EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Alice Peck Elementary School
35 Hillfield Rd,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Alice Peck Elementary School at 35 Hillfield Road in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Eight (8) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

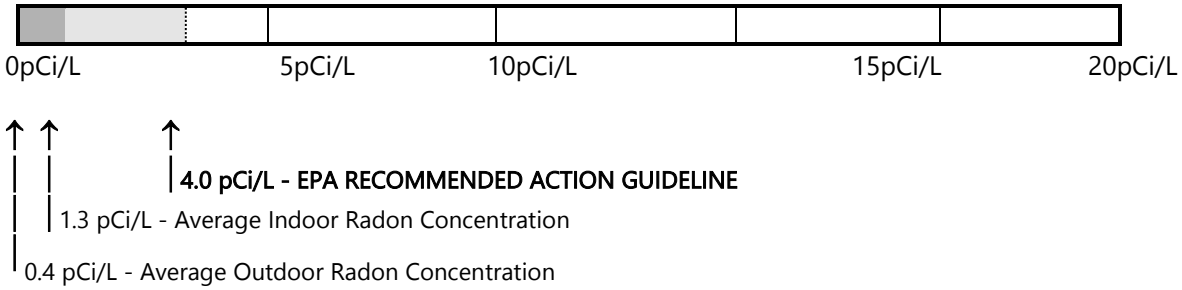
IV. RADON IN AIR TEST RESULTS

Alice Peck Elementary School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS151	1st Floor	Room 15 **	< 0.5
R2	RAS152	1st Floor	Room 15	0.80
R3	RAS153	1st Floor	Gym (Back)	< 0.5
R4	RAS154	1st Floor	Gym (Front)	0.51
R5	RAS155	1st Floor	Media Center (Right)	< 0.5
R6	RAS156	1st Floor	Media Center (Left)	< 0.5
R7	RAD112A	1st Floor	Room 26*	< 0.5
R8	RAD112B	1st Floor	Room 26*	< 0.5

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Alice Peck Learning Center located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS151	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Room 15 (Field Blank)	2/27/2024	12:07 PM	2/29/2024	12:41 PM	< 0.5
RAS152	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Room 15	2/27/2024	12:07 PM	2/29/2024	12:41 PM	0.80
RAS153	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Gym (Back)	2/27/2024	12:05 PM	2/29/2024	12:48 PM	< 0.5
RAS154	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Gym (Front)	2/27/2024	12:05 PM	2/29/2024	12:48 PM	0.51
RAS155	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Media Center (Right)	2/27/2024	12:10 PM	2/29/2024	12:46 PM	< 0.5
RAS156	35 Hillfield Rd, Hamden, CT	Alice Peck Elementary | Media Center (Left)	2/27/2024	12:10 PM	2/29/2024	12:46 PM	< 0.5

Appendix B

Radon Map Locations

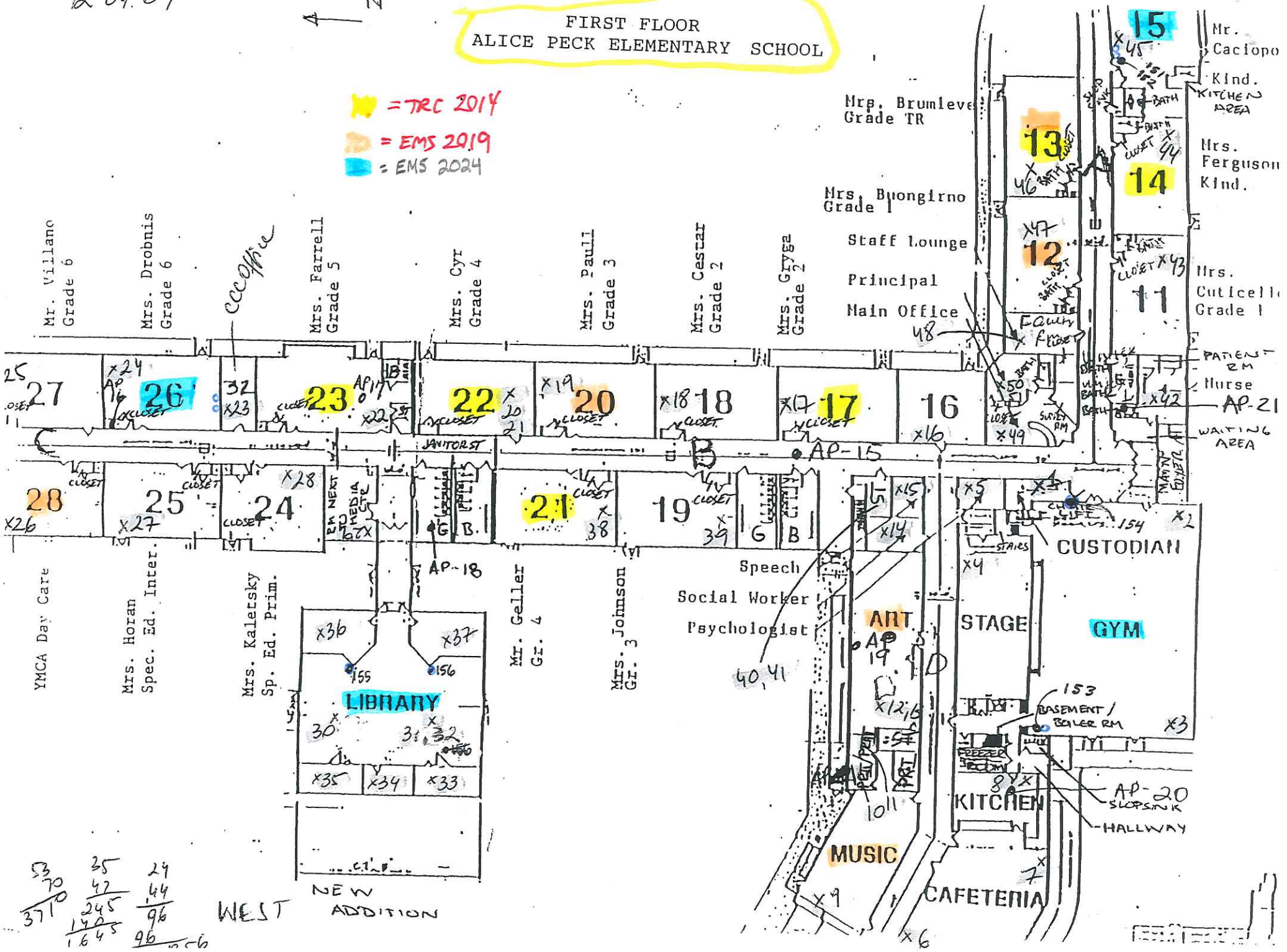
12-04-07

FIRST FLOOR
ALICE PECK ELEMENTARY SCHOOL

= TRC 2014

= EMS 2019

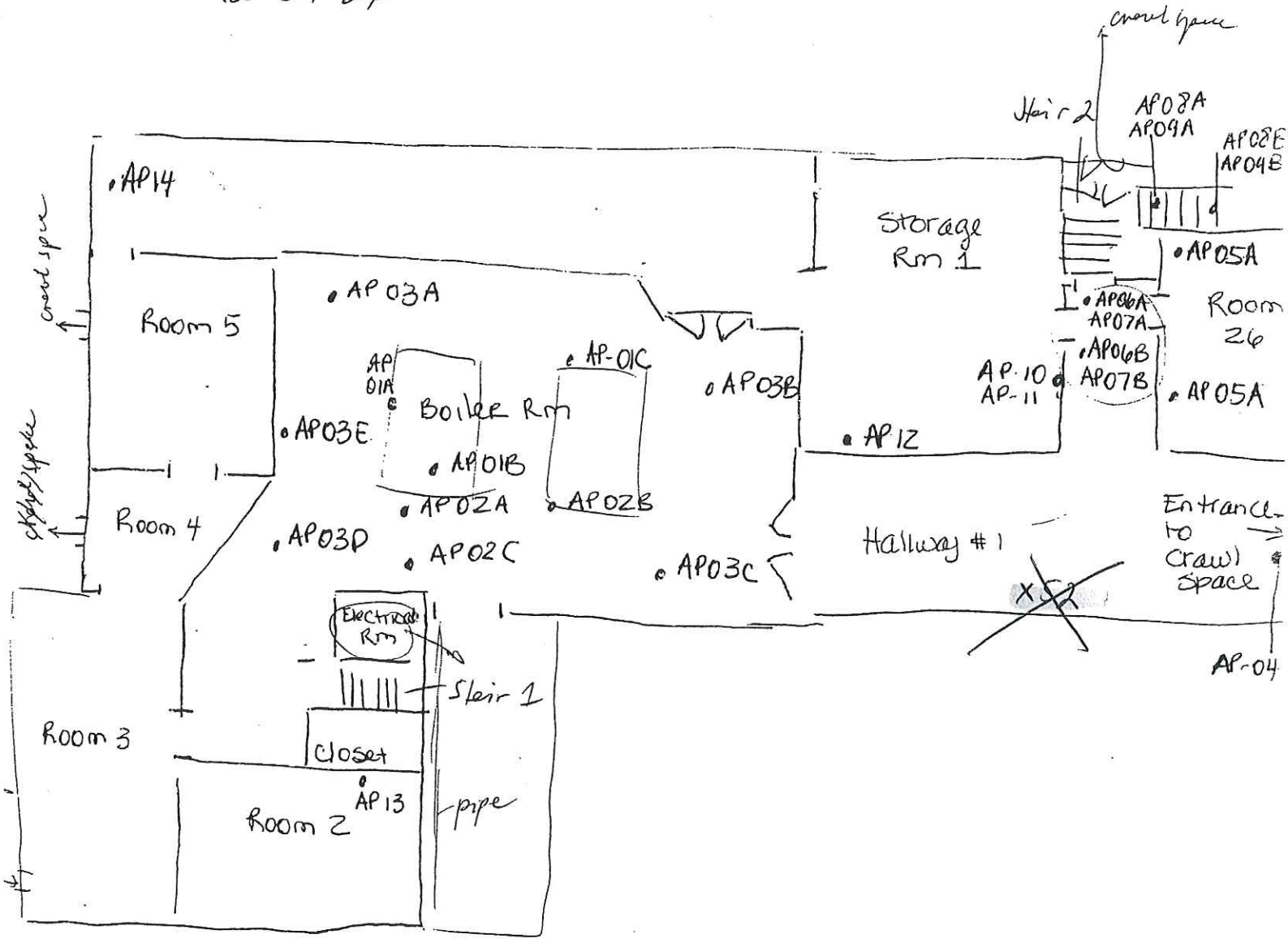
= EMS 2024



53 70 371 | 35 47 245 140 1645 | 24 44 96 96

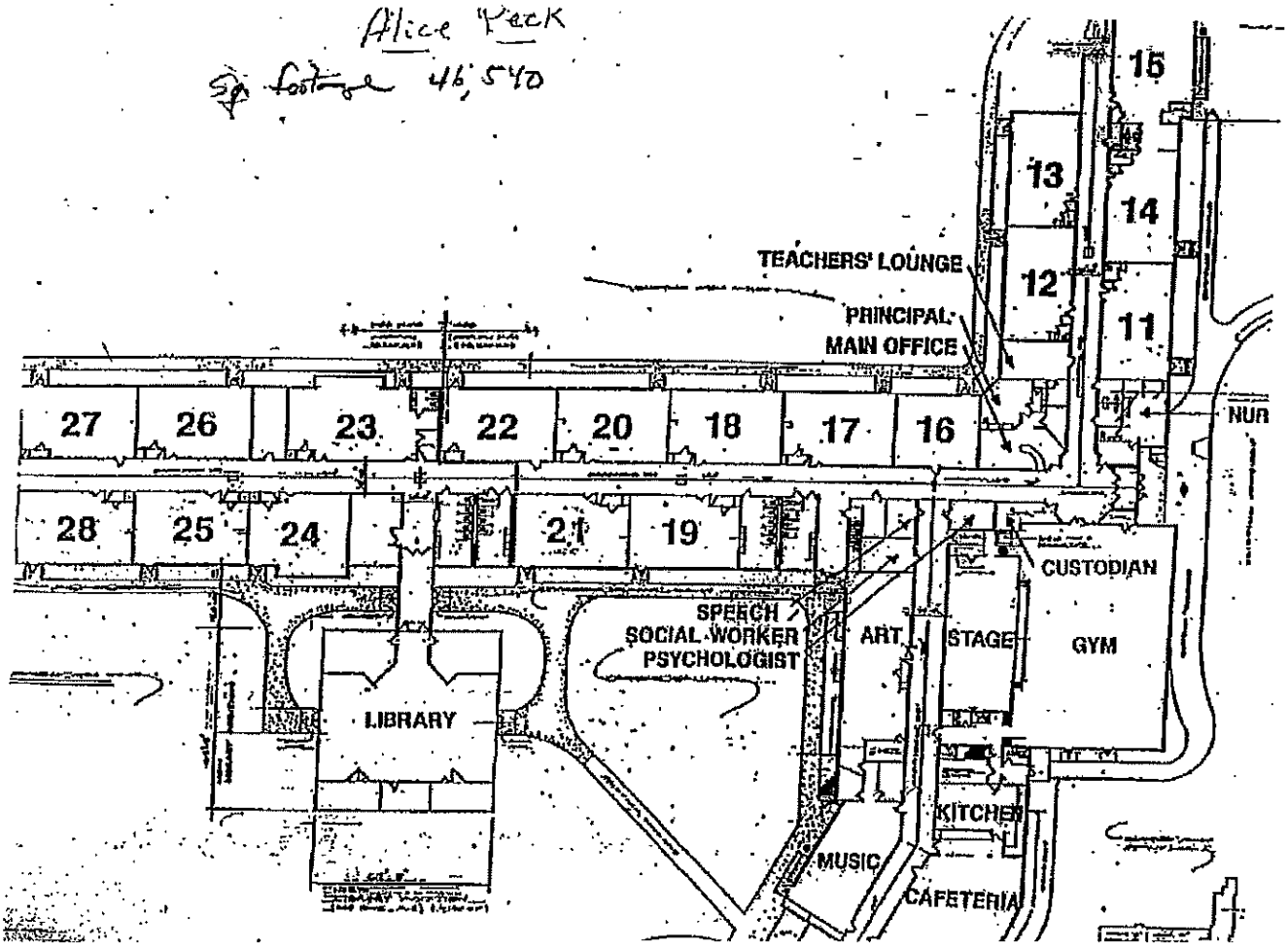
BASEMENT
ALICE PECK ELEMENTARY SCHOOL

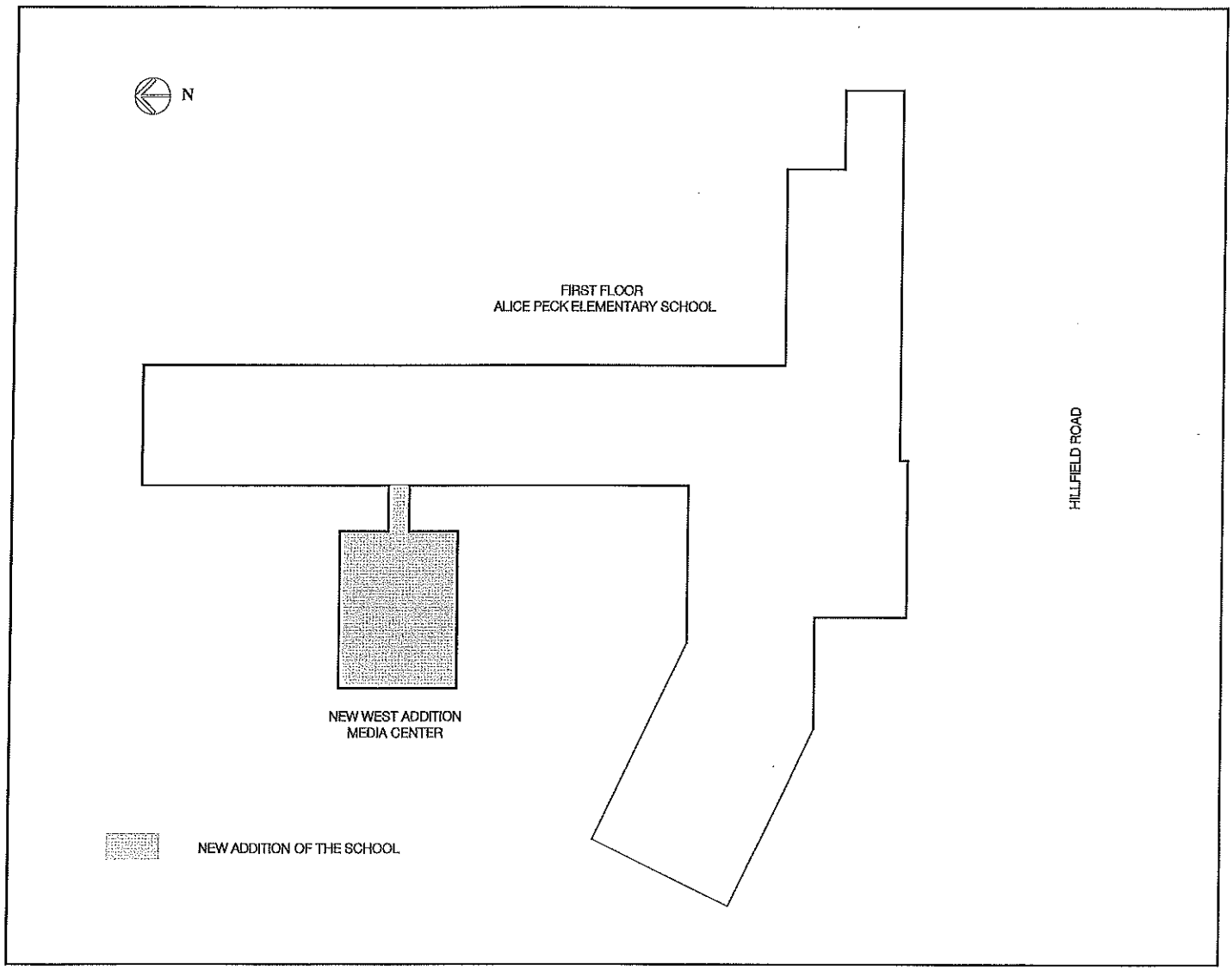
12-04-07



Alice Peck

Sq footage 46,540




N
FIRST FLOOR
ALICE PECK ELEMENTARY SCHOOL
HILLFIELD ROAD
NEW WEST ADDITION
MEDIA CENTER
NEW ADDITION OF THE SCHOOL

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Radon Sampling Report
Short Term Radon Testing
for

Bear Path School
10 Kirk Road
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Bear Path School at 10 Kirk Road in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 26 to February 28, 2024, by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Eight (8) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

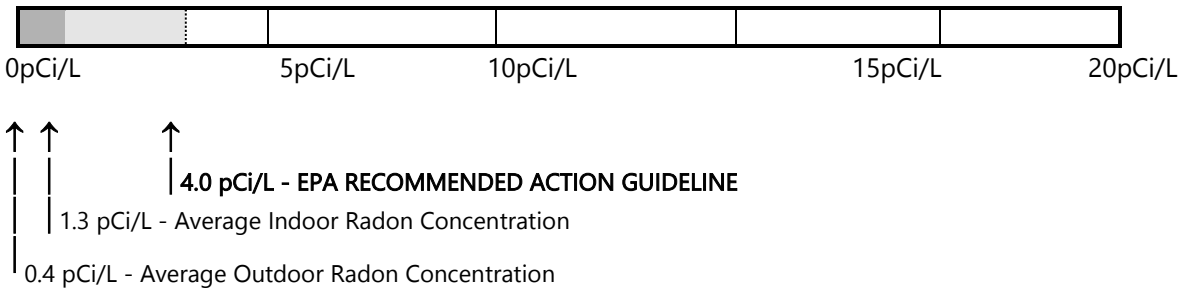
IV. RADON IN AIR TEST RESULTS

Bear Path School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS122	1st Floor	Room 104**	< 0.5
R2	RAS123	1st Floor	Room 104	0.58
R3	RAS124	1st Floor	Room 113	0.62
R4	RAS125	1st Floor	Room 133	1.64
R5	RAS126	1st Floor	Right Side Media Center	1.6
R6	RAS127	1st Floor	Left Side Media Center	1.66
R7	RAD106A	1st Floor	Main Office*	1.28
R8	RAD106B	1st Floor	Main Office*	1.05

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at Bear Path School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS
LOCATION: HAMDEN PUBLIC SCHOOLS
CLIENT NAME: ENVIROMED SERVICES

