MCPS DEM SUSTAINABILITY & COMPLIANCE

School / Facility Radon Testing Report Form

School Year: **24-25**

Facility:	Snowden Farm Elementary School
Address:	22500 Sweetspire Dr.
	Clarksburg, MD 20871
Reason for Testing:	Scheduled Re-Testing - ☐ 2-year or ☒ 5-year schedule ☐ Clearance Testing (Post-Mitigation) ☐ Building Envelope or HVAC Upgrades ☐ New Construction – Addition or Facility
Current Radon Status:	☐ Active Mitigation (2-year regular schedule) ☒ No Active Mitigation (5-year regular schedule) ☐ Not Previously Tested (New Facility)
Round of Testing:	☒ Initial Testing **-or-** ☐ Follow-up Testing
Testing Status:	☒ No Further Testing Needed **-or-** ☐ Follow-Up Testing Required

Conclusion (When Testing Status is - No Further Testing Needed)

Mitigation -	**Facility Radon Status:**		
☒ Not Required ☐ Required (≥4.0-pCi/L) Rooms:	☒ No Change in Status ☐ Active Mitigation (2-year regular schedule) ☐ No Active Mitigation (5-year regular schedule)		
Number of Rooms Tested	49	Lowest Value (pCi/L)	<0.3
Number of Rooms (≥4.0-pCi/L)	0	Highest Value (pCi/L)	2.6

Instructions: Submit one testing report form per-facility. Include the following as attachments:

Attachment 1- Summary Data Tables – containing the following: (see attached samples tables)

- Testing Results – lab/detector Identification, by room number/name (alpha-numeric order) as depicted on facility map/floor plan provided by the facility/school at the time of test device deployment;
- Summary Results – list of rooms by test result ≥2.0-pCi/L; ≥2.7-pCi/L; ≥4.0-pCi/L; and ≥8.0-pCi/L;
- QA/QC Results - (field blanks and duplicates) indicating location collected; trip and office blanks; and spike sample results;
- Invalid Measurement Locations – missed locations, missing and or damaged/compromised testing devices.

Attachment 2 – Laboratory Report(s)

Attachment 3 – Sampling Location Map(s) – indicating approximate location of samples, duplicates and blanks.

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Detector and Deployment

Detector/Device Type:	☒ Passive ☐ Continuous	☒ Charcoal Absorption (CAD) ☐ Alpha Track (ATD) ☐ Other ☐ Electret ion Chamber (EIC) ☐ Electronic Integration (EID)
	Other–Specify here:	
Detector/Device Name:	Air Chek – Radon Test Kits	
Manufacturer:	Radon Labs	

Person(s) Deploying or Retrieving Test Devices and certification number	Organization/Company
Brittany Maas	KCI Technologies, Inc.
If noncertified individuals, the qualified measurement professional providing oversight -	
Tyler McCleaf, CSP Cert. # 111004-RMP	KCI Technologies, Inc.

Testing

☒ Short-Term ☐ Long-Term	Length of Test (days):	3	Date of Deployment and Retrieval (mm/dd/yy):	3/10/2025 3/13/2025
Does the test period include weekends, school breaks or holidays?				☐ Yes ☒ No
*If "**Yes**" please explain/detail in the space below:*				
Was HVAC operating under occupied conditions?				☒ Yes ☐ No
*If "**No**" please explain/detail in the space below:*				

Testing (continued)

	Detectors Deployed				
	Ground-Contact		Upper-Level(s)		Total
Round of Testing	Initial	Follow-Up	Initial	Follow-Up	
Test Locations[1]	46	0	3	0	49
Duplicates[2]	5	0	0	0	5
Field Blanks[3]	2	0	0	0	2
				Grand Total	56

1 – include all detectors deployed (duplicates, field blanks); 1 detector per occupied (or intended to be occupied) ground-contact space ≤ 2,000-square feet; large spaces ≥ 2,000-square feet - 1 detector per 2,000-square feet or part thereof); and upper floors - 10% of all occupied or intended to be occupied rooms per floor (these are in addition to ground contact locations)
2 - 10% of all locations tested, per floor
3 – 5% of all locations tested, per floor

Quality Assurance / Quality Control (QA/QC)

A Quality Assurance plan that is consistent with ANSI/AARST MS-QA (Radon Measurement Systems Quality Assurance) was submitted under separate cover, and is available to review at the MCPS Radon Testing and Mitigation Program website. The following number of QA/QC samples are associated this facility.

	QA/QC Samples		Total
Round of Testing	Initial	Follow-Up	
Spikes[1]	Not applicable		10
Trip Blanks[2]	1	0	1
Office Blanks[3, 4]	1	0	1
			12

1 - 3% of EIC detectors; and 3% from each LOT of CAD and ATD detectors; a maximum of 6-spiked measurements per month for both EIC detectors and each LOT of CAD and ATD detectors.
2 – One per shipping container from start of detector deployment
3 – One per facility tested as devices are removed/allocated from the storage location for deployment;
4 - One additional blank, analyzed prior to deployment, for storage locations that have not been evaluated or monitored, for detectors that have been stored for more than 30-day durations.

