



Monomoy Regional Middle School Air Quality Testing Report

Reason for Testing: Periodic precautionary air tests

Date: December 2024

Description: Air quality test in three locations in the building and three external locations for comparison

Locations:

Sample ID	Location	Note
2024-15470-1	Building rear, near Central Office exit, near the road	The control sample used for all comparisons
2024-15470-2	Building rear, near Central Office exit, near the building	
2024-15470-3	Building front, near Central Office entrance, near the road	
2024-15470-4	Counseling office, on the counter	
2024-15470-5	Counseling conference room, middle of the room	
2024-15470-6	Counseling office (Ms Chace's room), middle of the room	
2024-15470-7	Room E114, near the windows	
2024-15470-8	Room E114, middle of the room	
2024-15470-9	Room E114, by the wall, near the room entrance	
2024-15470-10	Room B125, in the storage room	
2024-15470-11	Room B125, near the windows	
2024-15470-12	Room B125, in the cupboard under the sink, with cabinet doors closed	

Conducted By: Frank Zelinski of Safe-n-Dry

Summary of Findings:

Spore counts compared to control count suggest elevated levels, particularly of aspergillus and cladosporium, in all three areas, though with some variation.

B125: Highest levels in the storage room. The wood decking under the classroom sink is a possible source.

E114: All three readings are similar. No obvious source of moisture.

Guidance (Counselling) Area: Conference room levels are normal. Elevated levels near the entry door may be due to traffic.

District Response:

Further cleaning and investigation of areas with the highest readings, investigating possible leaks under the sink and if necessary removing part of the sink in room B125. Ensure air purifiers already in place are functioning and filters are being replaced on schedule, explore the need for further air purifiers.

Customer: Healthy Fresh Air
15 Pine Ridge Lane. Orleans, MA 02653
clearairtobreathe@gmail.com/774-216-9006

Laboratory Analysis Report

Project Information:	Monomoy Middle School 425 Crowell Rd Chatham, MA 02633
Order Number:	2024-15470
Received Date:	December 30, 2024
Analysis Date:	December 30, 2024

Katiuska Acosta

Katiuska Acosta, Laboratory Director or other approved signatory

The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation. .





Spore Trap Analysis-ASTM

Sample ID:	2024-15470-1	2024-15470-2	2024-15470-3
Origin:	Outside Control	Outside	Outside
Volume Sampled (L):	309554	320590	320586
Media:	My Mold Detective	My Mold Detective	My Mold Detective
Percent of Trace Analyzed:	100% of 600X Magnification	100% of 600X Magnification	100% of 600X Magnification
Conclusion:	Control	Not Elevated	Not Elevated

Spore Types	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%
Alternaria	-	-	-	-	-	-	1	0	3
Ascospores	8	123	42	16	213	64	9	128	29
Aspergillus/Penicillium-Like	4	41	21	4	42	16	6	85	19
Basidiospores	-	-	-	-	-	-	3	42	10
Bipolaris/Dreschlera	-	-	-	-	-	-	-	-	-
Cladosporium	5	82	26	4	42	16	10	128	32
Curvularia	1	0	5	1	0	4	2	42	6
Nigrospora	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Smut/Myxomyces/Periconia	1	0	5	-	-	-	-	-	-
Total Spores	19	253	-	25	333	-	31	413	-
Hyphal Fragments	2	110063	-	2	113987	-	2	113986	-
Pollen	-	-	-	3	170981	-	-	-	-
Debris Rating	2			2			2		
Detection Limit	13.3333			13.3333			13.3333		

Detection Limit:

Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. Debris Rating is due to the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories 0-5 for Accurate Count, are used to indicate the amount of observed debris, with 1 indicating the lowest amount of debris, and 5 indicating an overloaded sample. Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report, it was not observed in the samples submitted

Conclusion Interpretations: The conclusions are intended to help the client understand the results of the analysis report, but do not recommend in any manner health consequences or financial choices derived from the results. The mold analysis is one component of an inspector's evaluation and may be used in conjunction with other findings such as water leaks, excess humidity and damages to the property which may promote the growth of mold. "The opinions/interpretations identified/expressed in this report are outside the scope of this organization's A2LA accreditation."

The "Control" is an outdoor air sample taken adjacent to the property tested to provide a baseline of factors or expected range including spore count and type of spores present when the indoor samples are collected.

"Elevated" means that these factors when compared to the "Control" are higher than expected. Most commonly associated fungi with water issues that are of known potential harm include, but are not limited to: *Chaetomium*, *Stachybotrys*, *Memnoniella*, *Trichoderma*, *Fusarium* and *Aspergillus*.

"Not Elevated" means that the quantity and/or the diversity of spores are lower than the control.

"NA" (Not Applicable) means no control sample was submitted, so no baseline was established.

The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation.



Spore Trap Analysis-ASTM

Sample ID:	2024-15470-4	2024-15470-5	2024-15470-6
Origin:	Guidance	Guidance	Guidance
Volume Sampled (L):	224773	297219	309376
Media:	My Mold Detective	My Mold Detective	My Mold Detective
Percent of Trace Analyzed:	100% of 600X Magnification	100% of 600X Magnification	100% of 600X Magnification
Conclusion:	Elevated	Not Elevated	Elevated

Spore Types	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	12	149	27	15	198	43	5	82	10
Aspergillus/Penicillium-Like	20	269	44	6	79	17	19	247	38
Basidiospores	-	-	-	-	-	-	2	41	4
Bipolaris/Dreschlera	-	-	-	1	0	3	-	-	-
Cladosporium	11	149	24	10	118	29	18	247	36
Curvularia	2	29	4	3	39	9	5	82	10
Nigrospora	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Smut/Myxomyces/Periconia	-	-	-	-	-	-	1	0	2
Total Spores	45	600	-	35	466	-	50	666	-
Hyphal Fragments	8	319678	-	8	422712	-	3	165000	-
Pollen	1	39959	-	-	-	-	-	-	-
Debris Rating	3			2			2		
Detection Limit	13.3333			13.3333			13.3333		

Detection Limit:

Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. Debris Rating is due to the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories 0-5 for Accurate Count, are used to indicate the amount of observed debris, with 1 indicating the lowest amount of debris, and 5 indicating an overloaded sample. Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report, it was not observed in the samples submitted

Conclusion Interpretations: The conclusions are intended to help the client understand the results of the analysis report, but do not recommend in any manner health consequences or financial choices derived from the results. The mold analysis is one component of an inspector's evaluation and may be used in conjunction with other findings such as water leaks, excess humidity and damages to the property which may promote the growth of mold. "The opinions/interpretations identified/expressed in this report are outside the scope of this organization's A2LA accreditation."

The "Control" is an outdoor air sample taken adjacent to the property tested to provide a baseline of factors or expected range including spore count and type of spores present when the indoor samples are collected.

"Elevated" means that these factors when compared to the "Control" are higher than expected. Most commonly associated fungi with water issues that are of known potential harm include, but are not limited to: *Chaetomium*, *Stachybotrys*, *Memnoniella*, *Trichoderma*, *Fusarium* and *Aspergillus*.

"Not Elevated" means that the quantity and/or the diversity of spores are lower than the control.

"NA" (Not Applicable) means no control sample was submitted, so no baseline was established.

The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation.



Spore Trap Analysis-ASTM

Sample ID:	2024-15470-7	2024-15470-8	2024-15470-9
Origin:	E114	E114	E114
Volume Sampled (L):	309610	320578	224772
Media:	My Mold Detective	My Mold Detective	My Mold Detective
Percent of Trace Analyzed:	100% of 600X Magnification	100% of 600X Magnification	100% of 600X Magnification
Conclusion:	Elevated	Elevated	Elevated

Spore Types	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	10	123	21	6	85	13	8	119	15
Aspergillus/Penicillium-Like	12	165	25	20	256	44	17	239	31
Basidiospores	-	-	-	1	0	2	5	59	9
Bipolaris/Dreschlera	-	-	-	-	-	-	-	-	-
Cladosporium	22	288	46	16	213	36	20	269	36
Curvularia	4	41	8	1	0	2	2	29	4
Nigrospora	-	-	-	1	0	2	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Smut/Myxomyces/Periconia	-	-	-	-	-	-	3	29	5
Total Spores	48	640	-	45	600	-	55	733	-
Hyphal Fragments	-	-	-	6	341949	-	2	79919	-
Pollen	2	110083	-	-	-	-	-	-	-
Debris Rating	3			3			2		
Detection Limit	13.3333			13.3333			13.3333		

Detection Limit:

Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. Debris Rating is due to the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories 0-5 for Accurate Count, are used to indicate the amount of observed debris, with 1 indicating the lowest amount of debris, and 5 indicating an overloaded sample. Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report, it was not observed in the samples submitted

Conclusion Interpretations: The conclusions are intended to help the client understand the results of the analysis report, but do not recommend in any manner health consequences or financial choices derived from the results. The mold analysis is one component of an inspector's evaluation and may be used in conjunction with other findings such as water leaks, excess humidity and damages to the property which may promote the growth of mold. "The opinions/interpretations identified/expressed in this report are outside the scope of this organization's A2LA accreditation."

The "Control" is an outdoor air sample taken adjacent to the property tested to provide a baseline of factors or expected range including spore count and type of spores present when the indoor samples are collected.

"Elevated" means that these factors when compared to the "Control" are higher than expected. Most commonly associated fungi with water issues that are of known potential harm include, but are not limited to: *Chaetomium*, *Stachybotrys*, *Memnoniella*, *Trichoderma*, *Fusarium* and *Aspergillus*.

"Not Elevated" means that the quantity and/or the diversity of spores are lower than the control.

"NA" (Not Applicable) means no control sample was submitted, so no baseline was established.

The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation.



Spore Trap Analysis-ASTM

Sample ID:	2024-15470-10	2024-15470-11	2024-15470-12
Origin:	Gifford B125	Gifford B125	Gifford B125
Volume Sampled (L):	297225	297226	297217
Media:	My Mold Detective	My Mold Detective	My Mold Detective
Percent of Trace Analyzed:	100% of 600X Magnification	100% of 600X Magnification	100% of 600X Magnification
Conclusion:	Elevated	Elevated	Elevated

Spore Types	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%	Raw Count	Count/m ³	%
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	11	158	14	6	79	10	6	79	14
Aspergillus/Penicillium-Like	28	356	35	24	317	38	10	118	23
Basidiospores	-	-	-	3	39	5	1	0	2
Bipolaris/Dreschlera	-	-	-	-	-	-	-	-	-
Cladosporium	38	515	48	22	277	35	25	317	58
Curvularia	-	-	-	4	39	6	1	0	2
Nigrospora	-	-	-	2	39	3	-	-	-
Pithomyces	-	-	-	2	39	3	-	-	-
Pyricularia	2	39	3	-	-	-	-	-	-
Smut/Myxomyces/Periconia	-	-	-	-	-	-	-	-	-
Total Spores	79	1053	-	63	840	-	43	573	-
Hyphal Fragments	-	-	-	5	264201	-	10	528384	-
Pollen	-	-	-	-	-	-	-	-	-
Debris Rating	3			2			2		
Detection Limit	13.3333			13.3333			13.3333		

Detection Limit:

Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. Debris Rating is due to the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories 0-5 for Accurate Count, are used to indicate the amount of observed debris, with 1 indicating the lowest amount of debris, and 5 indicating an overloaded sample. Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report, it was not observed in the samples submitted

Conclusion Interpretations: The conclusions are intended to help the client understand the results of the analysis report, but do not recommend in any manner health consequences or financial choices derived from the results. The mold analysis is one component of an inspector's evaluation and may be used in conjunction with other findings such as water leaks, excess humidity and damages to the property which may promote the growth of mold. "The opinions/interpretations identified/expressed in this report are outside the scope of this organization's A2LA accreditation."

The "Control" is an outdoor air sample taken adjacent to the property tested to provide a baseline of factors or expected range including spore count and type of spores present when the indoor samples are collected.

"Elevated" means that these factors when compared to the "Control" are higher than expected. Most commonly associated fungi with water issues that are of known potential harm include, but are not limited to: *Chaetomium*, *Stachybotrys*, *Memnoniella*, *Trichoderma*, *Fusarium* and *Aspergillus*.

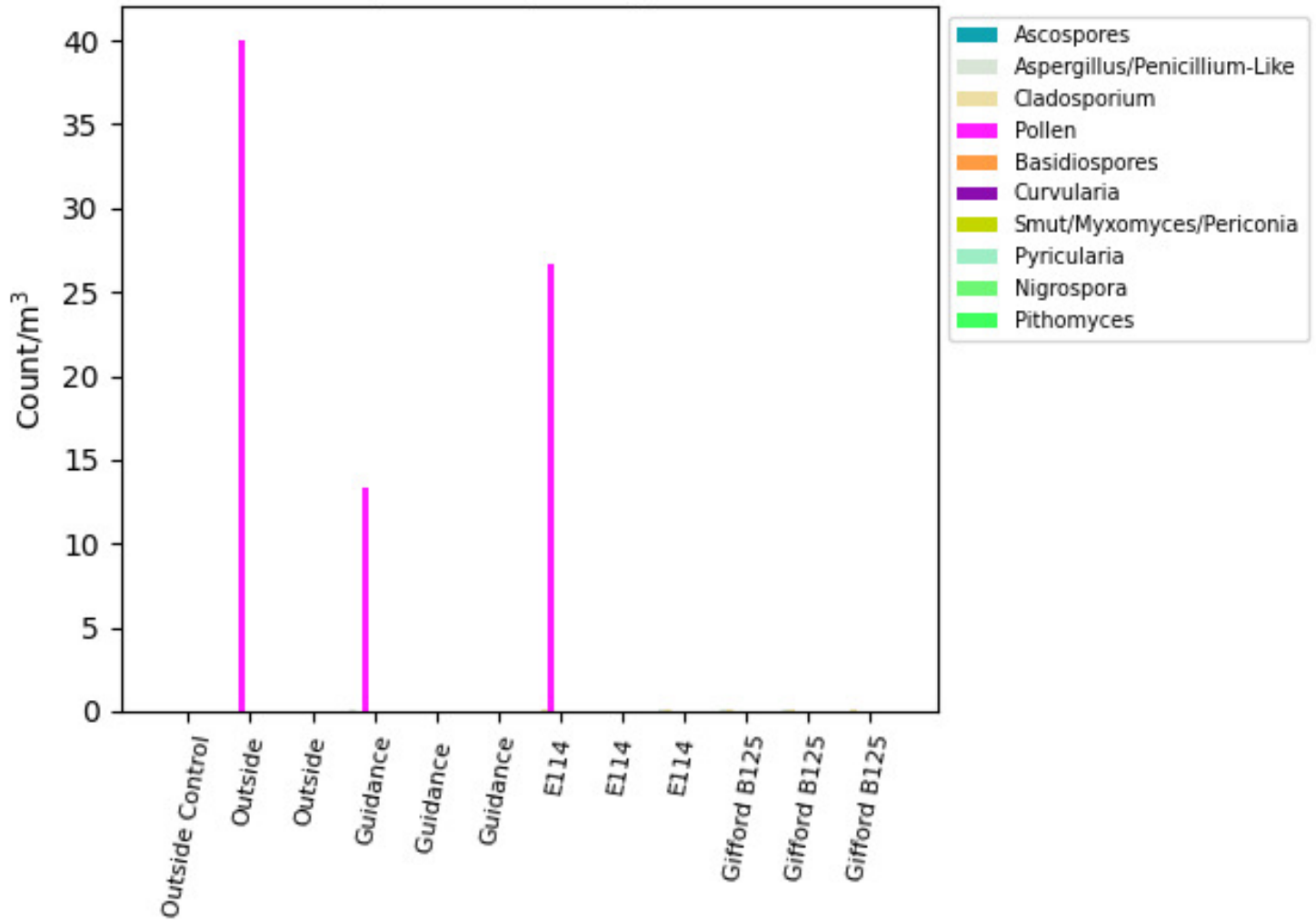
"Not Elevated" means that the quantity and/or the diversity of spores are lower than the control.

"NA" (Not Applicable) means no control sample was submitted, so no baseline was established.

The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation.



Spore Trap Analysis



The results presented pertain only to the samples as presented in the attached Chain of Custody. This report will not be reproduced except in its entirety and with the written approval of NexLab Environmental, LLC. Samples were received in good condition unless otherwise noted in the report. The use or interpretation of the results of laboratory analyses is the exclusive responsibility of the company and/or the individuals who conducted the sampling and does not imply any responsibility on the part of NexLab. It is important to note that neither the EPA nor OSHA have established standards for mold or mildew levels in indoor environments, and NexLab Environmental, LLC makes no express or implied warranties regarding the health of a property based solely on samples submitted to its laboratory for analysis. Any opinions or interpretations expressed in this report are outside the scope of A2LA accreditation.

IAQ/MOLD ASSESSMENT REPORT



FOR: **Monomoy Regional Middle School**

BY: **HealthyFreshAir.com/Frank Zelinski**

NORMI™ Certified IAQ/Mold Inspector and Assessor (CMI/CMA)

Frank M Zelinski
Mold ProActive.com
15 Pine Ridge Lane
Orleans, MA 02653
January 2, 2025

www.healthyfreshair.com 774-216-9006 clearairtobreathe@gmail.com

--

Scott Carpenter scarpenter@monomoy.edu 508-945-5130

Michael MacMillan mmacmillan@monomoy.edu 617-848-0460

Middle School inspected at 425 Crowell Rd, Chatham, MA 02633 on Friday December 27, 2024

Re: Occupant IAQ Concerns

—————We Help People Who Like to Breathe!—————
We want to personally thank you for the time you have taken with us to help expedite this NORMI™ Certified IAQ/Mold Assessment. We are satisfied that we now have enough information to draw some important conclusions and make some specific recommendations to significantly improve the indoor air quality of the referenced property.

Attached find the report, labs, documentation, and summary report for your home. This report meets the guidelines of ASTM, IICRC S-520, and NORMI Professional Practices. We are eager to assist you in resolving the problems we have found and hope you will help us expedite a solution.

Respectfully yours,

A handwritten signature in black ink, appearing to read 'Frank M. Zelinski', is written over a large, faint, light blue watermark of the Healthy Fresh Air logo.

MOLD ASSESSORS Minimum Level of Insurable Practices

These general standards and practices are minimum requirements and do not constitute complete or sufficient specifications for mold assessment in all cases. More detailed requirements developed by a NORMI Certified Mold Assessor (CMA) for a mold assessment project may be required and shall take precedence over the provisions of this section. The NORMI professional shall work only under the provisions stated in a contract for services rendered, which should be presented to the client prior to the beginning of any project.¹

Index of Sections²

- General Information and History
- Visual/Olfactory Inspection and Walk-thru.
- Lab Reports and Diagnostics
- Interpretation of Results
- NORMI Sanitization Plan
- IAQ/Mold Management Plan
- Closing Paragraph

General Information and History

A monthly monitoring of the level of mold has been requested, with the first one being done in the month of December 2024, continuing to June 2025. For this, 3 outside samples to be taken, with one specified as a “control”. However, an average of all three will give a true reading. Each month, the particular rooms will be determined. First inspection done with Chuck and Rick assisting. 3 outside air samples taken, 3 in the following 3 rooms, E114, Guidance, and Ms Giffords room.

Interpretation of Results.

The Nexlab reports are attached. The outside averages are Ascospores 154, Aspergillus 56, Cladosporium 84, and Hyphal fragments 112678. Using these averages we compare them with the inside 3 test areas;

TEST AREA	SPORE COUNT	HYPHAL	CONCLUSION
Exterior	333	112,678	Control for compare
E114	657	140,622	Elevated
Guidance	577	302,463	Elevated
Gifford	812	264,195	Elevated

Here is a definition of “Hyphal Fragments” as seen at [How to interpret your mold air sampling results - Bald Eagle Inspection Services, LLC](#) , *Hyphal Fragments – An indicator of fungal growth. Hyphal fragments are the fruiting structures of mold (such as a tree has branches and a plant has stems). Hyphal fragments typically settle quickly, therefore, the presence of high amounts of hyphal fragments (above 100/m3) suggests an active fungal growth is nearby.*

Gifford room observations. The back room shows the higher levels, 35% of it being Aspergillus. The sample from the cabinet below the sink shows three mold spores, 79 Ascospores, 118 Aspergillus/Penicillium, 317 Cladosporium, and the highest Hyphal Fragment in the 3 room tests. This would indicate a problem on the back of the wood decking under the sink, no doubt caused by some past leakage. Below sinks are a very common mold source due to water leakage and the wood of the cabinet being a good food source for mold. Might consider including this in a future mold remediation to be done when school out for a few days. Custodians can verify if problem by using a circular saw to cut sample from decking, or using a borescope in the left hole where drain pipe exits. The sampling by the window shows a spore count of 840 with 38% being Aspergillus/Penicillium like, and 35% Cladosporium.

E114 thoughts. No visible suspected sources, and may be attributed to traffic in and out of the room, with individuals bring in mold spores from corridor or on their clothing. Be alert to any mold generating sources that might be noted.

Guidance observations. The Conference room is “Not Elevated” indicating the levels read are to be expected under average conditions and compared to outside readings. The readings taken from on the counter by the entry door are in the “Elevated” range. Even though an MCI Protector purifier in operation, this higher reading could be due to the air flow and human traffic entering from the corridor door. Mc Chace room has the highest spore count of the three Guidance areas. Is her door closed most of the time? Comparing her room with the Conference room and daily practices might provide some clues. To assist the purifying effect in both the side rooms, plugging in the PureAir 50 Plug In (\$63.99) and can be ordered direct at [Best Living Systems, LLC Shopping Cart.](#)

It might be noted that air in the entire school building might be compared to the ocean. While some areas are remediated, thus improving the local quality of that area, constant movement will work to balance out the entire sum of Indoor Air Quality (IAQ). Each improvement will eventually work toward an overall improvement. The custodial personnel are to be commended for their diligence in working on various improvements, and locating any hotspots in the building will be a forward step in the IAQ. Following that up with “active” air purification will also help.

I am always available for any further questions. 774-216-9006

THE FOLLOWING ARE GENERAL GUIDELINES FOR CLEANING OR PREVENTING MOLD AND MAY NOT ALL BE SPECIFIC TO THIS JOB.

NORMI Sanitization Plan

From the **NORMI Professional Practices**, this protocol shall be used on all projects where mold counts are elevated, as interpreted by the NORMI certified professional, whether remediation has taken place.

- a. Thorough fogging and wiping down of the entire environment with an approved anti-microbial being careful to avoid spotting of leather, marble, tile, glass, and/or other surfaces which might be prone to spotting. This could include the fogging of a protectant, as a second step, to reduce the possibility of mold proliferation in the indoor environment. (See Recommended Products List.)

- b. Recommendation, where necessary, that the HVAC system be cleaned by an approved and trained mechanical contractor and/or duct cleaner. Where ducts are cleaned the NADCA guidelines should be followed.
- c. The installation of air filtration and purification equipment in accordance with NORMI IAQ training recommendations. This holistic approach to IAQ will improve any environment and reduce contaminants including the potential growth of mold and bacteria. (See Recommended Products List.)
- d. The installation of passive fresh-air makeup to reduce randomized air infiltration and enhance the effectiveness of air filtration and purification equipment.
- e. Ongoing use of water-based green chemistries to reduce VOCs and odors. These chemistries should be bio-degradable, water-based and used as an all-purpose cleaner. (See Recommended Products List.)
- f. Deliver to the client the NORMI Sanitization Protocol which includes “36 Ways to Have a Healthier Indoor Environment” from *Mold-Free Construction*.
- g. Recommend post screening after the Sanitization Protocol is in place and that on an annual basis to insure maintenance of a clean, healthy environment.³

It is our recommendation, based on all the information we gathered, our expertise, experience, and the clear IAQ/Mold Profile we have developed from this inspection, that you sanitize the indoor air environment using the following protocol. By partnering with us in this process, you will be able to provide a clean air environment for years to come and create a healthier living space for your home.

- 1) Fogging of recommended preparation product (see Recommended Products List)—this is a concentrated no VOCs, biodegradable water-based enzyme cleaner available that can also be used as a general all-purpose cleaner and mold/mildew remover. Surfaces cleaned with an enzyme cleaner will remain cleaner longer with no toxicity or harmful residue...this product is safe for food contact surfaces.
- 2) Fogging of recommended protectant product (see Recommended Products List)—this is a concentrated no VOCs, biodegradable water-based protectant that utilizes a mechanical method of killing mold and bacteria as it settled on surfaces.
- 3) Utilize recommended 1” filter in HVAC systems to reduce dust, bio-nesting and eliminate filter blow by. This will keep the duct system and internal working parts of the HVAC cleaner and reduce the possibility of mold growth inside the systems. (See Recommended Products List)
- 4) Utilize pro-active air purification technologies which should include stand-alone air purifiers and HVAC probes installed on the return plenum and supply plenum of each system to keep it clean and reduce the growth of mold, bacteria and the odors associated with them. (See Recommended Products List)

IAQ/Mold Management Plan

An IAQ/Mold Management Plan involves controlling contaminants in the indoor environment. By following this checklist and utilizing the recommended products, indoor air contaminants including mold and bacteria will be reduced in the air and on surfaces. Testing data is available upon request.⁴

5) This checklist is an excerpt from *Mold Free Construction*⁵ and should become part of any IAQ Management Plan.

- ☐ Keep the premises clean and regularly dust, vacuum, and mop.
- ☐ Install an efficient air purification system in your home or office to maintain good indoor air quality and reduce dust. This would require installation of air filtration/purification equipment in the HVAC system(s), general living areas and moisture prone areas. Your IAQ professional can design an efficient system for you.
- ☐ Use hood vents when cooking, cleaning, and dishwashing.
- ☐ Keep closet doors ajar, where possible, to increase airflow in the closets or install vented doors.
- ☐ Avoid excessive amounts of indoor plants.
- ☐ Use exhaust fans when bathing/showering.
- ☐ Leave exhaust fans on long enough to remove moisture from the room.
- ☐ Use ceiling fans.
- ☐ Water all indoor plants outdoors, if possible.
- ☐ Wipe down any moisture and/or spillage.
- ☐ Wipe down bathroom walls and fixtures after bathing/showering. There are some good products out there for this very purpose.
- ☐ Wipe down any vanities/sink tops.
- ☐ Avoid drying clothes by hand drying indoors.
- ☐ Avoid air-drying dishes.
- ☐ Open blinds/curtains to allow light into premises.
- ☐ Wipe down floors after any water spillage.
- ☐ Hang shower curtains within the bath when showering.
- ☐ Securely close shower doors, if present, when showering.
- ☐ Leave bathroom and showers door open after use.
- ☐ Use a dryer if present for wet towels.
- ☐ Use household cleaners (we prefer biodegradable enzyme cleaners) on any hard surfaces.
- ☐ Remove any moldy or rotting food.
- ☐ Remove garbage regularly.
- ☐ Wipe down all visible signs of moisture.
- ☐ Regularly scan the ceiling for evidence of roof leaks.
- ☐ Periodically check the air conditioning vents to be sure they are clean.
- ☐ Change the air conditioning filter regularly.
- ☐ Perform scheduled maintenance on your air conditioning system, including, but not limited to, cleaning the evaporator coil.

