

J.C. Broderick & Associates, Inc.

Environmental / Construction Consulting & Testing



January 31, 2023

Mr. Severino Fasulo
Syosset Central School District
99 Pell Lane
Syosset, New York 11791

**Re: Indoor Radon Sampling and Methane Monitoring
South Grove Elementary School
60 Colony Lane
Syosset, New York 11791
Sampling Dates: January 9 - 12, 2023**

JCB#: 22-52916

Dear Mr. Fasulo:

J.C. Broderick and Associates, Inc. (JCB) was retained to perform indoor radon sampling and methane monitoring within the above referenced school building. The existing active sub-slab depressurization system (SSDS) for radon mitigation was turned off 48-hours prior to the start and throughout the duration of the sampling.

The radon sampling was performed by experienced JCB representatives following the EPA Radon Measurement in Schools (EPA 402-R-92-014) guidance document. Sampling was performed utilizing Short-Term test devices which were placed in frequently occupied rooms in contact with the ground.

Radon Laboratory Analytical Summary

The short-term Radon in Air sampling was performed utilizing laboratory supplied test kits, assigned individual identification numbers and were secured. Chain of Custody documents were prepared, and the samples were then delivered to an independent New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis of Radon in Air.

EMSL Analytical Inc. (EMSL) of Cinnaminson, New Jersey provided laboratory analytical services. Copies of EMSL's NYSDOH certifications are available upon request.

The laboratory analytical results for the Radon in Air samples were reviewed and compared to the United States Environmental Protection Agency (EPA) recommended action level of 4.0 pCi/L as reported in Radon Measurement in Schools Revised Edition (EPA 402-R-92-014), dated July 1993.

The monitoring for methane gas was also performed during this period utilizing a Landtec GEM 5000 methane detecting real-time monitor. The monitor recorded the percentage of methane along with carbon dioxide and oxygen every 15-minutes.

The table on the following page summarizes the Radon Analytical Results for the last three sampling events:

Table No. 2: Summary of Radon Samples Analysis Results			
AHERA Room Identification	Radon Activity pCi/L – 1/12/23	Radon Activity pCi/L – 4/25/22	Radon Activity pCi/L – 2/25/22
Room 2002	1.5	0.3	1.2
Room 2002 – Blank	0.4	-0.1	-0.3
Room 2005	1.9	0.4	1.0
Room 2008	1.9	0.3	1.0
Room 2008 – Duplicate	1.9	0.1	0.8
Room 2011	1.3	0.3	1.5
Room 2015	1.3	0.4	1.2
Room 2018	2.2	0.3	1.2
Room 2023	1.4	0.4	1.2
Room 2027	1.7	0.3	0.9
Room 2030	1.5	0.6	1.7
Room 2032	1.6	0.2	1.6
Room 2041	2.0	0.3	1.1
Room 2043	1.6	0.1	2.0
Room 2044	1.6	0.3	1.3
Room 2045	0.8	0.4	1.2
Room 2050	1.6	0.3	1.1
Room 2052	2.0	0.1	1.5
Room 2052 – Duplicate	1.9	0.5	1.3
Room 2054	2.2	0.3	1.2
Room 2056	1.6	0.3	1.4
Room 2058	2.4	0.5	1.3
Room 2060	2.1	0.3	1.2
Room 2062	1.9	0.2	1.1
Room 2062 – Blank	0.2	-0.1	1.2
Room 2068	1.2	0.3	0.8
Room 2068B	1.0	0.6	1.1
Room 2068B – Duplicate	1.4	0.2	NT
Room 2070	1.2	0.4	0.9
Room 2071	1.6	0.3	1.1
Room 2071 – Blank	0.1	0.0	1.3
Room 2075	2.1	0.4	1.6
Room 2078	1.7	0.6	1.3
Room 2081	1.8	0.4	1.6
Room 2086	1.3	0.5	1.1
Room 2086 – Duplicate	1.5	0.6	0.8
Room 2089	1.7	0.5	1.0
Room 2096	1.8	0.4	1.2
Room 123	4.0	0.8	2.3
Room 124	3.8	0.9	2.0

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Indoor Radon Sampling and Methane Monitoring
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The laboratory analytical results from the Radon in Air samples submitted indicated a concentration of Radon meeting the guidance value established by the EPA of equal to or greater than 4.0 pCi/L in one (1) of the 40 samples collected. Room 123 is used as a coach's office and is located off the gym at South Grove ES.

As a result of the above referenced finding and recommendations in the EPA guidance document, JCB recommends follow-up testing of Room 123 and due to its proximity and test result, Room 124. The testing should be performed under the same conditions as the initial sampling under full occupancy during the heating season.

Please see the attached laboratory reports and to include in the District's Radon Measurement Plan. If there are any questions or if more information is needed, please feel free to contact our office.

Sincerely,
J. C. Broderick & Associates, Inc.

A handwritten signature in black ink, appearing to read "Steven Muller", written in a cursive style.

Steven Muller, P.G.
Director, Subsurface Division