TTI ENVIRONMENTAL, INC.
Consulting & Contracting

1253 North Church Street, Moorestown, NJ 08057
www.ttienv.com o 856-840-8800 f 856-840-8815

October 4, 2024

Mr. Scott Krisanda, M.Ed., CEFM
Director of Facilities
Pemberton Township Schools
125B Trenton Road
Browns Mills, NJ 08015

Reference: Clearance Inspection and Testing 2nd Event
Pemberton Township - Samuel T Busansky School – Room 109
16 Scrapetown Rd, Pemberton, NJ 08068
TTI Project Number 24-1322

Dear Mr. Krisanda:

Thank you for selecting TTI Environmental, Inc. (TTI) for your environmental needs. This correspondence is being forwarded to provide the findings and results of the recent clearance inspection conducted at the above referenced property and room.

1.0 Background

TTI arrived on site on September 13, 2024 to conduct an initial inspection of Room 109 and was provided with general information on the area of concern. Based on the information provided and TTI's site inspection results TTI recommended that an in-depth cleaning of Room 109 and contents be conducted to remove and reduce the surface mold within the room back to a normal condition. The school staff performed the room cleaning, and a clearance inspection and testing was performed by TTI on September 20, 2024. The clearance air sample failed, and the room was not deep cleaned. TTI recommended that the room remain closed and that additional cleaning be conducted to return the space back to a normal condition. The district hired AllRisk Property Damage Experts (AllRisk) to conduct the 2nd round of cleaning. AllRisk completed the cleaning of Room 109 on September 29, 2024. TTI arrived on site October 1, 2024 to conduct a reinspection which included visual and the collection of an air sample.

The onsite clearance inspection was conduct by the following personnel: Mr. Timothy Popp, Vice President of Consulting for TTI. In addition to the visual inspection, TTI collected one (1) air sample from inside the room and one from outside the building as a comparison sample.

Observations

The visual inspection of the building components and contents did not identify any visible mold growth. The dust level and cleanliness within Room 109 was very clean. The temperature level in the building was normal, and the relative humidity was below 60%.

Table 1.0 Indoor Direct Reading Parameter

Room/Area	Temperature	Relative Humidity
Room 109	71.9	44.8
Outside	70.7	67.5
Recommended Ranges	**68-79**	**>30 & <60%**

2.0 Sampling Methods and Sample Locations

A fungal spore trap air sample was collected from within Room 109 and the outside as a comparison sample. All laboratory analysis was performed by EMSL Analytical Inc. Cinnaminson, New Jersey, a certified AIHA NVLAP Laboratory. The analytical test report is attached in Appendix A. A description of sample methodology is described below:

Fungal Spore Trap Air Samples

Fungal spore trap air samples are collected by using an Air-O-Cell™ cassette attached to a high-volume vacuum pump. A volume of air is drawn through the cassette and the contents of the air are deposited upon a specially treated glass slide, which is then analyzed by a mycologist who identifies fungal types and quantity. Fungal spore trap air samples measure both viable and non-viable fungal spores as well as fungal parts and fragments. Fungal spore trap air samples are collected from the outdoors to be used as a comparison to the inside samples. There are currently no standards of reference ranges for acceptable levels of airborne microorganisms when interpreting fungal air sample results, just guidance. It is generally accepted that indoor airborne fungal concentrations should be approximately the same as found outdoors and display similar genus distribution. Elevated indoor airborne fungal concentrations as compared to outdoor concentrations are often an indicator of a fungal amplification source due to a moisture condition.

Table 1.0: Fungal Spore Trap Air Sample Results Summary

Sample Number	Location	Total Airborne Fungal Concentration (fs per m^3)	Dominant Fungi Detected			Fungal Genera of Concern Detected		
			Fungal Species and/or Fungal Parts	Concentration (fs per m^3)	Percent of Total Sample	Fungal Species	Concentration (fs per m^3)	Percent of Total Sample
A-1	Room 109	710	Aspergillus/ Penicillium	570	80.3	Aspergillus/ Penicillium	570	80.3
A-2	Outside	16,850	Basidiospores	8,640	51.3	Aspergillus/ Penicillium	1,200	7.1

fs/m^3: fungal structures per cubic meter ND: Non-detected

The total airborne fungal concentration level of the sample collected inside Room 109 was lower than the outside sample. The individual mold species Aspergillus/Penicillium was detected at a level below the outside sample and was less than 800 fs per m^3.

