

## **State Hopes to Unravel Radiation Readings near Piketon**

Columbus Dispatch pB4 Sat, July 30, 2005

Two different tests of stream show far different toxin levels.

By Mike Lafferty

The Columbus Dispatch

State officials are trying to figure out whose numbers tell the true story of a stream near the former uranium enrichment plant at Piketon.

Environmental groups say their tests show that the Big Run is highly radioactive. The federal government says the water is safe.

So, the state will perform its own radiation tests of the stream near the former Portsmouth Gaseous Diffusion Plant.

Environmental groups say foam from two spots in Big Run, about 65 miles south of Columbus in Pike County, tested about 100 times above background radiation levels.

The U.S. Department of Energy and United States Enrichment Corp., which runs the plant, say the water is safe.

"The bottom line is there is not a reason to be concerned," said USEC spokeswoman Elizabeth Stuckle.

The Ohio Environmental Protection Agency isn't sure who to believe and has questions for both sides.

The state will perform radiation tests as part of a water-chemistry analysis of area streams. Testing likely will occur in August and September as part of an ongoing effort to measure stream health, according to Maria Galanti, the EPA's project coordinator overseeing the environmental cleanup at the 3,000-acre site.

Big Run is a tributary of the Scioto River. In 1992, it was one of several area streams that contained fish with elevated radiation levels. Stream sediments showed radiation levels five times above the natural level, as well as increased levels of arsenic, cadmium, chromium and mercury.

Excessive radiation exposure can affect many body organs and cause tumors and genetic mutations. Arsenic has been linked to, among other conditions, nausea and vomiting and circulatory system damage. In high doses it can be fatal.

Mercury affects the central nervous system, while cadmium has been linked to a variety of ailments, including kidney disorders. Ingesting large amounts of chromium can cause stomach ulcers, convulsions, and kidney and liver damage.

The Portsmouth-Piketon Residents for Environmental Safety and Security and the RadioActivist Campaign, based in Hanford, Wash., reported the high radiation levels earlier this month.

But, to make sense of the data, Galanti says she needs details, such as why the foam was tested instead of water.

"They didn't even bother to tell us the locations," she said.

Galanti accompanied USEC technicians when they went to the stream and has questions about their tests as well.

"They supposedly put out a report how the samples were collected, what happened when they went to the lab and how the data was analysed," she said. "They went back and took additional water samples at the same sites. I need to know what USEC did."

Norm Buske, a physicist and director of the RadioActivist Campaign, said the high readings are correct.

The tests were made in November 2003 as part of a project to prepare a citizen's do-it-yourself guide to measuring radiation. The technique was developed and the tests and foam samples were taken by a Russian nuclear physicist, Sergey Pashenko, who visited Piketon for several days.

Pashenko's technique, which uses a Geiger counter to test foam residue, is not designed to provide specific numbers, but rather a general level of radioactivity.

"It's really just a screening technique," Buske said, adding that it helps indicate whether additional, more-detailed tests are needed.

The government's more-detailed data, he said, confirms the data.

Graham Mitchell, of the Ohio EPA, said the federal Energy Department's figures are high but that it's impossible to know what they really indicate without more information.

"We're really in the apples and oranges thing here," he said.

The debate over Big Run also comes at a time when the Portsmouth-Piketon group is trying to halt construction of a gas centrifuge plant that would replace the older equipment used to enrich uranium fuel for nuclear power plants.

Ewan Todd, a member of the group, says the stream-radiation readings show that the Department of Energy and the enrichment facility can't be trusted to operate the new plant without recontaminating the environment.

Buske also says the federal government was conducting a ruse when it originally issued the radioactivity numbers using milliliters instead of the much larger liter unit, which is the standard practice. Using milliliters gave a seemingly smaller, more innocuous figure, he said.

"It's cunning," he said.

Said Stuckle, "That is absolutely not true."

[mlafferty@dispatch.com](mailto:mlafferty@dispatch.com)