FRANCE ENVIRONMENTAL

Environmental Consulting Services

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January 27, 2024

City of Richmond Public Schools
Department of Facility Service
1461 A Commerce Road
Richmond, Virginia 23224

ATTN.: Mr. Ronald Hathaway, Jr.
Director of Facilities

RE: Moisture & Mold Assessment Report
Fairfield Court Elementary School – All Rooms
2510 Phaup Street
Richmond, Virginia 23223
FEI Project Number: FEI-23MI637

Dear Mr. Hathaway:

In accordance with your request, a Moisture & Mold Assessment has been performed at the above reference academic facility. France Environmental, Inc. (FEI) is providing this letter report summarizing our findings and sample results from the fieldwork conducted on November 22, 2023. The investigation was performed by FEI Industrial Hygienists, Mr. Andrew H. Baird, Mr. Keith Baird and Mr. James W. Morris. An additional site visit was performed on December 29, 2023 by FEI Industrial Hygienist Mr. Micheal D. Allshouse to perform confirmation sampling of areas that were inconclusive after the initial round of air sampling.

The scope of this assessment was to test for identifiable conditions, if any, that may be affecting the quality of the air in the subject space. The assessment included a visual inspection and air sampling for fungi (mold). At the client's request, air samples were collected from each accessible classroom, office, and academic space within the building. Please find attached with this letter the Laboratory Results; Sample Location Drawings; Photographs of Site Conditions; and Fungal Types/Groups Chart for the air sampling performed.

VISUAL OBSERVATIONS:

France Environmental, Inc. performed a visual assessment of the interior areas of the subject spaces. The visual inspection was focused on potential indicators of Indoor Air Quality (IAQ) problems and specifically included areas of visible water damage and visible mold growth. Specific items of interest observed during the inspection are described below:

- Moisture and/or damaged stained lay-in ceiling tiles were observed throughout the building. Staining appears to be from HVAC Duct/Diffuser condensation and past or current pipe and/or roof leaks.
- Ceiling HVAC Diffusers/Ceiling Units and associated ceiling tiles are showing a light to moderate dust load.
- Visible mold growth was observed on A/C Units and/or diffuser vents in the following locations: 1st Floor – Rooms 101A, 101,102, 103, 104, Media Center, 107, 108, 109, 111,

and 115.
- Suspect mold growth was observed on the interior window glaze in Office 3.

TOTAL FUNGAL AIR SAMPLING:

On November 22, 2023, FEI collected a total of forty-five (45) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Common Areas, Kitchen, Gym, Multi-Purpose Room, Break Rooms, and Media Center.
- Two (2) exterior samples were collected outside the building for comparison purposes. These samples were collected throughout the day and included a pre-sample before interior air samples were collected, and a post interior air sample.

The air samples were collected at an airflow rate of five (5) liters per minute for five (5) minutes totaling twenty-five (25) liters of air.

The results of the fungi samples collected and analyzed are as follows:

- The results of the air samples collected **did not** indicate airborne fungal amplification when compared to the outside building samples at the time of the air sampling. There were a few mold air samples >12,000 of ***Basidiospores*** located in: Kitchen, Main Office, Nurse's Office, Main Office #1-#2 and 108 and the outside building samples showing exactly the same. ***Aspergillus/Penicillium sp.*** was found elevated in Room 102 when compared to the outside building samples. FEI returned to the site to collect additional confirmation samples from the areas mentioned above. *The additional samples confirmed there was no fungal amplification occurring in these areas. (Please Refer To "Mold Air Cassette Sample Analysis Laboratory Results" Appendix)*

Microbiological interpretation of sample results poses a challenge for the health and safety professionals as there are at present no strict numerical guidelines which are appropriate for assessing whether microbial levels inside buildings are "safe" or "normal" spore levels. There are currently no regulatory standards for evaluating airborne fungi concentrations for this or any other facility. As these organisms are present everywhere the standard of care is to perform a risk-based analysis. In general, industry standards effective interpretation is based on the comparison of indoor and outdoor samples. In "Clean" buildings, total airborne spore concentrations are generally less than outdoor spore concentrations with similar genera identified within each environment. The presence or absence of a few non-moisture indicator genera in small numbers (<1,000 Counts/M^3) identified within interior building areas should not be considered abnormal. However, the presence of moisture indicator mold spores (***Chaetomium; Stachybotrys; Rhodotorula; Trichoderma; and Scopulariopsis***) in any significate amounts would indicate chronic moisture intrusion issues and confirmation that molds have colonized and are amplifying within the building. ***Stachybotrys*** was found in trace amounts in the Main Office #3. This room was included in the second round of air sampling and it did not indicate fugal amplification was occurring. This Office did have the visible mold growth on the interior window glaze.

TOTAL FUNGAL SURFACE SAMPLING:

FEI collected a total of two (2) direct tape lift surface samples from the following areas:

- One (1) sample was collected from the black growth found on the Window AC Vent in Room 101
- One (1) sample was collected from the black growth on the Ceiling AC Vent in Room 104

The direct microscopic examination of the surface samples determined whether or not fungi is growing and/or still present on the surfaces sampled, and if so, what kinds of fungi was present.

