

Understanding the Full Story: Groundwater around Ash Ponds

Progress Energy
2010

Overview

- On Oct. 6, 2009, the environmental group Appalachian Voices issued a report titled “North Carolina Ash Pond Groundwater Contamination Analysis.” The data referenced in this report come from a voluntary groundwater monitoring program that Progress Energy began in 2006. In February 2010, the same group reissued the same data in another report.
- We proactively share all the monitoring results with the N.C. Department of Environment and Natural Resources (NCDENR) and work with them to determine if further action is needed.
- We take every sample and indication of elevated levels seriously. Because results from individual wells can vary greatly depending on the weather and other factors, it is important to have sufficient data to determine if an elevated result is unusual (a one-time occurrence) or part of a trend.
- The majority of the elements for which we monitor are non-toxic and do not have health-based drinking water standards associated with them. For example, in monitoring manganese, there is an aesthetics-based secondary drinking water standard for the smell and color of the water. There is no drinking water standard established for some other elements, such as boron.

Background levels

- One key omission from the Appalachian Voices reports is data from monitoring wells located upgradient (where groundwater is coming from) around our ash ponds. We provided the data from these upgradient wells to NCDENR as part of our monitoring program, but Appalachian Voices chose not to include them in the report. This upgradient information is important to have because it helps identify the naturally-occurring background levels of various elements.
- Data from the upgradient wells in our monitoring program indicate high background levels of several elements listed in the Appalachian Voices report. For example, samples from these “uphill” wells indicate levels of iron that range from 2 to 219 times higher than the groundwater standard and manganese levels that range from 4 to 45 times higher than the groundwater standard. According to the report, iron and manganese are two of the top three most common exceedences found at the downhill wells.

Actively gathering more data

- We are conducting more studies to determine the location, flow and source of any elevated elements in groundwater around our ash ponds, as well as gather more data on background levels.
- We have submitted a plan to state regulatory agencies to identify locations for additional monitoring wells around our ash ponds to gather more data about elevated levels, source, flow and potential for off-site impact.
- We will provide the results of these additional studies to NCDENR and work with them to create an action plan if needed.

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