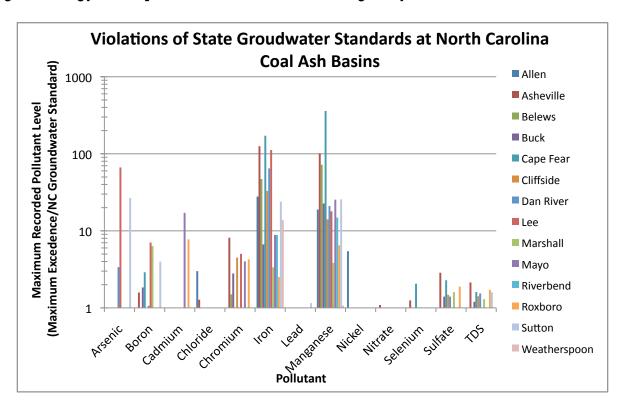


Figure 1. Maximum recorded pollutant level for each pollutant and plant. In this chart, values are represented as a factor of the NC groundwater standard. For example, the standard for arsenic is  $10~\mu g/L$ , so a value of  $30~\mu g/L$  would be 3 times the standard. This graph mirrors Figure 1 in the previous report, but with data from the period of December 2010, through May 2012.

**Findings**- Over the year and a half period studied; there were 737 violations of state ground water standards, every power plant had at least 22 violations, and on average each plant had 52 violations. Groundwater standards were violated for arsenic, boron, cadmium, chloride, chromium, iron, lead, manganese, nickel, nitrate, selenium, sulfate and total dissolved solids. Values were reported as high as 66 times the standard for arsenic, eight times the chromium standard, double the selenium standard, 170 times the iron standard and 360 times the standard for manganese.

**Conclusions**- The level and distribution of exceedances of ground water standards at North Carolina's coal ash impoundments is essentially unchanged since 2009. Ground water contamination surrounding these impoundments continues to pose a risk to public health and the environment. NC DENR has yet to push for corrective action on any of the facilities.