TTI ENVIRONMENTAL, INC.
Consulting & Contracting

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

October 31, 2024

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

Reference: Mold Inspection and Testing
Marcus W. Newcomb Middle School - Media Center
300 Fort Dix Rd, Pemberton, NJ
TTI Project Number 24-1527

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 initial mold inspection conducted at the above referenced property.

1.0 Background

TTI arrived on site on October 24, 2024 and was provided with general information on the area of concern. The property is a public elementary school building which was unoccupied at the time of the inspection and is located at 300 Fort Dix Rd, Pemberton, New Jersey. The mold inspection included the entire Media Center Room within the subject building. TTI's inspection was performed using a high lumen flashlight, humidity/temperature meter, and a thermal camera.

The building is one story constructed of metal ceiling deck, concrete slab floor, cinder block walls, limited sheetrock walls, drop ceilings in closets and carpet tile floors.

The onsite assessment was conduct by the following personnel: Mr. Timothy Popp, Vice President of Consulting for TTI. In addition to the visual inspection, TTI collected two (2) air samples from inside the Media Center and one from outside the building as a comparison sample.

Observations

The Media Center room in the building was inspected to identify water intrusion and or mold conditions. The inspection with a thermal camera and moisture meter did not identify any current water intrusion in the room. No unusual odor was noted during the inspection. The wood windowsill along the outside wall appeared to have previous water intrusion stains and was dry at the time of our inspection. This previous intrusion appeared to be from a windblown rain event and or something placed on the sill like a plant. The entire room was inspected for the presence of surface mold with a high lumen flashlight which did not identify any surface mold growth on any contents or building components. The dust level in the Media Center was mostly good, however areas not commonly dusted had a medium level (on top of books not moved for a while and high/low reach areas). The temperature and relative humidity reading levels in the Media Center were detected at an acceptable level.

Table 1.0 Indoor Direct Reading Parameter

Room/Area	Temperature	Relative Humidity
Media Center	68.7	57.9
Outside	52.8	62.4
Recommended Ranges	**68-79**	**>30 & <60%**

2.0 Sampling Methods and Sample Locations

Two fungal spore trap air samples were collected from within the Media Center and the exterior 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 or below those 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 2.0: 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)	% of Total Sample
A-1	Media Center back	2,500	Basidiospores	1,700	68	Aspergillus/ Penicillium	90	3.6
						Cladosporium	570	22.8
A-2	Media Center front	2,730	Basidiospores	1,100	4.03	Aspergillus/ Penicillium	200	7.3
						Cladosporium	790	28.9
A-3	Outside	15,200	Basidiospores	9,690	63.8	Aspergillus/ Penicillium	200	1.3
						Cladosporium	4,000	26.3

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

The total airborne fungal concentration level of the samples collected inside the Media Room were lower than the outside sample. The individual mold species detected in the air samples collected inside the Media Room were similar to the outside and did not identify any species of concern to be greater than 800 fs per m3.

Conclusions & Recommendations

- The in-depth visual inspection of the Media Room did not reveal any current visible mold growth on the building components and or contents. The humidity level in the Media Center was below 60% which prevents humidity related mold growth.
- The fungal air samples collected in the room did not indicate an air borne mold issue within the space at this time.
- TTI recommends that the dust level be reduced in areas not commonly dusted. A HEPA vacuum should be used to capture and remove the settled dust.
- TTI recommends that no further investigation is warranted at this time. A copy of this should be maintained in the building IAQ Plan and any noted corrective actions taken.

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: 372418442
Customer ID: TTIE54
Customer PO: 039979
Project ID:

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

Project: 24-1527 Newcomb School

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected Date: 10/24/2024
Received Date: 10/24/2024 01:10 PM
Analyzed Date: 10/25/2024

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

Lab Sample Number:	372418442-0001			372418442-0002			372418442-0003		
Client Sample ID:	A-1			A-2			A-3		
Volume (L):	75			75			75		
Sample Location:	Media Center Back			Media Center Front			Outside		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	3	100	0.7
Ascospores	3	100	4	5	200	7.3	17	740	4.9
Aspergillus/Penicillium++	2	90	3.6	4	200	7.3	5	200	1.3
Basidiospores	38	1700	68	26	1100	40.3	101(222)	9690	63.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	13	570	22.8	18	790	28.9	91	4000	26.3
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1	10*	0.4	3	100	0.7
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	1	40	1.5	4	200	1.3
Myxomycetes++	1	40	1.6	6	300	11	3	100	0.7
Pithomyces++	-	-	-	2	90	3.3	-	-	-
Rust	-	-	-	-	-	-	5	70*	0.5
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**57**	**2500**	**100**	**63**	**2730**	**100**	**353**	**15200**	**100**
Hyphal Fragment	2	90	-	2	90	-	6	300	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	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

Vincent Iuzzolino, M.S., Laboratory Manager
or other Approved Signatory

Initial report from: 10/25/2024 12:57 PM

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

OrderID: 372418442

EMSL Chain of Custody - One Chain

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

EMSL Order Number / Lab Use Only: 372418442

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

PHONE: (800) 220-3675
EMAIL: CinnAslab@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:	24-1527 Newcomb School
Purchase Order:	039979
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:	3

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

☐ **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

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)

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)

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)

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

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

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: 10/24/24	Received by:	Date/Time: 10/24/24 1100
Relinquished by:	Date/Time:	Received by:	Date/Time

RECEIVED EMSL CINNAMINSON, N.J. OCT 24 P 1:10

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: 372418442

EMSL Chain of Custody - One Chain

EMSL Order Number / Lab Use Only

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

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

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

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.)

24-1527 Newcomb School PO# 039979

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
A-1	Media Center back	75L	10 24 24 640
A-2	Media Center front	↓	657
A-3	Outside	↓	↓ 720

RECEIVED
EMSL
CINNAMINSON, N.J.
2021 OCT 24 P 1:10

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.)