Conclusions & Recommendations

- The second cleaning event was more in-depth and successful in removing the surface dust and settled spores from the room.
- The humidity level in the room was below 60%.
- Based on the clearance inspection and the results from the air sample Room 109 has been return to a normal condition.
- TTI recommends that no further investigation is required at this time and Room 109 can be re-occupied.

We appreciate the opportunity for allowing TTI to provide you with environmental consulting services. If you should have any questions, please feel free to contact us at any time.

Sincerely,
TTI ENVIRONMENTAL, INC.

Timothy Popp
Vice President of Consulting

Appendix A:
Analytical Test Reports

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: 372416837
Customer ID: TTIE54
Customer PO: 039825
Project ID:

Attention: Tim Popp
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected Date: 10/01/2024
Received Date: 10/01/2024 02:50 PM
Analyzed Date: 10/02/2024

Project: 24-1322 Pemberton Busansky School

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

Lab Sample Number:	372416837-0001			372416837-0002		
Client Sample ID:	A-1			A-2		
Volume (L):	75			75		
Sample Location:	Room 109			Exterior		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	1	10*	0.1
Ascospores	-	-	-	2	90	0.5
Aspergillus/Penicillium++	13	570	80.3	28	1200	7.1
Basidiospores	3	100	14.1	108(198)	8640	51.3
Bipolaris++	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-
Cladosporium	-	-	-	109	4760	28.2
Curvularia	-	-	-	-	-	-
Epicoccum	-	-	-	2	30*	0.2
Fusarium++	-	-	-	1	40	0.2
Ganoderma	-	-	-	3	100	0.6
Myxomycetes++	-	-	-	2	90	0.5
Pithomyces++	-	-	-	1	10*	0.1
Rust	1	40	5.6	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-
Paecilomyces++	-	-	-	42	1800	10.7
Pyricularia	-	-	-	1	40	0.2
Torula++	-	-	-	1	40	0.2
Total Fungi	**17**	**710**	**100**	**391**	**16850**	**100**
Hyphal Fragment	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ 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 Manager
or other Approved Signatory

Initial report from: 10/02/2024 03:29 PM

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

OrderID: 372416837

EMSL Chain of Custody - One Chain

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

EMSL Order Number / Lab Use Only: 372416837

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnAsblab@EMSL.com

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

Customer Information

Customer ID:	
Company Name:	TTI Environmental Inc
Contact Name:	Tim Popp
Street Address:	1253 North Church St
City, State, Zip:	Moorestown NJ 08057
Country:	
Phone:	609-304-3968
Email(s) for Report:	timp@ttienv.com

Billing Information

Billing ID:	
Company Name:	Same
Billing Contact:	
Street Address:	
City, State, Zip:	
Country:	
Phone:	
Email(s) for Invoice:	

Project Information

Project Name/No: 24-1322 Pemberton Busansky School
Purchase Order: 039825
EMSL LIMS Project ID: (If applicable, EMSL will provide)
US State where samples collected:
State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-Taxable)
Sampled By Name: Tim Popp
Sampled By Signature:
No. of Samples in Shipment: 2

Turn-Around-Time (TAT)

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

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.

ASBESTOS

PCM Air
- ☐ NIOSH 7400
- ☐ NIOSH 7400 w/ 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)
- ☐ POINT COUNT ☐ 400 (<0.25%) ☐ 1,000 (<0.1%)
- POINT COUNT w/ GRAVIMETRIC ☐ 400 (<0.25%) ☐ 1,000 (<0.1%)
- ☐ NIOSH 9002 (<1%)
- ☐ NYS 198.1 (Friable - NY)
- ☐ NYS 198.6 NOB (Non-Friable - NY)
- ☐ NYS 198.8 (Vermiculite SM-V)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312*

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (Non-Friable-NY)
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)

Other Test (please specify)

*Please call with your project-specific requirements.

