



Environmental Consulting Services

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January 26, 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
Mary Munford Elementary School – All Rooms
211 Westmoreland Avenue
Richmond, Virginia 23226
FEI Project Number: FEI-23MI612

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 18, 2023. The investigation was performed by FEI Industrial Hygienists, Mr. Micheal D. Allshouse, Mr. James Morris and Mr. Kshan X. Sims.

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 and/or wall damage was noticed in some areas. These appear to be from water intrusion and are indicating being "Dry" with the use of the Moisture Meter. No visible mold growth was noticed.
- Musty odors were notice in Rooms 209B and 206.
- Visible mold growth was observed on the ceiling HVAC diffuser in the 1st Floor – Auditorium.

TOTAL FUNGAL AIR SAMPLING:

On November 18, 2023, FEI collected a total of forty-eight (48) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Commons, Kitchen, Clinic, Cafeteria, Break Rooms, Auditorium and Media Center.
- Three (3) 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, mid-day air sample, 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. *(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/M³) 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 significant amounts may indicate chronic moisture intrusion issues and confirmation that molds have colonized and are amplifying within the building. ***Chaetomium*** was found in trace amounts in the Library. This room does have water stained lay-in ceiling tile. The air sample is not of a concern.

COMFORT PARAMETER TESTING:

FEI also conducted Comfort Parameter Sampling, which included Temperature and Relative Humidity by utilizing electronic recording monitor (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. FEI did observe suspected visible mold in the building.

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 73°F to 79°F during the summer months. These ranges should be acceptable for

sedentary or slightly active persons. The temperature measured in the building ranged from 64.1°F to 75.3°F and were not within the recommended general comfort range for the season. Some of the readings were below 68°F. Adjustment in temperature might be needed. The average temperatures measured outside were 60.0°F in the morning, 68.3°F mid-day and 63.0°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 37.2% to 61.6%. The outside humidity readings were 76.1% in the morning, 46.0% mid-day and 51.6% 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.
- The Auditorium Ceiling HVAC diffusers might need cleaning. It appears to be mold growth but due to height restrictions a tape lift sample was not ascertainable.
- Remove/Replace stained and/or dirty ceiling tiles throughout Building. It is recommended these ceiling tiles be removed and the surrounding ceiling grid surfaces 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
Senior Project Manager

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

**MOLD AIR CASSETTE ANALYTICAL LABORATORY
RESULTS**

**AmeriSci Bio-Chem**13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800**Analyzed By:**
Justin B. Liverman**AmeriSci Job #:**
323111092
FINAL REPORT**Client: France Environmental, Inc.****Client Job#:** FEI-23MI612**Date Received:** 11/18/23**Address:** 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225**Client Job Name:** Richmond City Public Schools, Mary
Munford Elementary School; 211
Westmoreland Street, Richmond,
VA 23220**Date Reported:** 11/22/23**Air Cassette Analytical Report (SOP# 3.24.01)**

AmeriSci Number	323111092-01			323111092-02			323111092-03			323111092-04		
Sample Number	2922658			2922603			2922592			2922593		
Sample Name	Pre-Sampling Exterior Front Of Building			Auditorium			Room 101			Room 102		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
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/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	40	n/a	1	40	n/a	1	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/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	40	2	1	ND			ND			ND		
Aspergillus/Penicillium	120	7	3	40	20	1	ND			ND		
Basidiospores	640	37	16	40	20	1	80	67	2	ND		
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	800	47	20	80	40	2	40	33	1	80	100	2
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	80	5	2	40	20	1	ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	40	2	1	ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	1720	100	43	200	100	5	120	100	3	80	100	2

ND = None Detected

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AmeriSci Number	323111092-05			323111092-06			323111092-07			323111092-08		
Sample Number	2922596			2922610			2922613			2922649		
Sample Name	Room 103			Room 104			1st Floor Hall By Room 103			Cafeteria		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	1			2			1			1		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fibers	ND	n/a	ND	120	n/a	3	40	n/a	1	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/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			40	11	1	ND			ND		
Aspergillus/Penicillium	40	20	1	40	11	1	40	25	1	80	22	2
Basidiospores	80	40	2	160	44	4	40	25	1	160	44	4
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	80	40	2	120	33	3	80	50	2	120	33	3
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	200	100	5	360	100	9	160	100	4	360	100	9