The results of the fungi surface samples collected and analyzed are as follows:

- The results of the surface **sample T1** collected from the black growth found on the Window AC Vent in Room 101 indicated the presence of ***Cladosporium sp.*** The estimated number of spores on the sample for this species was described by the laboratory as "Heavy", which the laboratory defines as 200 or more spores observed. Definite Mold Growth! *(Please Refer To "Surface Sample Analysis Laboratory Results" Appendix)*
- The results of the surface **sample T2** collected from the black growth on the Ceiling AC Vent in Room 104 indicated the presence of ***Cladosporium sp.*** The estimated number of spores on the sample for this species was described by the laboratory as "Heavy", which the laboratory defines as 200 or more spores observed. Definite Mold Growth! *(Please Refer To "Surface Sample Analysis Laboratory Results" Appendix)*

COMFORT PARAMETER TESTING:

FEI also conducted Comfort Parameter Sampling which included Temperature and Relative Humidity by utilizing electronic recording monitors (EXTECH Model 445580 Humidity/Temperature Pen). Measurements were collected throughout the building during the inspection. Description of recommended levels and comfort parameter results are found below.

TEMPERATURE (T)

The measurement of the air temperature is used to determine comfort level parameters associated with the indoor environment. The measuring device was used to collect the temperature in each of the rooms inspected. The American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc. (ASHRAE) provides guidance on comfort ranges for temperature depending on the season. These numbers generally range from 68 to 75 Degrees Fahrenheit (°F) during the winter months and from 73ºF to 79ºF during the summer months. These ranges should be acceptable for sedentary or slightly active persons. The temperature measured in the building ranged from 60.0ºF to 77.4ºF. The temperatures measured outside were 60.0°F in the morning, 63.1°F mid-day and 68.0°F in the afternoon.

RELATIVE HUMIDITY (RH)

Measurement of the Relative Humidity are used to indicate comfort level parameters associated with the indoor air. Overly dry or overly humid air are indicators of air quality issues caused by the HVAC system. ASHRAE has set standards that present guidelines for human occupation. Relative Humidity levels below 30% are associated with increased discomfort and drying of the mucus membranes and skin. High humidity can result in condensation and the subsequent development of mold and fungi along with the increase of dust mite propagation. Ideal indoor Relative Humidity for winter months is 35%, while 50% is optimal in the summer months. Relative Humidity levels ≤65% are considered acceptable by ASHRAE standards. The Relative Humidity levels in the

building at the time of the sampling ranged from 38.0% to 57.1%. The outside humidity readings were 48.8% in the morning, 49.3% mid-day and 51.9% in the afternoon.

CONCLUSIONS/RECOMMENDATIONS:

- The airborne fungal spore levels for the indoor air samples at the time of this sampling event **do not** indicate active amplification of fungal spores based on comparison to the outdoor fungal spore levels.
- Visible mold-impacted Window AC Vents and Ceiling AC Vents (confirmed by surface sampling) were observed in Rooms 101 and 104. It is recommended these vents be cleaned in accordance with industry standard mold remediation procedures, such as those outlined in the U.S. Environmental Protection Agency (EPA) publication Mold Remediation in Schools and Commercial Buildings (September 2008).
- As part of an on-going maintenance program, it is recommended that water-stained ceiling tiles, when identified, be investigated to determine the water source and try and correct/reduce the source of the moisture.
- As part of the on-going maintenance & custodial activities, it is recommended that HVAC ceiling diffusers and wall mounted HVAC Units be cleaned (HEPA Vacuumed and wiped down) periodically throughout the year.
- To improve the perception of the buildings indoor air quality, the school system may consider replacing water stained and/or dirty ceiling tiles as an on-going maintenance item.
- As part of the on-going maintenance program, it is recommended HVAC filters and air filtration machines are maintained in good condition with preventative maintenance in accordance with the manufacturer's recommendations.

It is important to note that the reported microbial levels are only reflective of conditions at the time of this test and that microbial populations can vary over time, depending upon a number of conditions, including environmental factors, i.e., temperature and relative humidity. FEI, by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state or federal public agencies any conditions at the site that may present a potential danger to public health, safety, or the environment.

Thank you for choosing FEI as your consultant for this project. If you have any questions, or if we can be of additional service, please contact the undersigned at 804.716.0560.

Respectfully submitted,

FRANCE ENVIRONMENTAL, INC.

Andrew H. Baird
Industrial Hygienist

Joseph T. France
Project Manager

Attachments: Mold Air Cassettes/Tape Lift Analytical Laboratory Report
Drawing Indicating Sample Locations
Photographs of Site Conditions
Fungal Types and Group Chart

MOLD AIR CASSETTE/TAPE LIFT ANALYTICAL LABORATORY RESULTS

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-01			323111126-02			323111126-03			323111126-04		
Sample Number	2915665			2915655			2915645			2915625		
Sample Name	Multi-Purpose Rm			Kitchen			Main Office			Nurse's Office		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	160	n/a	4	40	n/a	1	200	n/a	5	120	n/a	3
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	160	4	4	80	1	2	40	<1	1	80	1	2
Aspergillus/Penicillium	80	2	2	ND			120	1	3	1040	7	26
Basidiospores	3960	94	99	>12000	99	300	>12000	99	300	>12000	77	300
Cladosporium sp.	ND			ND			ND			2440	16	61
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**4200**	**100**	**105**	**12080**	**100**	**302**	**12160**	**100**	**304**	**15560**	**100**	**389**

