



November 11, 2019

Dave Peterson
Hillsboro School District
4901 SE Witch Hazel Road
Hillsboro, Oregon 97123

Via email: petersod@hsd.k12.or.us

Regarding: District Wide Radon Testing
 South Meadows Middle School
 4690 SE Davis Road
 Hillsboro, Oregon 97123
 PBS Project 23440.024, Phase 0004

Dear Mr. Peterson:

Between November 4 and November 7, 2019, PBS Engineering and Environmental Inc. (PBS) performed short term radon testing at South Meadows Middle School located at 4690 SE Davis Road in Hillsboro, 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 South Meadows Middle 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 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 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: AirChek, Inc Laboratory Analysis Report

Radon test result report for:
SOUTH MEADOWS
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9227888	148 BLANK	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9014971	BOYS LOCKER OFFICE	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	1.0 ± 0.4	2019-11-11
9014975	BOYS LOCKER OFFICE DUP	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	1.0 ± 0.4	2019-11-11
9014963	BREAK ROOM	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.3 ± 0.4	2019-11-11
9014961	BREAK ROOM BLANK	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9014962	BREAK ROOM DUP	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.8 ± 0.4	2019-11-11
9014950	COMMONS 1	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.8 ± 0.4	2019-11-11
9014956	COMMONS 2	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.8 ± 0.4	2019-11-11
9014946	CUSTODIAL OFFICE	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9014947	FITNESS ROOM	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	0.9 ± 0.4	2019-11-11
9014972	GIRLS LOCKER OFFICE	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	1.9 ± 0.5	2019-11-11
9014968	GIRLS LOCKER OFFICE BLANK	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9200989	HEALTH OFFICE	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.7 ± 0.3	2019-11-11
9014942	KITCHEN OFFICE	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	1.5 ± 0.5	2019-11-11
9014953	LIBRARY 1	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9014954	LIBRARY 2	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	0.9 ± 0.4	2019-11-11
9014948	LIBRARY COMPUTER ROOM	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	0.7 ± 0.4	2019-11-11
9200990	MAIN OFFICE	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.6 ± 0.3	2019-11-11
9200958	MEDIA ROOM	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	0.7 ± 0.3	2019-11-11
9014974	PARKS AND REC OFF. DUP	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	1.2 ± 0.5	2019-11-11
9014973	PARKS AND REC OFFICE	2019-11-05 @ 2:00 pm	2019-11-07 @ 5:00 pm	1.1 ± 0.4	2019-11-11
9200588	ROOM 110	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.6 ± 0.3	2019-11-11
9227973	ROOM 111	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9227984	ROOM 111 COMPUTER RM	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.6 ± 0.3	2019-11-11
9227983	ROOM 111 OFFICE	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9227998	ROOM 112	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.5 ± 0.3	2019-11-11
9227997	ROOM 114	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.9 ± 0.3	2019-11-11
9200600	ROOM 116	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9200587	ROOM 118	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.7 ± 0.4	2019-11-11
9227994	ROOM 118 DUP	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.3 ± 0.4	2019-11-11
9227989	ROOM 119	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.6 ± 0.3	2019-11-11
9227990	ROOM 119A	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.7 ± 0.3	2019-11-11
9227991	ROOM 119B	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9227892	ROOM 119C	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.9 ± 0.3	2019-11-11
9227884	ROOM 119D	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9227891	ROOM 119E	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.4 ± 0.4	2019-11-11
9227883	ROOM 119F	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.3 ± 0.4	2019-11-11

Radon test result report for:
**SOUTH MEADOWS
 MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9227993	ROOM 119G	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.8 ± 0.4	2019-11-11
9227982	ROOM 120	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.7 ± 0.3	2019-11-11
9227975	ROOM 120A	2019-11-04 @ 7:00 pm	2019-11-07 @ 4:00 pm	0.8 ± 0.3	2019-11-11
9200968	ROOM 121A	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.9 ± 0.3	2019-11-11
9200950	ROOM 121B	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9200949	ROOM 121C	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.7 ± 0.3	2019-11-11
9200997	ROOM 121E	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	< 0.3	2019-11-11
9200977	ROOM 121F	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.0 ± 0.3	2019-11-11
9200978	ROOM 121H	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.7 ± 0.3	2019-11-11
9200956	ROOM 121K	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	3.8 ± 0.5	2019-11-11
9200954	ROOM 121L	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.7 ± 0.3	2019-11-11
9014958	ROOM 121M	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.1 ± 0.4	2019-11-11
9200955	ROOM 121N	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	1.3 ± 0.4	2019-11-11
9200963	ROOM 121R	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.8 ± 0.3	2019-11-11
9200979	ROOM 121R DUP	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.9 ± 0.4	2019-11-11
9227988	ROOM 122	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9227894	ROOM 124	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9227893	ROOM 126	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.0 ± 0.4	2019-11-11
9227889	ROOM 128	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.4 ± 0.4	2019-11-11
9014957	ROOM 130	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9227992	ROOM 130A	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.8 ± 0.3	2019-11-11
9014955	ROOM 131	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9227890	ROOM 132	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.9 ± 0.3	2019-11-11
9227897	ROOM 134	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.7 ± 0.3	2019-11-11
9227896	ROOM 136	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9227995	ROOM 138	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.9 ± 0.4	2019-11-11
9227898	ROOM 139	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.0 ± 0.3	2019-11-11
9227996	ROOM 139A	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	< 0.3	2019-11-11
9200948	ROOM 140	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9227895	ROOM 142	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9200959	ROOM 144	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9228000	ROOM 146	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.9 ± 0.3	2019-11-11
9227900	ROOM 147	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	0.6 ± 0.3	2019-11-11
9227999	ROOM 148	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.1 ± 0.3	2019-11-11
9200964	ROOM 148 DUP	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.5 ± 0.4	2019-11-11
9227899	ROOM 149	2019-11-04 @ 7:00 pm	2019-11-07 @ 5:00 pm	1.2 ± 0.4	2019-11-11
9200957	ROOM 160A	2019-11-04 @ 8:00 pm	2019-11-07 @ 5:00 pm	0.8 ± 0.3	2019-11-11

November 11, 2019

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**SOUTH MEADOWS
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9014949	STUDENT SERVICES MAIN	2019-11-04 @ 6:00 pm	2019-11-07 @ 4:00 pm	0.8 ± 0.4	2019-11-11

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