Quality Assurance / Quality Control (continued)

Spike Sample Lab Results. Measured values are satisfactory, i.e., within ± 25% of the chamber's reference value?	☒ Yes ☐ No	
Quality Control measurements comply with QA/QC requirements in the submitted testing organization's/company's QA plan?	☒ Yes ☐ No	
Round of Testing	**Initial**	**Follow-Up**
All Field, Trip and Office Blanks are **≤** (less than or equal to) to the Method Detection Limit?	☒ Yes ☐ No	☐ Yes ☐ No
For all Duplicate Samples[1], the higher value is **≤ 2x** the lower value?	☒ Yes ☐ No	☐ Yes ☐ No
For all Duplicate Samples[1], Relative Percent Difference(s) (RPD)[2] are less than the Warning Level[3]?	☒ Yes ☐ No	☐ Yes ☐ No
For all Duplicate Samples[1], Relative Percent Difference(s) (RPD)[2] are less than the Control Level[3]?	☒ Yes ☐ No	☐ Yes ☐ No

1 – Duplicate Control – a "NO" response constitute a control failure and the space/location represented by the duplicate sample becomes an invalid measurement location and should be listed in the "Invalid Measurement Locations" Table attached to this report.

2 - The objective of duplicate tests is to assess the precision error of the measurement method or, how well two side-by-side measurements agree or disagree. Precision involving duplicates is calculated by using Relative Percent Difference (RPD). RPD is equal to the difference between the higher test result minus the lower value test result divided by the average of the two duplicate test results, multiplied by 100. The RPD result is then compared to the warning and control limits.

3 - The Warning Level is set at the deviation from ideal performance that would be expected to occur by chance only 5% of the time, and Control Limits are set at that deviation from ideal performance that would be expected to occur by chance only 1% of the time. The Warning Level indicates a potential problem, which should be investigated. The Control Level indicates that the measurement system should be subject to corrective action.

The control and warning levels for duplicates, based on the averaged duplicate test result, are -

Average concentration of the two duplicate test results	Warning Level	Control Level
< 2.0-pCi/L	1-pCi/L	Not applicable
Between 2.0 and 3.9-pCi/L	50% RPD	67% RPD
≥ 4.0-pCi/L	28% RPD	36% RPD

MCPS DEM SUSTAINABILITY & COMPLIANCE

School / Facility Radon Testing Report Form

Summary of Test Results[1] and Determination of Valid Measurements[2]

	Ground-Contact		Upper-Level(s)		Total
Round of Testing	**Initial**	**Follow-Up**	**Initial**	**Follow-Up**	
Number of test locations:	46	0	3	0	49
Number of locations ≥8.0-pCi/L:	0	0	0	0	0
Number of locations ≥4.0 and ≤8-pCi/L:	0	0	0	0	0
Number of locations ≥2.7 and <4-pCi/L:	0	0	0	0	0
Number of locations ≥2.0 and <2.7-pCi/L:	0	0	0	0	0
Number of missing required test locations[3]:	1	0	0	0	1
Number of failed duplicate control locations:	0	0	0	0	0
Percentage of missing test locations for the facility[4,5]:	2.0%	0	0	0	2.0%

1 – for locations with multiple test results, report consistent with Section 7.2(When Two Test Results Disagree) and 8.1.2 (Averaging) of ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings;

2 - the allowance is to be calculated individually for Ground-Contact and Upper-Level(s) Test Locations;

3 – includes missed or inaccessible locations upon deployment or retrieval, damaged (not able to analyze) and missing detectors upon retrieval;

4 – if all valid measurements are <4.0-pCi/L and the total number of test locations are ≥18, there is an allowance of ≤33%. If less than 18 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023;

5 – if any valid measurements are ≥4.0-pCi/L and the total number of test locations are ≥20, there is an allowance of ≤25% of the total locations tested. If less than 20 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023.

Summary of Test Results[1] and Determination of Valid Measurements[2] (continued)

Round of Testing	Initial	Follow-Up
Were test devices deployed in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	☒ Yes ☐ No	☐ Yes ☐ No
Were valid measurements obtained in all occupied and intended to be occupied rooms in contact with the ground, and, if applicable, 10% of upper floor rooms?	☐ Yes ☒ No	☐ Yes ☐ No
If Yes to both above *– then Testing Status –* ***'No Further Testing Needed'*** *mark 'NA' below and complete Conclusions section*		
If No to either above, were all results obtained under 4.0-pCi/L **and** were sufficient valid measurements obtained?[1,2] ***If Yes,*** *then -* ***'No Further Testing Needed'*** *complete Conclusion section on first page.* ***If No****, then -* ***'Follow-up Testing Required'*** *continue below.*	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA

1 – if all valid measurements are <4.0-pCi/L and the total number of test locations are ≥18, there is an allowance of ≤33%. If less than 18 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings to determine the allowance;
2 – if any valid measurements are ≥4.0-pCi/L and the total number of test locations are ≥20, there is an allowance of ≤25% of the total locations tested. If less than 20 test locations please review section 6.2 of the ANSI/AARST MA-MFLB 2023 – Conducting Measurements of Radon in Multifamily, School, Commercial and Mix-Use Buildings to determine the number the allowance.

Follow-Up Testing

Required –

- If an insufficient number (greater than the allowance provided above) of valid measurements were obtained during the initial round of testing (the "missing required test locations" in the table above);
- Any location test results ≥ 4.0-pCi/L;
- Any location where duplicates fail QC checks; and or
- At the discretion of MCPS IAQ Staff

Reason for Follow-Up Testing	Testing Procedure	Follow-up Result	Conclusion
Insufficient Number of Measurements	Follow same procedures as Initial Testing	Not Applicable	Follow Initial Testing procedures
Results ≥ 4.0-pCi/L	Deploy two Short-term follow-up tests and required blanks and duplicates; Average the results of the two tests	≥4.0	Mitigation Required
Failed QC checks		≥2.0 and <4.0	Consider Mitigation
		<2.0	Mitigation Not Required

- ***If follow-up testing identifies additional spaces requiring additional testing it will be performed as part of the ongoing follow-testing round.***