ND = None Detected

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AmeriSci Number	323111126-05			323111126-06			323111126-07			323111126-08		
Sample Number	2915635			2915666			2915656			2915646		
Sample Name	Main Office - Office #1			Main Office - Office #2			Main Office - Office #3			Outside Building - Pre - Front		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	80	n/a	2	400	n/a	10	80	n/a	2
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	160	1	4	40	<1	1	280	4	7	1960	14	49
Aspergillus/Penicillium	80	1	2	ND			160	2	4	160	1	4
Basidiospores	>12000	98	300	>12000	98	300	7080	92	177	>12000	85	300
Cladosporium sp.	ND			80	1	2	ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			80	1	2	120	2	3	ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			40	1	1	ND		
Total Fungal Spores	**12240**	**100**	**306**	**12200**	**100**	**305**	**7680**	**100**	**192**	**14120**	**100**	**353**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-09			323111126-10			323111126-11			323111126-12		
Sample Number	2915636			2915626			2915667			2915657		
Sample Name	Gym			Gym Hallway			Class at Side Exit			Class at Side Exit		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	ND	n/a	ND	160	n/a	4	80	n/a	2	80	n/a	2
Mycelial Fragments	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			ND			80	2	2	ND		
Aspergillus/Penicillium	ND			80	1	2	ND			ND		
Basidiospores	ND			10160	99	254	4640	98	116	3120	100	78
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	<1	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	ND	**ND**	**ND**	**10280**	**100**	**257**	**4720**	**100**	**118**	**3120**	**100**	**78**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-13			323111126-14			323111126-15			323111126-16		
Sample Number	2915647			2915637			2915627			2915668		
Sample Name	120			119			118			117		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	120	n/a	3	80	n/a	2	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	360	11	9	160	4	4	80	4	2	ND		
Aspergillus/Penicillium	80	2	2	80	2	2	ND			40	2	1
Basidiospores	2720	84	68	3640	94	91	2080	96	52	2480	98	62
Cladosporium sp.	80	2	2	ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**3240**	**100**	**81**	**3880**	**100**	**97**	**2160**	**100**	**54**	**2520**	**100**	**63**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-17			323111126-18			323111126-19			323111126-20		
Sample Number	2915658			2915648			2915638			2915628		
Sample Name	116			115			114			113		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	40	n/a	1	80	n/a	2	200	n/a	5
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	40	2	1	ND			ND			80	2	2
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	2240	98	56	3040	100	76	5160	100	129	4320	98	108
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**2280**	**100**	**57**	**3040**	**100**	**76**	**5160**	**100**	**129**	**4400**	**100**	**110**

ND = None Detected

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AmeriSci Number	323111126-21			323111126-22			323111126-23			323111126-24		
Sample Number	2915669			2915659			2915649			2918537		
Sample Name	112			Middle Hallway			Kitchen Office			101A		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			2		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	240	n/a	6	200	n/a	5	280	n/a	7
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			40	1	1	240	6	6	ND		
Aspergillus/Penicillium	ND			40	1	1	ND			80	13	2
Basidiospores	2440	97	61	5680	99	142	3560	94	89	360	60	9
Cladosporium sp.	80	3	2	ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			160	27	4
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**2520**	**100**	**63**	**5760**	**100**	**144**	**3800**	**100**	**95**	**600**	**100**	**15**

ND = None Detected

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TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-25			323111126-26			323111126-27			323111126-28		
Sample Number	2918535			2918555			2918545			2918564		
Sample Name	101			102			103			104		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	2			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	200	n/a	5	160	n/a	4	120	n/a	3	160	n/a	4
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	120	6	3	ND			ND			ND		
Aspergillus/Penicillium	120	6	3	6040	99	151	ND			ND		
Basidiospores	1440	73	36	ND			3320	100	83	3920	96	98
Cladosporium sp.	40	2	1	ND			ND			40	1	1
Curvularia sp.	ND			ND			ND			80	2	2
Epicoccum sp.	ND			40	1	1	ND			ND		
Myxomycetes/Periconia/Smuts	200	10	5	ND			ND			40	1	1
Pithomyces sp.	40	2	1	ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**1960**	**100**	**49**	**6080**	**100**	**152**	**3320**	**100**	**83**	**4080**	**100**	**102**

ND = None Detected

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-29			323111126-30			323111126-31			323111126-32		
Sample Number	2918556			2918544			2918557			2918546		
Sample Name	MIC			MDF			106			107		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	40	n/a	1	80	n/a	2	200	n/a	5
Mycelial Fragments	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			80	1	2	80	2	2	ND		
Aspergillus/Penicillium	ND			80	1	2	120	3	3	ND		
Basidiospores	2680	100	67	5960	96	149	3280	92	82	4800	100	120
Cladosporium sp.	ND			80	1	2	80	2	2	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	1	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**2680**	**100**	**67**	**6240**	**100**	**156**	**3560**	**100**	**89**	**4800**	**100**	**120**

ND = None Detected

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-33			323111126-34			323111126-35			323111126-36		
Sample Number	2944042			2918554			2918538			2918547		
Sample Name	108			109			110			111		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	160	n/a	4	200	n/a	5	ND	n/a	ND	160	n/a	4
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	720	6	18	40	1	1	ND			ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	>12000	94	300	2960	96	74	120	100	3	3960	100	99
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			80	3	2	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**12720**	**100**	**318**	**3080**	**100**	**77**	**120**	**100**	**3**	**3960**	**100**	**99**

ND = None Detected

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-37			323111126-38			323111126-39			323111126-40		
Sample Number	2918534			2918536			2944060			2922618		
Sample Name	Server Room			A8			A7			Rotunda Hall		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	240	n/a	6	280	n/a	7	ND	n/a	ND	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	160	4	4	ND			40	1	1	ND		
Aspergillus/Penicillium	ND			200	6	5	80	2	2	ND		
Basidiospores	3840	96	96	3320	93	83	5160	98	129	6440	100	161
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	1	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**4000**	**100**	**100**	**3560**	**100**	**89**	**5280**	**100**	**132**	**6440**	**100**	**161**