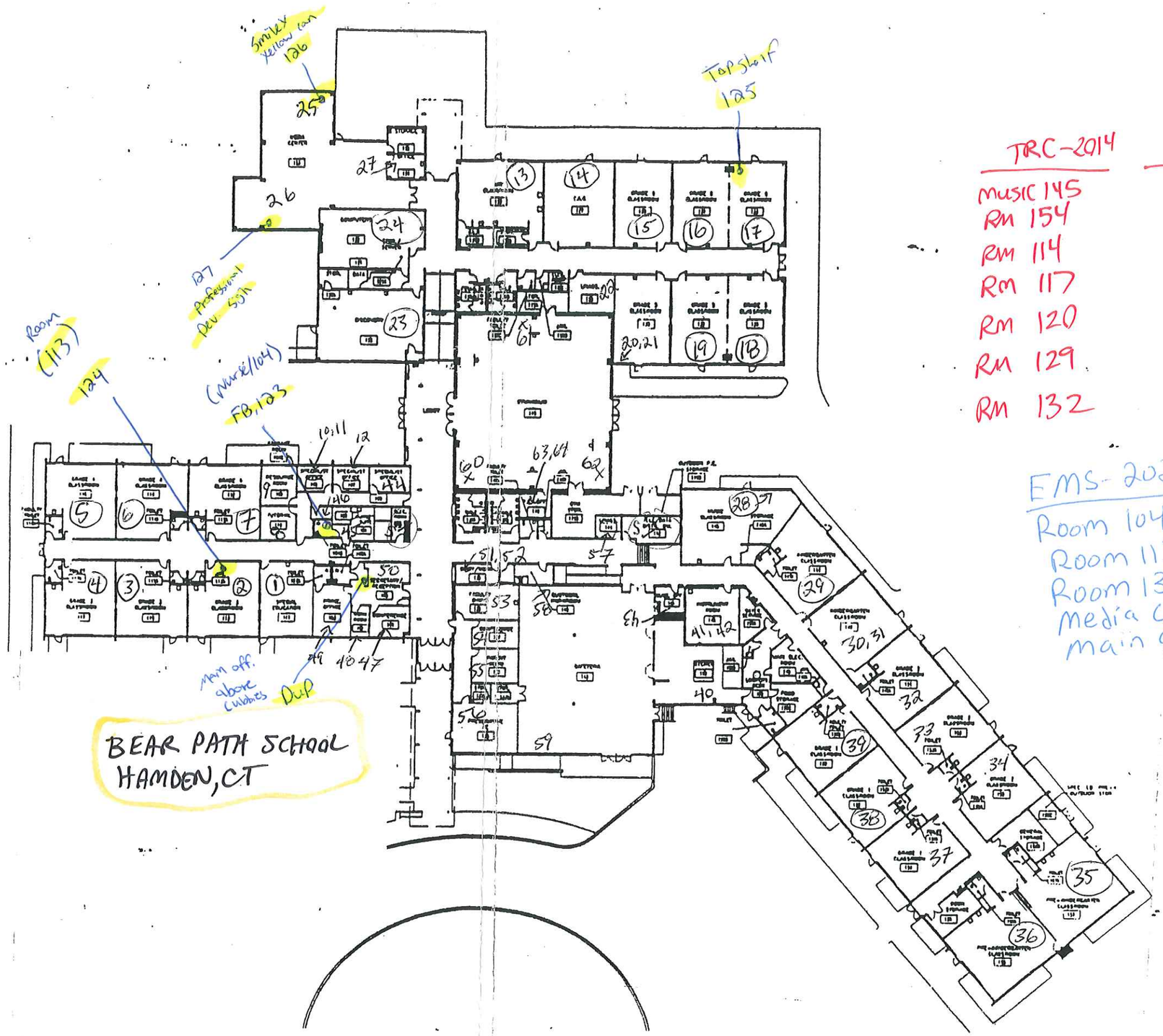
DATE: 2/26/24 - 2/29/2024

PROJ. NO.: IH-24-280

RAS122	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Room 104 (Feild Blank)	2/26/2024	2:50 PM	2/28/2024	2:55 PM	< 0.5
RAS123	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Room 104	2/26/2024	2:50 PM	2/28/2024	2:55 PM	0.58
RAS124	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Room 113	2/26/2024	2:55 PM	2/28/2024	3:00 PM	0.62
RAS125	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Room 133	2/26/2024	3:05 PM	2/28/2024	3:10 PM	1.64
RAS126	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Right Side Media Room	2/26/2024	3:10 PM	2/28/2024	3:15 PM	1.6
RAS127	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Left Side Media Room	2/26/2024	3:12 PM	2/28/2024	3:17 PM	1.66
RAD106 A & B	10 Kirk Road, Hamden, CT	Bear Path Elementary School | Main Office	2/26/2024	3:20 PM	2/28/2024	3:25 PM	1.28/1.05

Appendix B

Radon Map Location



TRC-2014	EMS-2019
Music 145	Rm 111
Rm 154	Rm 116
Rm 114	Rm 122
Rm 117	Rm 127
Rm 120	Rm 132
Rm 129	Rm 151
Rm 132	Rm 158

EMS-2024

Room 104
Room 113
Room 133
Media center
Main office

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Radon Sampling Report
Short Term Radon Testing
for

Central Administration
60 Putnam Avenue,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Central Administration at 60 **Putnam Ave** in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Six (6) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance and United States Environmental Protection Agency (US EPA) sampling protocol. Upon

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

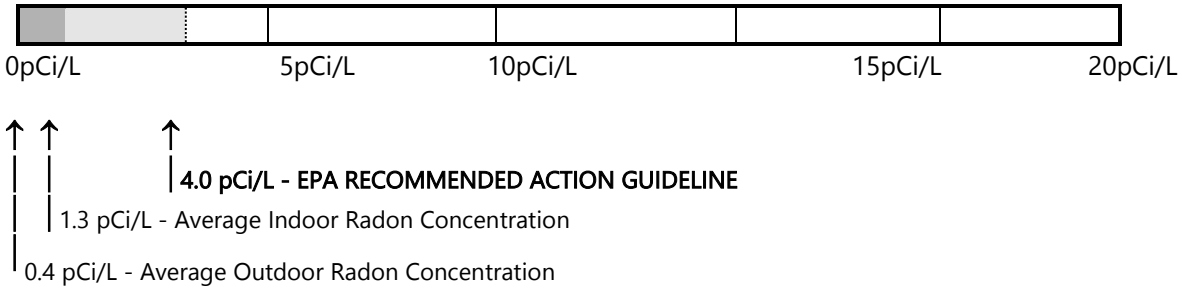
IV. RADON IN AIR TEST RESULTS

Central Administration

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS139	1st Floor	Gym (Right Side) **	< 0.5
R2	RAS140	1st Floor	Gym (Right Side)	2.28
R3	RAS141	1st Floor	Gym (Left Side)	1.69
R4	RAS142	1st Floor	Steps Class #1	1.29
R5	RAD107A	1st Floor	Nurse Office *	1.13
R6	RAD107B	1st Floor	Nurse Office *	1.10

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Central Administration located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the building. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

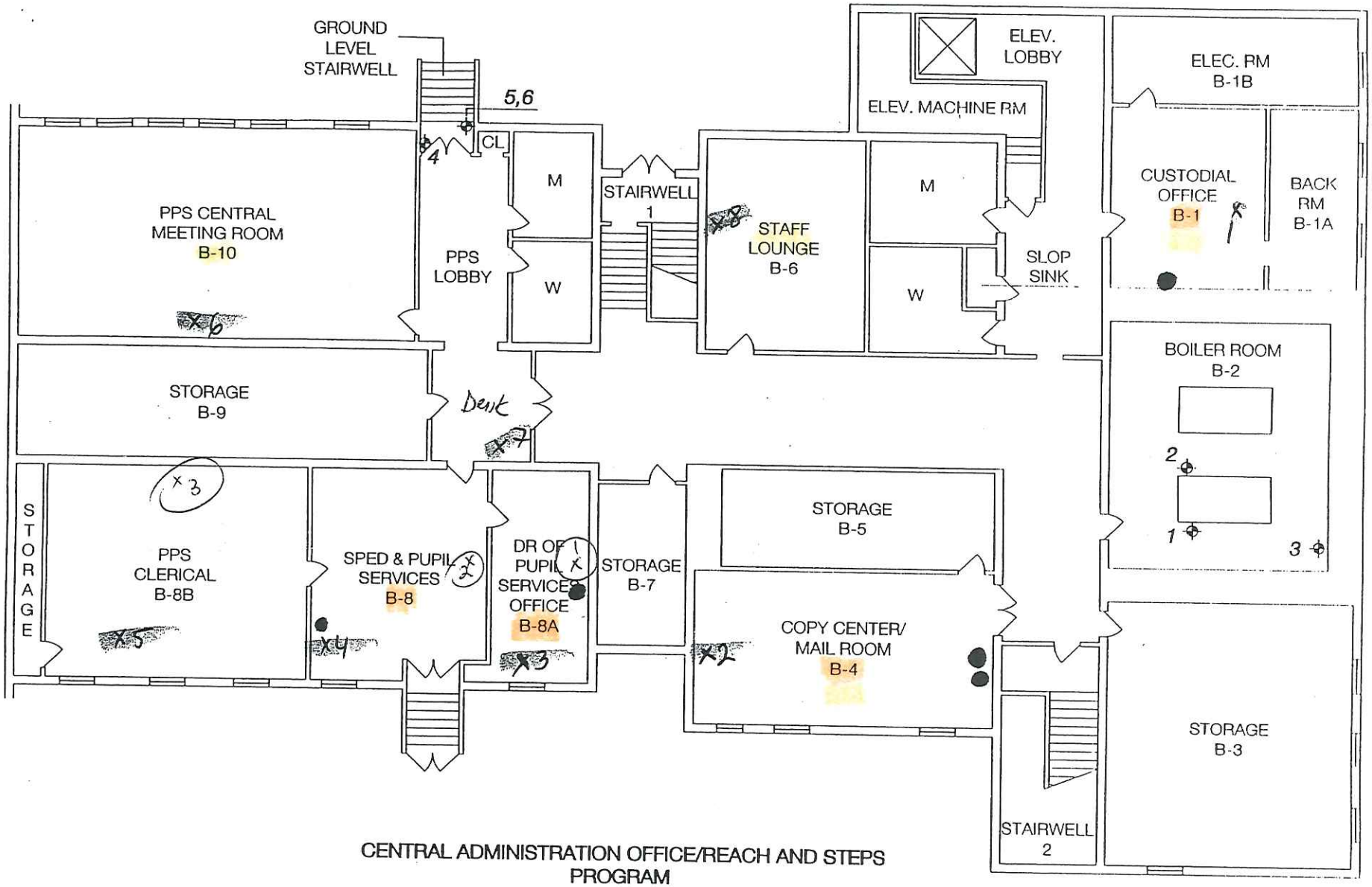
CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS139	60 Putnam Avenue, Hamden CT	Central Admin | Right Side Gym (Field Blank)	2/27/2024	9:45 AM	2/29/2024	10:01 AM	< 0.5
RAS140	60 Putnam Avenue, Hamden CT	Central Admin | Right Side Gym	2/27/2024	9:45 AM	2/29/2024	10:01 AM	2.28
RAS141	60 Putnam Avenue, Hamden CT	Central Admin | Left Side Gym	2/27/2024	9:45 AM	2/29/2024	10:02 AM	1.69
RAS142	60 Putnam Avenue, Hamden CT	Central Admin | Steps Class #1	2/27/2024	9:50 AM	2/29/2024	10:02 AM	1.29
RAD108 A & B	60 Putnam Avenue, Hamden CT	Central Admin | Nurse's Office	2/27/2024	9:55 AM	2/29/2024	10:04 AM	1.13/1.10

Appendix B

Radon Canister Placement Map

12-04-07



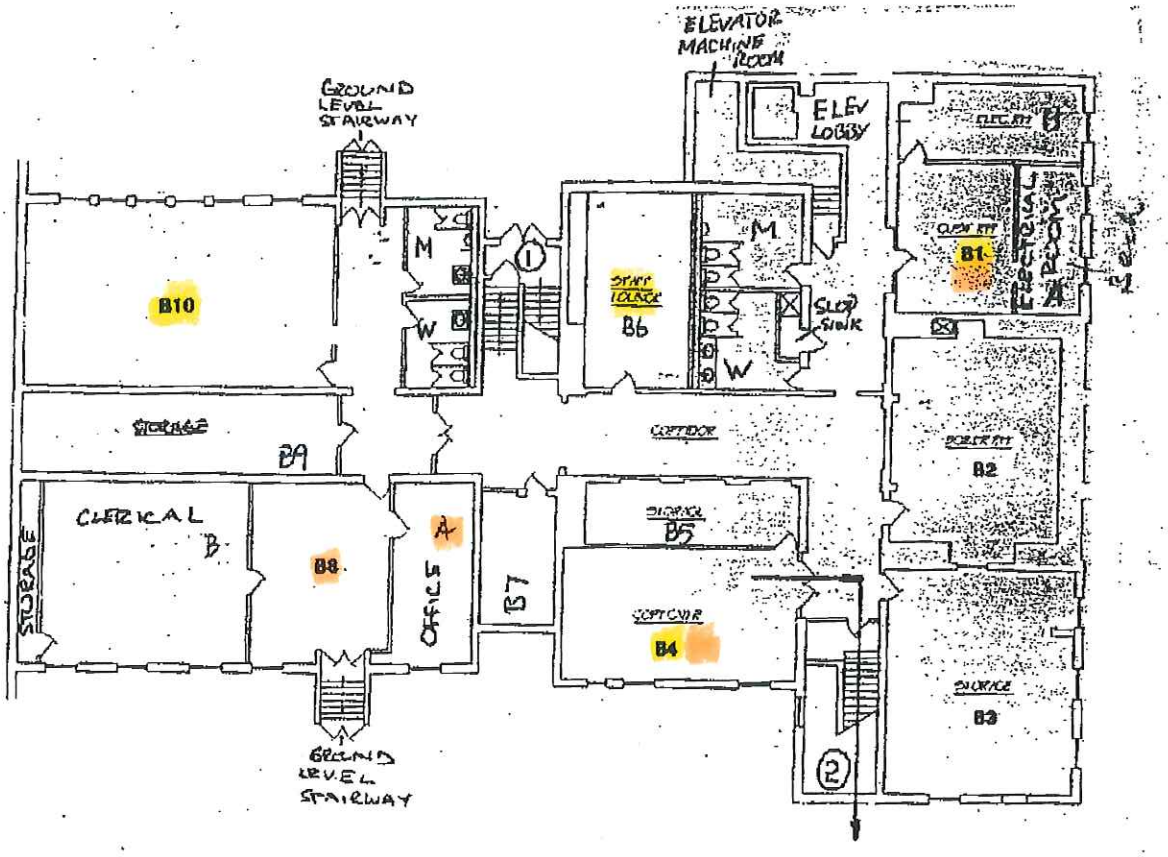
CENTRAL ADMINISTRATION OFFICE/REACH AND STEPS PROGRAM
60 PUTNOM AVANUE, HAMDEN, CT
BASEMENT AND BULK SAMPLE LOCATION DIAGRAM
DECEMBER 2005

24
42

LEGEND:

⌖ = SAMPLE NUMBER AND LOCATION

= TRC 2014
= EMS 2019
= EMS 2024



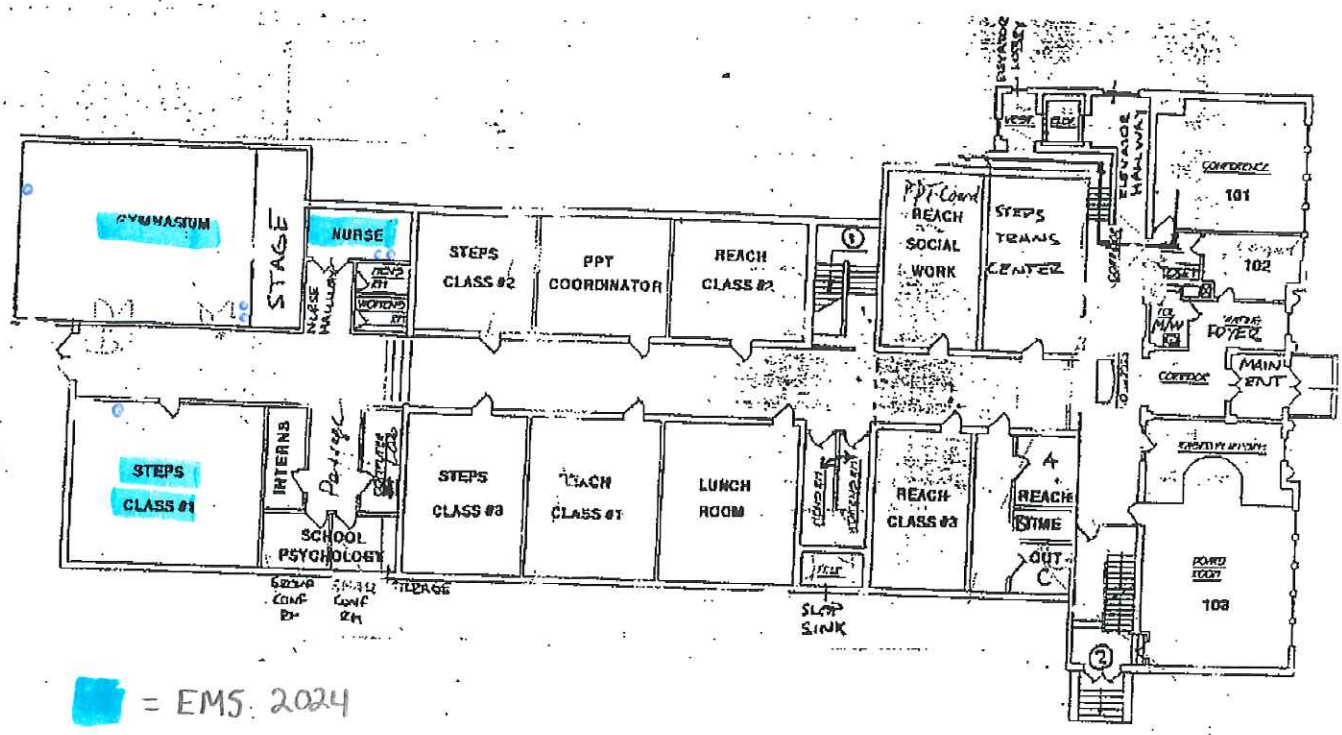
BASEMENT

+Psychology TRC 2014

CENTRAL ADMIN OFFICE
60 PUTNAM AVE
HAMDEN, CT

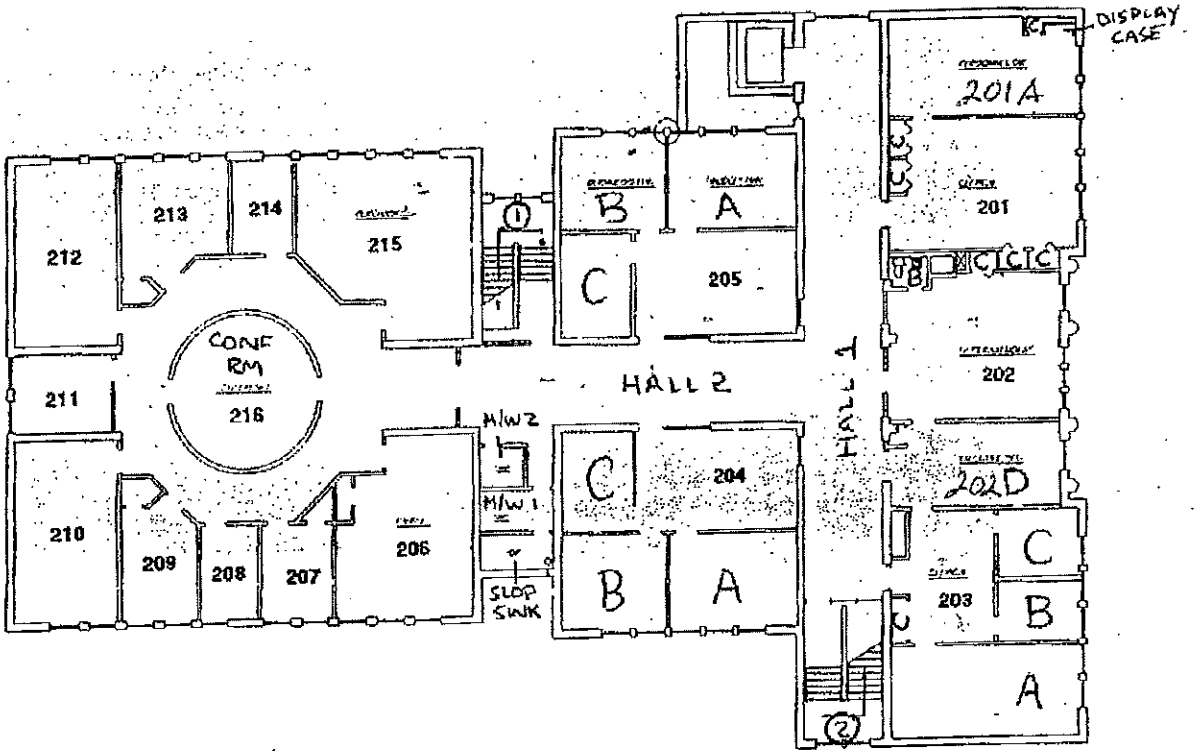
= TRC 2014

= EMS 2019



FIRST FLOOR

CENTRAL ADMIN OFFICE
60 PUTNAM AVE
HAMDEN, CT



SECOND FLOOR

CENTRAL ADMIN OFFICE
60 PUTNAM AVE
HAMDEN, CT

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Church Street School
95 Church Street
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5-year re-evaluation for airborne radon at the Church Street School at 95 Church Street in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was conducted from February 26 to February 28, 2024 by National Radon Proficiency Program (NRPP) accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Five (5) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