Attachment 1:

Summary Data Tables

Table 1- Radon Testing Results		
Snowden Farm Elementary School		
Test Period: 3/10/2025 - 3/13/2025		
Kit Number	Room / Area	Result
11886986	102	< 0.3
11886655	105	< 0.3
11886656	105	< 0.3
11886993	106	< 0.3
11886792	109	< 0.3
11886767	110	< 0.3
11886887	110	< 0.3
11886888	120	< 0.3
11886796	121	< 0.3
11886794	124	0.6
11886891	125	< 0.3
11886897	125	< 0.3
11886896	126	2.6
11886799	128	0.6
11886789	130	0.8
11886982	133	0.6
11886665	134	0.9
11886987	135	0.7
11886992	139	< 0.3
11886900	140	0.5
11886894	144	< 0.3
11886783	148	2.0
11886871	148	1.9
11886893	148	< 0.3
11886872	150	0.7
11886943	151	0.6
11886983	154	1.1
11886988	158	< 0.3
11886984	162	0.6
11886977	164	0.7
11886994	168	0.6
11886998	168	0.6
11886989	170	< 0.3
11886899	180	< 0.3
11886889	181	0.6
11886981	181	< 0.3
11886775	182	< 0.3

Table 1- Radon Testing Results		
Snowden Farm Elementary School		
Test Period: 3/10/2025 - 3/13/2025		
Kit Number	Room / Area	Result
11886776	184	< 0.3
11886800	184	< 0.3
11886976	184	< 0.3
11886890	186	< 0.3
11886784	228	< 0.3
11886791	246	< 0.3
11886979	251	< 0.3
11886995	100C	0.7
11886975	100D	1.1
11886991	100E	1.1
11886675	100F	0.6
11886990	102B	< 0.3
11886996	102C	< 0.3
11886785	108H	< 0.3
11886766	110B	< 0.3
11886895	128A	< 0.3
11886892	128B	0.7
11886997	181A	< 0.3
11886973	MAIN OFFICE	< 0.3

Table 2 - Summary Testing Results ≥2.0 pCi/L							
Snowden Farm Elementary School							
Test Period: 3/10/2025 - 3/13/2025							
≥2.0 and <2.7 pCi/L		≥2.7 and <4.0 pCi/L		≥4.0 and <8.0 pCi/l		≥8.0 pCi/L	
Room / Area	Result	Room / Area	Result	Room / Area	Result	Room / Area	Result
148	2.0	N/A	N/A	N/A	N/A	N/A	N/A
126	2.6						

Table 3 - QC Radon Testing Results			
Snowden Farm ES			
Test Period: 3/10/2025 - 3/13/2025			
Kit Number	**QC Type**	**Room / Area**	**Result**
11886767	D	110	<0.3
11886891	D	125	<0.3
11886783	D	148	2.0
11886893	FB	148	<0.3
11886994	D	168	0.6
11886800	D	184	<0.3
11886976	FB	184	<0.3
11892446	OB	OFFICE BLANK	< 0.3
11892444	TB	TRAVEL BLANK	< 0.3

Table 3a - Duplicate Worksheet / Data Validation										
Snowden Farm Elementary School										
Test Period: 3/10/2025 - 3/13/2025										
Sample ID			Duplicate Concentrations (pCi/L) and QC Checks							
Kit Numbers		Room / Area	Higher	Lower	Check #1 (Pass/Fail)	2x the Lower	Check #2 (Pass/Fail)	Average	Relative Percent Difference (RPD)	Check #3
11886767	11886887	110	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11886891	11886897	125	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓
11886783	11886871	148	2.0	1.9	✓	3.8	PASS	2.0	<1-pCi/L	✓
11886994	11886998	168	0.6	0.6	✓	1.2	PASS	0.6	<1-pCi/L	✓
11886800	11886976	184	0.3	0.3	✓	0.6	PASS	0.3	<1-pCi/L	✓

NOTES:

QC Check #1 - Data Entry

QC Check #2 - Higher duplicate concentration is < or = to 2x the Lower

QC Check #3 - Meets RPD Limits, by average duplicate concentration

- enter 2 if RPD is BELOW warning and control levels, AND passes QC Check 1 and 2
- enter 1 if RPD is ABOVE warning and BELOW control levels, AND passes QC Check 1 and 2
- enter 0 if RPD is ABOVE control level, or 'FAILS' QC Check 1 or 2

Average (pCi/L)	Warning Level	Control Level
< 2.0	1-pCi/L	NA
Between 2.0 and 3.9	50% RPD	67% RPD
≥ 4.0	28% RPD	36% RPD

Table 4 - Summary of Invalid Measurement Locations		
Snowden Farm Elementary School		
Test Period: 3/10/25 - 3/13/25		
Kit Number	**Room/Area**	**Reason**
11886880	110 (Café)	Missing Kit

Attachment 2:

