



9 Isaac Street
Norwalk, CT
06850
Phone: 203-853-9792
Fax: 203-853-0273
www.brooksenviro.com

March 27, 2017

Gino Faiella, *Director of Facilities*
Newtown Public Schools
Maintenance Department
12 Berkshire Road
Sandy Hook, CT 06482-1398

Dear Mr. Faiella:

The results of recent radon-in-air testing at **Sandy Hook Elementary School** are enclosed. You will find three pages presented in a format suitable for posting. The radon-in-air concentration is given in the second column labeled "pCi/L" and the location is given in the third column labeled "Room". Note that the symbol "<" indicates no radon was detected. In that case, the number given (0.3) represents the detection limit.

Radon-in-air samples were collected following guidelines issued by the Connecticut Department of Public Health (CT-DPH) in response to Connecticut Public Act 03-220, "An Act Concerning Indoor Air Quality in Schools". Charcoal samplers, manufactured and analyzed by Air-Chek Inc., 1936 Butler Bridge Road, Mills River, NC 28759, were placed in frequently occupied rooms that come in contact with ground. Lavatories, storage rooms, locker rooms, closets, etc. and rooms not contacting ground were not tested. Testing took place during a school week with building systems operating normally. Teachers were instructed to keep windows closed during the testing. The results provide a "background" survey which can be used to indicate whether further testing should be done or whether actions should be considered to reduce radon levels.

The Connecticut guideline for radon-in-air is 4 pCi/L. The Department of Public Health currently feels that no further action is indicated when results this low are obtained. Although exposures in this range do present some risk of lung cancer, no remedial measures are recommended since reduction of levels this low may be impossible to achieve.

All of the results obtained in this survey were below 4 pCi/L.

Sincerely yours,

A handwritten signature in blue ink that reads "Mark F. Granville". The signature is written in a cursive, flowing style.

Mark F. Granville
Senior Consultant

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APPENDIX

Some of the samples listed with the results were collected as part of quality control. These samples fall into three categories: (1) blanks, (2) duplicates, and (3) more than one device in rooms exceeding 2,000 square feet.

All the blank samples yielded <0.3, indicating this batch of packets was not contaminated and the laboratory did not introduce an upward bias. The blanks are indicated by "BL" following a room designation.

Duplicates were collected by setting two packets 4" apart in six rooms. The results indicate an overall standard deviation of measurement of less than 0.23 pCi/L.

Duplicate	#1	#2	Mean	StdDev	RPD
room 101	<0.3	<0.3	<0.3	<0.15	NA
room 110	0.5	<0.3	<0.4	<0.4	NA
room 122	0.6	0.6	0.60	0.00	0%
room 137	<0.3	<0.3	<0.3	<0.15	NA
room 139	<0.3	<0.3	<0.3	<0.15	NA
room 158A	<0.3	0.6	<0.45	<0.45	NA

The CT-DPH states that the quality of the results should be questioned if the relative percent difference (RPD) of results over 4.0 pCi/l is 25% or more. Since all of the results for duplicates are less than 4.0 pCi/L, the CT criteria is not applicable. The National Radon Safety Board states that RPD less than 37% is acceptable for results greater than 4 pCi/L and RPD less than 67% is acceptable for results less than 4 pCi/L (excluding non-detects which result in 0% or <200%). The duplicates satisfy the NRSB criteria.

Additional samples were collected in three areas over 2,000 square feet by distributing two or more packets in the area. The overall standard deviation for additional samples is consistent with the standard deviation of duplicate samples.

Additional	#1	#2	#3	#4	Mean	StdDev
café/stage	0.5	<0.3	<0.3	<0.3	<0.35	<0.24
gymnasium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.15
library	<0.3	<0.3	<0.3		<0.3	<0.15

NEWTOWN PUBLIC SCHOOLS / SANDY HOOK

Kit #	pCi/L	Room	Hours	Started	Ended	Analyzed	NOTES	MST %
7157863	< 0.3	101	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157834	< 0.3	101	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157827	< 0.3	101A	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157864	< 0.3	101A BL	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157811	< 0.3	101B	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157824	< 0.3	101C	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157809	< 0.3	101D	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.6%
7157810	< 0.3	101F	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157819	< 0.3	108A	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157808	< 0.3	108B	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.6%
7157805	< 0.3	109	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.8%
7157868	0.5	110	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157803	< 0.3	110	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		4.4%
7157804	< 0.3	112	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.8%
7157814	0.7	116	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157813	0.7	117	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157802	0.6	118	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.8%
7157806	0.6	119	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		3.6%
7157812	0.8	120	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157818	0.7	121	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157821	0.6	122	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		3.7%
7157867	0.6	122	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		3.7%
7157815	0.6	123	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.1%
7157865	< 0.3	123 BL	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.9%
7157825	< 0.3	125A	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157835	< 0.3	125B	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157828	< 0.3	125C	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157837	< 0.3	126	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.1%

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Kit #	pCi/L	Room	Hours	Started	Ended	Analyzed	NOTES	MST %
7157826	< 0.3	128	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157822	< 0.3	129	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157823	< 0.3	130	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157833	< 0.3	131	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157832	< 0.3	132	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157836	< 0.3	133	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157838	< 0.3	137	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157866	< 0.3	137	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157862	< 0.3	139	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157852	< 0.3	139	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157854	< 0.3	140	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157869	< 0.3	140 BL	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157853	< 0.3	141	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157831	< 0.3	142	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157829	< 0.3	143	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157841	< 0.3	144	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157839	< 0.3	145	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157830	< 0.3	146	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157840	< 0.3	147	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157856	0.6	149	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157855	< 0.3	149C	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157858	1.3	153A	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157848	< 0.3	158A	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157843	0.6	158A	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157845	< 0.3	161B	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157844	< 0.3	161B BL	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157857	0.5	CAFE	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157859	< 0.3	CAFE	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%

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Kit #	pCi/L	Room	Hours	Started	Ended	Analyzed	NOTES	MST %
7157860	< 0.3	CAFE	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		4.5%
7157861	< 0.3	CAFE	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157847	< 0.3	GYM	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.7%
7157849	< 0.3	GYM	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157850	< 0.3	GYM	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157851	< 0.3	GYM	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%
7157846	0.5	KITCHEN	71	2017-03-20 @ 11:00 am	2017-03-23 @ 10:00 am	2017-03-24		3.6%
7157820	< 0.3	LIBRARY	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.8%
7157816	< 0.3	LIBRARY	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.1%
7157817	< 0.3	LIBRARY	71	2017-03-20 @ 10:00 am	2017-03-23 @ 9:00 am	2017-03-24		2.1%
7157807	< 0.3	NURSE	72	2017-03-20 @ 10:00 am	2017-03-23 @ 10:00 am	2017-03-24		2.9%