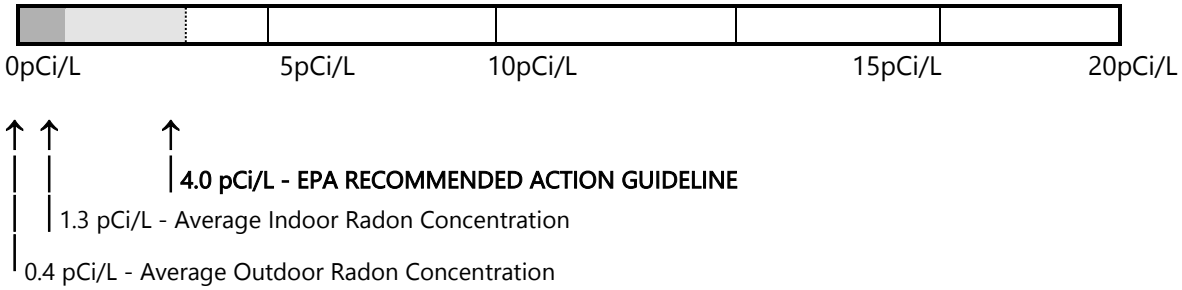
IV. RADON IN AIR TEST RESULTS

Church Street School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS109**	1st Floor	Nurses Office (Field Blank)	< 0.5
R2	RAS110	1st Floor	Nurses Office	0.57
R3	RAS111	1st Floor	C-11	0.88
R4	RAD103A*	1st Floor	Main Office	0.56
R5	RAD103B*	1st Floor	Main Office	0.57

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at Church Street School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS
LOCATION: HAMDEN PUBLIC SCHOOLS
CLIENT NAME: ENVIROMED SERVICES

DATE: 2/26/24 - 2/29/2024

PROJ. NO.: IH-24-280

RAS109	95 Church Street, Hamden, CT	Church Street School | Nurse's Office (Field Blank)	2/26/2024	11:43 AM	2/28/2024	12:07 PM	< 0.5
RAS110	95 Church Street, Hamden, CT	Church Street School | Nurse's Office	2/26/2024	11:43 AM	2/28/2024	12:07 PM	0.57
RAS111	95 Church Street, Hamden, CT	Church Street School | C-11	2/26/2024	11:46 AM	2/28/2024	12:08 PM	0.88
RAD103 A & B	95 Church Street, Hamden, CT	Church Street School | Main Office	2/26/2024	11:48 AM	2/28/2024	12:05 PM	0.56/0.57

Appendix B

Radon Sample Locations

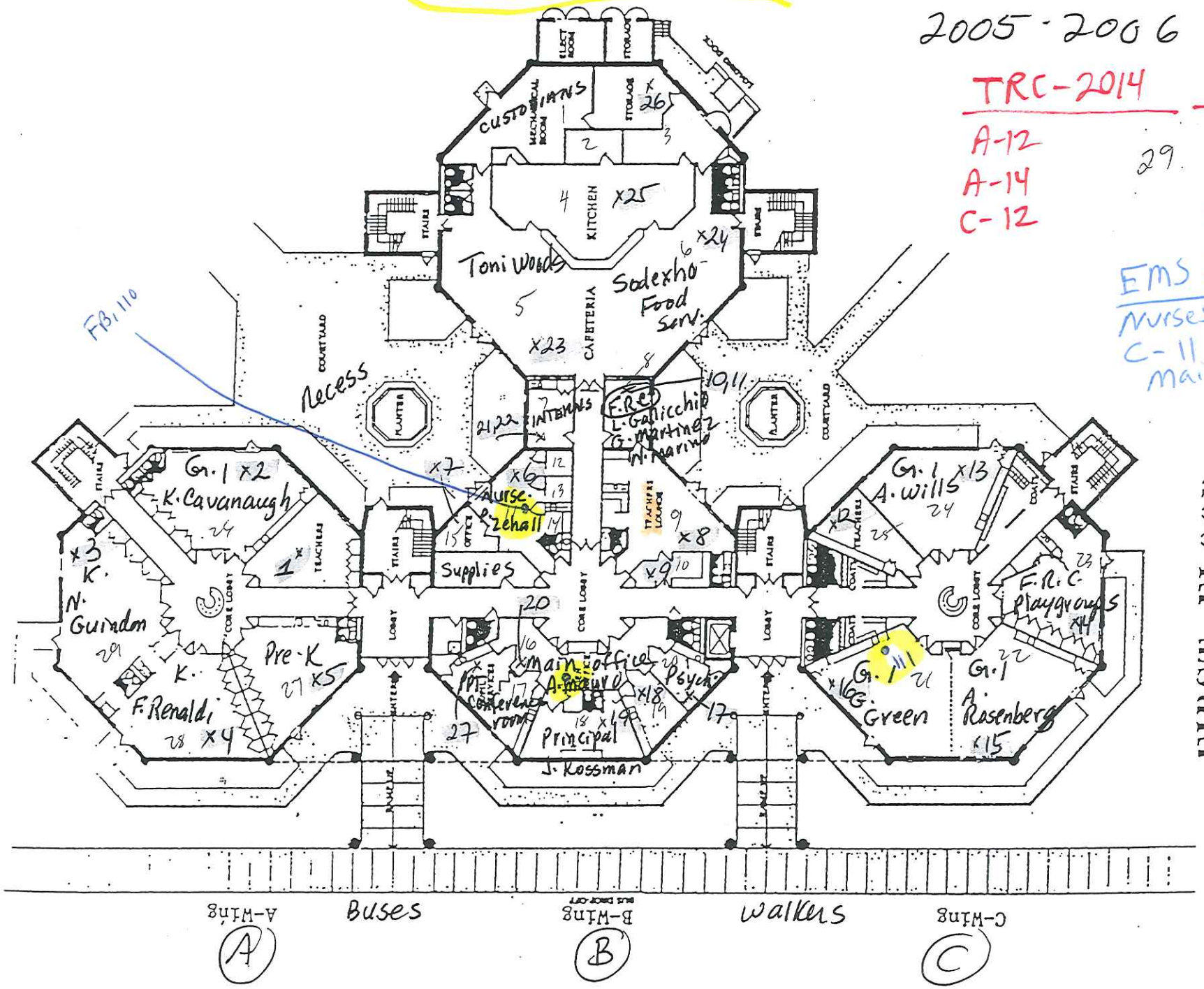
Church St. School

12-03-07

2005-2006

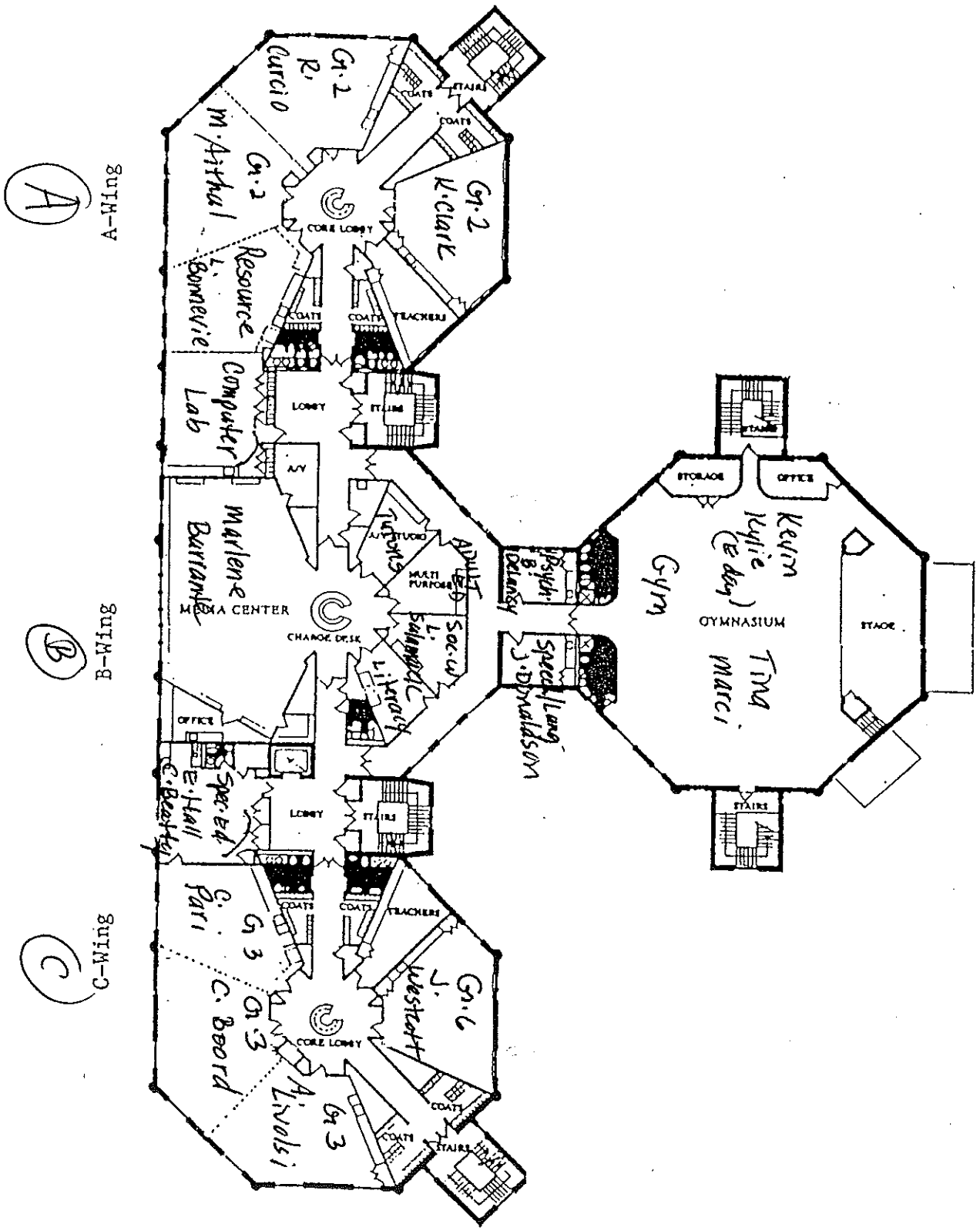
TRC-2014	EMS-2019
A-12	A-13
A-14	C-13
C-12	STAFF LOUNGE

EMS 2024
Nurses office
C-11
main office



CHURCH STREET ELEMENTARY SCHOOL

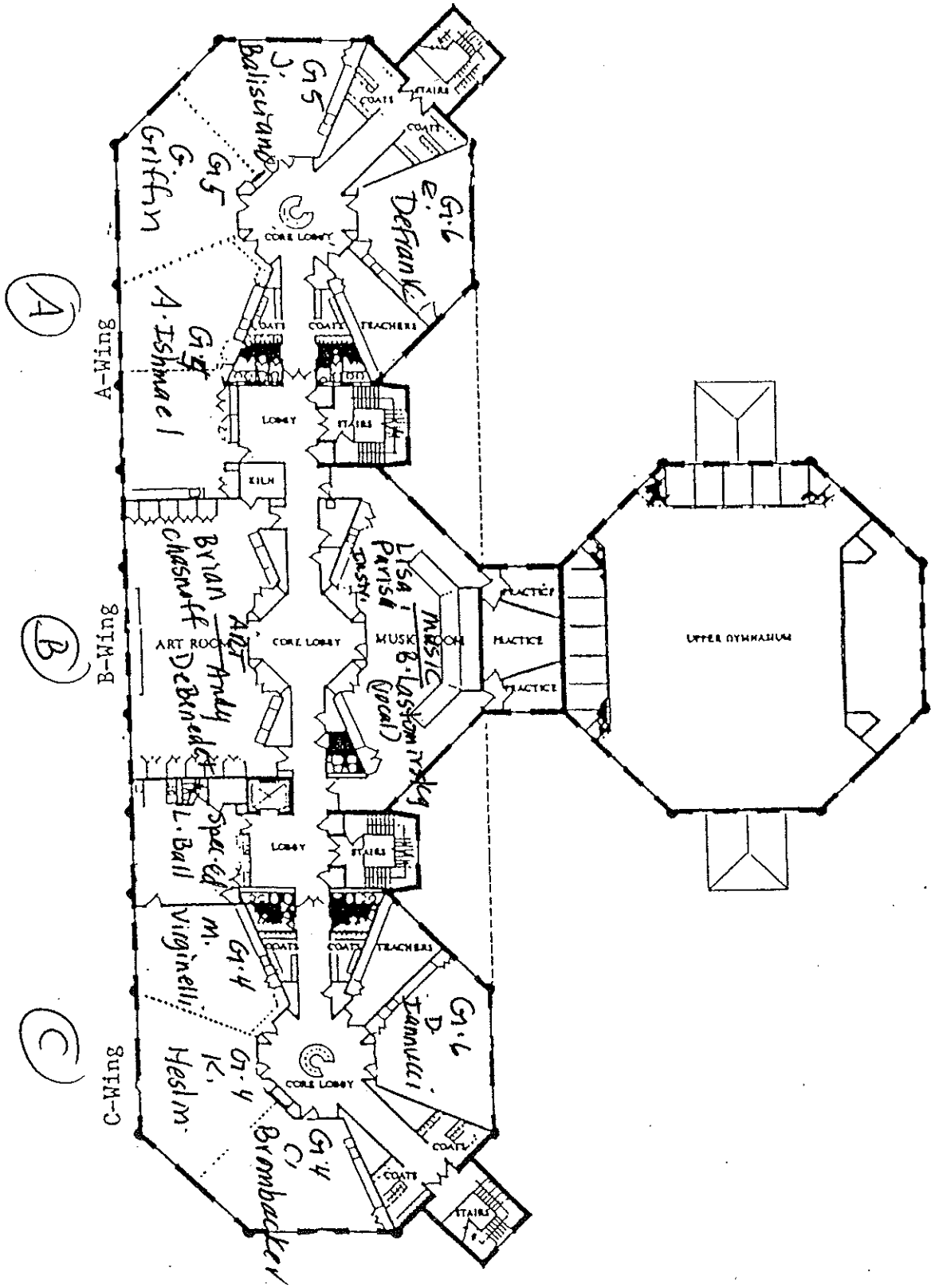
EDWARD SAAD & ASSOCIATES - ARCHITECTS



SECOND FLOOR

CHURCH STREET ELEMENTARY SCHOOL

EDWARD SAAD & ASSOCIATES · ARCHITECTS



THIRD FLOOR

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Dunbar Hill School,
315 Lane Street
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5-year re-evaluation for airborne radon at the Dunbar Hill School at 315 Lane Street in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 26 to February 28, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Eight (8) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

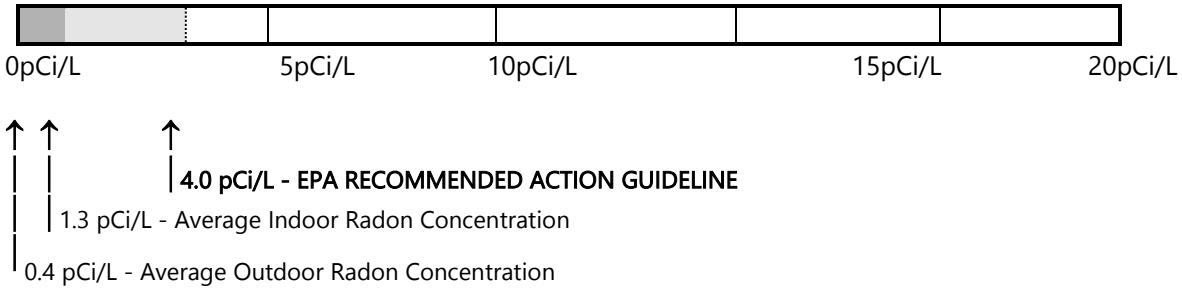
IV. RADON IN AIR TEST RESULTS

Dunbar Hill School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS116**	1st Floor	Classroom #6 (Field Blank)	< 0.5
R2	RAS117	1st Floor	Classroom #6	< 0.5
R3	RAS118	1st Floor	Classroom#2	< 0.5
R4	RAS119	1st Floor	Health Office	< 0.5
R5	RAS120	1st Floor	Staff Lounge/Conference Room	< 0.5
R6	RAS121	1st Floor	Practice Room #3	< 0.5
R7	RAD105A*	1st Floor	Computer Lab	< 0.5
R8	RAD105B*	1st Floor	Computer Lab	< 0.5

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at Dunbar Hill School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5-year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

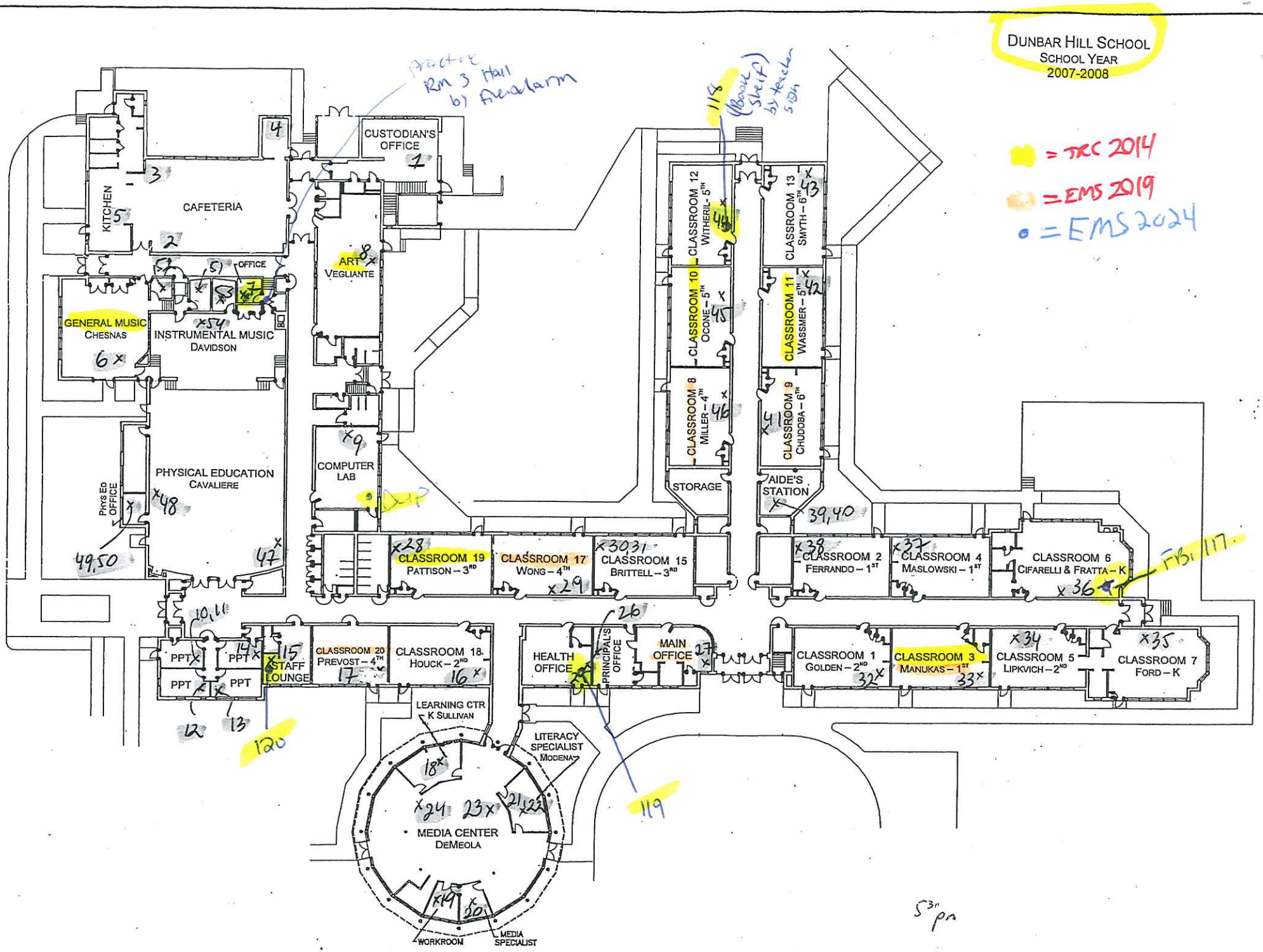
LOCATION: HAMDEN PUBLIC SCHOOLS

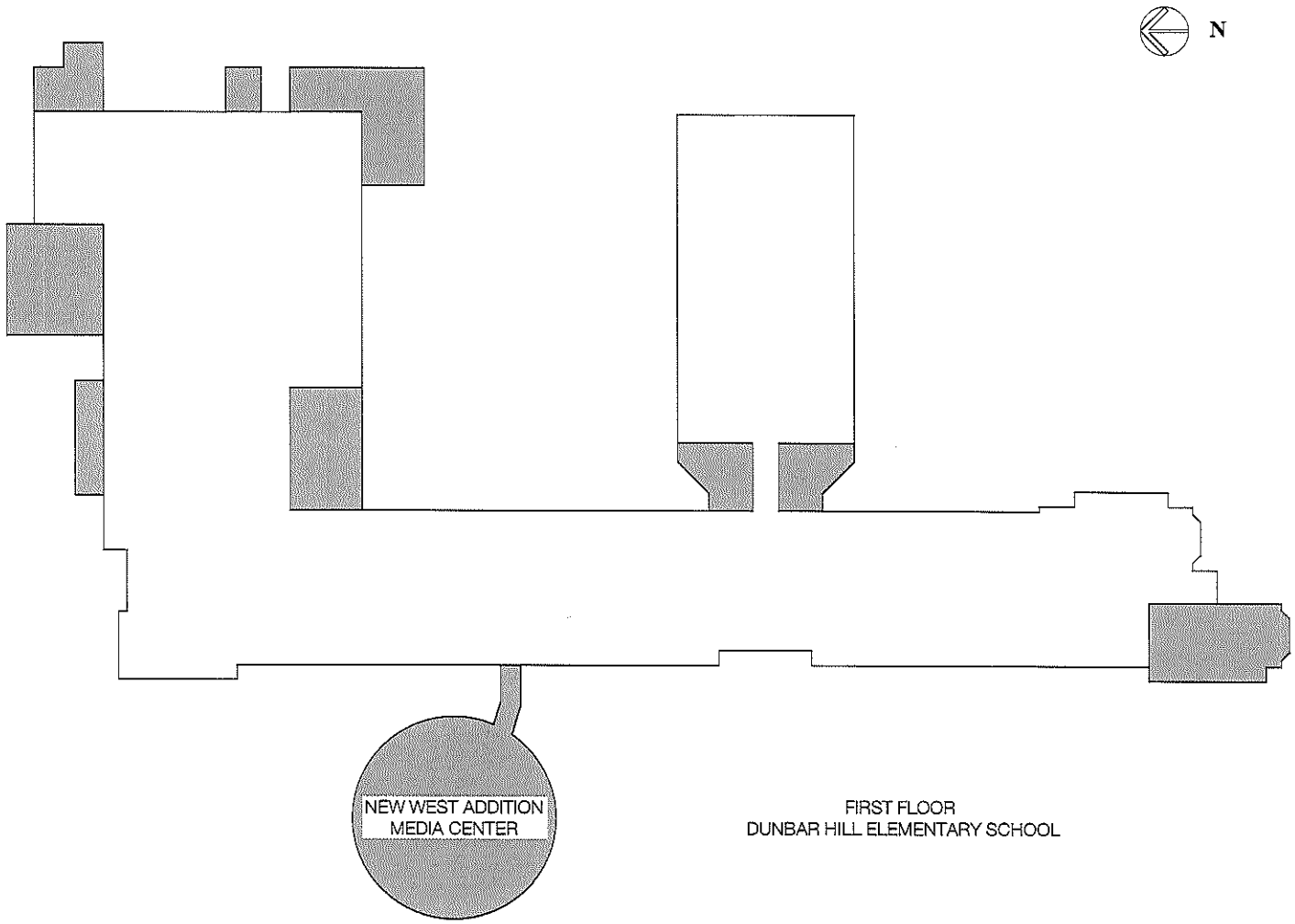
CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS116	315 Lane Street, Hamden, CT	Dunbar Hill School | Classroom #6 (Field Blank)	2/26/2024	1:50 PM	2/28/2024	1:55 PM	< 0.5
RAS117	315 Lane Street, Hamden, CT	Dunbar Hill School | Classroom #6	2/26/2024	1:50 PM	2/28/2024	1:55 PM	< 0.5
RAS118	315 Lane Street, Hamden, CT	Dunbar Hill School | Classroom #2	2/26/2024	1:55 PM	2/28/2024	2:00 PM	< 0.5
RAS119	315 Lane Street, Hamden, CT	Dunbar Hill School | Health Office	2/26/2024	2:00 PM	2/28/2024	2:05 PM	< 0.5
RAS120	315 Lane Street, Hamden, CT	Dunbar Hill School | Staff Lounge/Conference Room	2/26/2024	2:05 PM	2/28/2024	2:10 PM	< 0.5
RAS121	315 Lane Street, Hamden, CT	Dunbar Hill School | Practice Room #3	2/26/2024	2:15 PM	2/28/2024	2:18 PM	< 0.5
RAD105 A & B	315 Lane Street, Hamden, CT	Dunbar Hill School | Computer Lab	2/26/2024	2:10 PM	2/28/2024	2:15 PM	< 0.5/< 0.5