Laboratory Reports

March 17, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

SNOWDEN Farm ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886995	100C	2025-03-10 @ 8:00 am	2025-03-13 @ 9:00 am	0.7 ± 0.3	2025-03-17
11886975	100D	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	1.1 ± 0.4	2025-03-17
11886991	100E	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	1.1 ± 0.4	2025-03-17
11886675	100F	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.4	2025-03-17
11886986	102	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886990	102B	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886996	102C	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886656	105	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886655	105	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886993	106	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886785	108H	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886792	109	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886887	110	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886767	110	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886766	110B	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886888	120	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886796	121	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886794	124	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.4	2025-03-17
11886891	125	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886897	125	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886896	126	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	2.6 ± 0.4	2025-03-17
11886799	128	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.4	2025-03-17
11886895	128A	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886892	128B	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.7 ± 0.3	2025-03-17
11886789	130	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.8 ± 0.4	2025-03-17
11886982	133	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.3	2025-03-17
11886665	134	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	0.9 ± 0.4	2025-03-17
11886987	135	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.7 ± 0.4	2025-03-17
11886992	139	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886900	140	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.5 ± 0.3	2025-03-17
11886894	144	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886783	148	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	2.0 ± 0.4	2025-03-17
11886871	148	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	1.9 ± 0.4	2025-03-17
11886893	148	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886872	150	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.7 ± 0.3	2025-03-17
11886943	151	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.4	2025-03-17
11886983	154	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	1.1 ± 0.4	2025-03-17

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

March 17, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:

SNOWDEN Farm ES
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886988	158	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886984	162	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.3	2025-03-17
11886977	164	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.7 ± 0.3	2025-03-17
11886998	168	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.3	2025-03-17
11886994	168	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.3	2025-03-17
11886989	170	2025-03-10 @ 8:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886899	180	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886981	181	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886889	181	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	0.6 ± 0.4	2025-03-17
11886997	181A	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886775	182	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886776	184	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886976	184	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886800	184	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886890	186	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886784	228	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886791	246	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886979	251	2025-03-10 @ 9:00 am	2025-03-13 @ 8:00 am	< 0.3	2025-03-17
11886973	MAIN OFFICE	2025-03-10 @ 8:00 am	2025-03-13 @ 9:00 am	< 0.3	2025-03-17

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

March 17, 2025 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
OFFICE
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892446	OB	2025-03-11 @ 11:00 am	2025-03-14 @ 11:00 am	< 0.3	2025-03-17
11886599	OB	2025-03-10 @ 11:00 am	2025-03-13 @ 11:00 am	< 0.3	2025-03-17

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

March 17, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
TRAVEL
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11892444	TB	2025-03-11 @ 11:00 am	2025-03-14 @ 11:00 am	< 0.3	2025-03-17
11886600	TB	2025-03-10 @ 11:00 am	2025-03-13 @ 11:00 am	< 0.3	2025-03-17

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20001560

NOMINAL Conditions: Radon Conc 50.6 pCi/L Rel. Hum 50.6 % Temp. 70.8 F

Date Start: 12/14/24 Date Stop: 12/17/24	Date Start: _____ Date Stop: _____
Time Start: 0815 Time Stop: 0815	Time Start: _____ Time Stop: _____
Device No.'s: (3) CHAR BAGS	Device No.'s: _____
11477880, 11477883, 11477896	_____
_____	_____
B4 Right	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
_____	_____
_____	_____
_____	_____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 µR/h Elevation = 820 ft

December 23, 2024 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
SK
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11477880	SK1	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	52.0 ± 4.2	2024-12-23
11477883	SK2	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	54.6 ± 4.4	2024-12-23
11477896	SK3	2024-12-14 @ 8:00 am	2024-12-17 @ 8:00 am	45.5 ± 3.6	2024-12-23

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI TECHNOLOGIES, INC Job Number 20002919

NOMINAL Conditions: Radon Conc 7.0 pCi/L Rel. Hum 51.4 % Temp. 70.7 F

Date Start: 3/7/25 Date Stop: 3/10/25	Date Start: _____ Date Stop: _____
Time Start: 0832 Time Stop: 0832	Time Start: _____ Time Stop: _____
Device No.'s: (7) CHAR BAGS	Device No.'s: _____
11886401 thru 11886406,	
11886410	
G3 Right	
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 µR/h Elevation = 820 ft

March 19, 2025

** LABORATORY ANALYSIS REPORT **

Radon test result report for:
QC
MAIN

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11886401	SK1	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.8 ± 1.1	2025-03-19
11886405	SK2	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.1 ± 1.1	2025-03-19
11886406	SK3	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.7 ± 1.1	2025-03-19
11886403	SK4	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.9 ± 1.2	2025-03-19
11886404	SK5	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.6 ± 1.2	2025-03-19
11886410	SK6	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	7.0 ± 1.1	2025-03-19
11886402	SK7	2025-03-07 @ 9:00 am	2025-03-10 @ 9:00 am	8.6 ± 1.2	2025-03-19

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KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

Radon Test Kit Chain of Custody

Project Name: MCPS Radon – Testing March 4th – March 7th, 2025

Name of Schools:

1. Hallie Wells MS
2. Snowden Farms ES
3. Watkins Mill HS
4. Whestone ES
5. Woodfield ES

	Date	Initials
Radon Test Kits Deployed	3/10/2025	
Radon Test Kits Collected	3/13/2025	
Radon Test Kits Shipped to Lab*	3/13/2025	
Radon Test Kits Received by Lab*	3/15/2025	

*All samples sent to Air Check, Inc., 2 Saber Way, Ward Hill, MA 01835

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MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Snowden Farms Elementary School
Date of Report	2/28/2020
Round of Testing	Initial **Follow-up** Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition New Facility
# of Rooms Tested	3
# Rooms ≥4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	0.5 pCi/L

Project Status

Current Project Status at this time: Retesting completed; no further action

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2/28/2020

Mr. Richard Cox, MS
Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Radon Testing Services

KCI Job #1214634188

Location: Snowden Farms Elementary School
22500 Sweetspire Drive
Clarksburg, Maryland 20871

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a "short-term" 3-day radon test for the Snowden Farms Elementary School, located at 22500 Sweetspire Drive in Clarksburg, Maryland 20871 (subject site).

