

County begins testing wells in Pearce Creek communities

By Jacob Owens jowens@cecilwhig.com | Posted: Wednesday, April 3, 2013 6:00 am

The Cecil County Health Department has begun testing residential wells of communities and homes surrounding the Pearce Creek Dredge Material Containment Area in Earleville this week.

Fifteen residents contacted the department about water testing following a community meeting in mid-March, according to Fred von Staden, county director of environmental health. A letter explaining the available testing will be mailed to residents this week.

Residents of several waterfront Earleville communities have started to look into studies of their drinking water after a U.S. Geological Survey study confirmed that dredge spoils deposited by the U.S. Army Corps of Engineers nearby had degraded local water tables. The long-awaited study, which collected field data from 50 wells — 35 in the DMCA, and 15 in residential wells in the West View Shores community — and geological surveys over two years, confirmed the presence of several elements — including beryllium, arsenic, cadmium and thallium — in amounts exceeding U.S. Environmental Protection Agency health advisory levels

“Several years ago, we did testing on about 40 residential wells for five elements, including arsenic, beryllium, nickel, manganese and iron,” von Staden said Monday. “This time, with the release of the U.S. Geological Survey study, we’re testing for all 19 constituents, as well as gross alpha and beta emitters.”

Von Staden said two employees from his department have been devoted fulltime to taking samples and interviewing area residents. Those technicians try to take samples of treated and untreated water from a residential well to give residents a better idea of what their water quality is. The employees can cover up to three homes a day, von Staden said, adding that there are more than 230 homes in the surrounding communities of West View Shores, Bay View Estates, Pond Neck Road and more.

Only one element of concern in the USGS report will not be tested for individually: strontium. Technicians will instead test for gross alpha and beta emitters, a property of the mildly radioactive element strontium and related element, radium.

Each sample for those radionuclides must be sent to the state laboratory immediately and tested within 48 hours of receipt, von Staden said, in order to ensure accurate readings. Those tests take three and half hours each per sample. For testing of the naturally occurring metals, a full report per well can be received from the state lab in about one month, he said.

“What all this means though is the Pearce Creek case is putting a lot of stress on our department and the state lab,” he said. Testing for total dissolved solids, or a measurement of how much of trace elements are found in water, typically takes hours.

In order to try to reduce the caseload on the state lab, the health department will instead use handheld TDS meters to measure samples. Testing for TDS levels is important in the Pearce Creek area, because the recently released study proved the presence of high TDS levels in the dredge spoil dump site assisted the movement of primary and secondary contaminants into groundwater.

“Normally, the laboratory test would dry a sample out at 180 degrees Celsius to find what is left over,” von Staden said. “This test will be much faster.”

The testing is currently being funded by the Maryland Department of Health and Mental Hygiene as a “public health investigation,” he added.

“That means the tests are not costing the individual homeowners, but ultimately it is the taxpayer paying for the tests,” von Staden said. “The Maryland Port Authority and U.S. Army Corps of Engineers are not currently helping to fund the initiative.”

Resident from nearby communities have also been inquiring about water testing, but von Staden said the department’s priority right now is to first serve as many of the Pearce Creek-area residents as possible.

“We’ve had some inquiries from the Crystal Beach community across Pearce Creek, but we’re asking them to be placed onto a waiting list at this time,” he said. “We did complete a test at a Crystal Beach home after the start of the year that found no violations of federal standards, but manganese was a little high. That is mostly an aesthetic problem rather than a health risk though.”

Von Staden said his biggest concern was educating the public on the health concerns and help them understand what is in their water.

“Some elements may just make water less palatable or discolored water may make people think their water is no good, when it is actually OK to drink,” he said. “Some of those aesthetic problems may drive people to more dangerous water sources, where clear water has more dangerous bacteria in it. We want to help people understand their water.”

To have your water tested by the Cecil County Health Department, call 410-996-5160 to set up an appointment.



Pearce Creek

The current condition of the Pearce Creek Dredge Material Containment Area in Earleville this week. A recently completed study confirmed the U.S. Army Corps of Engineers contaminated local aquifers.