TEM - Settled Dust
- ☐ Microvac - ASTM D5755
- ☐ Wipe - ASTM D6480
- ☐ Qualitative via Filtration Prep
- ☐ Qualitative via Drop Mount Prep

Soil - Rock - Vermiculite (reporting limit):
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.1%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)
- ☐ TEM Qualitative via Filtration Prep
- ☐ TEM Qualitative via Drop Mount Prep

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☐ **Positive Stop - Clearly Identified Homogeneous Areas (HA)** Filter Pore Size (Air Samples) ☐ 0.8um ☐ 0.45um

LEAD (PB)

Flame Atomic Absoprtion
- ☐ Chips SW846-7000B or AOAC 974.2
- ☐ Soil SW846-7000B/7420
- ☐ Air NIOSH 7082
- ☐ Wastewater SM3111B or SW846-7000B/7420
- ☐ ASTM Wipe SW846-7000B/7420
- ☐ non-ASTM Wipe SW846-7000B/7420
- ☐ TCLP SW846-1311/ 7420/ SM3111B

ICP
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)
- ☐ Chatfield SOP

MAT-SCI (TAT End of Business Day)
- ☐ Common Particle ID (large particles)
- ☐ Full Particle ID (environmental dust)
- ☐ Basic Mateiral ID (solids)
- ☐ Advanced Material ID
- ☐ Physical Testing (Tensile, Compression)
- ☐ Combustion-By-Products (Soot, Char, Etc.)
- ☐ X-Ray Flourescence (elem. Analysis)
- ☐ X-Ray Diffraction (Crystalline Part.)
- ☐ MMVF's (Fibrous Glass, RCF's)
- ☐ Particle Size (Sieve, Microscopy, Laser)
- ☐ Combustible Dust
- ☐ Petrographic Examination

MICROBIOLOGY

Swab and Bulk Samples
- ☐ Mold & Fungi - Direct Examination
- ☐ Mold & Fungi Culture (Genus Only)
- ☐ Mold & Fungi Culture (Genus & Species)
- ☐ Bacterial Count & ID (Up to 3 Types)
- ☐ Bacterial Count & ID (Up to 5 Types)

Air Samples
- ☒ Mold & Fungi (Spore Trap)
- ☐ Mold & Fungi Culture (Genus Only)
- ☐ Mold & Fungi Culture (Genus & Species)
- ☐ Bacterial Count & ID (Up to 3 Types)
- ☐ Bacterial Count & ID (Up to 5 Types)

Sewage Screen
- ☐ Sewage Screen (P/A)
- ☐ Sewage Screen (Membrane Filtration)

Water Samples
- ☐ Total Coliform & E. Coli (P/A, SM 9223B)
- ☐ Heterotrophic Plate Count (PP, SM 9251B)
- ☐ Fecal Coliform (SM 9222D)

DNA & PCR Testing: (See Analytical Guide for Code)
Test Code:

Legionella: (See Analytical Guide for Code)
Test Code:

P/A= Presence/Absence, PP= Pour Plate

IAQ (TAT End of Business Day)
- ☐ Nuisance Dust ☐ NIOSH 0500 ☐ NIOSH 0600
- ☐ Airborne Dust ☐ PM10 ☐ TSP
- Silica Analysis: ☐ All Species
- Silica Analysis - Single Species ☐ Alpha Quartz ☐ Cristobalite ☐ Tridymite
- ☐ HVAC Efficiency
- ☐ Carbon Black
- ☐ Airborn Oil Mist
- Radon Testing: Call for Kit and COC

Other Test (please specify)

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: 10/1/24	Received by:	Date/Time 10/1/24 750
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - COC-17 One Chain EMSL R5 2/26/2021

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

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

OrderID: 372416837

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TESTING LABS • PRODUCTS • TRAINING

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200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnAsblab@EMSL.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

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

24-1322 Pemberton Busansky School PO#039825

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
A-1	Room 109	75L	10/24 1258
A-2	Exterior	↓	↓ 121

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EMSL
CINNAMINSON, N.J.
2024 OCT -1 P 2:51

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time:	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - COC-17 One Chain EMSL R5 2/26/2021

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