SCOPE OF SERVICES

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Safety Board (NRSB) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from www.montgomerycountymd.gov/dep/air/radon or www.epa.gov/radon.

KCI visited the site on 2/3/2020 and deployed five (5) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

KCI sampled the following locations during this follow-up test:

1. Rooms with missing test kits from the December 2019 testing period (i.e. test kit was deployed but not recovered),

2. Rooms with invalidated test kits from the December 2019 testing period (e.g. an open window in the room or disturbed test kit),
3. Rooms which were locked/inaccessible during the December 2019 testing period,
4. Rooms with elevated December 2019 results (i.e. ≥3.5 piC/L),
5. Rooms previously tested for radon but not tested in December 2019, and
6. Additional rooms that require testing (if applicable.)

A floor plan map of the building with the test locations is included as Appendix A of this report.

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted six (6) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 2/6/2020 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Follow-up to initial testing.

These tests were conducted to:

- Evaluate radon concentrations at the facility.

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

KCI recorded observations of the following conditions in each room at the time of deployment and collection of the radon test kits:

- Indoor temperature,
- HVAC Operation,
- Dehumidifier operation,
- Humidifier operation,
- Ceiling fan operation, and
- Open windows or doors.

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures ranged from the mid-30s to the low-50s; and high temperatures ranged from the upper-40s to the mid-60s. Maximum sustained winds ranged from 13-21 miles per hour. Average humidity was approximately 76%. A total of 1.09 Inches of rain were recorded during the testing period. The weather conditions during the testing period may have resulted in atypical radon test results for this facility.

RESULTS

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Follow-up sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	None	N/A
≤4.0 piC/L	See Attachment B	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at 410-316-7800.

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

Floor Plan Legend
X-Sample Location (in red)
X- Previous Sample Location
1- Not Samled; No Ground Contact
2- Not Samled; Unoccupied (e.g. Storage, Mechanical)
3- Not Samled; High Humidity/Moisture
4- Not Samled; Bathroom/Hallway

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Snowden Farms Elementary School		
Test Period: 02/03/20-02/06/20		
Kit Number	Room / Area	Result
9348524	104A	<0.3
9348554	110B	0.5
9348553	124A	<0.3
9334909	OFFICE BLANK	<0.3
9334910	OFFICE BLANK	<0.3

Table 2- Radon Testing Results			
Snowden Farms Elementary School			
Test Period: 02/03/20-02/06/20			
Kit Number	QC Type	Room / Area	Result
9334902	TRANSIT BLANK	NA	<0.3

ATTACHMENT C

Laboratory Analytical Results

February 11, 2020 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
SNOWDEN ES
347

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9348524	104A	2020-02-04 @ 9:00 am	2020-02-07 @ 8:00 am	< 0.3	2020-02-11
9348554	110B	2020-02-04 @ 9:00 am	2020-02-07 @ 8:00 am	0.5 ± 0.3	2020-02-11
9348553	124A	2020-02-04 @ 9:00 am	2020-02-07 @ 8:00 am	< 0.3	2020-02-11

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

EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KCI Technologies, Inc. Job Number 194523

NOMINAL Conditions: Radon Conc 25.8 pCi/L Rel. Hum 49.8 % Temp. 70.2 F

Date Start: 2/21/20 Date Stop: 2/24/20	Date Start: _____ Date Stop: _____
Time Start: 0745 Time Stop: 0745	Time Start: _____ Time Stop: _____
Device No.'s: (9) Char Bags - 9341725 thru 9341733	Device No.'s: _____
52 Cell	
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____
Date Start: _____ Date Stop: _____	Date Start: _____ Date Stop: _____
Time Start: _____ Time Stop: _____	Time Start: _____ Time Stop: _____
Device No.'s: _____	Device No.'s: _____

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 µR/h Elevation = 820 ft

February 28, 2020 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within ± 25% of the chamber's reference value (25.7 pCi/L).

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9341725	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 ± 1.6	2020-02-26
9341730	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.1 ± 1.6	2020-02-26
9341728	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.9 ± 1.6	2020-02-26
9341726	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.8 ± 1.5	2020-02-26
9341731	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	25.1 ± 1.5	2020-02-26
9341729	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	26.2 ± 1.6	2020-02-26
9341727	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.2 ± 1.6	2020-02-26
9341732	N/A	2020-02-21 @ 8:00 am	2020-02-24 @ 8:00 am	27.3 ± 1.6	2020-02-26

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

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Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 1 Retesting

Name of Schools:

1. Belmont E.S.
2. Clarksburg H.S.
3. Damascus E.S.
4. Damascus H.S.
5. DuFief E.S.
6. Fields Road E.S.
7. Gaithersburg E.S.
8. McAuliffe E.S.
9. Quince Orchard H.S.
10. Snowden Farms E.S.
11. South Lake E.S.
12. Stone Mill E.S.
13. Travilah ES
14. Watkins Mill ES
15. Whitman H.S.

	Date	Initials
Radon Test Kits Deployed	02/03/20 to 02/04/20	
Radon Test Kits Collected	02/06/20 to 02/07/20	
Radon Test Kits Shipped to Lab*	02/07/20	
Radon Test Kits Received by Lab*	02/10/20	

*All samples sent to Air Check, Inc., 1936 Butler Bridge Rd, Mills River, NC 28759

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MCPS RADON TESTING - EXECUTIVE SUMMARY

Site Name	Snowden Farms Elementary School
Date of Report	1/28/2020
Round of Testing	Initial Follow-up Post Remediation 2 year testing 5 year testing HVAC Upgrade Window Replacement New Addition **New Facility**
# of Rooms Tested	48
# Rooms ≥4.0 pCi/L	0
Lowest Value	<0.3 pCi/L
Highest Value	1.8 pCi/L

Project Status

Current Project Status at this time: Testing Complete; missing/compromised tests to be sampled.

