



December 12, 2018

David Callaway  
David Douglas School District  
11300 NE Halsey Street  
Portland, Oregon 97220

Via email: david\_callaway@ddsd40.org

Regarding: District-Wide Radon Testing  
DDSD District Office  
11300 NE Halsey Street  
Portland, Oregon  
PBS Project 23179.065, Phase 0001

Dear Mr. Callaway:

From November 27 to 30, 2018, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at the David Douglas School District Offices, located at 11300 NE Halsey Street in Portland, Oregon.

The Environmental Protection Agency (EPA) recommends, and the Oregon Health Authority (OHA) requires, that school 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.

The following table lists all samples in which radon levels were found to be above the EPA action level.

**Test Kits with Radon 4.0 pCi/L or above**

Test Kit Number	Sample Location	Radon Level (pCi/L)
9123132	McCue Office	4.2

A long-term radon detector kit has been placed in this area.

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 that 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](mailto:dale.voeller@pbsusa.com) with any questions or comments.

Sincerely,

Dale Voeller, CHMM, CSP  
Senior Project Manager

Attachment: Air Chek, Inc., Laboratory Analysis Report

DSV:mo

Radon test result report for:  
**DISTRICT OFFICE  
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9123139	108-120 MAIN	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.3 ± 0.4	2018-12-03
9123136	129-138 MAIN	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.3 ± 0.4	2018-12-03
9123141	DARCEY OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	1.1 ± 0.3	2018-12-03
9123143	GLORIA OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.5 ± 0.4	2018-12-03
9123129	HAYES OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	3.3 ± 0.4	2018-12-03
9123138	LUNCH ROOM	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	3.8 ± 0.4	2018-12-03
9123131	M. PEARSON OFFIC	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.4 ± 0.3	2018-12-03
9123132	MCCUE OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	4.2 ± 0.4	2018-12-03
9123137	NURSING RM	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.9 ± 0.4	2018-12-03
9123130	OFFICE 129	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.5 ± 0.3	2018-12-03
9123144	PATT OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.0 ± 0.3	2018-12-03
9123128	PATT OFFICE DUP	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.0 ± 0.3	2018-12-03
9123135	PAUL OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	3.9 ± 0.4	2018-12-03
9123134	RECEPTION	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.6 ± 0.4	2018-12-03
9123140	RM 109	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.5 ± 0.3	2018-12-03
9123142	STEPHANIE OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.3 ± 0.4	2018-12-03
9123133	Y. KENNA OFFICE	2018-11-27 @ 3:00 pm	2018-11-30 @ 2:00 pm	2.1 ± 0.3	2018-12-03