

September 29, 2017

DEC Statement:

While recent sampling at the Bethpage High School and Central Boulevard Elementary School have confirmed the presence of concentrations of radium in groundwater over 40' below ground, these detections pose no health concerns for students, staff, or visitors to the schools or the neighboring community. The schools are served with water from the Bethpage Water District which is rigorously tested, including monitoring for radium, and free of contamination. Out of an abundance of caution, DEC will continue to work with the school district to routinely monitor and inform the public on environmental conditions in the area.

Background Information

Recent groundwater samples were collected at monitoring wells at Bethpage High School (BHS) and Central Boulevard Elementary School (CBES) performed by the Bethpage Union Free School District and its consultant, J.C. Broderick & Associates, Inc. on August 18th, 2017 and analyzed for radiological parameters, including radium. The schools consultant lead the sampling effort and had the samples analyzed through their own laboratory contract - DEC was provided with representative split samples of the groundwater, which were sent out for independent analysis to a state contract laboratory.

The preliminary data from the these samples confirmed detections of Radium-226 and Radium-228 in groundwater at both BHS and CBES. Compiled results from the separate analyses show a range of detections reported as Radium 226-228 at concentrations from 6.48 to 27.7 picocuries per liter (pCi/l) at the high school and 9.68 to 32.15 pCi/l at the elementary school. While not strictly applicable to groundwater in this case, NYS does have a standard for drinking water for total radium of 5 pCi/l.

The recent data is consistent with previous sampling performed at the High School by the school consultant. The data from the elementary school is new, and as with the previous sampling, the DEC has conferred with the NYS Department of Health regarding the significance of the detections of radium in the groundwater monitoring wells at the two schools. As the groundwater is not used for drinking and there is no other exposure to groundwater (the water is 57 feet below ground surface at the BHS and 43 feet below ground at the CBES), there are no immediate health concerns identified for students, staff, or visitors to the school due to the presence of the radium.

The results cannot be used to determine whether an off-site contaminant source of radium may be impacting the groundwater or whether this is an indication of naturally occurring radium in the groundwater, which has been reported in certain areas in LI. DEC is continuing to investigate the nature and extent of contaminants, including radium and other emerging contaminants like 1,4-dioxane, in groundwater in the Bethpage area as part of our overall evaluation of the Navy/Grumman plume, and at other sites across Long Island.

As these investigations continue, the state will take all appropriate actions necessary to protect the public health and environment.

This sampling effort was a follow up to a May 2017 report by J.C. Broderick & Associates ["Volatile Vapor Intrusion (VVI) and Groundwater Analytical Report with Radon Testing", dated May 2017 prepared by J.C. Broderick & Associates, Inc. for the Bethpage Union Free School District] that presented results of sampling at the high school.

Additionally, on June 15, the DEC performed a scan at the high school with appropriate radiation-detecting instrumentation of surface soils at select areas around the school, including lawns and playing fields. This scan conclusively determined there were no on-site sources of radium contamination present at the high school.