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1/28/2020

Mr. Richard Cox, MS
Environmental Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Radon Testing Services

KCI Job #12146341126

Location: Snowden Farms Elementary School
22500 Sweetspire Drive
Clarksburg, Maryland 20871

Dear Mr. Cox:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to Montgomery County Public Schools pursuant to completing a "short-term" 3-day radon test for the Snowden Farms Elementary School, located at 22500 Sweetspire Drive in Clarksburg, Maryland 20871 (subject site).

SCOPE OF SERVICES

KCI conducted radon testing at the subject site to evaluate indoor radon levels relative to the USEPA's recommended action level of 4.0 picocuries per Liter (pCi/L) - the level at which EPA recommends that schools take action to reduce the level. KCI conducted the radon testing in accordance with American Association of Radon Scientists and Technologists (AARST) *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*. A National Radon Proficiency Program (NRPP) Radon Measurement Specialist (certification #111004 RT) supervised the testing. Additional information on radon management and the health effects of radon exposure is available from https://www.montgomeryschoolsmd.org/departments/facilities/maintenance/default.aspx?id=458858 or www.epa.gov/radon.

KCI visited the site on 12/10/2019 and deployed sixty-three (63) activated charcoal (AC) radon test kits. KCI deployed radon test kits in frequently-occupied ground contact rooms, and other areas, (if applicable) in accordance with AARST guidance.

A floor plan map of the building with the test locations is included as Appendix A of this report.

As a quality control measure, KCI included duplicate samples, field blanks, lab transit blanks, and office blanks in accordance with AARST recommendations. In addition, KCI submitted sixty (60) test kits to Bowser-Morner, Inc. as spike samples. The spiked tests were exposed to a known radon concentration by Bowser-Morner, Inc. prior to being returned to the laboratory for analysis.

KCI returned to the site on 12/13/2019 to retrieve the radon sampling test kits. KCI shipped all radon tests via overnight delivery to Aircheck, Inc. for analysis by gamma-ray spectroscopy. Aircheck, Inc. is a NRSB certified analytical laboratory for radon analysis (certification #ARL1402) located at 1936 Butler Bridge Road, Mills River, North Carolina.

EVALUATION OF TESTING CONDITIONS

These tests represent:

- Initial Testing

These tests were conducted to:

- Evaluate radon concentrations at the facility.

According to AARST, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, ideal testing conditions would be when the building is fully occupied and the heating system is active. For this test, the facility's HVAC system was operating in heating mode; therefore, KCI concludes that this test was conducted during ideal testing conditions.

KCI recorded observations of the following conditions in each room at the time of deployment and collection of the radon test kits:

- Indoor temperature,
- HVAC Operation,
- Dehumidifier operation,
- Humidifier operation,
- Ceiling fan operation, and
- Open windows or doors.

KCI also compiled weather data for the testing period and conducted observations of relevant field conditions. During the test period, weather records indicate low temperatures were in the upper-30s and high temperatures ranged from the upper-30s to the mid-50s. Maximum sustained winds ranged from 7-21 miles per hour. Average humidity was around 75%. 0.52 inches of precipitation (rain) was recorded during the testing period.

RESULTS

The sampling locations and analytical results are listed on Table 1 (Attachment B). The quality control sample locations and analytical results are listed on Table 2 (Attachment B). Sampling locations and associated test kit identification numbers and relevant field observations are listed on Table 3 (Attachment B). The laboratory analytical results are included in Attachment C. Laboratory results and exposure data for the spike samples are also included in Attachment C.

The results of the radon test analysis indicated the following:

Radon Concentration	Room	Result
≥4.0 piC/L	None	N/A
≤4.0 piC/L	See Attachment B	See Attachment B

Quality Control Samples	
Results of Blank Canisters:	The office blanks, and lab transit blanks had test results of less than the laboratory detection limit of 0.3 pCi/L.
Adequate Laboratory Precision?	Review of the duplicate sample analysis indicates that adequate laboratory measurement precision was achieved.
Spike Sample Analysis:	The Spike sample analysis results indicate the laboratory is operating within statistical control limits.

Our professional services have been performed in accordance with customary principles and practices in the field of industrial hygiene and engineering. If you have any questions or comments regarding this report, please feel free to contact me at 410-316-7800.

Sincerely,

Mr. Tyler P. McCleaf
Radon Measurement Provider
111004 RT

KCI Technologies, Inc.

Attachments:

A- Floor Plan with Test Locations

B - Tables 1-3, Radon Test Summary Spreadsheets

C- Laboratory Analytical Results

ATTACHMENT A

Floor Plan With Test Locations

ATTACHMENT B

Radon Test Summary Spreadsheet

Table Notes:

AC- Activated Charcoal

ACI- Air Chek, Inc.

D- Duplicate

FB- Field Blank

KCI- KCI Technologies, Inc.