Appendix B

Radon Sample Locations


DUNBAR HILL SCHOOL
SCHOOL YEAR
2007-2008
= DRC 2014
= EMS 2019
= EMS 2024
practice
Rm 3 Hall
by fire alarm
CUSTODIAN'S OFFICE
KITCHEN
CAFETERIA
OFFICE
ART
VEGLIANTE
GENERAL MUSIC
CHESNAS
INSTRUMENTAL MUSIC
DAVIDSON
PHYSICAL EDUCATION
CAVALIERE
PHYS ED OFFICE
COMPUTER LAB
CLASSROOM 12
WITHERIL – 5TH
CLASSROOM 10
OCONE – 5TH
CLASSROOM 8
MILLER – 4TH
STORAGE
CLASSROOM 13
SMYTH – 6TH
CLASSROOM 11
WASSMER – 5TH
CLASSROOM 9
CHUDOBA – 6TH
AIDE'S STATION
CLASSROOM 19
PATTISON – 3RD
CLASSROOM 17
WONG – 4TH
CLASSROOM 15
BRITTELL – 3RD
CLASSROOM 2
FERRANDO – 1ST
CLASSROOM 4
MASLOWSKI – 1ST
CLASSROOM 6
CIFARELLI & FRATTA – K
PPT
PPT
PPT
PPT
STAFF LOUNGE
CLASSROOM 20
PREVOST – 4TH
CLASSROOM 18
HOUCK – 2ND
HEALTH OFFICE
PRINCIPAL'S OFFICE
MAIN OFFICE
CLASSROOM 1
GOLDEN – 2ND
CLASSROOM 3
MANUKAS – 1ST
CLASSROOM 5
LIPKVICH – 2ND
CLASSROOM 7
FORD – K
LEARNING CTR
K SULLIVAN
LITERACY SPECIALIST
MODENA
MEDIA CENTER
DEMEOLA
WORKROOM
MEDIA SPECIALIST
119
120
53" pn
← LANE STREET →


N
NEW WEST ADDITION
MEDIA CENTER
FIRST FLOOR
DUNBAR HILL ELEMENTARY SCHOOL
NEW ADDITIONS OF THE SCHOOL
LANE STREET

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Hamden High School
2040 Dixwell Avenue,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Hamden High School at 2040 Dixwell Avenue in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Thirteen (13) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

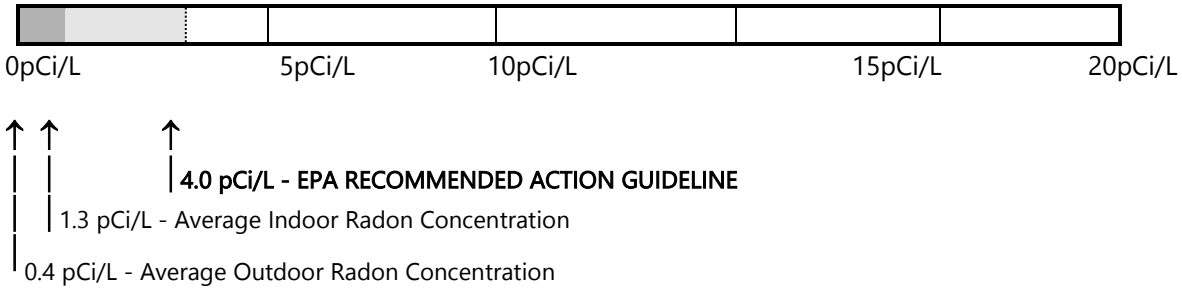
IV. RADON IN AIR TEST RESULTS

Hamden High School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS128	1st Floor	Room D104 **	< 0.5
R2	RAS129	1st Floor	Room D104	< 0.5
R3	RAS130	1st Floor	Room D110	< 0.5
R4	RAS131	1st Floor	Room 106	< 0.5
R5	RAS132	1st Floor	Gym (Right Side)	< 0.5
R6	RAS133	1st Floor	Gym (Left Side)	< 0.5
R7	RAS134	1st Floor	Auditorium (Right Side)	0.52
R8	RAS135	1st Floor	Auditorium (Left Side)	0.65
R9	RAS136	1st Floor	Room B110	< 0.5
R10	RAS137	1st Floor	Room B105	< 0.5
R11	RAS138	1st Floor	Room A112	< 0.5
R12	RAD112A	1st Floor	Room 104A (Main Office) *	0.75
R13	RAD112B	1st Floor	Room 104A (Main Office) *	0.76

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Hamden High School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS128	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room D104 (Field Blank)	2/27/2024	8:35 AM	2/29/2024	9:17 AM	< 0.5
RAS129	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room D104	2/27/2024	8:35 AM	2/29/2024	9:17 AM	< 0.5
RAS130	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room D110	2/27/2024	8:30 AM	2/29/2024	9:16 AM	< 0.5
RAS131	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room 106	2/27/2024	8:38 AM	2/29/2024	9:18 AM	< 0.5
RAS132	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Gym (Right Side)	2/27/2024	8:41 AM	2/29/2024	9:19 AM	< 0.5
RAS133	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Gym (Left Side)	2/27/2024	8:44 AM	2/29/2024	9:20 AM	< 0.5
RAS134	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Auditorium (Right Side)	2/27/2024	8:50 AM	2/29/2024	9:25 AM	< 0.5
RAS135	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Auditorium (Left Side)	2/27/2024	8:53 AM	2/29/2024	9:25 AM	< 0.5
RAS136	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room B110	2/27/2024	8:55 AM	2/29/2024	9:26 AM	< 0.5
RAS137	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room B105	2/27/2024	8:58 AM	2/29/2024	9:26 AM	0.52
RAS138	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room A112	2/27/2024	9:00 AM	2/29/2024	9:28 AM	0.65
RAD107 A & B	2040 Dixwell Avenue, Hamden, CT	Hamden High School | Room A104 (Main Office)	2/27/2024	9:05 AM	2/29/2024	9:30 AM	0.75/0.76

Appendix B

Radon Sample Locations

TRC 2014

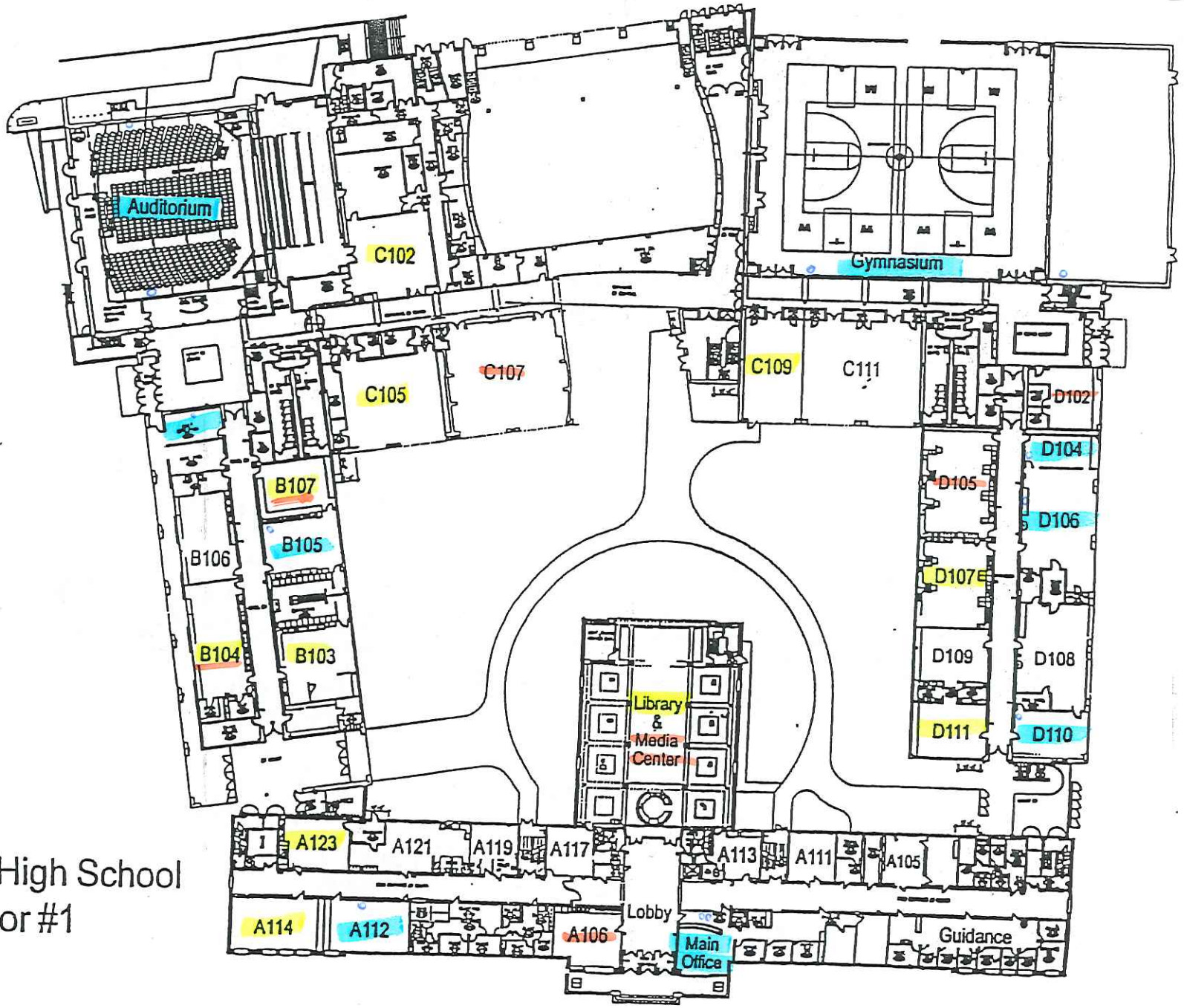
Men's PE Office
C105 A115 - Library
C109 A123
C102 A114
B107 D111
B104 D107
B103 A102

EMS 2019

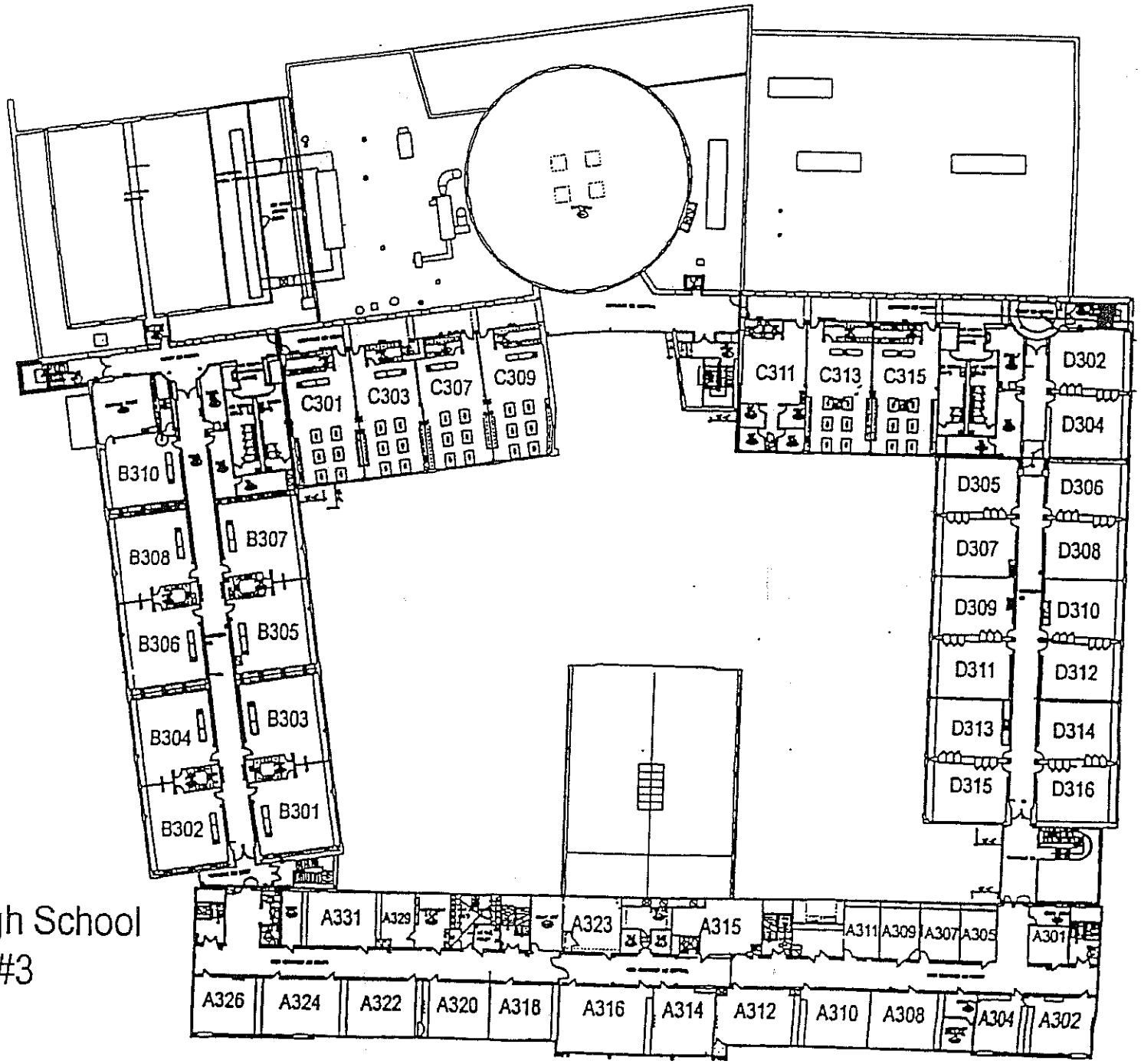
D102 A106
C107 Library
C106 A102
B107 A101
B104 D105
A110

EMS 2024

D104 B110
D110 B105
D106 A112
Gym A104 - Main office
Auditorium

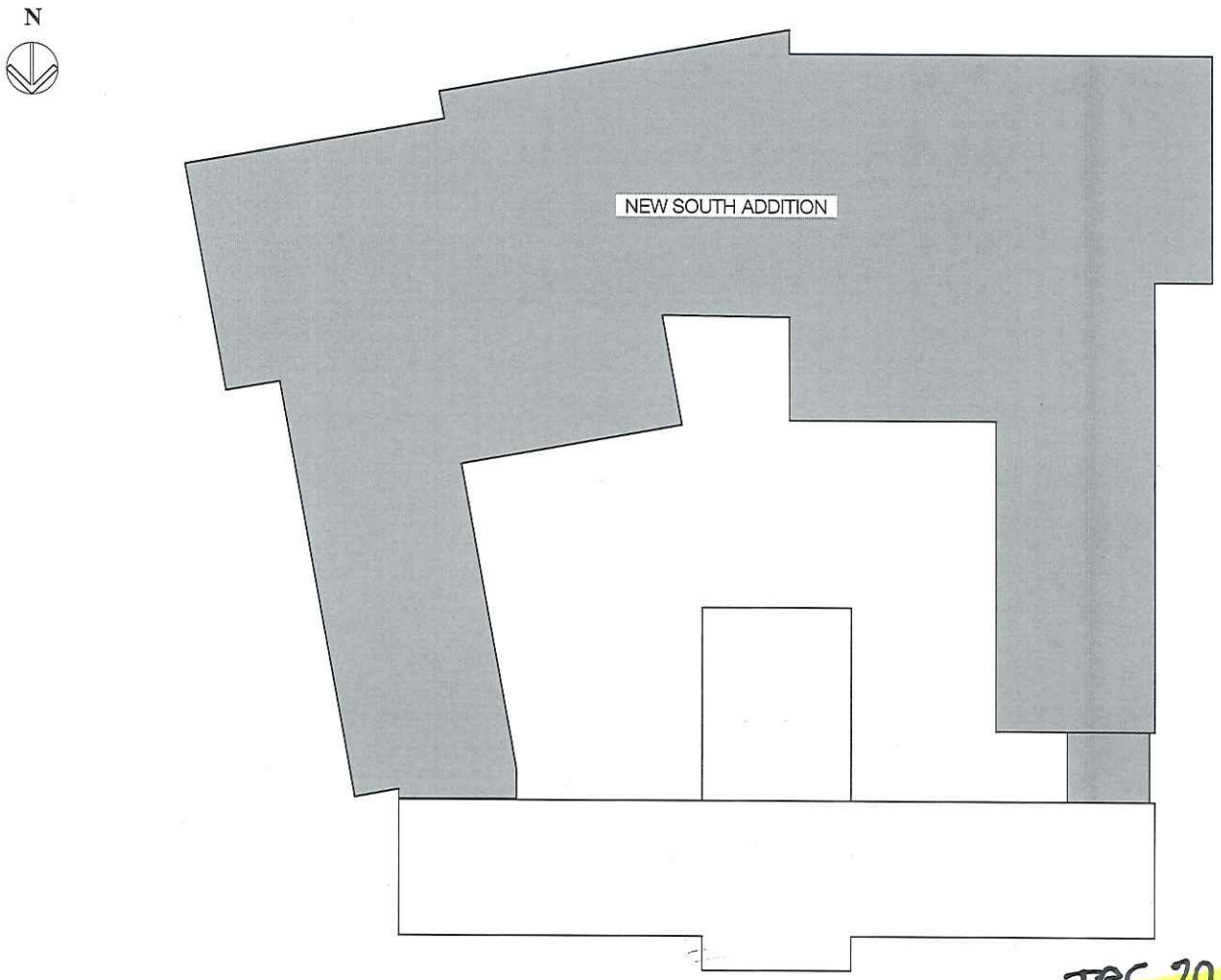


Hamden High School
Floor #1



Hamden High School
Floor #3

HAMDEN HIGH SCHOOL (get better floor plan)



FIRST FLOOR
HAMDEN HIGH SCHOOL

MENS PE OFFICE

TRC 2014:
- C105
- C109
- C102
- B107
- B104
- B103
- A115-LIBRARY
- A123
- A114
- D111
- D107
- A102

EMS 2019:
- D102
- C107
- C106
- B107
- B104
- A110
- A106
- LIBRARY
- A102
- A101
- D105

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Hamden Middle School
2623 Dixwell Avenue,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Hamden Middle School at 2623 Dixwell Avenue in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Ten (10) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

