

March 28, 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 – March 2023 Main Road Elementary School Epic Project No. 23-1040

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 Main Road 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 March 17, 2023.

Acceptable Temperature and Relative Humidity Criteria

Acceptable Indoor Temperature Range: Ideal Relative Humidity Range:

68° - 79° Fahrenheit

30-60%

The following rooms/areas were inspected:

Room 4, Room 58, Room 69, Room 14, Room 22

HEALTH

SAFETY

ENVIRONMENT

Franklin Township Board of Education Indoor Air Quality Inspection Report – March 2023 Main Road Elementary School Epic Project No. 23-1040 March 28, 2023

Observations, Comments, and Recommendations Weather Conditions: Cloudy/Cool, 61° Fahrenheit, 40% Relative Humidity

Room 4

No visible mold was observed.

No evidence of recent water intrusion was observed.

Relative humidity was below the ideal range (23%). Temperature was within the acceptable range.

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

No action required at this time.

Room 58

No visible mold was observed.

No evidence of recent water intrusion was observed.

Relative humidity was below the ideal range (22%). Temperature was within the acceptable range.

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

No action required at this time.

Room 69

Minor mold was observed on the half-circle desks.

No evidence of recent water intrusion was observed.

Relative humidity was below the ideal range (20%). Temperature was within the acceptable range.

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

Recommendations to clean affected areas with mold-resistant cleaning products were made to the district.

Room 14

Mold was observed on the inside of the wooden cabinets (see photo).

No evidence of recent water intrusion was observed.

Relative humidity was below the ideal range (21%). Temperature was within the acceptable range.

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

Recommendations to clean affected areas with mold-resistant cleaning products were made to the district.

Room 22

Mold was observed on the inside of the wooden cabinets.

No evidence of recent water intrusion was observed.

Relative humidity was below the ideal range (22%). Temperature was within the acceptable range.

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

Recommendations to clean affected areas with mold-resistant cleaning products were made to the district.

Franklin Township Board of Education Indoor Air Quality Inspection Report – March 2023 Main Road Elementary School Epic Project No. 23-1040 March 28, 2023

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.
- To prevent respiratory discomfort, maintain a minimum relative humidity of 30% and avoid excessively dry air. In cases where low humidity is causing complaints such as dry throats, a humidifier may be used on a temporary basis.

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

Jon ; took

Epic Environmental Services, LLC

James Eberts

President

Epic Environmental Services, LLC

James Ja Ebents

Franklin Township Board of Education Indoor Air Quality Inspection Report -- March 2023 Main Road Elementary School Epic Project No. 23-1040 March 28, 2023

Sample Data Summary Air Sampling

Air Samples

March 17, 2023

Air Samples	Wiai Ch 17, 2025					
Air Sample Location	Air Sample Location Airborne Mold Concentrations (sp					
	Total	Individual Mold Concen	trations			
		Ascospores	40			
Room 4	640	Basidiospores	400			
		Cladosporium	200			
		Ascospores	80			
Room 58	1060	Aspergillus/Penicillium	200			
		Basidiospores	300			
		Cladosporium	400			
		Arthrinium	80			
		Ascospores	80			
Room 69	1120	Aspergillus/Penicillium	80			
		Basidiospores	800			
		Cladosporium	80			
		Myxomycetes	80			
		Ascospores	80			
Room 14	960	Basidiospores	800			
		Cladosporium	80			
		Ascospores	80			
Room 22	980	Aspergillus/Penicillium	600			
		Basidiospores	300			
		Alternaria	80			
Outside	1980	Ascospores	200			
		Aspergillus/Penicillium	700			
		Basidiospores	800			
		Cladosporium	200			

- 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.

Tele: 856.205.1077

Epic Enviromental Services, LLC



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: 372304116
Customer ID: EPIC62
Customer PO: 23-1040

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: 03/17/2023 **Received Date:** 03/18/2023 **Analyzed Date:** 03/21/2023

