

February 21, 2018

Ms. Kate Hall **Dallas School District #2**111 SW Ash Street

Dallas, OR 97338

RE: Radon Testing Whitworth Elementary School 1151 SE Miller Avenue Dallas, OR 97338

TRC Project: 297131

Ms. Hall:

At your request, TRC Environmental Corporation (TRC) performed radon in air testing at the Whitworth Elementary School located at 1151 SE Miller Avenue, in Dallas, Oregon.

VIA email to: kate.hall@dsd2.org

<u>Testing Procedures</u>

Prior to conducting the radon testing, to maintain proper testing conditions, a notification letter from the school administration was provided to staff informing them of the scheduled radon testing dates and protocols. Testing was performed under the guidance of TRC personnel certified as Radon Measurement Providers by the National Environmental Health Association (NEHA) National Radon Proficiency Program (NRPP). The initial radon testing was performed between February 6, 2018 and February 9, 2018.

Radon testing was conducted using the protocols recommended by the United States Environmental Protection Agency (EPA) and the Oregon Health Authority (OHA) as directed by ORS 332.166-167. Testing was conducted by taking initial short-term measurements of frequently occupied rooms in contact with the soil or above a basement or crawlspace. Frequently occupied rooms include classrooms, offices, cafeterias, libraries and gymnasiums. Areas such as restrooms, hallways, stairwells, elevator shafts, utility closets and storage closets need not be tested. Testing was conducted during the weekday while school was in session and Heating Ventilation and Air-Conditioning (HVAC) systems were operating normally.

The radon sampling devices placed in Whitworth Elementary School were short-term (3-day) passive, 4-inch open-faced, activated charcoal absorption canisters, deployed in general accordance with the OHA guidance documents *Testing for Elevated Radon in Oregon Schools*, as well as the EPA guidance documents *Radon Measurements in Schools*, *July 1993*, *and Indoor*

Radon and Radon Decay Product Measurement Device Protocols, July 1992. After retrieval from Whitworth Elementary School, the canisters were returned to TRC's American Association of Radon Scientists and Technologists (AARST)/National Environmental Health Association (NEHA) and National Radon Proficiency Program (NRPP)-certified Analytical Laboratory for analysis utilizing a gamma scintillation spectroscopy system.

A warning sheet was placed underneath each testing device to alert occupants that radon testing was in progress, and that the devise should not be disturbed and the windows must remain closed. TRC followed the EPA and OHA guidance for placing testing devices, as reasonably feasible, based on each room's configuration and usage. Testing devices were generally placed within the rooms away from drafts, vents and appliance, 20 inches above the floor, 3 feet from any exterior walls, doors or windows, 1 foot from any interior walls, 4 inches from other objects, away from heat, areas of high humidity and direct sunlight and where they were least likely to be disturbed. Multiple testing devices were utilized in rooms that were greater than 2000 square feet. Testing for the District included 10% duplicated measurements and 5% blank measurements to provide appropriate quality assurance/quality control (QA/QC) measures. Samples were left in place for 3 days to ensure optimum results.

Samples Collected and Results

Testing was performed testing in 39 locations within this school. All of the 39 rooms tested had results below the EPA recommended action level of 4.0 picocuries per liter (pCi/L) of air, with the highest reading in Room 22 of 2.4 pCi/L.

Enclosed, please find the testing device warning sheet, a sample location map and laboratory analytical data.

TRC appreciates the opportunity to provide you with environmental consulting services. We look forward to working with you on future endeavors. If you have any questions or comments concerning this report, please call TRC at (503) 387-3251.

Sincerely,

TRC Environmental Corporation

Victoria Shepersky

Senior Industrial Hygienist

Ron Landolt

NW Region BSI Practice Leader

February 21, 2018

TRC Project: 297131

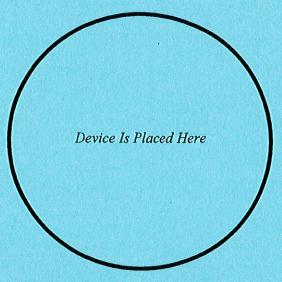
Attachments: Appendix A – Radon Device Warning Sheet

Appendix B – Sample Location Map Appendix C – Laboratory Results

Appendix A – Radon Device Warning Sheet

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DO NOT TOUCH, MOVE, OR DISTURB UNDER ANY CIRCUMSTANCES! (KEEP YOUR WINDOWS CLOSED)



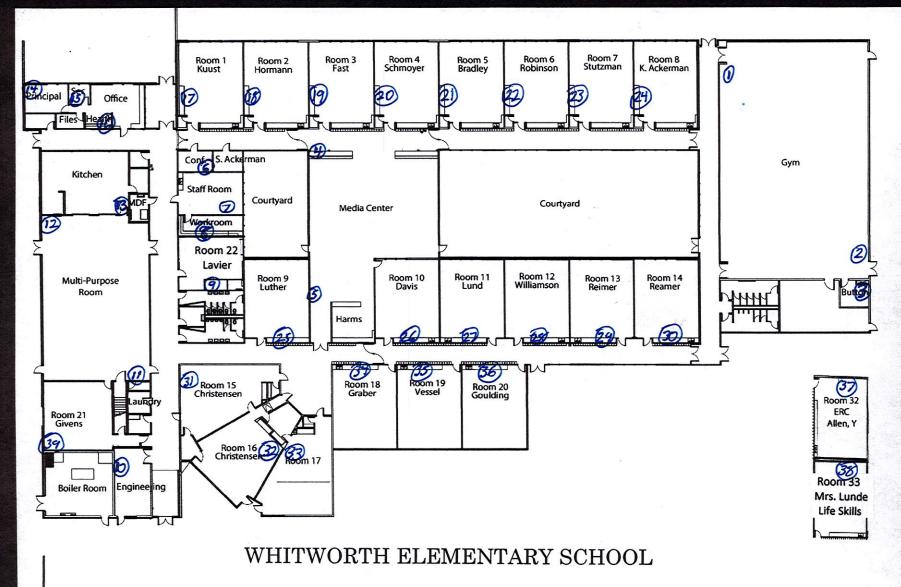
RADON TESTING IN PROGRESS

(Canister and its contents are not harmful)

Please note if windows were opened at any time dur	ring the test and
how long they were open or if the test was distu	rbed in any
wayThanks for your full cooperation	n.