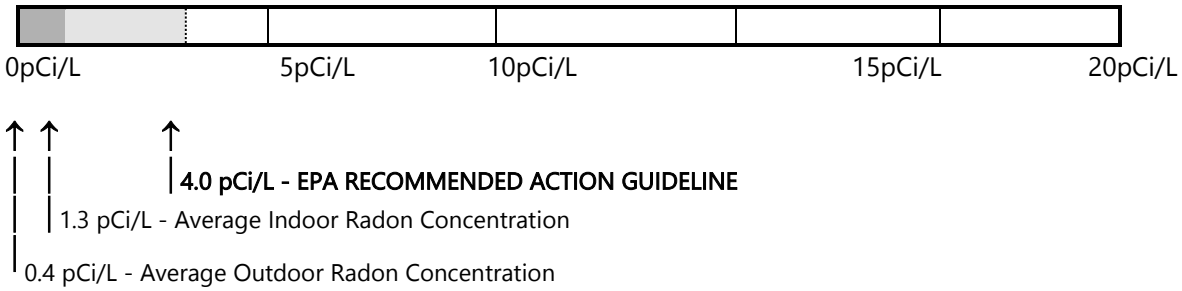
IV. RADON IN AIR TEST RESULTS

Hamden Middle School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS143	1st Floor	Room 117 **	< 0.5
R2	RAS144	1st Floor	Room 117	< 0.5
R3	RAS145	1st Floor	Room 100 (Auditorium)	< 0.5
R4	RAS146	1st Floor	Room 100 (Auditorium)	< 0.5
R5	RAS147	1st Floor	Room 110 (Cafeteria)	< 0.5
R6	RAS148	1st Floor	Room 110A (Cafeteria)	< 0.5
R7	RAS149	1st Floor	Room 134	< 0.5
R8	RAS150	1st Floor	Room 144	< 0.5
R9	RAD112A	1st Floor	Room 193 (Main Office) *	< 0.5
R10	RAD112B	1st Floor	Room 193 (Main Office) *	< 0.5

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Hamden Middle School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS143	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 117 (Field Blank)	2/27/2024	11:18 AM	2/29/2024	12:03 PM	< 0.5
RAS144	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 117	2/27/2024	11:18 AM	2/29/2024	12:03 PM	< 0.5
RAS145	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 100 (Auditorium)	2/27/2024	11:08 AM	2/29/2024	11:57 AM	< 0.5
RAS146	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 100 (Auditorium)	2/27/2024	11:08 AM	2/29/2024	11:58 AM	< 0.5
RAS147	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 110 (Cafeteria)	2/27/2024	11:15 AM	2/29/2024	12:02 PM	< 0.5
RAS148	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 110A (Cafeteria)	2/27/2024	11:15 AM	2/29/2024	12:02 PM	< 0.5
RAS149	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 134	2/27/2024	11:20 AM	2/29/2024	12:06 PM	< 0.5
RAS150	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 144	2/27/2024	11:25 AM	2/29/2024	12:08 PM	< 0.5
RAD109 A & B	2623 Dixwell Avenue, Hamden, CT	Hamden Middle School | Room 193 (Main Office)	2/27/2024	11:05 AM	2/29/2024	11:57 AM	< 0.5/< 0.5

Appendix B

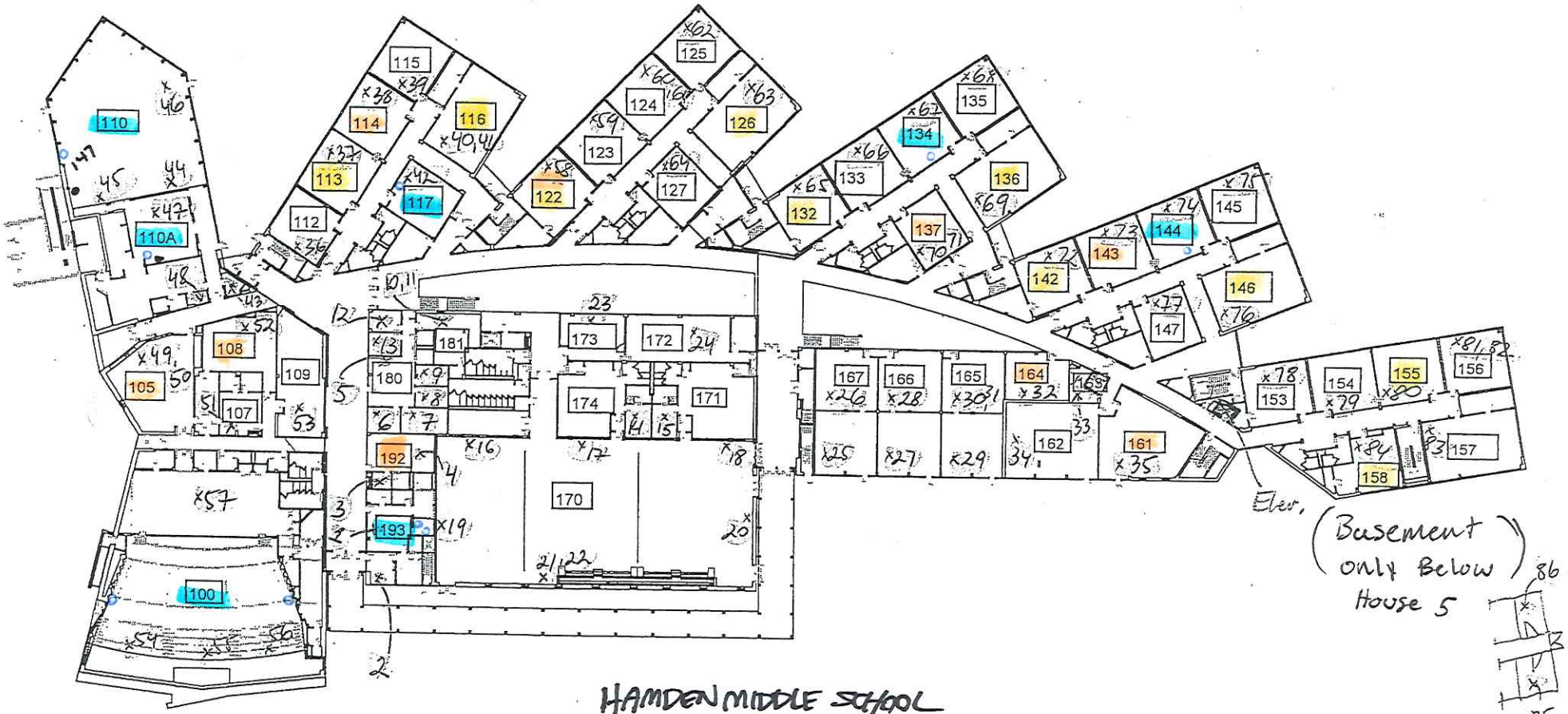
Radon Sample Locations

12-11-07

= JRC 2014

= EMS 2019

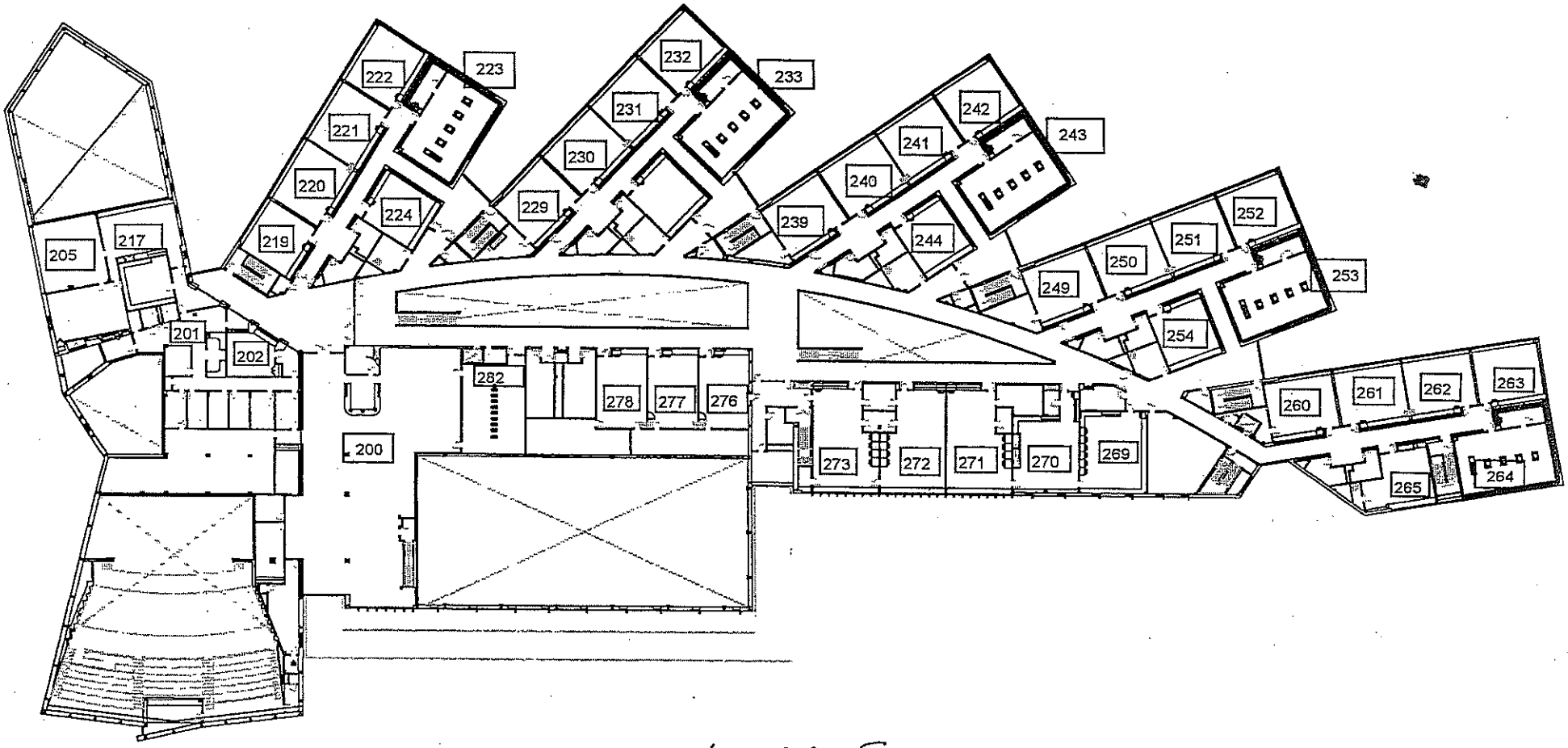
= EMS 2024



HAMDEN MIDDLE SCHOOL

First Floor

Bsmt — 2 sample beneath 153-158 Wing



Second Floor

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Helen Street School,
285 Helen Street
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5-year re-evaluation for airborne radon at the Helen St. School at 285 Helen Street in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 26 to February 28, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Six (6) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

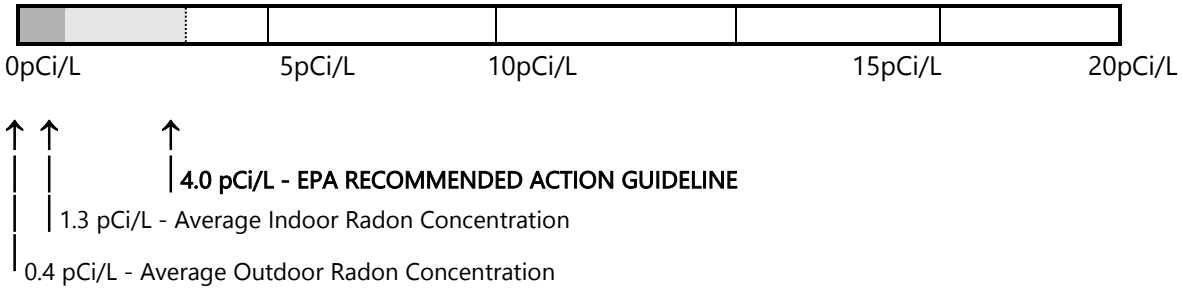
IV. RADON IN AIR TEST RESULTS

Helen Street School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS112	Basement	Entrance Corridor**	< 0.5
R2	RAS113	Basement	Entrance Corridor	1.27
R3	RAS114	Basement	Room 3	1.42
R4	RAS115	Basement	Room 2	1.48
R5	RAD104A	1st Floor	638-Carrasco*	1.87
R6	RAD104B	1st Floor	638- Carrasco*	1.63

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Helen Street School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS
LOCATION: HAMDEN PUBLIC SCHOOLS
CLIENT NAME: ENVIROMED SERVICES

DATE: 2/26/24 - 2/29/2024

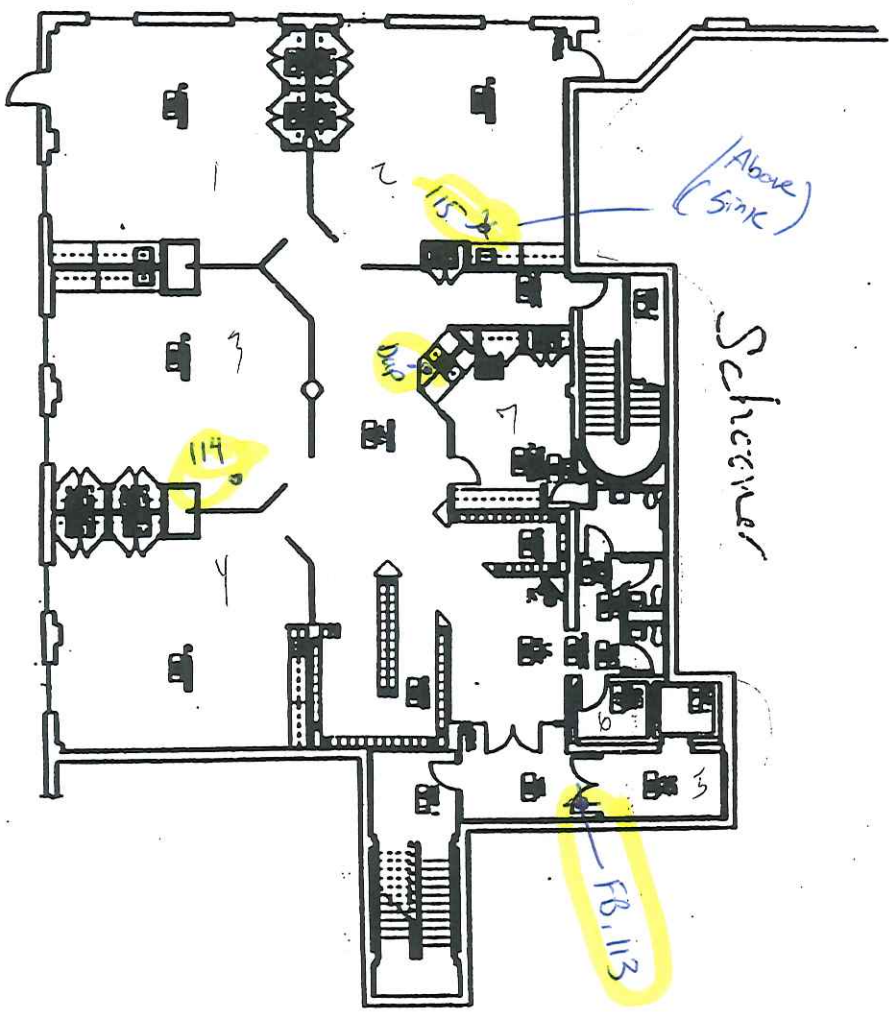
PROJ. NO.: IH-24-280

RAS112	285 Helen Street, Hamden, CT	Helen Street School | Entrance Corridor (Field Blank)	2/26/2024	1:10 PM	2/28/2024	1:26 PM	< 0.5
RAS113	285 Helen Street, Hamden, CT	Helen Street School | Entrance Corridor	2/26/2024	1:15 PM	2/28/2024	1:26 PM	1.27
RAS114	285 Helen Street, Hamden, CT	Helen Street School | Room 3	2/26/2024	1:20 PM	2/28/2024	1:28 PM	1.42
RAS115	285 Helen Street, Hamden, CT	Helen Street School | Room 2	2/26/2024	1:25 PM	2/28/2024	1:28 PM	1.48
RAD104 A & B	285 Helen Street, Hamden, CT	Helen Street School | 638 - Carrasco	2/26/2024	1:23 PM	2/28/2024	1:27 PM	1.87/1.63

Appendix B

Radon Sample Locations

Helen Street
1ST



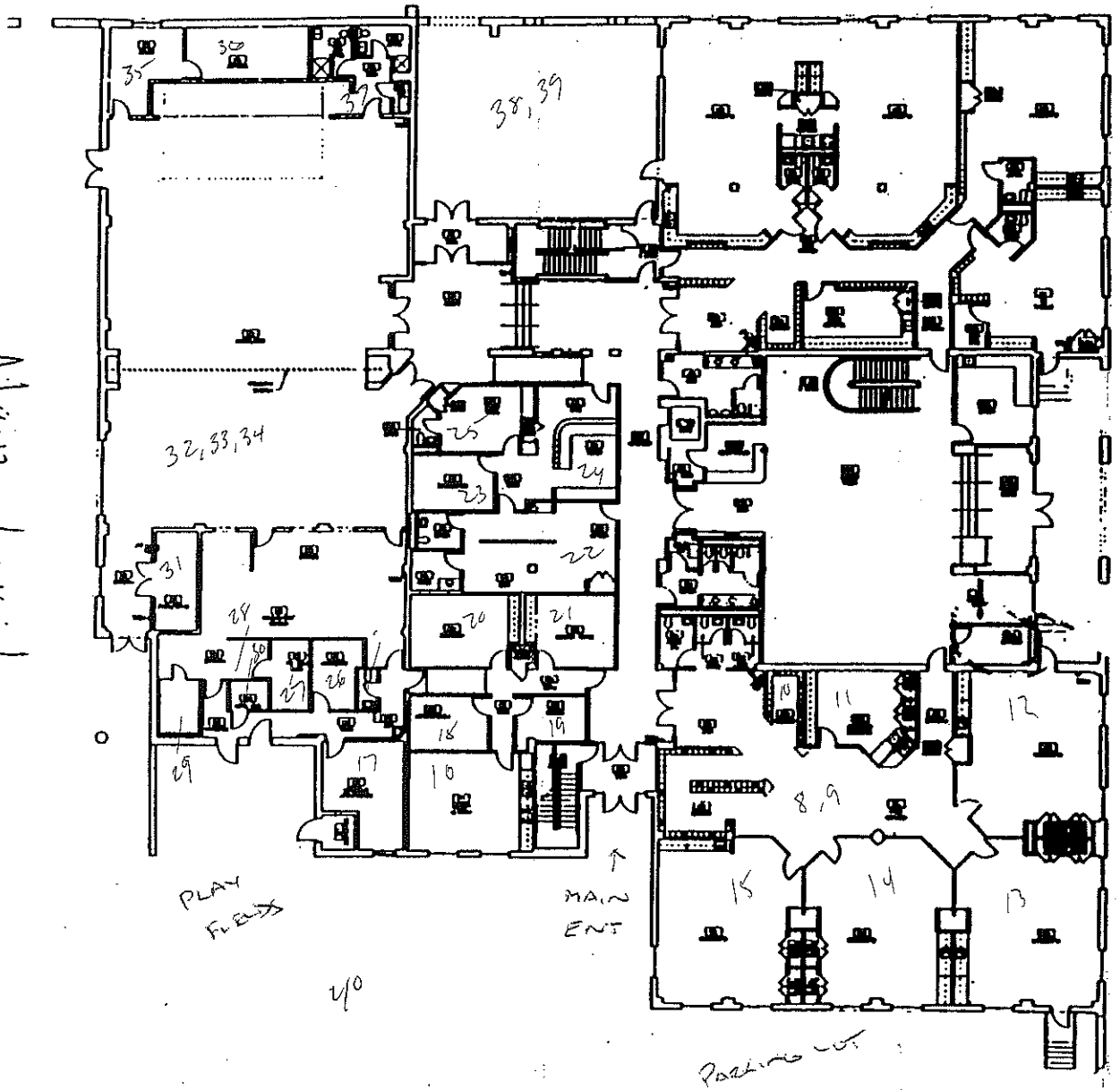
TRC-2014	EMS 2019
Kindergarten-DeStefano	Rm 1
Atlantis-Iannotti	Rm 4
Literacy Specialist	Callipso Pre-K1
Atlantis-Quinn	Atlantis 154