OB- Office Blank

PM- Project Manager

QC- Quality Control

Table 1- Radon Testing Results		
Snowden Farms Elementary School		
Test Period: 12/10/2019-12/13/2019		
Kit Number	Room / Area	Result
9334997	OFFICE BLANK	< 0.3
9335219	170	0.5
9335220	168	0.7
9335221	168	0.5
9335222	164	0.6
9335223	162	0.6
9335224	158	0.9
9335225	154	< 0.3
9335226	150	< 0.3
9335227	148	< 0.3
9335228	144	< 0.3
9335229	140	< 0.3
9335230	134	0.7
9335231	134	0.9
9335232	128	1.6
9335233	128	< 0.3
9335234	128B	1.3
9335235	128A	1.8
9335236	126	1.6
9335237	130	0.8
9335238	124	< 0.3
9335239	120	< 0.3
9335240	121	< 0.3
9335241	121	< 0.3
9335242	125	< 0.3
9335243	133	< 0.3
9335244	135	0.8
9335245	139	0.8
9335246	151	< 0.3
9335247	105A	< 0.3
9335248	105	< 0.3
9335249	105	< 0.3
9335250	109	0.5
9335251	109	< 0.3
9335252	180	1.1
9335253	180	< 0.3
9335254	182	< 0.3
9335255	184	0.6
9335256	186	< 0.3
9335257	181	< 0.3
9335258	181	< 0.3
9335259	181A	< 0.3
9335260	104	0.7
9335261	104	< 0.3
9335262	104	< 0.3
9335263	108H	0.5
9335264	106	0.6
9335265	100C	< 0.3
9335266	100F	< 0.3
9335267	100E	0.7

9335268	100D	< 0.3
9335269	100	< 0.3
9335270	102	< 0.3
9335271	102	< 0.3
9335272	102B	< 0.3
9335273	102B	< 0.3
9335274	102C	< 0.3
9335275	256	0.5
9335276	238	< 0.3
9335277	218	< 0.3
9335278	206	< 0.3
9335279	206	< 0.3
9335703	UNKNOWN	MISSING

Table 2- Radon Testing Results			
Snowden Farms Elementary School			
Test Period: 12/10/2019-12/13/2019			
Kit Number	QC Type	Room / Area	Result
9335221	D	168	0.5
9335231	D	134	0.9
9335233	FB	128	<0.3
9335241	D	121	<0.3
9335251	D	109	<0.3
9335253	FB	180	<0.3
9335261	D	104	<0.3
9335271	D	102	<0.3
9335273	FB	102B	<0.3
9335279	D	206	<0.3
9334850	TRANSIT BLANK	NA	< 0.3
9334914	TRANSIT BLANK	NA	< 0.3
9334916	TRANSIT BLANK	NA	< 0.3
9334963	TRANSIT BLANK	NA	< 0.3

Summary of Missed Locations		
Snowden Farms Elementary School		
Test Period: 12/10/2019 - 12/13/2019		
Kit Number	Room/Area	Result
	NA	

Summary of Missing, Compromised and >/= 4 piC/L Tests		
Snowden Farms Elementary School		
Test Period: 12/10/2019-12/13/2019		
Kit Number	Room/Area	Result
9335703	*Unknown	Missing

Table Note:
* Missing or Compromised Sample

ATTACHMENT C

Laboratory Analytical Results

December 17, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9335269	100	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335265	100C	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335268	100D	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335267	100E	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	0.7 ± 0.3	2019-12-16
9335266	100F	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335271	102	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335270	102	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335272	102B	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335273	102B	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335274	102C	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335261	104	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335262	104	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335260	104	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	0.7 ± 0.3	2019-12-16
9335249	105	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335248	105	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335247	105A	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335264	106	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	0.6 ± 0.3	2019-12-16
9335263	108H	2019-12-10 @ 10:00 am	2019-12-13 @ 10:00 am	0.5 ± 0.3	2019-12-16
9335251	109	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335250	109	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	0.5 ± 0.3	2019-12-16
9335239	120	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335240	121	2019-12-10 @ 9:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335241	121	2019-12-10 @ 9:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335238	124	2019-12-10 @ 9:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335242	125	2019-12-10 @ 9:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335236	126	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	1.6 ± 0.3	2019-12-16
9335232	128	2019-12-10 @ 8:00 am	2019-12-13 @ 8:00 am	1.6 ± 0.4	2019-12-16
9335233	128	2019-12-10 @ 8:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335235	128A	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	1.8 ± 0.3	2019-12-16
9335234	128B	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	1.3 ± 0.3	2019-12-16
9335237	130	2019-12-10 @ 9:00 am	2019-12-13 @ 10:00 am	0.8 ± 0.3	2019-12-16
9335243	133	2019-12-10 @ 9:00 am	2019-12-13 @ 10:00 am	< 0.3	2019-12-16
9335230	134	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.7 ± 0.3	2019-12-16
9335231	134	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.9 ± 0.3	2019-12-16
9335244	135	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	0.8 ± 0.3	2019-12-16
9335245	139	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	0.8 ± 0.3	2019-12-16
9335229	140	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16

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December 17, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9335228	144	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335227	148	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335226	150	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335246	151	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335225	154	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335224	158	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.9 ± 0.3	2019-12-16
9335223	162	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.6 ± 0.3	2019-12-16
9335222	164	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.6 ± 0.3	2019-12-16
9335220	168	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.7 ± 0.3	2019-12-16
9335221	168	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.5 ± 0.3	2019-12-16
9335219	170	2019-12-10 @ 8:00 am	2019-12-13 @ 9:00 am	0.5 ± 0.3	2019-12-16
9335252	180	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	1.1 ± 0.3	2019-12-16
9335253	180	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335257	181	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335258	181	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335259	181A	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335254	182	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335255	184	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	0.6 ± 0.3	2019-12-16
9335256	186	2019-12-10 @ 9:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335279	206	2019-12-10 @ 11:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335278	206	2019-12-10 @ 10:00 am	2019-12-13 @ 9:00 am	< 0.3	2019-12-16
9335277	218	2019-12-10 @ 10:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335276	238	2019-12-10 @ 10:00 am	2019-12-13 @ 8:00 am	< 0.3	2019-12-16
9335275	256	2019-12-10 @ 10:00 am	2019-12-13 @ 8:00 am	0.5 ± 0.3	2019-12-16

