



HILLMANN
CONSULTING

May 2, 2019

Ms. Rebecca Lopez
East Stroudsburg Area School District
50 Vine Street
East Stroudsburg, Pennsylvania 18301

RE: Microbial Investigation – Air Quality Sampling
JT Lambert Intermediate School
2000 Milford Road
East Stroudsburg, Pennsylvania 18301
Hillmann Project Number: PH-0755

Dear Ms. Lopez:

Thank you for retaining Hillmann Consulting, LLC (Hillmann) to address your environmental concerns. On April 17, 2019, Mr. John Murphy, CMI, conducted a Microbial Investigation and Air Quality Sampling of the Band Room, Auditorium, Main Gym, Guidance Office, TLC Building and Classrooms 206, 222, 216, 118, 123, 108, 102, 303, 311, and 320 located within JT Lambert Intermediate School. This investigation is part of a biannual sampling plan in order to document air quality within JT Lambert Intermediate School. The parameters for the investigation included a visual inspection and the collection of one airborne fungal spore sample within the subject spaces listed above.

Hillmann selected the sampling parameters based on consultations with the client (East Stroudsburg Area School District), the laboratory performing the analysis, and our in-house experts. The inspection was a general screening to randomly assess indoor airborne spore concentrations within the subject spaces.

Airborne fungal spores were collected by drawing air through an Air-O-Cell® cassette utilizing a Zefon BioPump. Samples were collected for a time period of five (5) minutes at a calibrated flow rate of 15 L/min yielding a total sample volume of 75 liters. These cassettes were then sent to an AIHA EMLAP accredited laboratory where fungal spores were identified by genera and concentration. Fungal spores are present in normal indoor settings. If found in excess amounts, these spores can produce allergy-like symptoms as well as asthmatic reactions in those who are sensitive to them. If the indoor samples are found to have a greater diversity of genera, and/or higher amounts of fungal spores than outdoor samples, it can be presumed that the subject space may be facilitating microbial growth.

OBSERVATIONS AND FINDINGS

Hillmann was met on site by facility personnel, who escorted Hillmann through the subject spaces to conduct airborne microbial quality assurance sampling.

The JT Lambert Intermediate School is primarily composed of a combination of masonry block units and wallboard walls, a combination of tile and carpet flooring, and drop ceiling tiles. Hillmann did not observe any water staining or visible microbial growth on accessible surfaces.

Average temperature and relative humidity readings were 70.8°F and 31.8% respectively.

Fifteen (15) airborne fungal spore samples were collected from the Band Room, Auditorium, Main Gym, Guidance Office, TLC Building and Classrooms 206, 222, 216, 118, 123, 108, 102, 303, 311, and 320 within JT Lambert Intermediate School. Laboratory analysis showed total indoor fungal spore concentrations and individual fungal genera were lower and/or comparable to the outdoor reference levels.

In the absence of health-based federal standards, Hillmann has adopted industry standard practice and recommended practices by the ACGIH to compare indoor/outdoor fungal concentrations. Samples are deemed “comparable” or “acceptable” when the following criteria are met:

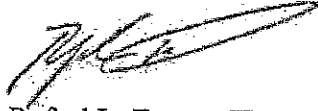
- Overall indoor/outdoor fungal genera identified are similar on the day of sampling. Raw spore counts less than ten (10) do not represent a statistically significant number. Therefore, the presence of one (1) spore of certain indicator genera (i.e. *Stachybotrys*) will not be grounds for failure.
- Common outdoor genera identified indoors are similar to or less than outdoor concentrations.
- Common water intrusion indicator genera including but not limited to: *Penicillium/Aspergillus* group, *Chaetomium*, etc. are similar to outdoor concentrations and/or within one order of magnitude (10 times difference). Exceptions will be made depending on conditions, fungal genera identified, and outlying factors.
- Hillmann also recommends that common water intrusion indicator genera be below a level of 1,000 CFU/m³ of air. Exceptions will be made depending on conditions, fungal genera identified, and outlying factors.”

CONCLUSIONS & RECOMMENDATIONS

Based upon the findings and laboratory results, the subject spaces do not appear to be facilitating microbial growth at this time.

If you have any questions, or need additional information, please feel free to contact our office at (856) 581-9055.