EMS-2024
Entrance Corridor
Room 3
Rm-2
638-Carrasco

Helen Street
2nd

HELEN ST

Calypso



Atlantis

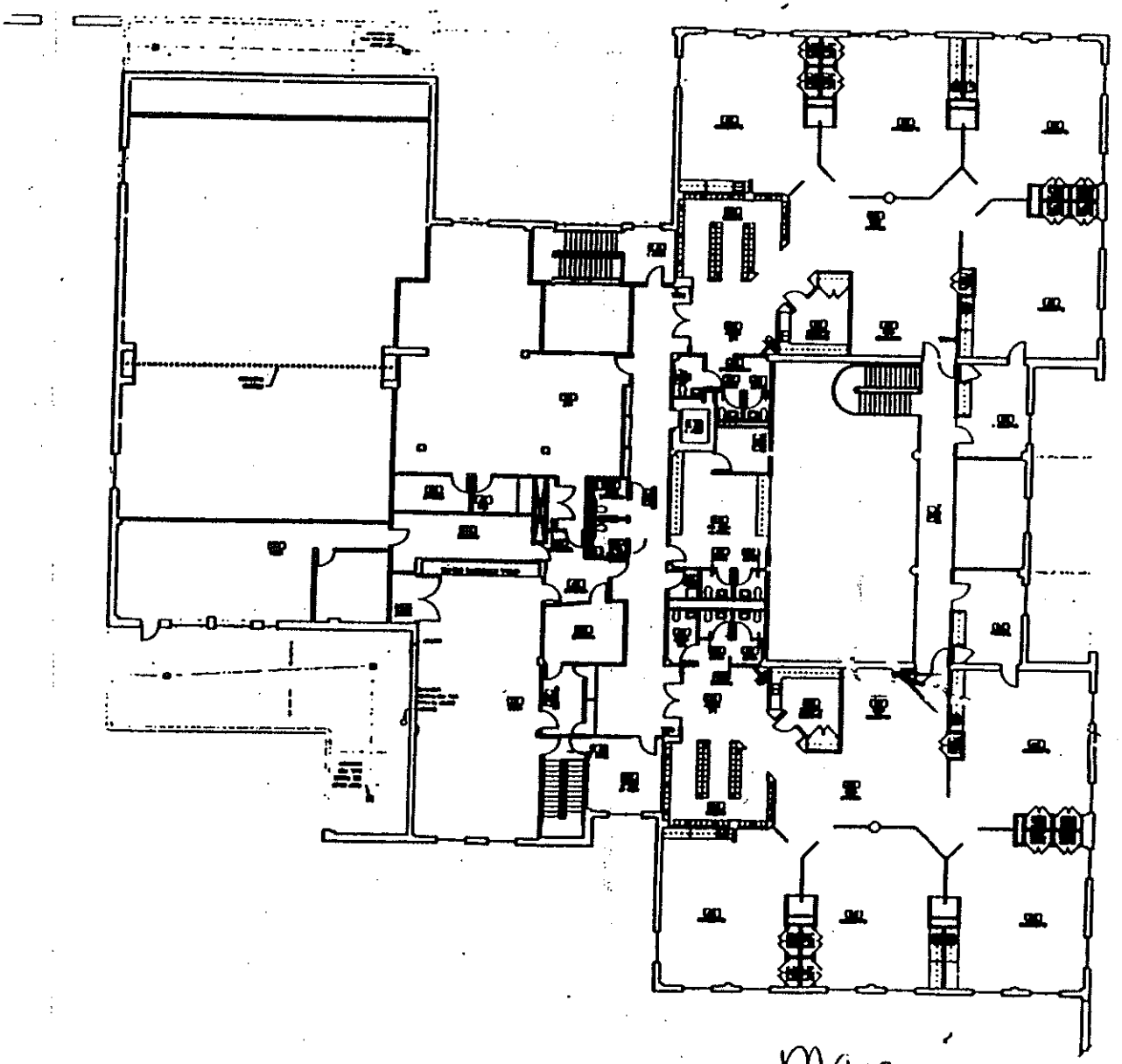
PINE ROCK AVE

GORHAM RD

Helen STREET

3rd

Coral Reef



Mariner

Upper Level

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Ridge Hill School
120 Carew Road
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5-year re-evaluation for airborne radon at the Ridge Hill School at 120 Carew Road in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 26 to February 28, 2024, by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Six (6) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

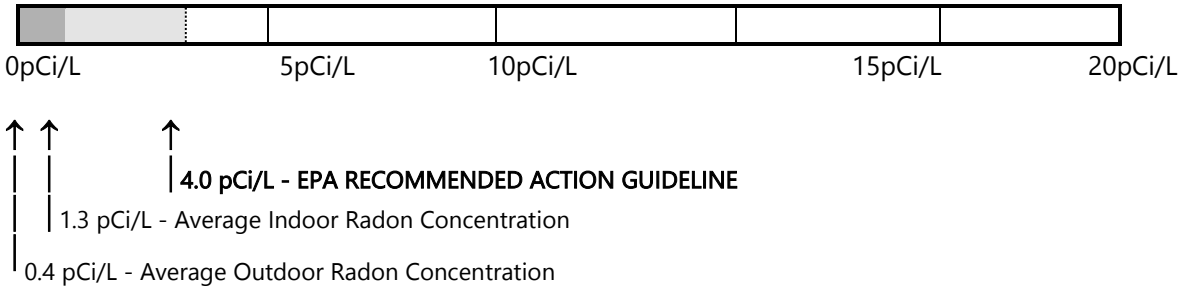
IV. RADON IN AIR TEST RESULTS

Ridge Hill School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS101	1st Floor	Mercury Front Near Bathroom**	< 0.5
R2	RAS102	1st Floor	Mercury Front Near Bathroom	< 0.5
R3	RAS103	1st Floor	Right Gym Entrance	< 0.5
R4	RAS104	1st Floor	Left Gym Entrance	< 0.5
R5	RAD101A	1st Floor	Mercury Front Right*	0.76
R6	RAD101B	1st Floor	Mercury Front Right*	0.69

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at Ridge Hill School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

CANISTER ID –	SAMPLE ADDRESS	LOCATION	DATE START	TIME START	STOP	TIME STOP	Result pCi/L
RAS101	120 Carew Road, Hamden, CT	Ridge Hill School | Mercury Front Bathroom (Field Blank)	2/26/2024	10:45 AM	2/28/2024	11:25 AM	< 0.5
RAS102	120 Carew Road, Hamden, CT	Ridge Hill School | Mercury Front Bathroom	2/26/2024	10:45 AM	2/28/2024	11:26 AM	< 0.5
RAS103	120 Carew Road, Hamden, CT	Ridge Hill School | Right Gym Entrance	2/26/2024	10:47 AM	2/28/2024	11:27 AM	< 0.5
RAS104	120 Carew Road, Hamden, CT	Ridge Hill School | Left Gym Entrance	2/26/2024	10:48 AM	2/28/2024	11:27 AM	< 0.5
RAD101A & B	120 Carew Road, Hamden, CT	Ridge Hill School | Mercury Front Right	2/26/2024	10:45 AM	2/28/2024	11:25 AM	0.76/0.69

Appendix B

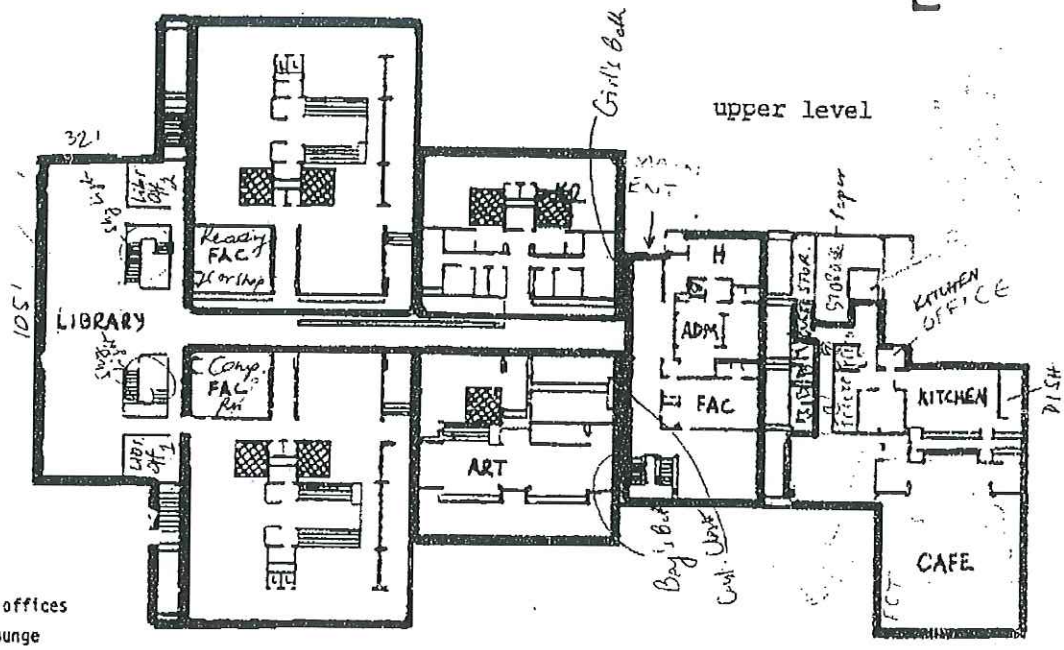
Radon Sample Locations

RIDGE HILL ELEMENTARY SCHOOL
Hamden, Connecticut

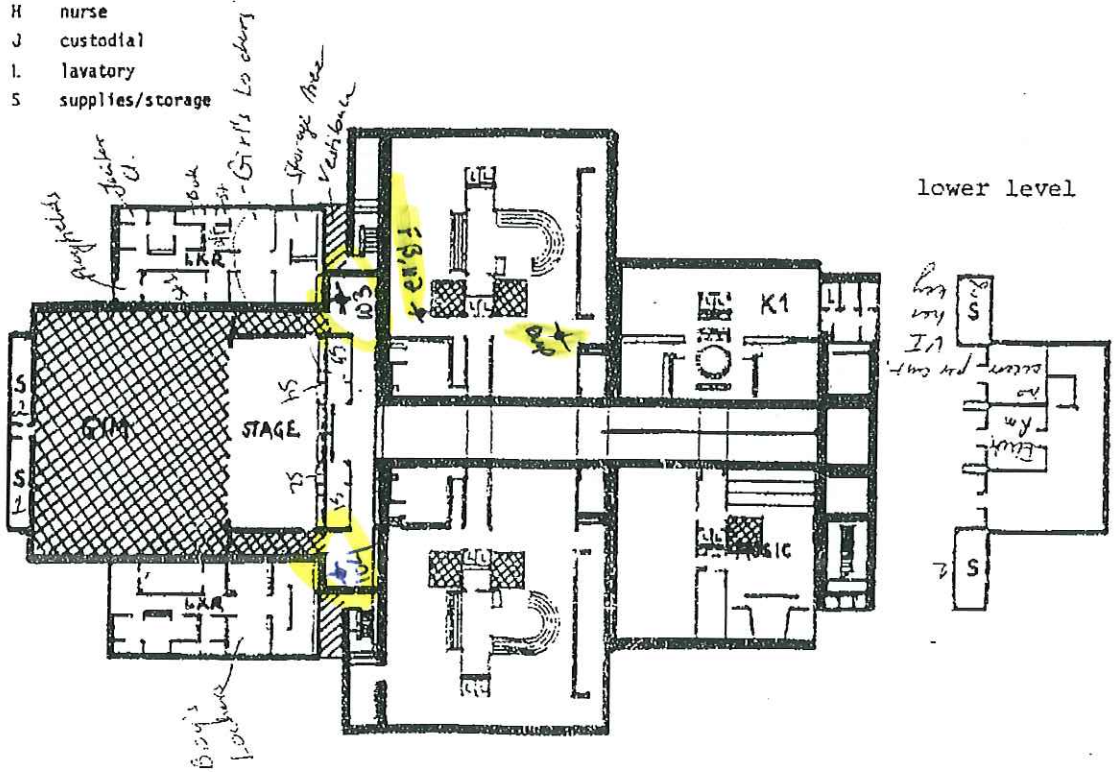
= TRC 2014 (VANGUARD MERCURY TUTORING)
= EMS 2019
= EMS 2024 (VANGUARD MUSIC SATELLITE)

floor tile

ventilator expansion joints



KEY:
ADM administrative offices
FAC faculty work/lounge
H nurse
J custodial
L lavatory
S supplies/storage



EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Shepard Glen Elementary School
1 Skiff Street,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the Shepard Glen School at 1 Skiff Street in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Seven (7) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

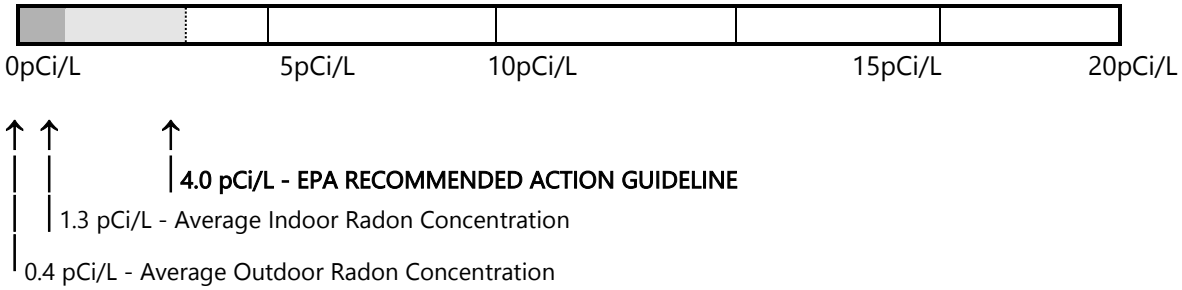
IV. RADON IN AIR TEST RESULTS

Shepherd Glen Elementary School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS163	1st Floor	Media Center (Right)	< 0.5
R2	RAS164	1st Floor	Cafeteria	< 0.5
R3	RAS165	1st Floor	Media Center (Left)	< 0.5
R4	RAS166	1st Floor	Staff Lounge **	< 0.5
R5	RAS167	1st Floor	Staff Lounge	< 0.5
R6	RAD112A	1st Floor	Main Office*	< 0.5
R7	RAD112B	1st Floor	Main Office*	< 0.5

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the Shephard Glen Elementary School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS163	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Media Center (Right)	2/27/2024	1:32 PM	2/29/2024	1:42 PM	< 0.5
RAS164	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Cafeteria	2/27/2024	1:35 PM	2/29/2024	1:41 PM	< 0.5
RAS165	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Media Center (Left)	2/27/2024	1:31 PM	2/29/2024	1:42 PM	< 0.5
RAS166	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Staff Lounge (Field Blank)	2/27/2024	1:38 PM	2/29/2024	1:43 PM	< 0.5
RAS167	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Staff Lounge	2/27/2024	1:38 PM	2/29/2024	1:43 PM	< 0.5
RAD112 A & B	1 Skiff Street, Hamden, CT	Shepherd Glen Elementary | Main Office	2/27/2024	1:30 PM	2/29/2024	1:40 PM	< 0.5/< 0.5

Appendix B

Radon Sample Locations

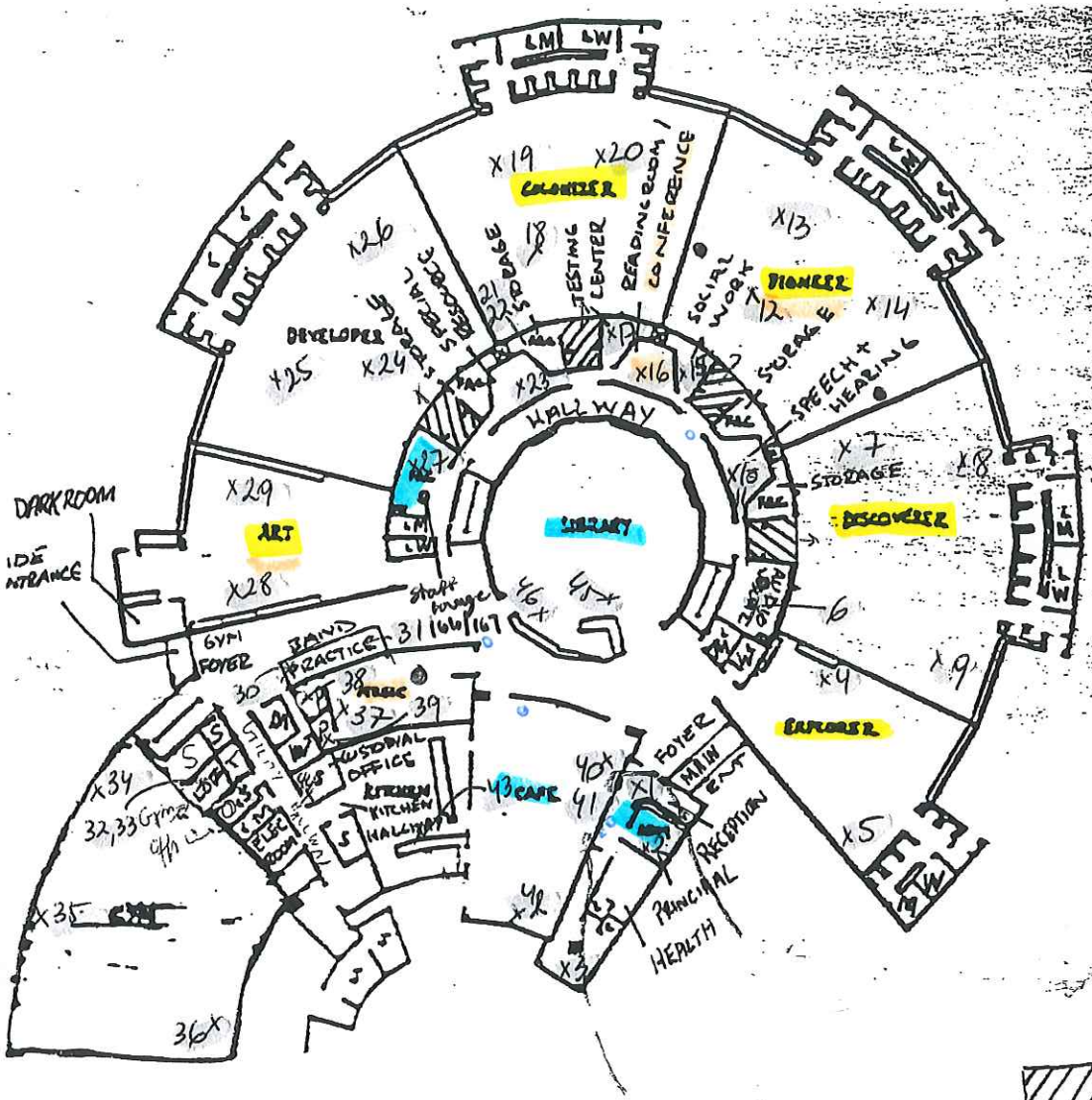
12-03-07

Shepherd Glen

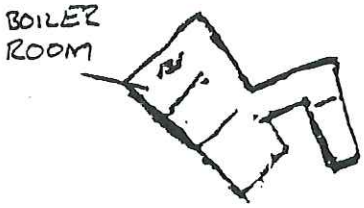
= TRUE 2014

= EMS 2019

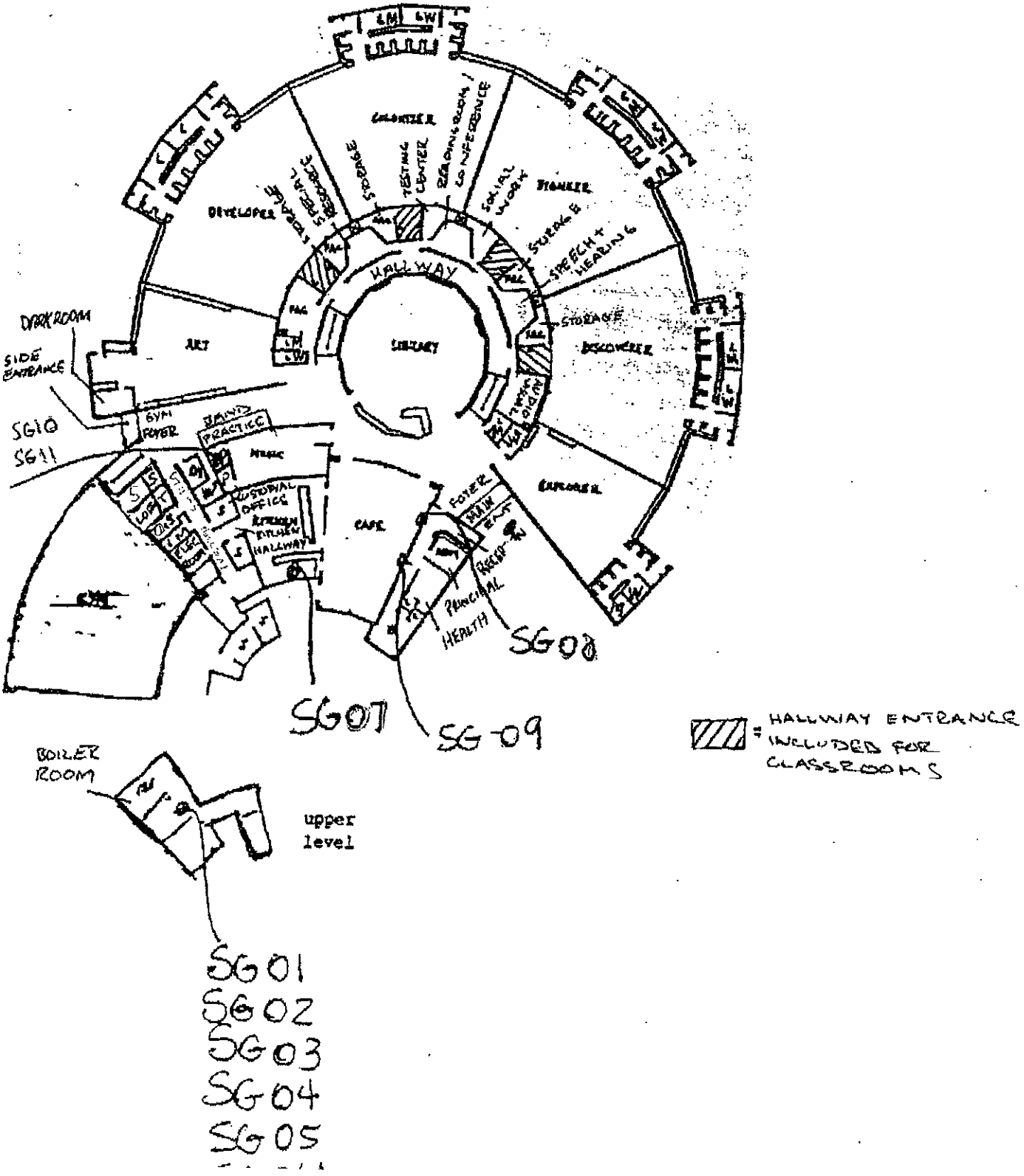
= EMS 2024



= HALLWAY ENTRANCE INCLUDED FOR CLASSROOMS



upper level


DEVELOPER
COUNSELOR
STORAGE
TESTING CENTER
CONFERENCE
SOCIAL WORK
PIONEER
STORAGE
SPEECH + HEARING
HALLWAY
LIBRARY
STORAGE
DISCOVERER
EXPLORER
DARKROOM
SIDE ENTRANCE
ART
SGIO
SG11
GYM FOYER
BAND PRACTICE
MUSIC
CUSTODIAL OFFICE
KITCHEN
HALLWAY
CAFE
FOYER
MAIN ENTRY
RECEP
PRINCIPAL
HEALTH
SG08
SG07
SG09
BOILER ROOM
upper level
SG01
SG02
SG03
SG04
SG05
= HALLWAY ENTRANCE INCLUDED FOR CLASSROOMS

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

Spring Glen School
1908 Whitney Avenue
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5-year re-evaluation for airborne radon at the Spring Glen School at 1908 Whitney Avenue. in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 26 to February 28, 2024, by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Six (6) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

and United States Environmental Protection Agency (US EPA) sampling protocol. Upon completion of the monitoring, the canisters were sealed and transported to a State certified laboratory for analysis, *Aquatek Labs* in Woodbridge, Connecticut. Results can be found in Appendix A.

