



healthAIR - Industrial Hygiene Services cleanWATER - Consulting & Testing Services safeEARTH - Hazardous Waste & Recycling Services

November 10, 2025

Mr. Jason Bing, RA, LEED AP Director, Capital Programs Ann Arbor Public Schools 2555 South State Street Ann Arbor, MI 48104 BingJ@aaps.k12.mi.us

RE: AEG Project #AE250988

Radon Sampling Services

Ann Arbor Public Schools, Dicken Elementary School

Dear Mr. Bing:

Pursuant to the request of Ann Arbor Public Schools, Arch Environmental Group, Inc. (AEG) placed short-term radon detectors throughout frequently occupied locations at ground level or lower throughout Dicken Elementary School. The detectors were placed in the facility on November 3, 2025 and were retrieved on November 5, 2025. Samples were analyzed by Air Chek, Inc. located in Mills River, North Carolina.

I. Introduction

The U.S. Environmental Protection Agency (EPA) and other major national and international scientific organizations have concluded that radon is a human carcinogen and a serious environmental health problem. Radon is a naturally occurring radioactive gas. It comes from the natural breakdown (decay) or uranium which is found in soil and rock all over the United States. Radon travels through soil and enters buildings through cracks and other holes in the foundation. Eventually it decays into radioactive particles (decay products) that can become trapped in your lungs when you breathe. As these particles in turn decay, they release small bursts of radiation. The radiation can damage lung tissue and lead to lung cancer over the course of your lifetime. Radon is colorless, odorless, and tasteless. The only way to know whether or not elevated levels of radon are present in a location is to test.

There are two ways to test for radon:

- 1. A **short-term test** is the quickest test for radon. In this test the device remains in the room for a period of **2 to 90 days** depending on the device.
- 2. A **long-term test** remains in place for more than 90 days.

The EPA recommends that action should be taken when radon levels are found to be 4pCi/L (Pico Curies per Liter of air) or higher.

II. Sampling Analysis & Strategies

In an effort to determine the radon levels throughout frequently occupied areas at ground level or lower, Arch Environmental Group, Inc. deposited short-term, activated charcoal adsorption devices (AC) in forty-four locations in Dicken Elementary School.

Project #AE250988 November 3-5, 2025 Page 2

Activated charcoal adsorption devices (ACs) are a passive detector system for the measurement of radon concentrations in the air. Once the detector is opened, radon gas diffuses passively onto the activated charcoal and radon concentration is determined. ACs are passive devices. The charcoal within these devices has been treated to increase its ability to adsorb gases. The passive nature of the activated charcoal allows continual adsorption and desorption of radon. During the entire measurement period (typically two to seven days), the adsorbed radon undergoes radioactive decay. AEG deposited the AC detectors on November 3, 2025. The detectors were placed between knee and shoulder height on a flat or hanging surface. Additionally, the detectors were placed at least 1 foot from exterior walls, 3 feet from windows or doors, away from direct sunlight and away from heat vents. After a designated time, the samples were retrieved on November 5, 2025; the AC detectors were closed and collected for laboratory analysis. Duplicate samples and blank samples necessary for quality assurance purposes were also collected at the facility.

As the sample results shown in *Attachment A* indicate, all samples identified radon concentrations below the EPA recommended "action level" of 4.0 pCi/L with sample results ranging from <0.3 pCi/L to 1.8 pCi/L. Prudent practice recommends that areas where radon levels are potentially above the "action level" should be retested with a second short-term test to confirm the results of the initial test. A second test above the "action level" recommends either progressing to a long-term test of at least 90 days or taking corrective measures to reduce levels below the "action level".

III. Conclusions

Pursuant to the request of Ann Arbor Public Schools, Arch Environmental Group, Inc. collected radon samples from frequently occupied areas throughout Dicken Elementary School. In accordance with the guidance document titled "Radon Measurements in Schools, Revised Edition (EPA 402-R-92-014, July 1993)" published by the U.S. Environmental Protection Agency, "...the EPA has conducted extensive research on the presence and measurement of radon in schools. Initial reports from some of those studies prompted the Administrator in 1989 to recommend that schools nationwide be tested for the presence of radon. Based on more recent findings, EPA continues to advise U.S. schools to test for radon and to reduce levels to below 4pCi/L." Following some of the sampling recommendations offered by this guidance document, Arch Environmental Group, Inc.'s samples collected during this round were all determined to be below 4 pCi/L.

