



November 7, 2017

Casey Waletich
Executive Director of Facilities, Safety, and Operations
Hillsboro School District
4901 SE Witch Hazel Road
Hillsboro, Oregon 97123

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

Regarding: District Wide Radon Testing
Jackson Elementary School
675 NE Estate Drive
Hillsboro, Oregon
PBS Project 23440.024, Phase 0002

Dear Mr. Waletich:

From October 16 to October 20, 2017, PBS Engineering and Environmental Inc. (PBS) performed short term radon testing at Jackson Elementary School located at 675 NE Estate Drive 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 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 all short-term radon tests at Jackson 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 503.417.7694 or chris.boyce@pbsusa.com with any questions or comments.

Sincerely,



Chris Boyce
Project Manager

Attachment: AirChek, Inc Laboratory Analysis Report

CB::bmp

Radon test result report for:**JACKSON
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7888871	1	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888872	1-ACTIVITY	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.6 ± 0.3	2017-10-23
7888898	10	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888897	11	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888900	11-ACTIVITY	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888896	12	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7889085	12-ACTIVITY	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888895	13	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888894	14	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7888888	15	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.0 ± 0.3	2017-10-23
7888887	16	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7888886	17	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.6 ± 0.2	2017-10-23
7888890	17-ACTIVITY	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888885	18	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.7 ± 0.3	2017-10-23
7888889	18-ACTIVITY	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888884	19	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7888873	2	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.4 ± 0.3	2017-10-23
7888883	20	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888874	22 MUSIC	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	2.6 ± 0.4	2017-10-23
7889099	3	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	1.0 ± 0.3	2017-10-23
7889097	4	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.7 ± 0.2	2017-10-23
7889096	5	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7888863	5 ACTIVITY	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7889095	6	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7889100	6 ACTIVITY	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	0.9 ± 0.3	2017-10-23
7889093	7	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7889086	8	2017-10-16 @ 3:00 pm	2017-10-20 @ 11:00 am	1.6 ± 0.3	2017-10-23
7888899	9	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	0.8 ± 0.3	2017-10-23
7888870	BLANK	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	< 0.3	2017-10-23
7888881	COUNSELOR OFFICE	2017-10-16 @ 2:00 pm	2017-10-20 @ 10:00 am	1.2 ± 0.3	2017-10-23
7888876	GYM OFFICE	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	2.0 ± 0.3	2017-10-23
7888867	HEALTH ROOM	2017-10-16 @ 1:00 pm	2017-10-20 @ 10:00 am	0.9 ± 0.3	2017-10-23
7888878	LIBRARY-1	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.0 ± 0.3	2017-10-23
7888879	LIBRARY-2	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888866	MAIN OFFICE	2017-10-16 @ 1:00 pm	2017-10-20 @ 10:00 am	1.2 ± 0.3	2017-10-23
7888882	MULTIPURP. STAGE	2017-10-16 @ 2:00 pm	2017-10-20 @ 10:00 am	1.2 ± 0.3	2017-10-23
7888875	MULTIPURPOSE-1	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23

October 23, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**JACKSON
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7888877	MULTIPURPOSE-2	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888864	OFFICE WORK RM	2017-10-16 @ 1:00 pm	2017-10-20 @ 10:00 am	1.0 ± 0.3	2017-10-23
7888868	PRIN. OFFICE	2017-10-16 @ 1:00 pm	2017-10-20 @ 10:00 am	0.6 ± 0.3	2017-10-23
7888880	SPEECH/LANGUAGE	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.1 ± 0.3	2017-10-23
7888869	STAFF LUNCH	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	1.3 ± 0.3	2017-10-23
7888865	WORK ROOM-DUP	2017-10-16 @ 1:00 pm	2017-10-20 @ 10:00 am	0.8 ± 0.3	2017-10-23

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

October 23, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**JACKSON
PORTABLES**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7888891	P1	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	< 0.3	2017-10-23
7888892	P2	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	< 0.3	2017-10-23
7888893	P3	2017-10-16 @ 2:00 pm	2017-10-20 @ 11:00 am	< 0.3	2017-10-23

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