March 14, 2022

Doug Lemonds
Lane County School District 4J
200 North Monroe Street
Eugene, Oregon 97402

Via email: lemonds@4j.lane.edu

Regarding: Spring Creek Elementary School– Short-Term Radon Testing
Eugene, Oregon
PBS Project 52704.002

Dear Mr. Lemonds:

From March 7th to March 10th, 2022, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at Spring Creek Elementary School in Eugene. 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., 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. **No samples taken by PBS at Spring Creek Elementary School were found to be above the EPA action level of 4.0 pCi/L.**

In addition to the single-use, short-term radon test kits deployed the Main Office Staff Room, one (1) sample blank, one (1) spike sample, and one (1) duplicate were analyzed by Air Chek, Inc. in Mills River, North Carolina for quality control (QC) purposes. Refer to the attached laboratory analysis report for more details.

The following table presents the results of all tests conducted during this study. Results are listed in pCi/L.

Kit Number	Start Date	End Date	Room	Floor	Result (pCi/L)	Comments
9527881	3/7/22	3/10/22	Main Office Staff Room	1	3.0 ± 0.3	
9527892	3/7/22	3/10/22	Main Office Staff Room	1	2.9 ± 0.3	Duplicate Device RPD: 3%
9527893	3/7/22	3/10/22	---	-	< 0.3	Blank Device
9527894	3/5/22	3/7/22	---	-	Measured: 21.7 Reference: 22.9	Spike Device RPE: 5%

Simultaneous measurement results that are between 2.0 pCi/L and 3.9 pCi/L shall agree with a Relative Percent Difference (RPD) of less than (<) 67 percent. RPD is calculated by taking the difference between 2 results, dividing by the average of the results, and multiplying by 100.

Simultaneous measurement results that are greater than or equal to (≥) 4.0pCi/L shall agree with a Relative Percent Difference (RPD) of less than (<) 36 percent. RPD is calculated by taking the difference between 2 results, dividing by the average of the results, and multiplying by 100.

Relative Percentage Error (RPE) is calculated by taking the difference between a measured value and reference value, dividing by the reference, and multiplying by 100. A trend in RPE values that are more than 30% should be investigated.

No abnormalities were noted during this testing event.

In addition to the EPA recommendation that radon concentrations do 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 kennedy.potts@pbsusa.com with any questions or comments.

Sincerely,

Kennedy Potts
Digitally signed by Kennedy Potts
Date: 2022.03.14 08:23:33 -07'00'

Kennedy Potts
Industrial Hygiene Technician

Reviewed by: JH

Attachment: AirChek, Inc., Laboratory Analysis Report

March 11, 2022

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

SPRING CREEK ELEMENTARY

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9527881	MAIN OFFICE STAFF ROOM	2022-03-07 @ 7:00 am	2022-03-10 @ 6:00 am	3.0 ± 0.3	2022-03-11
9527892	MAIN OFFICE STAFF ROOM	2022-03-07 @ 7:00 am	2022-03-10 @ 6:00 am	2.9 ± 0.3	2022-03-11
9527893	ROOM A	2022-03-07 @ 7:00 am	2022-03-10 @ 6:00 am	< 0.3	2022-03-11

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