



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
West Union Elementary School
23870 NW West Union Road
Hillsboro, Oregon
PBS Project 23440.024, Phase 0002

Dear Mr. Waletich:

From October 9 to October 12, 2017, PBS Engineering and Environmental Inc. (PBS) performed short term radon testing at West Union Elementary School located at 23870 NW West Union Road 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 but one short-term radon test at West Union Elementary School tested below 4.0 pCi/L. The test located in the staff workroom had a result of 4.0 pCi/L and will require follow up testing.

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:**WEST UNION
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7888948	ADMIN	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.5 ± 0.4	2017-10-16
7888983	CAFETERIA	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.2 ± 0.3	2017-10-16
7888984	CAFETERIA	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.3 ± 0.3	2017-10-16
7888965	CLR 1	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	3.0 ± 0.4	2017-10-16
7888972	CLR 10	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.0 ± 0.4	2017-10-16
7888978	CLR 11	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.8 ± 0.4	2017-10-16
7888976	CLR 11 DUP	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.9 ± 0.4	2017-10-16
7888977	CLR 12	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	2.0 ± 0.4	2017-10-16
7888961	CLR 15	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	< 0.3	2017-10-16
7888960	CLR 16	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	0.8 ± 0.3	2017-10-16
7888968	CLR 17	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	2.8 ± 0.4	2017-10-16
7888981	CLR 18	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	1.5 ± 0.3	2017-10-16
7888979	CLR 19	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	1.3 ± 0.3	2017-10-16
7888964	CLR 2	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.0 ± 0.4	2017-10-16
7888982	CLR 20	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	2.1 ± 0.4	2017-10-16
7888975	CLR 21	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	2.6 ± 0.4	2017-10-16
7888974	CLR 26	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	1.4 ± 0.3	2017-10-16
7888955	CLR 3	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	3.5 ± 0.5	2017-10-16
7888957	CLR 4	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.3 ± 0.4	2017-10-16
7888963	CLR 5	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	3.3 ± 0.5	2017-10-16
7888950	CLR 6	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	1.6 ± 0.4	2017-10-16
7888956	CLR 7	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	1.6 ± 0.4	2017-10-16
7888954	CLR 8	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.8 ± 0.4	2017-10-16
7888958	CLR 8 DUP	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.7 ± 0.4	2017-10-16
7888966	CLR 9	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	1.6 ± 0.4	2017-10-16
7888971	CONF ROOM B	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	< 0.3	2017-10-16
7888980	COUNSELING	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	1.5 ± 0.3	2017-10-16
7888969	CUSTODIAL BLANK	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	< 0.3	2017-10-16
7888985	CUSTODIAL OFFICE	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.5 ± 0.4	2017-10-16
7888991	HEALTH	2017-10-09 @ 1:00 pm	2017-10-12 @ 11:00 am	2.7 ± 0.4	2017-10-16
7888986	KITCHEN	2017-10-09 @ 1:00 pm	2017-10-12 @ 12:00 pm	1.4 ± 0.3	2017-10-16
7888962	LIBRARY	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	3.5 ± 0.5	2017-10-16
7888970	LIBRARY DUP	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	3.5 ± 0.5	2017-10-16
7888949	PRINCIPAL	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	2.1 ± 0.4	2017-10-16
7888967	SPEECH	2017-10-09 @ 12:00 pm	2017-10-12 @ 12:00 pm	1.9 ± 0.4	2017-10-16
7888973	STAFF LOUNGE	2017-10-09 @ 12:00 pm	2017-10-12 @ 11:00 am	1.7 ± 0.4	2017-10-16
7888992	STAFF WKRM	2017-10-09 @ 1:00 pm	2017-10-12 @ 11:00 am	4.0 ± 0.5	2017-10-16