ND = None Detected

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-41			323111126-42			323111126-43			323111126-44		
Sample Number	2944049			2944037			2944040			2922762		
Sample Name	A6			A5			A4			A3		
Analysis Date	11/27/2023			11/27/2023			11/27/2023			11/27/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	160	n/a	4	ND	n/a	ND	120	n/a	3	80	n/a	2
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			ND			40	1	1	ND		
Aspergillus/Penicillium	ND			40	3	1	ND			ND		
Basidiospores	1640	100	41	1200	97	30	3760	98	94	3040	100	76
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			40	1	1	ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	**1640**	**100**	**41**	**1240**	**100**	**31**	**3840**	**100**	**96**	**3040**	**100**	**76**

ND = None Detected

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111126
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111126-45											
Sample Number	2944053											
Sample Name	Outside Building - Post - Front											
Analysis Date	11/27/2023											
Volume (L)	25											
Limit of Detection (LOD) (Count/M ^{3})	40											
Background Density	1											
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND									
Fibers	240	n/a	6									
Mycelial Fragments	40	n/a	1									
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND											
Aspergillus/Penicillium	ND											
Basidiospores	4520	99	113									
Cladosporium sp.	40	1	1									
Curvularia sp.	ND											
Epicoccum sp.	ND											
Myxomycetes/Periconia/Smuts	ND											
Pithomyces sp.	ND											
Stachybotrys sp.	ND											
Total Fungal Spores	**4560**	**100**	**114**									

ND = None Detected
Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Jill G. Carrillo / Analyst
Signature:
Date: 11/28/23

Name/Title: Jill G. Carrillo / Analyst
Reviewed By:
Date: 11/28/23

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

AmeriSci Job #:
323111126
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: CORPS: Fairfield Court Elementary School

Date Received: 11/27/23
Date Reported: 11/28/23

Direct Fungal Identification (SOP# 3.21.01)

AmeriSci Job # 323111126-46

Sample #: T1 **Sample description:** 101 - Black on Window AC Vent **Analysis Date:** 11/27/23

Fungal Identification	Estimated Amount	Comments
Cladosporium sp.	Heavy	

AmeriSci Job # 323111126-47

Sample #: T2 **Sample description:** 104 - Black on Ceiling AC Vent **Analysis Date:** 11/27/23

Fungal Identification	Estimated Amount	Comments
Cladosporium sp.	Heavy	

Minimum reporting limit is no fungi detected

Rare: 1 - 10 Spores **Light: 11 - 100 Spores** **Moderate: 101 - 200 Spores** **Heavy: 200+ Spores**

Results relate only to the items tested.

Name/Title: Jill G. Carrillo / Analyst

Signature:

Date: 11/28/23

Name/Title: Jill G. Carrillo / Analyst

Reviewed By:

Date: 11/28/23

AMERI SCI
BIO-CHEM

13635 Genito Road Midlothian, VA 23112
(804) 763-1200 Phone / (804) 763-1800 Fax
AIHA ACCREDITED 175122

323-11-1126

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI637	**STD** – Standard: 2 Days (Non-viable) **24** – 24: 24 Hours (Non-viable) **R** – Rush: 6 hours (Non-viable) **C** – Culture: 7-14 Days **W** – Weekends: Scheduled by noon ET Friday Only ***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.
Project Name: CORPS: Fairfield Court Elementary School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

						Requested Services (X Boxes)						
						Non-Viable			Culturable			
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk			
Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2915665	Multi-Purpose Rm	ST	STD	25 LTRS			X					
2915655	Kitchen	ST	STD	25 LTRS			X					
2915645	Main Office	ST	STD	25 LTRS			X					
2915625	Nurse's Office	ST	STD	25 LTRS			X					
2915635	Main Office – Office #1	ST	STD	25 LTRS			X					
2915666	Main Office – Office #2	ST	STD	25 LTRS			X					
2915656	Main Office – Office #3	ST	STD	25 LTRS			X					
2915646	Outside Building – Pre - Front	ST	STD	25 LTRS			X					
2915636	Gym	ST	STD	25 LTRS			X					
2915626	Gym Hallway	ST	STD	25 LTRS			X					
2915667	Class at Side Exit	ST	STD	25 LTRS			X					
2915657	Class at Side Exit	ST	STD	25 LTRS			X					

Sample Type Codes	
AP – Andersen Plate	**T** - Tape
SW - Swab	**ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.
B – Bulk	

Relinquished By	Date & Time	Received By	Date & Time
Andrew Burk	11-27-23		
		Received	

NOV 27 2023

323-11-1126

AMERI SCI BIO-CHEM

13635 Genito Road Midlothian, VA 23112
(804) 763-1200 Phone / (804) 763-1800 Fax
AIHA ACCREDITED 175122

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI637	**STD** – Standard: 2 Days (Non-viable) **24** – 24: 24 Hours (Non-viable) **R** – Rush: 6 hours (Non-viable) **C** – Culture: 7-14 Days **W** – Weekends: Scheduled by noon ET Friday Only ***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.
Project Name: CORPS: Fairfield Court Elementary School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)							
						Non-Viable			Culturable				
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk				
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only	
2915647	120	ST	STD	25 LTRS			X						
2915637	119	ST	STD	25 LTRS			X						
2915627	118	ST	STD	25 LTRS			X						
2915668	117	ST	STD	25 LTRS			X						
2915658	116	ST	STD	25 LTRS			X						
2915648	115	ST	STD	25 LTRS			X						
2915638	114	ST	STD	25 LTRS			X						
2915628	113	ST	STD	25 LTRS			X						
2915669	112	ST	STD	25 LTRS			X						
2915659	Middle Hallway	ST	STD	25 LTRS			X						
2915649	Kitchen Office	ST	STD	25 LTRS			X						
2918537	101A	ST	STD	25 LTRS			X						