Regards,
Hillmann Consulting, LLC



Rafael L. Torres, III
Director of Operations
Philadelphia Area Regional Office



John Murphy
Industrial Hygienist, CMI

File: PH-0755
Enclosed: Laboratory Results

Date of Sampling: 04/17/2019 Job #: PH-0755
 Date of Sample Receipt: 04/19/2019 Order#: 0419377



Client: EAST STROUDSBURG AREA SCHOOL DISTRICT
 50 VINE STREET
 EAST STROUDSBURG, PA 18301
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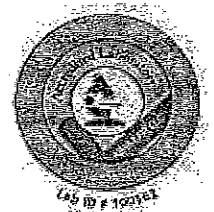
Attn:
 Collection Site: EAST STROUDSBURG/ PA/ JT LAMBERT SCHOOL
 Field Technician: John Murphy
 Date of Analysis: 04/19/2019
 Date of Issue: 04/22/2019
 Sampling Method: Air-O-Cell

SCOPE TRAP REPORT: Method (Fungal Spore SOP)

Location:	Band Room			Auditorium			Main Gym		
Lab ID#:	F48145			F48146			F48147		
Volume (Liters):	75			75			75		
Background Debris: *	Light			Light			Light		
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Ascospores							1	61	25%
Basidiospores	3	180	42%	6	370	100%	2	120	50%
Cladosporium	1	61	14%						
Hyphal Fragments	1	61	14%						
Myxo./Periconia/Rusts/Smuts	1	61	14%						
Penicillium/Aspergillus	1	61	14%				1	61	25%
Total Spores/m3	420			370			240		
Analytical Sensitivity ***	61			61			61		

* Background debris may affect analysis of sample causing results to be reported lower than actually present in the air. Background debris are expressed qualitatively: heavy > medium > light.
 ** Percentages may not equal 100% due to rounding.
 *** Analytical sensitivity is based on 1000X magnification and 15% of trace analyzed.
 Samples arrived in acceptable condition unless otherwise noted.
 Uncertainty of measurement available upon request.
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Signature: 
 Angelo Tango Laboratory Manager #Analyzed: 17



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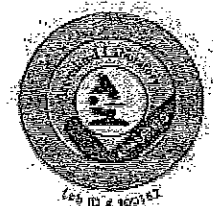
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 Date of Issue: 04/22/2019
 Sampling Method: Air-O-Cell

SCOPE TRAP REPORT: Method (Fungal Spore SOP)

Location:	Guidance Office			Room 206			Room 222		
Lab ID#:	F48148			F48149			F48150		
Volume (Liters):	75			75			75		
Background Debris: *	Light			Light			Light		
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Basidiospores	1	61	100%				2	120	100%
Hyphal Fragments				1	61	50%			
Penicillium/Aspergillus				1	61	50%			
Total Spores/m3	61			120			120		
Analytical Sensitivity ***	61			61			61		

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SPODE TRAP REPORT: Method (Fungal Spore SOP)

Location:	Room 216			Room 118			Room 123		
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Lab ID#:	F48151			F48152			F48153		
Volume (Liters):	75			75			75		
Background Debris: *	Medium			Light			Light		
Basidiospores	2	120	50%	1	61	100%	3	180	75%
Cladosporium	1	61	25%						
Hyphal Fragments	1	61	25%						
Penicillium/Aspergillus							1	61	25%
Total Spores/m3	240			61			240		
Analytical Sensitivity ***	61			61			61		

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 Date of Issue: 04/22/2019
 Sampling Method: Air-O-Cell

SPORE TRAP REPORT- Method (Fungal Spore SOP)

Location:	Room 108			Music Room 102			Room 303		
Lab ID#:	F48154			F48155			F48156		
Volume (Liters):	75			75			75		
Background Debris: *	Light			Light			Light		
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Basidiospores							1	61	100%
Hyphal Fragments	1	61	50%						
Penicillium/Aspergillus	1	61	50%						
Total Spores/m3	120			No Spores Detected			61		
Analytical Sensitivity ***	61			61			61		

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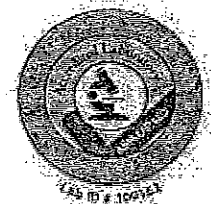
SCOPE TRAP REPORT: Method (Fungal Spore SOD)

Location:	Room 311			Room 320			TLC Building		
Lab ID#:	F48157			F48158			F48159		
Volume (Liters):	75			75			75		
Background Debris: *	Light			Light			Light		
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Ascospores	1	61	5%						
Basidiospores	13	790	68%						
Cladosporium	1	61	5%						
Myxo./Periconia/Rusts/Smuts	1	61	5%						
Penicillium/Aspergillus	2	120	10%						
Stachybotrys	1	61	5%						
Total Spores/m3	1,200			No Spores Detected			No Spores Detected		
Analytical Sensitivity ***	61			61			61		

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SPORE TRAP REPORT: Method (Fungal Spore SOP)

Location:	Outside			Outside					
	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**	raw ct.	spores/m3	%**
Lab ID#:	F48160			F48161					
Volume (Liters):	75			75					
Background Debris: *	Light			Light					
Ascospores	1	61	8%	5	310	20%			
Basidiospores	10	610	83%	18	1,100	72%			
Coprinus	1	61	8%	1	61	4%			
Penicillium/Aspergillus				1	61	4%			
Total Spores/m3	730			1,500					
Analytical Sensitivity ***	61			61					

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