Appendix B – Sample Location Map

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Appendix C – Laboratory Results

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RADON ANALYSIS REPORT

CLIENT:

Dallas School District

Site:

Whitworth Elementary School, 1151 SE Miller Ave, Dallas OR

Project #:

297131.0000.0000

Lab Log #: Date Received: 02/12/18

51924

Date Analyzed: 02/12/18 & 02/13/18

Test Location	Canister #	Start Date	Start Time	Stop Date	Stop Time	Radon Concentration (pCi/l)
01- Gym	1895	02/06/18	1013	02/09/18	0842	0.6
01A- Gym- Duplicate	821	02/06/18	1013	02/09/18	0842	0.6
02- Gym	1372	02/06/18	0820	02/09/18	0845	ND<0.5
03- Mr. Button's Office	303	02/06/18	0822	02/09/18	0846	ND<0.5
04- Media Center	2147	02/06/18	0829	02/09/18	0848	1.5
05- Media Center	192A	02/06/18	0832	02/09/18	0851	1.4
05A- Media Center- Duplicate	231	02/06/18	0832	02/09/18	0851	1.3
06- Conference Room	286A	02/06/18	0837	02/09/18	0854	1.3
07- Staff Room	1882	02/06/18	0838	02/09/18	0856	1.8
08- Staff Work Room	1879	02/06/18	0845	02/09/18	0857	1.6
09- Room 22	256	02/06/18	0847	02/09/18	0859	2.4
10- Engineering Office	2080	02/06/18	0851	02/09/18	0900	1.9
11- Multi-Purpose Room	3121	02/06/18	0855	02/09/18	0902	1.3
12- Multi-Purpose Room	1559	02/06/18	0857	02/09/18	0904	1.1
13- Kitchen	2067	02/06/18	0900	02/09/18	0905	1.0
14- Principal's Office	1562	02/06/18	0903	02/09/18	0907	1.0
15- Secretary's Office	2191	02/06/18	0904	02/09/18	0909	1.2
16- Health	2048	02/06/18	0908	02/09/18	0909	1.4
17- Room 1	1018	02/06/18	0909	02/09/18	0911	1.4
18- Room 2	1943	02/06/18	0911	02/09/18	0912	1.1

Test Location	Canister #	Start Date	Start Time	Stop Date	Stop Time	Radon Concentration (pCi/l)
19- Room 3	1946	02/06/18	0912	02/09/18	0914	1.7
20- Room 4	1979	02/06/18	0915	02/09/18	0916	1.4
21- Room 5	2142	02/06/18	0918	02/09/18	0917	2.1
22- Room 6	3198	02/06/18	0920	02/09/18	0918	2.1
23- Room 7	2044	02/06/18	0922	02/09/18	0919	1.5
24- Room 8	492	02/06/18	0924	02/09/18	0921	1.8
25- Room 9	2117	02/06/18	0926	02/09/18	0926	0.7
26- Room 10	2129	02/06/18	0929	02/09/18	0929	0.9
26A- Room 10- Duplicate	A-98	02/06/18	0929	02/09/18	0929	0.8
27- Room 11	2101	02/06/18	0931	02/09/18	0931	1.2
28- Room 12	A-21	02/06/18	0933	02/09/18	0932	0.7
29- Room 13	1831	02/06/18	0935	02/09/18	0934	1.2
30- Room 14	532	02/06/18	0937	02/09/18	0935	1.1
31- Room 15	2153	02/06/18	0940	02/09/18	0937	2.2
32- Room 16	315	02/06/18	0943	02/09/18	0939	2.0
33- Room 17	210	02/06/18	0945	02/09/18	0940	1.7
34- Room 18	1964	02/06/18	0948	02/09/18	0942	1.2
35- Room 19	371	02/06/18	0950	02/09/18	0944	ND<0.5
36- Room 20	1385	02/06/18	0952	02/09/18	0945	ND<0.5
37- Room 32	2019	02/06/18	0955	02/09/18	0951	ND<0.5
37A- Room 32- Duplicate	2105	02/06/18	0955	02/09/18	0951	ND<0.5
38- Room 33	1921	02/06/18	0959	02/09/18	0954	ND<0.5
39- Room 21	1889	02/06/18	1006	02/09/18	0959	1.6
Field Blank	2167	02/06/18		02/09/18		ND<0.5
Field Blank	3168	02/06/18		02/09/18		ND<0.5

Results relate only to samples tested, as received by the laboratory.

This laboratory utilizes gamma scintillation spectroscopy to analyze activated charcoal (AC) canisters following USEPA Indoor Radon and Radon Decay Product Measurement Device Protocols, July 1992. The United States Environmental Protection Agency has set a CONTINUOUS EXPOSURE Action Level of 4 pCi/l as a guidance level at which further testing and/or remedial actions are indicated. Consult your testing laboratory or State Health Department for further information.

Analyzed by	Meller
	Kathleen Williamson, Laboratory Manage
Reviewed by	Edthil 1
	Kathleen Williamson, Laboratory Manage
	or other approved signatory

02/13/18

Date Issued: