March 18, 2020

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

RE: Indoor Air Quality Inspection Report – March 2020
Main Road Elementary School
Epic Project No. 20-1033

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 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 12, 2020.

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 6, Room 21, Room 36, Room 12, Room 59

Observations, Comments, and Recommendations

Weather Conditions: Cloudy, 39° Fahrenheit, 71% Relative Humidity

Room 6
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within acceptable range (33%). Temperature was within the normal range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 21
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was below ideal range (24%). Temperature was within the normal range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 36
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was below ideal range (24%). Temperature was within the normal range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 12
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was below ideal range (22%). Temperature was within the normal range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room 59
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was below ideal range (21%). Temperature was within the normal range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Epic Environmental Services, LLC 1930 Brown Road Newfield, New Jersey 08344
Tele: 856.205.1077 www.epicenviro.com Fax: 856.205.0413

Air Sample Results

Air samples were collected in five random locations throughout the school. Airborne mold spore concentrations were near or below background concentrations in all locations.

See Sample Data Summary

Conclusions and General Recommendations

- Assure steps are taken to maintain relative humidity above 30% during the winter season. Sensitive persons may experience dryness/general discomfort of the upper respiratory system in low relative humidity situations.

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 Jr. Eberts

James Eberts
President
Epic Environmental Services, LLC

Sample Data Summary

Air Sampling

Air Samples March 12, 2020

Air Sample Location	Airborne Mold Concentrations (spores/m³)		
	Total	Individual Mold Concentrations	
Room 6	6060	Ascospores	80
		Aspergillus/Penicillium	80
		Basidiospores	5900
Room 21	6200	Ascospores	600
		Basidiospores	5400
		Cladosporium	200
Room 36	2960	Ascospores	200
		Basidiospores	2600
		Curvularia	80
		Ganoderma	80
Room 12	4700	Basidiospores	4700
Room 59	3300	Ascospores	500
		Basidiospores	2800
Outside	9200	Ascospores	1200
		Basidiospores	7800
		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 at or below background (outside) concentrations.

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

Order ID:	372004905
Customer ID:	EPIC62
Customer PO:	20-1033
Project ID:	

Attn: James Eberts
Epic Environmental Services, LLC
1930 Brown Road
Newfield, NJ 08344

Phone:	(856) 205-1077
Fax:	(856) 205-0413
Collected:	03/12/2020
Received:	03/13/2020
Analyzed:	03/16/2020

Proj: Franklin Township BOE IAQ - Main Road ES

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

Lab Sample Number:	372004905-0001			372004905-0002			372004905-0003		
Client Sample ID:	M-01			M-02			M-03		
Volume (L):	25			25			25		
Sample Location:	Outside			Room 6			Room 21		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	16	1200	13	1	80	1.3	7	600	9.7
Aspergillus/Penicillium	-	-	-	1	80	1.3	-	-	-
Basidiospores	98	7800	84.8	74	5900	97.4	68	5400	87.1
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	2	200	2.2	-	-	-	2	200	3.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	115	9200	100	76	6060	100	77	6200	100
Hyphal Fragment	-	-	-	-	-	-	1	80	-
Insect Fragment	-	-	-	-	-	-	1	80	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	3	-	-	3	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	3	-	-	3	-

Report Comment: Sample cassettes exceeded the manufacturer's use by date of 02/2020.

++ 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

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

Initial report from: 03/16/2020 15:53:12

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
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID:	372004905
Customer ID:	EPIC62
Customer PO:	20-1033
Project ID:	

Attn:	James Eberts	Phone:	(856) 205-1077
	Epic Environmental Services, LLC	Fax:	(856) 205-0413
	1930 Brown Road	Collected:	03/12/2020
	Newfield, NJ 08344	Received:	03/13/2020
		Analyzed:	03/16/2020

Proj: Franklin Township BOE IAQ - Main Road ES

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

Lab Sample Number:	372004905-0004			372004905-0005			372004905-0006		
Client Sample ID:	M-04			M-05			M-06		
Volume (L):	25			25			25		
Sample Location:	Room 36			Room 12			Room 59		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	3	200	6.8	-	-	-	6	500	15.2
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	32	2600	87.8	59	4700	100	35	2800	84.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	1	80	2.7	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	1	80	2.7	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	37	2900	100	59	4700	100	41	3300	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	3	-	-	3	-	-	3	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	3	-	-	3	-

Report Comment: Sample cassettes exceeded the manufacturer's use by date of 02/2020.

++ 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

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

Initial report from: 03/16/2020 15:53:12

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

RECEIVED
EMSL
CINNAMINSON, NJ
2020 MAR 4 P 1:17

Environmental Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*: 372004905

EMSL Analytical, Inc.
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: Franklin Twp BOE IAQ – 844 Main Road ES	
Please Provide Results: Email	**Purchase Order:** 20-1033 — **State Samples Taken:** NJ

Turnaround Time (TAT) Options* - Please Check

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

*Analyses 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 Trap
• M049 BioSIS	• M003 Burkard	• M043 Cyclex	• M002 Cyclex-d	
• M030 Micro 5	• M174 MoldSnap	• M176 Pelle 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	• M019 Fecal Coliform
• M006 Viable Fungi ID and Count (Speciation)	• M180 Real Time Q-PCR-ERMI 36 Panel	• M133 MRSA Analysis
• M007 Culturable Fungi	• M018 Total Coliform (Membrane Filtration)	• M028 *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: Tim Eberts **Signature of Sampler:**

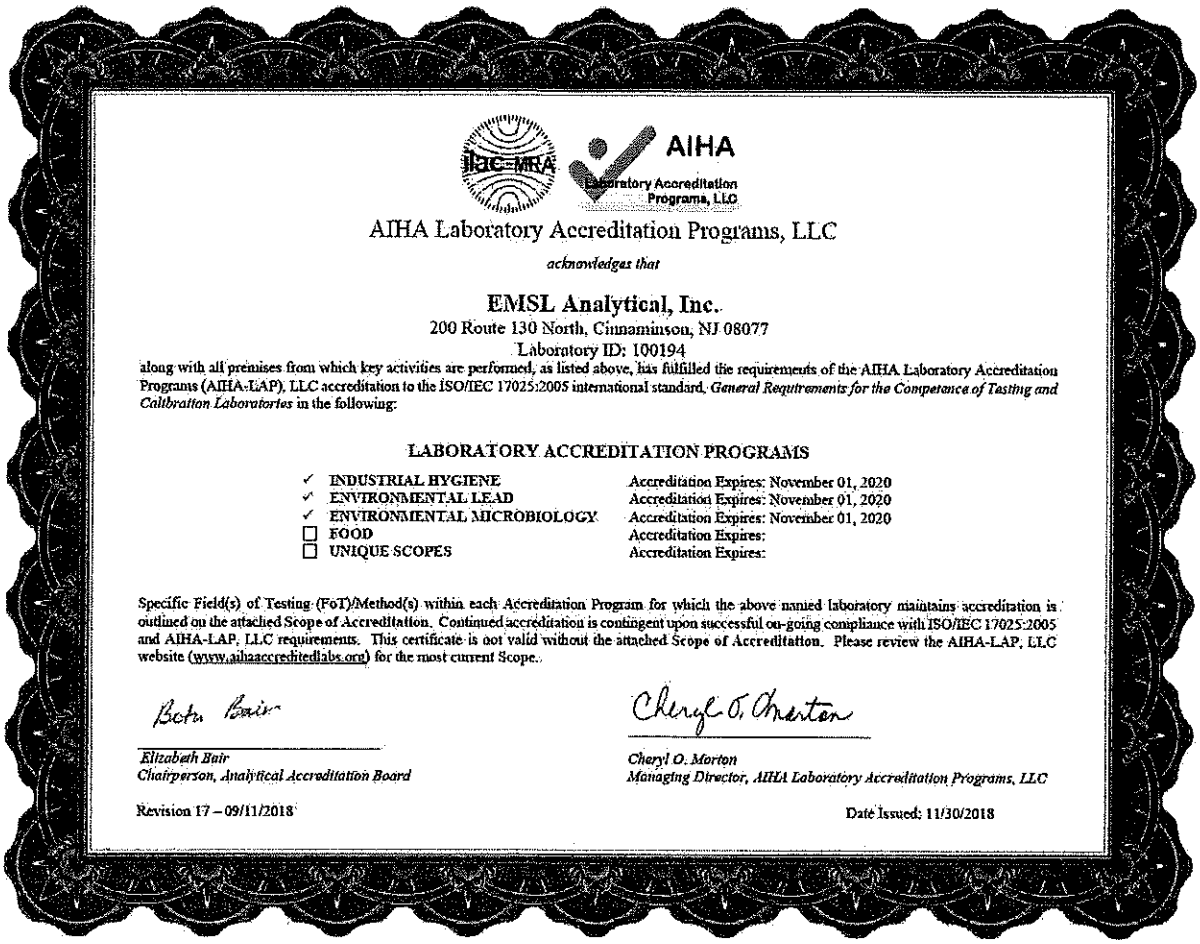
Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
M-01	Outside	Air	M030	75L	3/12/20 0644
M-02	RM 6				0654
M-03	RM 21				0701
M-04	RM 36				0707
M-05	RM 12				0713
M-06	RM 59				0721

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

Relinquished (Client): **Date:** 3/13/20 **Time:** 1230

Received (Client): **Date:** 3-13-20 **Time:** 1:15

Comments/Special Instructions:



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Laboratory ID: 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 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓	INDUSTRIAL HYGIENE	Accreditation Expires: November 01, 2020
✓	ENVIRONMENTAL LEAD	Accreditation Expires: November 01, 2020
✓	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: November 01, 2020
☐	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 17025:2005 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.

Beth Blair

Elizabeth Blair
Chairperson, Analytical Accreditation Board

Cheryl O. Morton

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

Revision 17 – 09/11/2018

Date Issued: 11/30/2018