Project: Main Rd ES IAQ

Spore Types Alternaria (Ulocladium) Ascospores Aspergillus/Penicillium Basidiospores Bipolaris++	Raw Count 1 3	Count/m³ 80	% of Total	Raw Count			372304116-0003 M - 03 25 Rm 58		
Ascospores Aspergillus/Penicillium Basidiospores	3	Contract that a second of		Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Aspergillus/Penicillium Basidiospores			4						
Basidiospores		200	10.1	1*	40*	6.3	1 	80	7.5
	9	700	35.4				2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	200	18.9
Bipolaris++	10	800	40.4	, 5	400	62.5	4	300	28.3
Chaetomium++	-	eram nazzanakana	· ····································	<u></u>	- esteres male at the track	essettribus (Artistro)	- Nagras des _a ntantango	- 5 (54)5 200 (55.5)	- 37.7
Cladosporium	2	200	10.1	10.51 (3 16.0)	200	31.3		400	31.6
Curvularia	= =	eka ersa vira aras ersa erras e	· Factorial tradesia	e i veg gregsjonku de bleve.	— Charlesta (Al-Neel Moran)	− agegyak Jerytjä ta i		eriodeses en	umanin in berk
Epicoccum									
Fusarium++	# 2.75-454 prusinent N	− Lugga eya aseku Mac	= 48.5 (1.7 (1.75 (1.74 (1.74))	− Tagagaran, agaran, attanya figi				enganga wan awa	-
Ganoderma			Alexandria de la companya de la comp				(300 V.749.005)		
Myxomycetes++	⇒ Like that Newscop (e.g. 1874)	enta en reaktennentek	es estes vivilativado	To Kinner et 1949 house	− E FFEDOSE AAADAA	- 			
Pithomyces++									
Rust	÷ ersonostatorostatoris		eriya iyada waxa iya			- 		SARENEN E NORTH	ere arra <u>T</u> odo
Scopulariopsis/Microascus									graffar Chick
Stachybotrys/Memnoniella	. taren signe una l	entroperations				aa eeroo oo oo oo o			omen vener
Unidentifiable Spores			ve additional state.					an salata sakelik	
Zygomycetes	en greek ar greek gr	eropoliti ila manamanta da	. As only in the following in	envicado aparacio			e e sale e en	80	7.5
Arthrinium						100	13	1060	100
Total Fungi	25	1980	100		640	100 3. 10 10 2 1 1 1 1 1 1		40*	mythryddig sirchl Dyddigiadai
Hyphal Fragment		40*							
Insect Fragment	2	200	namā, ut gentratija		- 80*	-4 153,4 5 1554, 875	assa mais	200	
Pollen	12	960	ega i en a e niĝe.	Triffic Zuman	80		-	80	
Analyt. Sensitivity 600x	en e	80 40*	- Colstack February		40*	_ 5656423554		40*	
Analyt, Sensitivity 300x		40*	Manage Tables		2			7	POST PRODUCTION
Skin Fragments (1-4)	- Caustina monata uma	TI Oktober week∎ okskelete	- NE SONORE, LES NOTES PARE	e surbu 6-proterwa ta	e Politiko etako etako eta	resident (residente).	: Korten 24 Arten	Simple (V.) A Little in	
Fibrous Particulate (1-4) Background (1-5)		±4.001.000 3			3		le estructualities	의 (영화년 14년 년) 3	

++ 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.

Vouent Tuggolio

Vincent luzzolino, 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 circle 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 defected 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. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

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

Initial report from: 03/23/2023 10:08 AM



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

Attention: James Eberts

Epic Environmental Services, LLC

80 Fork Bridge Road Pittsgrove, NJ 08318 EMSL Order: 372304116 Customer ID: EPIC62 Customer PO: 23-1040

Project ID:

Phone: (856) 205-1077

Fax: (856) 205-0413

Collected Date: 03/17/2023
Received Date: 03/18/2023
Analyzed Date: 03/21/2023

Project: Main Rd ES IAQ

Lab Sample Number:	Micro-5(™) Analysis of Fungal Spores & Particu			372304116-0005			372304116-0006		
Client Sample ID:	M - 04 M - 05		M - 06						
Volume (L):		25	5 25			25			
Sample Location:		Rm 69			Rm 14			Rm 22	
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m ^a	% of Total	Raw Count	Count/m ^o	% of Total
Alternaria (Ulocladium)								20	8.2
Ascospores	1 - 155 - 5 (2000) (1900) (1900)	80	7.1	e	80	8.3	1 	80 600	61.2
Aspergillus/Penicillium		80	7.1	10	800	83.3	1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	300	30.6
Basidiospores	10	800	71.4			* 5 % * . (MANAYING	5.55.65.25.65
Bipolaris++ Chaetomium++						eg rendere Çekirêya. -		alitik malili peraku	an ar danyari sa •
Chaetomium++		- 80	7.1		80	8.3		Region	
Curvularia		diana majadik	eratur gelen filt fram 1996 -	e in in a profit in a section in	unne, mit Stifte, e 10 mi •	William Artin Artin F	- Contract service was	en jagen eg ere kee	- -
Epicoccum									
Fusarium++	······································	-		*		-	-	-	
Ganoderma									
Myxomycetes++	1	80	7.1	-	-	-	<u>-</u>	_	_
Pithomyces++									
Rust	-	.	_	<u>.</u>		• • • • • • • • • • • • • • • • • • •	- 	e Ukrasi razryka kuzasztreksi	A 145, NAC ASSUME
Scopulariopsis/Microascus			维持特殊分						
Stachybotrys/Memnoniella	-	-	= ::::::::::::::::::::::::::::::::::::	# ************************************		— Concrete de la proprieda de la construcción de la construcción de la construcción de la construcción de la cons			
Unidentifiable Spores									i meuteur
Zygomycetes	n was all state tweely detail.		- Section terror valuri 2000	e in an Description		- Casastalijajaistai			YARABININ
Arthrinium		4400	100	12	960	100	13	980	100
Total Fungi	14 CTA-A-HERZIVEY	1120	100						
Hyphal Fragment Insect Fragment	retite i A Augustina L		en partir de la Porte de l La Porte de la	i dan sera da inggalah L	, 64 4월 2 학생(학)은 -	ege en afgillen i Schelle =	e di substanda un e estili aj	- eduptivity se	en in Troba di kani in Er -
insect rragilierit	2*	80*	er cheune	2*	80*		Y************		
Analyt. Sensitivity 600x	-	80	-		80	-	~	80	•
Analyt, Sensitivity 300x		40*			40*			40*	
Skin Fragments (1-4)		2	ra eje rurana. •	-	2			3	
Fibrous Particulate (1-4)									
Background (1-5)	-	3	-	-	3	•	-	3	-

. Sample Comment: 372304116-0006

Aspergillus conidiophores present in sample.

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

Vouent Tuggol

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

Vincent luzzolino, 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 approved 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 Chein 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 particulo insect fragment. *** Denotes particles found at 300X. "-** Denotes not detected. Due to method stopping rules, naw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (28-50%), 3 (51-75%), 4 (76-100%) of the background particles.

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

Initial report from: 03/23/2023 10:06 AM