The EPA suggests that schools retest sometime in the future, especially after significant changes to the building structure or the HVAC system.

If you have any question regarding this information or work conducted by Arch Environmental Group, Inc., please feel free to contact me at (248) 426-0165 ext. "330" [office] or (248) 252-3618 [mobile].

Sincerely,

HealthAIR

A Division of arch environmental group

Philip E. Grosse Project Consultant III





Attachment A
Official Laboratory Results

$\frac{Radon\ test\ result\ report\ for:}{\mathbf{AAPS}}$

AAPS DICKEN ES

7540561 7540564	102			pCi/L	Analyzed
		2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.7 ± 0.3	2025-11-07
	103	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.7 ± 0.3	2025-11-07
7540562	104	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.9 ± 0.3	2025-11-07
7540565	105	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.8 ± 0.3	2025-11-07
7540563	106	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.7 ± 0.3	2025-11-07
7540566	107	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.3 ± 0.3	2025-11-07
7540567	108	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.7 ± 0.3	2025-11-07
7540570	109	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.6 ± 0.3	2025-11-07
7540568	110	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.7 ± 0.3	2025-11-07
7540569	110 DUP	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.6 ± 0.3	2025-11-07
7540571	111	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.8 ± 0.3	2025-11-07
7540572	112	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.6 ± 0.3	2025-11-07
7540574	113	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.2 ± 0.3	2025-11-07
7540573	114	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.1 ± 0.3	2025-11-07
7540576	115 ART	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540583	116	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540577	117	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540582	118	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540578	119	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540579	119 DUP	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540581	120	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540593	121	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	0.6 ± 0.3	2025-11-07
7540580	122	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540587	126	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540588	126A	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540589	126A DUP	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540584	127	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540591	128	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	1.1 ± 0.3	2025-11-07
7540558	AV ROOM	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.6 ± 0.3	2025-11-07
7540559	AV ROOM DUP	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.9 ± 0.3	2025-11-07
7540599	BLANK 1	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	< 0.3	2025-11-07
7540693	BLANK 2	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	< 0.3	2025-11-07
7540694	BLANK 3	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	< 0.3	2025-11-07
7540586	BOILER	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	< 0.3	2025-11-07
7540551	CLINIC	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.6 ± 0.3	2025-11-07
7540585	CUST. OFF	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.7 ± 0.3	2025-11-07
7540575	CUST. SUPPLY	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.6 ± 0.3	2025-11-07

 $\frac{Radon\ test\ result\ report\ for:}{\mathbf{AAPS}}$

AAPS DICKEN ES

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7540597	GYM	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	< 0.3	2025-11-07
7540595	GYM OFF	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	0.9 ± 0.3	2025-11-07
7540596	GYM STO	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	0.8 ± 0.3	2025-11-07
7540590	KILN	2025-11-03 @ 6:00 pm	2025-11-05 @ 6:00 pm	0.6 ± 0.3	2025-11-07
7540594	KIT. OFF	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	0.9 ± 0.3	2025-11-07
7540550	MAIN OFF	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.7 ± 0.3	2025-11-07
7540598	MAIN OFF DUP	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.7 ± 0.3	2025-11-07
7540560	MC 101	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	1.0 ± 0.3	2025-11-07
7540557	MEDIA	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.9 ± 0.3	2025-11-07
7540592	MPR	2025-11-03 @ 7:00 pm	2025-11-05 @ 7:00 pm	0.6 ± 0.3	2025-11-07
7540556	OFF. BOOK	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.9 ± 0.3	2025-11-07
7540554	OFF. CONF	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.8 ± 0.3	2025-11-07
7540555	OFF. COPY	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.9 ± 0.3	2025-11-07
7540552	OFF. PHONE	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.7 ± 0.3	2025-11-07
7540553	PRINCIPAL	2025-11-03 @ 5:00 pm	2025-11-05 @ 5:00 pm	0.7 ± 0.3	2025-11-07

