



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
David Douglas Aquatics Center
13030 SE Taylor Court
Portland, Oregon 97233
PBS Project 23179.043, Phase 0002

Dear Mr. Callaway:

From October 30 to November 30, 2017, PBS Engineering and Environmental Inc. (PBS) performed short-term radon testing at David Douglas Aquatics Center located at 13030 SE Taylor Court 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 short-term radon tests at the David Douglas Aquatics Center 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 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 503.417.7694 or chris.boyce@pbsusa.com with any questions or comments.

Sincerely,



Chris Boyce
Project Manager

Attachment: AirChek, Inc Laboratory Analysis Report

CB::bmp

November 6, 2017

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
**AQUATICS CENTER
MAIN**

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7957185	408	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	2.1 ± 0.3	2017-11-06
7957186	408-DUP	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	???? UI	2017-11-06
7957188	BLANK	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	< 0.3	2017-11-06
7957187	COACH	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	1.6 ± 0.3	2017-11-06
7957189	FIRST AID	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	2.3 ± 0.3	2017-11-06
7957190	RECEPTION/LOBBY	2017-10-30 @ 1:00 pm	2017-11-02 @ 2:00 pm	2.6 ± 0.3	2017-11-06

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

Analysis Report Notations

See notation descriptions below

M	Missing start or ending time or date. If the start or ending day or time is missing, analysis cannot be completed. If the missing data is provided after the fact, a reprocessing fee is charged.
L	Long Exposure...exposed longer than recommended. Result represents the last 3 days of test period.
S	Short Exposure...not exposed long enough. Estimated result only.
N	Not Exposed Long Enough...less than 46 hours. No result is available.
D	Long Decay time...the sample arrived too late. (more than 192 hours) for valid analysis. Estimated result only.
E	Excessive decay time...the sample arrived so late (more than 12 days) that NO result is available.
X	The temperature indicated was outside the acceptable range (<35F - >90F). Estimated result only.
K	The test kit was sold over 5 years ago and is now expired.
W	Wet Sample...Test was exposed too long in a damp environment. Estimated result only.
U	Unsealed...sampler was improperly sealed. Most of the radon may have escaped. NO result is available.
F	Faulty handling by user. NO result is available.
P	Foam Plug was left in sampler and may have caused radon leakage. NO result is available.
T	Torn in transit. NO result is available. Free replacement in most cases.
I	Invalid Test.
C	Overexposed. Exposed longer than the recommended MAXIMUM length of exposure. No result is available.

For further explanation of the various notations, or any other questions, please call Air Chek at (828) 684-0893 Mon - Fri 8:30 to 5:30 pm Eastern Standard Time or email info@radon.com

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892