In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

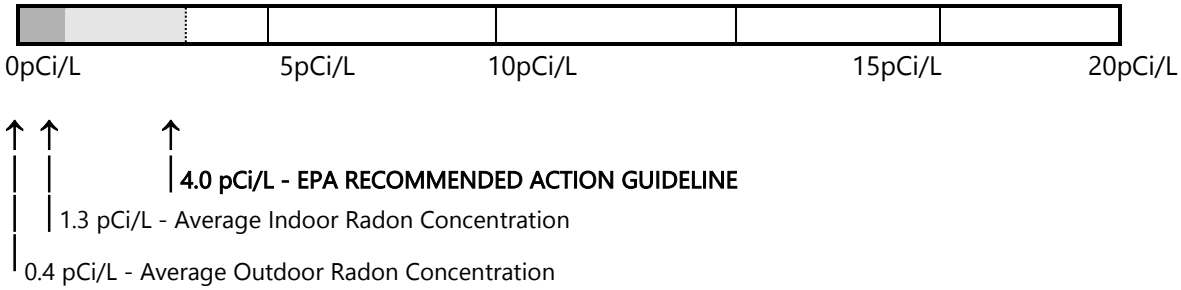
IV. RADON IN AIR TEST RESULTS

Spring Glen School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAD102A	1st Floor	Room 106*	< 0.5
R2	RAD102B	1st Floor	Room 106*	< 0.5
R3	RAS105	1st Floor	Room 108**	< 0.5
R4	RAS106	1st Floor	Room 108	< 0.5
R5	RAS107	1st Floor	Room 105	0.82
R6	RAS108	1st Floor	Room 103	0.63

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



The CT DPH School Radon Testing Guidance and the US EPA strongly recommend taking further action when the radon test results are 4.0 picoCuries per liter of air (pCi/L) or greater.

The national average indoor radon level is about 1.3 pCi/L. The higher the radon levels the greater the health risk to occupants. Even high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

V. WHAT DO THE RADON TEST RESULTS MEAN?

If the radon level is **below 4.0 pCi/L**, you do not need to take action.

If the radon level is **4.0 pCi/L or greater,** use the following chart to determine what should be done next. Depending upon the type of test taken, you will have to either test again or take corrective actions to reduce the radon level.

Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at Spring Glen School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5-year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

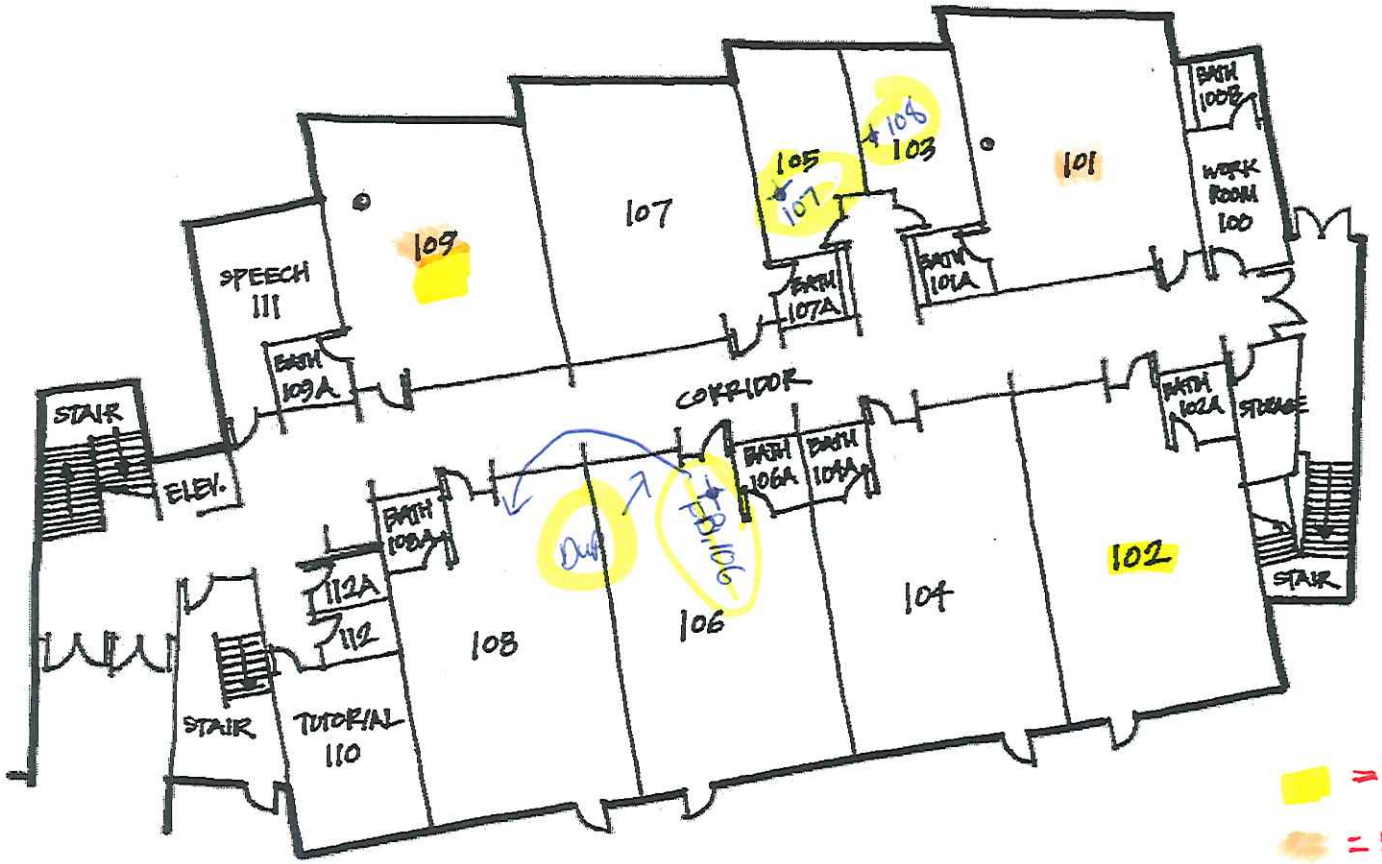
LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

RAS105	1908 Whitney Avenue, Hamden, CT	Spring Glen School | Room #108 (Field Blank)	2/26/2024	11:17 AM	2/28/2024	11:47 AM	< 0.5
RAS106	1908 Whitney Avenue, Hamden, CT	Spring Glen School | Room #108	2/26/2024	11:17 AM	2/28/2024	11:47 AM	< 0.5
RAS107	1908 Whitney Avenue, Hamden, CT	Spring Glen School | Room #105	2/26/2024	11:20 AM	2/28/2024	11:49 AM	0.82
RAS108	1908 Whitney Avenue, Hamden, CT	Spring Glen School | Room #103	2/26/2024	11:21 AM	2/28/2024	11:50 AM	0.63
RAD102 A & B	1908 Whitney Avenue, Hamden, CT	Spring Glen School | Room 106	2/26/2024	11:18 AM	2/28/2024	11:48 AM	< 0.5/< 0.5

Appendix B

Radon Sample Locations



also: Computer Lab

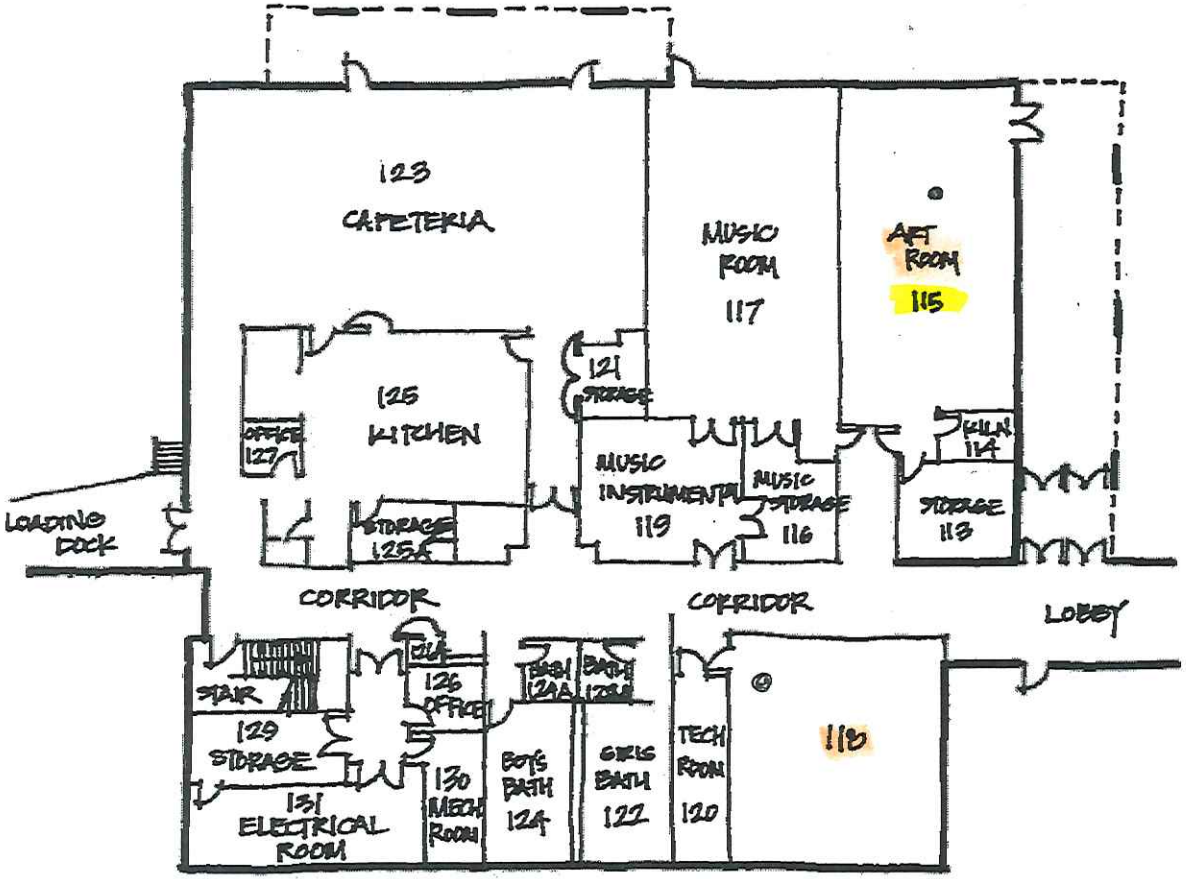
= TRC 2014

= EMS 2019

ACADEMIC WING – 1ST FLOOR

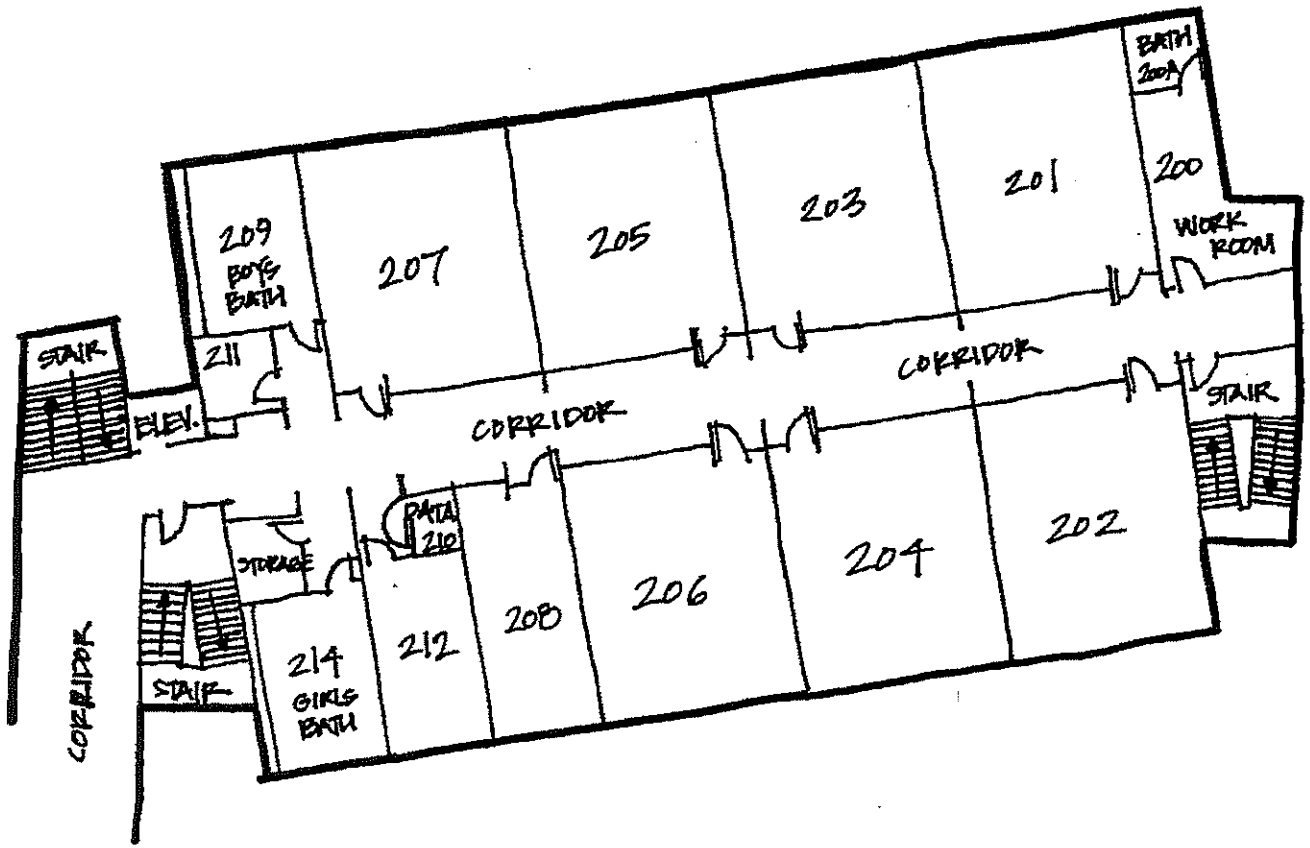
SPRING GLEN SCHOOL

HAMDEN, CT



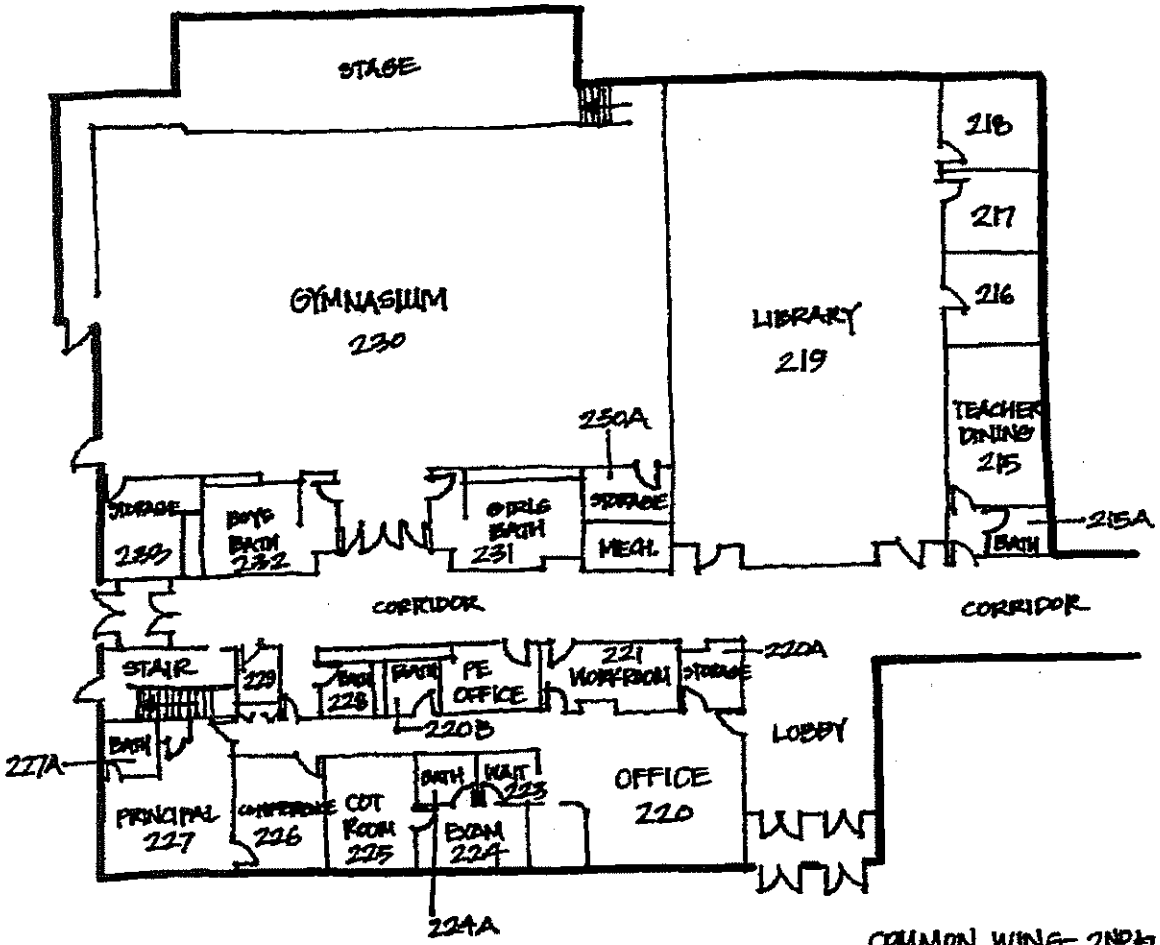
COMMON WING - 1ST FLOOR

SPRING GLEN SCHOOL - HAMDEN, CT



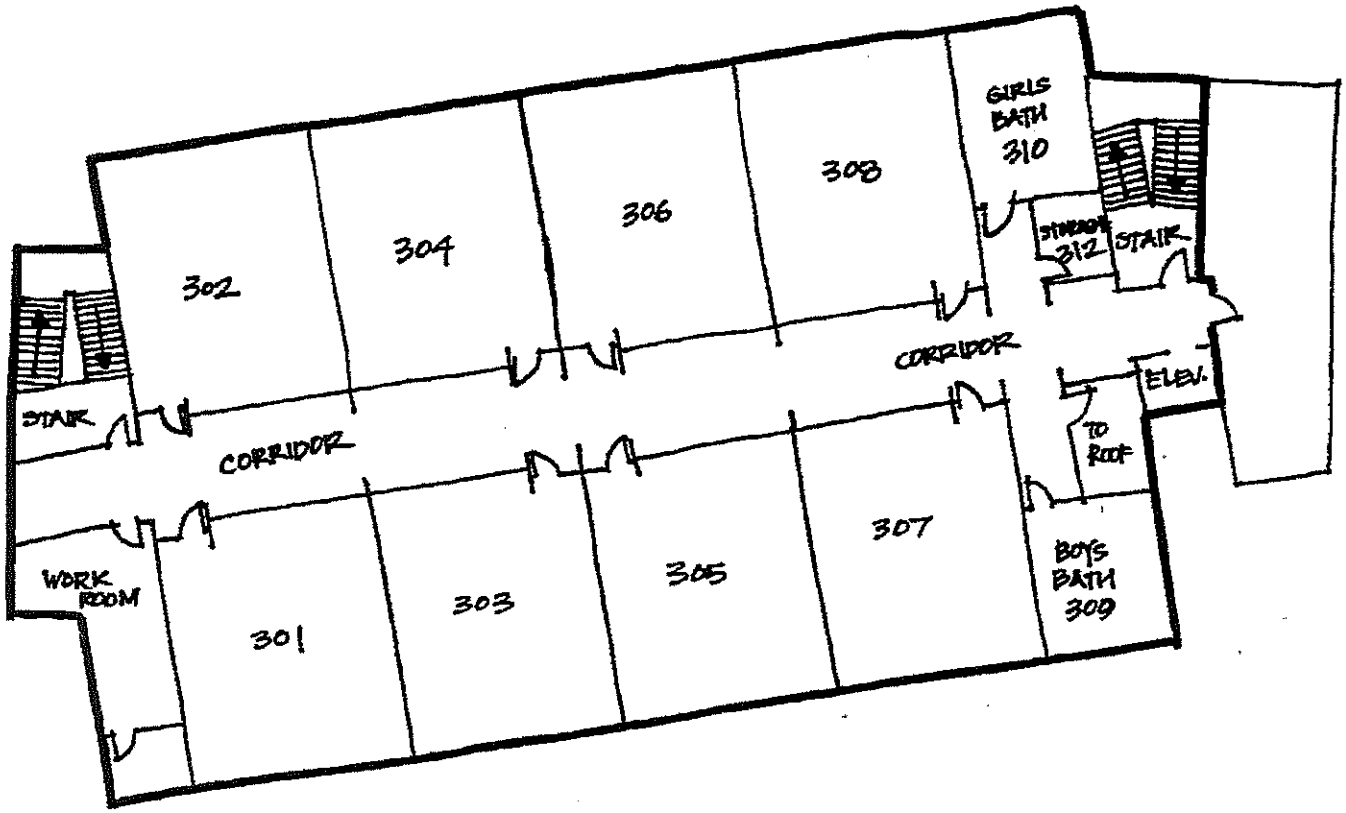
ACADEMIC WING – 2ND FLOOR

SPRING GLEN SCHOOL HAMDEN, CT



COMMON WING - 2ND FLOOR

SPRING GLEN SCHOOL HAMDEN, CT



ACADEMIC WING - 3RD FLOOR
SPRING GLEN SCHOOL HAMDEN, CT

EnviroMed

Cleaner environment. Safer workplaces.