ND = None Detected

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TEL: (804) 763-1200 • FAX: (804) 763-1800**Analyzed By:**
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AmeriSci Number	323111092-09			323111092-10			323111092-11			323111092-12		
Sample Number	2922674			2922634			2922635			2922604		
Sample Name	Kitchen			Main Office			Principal's Office			Room 105		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	1			1			2			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fibers	40	n/a	1	ND	n/a	ND	160	n/a	4	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	40	n/a	1	40	n/a	1
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	40	11	1	ND			40	2	1	ND		
Aspergillus/Penicillium	80	22	2	40	13	1	720	28	18	240	19	6
Basidiospores	120	33	3	200	63	5	600	23	15	400	32	10
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	120	33	3	80	25	2	1160	45	29	360	29	9
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			80	3	2	240	19	6
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	360	100	9	320	100	8	2600	100	65	1240	100	31

ND = None Detected

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MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800**Analyzed By:**
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323111092
FINAL REPORT**Client: France Environmental, Inc.**
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AmeriSci Number	323111092-13			323111092-14			323111092-15			323111092-16		
Sample Number	2922598			2922662			2922671			2922600		
Sample Name	Room 106			Room 107			Room 108			Room 109		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			1			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	80	n/a	2	40	n/a	1	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/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			40	4	1	ND			ND		
Aspergillus/Penicillium	80	13	2	120	12	3	80	20	2	120	8	3
Basidiospores	200	31	5	440	44	11	160	40	4	800	50	20
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	240	38	6	280	28	7	160	40	4	600	38	15
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			40	3	1
Myxomycetes/Periconia/Smuts	120	19	3	120	12	3	ND			40	3	1
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	640	100	16	1000	100	25	400	100	10	1600	100	40

ND = None Detected

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MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800**Analyzed By:**
Justin B. LivermanAmeriSci Job #:
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AmeriSci Number	323111092-17			323111092-18			323111092-19			323111092-20		
Sample Number	2922609			2922661			2918612			2918622		
Sample Name	1st Floor Hall By Room 109			Mid-Sampling Exterior Rear Of Building			Room 110			Room 111		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			2			1		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	40	n/a	1	40	n/a	1	40	n/a	1	ND	n/a	ND
Fibers	120	n/a	3	40	n/a	1	80	n/a	2	ND	n/a	ND
Mycelial Fragments	ND	n/a	ND	80	n/a	2	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			80	1	2	ND			ND		
Ascospores	40	5	1	40	1	1	40	4	1	ND		
Aspergillus/Penicillium	120	14	3	280	5	7	240	24	6	ND		
Basidiospores	360	43	9	2240	38	56	360	36	9	ND		
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	320	38	8	2760	46	69	320	32	8	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			40	1	1	40	4	1	ND		
Myxomycetes/Periconia/Smuts	ND			440	7	11	ND			ND		
Pestalotia sp.	ND			40	1	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			40	1	1	ND			ND		
Total Fungal Spores	840	100	21	5960	100	149	1000	100	25	ND	ND	ND

ND = None Detected

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Richmond, VA 23225**Client Job#:** FEI-23MI612**Client Job Name:** Richmond City Public Schools, Mary
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VA 23225**Date Received:** 11/18/23**Date Reported:** 11/22/23**Air Cassette Analytical Report (SOP# 3.24.01)**

AmeriSci Number	323111092-21			323111092-22			323111092-23			323111092-24		
Sample Number	2918592			2918602			2922892			2922949		
Sample Name	Resource Room 1			Resource Room 2			Room 112A			Room 112B		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	1			2			2			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	80	n/a	2	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	40	n/a	1	160	n/a	4	240	n/a	6
Mycelial Fragments	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			40	2	1	40	6	1	ND		
Ascospores	ND			40	2	1	ND			ND		
Aspergillus/Penicillium	120	20	3	240	14	6	120	18	3	80	18	2
Basidiospores	280	47	7	680	39	17	280	41	7	160	36	4
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	200	33	5	680	39	17	200	29	5	200	45	5
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			40	2	1	ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	2	1	40	6	1	ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	600	100	15	1760	100	44	680	100	17	440	100	11

ND = None Detected



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13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
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Analyzed By:
Justin B. Liverman

AmeriSci Job #:
323111092
FINAL REPORT

Client: France Environmental, Inc.