- ☐ Wipe down windows and sills if moisture is present.
- ☐ Regularly, inspect for leaks under the sinks and around the base of the water closets, around the washing machine and water heater.
- ☐ Check all washer hoses and outside garden hose connections.
- ☐ Regularly empty dehumidifier.
- ☐ Clean behind the refrigerator and around the air conditioning air handler if possible.
- ☐ Empty the refrigerator condensation pan where possible.
- ☐ If possible, pour a small amount of bleach in the drip pan of the air conditioning air handler to decrease the potential for mold growth.
- ☐ Answer this question regularly and check for the signs of mold: "If I were mold and liked moisture, where would I feel most comfortable to set up a home and build a family?"

Recommended Products List

- Preparation Product—we recommend EnzyMagic201, a 20:1 concentrate, water-based, biodegradable all-purpose cleaner that reduces contaminants like mold, bacteria and the odors associated with them. Also see www.anabec.com for Advanced Cleaning Solution Plus.
- Protectant—protectant—we recommend BacShield, a 64:1 concentrate, because it has no VOCs, is a biodegradable water-based protectant that utilizes a mechanical method of killing mold and bacteria as it settles on surfaces. As seen at www.blspro.com/02574 and available thru Frank Zelinski. Also available for prevention and protection is www.anabec.com product Anabec X70. When applied in tandem with the Cleaner by a trained applicator under the Anabec, Inc. Warranty Program, X70 carries a 30-year transferable warranty.
- HVAC Filter—we recommend the PerfectFit Filter which fits any size return and reduces bio-nesting, blow by, and has an internal frame rather than cardboard so mold will not grow on it. This filter can be purchased by subscription with FREE shipping at www.90dayfilter.com/02574
- Proactive Air Purification Technologies—we recommend the MCI™ Multi-Cluster Ionization technology from Best Living Systems. The technology website is, and a complete line of air and laundry purification products can be reviewed at where purchasing arrangements and sizing for your environment can be made by your NORMIPRO Management IAQ/Mold Assessor. Also, a full line of air purification products can be seen at www.fmz.greentechaffiliate.com, and can be ordered thru Frank Zelinski.
- Mold preventive paints as seen at <https://www.rustoleum.com/product-catalog/consumer-brands/zinsser/specialty-coatings>. I have a 25 year long satisfactory experience with Perma-White paint for the interior. Most paint and big box stores carry Perma White. It can be tinted to pastel levels also.

- Use of proper dehumidification equipment. Either a dehumidifier, or dehumidifier alternative such as the XCHANGER as seen at https://www.tjernlund.com//xchanger_basement_fan.htm. Watch three videos at bottom of the page.
- For basement remodeling, a highly recommended framing and insulation product is seen at www.insofast.com. I have used it and highly recommend it as there is nothing organic for mold to grow on, and a bonus is that it does not provide space as living quarters for mice, as framed walls do. Also, if there is flooding, nothing needs to be torn out.

Closing Paragraph

It is our opinion that these recommendations will substantially improve the indoor air environment of your home and, in addition, reduce the potential for mold or other IAQ problems in the future. There is no “over-night” solution, but we believe the improvement will be significant and, over a relatively short period, the occupants and visitors in your home will feel better about their environment. If we may be of further service to you in the future, please do not hesitate to call. We appreciate your business and thank you for choosing a NORMI Certified IAQ/Mold Inspector.

Respectfully yours,


 Health • Fresh Air
 ————— We Help People Who Like to Breathe! —————

Frank M Zelinski
 Certified Mold Assessor
 Safe N Dry

¹ NORMI Professional Practices, Revision 10/08/2015, page 1

² NORMI Professional Practices, Mold Assessor, (5) **Mold Assessment Report (MAR)**, page 2

³ NORMI Professional Practices, Mold Remediator (15) **NORMI Sanitization Protocol**, pages 12-13

⁴ Best Living Systems, LLC Manufacturer Rep Binder, **Clinical Field Tests** by request

⁵ *Mold Free Construction*, D. Douglas Hoffman, **revised 01/01/2005**