

Test 97 wells, lab urged

Tainted BNL water spurs request for E. Yaphank studies

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Contamination from a fire-fighting foam has been found at Brookhaven National Laboratory, raising concerns from an advisory group that a soon-to-be-regulated chemical has spread off-site to private residential wells.

A community advisory council urged BNL to test 97 properties in East Yaphank south of the lab for per- and polyfluoroalkyl substances, also known as PFAS, a group of chemicals that includes perfluorooctane sulfonic acid, or PFOS. The chemical, which was in firefighting foams used at the lab from the 1960s until 2008, is expected to be regulated this year by New York State, officials said.

Letter to lab director

The 26-member advisory council wrote in a Nov. 8 letter to lab director Doon Gibbs that it is “concerned about members of the public utilizing private wells that live south of the Laboratory and may be adversely impacted by PFAS contamination.”

The letter also said the council hoped “that BNL will test all private wells contained in the 97 additional properties.”

Brookhaven National Lab officials said last month they had not decided whether to test the wells outside the lab, south of the Long Island Expressway, and was working with local, state and federal regulators. BNL is a research institution funded primarily by the U.S. Department of Energy, with almost 3,000 employees and 4,000 visiting researchers studying physics, chemistry, biology, medicine, and applied science.

Brookhaven has continued to drill wells on the 5,265-acre lab grounds in Upton to see how far the contamination has spread. The chemical has been detected at the highest levels around its current and former fire stations, and in three of five drinking water supply wells.

“We recognize how impor-



Firefighting foam, seen here at Brookhaven National Laboratory in 1970, was a source of the water contaminants known as PFAS.

tant this issue is. We’re trying to move forward as quickly as we can, working with the regulators,” said Jason Remien, manager of the lab’s environmental protection division.

Officials from the state DEC and Department of Health said in a joint statement they were evaluating the need to test the wells “as part of their comprehensive investigation of contamination.”

The Suffolk County Department of Health Services had requested private well testing for about 97 properties, in an area that stretches south from the lab to Sunrise Highway, according to a PowerPoint presentation given to the advisory council in October.

“It is the position of Suffolk County Department of Health Services that due to the detection of PFAS in groundwater on BNL property above the EPA health advisory level, the U.S. Department of Energy should pay for PFAS testing in private wells down-gradient of BNL,” according to a statement from

health department spokeswoman Grace Kelly-McGovern.

Private wells are not regularly tested or treated, and are generally shallower than those drilled by public water providers, meaning health officials fear they’re more susceptible to pollution. The number of private wells on Long Island is unknown, though water officials estimate up to 40,000 homes are on private wells.

Health effects

The group of chemicals at issue increasingly have become a concern among regulators and environmentalists. Health effects include liver damage, decreased fertility, developmental delays in fetuses and children, and is considered a possible carcinogen, according to the U.S. Environmental Protection Agency.

The detection of PFOS in groundwater prompted the state to add Gabreski Air National Guard Base in Westhampton Beach and a Suffolk County fire-training center in Yaphank

to the state Superfund list because of contaminated water supplies. The chemicals have shown up in private wells in nearby Wainscott, as well as in public wells in Hampton Bays.

Drinking water standards

A state panel last month recommended a drinking water standard of 10 parts per trillion for PFOS and a related chemical, PFOA, used in manufacturing, which would be the most protective drinking water standards in the nation. The state health commissioner is expected to set a standard this year.

Historical photos show fire suppression foam spilling onto the lab ground during training exercises in 1966 and 1970.

Testing wells installed near the lab’s current firehouse found levels of PFOA and PFOS up to 12,400 parts per trillion, and at 5,370 parts per trillion at the lab’s former firehouse, according to a statement from lab spokesman Pete Genzer. Those two sites were believed to be the “primary locations” where firefighting

foam was used during training.

The Suffolk Department of Health Services tested drinking water supply wells in 2017 as part of a national program to collect data on emerging contaminants of concern to the public. The detection at BNL previously had not been reported.

The contamination has been found at three of the five drinking water supply wells at BNL; two at levels of up to 27 parts per trillion, and one at up to 70.4 parts per trillion, though Remien said he believes there was a quality assurance problem with the highest sample, from June 2018. Other samples were below 70 parts per trillion, which is the current EPA health advisory level for PFOS.

The lab is re-establishing carbon filtration on two wells, and tests show treated drinking water at the lab are less than 3 parts per trillion, Genzer said.

Mike Giacomaro, president of the East Yaphank Civic Association, said most of the homes in the area have been offered hookups to public water.