**Address: 7834 Forest Hill Ave
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Richmond, VA 23225**

Client Job#: FEI-23MI612

**Client Job Name: Richmond City Public Schools, Mary
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Date Received: 11/18/23

Date Reported: 11/22/23

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AmeriSci Number	323111092-25			323111092-26			323111092-27			323111092-28		
Sample Number	2922900			2922928			2922896			2922883		
Sample Name	Room 113			Room 114			Room 115			Clinic		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			2			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	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	280	n/a	7	160	n/a	4
Mycelial Fragments	40	n/a	1	40	n/a	1	40	n/a	1	ND	n/a	ND
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			ND			40	2	1	40	7	1
Aspergillus/Penicillium	80	15	2	40	10	1	160	10	4	120	20	3
Basidiospores	200	38	5	160	40	4	960	57	24	200	33	5
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	240	46	6	200	50	5	480	29	12	240	40	6
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			40	2	1	ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	520	100	13	400	100	10	1680	100	42	600	100	15

ND = None Detected



AmeriSci Bio-Chem

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

Analyzed By:
 Justin B. Liverman

AmeriSci Job #:
323111092
 FINAL REPORT

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

Client Job#: FEI-23MI612
Client Job Name: Richmond City Public Schools, Mary
 Munford Elementary School; 211
 Westmoreland Street, Richmond,
 VA 23225

Date Received: 11/18/23
Date Reported: 11/22/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111092-29			323111092-30			323111092-31			323111092-32		
Sample Number	2918601			2918611			2918621			2918579		
Sample Name	Room 201			Room 202			Room 203			Room 204		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
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/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	40	n/a	1	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fibers	ND	n/a	ND	80	n/a	2	120	n/a	3	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	80	29	2	80	25	2	80	17	2	40	10	1
Basidiospores	120	43	3	160	50	4	80	17	2	200	50	5
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	40	14	1	80	25	2	200	42	5	160	40	4
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			40	8	1	ND		
Myxomycetes/Periconia/Smuts	40	14	1	ND			80	17	2	ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	280	100	7	320	100	8	480	100	12	400	100	10

ND = None Detected



Client: France Environmental, Inc.

**Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225**

Client Job#: FEI-23MI612

**Client Job Name: Richmond City Public Schools, Mary
Munford Elementary School; 211
Westmoreland Street, Richmond,
VA 23220**

Date Received: 11/18/23

Date Reported: 11/22/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111092-33			323111092-34			323111092-35			323111092-36		
Sample Number	2918590			2922752			2922740			2922743		
Sample Name	Room 205			Room 206			Room 207			Room 208		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			2			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fibers	80	n/a	2	120	n/a	3	80	n/a	2	280	n/a	7
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			40	8	1	ND			40	10	1
Aspergillus/Penicillium	80	33	2	80	17	2	40	11	1	80	20	2
Basidiospores	40	17	1	120	25	3	160	44	4	120	30	3
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	80	33	2	120	25	3	160	44	4	160	40	4
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	40	17	1	120	25	3	ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	240	100	6	480	100	12	360	100	9	400	100	10

ND = None Detected



AmeriSci Bio-Chem

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

Analyzed By:
Justin B. Liverman

AmeriSci Job #:
323111092
FINAL REPORT

Client: France Environmental, Inc.

**Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225**

Client Job#: FEI-23MI612
Client Job Name: Richmond City Public Schools, Mary
Munford Elementary School; 211
Westmoreland Street, Richmond,
VA 23225

Date Received: 11/18/23

Date Reported: 11/22/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111092-37			323111092-38			323111092-39			323111092-40		
Sample Number	2922766			2922774			2918600			2918610		
Sample Name	Room 209A			Room 209B			Room 210			Room 211		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	3			1			1			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	40	n/a	1	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	360	n/a	9	40	n/a	1	80	n/a	2	120	n/a	3
Mycelial Fragments	120	n/a	3	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	160	11	4	120	43	3	80	40	2	80	33	2
Basidiospores	120	9	3	80	29	2	80	40	2	40	17	1
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	840	60	21	40	14	1	40	20	1	80	33	2
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	280	20	7	40	14	1	ND			40	17	1
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	1400	100	35	280	100	7	200	100	5	240	100	6

