

Health Safety & Risk Management Office c/o Brighton Central School District Brookside School 220 Idlewood Road Rochester, New York 14618 phone (585) 658-7937/7929 fax (585) 241-3668

December 20, 2017

Mr. Blaine Cunningham Manager of Buildings & Grounds Webster Central School District 119 South Avenue Webster, New York 14580

**RE: Radon Testing Webster Central School District** 

Dear Mr. Cunningham:

Short-term radon testing was performed in the Professional Learning Center, Buildings and Grounds, Webster Aquatic Center and the Transportation Department buildings in the Webster Central School District the week of December 11, 2018. Testing was performed to confirm the baseline state of the buildings and to determine the presence or absence of any potential radon infiltration into the buildings.

Radon is a naturally occurring radioactive gas. It comes from the natural breakdown (decay) of uranium which is found in soil and rock throughout the United States. Radon travels through soil and enters buildings through cracks and other holes in the foundation. Eventually, it decays into radioactive particles (decay products) that can become trapped in the lungs. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of a lifetime. United State Environmental Protection Agency (US EPA) studies have found that radon concentrations in outdoor air average about 0.4 picoCuries per liter of air (pCi/L). However, radon and its decay products can accumulate to much higher concentrations inside a building.

Radon is colorless, odorless, and tasteless. The only way to know whether an elevated level of radon is present in any room of a school is to test. Each frequently occupied room that is in contact with the ground was measured because adjacent rooms can have significantly different levels of radon.

According to Official Compilation of Codes, Rules and Regulations of the State of New York, Title 8. Education Department Chapter II. Regulations of the Commissioner Subchapter J. Buildings and Transportation Part 155 Educational Facilities. Section 155.5 Uniform Safety Standards for School Construction and Maintenance Projects (m) Radon: Districts shall take responsibility to be aware of the geological potential for high levels of radon and to test and mitigate as appropriate. Radon testing in all Webster Central School District facilities was performed in response to this regulation.

Prior to placement of the short term testing canisters, each facility's floor plan was evaluated and testing areas identified based on the US EPA's Guidelines for Radon Measurement in Schools. All

frequently occupied rooms in direct contact with, or immediately above unoccupied rooms in direct contact with the ground, were tested.

All US EPA protocols for placement were observed and "closed building" conditions were maintained during the sample placements. All samples placed were short-term charcoal style samplers and lab analysis was completed by the Radon Testing Corporation of America (NYSDOH ELAP #10806).

## **Sample Analysis**

Please reference the attached laboratory reports for detailed sampled analysis. The report for each facility includes sample identification number, time and temperature of placements, and a basic description of the room where the sample was placed.

In addition, as a quality control measure, "blank" samplers were returned to the lab without being exposed to room air and "duplicate" samplers were placed side by side with other samplers in order to validate the accuracy of the results. The number of "blanks" were 5% of the total number of canisters deployed in each facility. The number of duplicates were 10% of the total number of canisters deployed in each facility.

## **Interpretation of Results**

According to the US EPA, the average indoor radon level is estimated to be about 1.3 pCi/L. If the results of testing shows a radon level of approximately 4.0 pCi/L or higher in any regularly occupied areas, the US EPA recommends that a second short term test be performed to verify the radon level. If the second test results are equal to or higher than the first, then action must be taken to reduce the radon levels.

The report results indicate that radon levels in all facilities tested throughout the Webster Central School District are below the US EPA action level of 4.0 picoCuries per liter of air (pCi/L).

No further action is required at this time. The EPA recommends that schools retest in the future after significant changes to the building structure or the HVAC system.

If you have any questions please feel free to contact the Health-Safety-Risk Management Office at (585) 344-7937.

Sincerely,

Ms. Dawn E. Howe

Dawn E. Howe

Environmental Health and Safety Specialist Health-Safety-Risk Management Office

**Attachments**