Sample Type Codes	
AP – Andersen Plate **SW** - Swab **B** - Bulk	**T** – Tape **ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Burch	11-27-23	Received 2023 NOV 27 2023 AM	

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13635 Genito Road Midlothian, VA 23112
(804) 763-1200 Phone / (804) 763-1800 Fax
AIHA ACCREDITED 175122

323-11-1126

Requested Services (X Boxes)							
Non-Viable			Culturable				
Spore Trap		Tape Bulk	Andersen, Swab, Bulk				
Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungaf Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only	

Contact Information

Company: **France Environmental, Inc.** PO#:

Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**

Results To: **Joseph France** Fax Results? Y/N Fax: **(804) 918-7098**

Phone: **(804) 716-0560** Email Y/N: **JFrance@FranceEnv.com**

Project Information

Project #: FEI-23MI637

Project Name: CORPS: Fairfield Court Elementary School

Invoice To: **Joseph France**

Sampling Date(s): 11-22-23

Turnaround Time Codes

STD – Standard: 2 Days (Non-viable)
24 – 24: 24 Hours (Non-viable)
R – Rush: 6 hours (Non-viable)
C – Culture: 7-14 Days
W – Weekends: Scheduled by noon ET Friday Only
***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)								
2918535	101	ST	STD	25 LTRS			X						
2918555	102	ST	STD	25 LTRS			X						
2918545	103	ST	STD	25 LTRS			X						
2918564	104	ST	STD	25 LTRS			X						
2918556	MIC	ST	STD	25 LTRS			X						
2918544	MDF	ST	STD	25 LTRS			X						
2918557	106	ST	STD	25 LTRS			X						
2918546	107	ST	STD	25 LTRS			X						
2944042	108	ST	STD	25 LTRS			X						
2918554	109	ST	STD	25 LTRS			X						
2918538	110	ST	STD	25 LTRS			X						
2918547	111	ST	STD	25 LTRS			X						

Sample Type Codes

AP – Andersen Plate
SW - Swab
B - Bulk
T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Baird	11-27-23		Received
			NOV 27 2023

3

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BIO-CHEM

13635 Genito Road Midlothian, VA 23112
(804) 763-1200 Phone / (804) 763-1800 Fax
AIHA ACCREDITED 175122

323-11-1126

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI637	**STD** – Standard: 2 Days (Non-viable) **24** – 24: 24 Hours (Non-viable) **R** – Rush: 6 hours (Non-viable) **C** – Culture: 7-14 Days **W** – Weekends: Scheduled by noon ET Friday Only ***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.
Project Name: CORPS: Fairfield Court Elementary School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)						
						Non-Viable: Spore Trap		Non-Viable: Tape Bulk	Culturable: Andersen, Swab, Bulk			
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2918534	Server Room	ST	STD	25 LTRS			X					
2918536	A8	ST	STD	25 LTRS			X					
2944060	A7	ST	STD	25 LTRS			X					
2922618	Rotunda Hall	ST	STD	25 LTRS			X					
2944049	A6	ST	STD	25 LTRS			X					
2944037	A5	ST	STD	25 LTRS			X					
2944040	A4	ST	STD	25 LTRS			X					
2922762	A3	ST	STD	25 LTRS			X					
2944053	Outside Building – Post – Front	ST	STD	25 LTRS			X					
T1	101 – Black on Window AC Vent	T	STD					X				
T2	104 – Black on Ceiling AC Vent	T	STD					X				

Sample Type Codes	
AP – Andersen Plate **SW** - Swab **B** - Bulk	**T** - Tape **ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Baird	11-27-23	Received NOV 27 2023	

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:
Justin B. Liverman

AmeriSci Job #:
323121089
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: City Of Richmond Public Schools (CORPS); Fairfield Court Elementary School, 2510 Phaup

Date Received: 12/29/23
Date Reported: 12/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323121089-01			323121089-02			323121089-03			323121089-04		
Sample Number	2916007			2916017			2916015			2916018		
Sample Name	Main Office			Nurse's Office			Main Office, Office 1			Main Office, Office 2		
Analysis Date	12/29/2023			12/29/2023			12/29/2023			12/29/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			2			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	ND	n/a	ND	120	n/a	3	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Aspergillus/Penicillium	ND			ND			40	14	1	ND		
Basidiospores	ND			ND			160	57	4	120	75	3
Cladosporium sp.	40	100	1	ND			80	29	2	40	25	1
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	**40**	**100**	**1**	**ND**	**ND**	**ND**	**280**	**100**	**7**	**160**	**100**	**4**

ND = None Detected

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AmeriSci Job #:
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FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
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Client Job#: FEI-23MI637
Client Job Name: City Of Richmond Public Schools (CORPS); Fairfield Court Elementary School, 2510 Phaup

Date Received: 12/29/23
Date Reported: 12/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323121089-05			323121089-06			323121089-07			323121089-08		
Sample Number	2916016			2916006			2916008			2916023		
Sample Name	Main Office, Office 3			Kitchen			Room 108			Gym Hallway		
Analysis Date	12/29/2023			12/29/2023			12/29/2023			12/29/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			1			1			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	ND	n/a	ND	40	n/a	1	80	n/a	2
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Aspergillus/Penicillium	40	11	1	ND			ND			ND		
Basidiospores	240	67	6	40	25	1	ND			40	13	1
Cladosporium sp.	80	22	2	80	50	2	40	50	1	280	88	7
Myxomycetes/Periconia/Smuts	ND			40	25	1	40	50	1	ND		
Total Fungal Spores	**360**	**100**	**9**	**160**	**100**	**4**	**80**	**100**	**2**	**320**	**100**	**8**