ND = None Detected



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

Client Job#: FEI-23MI612
Client Job Name: Richmond City Public Schools, Mary
Munford Elementary School; 211
Westmoreland Street, Richmond,
VA 23225

Date Received: 11/18/23
Date Reported: 11/22/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111092-41			323111092-42			323111092-43			323111092-44		
Sample Number	2922760			2918620			2922777			2922710		
Sample Name	Room 212			Room 213			Room 214			Library		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			2			3		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	40	n/a	1	40	n/a	1	ND	n/a	ND	40	n/a	1
Fibers	80	n/a	2	160	n/a	4	320	n/a	8	360	n/a	9
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	80	n/a	2
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	40	11	1	ND			40	5	1	ND		
Aspergillus/Penicillium	80	22	2	40	9	1	240	27	6	80	11	2
Basidiospores	40	11	1	40	9	1	280	32	7	320	44	8
Chaetomium sp.	ND			ND			ND			40	6	1
Cladosporium sp.	160	44	4	160	36	4	320	36	8	240	33	6
Curvularia sp.	ND			ND			ND			40	6	1
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	40	11	1	200	45	5	ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	360	100	9	440	100	11	880	100	22	720	100	18

ND = None Detected

**AmeriSci Bio-Chem**13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800**Analyzed By:**
Justin B. LivermanAmeriSci Job #:
323111092
FINAL REPORT**Client: France Environmental, Inc.****Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225****Client Job#: FEI-23MI612**
**Client Job Name: Richmond City Public Schools, Mary
Munford Elementary School; 211
Westmoreland Street, Richmond,****Date Received: 11/18/23**
Date Reported: 11/22/23**Air Cassette Analytical Report (SOP# 3.24.01)**

AmeriSci Number	323111092-45			323111092-46			323111092-47			323111092-48		
Sample Number	2922776			2918580			2918591			2922647		
Sample Name	AV Room			Speech Room			2nd Floor Hallway By Room 203			Post-Sampling Exterior Front Of Building		
Analysis Date	11/22/2023			11/22/2023			11/22/2023			11/22/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ³)	40			40			40			40		
Background Density	2			2			1			2		
Other	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	40	n/a	1	120	n/a	3
Fibers	80	n/a	2	200	n/a	5	80	n/a	2	80	n/a	2
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	80	n/a	2
Fungal Identification	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count
Alternaria sp.	ND			ND			ND			40	1	1
Ascospores	ND			ND			ND			80	1	2
Aspergillus/Penicillium	ND			40	20	1	40	7	1	240	4	6
Basidiospores	40	50	1	ND			160	29	4	3520	55	88
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	40	50	1	80	40	2	360	64	9	2400	38	60
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			80	40	2	ND			120	2	3
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stemphylium sp.	ND			ND			ND			ND		
Total Fungal Spores	80	100	2	200	100	5	560	100	14	6400	100	160

ND = None Detected

Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Justin B. Liverman / AnalystName/Title: Jill G. Carrillo / Analyst

Signature:

Reviewed By:

Date: 11/22/23Date: 11/22/23



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

323-11-1092

Requested Services (X Boxes)					
Non-Viable		Culturable			
Spore Trap	Tape Bulk	Andersen, Swab, Bulk			

Contact Information			
Company: France Environmental			PO#:
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225			
Results To: FEI		Fax Results? <input type="checkbox"/>	Fax#:
Phone: 804 716 0560		Email? <input checked="" type="checkbox"/>	Email: FEI Distribution List

Project Information		Turnaround Time Codes	
Project Name: Richmond City Public Schools Mary Munford Elementary School 211 Westmoreland Street Richmond, Virginia 23226 Proj. #: FEI-23MI612		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.	
Sampling Date(s): 11/18/2023			

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2922658	Pre-Sampling Exterior Front of Building	ST	STD	25 Liters	
2922603	Auditorium	ST	STD	25 Liters	
2922592	Room 101	ST	STD	25 Liters	
2922593	Room 102	ST	STD	25 Liters	
2922596	Room 103	ST	STD	25 Liters	
2922610	Room 104	ST	STD	25 Liters	
2922613	1st Floor Hall by Room 103	ST	STD	25 Liters	
2922649	Cafeteria	ST	STD	25 Liters	
2922674	Kitchen	ST	STD	25 Liters	
2922634	Main Office	ST	STD	25 Liters	
2922635	Principal's Office	ST	STD	25 Liters	
2922604	Room 105	ST	STD	25 Liters	