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EXPOSURE IN BOWSER-MORNER RADON CHAMBER

CLIENT KEI Technologies Inc. Job Number 193475

NOMINAL Conditions: Radon Conc 25.7 pCi/L Rel. Hum 74.6 % Temp. 69.9 F

Date Start: 12/13/19 Date Stop: 12/16/19	Date Start: _____ Date Stop: _____
Time Start: 0806 Time Stop: 0806	Time Start: _____ Time Stop: _____
(Group 1) Device No.'s: (20) Char. Bags - 9334502 thru 9334510, 9334514, 9334516, 9334517, ~~9334518~~, 9334519 9334522 thru 9334528	Device No.'s: _____
B4	

Date Start: 12/13/19 Date Stop: 12/16/19	Date Start: _____ Date Stop: _____
Time Start: ~~0800~~ 0811 Time Stop: 0811	Time Start: _____ Time Stop: _____
(Group 2) Device No.'s: (20) Char. Bags - 9334529 thru 9334538, 9334540, 9334542 thru 9334550	Device No.'s: _____
B3	

Date Start: 12/13/19 Date Stop: 12/16/19	Date Start: _____ Date Stop: _____
Time Start: 0816 Time Stop: 0816	Time Start: _____ Time Stop: _____
(Group 3) Device No.'s: (20) Char. Bags - 9334551, 9334552, 9334562, 9334555 thru 9334559, 9334569, 9334576, 9334579, 9334580, 9334583, 9334584, 9334591, 9334593, 9334594, 9334597, 9334598, 9334599	Device No.'s: _____
B2	

Note: All times are in 24-hour (military) notation, Eastern Standard Time (EST)
Background = 7 µR/h Elevation = 820 ft

December 18, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

MCPS - Spike Sample Lab Results. Measured values are satisfactory, i.e., within ± 25% of the chamber's reference value (25.7 pCi/L).

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334583	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334529	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 ± 1.5	2019-12-18
9334597	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334534	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334540	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.9 ± 1.4	2019-12-18
9334546	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.9 ± 1.5	2019-12-18
9334551	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334558	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334579	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334593	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334532	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334537	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334544	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18
9334549	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18
9334556	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334569	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334584	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18
9334530	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334598	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334535	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.0 ± 1.4	2019-12-18
9334542	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334547	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	25.2 ± 1.5	2019-12-18
9334552	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.2 ± 1.4	2019-12-18
9334559	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334580	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334594	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334533	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 ± 1.5	2019-12-18
9334538	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 ± 1.5	2019-12-18
9334545	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.0 ± 1.4	2019-12-18
9334550	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334557	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 ± 1.5	2019-12-18
9334576	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334591	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334531	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 ± 1.5	2019-12-18
9334599	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334536	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18
9334543	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18

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December 18, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334548	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.0 ± 1.4	2019-12-18
9334555	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.4 ± 1.4	2019-12-18
9334562	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18

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December 18, 2019 **** LABORATORY ANALYSIS REPORT ****

Radon test result report for:
S
N/A

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
9334505	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.5 ± 1.5	2019-12-18
9334510	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.4 ± 1.5	2019-12-18
9334522	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.9 ± 1.4	2019-12-18
9334527	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	22.6 ± 1.4	2019-12-18
9334503	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334508	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.7 ± 1.5	2019-12-18
9334517	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18
9334525	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334506	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.3 ± 1.5	2019-12-18
9334514	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.5 ± 1.5	2019-12-18
9334523	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.6 ± 1.4	2019-12-18
9334528	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334504	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.8 ± 1.4	2019-12-18
9334509	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.5 ± 1.4	2019-12-18
9334519	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.1 ± 1.4	2019-12-18
9334526	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.3 ± 1.4	2019-12-18
9334502	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	23.7 ± 1.4	2019-12-18
9334507	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.7 ± 1.5	2019-12-18
9334516	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	22.2 ± 1.3	2019-12-18
9334524	N/A	2019-12-13 @ 8:00 am	2019-12-16 @ 8:00 am	24.6 ± 1.5	2019-12-18

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KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

Corporate Office: 936 Ridgebrook road • Sparks , Maryland 21152 • 410-316-7800 • (Fax) 410-316-7935

Radon Test Kit Chain of Custody

Project Name: MCPS Radon 2019 Week 1

Name of Schools:

1. Baker M.S.
2. Belmont E.S.
3. Clarksburg E.S.
4. Clarksburg H.S.
5. Clearspring E.S.
6. Damascus E.S.
7. Damascus H.S.
8. Dufief E.S.
9. Fields Road E.S.
10. Gaithersburg E.S.
11. Germantown E.S.
12. Great Seneca Creek E.S.
13. Jones Lane E.S.
14. Lake Seneca E.S.
15. McAuliffe E.S.
16. Quince Orchard H.S.
17. Rosa Parks M.S.
18. Snowden Farm E.S.
19. South Lake E.S.
20. Stone Mill E.S.
21. Travilah E.S.
22. Watkins Mill E.S.
23. Watkins Mill H.S.
24. Whitman H.S.

	Date	Initials
Radon Test Kits Deployed	12/09/19 to 12/10/19	
Radon Test Kits Collected	12/12/19 to 12/13/19	
Radon Test Kits Shipped to Lab*	12/13/19	
Radon Test Kits Received by Lab*	12/16/19	

*All samples sent to Air Check, Inc., 1936 Butler Bridge Rd, Mills River, NC 28759