October 4, 2023

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

RE: Indoor Air Quality Inspection Report – August 2023
Reutter Elementary School
Epic Project No. 23-2269

Dear Mr. Zeck:

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 August 28, 2023.

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 12, Room 17, Room 20, Room 43, Room 1

Observations, Comments, and Recommendations

Weather Conditions: Sunny, 77° Fahrenheit, 72% Relative Humidity

Room 12
Visible mold was observed under wooden shelving.
No evidence of recent water intrusion was observed.
Relative humidity was within the normal range (49%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
Recommendations were given to the district to clean wooden shelving surfaces with a product designed to kill mold and mold spores.

Room 17
Visible mold was observed under wooden shelving.
No evidence of recent water intrusion was observed.
Relative humidity was within the normal range (49%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
Recommendations were given to the district to clean wooden shelving surfaces with a product designed to kill mold and mold spores.

Room 20
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within the normal range (49%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 43
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within the normal range (52%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 1
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within the normal range (54%). 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.
- Clean all wooden shelving similar to the shelving in Rooms 12/17; as they are all suspected of having some amount of mold. If possible, refinish/paint shelving to prevent future mold growth.

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,

Timothy Eberts
Senior Project Manager
Epic Environmental Services, LLC

James Eberts
President
Epic Environmental Services, LLC

Sample Data Summary
Air Sampling

Air Samples August 28, 2023

Air Sample Location	Airborne Mold Concentrations (spores/m³)		
	Total	Individual Mold Concentrations	
Room 12	1000	Aspergillus/Penicillium	80
		Basidiospores	800
		Cladosporium	80
		Myxomycetes	40
Room 17	700	Basidiospores	700
Room 20	2400	Aspergillus/Penicillium	200
		Basidiospores	2000
		Cladosporium	200
Room 43	1800	Basidiospores	1400
		Cladosporium	400
Room 1	700	Basidiospores	500
		Cladosporium	200
Outside	8500	Alternaria	80
		Ascospores	200
		Aspergillus/Penicillium	80
		Basidiospores	5400
		Cladosporium	2100
		Epicoccum	80
		Ganoderma	400
		Myxomycetes	40
		Rust	40
		Nigrospora	80

- 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: 372313520
Customer ID: EPIC62
Customer PO:
Project ID:

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

Phone: (856) 205-1077
Fax: (856) 205-0413
Collected Date: 08/28/2023
Received Date: 08/28/2023
Analyzed Date: 09/05/2023

Project: Reutter ES IAQ

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

Lab Sample Number:	372313520-0001			372313520-0002			372313520-0003		
Client Sample ID:	R-01			R-02			R-03		
Volume (L):	25			25			25		
Sample Location:	Outside			Rm 12			Rm 17		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	1	80	0.9	-	-	-	-	-	-
Ascospores	2	200	2.4	-	-	-	-	-	-
Aspergillus/Penicillium	1	80	0.9	1	80	8	-	-	-
Basidiospores	68	5400	63.5	10	800	80	9	700	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	26	2100	24.7	1	80	8	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1	80	0.9	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	5	400	4.7	-	-	-	-	-	-
Myxomycetes++	1*	40*	0.5	1*	40*	4	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	1*	40*	0.5	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	1	80	0.9	-	-	-	-	-	-
Total Fungi	**107**	**8500**	**100**	**13**	**1000**	**100**	**9**	**700**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1	80	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	2	-	-	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

Skin Fragment and Fibrous Particulate ratings are based on the percent of non-fungal material they represent: 1 (1-25%), 2 (26-50%), 3 (51-75%), or 4 (76-100%). Background ratings are based on the total area covered by non-fungal particles: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-99%), or 5 (100%; overloaded, prohibiting accurate detection and quantification). High levels of background will obscure spores and other particulates, leading to underestimation. 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. 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. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

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

Initial report from: 09/05/2023 10:58 AM

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

EMSL Analytical, Inc.

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Phone: (856) 205-1077
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Collected Date: 08/28/2023
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Analyzed Date: 09/05/2023

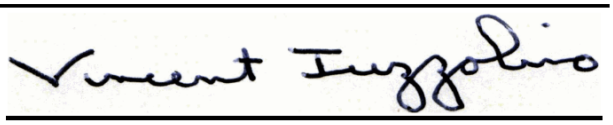
Project: Reutter ES IAQ

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

Lab Sample Number:	372313520-0004			372313520-0005			372313520-0006		
Client Sample ID:	R-04			R-05			R-06		
Volume (L):	25			25			25		
Sample Location:	Rm 20			Rm 43			Rm 1		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	2	200	8.3	-	-	-	-	-	-
Basidiospores	25	2000	83.3	17	1400	77.8	6	500	71.4
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	2	200	8.3	5	400	22.2	3	200	28.6
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Total Fungi	**29**	**2400**	**100**	**22**	**1800**	**100**	**9**	**700**	**100**
Hyphal Fragment	-	-	-	1	80	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	2	-	-	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.



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Initial report from: 09/05/2023 10:58 AM

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OrderID: 372313520

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Microbiology Chain of Custody Form

EMSL Order Number / Lab Use Only

372313520

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: c@emsl.com

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	Epic Environmental Services, LLC	Company Name:	Epic Environmental Services, LLC
Contact Name:	James Eberts	Billing Contact:	James Eberts
Street Address:	80 Fork Bridge Road	Street Address:	80 Fork Bridge Road
City, State, Zip:	Pittsgrove NJ 08318	City, State, Zip:	Pittsgrove NJ 08318
Country:	US	Country:	US
Phone:	856-205-1077	Phone:	856-205-1077
Email(s) for Report:	jeberts@epicenviro.com	Email(s) for Invoice:	

Project Information

Project Name/No: Rentar ES IAQ

Purchase Order:

EMSL LIMS Project ID: (If applicable, EMSL will provide)

State Samples Collected: NJ

Zip Code Samples Collected::

State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-taxable)

Sampled By Name: Timothy Fibers

Sampled By Signature:

No. of Samples in Shipment: 6

☐ Sterile/Sodium Thiosulfate Preserved Bottle Used: ☐ Biocide Used in Source (specify)

☐ Public Water Supply Samples: ☐ Note: All results may automatically be reported to DOH if required by State.

Turn-Around-Time (TAT) Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32* Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

MICROBIOLOGY TEST CODES

M001 Air-O-Cell	M174 MoldSnap	M012 *Pseudomonas aeruginosa* (P/A***)	M115 Sewage Screen - Water (P/A***)
M030 Micro 5	M032 Allergenco-D	M024 *Pseudomonas aeruginosa* (MFT*)	M116 Sewage Screen - Water (MPN**)
M041 Fungal Direct Examination		M015 Heterotrophic Plate Count	M117 Sewage Screen - Swab (P/A***)
M169 Pollen ID & Enumeration		M017 Total Coliform & *E. Coli* (Colilert P/A***)	M013 Sewage Screen - Swab (MFT*)
M280 Dust Characterization Level-1		M018 Total Coliform & *E. Coli* (MFT*)	M730 *Methicillin-resistant Staph. aureus* (MRSA)
M281 Dust Characterization Level-2		M114 Total Coliform & *E. Coli Enumeration (Colilert MPN**)*	M031 Rapid-growing non-TB *Mycobacteria* Detection & Enumeration
M005 Viable Fungi-Air Samples (Genus ID & Count)		M019 Fecal Coliform (MFT*)	
M006 Viable Fungi-Air Samples (Includes *Penicillum, Aspergillus, Cladosporium, Stachybotrys* Species ID & Count)		M020 Fecal *Streptococcus* (MFT*)	M014 Endotoxin Analysis
		M029 *Enterococci* (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
M007 Culturable Fungi-Surface Samples (Genus ID & Count)		M129 *Enterococci* (Enterolert P/A***)	M095 Bacteroides
M008 Culturable Fungi-Surface Samples (Includes *Penicillum, Aspergillus, Cladosporium, Stachybotrys* Species ID & Count)		M180 Real Time qPCR-ERMI 36 Panel	Other - See Analytical Price Guide for Test Code
		M025 Sewage Screen - Water (MFT*)	*Legionella Analysis* Please use EMSL *Legionella* COC
M009 Bacteria Culture Gram Stain & Count		*MFT= Membrane Filtration Technique	
M010 Bacteria Count & ID - 3 Most Prominent		**MPN = Most Probable Number	
M011 Bacteria Count & ID - 5 Most Prominent		***P/A = Presence/Absence	

RECEIVED AUG 28 2023 EMSL CINNAMINSON, NJ 2:32

Sample #	Sample Location/Description	Sample Type (Matrix)	Potable / Non-Potable (Only for Water)	Test Code	Volume/Area	Date / Time Collected	Temperature (Lab Use Only)
Example: Sample 1	Kitchen	Water	Potable	M017	1,000 ml	1/1/2021 3:30pm	
R-01	Outside	AIR		M030	252	8/28/23 1101	
R-02	RM 12					1112	
R-03	RM 17					1117	
R-04	RM 20					1126	
R-05	RM 43					1133	
R-06	RM 1					1139	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:

Sample Condition Upon Receipt:

Relinquished by:		Date/Time: 8/28/23 1400	Received by:		Date/Time: 8/28/23 130
Relinquished by:		Date/Time:	Received by:		Date/Time

Controlled Document - COC-34 Micro R13 03/02/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

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: January 01, 2025
☑	**ENVIRONMENTAL LEAD**	Accreditation Expires: January 01, 2025
☑	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: January 01, 2025
☐	**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

Revision20: 06/07/2022

Date Issued: 01/01/2023