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Type Codes		Relinquished By		Date & Time		Received By		Date & Time	
AP – Andersen Plate	T - Tape	Micheal D. Allshouse		11/18/2023		TYANA M		11/20/23	
SW - Swab	ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.								
B - Bulk									



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

323-11-1092

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						
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact Information			
Company: France Environmental			PO#:
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225			
Results To: FEI	Fax Results? <input type="checkbox"/>	Fax#:	
Phone: 804 716 0560	Email? <input checked="" type="checkbox"/>	Email: FEI Distribution List	

Project Information	Turnaround Time Codes
Project Name: Richmond City Public Schools Mary Munford Elementary School 211 Westmoreland Street Richmond, Virginia 23226 Proj. #: FEI-23MI612	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.
Sampling Date(s): 11/18/2023	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2922598	Room 106	ST	STD	25 Liters	
2922662	Room 107	ST	STD	25 Liters	
2922671	Room 108	ST	STD	25 Liters	
2922600	Room 109	ST	STD	25 Liters	
2922609	1st Floor Hall by Room 109	ST	STD	25 Liters	
2922661	Mid-Sampling Exterior Rear of Building	ST	STD	25 Liters	
2918612	Room 110	ST	STD	25 Liters	
2918622	Room 111	ST	STD	25 Liters	
2918592	Resource Room 1	ST	STD	25 Liters	
2918602	Resource Room 2	ST	STD	25 Liters	
2922892	Room 112A	ST	STD	25 Liters	
2922949	Room 112B	ST	STD	25 Liters	

Sample Type Codes	Relinquished By	Date & Time	Received By	Date & Time
AP - Andersen Plate SW - Swab B - Bulk T - Tape ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.	Micheal D. Allshouse	11/18/2023	Tyana M	11/20/23



323-11-1092

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

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						
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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 <input type="checkbox"/>	Fax#:
Phone: 804 716 0560	Email? Y <input checked="" type="checkbox"/>	Email: FEI Distribution List
Project Information		Turnaround Time Codes
Project Name: Richmond City Public Schools Mary Munford Elementary School 211 Westmoreland Street Richmond, Virginia 23226 Proj. #: FEI-23MI612		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.
Sampling Date(s): 11/18/2023		

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2922900	Room 113	ST	STD	25 Liters	
2922928	Room 114	ST	STD	25 Liters	
2922896	Room 115	ST	STD	25 Liters	
2922883	Clinic	ST	STD	25 Liters	
2918601	Room 201	ST	STD	25 Liters	
2918611	Room 202	ST	STD	25 Liters	
2918621	Room 203	ST	STD	25 Liters	
2918579	Room 204	ST	STD	25 Liters	
2918590	Room 205	ST	STD	25 Liters	
2922752	Room 206	ST	STD	25 Liters	
2922740	Room 207	ST	STD	25 Liters	
2922743	Room 208	ST	STD	25 Liters	

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
Micheal D. Allshouse	11/18/2023	Tyana M	11/20/23

② ③



323-11-1092

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

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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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 **Turnaround Time Codes**

Project Name: Richmond City Public Schools
Mary Munford Elementary School
211 Westmoreland Street
Richmond, Virginia 23226

Proj. #: FEI-23MI612

Sampling Date(s): 11/18/2023

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.)
2922766	Room 209A	ST	STD	25 Liters	
2922774	Room 209B	ST	STD	25 Liters	
2918600	Room 210	ST	STD	25 Liters	
2918610	Room 211	ST	STD	25 Liters	
2922760	Room 212	ST	STD	25 Liters	
2918620	Room 213	ST	STD	25 Liters	
2922777	Room 214	ST	STD	25 Liters	
2922710	Library	ST	STD	25 Liters	
2922776	AV Room	ST	STD	25 Liters	
2918580	Speech Room	ST	STD	25 Liters	
2918591	2nd Floor Hallway by Room 203	ST	STD	25 Liters	
2922647	Post-Sampling Exterior Front of Bulding	ST	STD	25 Liters	

