November 8, 2021

Mr. Thomas Rambone, CEFM
Facilities Manager
Franklin Township Board of Education
3228 Coles Mill Rd.
Franklinville, NJ 08322

RE: Indoor Air Quality Inspection Report – September 2021
Reutter Elementary School
Epic Project No. 21-3270

Dear Mr. Rambone:

Epic Environmental Services, LLC (Epic) was retained by the Franklin Township Board of Education (District) to perform indoor air quality inspections for five randomly selected areas at the Reutter Elementary School. The inspections consisted of visual observations and the collection of temperature and relative humidity data. Additionally, samples for airborne mold spores were collected in the inspection areas.

The visual inspections focused on signs of moisture, water intrusion, and visible mold growth.

Temperature and relative humidity data were compared to current New Jersey Indoor Air Quality and industry standards.

Epic Environmental performed the inspections on September 15, 2021.

Acceptable Temperature and Relative Humidity Criteria

Acceptable Indoor Temperature Range:	**68° - 79° Fahrenheit**
Ideal Relative Humidity Range:	**30-60%**

The following rooms/areas were inspected:

Room 1, Room 11, Room 17, Room 29, Room 55

Observations, Comments, and Recommendations

Weather Conditions: Cloudy, 73° Fahrenheit, 90% Relative Humidity

Room 1
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was elevated (66%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 11
Visible mold was observed on the closet door.
No evidence of recent water intrusion was observed.
Relative humidity was elevated (69%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
Clean closet door using an EPA-approved fungicide designed to kill mold.

Room 17
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was elevated (74%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 29
Visible mold was observed on a wooden stool.
No evidence of recent water intrusion was observed.
Relative humidity was elevated (68%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
Clean wooden stool using an EPA-approved fungicide designed to kill mold.

Room 55
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was elevated (70%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Air Sample Results

Air samples were collected in each inspection area. Airborne mold spore concentrations were near or below background (outside) concentrations in all areas.

See Sample Data Summary

Conclusions and General Recommendations

- Assure steps are taken to maintain a maximum relative humidity concentration of 60% during the summer months. This will reduce the overall probability of triggering mold activity.

Please do not hesitate to contact me at 856-205-1077 should you have any questions.

An invoice for the completed project is enclosed.

Regards,

James Eberts
President
Epic Environmental Services, LLC

Sample Data Summary
Air Sampling
Air Samples September 15, 2021

Air Sample Location	Airborne Mold Concentrations (spores/m³)		
	Total	Individual Mold Concentrations	
Room 1	24740	Ascospores	80
		Basidiospores	24500
		Ganoderma	80
		Pithomyces++	80
Room 11	26300	Ascospores	400
		Aspergillus/Penicillium	200
		Basidiospores	25400
		Cladosporium	300
Room 17	6600	Basidiospores	6200
		Cladosporium	200
		Curvularia	40
		Ganoderma	80
		Pithomyces++	80
Room 29	17660	Ascospores	80
		Basidiospores	17500
		Cladosporium	80
Room 55	36700	Ascospores	1100
		Aspergillus/Penicillium	300
		Basidiospores	34700
		Cladosporium	200
		Ganoderma	200
		Unidentifiable Spores	200
Outside	125640	Ascospores	3400
		Basidiospores	120000
		Cladosporium	1400
		Curvularia	80
		Ganoderma	300
		Unidentifiable Spores	300
		Bispora	80
		Cercospora++	40
		Nigrospora	40

- Total mold counts found in **green** indicate a total airborne mold level NEAR or BELOW the outside (background) level.
- Total mold counts found in **red** indicate a total airborne mold level significantly ABOVE the outside (background) level, and may be an indicator of active mold growth.
- Individual molds listed in **green** indicate an individual airborne mold level NEAR or BELOW outside the (background) level.
- Individual molds listed in **purple** were not found in the background sample, but not considered evidence of a water/moisture issue or active mold growth.
- Individual molds listed in **red** indicate an individual airborne mold level significantly ABOVE the outside (background) level, and may be an indicator of active mold growth in the area.

Airborne mold spore concentrations were near or below background (outside) concentrations.

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

EMSL Order: 372115635
Customer ID: EPIC62
Customer PO: 21-3270
Project ID:

Attention: James Eberts
Epic Environmental Services, LLC
80 Fork Bridge Road
Pittsgrove, NJ 08318

Phone: (856) 205-1077
Fax: (856) 205-0413
Collected Date: 09/15/2021
Received Date: 09/17/2021
Analyzed Date: 09/20/2021

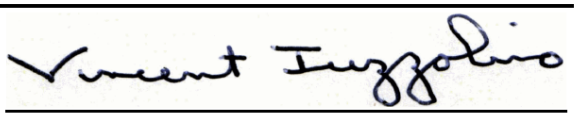
Project: Delsea BOE - Reutter ES IAQ

Test Report: Micro-5(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	372115635-0001			372115635-0002			372115635-0003		
Client Sample ID:	R-01			R-02			R-03		
Volume (L):	25			25			25		
Sample Location:	Room 1			Room 11			Room 17		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	80	0.3	5	400	1.5	-	-	-
Aspergillus/Penicillium	-	-	-	2	200	0.8	-	-	-
Basidiospores	306	24500	99	317	25400	96.6	78	6200	93.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	4	300	1.1	2	200	3
Curvularia	-	-	-	-	-	-	1*	40*	0.6
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	1	80	0.3	-	-	-	1	80	1.2
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	2*	80*	0.3	-	-	-	1	80	1.2
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Total Fungi	**310**	**24740**	**100**	**328**	**26300**	**100**	**83**	**6600**	**100**
Hyphal Fragment	1*	40*	-	-	-	-	1*	40*	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	3	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	2	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.



Vincent Iuzzolino, M.S., Laboratory Director
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194

Initial report from: 09/20/2021 06:09 PM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

EMSL Order: 372115635
Customer ID: EPIC62
Customer PO: 21-3270
Project ID:

Attention: James Eberts
Epic Environmental Services, LLC
80 Fork Bridge Road
Pittsgrove, NJ 08318

Phone: (856) 205-1077
Fax: (856) 205-0413
Collected Date: 09/15/2021
Received Date: 09/17/2021
Analyzed Date: 09/20/2021

Project: Delsea BOE - Reutter ES IAQ

Test Report: Micro-5(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	372115635-0004			372115635-0005			372115635-0006		
Client Sample ID:	R-04			R-05			R-06		
Volume (L):	25			25			25		
Sample Location:	Room 29			Room 55			Outside by Front Ent		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	80	0.5	14	1100	3	43	3400	2.7
Aspergillus/Penicillium	-	-	-	4	300	0.8	-	-	-
Basidiospores	219	17500	99.1	434	34700	94.6	1500	120000	95.5
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	1	80	0.5	3	200	0.5	18	1400	1.1
Curvularia	-	-	-	-	-	-	1	80	0.1
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	2	200	0.5	4	300	0.2
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	2	200	0.5	4	300	0.2
Zygomycetes	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	1	80	0.1
Cercospora++	-	-	-	-	-	-	1*	40*	0
Nigrospora	-	-	-	-	-	-	1*	40*	0
Total Fungi	**221**	**17660**	**100**	**459**	**36700**	**100**	**1573**	**125640**	**100**
Hyphal Fragment	1	80	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	1	80	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Vincent Iuzzolino, M.S., Laboratory Director
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.
High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194

Initial report from: 09/20/2021 06:09 PM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

Environmental Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*: 372115635

Westmont, NJ
107 Haddon Avenue
Westmont, NJ 08108
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company: Epic Environmental Services, LLC	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 1930 Brown Road	
City/State/Zip: Newfield, NJ 08344	
Report To (Name): James Eberts	**Fax:** 856-205-0413
Telephone: 856-205-1077	**Email Address:** jeberts@epicenviro.com
Project Name/Number: Delsea BOE - Reuther ES IAQ	
Please Provide Results: Email	**Purchase Order:** 21-3270 **State Samples Taken:** NJ

RECEIVED EMSL CINNAMINSON, NJ 2021 SEP 17 AM 8:28

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements.*

Non Culturable Air Samples (Spore Traps)

• M001 Air-O-Cell	• M173 Allegro M2	• M004 Allergenco	• M032 Allergenco-D	• M172 Versa Kap
• M049 BioSIS	• M003 Burkard	• M043 Cyclex	• M002 Cyclex-d	
• M030 Micro 5	• M174 MoldSnap	• M176 Rella Smart	• M130 Via-Cell	

Other Microbiology Test Codes

• M041 Fungal Direct Examination	• M014 Endotoxin Analysis	• M029 *Enterococci*
• M005 Viable Fungi ID and Count	• M015 Heterotrophic Plate Count	• M018 Fecal Coliform
• M006 Viable Fungi ID and Count (Speciation)	• M160 Real Time Q-PCR-ERMI 36 Panel	• M133 MRSA Analysis
• M007 Culturable Fungi	• M018 Total Coliform (Membrane Filtration)	• M020 *Cryptococcus neoformans* Detection
• M008 *Culturable Fungi (Speciation)*	• M020 Fecal *Streptococcus* (Membrane Filtration)	• M120 *Histoplasma capsulatum* Detection
• M009 Gram Stain Culturable Bacteria	• M210-215 *Legionella* Detection	• M033-39 Allergen Testing
• M010 Bacterial Count and ID – 3 Most Prominent	• M026 Recreational Water Screen	• M044 Group Allergen (Cat, Dog, Cockroach, Dustmites)
• M011 Bacterial Count and ID – 5 Most Prominent	• M027 Mycotoxin Analysis	• Other See Analytical Price Guide
• M013 Sewage Contamination in Buildings		

Preservation Method (Water):

Name of Sampler: James Eberts **Signature of Sampler:** James E.

Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
R-01	Room 1	Air	M030	25L	9/15/21 0635
R-02	Room 11			25L	0643
R-03	Room 17			25L	0652
R-04	Room 29			25L	0659
R-05	Room 55			25L	0705
R-06	Outside by Front Ent End			25L	0720

Client Sample # (s): R-01 → R-06 **Total # of Samples:** 6

Relinquished (Client): James E. **Date:** 9/17/21 **Time:**

Received (Client): **Date:** 9/17/21 **Time:** 1120

Comments/Special Instructions:

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Laboratory ID: LAP-100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	INDUSTRIAL HYGIENE	Accreditation Expires: November 01, 2022
☑	ENVIRONMENTAL LEAD	Accreditation Expires: November 01, 2022
☑	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: November 01, 2022
☐	FOOD	Accreditation Expires:
☐	UNIQUE SCOPES	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision19: 09/01/2020

Date Issued: 10/31/2020