



Soil and Land Use Technology, Inc.

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Telephone: (301) 595-3783
www.salutinc.com

January 3, 2018

Howard County Public School System
Harriet Tubman Building
8045 Harriet Tubman Lane
Columbia, MD 21044

Attention: Mr. Jeffrey Klenk (jeffrey_klenk@hcpss.org)

RE: Glenwood Middle School Trailer #20, Mold Investigation

Mr. Klenk:

On October 4, 2017 a representative from Soil and Land Use Technology, Inc. (SaLUT) conducted a mold investigation in Trailer #20 at the Glenwood Middle School, a property maintained by the Howard County Public School System (HCPSS), located at 2690 MD-97, Glenwood, MD 21738. Mr. Herbert Savje, Director of School Facilities, accompanied the representative from SaLUT to view the area of concern.

Methodology

The IAQ evaluation conducted by SaLUT included a visual assessment, and collection of swab samples for mold in representative locations within Trailer #20.

Mold samples from areas of suspected mold growth were collected on Healthlink transporter Sterile Swabs.

Observations

The table below summarizes the main observations from the mold investigation in Trailer #20, visited on October 4, 2017.

Location	Summary of Observations
Trailer #20 Floor area 700 ft ²	No occupants at the time of inspection; 1’x1’ floor tile floor; No visible water stains on the ceiling, Mild musty odor; No visible dust on floor/ other surfaces; No potted plants.

Table 1 shows the summary of mold swab sample analysis results and locations. Laboratory analysis follows this report (see attachment).

Table 1: Glenwood Middle School- Trailer #20, Results of Mold Swab samples; October 4, 2017 (03:15 PM- 4:15 PM)

Sample Location	Trailer #20 Front entrance door area- Underneath the floor tile	Trailer #20 Below the 1 st window from the entrance-Underneath the floor tile
<i>Agrocibe/Coprinus</i>	-	-
<i>Alternaria</i>	-	-
<i>Ascospores</i>	-	-
<i>Aspergillus/Penicillium</i>	Low	Low
<i>Basidiospores</i>	-	-
<i>Bipolaris++</i>	-	-
<i>Chaetomium</i>	High	High
<i>Cladosporium</i>	-	-
<i>Curvularia</i>	-	-
<i>Epicoccum</i>	-	-
<i>Fusarium</i>	-	-
<i>Gonoderma</i>	-	-
<i>Myxomycetes++</i>	-	-
<i>Paecilomyces</i>	-	-
<i>Rust</i>	-	-
<i>Scopulariopsis</i>	-	-
<i>Stachybotrys</i>	-	-
<i>Torula</i>	-	-
<i>Ulocladium</i>	-	-
<i>Unidentifiable Spores</i>	-	-
<i>Zygomycetes</i>	-	-
<i>Pithomyces</i>	-	-
<i>Fibrous Particulate</i>	Low	Low
<i>Hyphal Fragment</i>	Medium	Medium
<i>Insect Fragment</i>	Rare	Low
<i>Pollen</i>	-	-

Conclusion

Mold was detected in the swab samples from underneath the floor tiles in affected area.

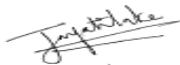
Recommendations

Prior to or in conjunction with the remediation efforts we recommend the cause of the expected reoccurring water intrusion (observed by HCPSS representative) be corrected. Based on the observations and the results of the swab samples at this facility, SaLUT recommends the following:

- Removal of affected floor tiles and flooring components, mold abatement, and replacement.

Thank you for the opportunity to provide industrial hygiene services for the Howard County Public School System. If you require additional information, please contact me at 301-595-3783.

Sincerely,



Chaminda Jayatilake, PE, CIH, CSP, CHMM
Certified Industrial Hygienist
Soil and Land Use Technology Inc (SaLUT)

Attachments

- Appendix A- Mold Swab Sample Analytical Results and Chain-of-Custody Forms**
- Appendix B- Photo Log**



Appendix A

Mold Swab Sample Analytical Results and Chain-of-Custody

Forms



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

191712150

PHONE:

FAX:

Company Name: SaLUT Inc		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**					
Street: 1818 New York Ave Suite 231		Third Party Billing requires written authorization from third party					
City: Washington	State/Province: DC	Zip/Postal Code:	Country:				
Report To (Name): Indika Jayatilake		Telephone #:					
Email Address: ijayatilake@salutinc.com		Fax #:	Purchase Order:				
Project Name/Number: 17-032 <i>Glenwood M.S.</i>		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email					
U.S. State Samples Taken:		Project Zip Code:					
		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential					
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements							
Sterile, Sodium Thiosulfate Preserved Bottle Used: <input type="checkbox"/> Biocide Used in Source (specify): <input type="checkbox"/>							
Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by state.							
Turnaround Time (TAT) Options * - Please Check							
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week				
Microbiology Test Codes							
M001 Air-O-Cell	M174 MoldSnap	M024 Pseudomonas aeruginosa (MFT*)	M115 Sewage Screen - Water (PIA***)				
M030 Micro 5	M032 Allergenco-D	M015 Heterotrophic Plate Count	M116 Sewage Screen - Water (MPN**)				
M041 Fungal Direct Examination		M017 Total Coliform & E. coli (Colilert P/A***)	M117 Sewage Screen - Swab (PIA***)				
M169 Pollen ID & Enumeration		M018 Total Coliform & E. coli (MFT*)	M013 Sewage Screen - Swab (MFT*)				
M280 Dust Characterization Level-1		M114 Total Coliform & E. coli Enumeration (Colilert MPN**)	M133 Methicillin-resistant Staph. aureus (MRSA)				
M281 Dust Characterization Level-2		M019 Fecal Coliform (MFT*)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration				
M005 Viable Fungi- Air Samples (Genus ID & Count)		M020 Fecal Streptococcus (MFT*)	M014 Endotoxin Analysis				
M006 Viable Fungi- Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M029 Enterococci (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)				
M007 Culturable fungi - Surface Samples (Genus ID & Count)		M129 Enterococci (Enterolert P/A***)	Other See Analytical Price Guide				
M008 Culturable fungi - Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M180 Real Time qPCR-ERMI 36 Panel	Legionella Analysis Please use EMSL Legionella COC				
M009 Bacteria Culture Gram Stain & Count		M025 Sewage Screen -Water (MFT*)					
M010 Bacteria Count & ID - 3 Most Prominent		*MFT= Membrane Filtration Technique					
M011 Bacteria Count & ID - 5 Most Prominent		**MPN= Most Probable Number					
M012 Pseudomonas aeruginosa (PIA***)		***P/A= Presence/Absence					
Name of Sampler: Indika Jayatilake		Signature of Sampler: <i>[Signature]</i>					
Sample #	Sample Location/Description	Sample Type	Potable/NonPotable (only for waters)	Test Code	Volume/Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
Example A1	Kitchen Sink/Tap	Water	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M017	100 mL	9/1/13 4:00 PM	
SWAB-1	Trailer #20 Front door <i>Hand area</i>		<input type="checkbox"/> P <input type="checkbox"/> NP	M041		10/4/2017	
SWAB-2	Trailer 20 below first window area		<input type="checkbox"/> P <input type="checkbox"/> NP	M041		10	
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
Client Sample # (s):		Total # of Samples:		Samples Received Chilled? Yes / No			
Relinquished (Client): <i>[Signature]</i>		Date:		Time:			
Received (Lab): <i>[Signature]</i>		Date:		Time:			
Comments/Special Instructions: <i>10/5/17</i> <i>WLM</i>							



EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705
Phone/Fax: (301) 937-5700 / (301) 937-5701
<http://www.EMSL.com> / beltsvillelab@emsl.com

Order ID: 191712150
Customer ID: SALU50
Customer PO:
Project ID:

Attn: Indika Jaynthlake
SaLUT
1818 New York Avenue, NE
Suite 218A
Washington, DC 20002
Proj: 17-032/GLENWOOD M.S.

Phone: (301) 595-3783
Fax: (301) 595-3787
Collected: 10/04/2017
Received: 10/05/2017
Analyzed: 10/05/2017

Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Swab Samples (EMSL Method: M041)

Lab Sample Number:	191712150-0001	191712150-0002			
Client Sample ID:	SWAB-1	SWAB-2			
Sample Location:	TRAILER 20 FRONT DOOR FLOOR AREA	TRAILER 20 BELOW FIRST WINDOW AREA			
Spore Types	Category	Category	-	-	-
Agrocybe/Coprinus	-	-	-	-	-
Alternaria	-	-	-	-	-
Ascospores	-	-	-	-	-
Aspergillus/Penicillium	Low	Low	-	-	-
Basidiospores	-	-	-	-	-
Bipolaris++	-	-	-	-	-
Chaetomium	*High*	*High*	-	-	-
Cladosporium	-	-	-	-	-
Curvularia	-	-	-	-	-
Epicoccum	-	-	-	-	-
Fusarium	-	-	-	-	-
Ganoderma	-	-	-	-	-
Myxomycetes++	-	-	-	-	-
Paecilomyces	-	-	-	-	-
Rust	-	-	-	-	-
Scopulariopsis	-	-	-	-	-
Stachybotrys	-	-	-	-	-
Torula	-	-	-	-	-
Ulocladium	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-
Zygomycetes	-	-	-	-	-
Fibrous Particulate	Low	Low	-	-	-
Hyphal Fragment	Medium	Medium	-	-	-
Insect Fragment	Rare	Low	-	-	-
Pollen	-	-	-	-	-

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000
Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut
* = Sample contains fruiting structures and/or hyphae associated with the spores.

Stefanie Schneider, Microbiology Lab Manager
or Other Approved Signatory

No discernable field blank was submitted with this group of samples.
EMSL maintains liability limited to cost of analysis. 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. Interpretation of the data contained in this report is the responsibility of the client. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--EMLAP Accredited #102891

Initial report from: 10/05/2017 16:30:05

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



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Appendix B

Photo Log

Swab Sample Locations



Trailer #20 Below the 1st window from the entrance



Trailer #20 Entrance door area