ND = None Detected

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Analyzed By:
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FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI637
Client Job Name: City Of Richmond Public Schools (CORPS); Fairfield Court Elementary School, 2510 Phaup

Date Received: 12/29/23
Date Reported: 12/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323121089-09											
Sample Number	2916024											
Sample Name	Exterior Front B Flagpole											
Analysis Date	12/29/2023											
Volume (L)	25											
Limit of Detection (LOD) (Count/M ^{3})	40											
Background Density	1											
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND									
Fibers	ND	n/a	ND									
Mycelial Fragments	ND	n/a	ND									
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Aspergillus/Penicillium	40	5	1									
Basidiospores	120	16	3									
Cladosporium sp.	600	79	15									
Myxomycetes/Periconia/Smuts	ND											
Total Fungal Spores	**760**	**100**	**19**									

ND = None Detected
Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Justin B. Liverman / Analyst
Signature:
Date: 12/29/23

Name/Title: Justin B. Liverman / Analyst
Reviewed By:
Date: 12/29/23

323 121089

AMERISCI BIO-CHEM

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Contact Information

Company: France Environmental | PO#:

Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225

Results To: FEI | Fax Results? Y☐ | Fax#:

Phone: 804 716 0560 | Email? Y☑ | Email: FEI Distribution List

Project Information

Project Name: City of Richmond Public Schools (CORPS)
Fairfield Court Elementary School
2510 Phaup Street
Richmond, Virginia 23223
Proj. #: FEI-23MI637

Sampling Date(s): 12/29/23

Turnaround Time Codes

STD – Standard: 2 Days (Non-viable)
24 – 24: 24 Hours (Non-viable)
R – Rush: 6 hours (Non-viable)
C – Culture: 7-14 Days
W – Weekends: Scheduled by noon ET Friday Only
***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.

Requested Services (X Boxes)

Non-Viable		Culturable				
Spore Trap	Tape Bulk	Andersen, Swab, Bulk				
Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)							
2916007	Main Office	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916017	Nurse's Office	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916015	Main Office, Office 1	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916018	Main Office, Office 2	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916016	Main Office, Office 3	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916006	Kitchen	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916008	Room 108	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916023	Gym Hallway	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
2916024	Exterior Front By Flagpole	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	

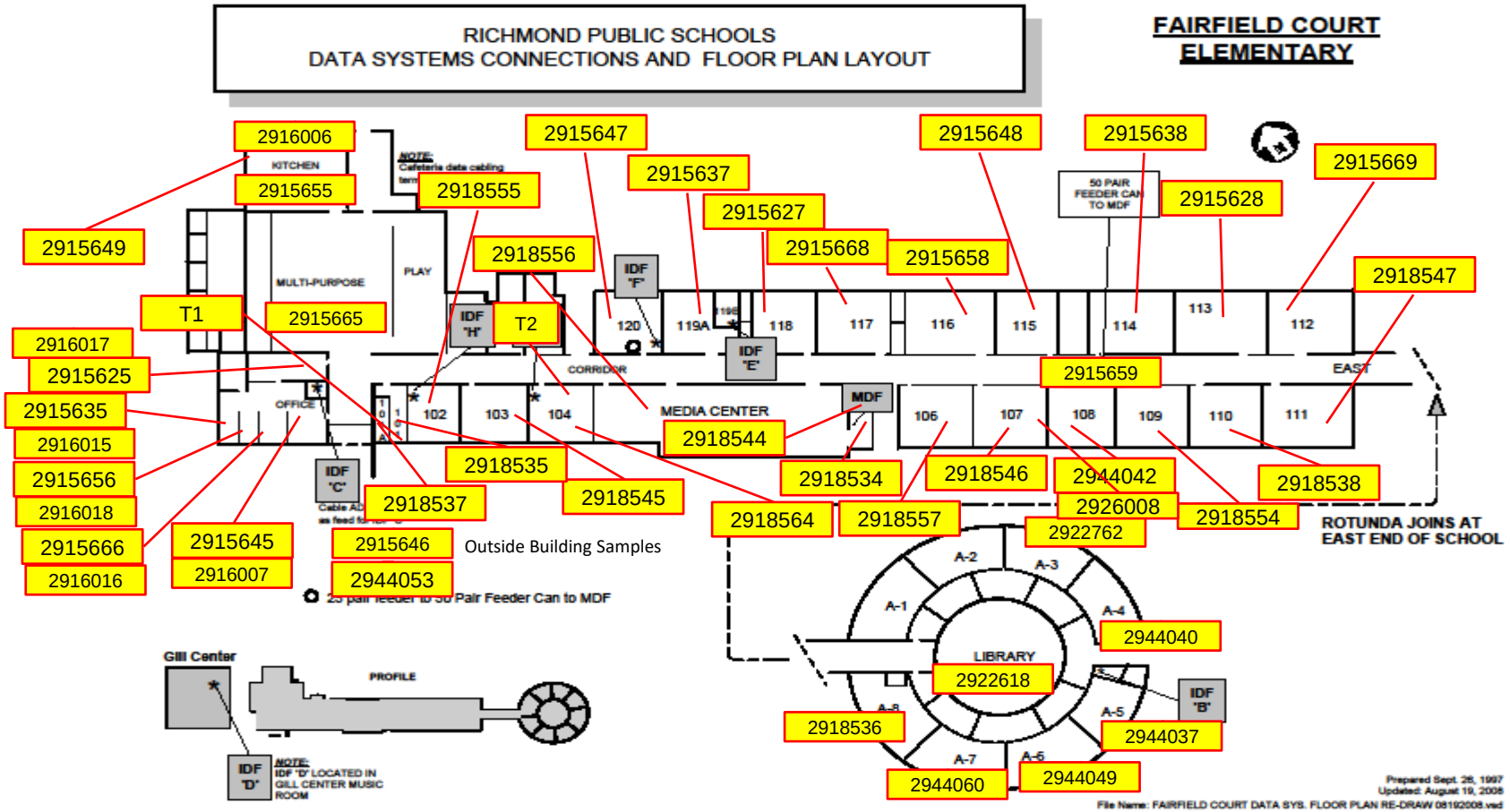
Sample Type Codes

AP – Andersen Plate
SW - Swab
B - Bulk
T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Micheal D. Allshouse	12/29/23	Received	
		DEC 29 2023	

TLM

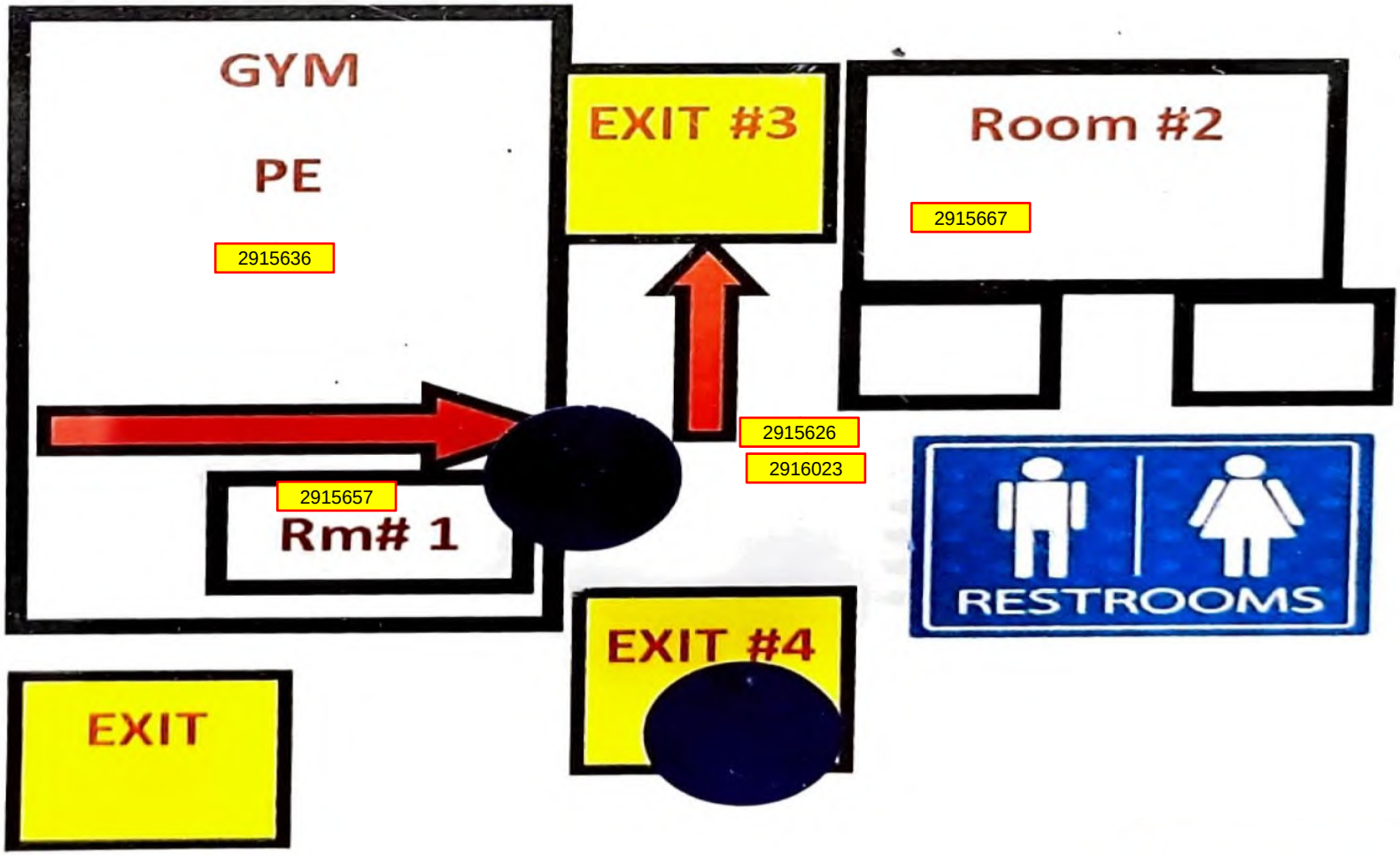
DRAWINGS INDICATING SAMPLE LOCATIONS



Moisture & Mold Assessment Sample Location Drawing

Fairfield Court Elementary School
Richmond, Virginia
FEI Project #: FEI-23MI637 Survey Date: 11/22/2023

FRANCE ENVIRONMENTAL



Moisture & Mold Assessment Sample Location Drawing

Fairfield Court Elementary School
Richmond, Virginia
FEI Project #: FEI-23MI637 Survey Date: 11/22/2023

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PHOTOGRAPHS OF SITE CONDITIONS

Photograph No. 1
Showing Visible Mold Growth - Office 101

Photograph No. 2
Showing Visible Mold Growth - Office 101A

Photograph No. 3
Showing General Dust and Debris - Cafeteria

Photograph No. 4
Showing General Dust and Debris - Gym Hallway

Photograph No. 5
Showing Visible Mold Growth on Ceiling Unit Vent - Classroom 104
Ceiling Unit Vent Not Sampled Due To Height

Photograph No. 6
Showing Multiple Stained Lay-In Ceiling Tiles - Gym Hallway

CHART 1
FUNGAL TYPES AND GROUPS

Chart 1
Fungal Types and Groups

These are brief descriptions for general informational purposes:

Ascospores (ass-co-spores) a large category of spores (produced in a sac-like structure) that are found everywhere in nature and include more than 3,000 genera. Most *Ascospores* of health or IAQ importance are identified separately by their genus (e.g. *Chaetomium*) when possible on a IAQ report, and the *Ascospore* category is used primarily on these reports for a large group of less important spore types often found in quantity on outdoor air samples. On tape samples, *Ascospore* is sometimes also used as a general morphological identification (i.e., the ascus or sac structure is present) for certain samples in those cases when the spores do not appear to represent any of the IAQ significant genera.