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

Kit Numbe Start Date	Start Time	End Date	End Time	Temperatu	Facility	Building	Room	Project ID
7540550 2025-11-03		2025-11-0			AAPS		MAIN OFF	
7540551 2025-11-03		2025-11-0	•		AAPS	DICKEN E		AE250988
7540552 2025-11-03		2025-11-0			AAPS		OFF. PHO	
7540553 2025-11-03		2025-11-0	•		AAPS		PRINCIPA	
7540554 2025-11-03		2025-11-0	•		AAPS		OFF. CON	
7540555 2025-11-03		2025-11-0	•		AAPS		OFF. COP	
7540556 2025-11-03		2025-11-0			AAPS		OFF. BOO	
7540557 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540558 2025-11-03		2025-11-0			AAPS		AV ROOM	
7540559 2025-11-03		2025-11-0	•		AAPS		AV ROOM	
7540560 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540561 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540562 2025-11-03		2025-11-0		70	AAPS	DICKEN E		AE250988
7540563 2025-11-03		2025-11-0		70	AAPS	DICKEN E		AE250988
7540564 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540565 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540566 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540567 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	108	AE250988
7540568 2025-11-03		2025-11-0			AAPS	DICKEN E	110	AE250988
7540569 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	110 DUP	AE250988
7540570 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	109	AE250988
7540571 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	111	AE250988
7540572 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	112	AE250988
7540573 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	114	AE250988
7540574 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	113	AE250988
7540575 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	CUST. SU	AE250988
7540576 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	115 ART	AE250988
7540577 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	117	AE250988
7540578 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	119	AE250988
7540579 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	119 DUP	AE250988
7540580 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	122	AE250988
7540581 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	120	AE250988
7540582 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	118	AE250988
7540583 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	116	AE250988
7540584 2025-11-03	6:00 pm	2025-11-0	6:00 pm	70	AAPS	DICKEN E	127	AE250988
7540585 2025-11-03		2025-11-0			AAPS		CUST. OF	AE250988
7540586 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540587 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540588 2025-11-03		2025-11-0	•		AAPS	DICKEN E		AE250988
7540589 2025-11-03		2025-11-0			AAPS		126A DUP	
7540590 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540591 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540592 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540593 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540594 2025-11-03		2025-11-0	•		AAPS		KIT. OFF	
7540595 2025-11-03		2025-11-0			AAPS		GYM OFF	
7540596 2025-11-03		2025-11-0			AAPS		GYM STO	
7540597 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540598 2025-11-03		2025-11-0			AAPS		MAIN OFF	
7540599 2025-11-03		2025-11-0			AAPS	DICKEN E		AE250988
7540600 2025-11-03	2:00 pm	2025-11-0	12:00 pm	70	GCPS	DOUGLAS	PSYCH	AE250991

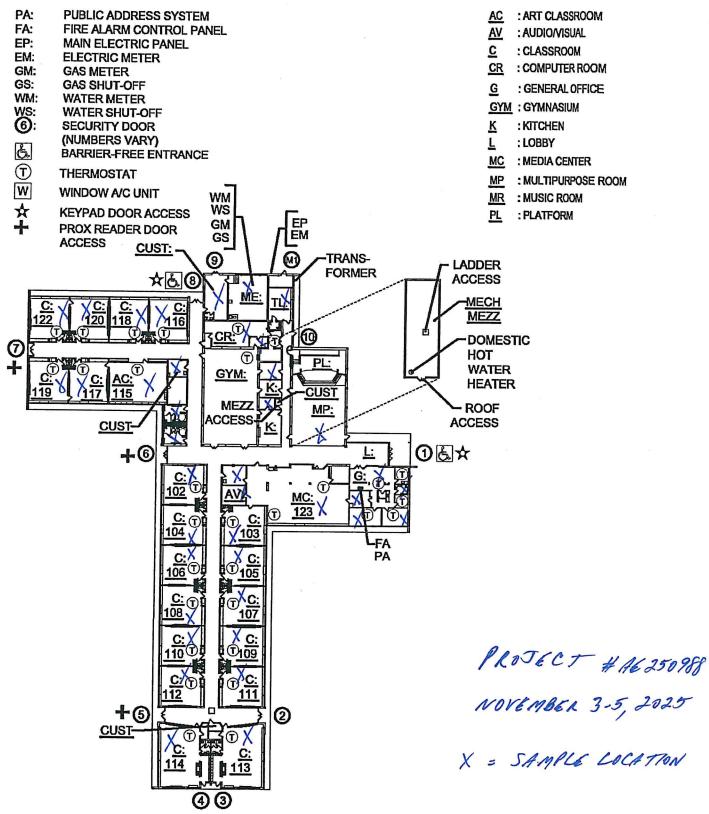
7540601	2025-11-0	2:00 pm	2025-11-0	12:00 pm	70	GCPS	DOUGLAS	PSYCH DU	AE250991
7540602	2025-11-03	2:00 pm	2025-11-0	12:00 pm	70	GCPS	DOUGLAS	BLANK 1	AE250991
7540693	2025-11-03	7:00 pm	2025-11-0	7:00 pm	70	AAPS	DICKEN E	BLANK 2	AE250988
7540694	2025-11-03	7:00 pm	2025-11-0	7:00 pm	70	AAPS	DICKEN E	BLANK 3	AE250988
7540695	2025-11-04	9:00 am	2025-11-0	12:00 pm	70	GCPS	DOUGLAS	STAFF	AE250991
7540696	2025-11-04	9:00 am	2025-11-0	12:00 pm	70	AAPS	DOUGLAS	SPEECH	AE250991