Sample Type Codes

AP - Andersen Plate
SW - Swab
B - Bulk

T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

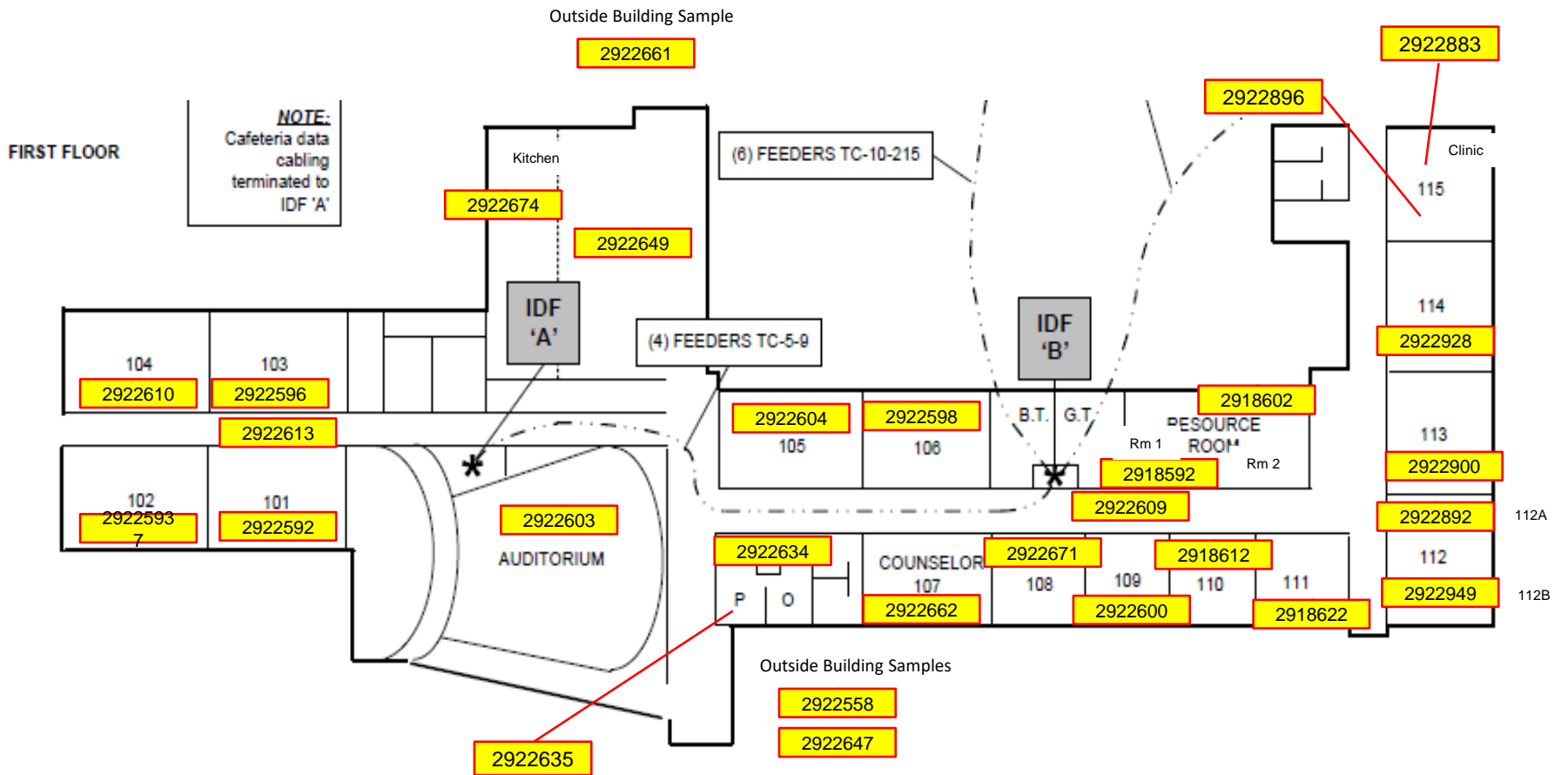
Relinquished By
Micheal D. Allshouse

Date & Time
11/18/2023

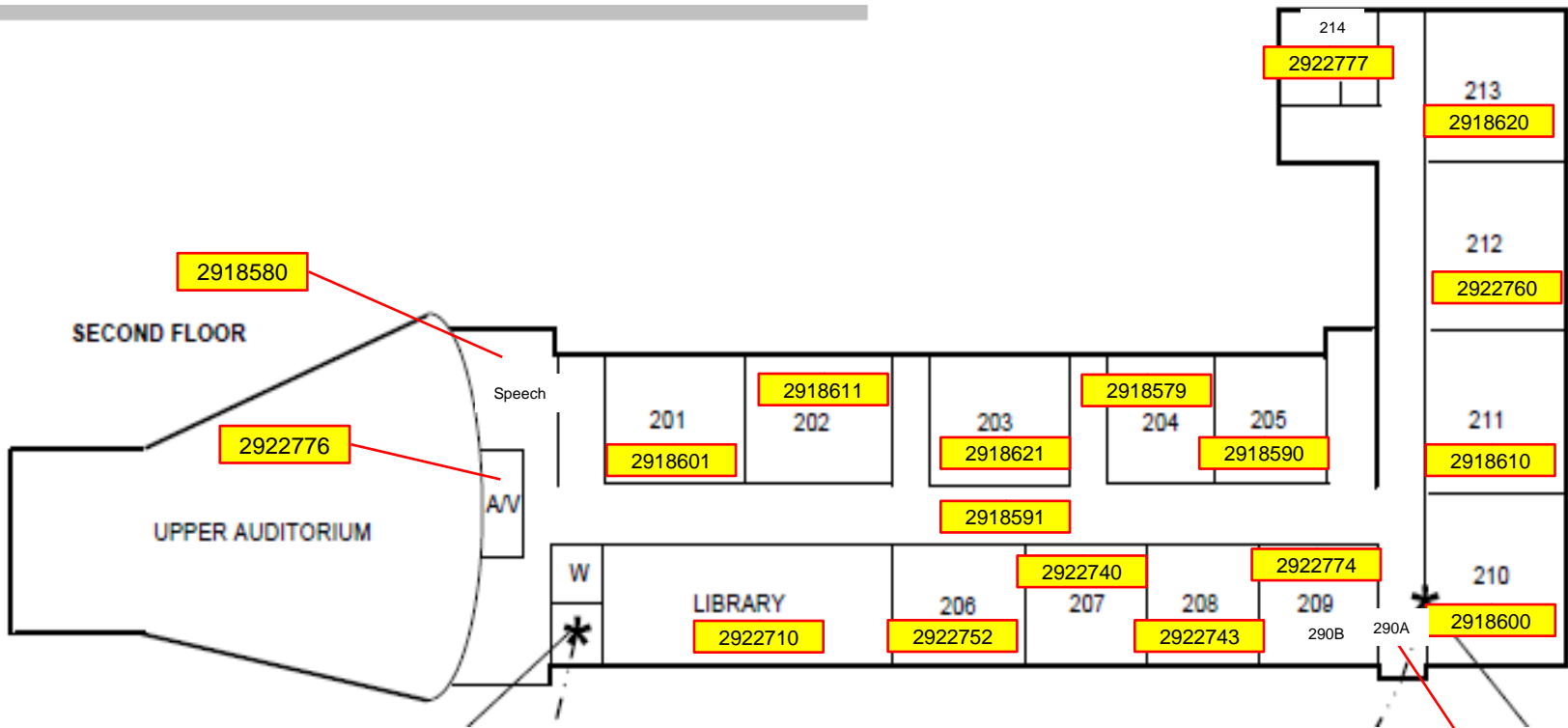
Received By
Tyana M

Date & Time
11/20/23

DRAWINGS INDICATING SAMPLE LOCATIONS



IAQ Sample Location Drawing
 Mary Munford Elementary School
 Richmond, Virginia
 FEI Project #: FEI-23MI612 Survey Date: 11/18/2023



IAQ Sample Location Drawing
 Mary Munford Elementary School
 Richmond, Virginia
 FEI Project #: FEI-23MI612 Survey Date: 11/18/2023

