



January 10, 2019

Joe Crelier
Director of Risk Management
Portland Public Schools
501 N Dixon Street
Portland, Oregon 97227

Via email: jcrelier@pps.net

Regarding: District-Wide Radon Testing
Green Thumb School
6801 SE 60th Avenue
Portland, Oregon 97206
PBS Project 6500.618, Phase 0005, Task 0002

Dear Mr. Crelier:

From December 10 to 13, 2018, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at Green Thumb School located at 6801 SE 60th Avenue in Portland, Oregon.

The Environmental Protection Agency (EPA) and Oregon Health Authority (OHA) recommend that buildings be tested for radon and that any radon concentrations be maintained below 4.0 picocuries per liter (pCi/L) of air. PBS used Air Chek, Inc., brand single-use, short-term radon test kits to measure radon levels in frequently-occupied rooms that are in contact with the ground or above unoccupied basements or crawlspaces.

Laboratory results indicate that all short-term radon tests at Green Thumb School were below 4.0 pCi/L.

See the attached laboratory analysis report for more details.

In addition to the EPA recommendation that radon concentrations not exceed 4.0 pCi/L, OHA recommends that the following steps be conducted based on the results of a room's initial short-term test:

- **If the result is less than 2.0 pCi/L**, school districts are required to test again every 10 years, per Oregon Revised Statute 332.166-167.
- **If the result is between 2.0 pCi/L and 4.0 pCi/L**, consider fixing (i.e., lowering) the radon in that room.
- **If the result is from 4.0 pCi/L to 8.0 pCi/L**, perform a follow-up measurement of that room using a long-term test. This test should be conducted over as much of a nine-month school year as possible, when the room is likely to be occupied. If that result is equal to or greater than 4.0 pCi/L, the radon in the room should be fixed (i.e., lowered).
- **If the initial short-term test result is equal to or greater than 8.0 pCi/L**, conduct a second short-term test and average its result with the initial short-term test result. If the average of the two is equal to or greater than 4.0 pCi/L, radon in the room should be fixed (i.e., lowered).

Note: A great difference in the results of the short-term tests may indicate a flaw in the testing process. Investigate and consider retesting. For situations in which one of the test results is equal to or greater than 4.0 pCi/L, if the higher result is two or more times the lower result, repeat the test.

LIMITATIONS OF SCOPE

This study was limited to the tests and locations as previously indicated. The site as a whole may have other environmental concerns that will not be characterized by this study. The findings and conclusions of this work are not scientific certainties, but probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. PBS is not able to represent conditions on the site or adjoining sites beyond those detected or observed by PBS.

Please feel free to contact me at 503.417.7691 or clark.nelson@pbsusa.com with any questions or comments.

Sincerely,

Clark Nelson
Project Manager

Attachment: Air Chek, Inc., Laboratory Analysis Report

CN:mo

December 14, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**GREEN THUMB
OFFICE (1)**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9122897	MAIN OFFICE	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	1.4 ± 0.2	2018-12-14
9122862	PRINCIPAL	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	1.3 ± 0.2	2018-12-14

Air Chek 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

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**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

GREEN THUMB

B

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9122898	2	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	< 0.3	2018-12-14

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**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

GREEN THUMB

C

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9122899	3	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	1.0 ± 0.2	2018-12-14
9122864	3 DUP	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	0.9 ± 0.2	2018-12-14
9122900	4	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	0.8 ± 0.2	2018-12-14
9122895	4 BLANK	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	< 0.3	2018-12-14
9122863	5	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	0.7 ± 0.2	2018-12-14

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**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

GREEN THUMB

D

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9122861	6 (MAIN)	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	0.6 ± 0.2	2018-12-14
9122896	6 SENSORY	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	< 0.3	2018-12-14
9122888	7	2018-12-10 @ 10:00 am	2018-12-13 @ 11:00 am	< 0.3	2018-12-14

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