Floor	Result	Variance	Analysis N Analysis D	%Moisture	Street	City	State	ZIP
1	0.7	0.3	2025-11-0	1.3				
1	0.6	0.3	2025-11-0	2.1				
1	0.7	0.3	2025-11-0	2.1				
1	0.7	0.3	2025-11-0	1.2				
1	0.8	0.3	2025-11-0	2.9				
1	0.9	0.3	2025-11-0	0.4				
1	0.9	0.3	2025-11-0	1.2				
1	0.9	0.3	2025-11-0	2				
1	0.6	0.3	2025-11-0	2.1				
1	0.9	0.3	2025-11-0	0.4				
1	1	0.3	2025-11-0	1.2				
1	0.7	0.3	2025-11-0	2				
1	0.9	0.3	2025-11-0	2.1				
1	0.7	0.3	2025-11-0	0				
1	1.7	0.3	2025-11-0	2.1				
1	1.8	0.3	2025-11-0	2				
1	1.3	0.3	2025-11-0	1.2				
1	0.7	0.3	2025-11-0	2				
1	0.7	0.3	2025-11-0	2				
1	0.6	0.3	2025-11-0	2.1				
1	1.6	0.3	2025-11-0	2.1				
1	1.8	0.3	2025-11-0	1.2				
1	0.6	0.3	2025-11-0	2				
1	1.1	0.3	2025-11-0	2.1				
1	1.2	0.3	2025-11-0	1.2				
1	0.6	0.3	2025-11-0	2.1				
1	< 0.3	0.3	2025-11-0	2.1				
1	< 0.3	0.3	2025-11-0	2.8				
1	< 0.3	0.3	2025-11-0	1.2				
1	< 0.3	0.3	2025-11-0	2				
1		0.3	2025-11-0	2.1				
1	< 0.3	0.3	2025-11-0	1.2				
1	< 0.3	0.3	2025-11-0	2.8				
1		0.3	2025-11-0	2.1				
	< 0.3	0.3		1.2				
1			2025-11-0	2				1
1		0.3		1.2				1
	< 0.3	0.3		2.1				
1		0.3		2				
1		0.3	2025-11-0	2				
1	0.6		2025-11-0	1.3				
1			2025-11-0	2				
1	0.6			1.2				
1	0.6			2				
1	0.9		2025-11-0	2				
1	0.9			1.2				1
1				2				
1		0.3		1.2				1
1			2025-11-0	1.2				
3		0.3	2025-11-0	1.2				
1	0.8	0.3	2025-11-0	2.9				

1	0.9	0.3	2025-11-0	2		
3	< 0.3	0.3	2025-11-0	1.2		
3	< 0.3	0.3	2025-11-0	1.2		
3	< 0.3	0.3	2025-11-0	1.3		
1	0.6	0.3	2025-11-0	2.1		
1	0.9	0.3	2025-11-0	2.1		



Attachment B
Sample Location Maps



FIRST FLOOR PLAN CONTRACTOR EDITION



Dicken Elementary School

Ann Arbor Public Schools

SCALE: FEET

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