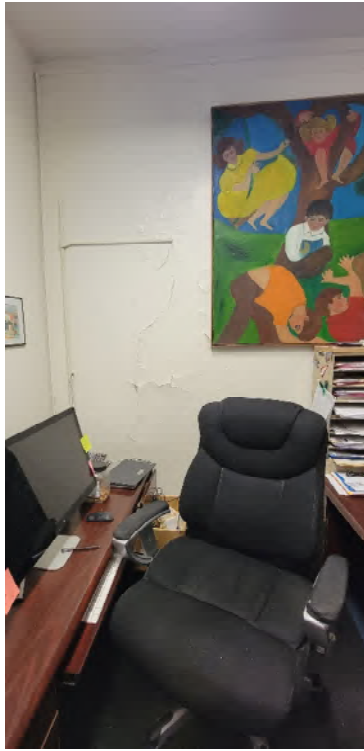
PHOTOGRAPHS OF SITE CONDITIONS



Photograph No. 1
Typical of Stained Lay-In Ceiling Tiles Observed



Photograph No. 2
Showing Typical Ceiling Moisture Damage



Photograph No. 3
Showing Typical Wall Moisture Damage



Photograph No. 4
Showing Dust Loading & Suspect Mold Growth. It Appears to be Mold Growth but Due to Height Restrictions a Tape Lift Sample was not Ascertainable.

CHART 1
FUNGAL TYPES AND GROUPS

Chart 1 - Continued

Fungal Types and Groups

These are brief descriptions for general informational purposes:

<i>Alternaria</i> (all-tur-nair-ee-uh)	common allergen/contaminant/opportunistic pathogen, one of the most common molds found worldwide in soil and on plants and can commonly be found indoors (frequently appearing black on window frames). It is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms.
<i>Ascospores</i> (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 <i>Ascospores</i> of health or IAQ importance are identified separately by their genus (e.g. <i>Chaetomium</i>) when possible, on a IAQ report, and the <i>Ascospore</i> 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, <i>Ascospore</i> 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.
<i>Aspergillus</i> (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 <i>Penicillium</i> 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. <i>Aspergillus</i> is one of the most infectious of molds, but infections are not common in normal immune systems. In immuno-compromised individuals, however, the disease <i>Aspergillosis</i> is a very significant and potentially deadly health concern.
<i>Basidiospores</i> (bah-sid-ee-oh-spores)	allergen/contaminant, a general class of spore formed on a structure known as a <i>basidium</i> , characteristic of the <i>Basidiomycete</i> 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.
<i>Chaetomium</i> (k-toe-me-um)	contaminant, rarely involved in systemic and cutaneous disease and sometimes reported to be allergenic. Some species can produce toxins, and there is some research interest on whether these toxins can cause cancer. Primary IAQ importance is currently related to that it will grow in the same conditions as <i>Stachybotrys</i> (wet cellulose) and amplified amounts in indoor air could be a warning that conditions do exist for <i>Stachybotrys</i> growth. Many times, on damp sheetrock paper, colonies of <i>Chaetomium</i> and <i>Stachybotrys</i> will be growing on top of one another or side by side (this can also be an important consideration when doing tape lifts of sheetrock because most of the time the colonies are not distinguishable by the naked eye-the small area that is sampled might be a pure colony of just <i>Chaetomium</i> even though numerous colonies of <i>Stachybotrys</i> might exist).
<i>Cladosporium</i> (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 <i>Cladosporium</i>).
<i>Curvularia</i> (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.
<i>Epicoccum</i> (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.
<i>Mycelial Fragments</i> (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.
<i>Myxomycetes</i> (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.

Chart 1 - Continued Fungal Types and Groups

These are brief descriptions for general informational purposes:

<i>Penicillium</i> (<i>pen-uh-sill-ee-um</i>)	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 <i>Penicillium</i> . Spores usually cannot be distinguished from <i>Aspergillus</i> 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.
<i>Periconia</i> (<i>per-ee-cone-e-uh</i>)	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.
<i>Pestalotia</i> (<i>pess-ta-low-tee-uh</i>)	<i>pestalotia</i> is primarily a secondary pathogen. It is saprophytic on dead and dying tissues and is weakly parasitic infecting wounds under moist conditions. Plant pathogen. Allergen not studied.
<i>Pithomyces</i> (<i>pith-oh-my-sees</i>)	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 (<i>pol-uhn</i>)	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.
<i>Stemphylium</i> (<i>stem-fill-ee-um</i>)	contaminant, reported to be allergen. Rarely grows indoors, but can grow on cellulose materials like paper.