



December 4, 2017

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

Via email: david\_callaway@ddsd40.org

Regarding: District-Wide Radon Testing  
North Powellhurst  
1400 SE 135th Avenue  
Portland, Oregon 97233  
PBS Project 23179.043, Phase 0002

Dear Mr. Callaway:

From October 30 to November 2, 2017, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at North Powellhurst School located at 1400 SE 135th Ave in Portland, 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 that all but one short-term radon tests at North Powellhurst School were below 4.0 pCi/L. The following table lists the one sample in which radon levels were found to be above the EPA action level.

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

Test Kit Number	Sample Location	Radon Level (pCi/L)
7957158	Speech Clinic	4.3

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 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](mailto: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:  
**NORTH POWELLHURST  
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7957160	301	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	3.2 ± 0.4	2017-11-06
7957161	302	2017-10-30 @ 11:00 am	2017-11-02 @ 2:00 pm	1.4 ± 0.3	2017-11-06
7957162	303	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	3.0 ± 0.4	2017-11-06
7957163	304	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.5 ± 0.3	2017-11-06
7957164	305	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	3.0 ± 0.4	2017-11-06
7957165	306	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.8 ± 0.4	2017-11-06
7957167	307	2017-10-30 @ 12:00 pm	2017-11-02 @ 1:00 pm	1.8 ± 0.4	2017-11-06
7957168	308	2017-10-30 @ 12:00 pm	2017-11-02 @ 1:00 pm	1.4 ± 0.4	2017-11-06
7957170	309	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	2.1 ± 0.3	2017-11-06
7957171	310	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.5 ± 0.4	2017-11-06
7957172	311	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.5 ± 0.3	2017-11-06
7957174	313	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.5 ± 0.3	2017-11-06
7957175	314	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.3 ± 0.3	2017-11-06
7957181	314-DUP	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.3 ± 0.3	2017-11-06
7957176	315	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.7 ± 0.3	2017-11-06
7957177	316	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	0.9 ± 0.3	2017-11-06
7957178	317	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.4 ± 0.3	2017-11-06
7957179	318	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.4 ± 0.3	2017-11-06
7957153	BLANK	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	< 0.3	2017-11-06
7957169	CUSTODIAL OFFICE	2017-10-30 @ 12:00 pm	2017-11-02 @ 1:00 pm	3.2 ± 0.4	2017-11-06
7957157	EVAL. RM 1	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.4 ± 0.3	2017-11-06
7957159	EVAL. RM 2	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	2.2 ± 0.4	2017-11-06
7957180	GYM-1	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	2.8 ± 0.4	2017-11-06
7957182	GYM-2	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	3.5 ± 0.4	2017-11-06
7957183	HEAD START	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	2.4 ± 0.4	2017-11-06
7957184	KITCHEN OFFICE	2017-10-30 @ 12:00 pm	2017-11-02 @ 2:00 pm	1.8 ± 0.3	2017-11-06
7957154	MAIN OFFICE	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.5 ± 0.3	2017-11-06
7957166	SLOAN OFFICE	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	2.4 ± 0.4	2017-11-06
7957158	SPEECH	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	4.3 ± 0.4	2017-11-06
7957156	WORK RM-DUP.	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.4 ± 0.3	2017-11-06
7957155	WORK ROOM	2017-10-30 @ 11:00 am	2017-11-02 @ 1:00 pm	1.8 ± 0.3	2017-11-06