



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
Washington Elementary School
777 E Lincoln Street
Woodburn, Oregon
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 Washington Elementary School located at 777 E Lincoln Street 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 Washington 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:
WASHINGTON E.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9368003	ASSIST. PRINCIPAL OFF.	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368021	BROOKS OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.7 ± 0.4	2020-02-05
9368039	CAFETERIA 1	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368038	CAFETERIA 2	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368010	CONFERENCE 1	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368036	CUSTODIAL OFF DUP	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.7 ± 0.3	2020-02-05
9368037	CUSTODIAL OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	1.0 ± 0.4	2020-02-05
9368016	GARCIA OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368049	GYM 1	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368034	GYM 2	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368033	GYM OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368047	GYM OFFICE DUP	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368004	HEALTH ROOM	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368035	KITCHEN OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368041	LIBRARY 1	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368042	LIBRARY 2	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368048	LIBRARY OFFICE	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368001	MAIN OFFICE	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368040	MUSIC ROOM	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368005	PRINCIPAL OFFICE	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368007	ROOM 101	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368008	ROOM 102	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	0.6 ± 0.3	2020-02-05
9368014	ROOM 103	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	0.6 ± 0.4	2020-02-05
9368006	ROOM 104	2020-01-29 @ 11:00 am	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368002	ROOM 105	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368020	ROOM 106	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368019	ROOM 107	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.7 ± 0.4	2020-02-05
9368013	ROOM 108	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.6 ± 0.3	2020-02-05
9368030	ROOM 109	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.6 ± 0.4	2020-02-05
9368029	ROOM 110	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368028	ROOM 111	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368017	ROOM 112	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368027	ROOM 113	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368026	ROOM 114	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.7 ± 0.4	2020-02-05
9368023	ROOM 115	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368024	ROOM 116	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368032	ROOM 117	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05

Radon test result report for:
WASHINGTON E.S.
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9368031	ROOM 117 DUP	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368015	ROOM 118	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368022	ROOM 119	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368044	ROOM 120	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368045	ROOM 121	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	1.7 ± 0.4	2020-02-05
9368046	ROOM 121 BLANK	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368053	ROOM 123	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	0.8 ± 0.4	2020-02-05
9368052	ROOM 124	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	0.8 ± 0.4	2020-02-05
9368050	ROOM 125	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	1.7 ± 0.4	2020-02-05
9368051	ROOM 126	2020-01-29 @ 1:00 pm	2020-01-31 @ 8:00 pm	0.6 ± 0.4	2020-02-05
9368011	SALAZAR OFFICE	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.6 ± 0.3	2020-02-05
9368009	SPEECH ROOM	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.6 ± 0.4	2020-02-05
9368025	STAFF BLANK	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05
9368018	STAFF DUP	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	0.5 ± 0.3	2020-02-05
9368012	STAFF ROOM	2020-01-29 @ 12:00 pm	2020-01-31 @ 8:00 pm	< 0.3	2020-02-05