



April 21, 2020

Ivan Leigh
Woodburn School District Facilities
1390 Meridian Drive
Woodburn, Oregon 97071

Via email: ileigh@woodburnsd.org

Regarding: District Wide Radon Testing
Heritage Elementary School
440 Parr Road
Woodburn, Oregon 97071
PBS Project 25453.007

Dear Mr. Leigh:

From March 10 to March 13, 2020, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at Heritage Elementary School located at 440 Parr Road in Woodburn, 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 Heritage Elementary 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 do 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 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 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 503.209.1500 or Rich.Dufresne@pbsusa.com with any questions or comments.

Sincerely,

Rich Dufresne
Senior Project Manager

Attachment: AirChek, Inc., Laboratory Analysis Report

BC:RD:mo

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9314095	AMATO ROOM	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313997	CAFETERIA 1	2020-01-29 @ 9:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313991	CAFETERIA 2	2020-01-29 @ 9:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313998	CAFETERIA BLANK	2020-01-29 @ 9:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314089	ESL ROOM	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313992	GYM 1	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	0.6 ± 0.3	2020-02-05
9313990	GYM 2	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9314087	HEALTH ROOM	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314096	HUELSMAN OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	0.8 ± 0.4	2020-02-05
9314100	LEARNING CENTER	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	0.5 ± 0.3	2020-02-05
9314099	LIBRARY OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	2.1 ± 0.4	2020-02-05
9314098	MAIN OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	0.5 ± 0.3	2020-02-05
9314092	MORENO ROOM	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313989	MUSIC ROOM	2020-01-29 @ 9:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314097	PRINCIPAL OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314081	RAWSON OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313949	ROOM 10	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.6 ± 0.4	2020-02-05
9313938	ROOM 11	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.8 ± 0.4	2020-02-05
9313937	ROOM 12	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313947	ROOM 13	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	1.1 ± 0.4	2020-02-05
9313957	ROOM 14	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.9 ± 0.4	2020-02-05
9313952	ROOM 15	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.8 ± 0.4	2020-02-05
9314200	ROOM 16	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314199	ROOM 17	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313980	ROOM 18	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.8 ± 0.4	2020-02-05
9313978	ROOM 19	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313964	ROOM 19A	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313982	ROOM 19B	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.6 ± 0.3	2020-02-05
9313969	ROOM 20	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.6 ± 0.3	2020-02-05
9313981	ROOM 21	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.7 ± 0.3	2020-02-05
9313965	ROOM 21 DUP	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.7 ± 0.3	2020-02-05
9313968	ROOM 22	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.6 ± 0.3	2020-02-05
9313985	ROOM 23	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	0.6 ± 0.4	2020-02-05
9313967	ROOM 24	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313966	ROOM 25	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314080	ROOM 32	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	0.7 ± 0.4	2020-02-05
9314093	ROOM 5	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05

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

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9313995	ROOM 50	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9314088	ROOM 7	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313956	ROOM 8	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313954	ROOM 8 BLANK	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313955	ROOM 8 DUP	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313984	ROOM A34	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313970	ROOM A35	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313971	ROOM A36	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313962	ROOM A37	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313979	ROOM A38	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	0.8 ± 0.4	2020-02-05
9313976	ROOM A39	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313975	ROOM A40	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313974	ROOM A41	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	0.5 ± 0.3	2020-02-05
9313973	ROOM A42	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313972	ROOM A43	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313963	ROOM A44	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313960	ROOM A46	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	0.7 ± 0.3	2020-02-05
9313959	ROOM A47	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	0.8 ± 0.4	2020-02-05
9313983	ROOM A47 DUP	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313958	ROOM A48	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313987	ROOM A48 BLANK	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313988	ROOM A48 DUP	2020-01-29 @ 9:00 am	2020-01-31 @ 7:00 pm	< 0.3	2020-02-05
9313977	STAFF LOUNGE	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9314086	TAPIA OFFICE	2020-01-29 @ 7:00 am	2020-01-31 @ 6:00 pm	0.9 ± 0.3	2020-02-05

April 6, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**HERITAGE
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9378211	33	2020-03-10 @ 2:00 pm	2020-03-13 @ 11:00 am	< 0.3	2020-03-16
9378210	9	2020-03-10 @ 2:00 pm	2020-03-13 @ 11:00 am	1.0 ± 0.3	2020-03-16
9378212	A45	2020-03-10 @ 2:00 pm	2020-03-13 @ 11:00 am	< 0.3	2020-03-16

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

April 17, 2020

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

**HERITAGE
PORTABLES**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9313946	29 DUP	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313944	ROOM 26	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313945	ROOM 27	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313948	ROOM 28	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313943	ROOM 29	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313950	ROOM 30	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05
9313951	ROOM 31	2020-01-29 @ 8:00 am	2020-01-31 @ 6:00 pm	< 0.3	2020-02-05

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