Radon Sampling Report
Short Term Radon Testing
for

West Woods Elementary School
350 West Todd Street,
Hamden, Connecticut

PREPARED FOR:

Hamden Public Schools
60 Putnam Avenue
Hamden, CT

February 2024

470 Murdock Avenue • Meriden, Connecticut 06450
203 238-4846 • facsimile (203) 238-4243

Table of Contents

I. SUMMARY

EnviroMed Services, Inc. was retained by Hamden Public Schools to conduct 5 year re-evaluation for airborne radon at the West Woods Elementary School at 350 West Todd Street in Hamden, Connecticut. The purpose of this monitoring was to determine if the airborne levels were below the U.S. Environmental Protection Agency (EPA) recommended action level of 4.0 picoCuries per liter of air (pCi/L). The monitoring was supervised from February 27 to February 29, 2024 by radon accredited professional John Luby.

II. RADON FACTS AND HEALTH RISK INFORMATION

Radon is the second leading cause of lung cancer. It is naturally occurring radioactive gas. It comes from the natural breakdown (decay) of 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 that can become trapped in our lungs when we breathe. As these particles in turn decay, they release small bursts of radiation. This radiation can damage lung tissue and lead to lung cancer over the course of our lifetime.

Radon is colorless, odorless, and tasteless. The only way to determine whether or not an elevated level of radon is present in any room of a school is to conduct a radon sampling test.

III. SAMPLING METHODOLOGY

Radon in Air

Monitoring was performed in 10% of occupied rooms that come in contact with the ground within the school. Eight (8) EPA approved monitoring devices were placed in designated sample locations at a minimum of 36 inches off the floor, more than one foot from exterior walls and more than three feet from windows. They were opened and allowed to be exposed to the indoor atmosphere for between forty-eight and seventy-two hours, which complies with the Connecticut Department of Public Health (CT DPH) School Radon Testing Guidance

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In order to provide assurance of the quality of the measurement, duplicate (10%) and blank (5%) samples accompanied all testing activities and were submitted to the laboratory at the same time. Please note that the laboratory allows for a +/- 0.5pCi/L variation on blank samples.

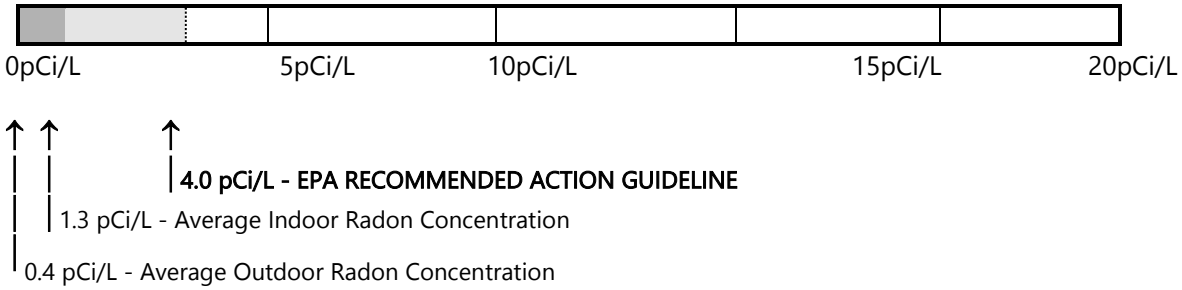
IV. RADON IN AIR TEST RESULTS

West Woods Elementary School

Sample ID	*Canister ID*	*Floor Level*	*Sample Location*	*Radon Level in pCi/L*
R1	RAS157	1st Floor	Main Office **	< 0.5
R2	RAS158	1st Floor	Main Office	< 0.5
R3	RAS159	1st Floor	Gym (Right)	< 0.5
R4	RAS160	1st Floor	Gym (Left)	< 0.5
R5	RAS161	1st Floor	Willow Room	< 0.5
R6	RAS162	1st Floor	Math Office	< 0.5
R7	RAD111A	1st Floor	Literacy Specialist (Blanchard)*	< 0.5
R8	RAD111B	1st Floor	Literacy Specialist (Blanchard)*	< 0.5

* indicates duplicate sample
** indicates blank sample

Use the following chart to compare your radon test results, expressed in picoCuries of radon per liter of air (pCi/L), with the EPA guidelines.



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Note: All tests should meet EPA technical protocols.

Type of Test(s)	*If Radon Level Is 4.0 pCi/L or Greater*
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Problem
One Long-Term Test	Fix The Problem

*If your first short-term test is several times greater than 4.0 pCi/L - for example, about 10 pCi/L or higher - you should take a second short-term test immediately.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained from the radon monitoring at the West Woods Elementary School located in Hamden, Connecticut, EnviroMed Services Inc. makes the following conclusions and recommendations:

- Testing indicates that radon levels are below the EPA Action Level in the school. No further action is required. Radon re-testing is recommended at 5 year intervals.

Appendix A

Laboratory Results

AQUATEK LABS

NRSB #6SS0078

RADON IN AIR LIQUID SCINTILLATION REPORT

SITE: HAMDEN PUBLIC SCHOOLS **DATE: 2/26/24 - 2/29/2024**

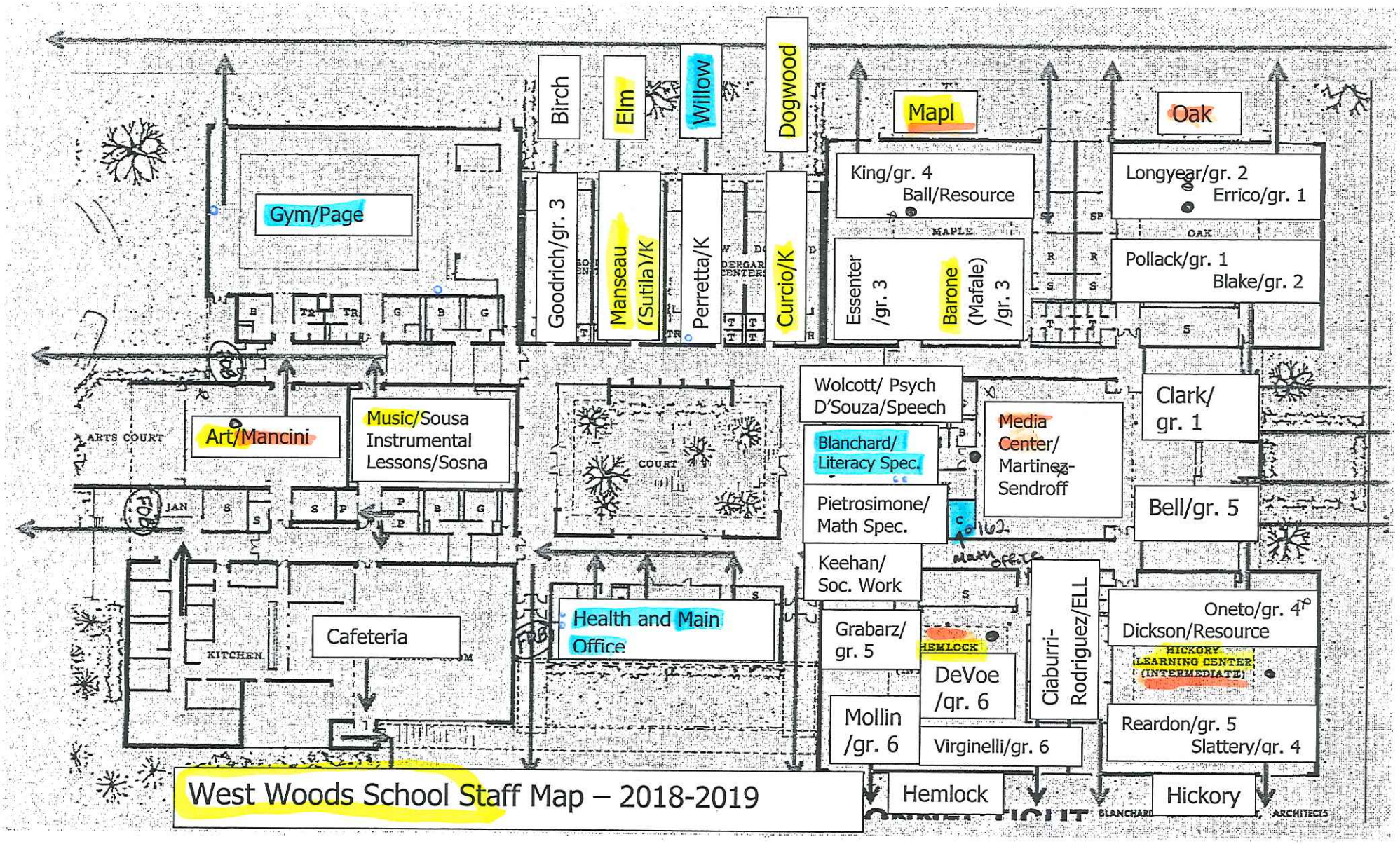
LOCATION: HAMDEN PUBLIC SCHOOLS

CLIENT NAME: ENVIROMED SERVICES **PROJ. NO.: IH-24-280**

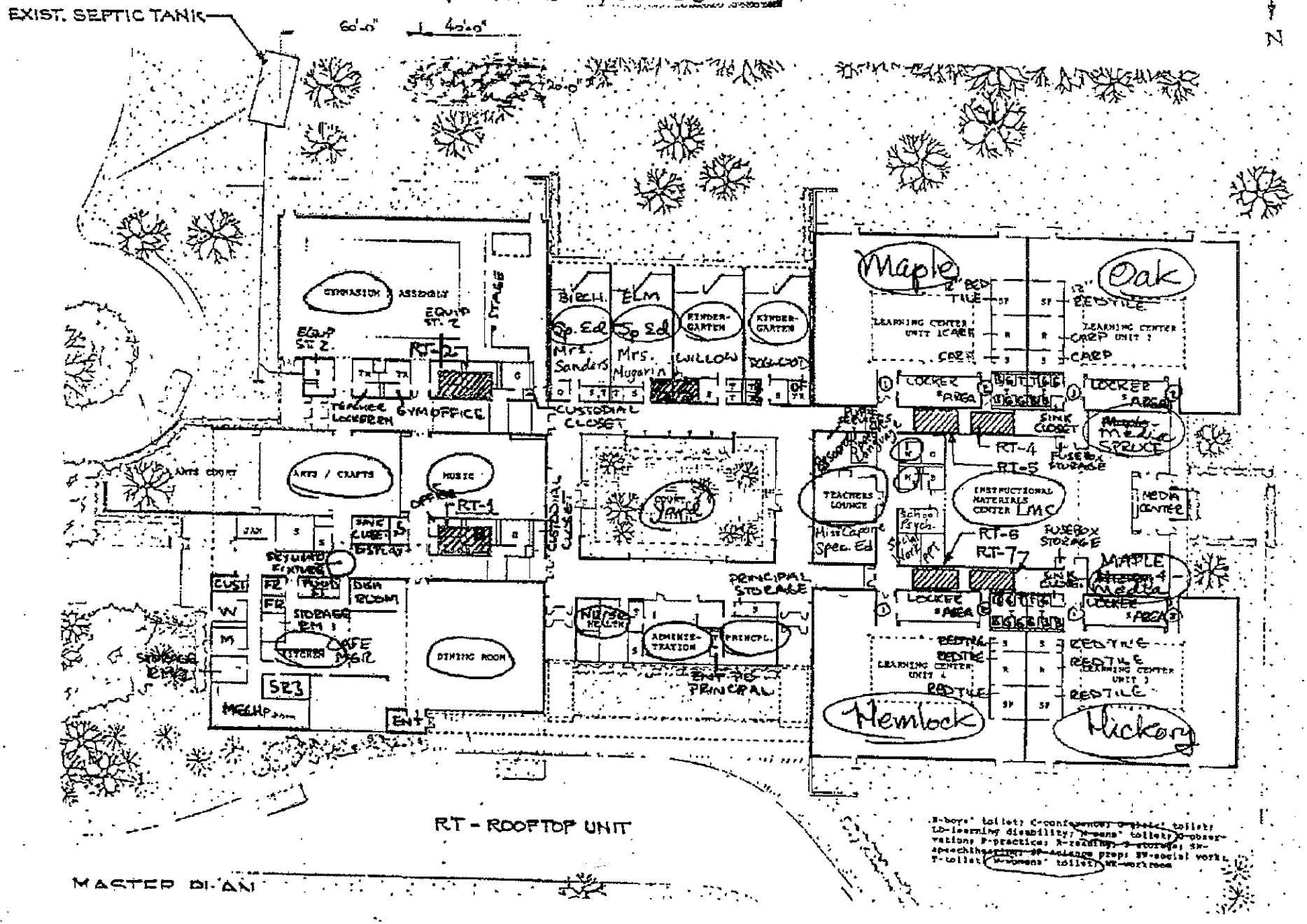
RAS157	350 West Todd Street, Hamden, CT	West Woods Elementary | Main Office (Field Blank)	2/27/2024	12:43 PM	2/29/2024	1:02 PM	< 0.5
RAS158	350 West Todd Street, Hamden, CT	West Woods Elementary | Main Office	2/27/2024	12:43 PM	2/29/2024	1:02 PM	< 0.5
RAS159	350 West Todd Street, Hamden, CT	West Woods Elementary | Gym (Right)	2/27/2024	12:48 PM	2/29/2024	1:06 PM	< 0.5
RAS160	350 West Todd Street, Hamden, CT	West Woods Elementary | Gym (Left)	2/27/2024	12:49 PM	2/29/2024	1:07 PM	< 0.5
RAD111 A & B	350 West Todd Street, Hamden, CT	West Woods Elementary | Literacy Specialist (Blanchard)	2/27/2024	12:57 PM	2/29/2024	1:03 PM	< 0.5/< 0.5

Appendix B

Radon Sample Locations


Birch
Elm
Willow
Dogwood
Mapl
Oak
Gym/Page
Goodrich/gr. 3
Manseau (Sutila)/K
Perretta/K
Curcio/K
King/gr. 4
Ball/Resource
Longyear/gr. 2
Errico/gr. 1
Essenter /gr. 3
Barone (Mafale) /gr. 3
Pollack/gr. 1
Blake/gr. 2
MAPLE
OAK
ARTS COURT
Art/Mancini
Music/Sousa Instrumental Lessons/Sosna
COURT
Wolcott/ Psych D'Souza/Speech
Blanchard/ Literacy Spec.
Media Center/ Martinez-Sendroff
Clark/ gr. 1
Pietrosimone/ Math Spec.
Bell/gr. 5
Keehan/ Soc. Work
Cafeteria
KITCHEN
Health and Main Office
Grabarz/ gr. 5
HEMLOCK
DeVoe /gr. 6
Ciaburri-Rodriguez/ELL
Oneto/gr. 4
Dickson/Resource
HICKORY LEARNING CENTER (INTERMEDIATE)
Mollin /gr. 6
Virginelli/gr. 6
Reardon/gr. 5
Slattery/gr. 4
Hemlock
Hickory
West Woods School Staff Map – 2018-2019
= TRC 2014
= EMS 2019
= EMS 2024

WestWoods School
350 West Todd St.
Hamden, CT 06518



For More Information Contact:

STATE OF CONNECTICUT
Department of Public Health
Radon Program

CT Department of Public Health
Radon Program
410 Capitol Avenue, MS# 12-RAD
P.O. Box 340308
Hartford, CT 06134-0308

Phone: 860-509-7300
Fax: 860-509-7295
Email: DPH.RadonReports@ct.gov
Web: www.ct.gov/radon

EPA United States Environmental Protection Agency New England

Funded in part through a grant from the EPA.

Adapted from the following publication:
EPA. (1994). *Radon in Schools, 2nd ed.*,
Publication #: EPA-402-F-94-009

Radon In Schools

Revised July 2023

Keeping Connecticut Healthy
DPH
Connecticut Department of Public Health

What You Should Know About Radon

Chances are you've already heard of radon - a radioactive gas that can cause lung cancer.

The Environmental Protection Agency (EPA) ranks indoor radon among the most serious environmental health problems facing us today. After smoking, it is the second leading cause of lung cancer in the United States causing an estimated twenty-one thousand (21,000) lung cancer deaths a year. It is the leading cause of lung cancer among non-smokers.

Radon is a naturally occurring gas that seeps into buildings from the surrounding soil. In some cases, well water may be a source of radon.

Radon exposure increases your risk of lung cancer. Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe. As these particles break down, they release small bursts of energy. These bursts can damage lung tissue and lead to lung cancer over the course of your lifetime. Your risk of getting lung cancer from radon depends mostly on three factors:

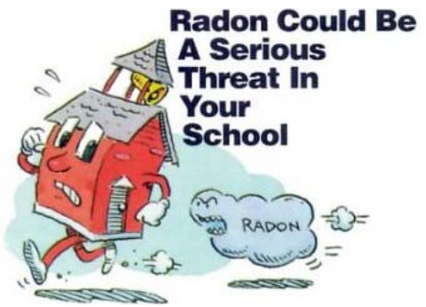
1. The level of radon gas in the air you breath;
2. The duration of exposure (how many hours you spend exposed);
3. Your smoking habits.

What you might not have heard - elevated levels of radon have been found in classrooms in a number of schools in Connecticut. Therefore, it is important that students, teachers, and parents are aware that a potential problem could exist in their school. A nationwide survey of radon levels in schools estimates that nearly one in five has at least one schoolroom with a short-term radon level above the EPA action level of 4.0 pCi/L (picocuries per liter) - the level at which EPA recommends that schools take action to reduce it.

Radon in Schools

Testing is the Only Way to Know!

Having your school tested for radon is required by law in the State of Connecticut. In fact, the only way to discover if high levels of radon are present is through testing. As real as the threat of radon is, the good news is that the problem can be solved.



How are schools tested for radon?

Testing for radon is simple and relatively inexpensive.

School officials will make sure to:

- Test all frequently occupiable rooms on and below the ground level,
- Conduct tests in the colder months of the year when school is in session,
- Keep all windows shut during testing, and
- Communicate the results to parents, teachers and students.

As Easy as 1-2-3!

Step 1: Initial Testing:

- Take short-term tests

Step 2: Follow-up Testing:

- Take a second short-term test in rooms where the initial level is 4.0 pCi/L or more

Step 3: Take action to reduce levels if:

- The average of the initial and follow-up short-term tests is 4.0 pCi/L or more.

Four is the magic number...

If radon levels exceed 4.0 pCi/L, action should be taken to reduce radon in your school. Fortunately, even if your school does have high radon levels, the problem can be corrected.

Proven techniques are available that reduce radon levels and lower risks of lung cancer.

Radon in Homes

School isn't the only place that you, your children, or teachers can be exposed to radon.

Many people spend more time at home, where high radon levels may pose a much greater threat to their health. Test your home for radon, if you haven't already! The Surgeon General joined the EPA in issuing a national health advisory, urging us all to test our homes for radon.

"Indoor radon gas is the second-leading cause of lung cancer in the United States and breathing it over prolonged periods can present a significant health risk to families all over the country. It's important to know that this threat is completely preventable. Radon can be detected with a simple test and fixed through well-established venting techniques."

U.S. Surgeon General, January 2005

Once again, testing is simple and inexpensive. After all, radon is one health problem nobody should have to live with - at home or at school.

In Summary

Radon

- Radon is a naturally occurring radioactive gas
- Radon usually comes from soils and rock, but can also come from well water
- Breathing in radon increases your risk of lung cancer
- Testing is the only way to find out if radon is a problem

Radon in Schools

- Testing is as easy as 1-2-3
  1. Testing must occur in all occupiable spaces at or below ground level
  2. Testing must occur while school is in session
  3. If high levels of radon are found, confirm them
- Radon testing is required in public schools in Connecticut
- When high levels are found, steps will be taken to reduce radon gas in the school
- The CT Department of Public Health can provide guidance documents and information to schools and the general public

Radon in Your Home

- You and your children probably spend more time in your home than you do at work or school
- Test your home for radon!
- The Radon Program can provide you with a list of qualified professionals