

Needham Risk Management Resource Group, LLC

Competence • Ethics • Integrity • Results

To: Clifford Nooney, Director of Facilities

From: Michael Needham, CSP, RES, CFPS, CET, Safety and Health Consultant

Date: June 18, 2018

Re: Guilderland High School Radon Long Term Follow-up Sampling

On March 8, 2018, David Bauer, Industrial Hygienist for Needham Risk Management Resource Group, LLC performed a follow-up long-term radon screening at Guilderland High School. This round of screening was conducted to assess the levels of radon during varying use conditions.

Radon is a radioactive noble gas that comes from the decay of radium in the soil. Radon is a colorless, odorless, and invisible gas that can only be detected through the use of proper equipment and protocols. Chronic exposure to elevated levels of radon has been linked to an increased incidence of lung cancer in underground miners. (Taken from "New York State Department of Health Radon Frequently Asked Questions – March 2000").

Needham Risk Management placed the test canisters on March 8th, 2018. The canisters were left in place for 90 days and collected for analysis by Radon Testing Corporation of America (The laboratory identified by the New York State Department of Health). The screening was conducted in cooperation with the New York State Department of Health Radiological Safety Unit, and the testing protocols followed the guidelines of the U.S. Environmental Protection Agency.

Results of this assessment showed the six areas of the Guilderland High School tested above the Environmental Protection Agency's (EPA) recommended action guideline for radon. The areas that tested above the EPA action guideline were the Wrestling Coach's Room, the Wrestling Room, the East Gym, the Auditorium, the Auditorium Stage, and the Auditorium Control Room.

A summary of the results is listed below, and a full laboratory report is attached.

Page 2 of 2 Guilderland HS long-term radon June 18, 2018

Location	Sample ID	Radon picoCuries per Liter
Auditorium Stage	10110447	3.8
Auditorium Stage	10110863	5
Auditorium	10110462	7.7
Auditorium	10110803	12.3
Auditorium Control Room	10110809	8.6
Auditorium Control Room	10110882	5.6
East Gym Near Hall	10110845	5.9
Wrestling Room	10110838	9
Wrestling Room	10110824	4.1
Wrestling Coach Office	10110452	3.7
Wrestling Coach Office	10110474	4.3

Given the results of the long-term tests and the levels noted, particularly in the auditorium, we believe it would be prudent to contact a Radon Mitigation Professional who could assess potential pathways and control measures to address the areas with elevated radon.

We recommend that this report be maintained in compliance with Occupational Safety and Health Administration's 29CFR 1910.1020 *Employee Access to Exposure and Medical Records* requirements.

If you have any questions or concerns, please do not hesitate to contact me at (518) 860-1758.



Needham Risk Management Resource Group, LLC

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To: Clifford Nooney, Director of Facilities

From: Michael Needham, CSP, RES, CFPS, CET, Safety and Health Consultant

Date: February 26, 2018

Re:

Guilderland High School Radon Follow-up Sampling

On February 12, 2018, David Bauer, Industrial Hygienist for Needham Risk Management Resource Group, LLC performed a follow-up short-term radon screening at Guilderland High School. This round of screening was conducted to verify the adequacy of remediation controls that the district had put in place in response to previous screening results that showed elevated levels in certain areas.

Radon is a radioactive noble gas that comes from the decay of radium in the soil. Radon is a colorless, odorless, and invisible gas that can only be detected through the use of proper equipment and protocols. Chronic exposure to elevated levels of radon has been linked to an increased incidence of lung cancer in underground miners. (Taken from "New York State Department of Health Radon Frequently Asked Questions – March 2000").

Needham Risk Management placed the test canisters on February 12th, 2018. The canisters were left in place for 2 days and collected for analysis by Radon Testing Corporation of America (The laboratory identified by the New York State Department of Health). The screening was conducted in cooperation with the New York State Department of Health Radiological Safety Unit, and the testing protocols followed the guidelines of the U.S. Environmental Protection Agency.

Results of this assessment showed six areas of the Guilderland High School that tested above the Environmental Protection Agency's (EPA) recommended action guideline for radon. The areas that tested above the EPA action guideline were the Wrestling Coach's Room, the Wrestling Room, the East Gym, the Auditorium, the Auditorium Stage, and the Auditorium Control Room.

A summary of the results is listed below, and a full laboratory report is attached.

573 Columbia Turnpike, Suite 3
East Greenbush, NY 12061
Telephone: (518) 860-1758 Fax: (518) 860-1759
Email: team@theneedhamgroup.com
www.theneedhamgroup.com

Location	Radon picoCuries per Liter
Room 301	2.2
Room 302	2.8
Room 302 (quality control duplicate)	2.1
Room 305	1.1
Room 306	0.5
Room 310	0.1
Faculty Room	0.5
Faculty Room (quality control duplicate)	0.6
Media Center - Office	1.1
Media Center - Storage	0.9
Media Center - Studio	1.3
Media Center – Work Room	1.3
Media Center – Back Work Room	3.6
Wrestling Room	5.5
Wrestling Coach	4.4
Wrestling Coach (quality control blank	0.1
East Gym – Near Hallway	4.8
East Gym – Near Football Room	5.0
Auditorium	8.0
Auditorium – Stage	4.9
Auditorium - Control Room	6.5

Needham Risk Management recommends that the district have the ventilation systems evaluated in the areas where elevated levels of radon were measured. In addition, we recommend performing a longer-term test of those areas to collect more data. If you have any questions please contact us.

We recommend that this report be maintained in compliance with Occupational Safety and Health Administration's 29CFR 1910.1020 *Employee Access to Exposure and Medical Records* requirements.