



November 14, 2018

Dave Peterson
Hillsboro School District
4901 SE Witch Hazel Road
Hillsboro, Oregon 97123

Via email: petersod@hsd.k12.or.us

Regarding: District Wide Radon Testing
 W.L. Henry Elementary School
 1060 SE 24th Avenue
 Hillsboro, Oregon
 PBS Project 23440.024, Phase 0003

Dear Mr. Peterson:

From November 6 to November 9, 2018, PBS Engineering and Environmental Inc. (PBS) performed short term radon testing at W.L. Henry Elementary School located at 1060 SE 24th Avenue in Hillsboro, 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 AirChek, 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 all short-term radon tests at W.L. Henry Elementary School tested 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 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 503.935.5484 or dale.voeller@pbsusa.com with any questions or comments.

Sincerely,

Dale Voeller, CHMM, CSP
Senior Project Manager

Attachment: AirChek, Inc Laboratory Analysis Report

SG::dsv

Radon test result report for:**W.L. HENRY
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9124111	COMMUNITY OFFICE	2018-11-06 @ 9:00 am	2018-11-09 @ 11:00 am	0.7 ± 0.3	2018-11-12
9124105	COUNSELOR OFFICE	2018-11-06 @ 9:00 am	2018-11-09 @ 11:00 am	0.7 ± 0.3	2018-11-12
9122750	CUSTODIAN OFFICE	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.4 ± 0.3	2018-11-12
9122761	FACULTY LOUNGE	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.3 ± 0.3	2018-11-12
9122740	GYM 1	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.6 ± 0.3	2018-11-12
9122758	GYM 2	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.7 ± 0.3	2018-11-12
9122752	GYM OFF. BLANK	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	< 0.3	2018-11-12
9122751	GYM OFF. DUP	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.9 ± 0.3	2018-11-12
9122757	GYM OFFICE	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.9 ± 0.3	2018-11-12
9124103	HEALTH RM.	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	0.6 ± 0.3	2018-11-12
9124102	LIBRARY 1	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.2 ± 0.3	2018-11-12
9124104	LIBRARY 2	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.4 ± 0.3	2018-11-12
9124109	MAIN OFFICE	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.4 ± 0.3	2018-11-12
9124114	MRS. GOMEZ OFF.	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.2 ± 0.3	2018-11-12
9124107	MUSIC ROOM	2018-11-06 @ 9:00 am	2018-11-09 @ 11:00 am	2.3 ± 0.3	2018-11-12
9124106	OFFICE CONF.	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.0 ± 0.3	2018-11-12
9124110	OFFICE WORK RM.	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	0.9 ± 0.3	2018-11-12
9122769	PORT 22	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.9 ± 0.3	2018-11-12
9122753	PORT 26	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.9 ± 0.3	2018-11-12
9122770	PORT 27	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.9 ± 0.3	2018-11-12
9122768	PORTABLE 21	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.7 ± 0.3	2018-11-12
9122745	RM 1 DUP	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.1 ± 0.3	2018-11-12
9122755	RM 10 BLANK	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	< 0.3	2018-11-12
9122754	RM 11 DUP	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.0 ± 0.3	2018-11-12
9122774	RM 23	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.7 ± 0.3	2018-11-12
9122767	RM 24	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	< 0.3	2018-11-12
9122771	RM 24 DUP	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.6 ± 0.3	2018-11-12
9122777	RM 25	2018-11-06 @ 10:00 am	2018-11-09 @ 11:00 am	0.6 ± 0.3	2018-11-12
9124108	ROOM 1	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.2 ± 0.3	2018-11-12
9122760	ROOM 10	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.0 ± 0.3	2018-11-12
9122764	ROOM 11	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.3 ± 0.3	2018-11-12
9122759	ROOM 12	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.4 ± 0.3	2018-11-12
9122763	ROOM 13	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.9 ± 0.3	2018-11-12
9122766	ROOM 14	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.6 ± 0.3	2018-11-12
9122765	ROOM 15	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.3 ± 0.3	2018-11-12
9122762	ROOM 16	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.2 ± 0.3	2018-11-12
9122756	ROOM 17	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.6 ± 0.3	2018-11-12

November 12, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**W.L. HENRY
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9122744	ROOM 2	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.1 ± 0.3	2018-11-12
9122746	ROOM 3	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.0 ± 0.3	2018-11-12
9124117	ROOM 4	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.5 ± 0.3	2018-11-12
9122741	ROOM 5	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.5 ± 0.3	2018-11-12
9124112	ROOM 6	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.7 ± 0.3	2018-11-12
9124113	ROOM 7	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.6 ± 0.3	2018-11-12
9124115	ROOM 8	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	2.0 ± 0.3	2018-11-12
9124118	ROOM 9	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	2.1 ± 0.4	2018-11-12
9122736	SPEECH BY RM. 6	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.2 ± 0.3	2018-11-12
9124116	SPEECH RM 6 DUP	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.5 ± 0.3	2018-11-12
9122742	TEAM BY RM 11	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.5 ± 0.4	2018-11-12
9122749	TEAM BY RM 14	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	2.6 ± 0.4	2018-11-12
9122748	TEAM BY RM 17	2018-11-06 @ 10:00 am	2018-11-09 @ 10:00 am	1.5 ± 0.3	2018-11-12
9122747	TEAM OFF. BY 2	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.0 ± 0.3	2018-11-12
9124101	WELLNESS CENTER	2018-11-06 @ 9:00 am	2018-11-09 @ 10:00 am	1.4 ± 0.3	2018-11-12

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