



December 21, 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
Alice Ott Middle School -Follow-Up Testing
12500 SE Ramona Street
Portland, Oregon
PBS Project 23179.065, Phase 0001

Dear Mr. Callaway:

From December 10 to 13, 2018, PBS Engineering and Environmental Inc. (PBS) performed follow-up short-term radon testing in two areas at Alice Ott Middle School, located at 12500 SE Ramona Street in Portland, Oregon. The testing was completed after adjustments to the ventilation system had been made in two areas that had previously tested above 4.0 picocuries per liter (pCi/L) of air.

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 pCi/L of air. PBS used Air Chek, Inc., brand single-use, short-term radon test kits to measure radon levels for both the initial and follow-up testing.

The following tables lists the results of the initial and follow-up testing.

Test Kits with Radon 4.0 pCi/L or above – Initial Testing November 13 to 16, 2018

Test Kit Number	Sample Location	Radon Level (pCi/L)
9122800	Mr. Bennor Counseling Office	4.2
9124161	Room under weight room (old locker rooms) (Family Services Office)	8.4

Test Kits with Radon 4.0 pCi/L or above – Follow-Up Testing December 10 to 13, 2018

Test Kit Number	Sample Location	Radon Level (pCi/L)
9123161	Mr. Bennor Counseling Office	4.0
9123628	Room under weight room (old locker rooms) (Family Services Office)	7.0

Long-term radon detector kits have been placed in both of these areas. 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 with any questions or comments.

Sincerely,

Dale Voeller, CHMM, CSP
Senior Project Manager

Attachment: Air Chek, Inc., Laboratory Analysis Report

DSV:mo

December 18, 2018

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

ALICE OTT 2

MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9123628	FAM. SERV. OFFIC	2018-12-10 @ 4:00 pm	2018-12-13 @ 3:00 pm	7.0 ± 0.4	2018-12-14
9123161	MR. BENNOR OFF.	2018-12-10 @ 4:00 pm	2018-12-13 @ 3:00 pm	4.0 ± 0.3	2018-12-14

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