Aspergillus (as-per-jill-us) allergen/contaminant/opportunistic pathogen, commonly found in the environment around the world. It comprises approximately 200 species and can appear almost any color. Though commonly found on cultures, tape-lifts, and air samples, its spores are indistinguishable from *Penicillium* on non-cultured samples (like tape-lifts and air-o-cells) unless the conidiophore is present. Health effects vary by species, but many species are reported to be allergenic. Some species produce toxins that might have significant health effects in humans. *Aspergillus* is one of the most infectious of molds, but infections are not common in normal immune systems. In immuno-compromised individuals, however, the disease *Aspergillosis* is a very significant and potentially deadly health concern.

Basidiospores (bah-sid-ee-oh-spores) allergen/contaminant, a general class of spore formed on a structure known as a *basidium*, characteristic of the *Basidiomycete* class (that includes rusts, smuts and mushrooms). This category is commonly found in outdoor air samples. Many species are reported to be allergenic and some species are associated with dry rot in wood. Elevated airborne concentrations indoors might be indicative of water damage or too high of humidity.

Cladosporium (clad-oh-spore-ee-um) common allergen/contaminant/very rarely pathogenic, found everywhere, many times the most common and numerous mold found in outdoor air. Indoor concentrations are usually not as high, but it is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms. It can thrive in various indoor environments, appearing light green to black (the black mold on air vent grills is usually *Cladosporioum*).

Curvularia (curve-you-lair-ee-uh) contaminant/opportunistic pathogen, found in air, soil and textiles. Reported to be allergenic. Rare infections of corneas, nails, and sinuses, primarily in immunocompromised individuals.

Epicoccum (epp-ee-cock-um) contaminant/opportunistic pathogen, found in soil, air, water and rotting vegetation and can be commonly found in outdoor air. It is a common allergen and rarely can it cause an infection in the skin.

Mycelial Fragments (my-sill-e-ul) a mass of hyphae; not in the form of large spore producing parts. Hyphae are an individual fungal thread or filament of connected cells. The thread that represents the individual parts of the fungal body.

Myxomycetes (mix-oh'-my-seat) general category for commonly found genera usually associated with living and decaying plants as well as decaying wood. Sometimes can be found indoors. Some allergenic properties reported, but generally pose no health concerns to humans or animals.

Penicillium (pen-uh-sill-ee-um) contaminant/opportunistic pathogen, one of the most common genera found worldwide in soil and decaying vegetation and indoors in dust, food and various building materials. Common bread mold is a species of *Penicillium*. Spores usually cannot be distinguished from *Aspergillus* on non-cultured samples (like tape-lifts and air-o-cells). It is reported to be allergenic, to cause certain infections in compromised individuals, and some species do produce toxins unhealthy to humans.

Periconia (per-ee-cone-e-uh) ubiquitous cosmopolitan. Mostly found in soil, blackened and dead herbaceous stems and leaf spots, grasses, rushes and sedges. Almost always associated with other fungi. Rare case of mycotic keratitis reported. Allergen not studied.

Chart 1
Fungal Types and Groups

These are brief descriptions for general informational purposes:

Pithomyces (pith-oh-my-sees)	contaminant, found on decaying plants, especially leaves and grasses. Rarely found indoors, but it can grow on paper. No reports of allergies or infections, but some species produce a toxin that causes facial eczema in sheep.
Pollen (pol-uhn)	Pollen is a fine powder produced by certain plants when they reproduce. During the spring, summer, and fall seasons, it's released into the air and picked up by the wind, which brings it to other plants to fertilize them. Inside of these pollen grains are proteins that commonly cause allergic reactions (such as sneezing, runny nose, and itchy eyes) when breathed in. The pollen that's most often responsible for causing allergies comes from grasses, trees, and weeds. Many people with asthma are allergic to pollen. When they breathe it in, it can trigger their asthma symptoms.
Smuts	general category for commonly found genera usually associated with living and decaying plants as well as decaying wood. Sometimes can be found indoors. Some allergenic properties reported, but generally pose no health concerns to humans or animals.
Stachybotrys (stack-ee-bought-ris)	contaminant, found indoors primarily on wet cellulose containing materials. It is the “toxic black mold” that has garnered much media attention. Some species produce a potent toxin that is lethal to animals, though dose effect on humans is not clear. One species produces a toxin linked to the bleeding lung deaths of several infants. A host of other toxic reactions in humans are also linked to it, but many of these require further study. ***Stachybotrys*** is sometimes difficult to detect indoors because many times it will grow unseen on the back of walls or in the wall cavity with little disturbance that would cause it to be detected by routine air sampling. This is potentially also when it is of most health concern: when it covers entire wall areas and constantly produces toxins undetected. Non-cultured lab analyses (air-o-cells and tape-lifts) usually are the proper method of identification because ***Stachybotrys*** does not grow or compete well on most culture plate media, and it is reported that even non-viable spores can be toxigenic.