



February 28, 2022

Chester Upland School District
232 W. 9th Street
Chester, PA 19013

RE: Limited Mold Inspection & Sampling

Location: Chester High School
232 W. 9th Street, Chester, PA 19013
Project #: 20220011

Acer Associates, LLC (ACER) was retained to perform a limited mold inspection and sampling at the above referenced location. The inspection was conducted on February 1, 2022, by Mr. Chuck Wilkins and Mr. Scott Horn, a Certified Microbial Consultant.

VISUAL INSPECTION:

On February 1, 2022, ACER conducted a limited visual inspection of the basement, 1st, 2nd, 3rd, and 4th floors. Suspected mold growth was observed in various locations on the following materials:

- Ceiling tiles in the hallways throughout, former dental room, long storage hallway, 2nd floor special needs room, kitchen, gym, Rooms C117, A137, A106, A107, A105, A104, A102, A101, A121, A122, B202, B203, B204, B208, C204, C204A, C201, C222, C228, C229, C233, C209, E247, A236, A207, A206, A205, A204, A220, A221, E329, E330, B410, B401, B415, B402, B426, B427, B428, B432, B433, B408, B407, B406, B405, B404, B403, B402, B401, C501, C502, C521, C528, C529, C530, C531, C534, C511, C510, A535, A510, A507, A506, A504, A505, A521, and A515.
- Drywall walls in the boiler room, former dental room, cafeteria, Rooms C127, C233, and A510.
- Diffusers in the main office suites on the 2nd, 3rd, and 4th floors, Rooms A247, and A510.
- Metal ducting in the Boy's and Girl's Locker Rooms, and Gym.
- Cardboard boxes and fiberglass pipe insulation in the long storage hallway and Girl's Locker Room Coach's Office.

During the inspection, water damage was evident on ceiling tiles and plaster walls in classrooms and the hallways throughout.



Sampling:

ACER collected five (5) tape samples of drywall walls, ceiling tile, ceiling diffuser, and a metal duct during the investigation. The purpose of the sampling was to confirm the presence and type of mold spores. The samples were analyzed for Total Fungal Spore Count, via direct microscopic examination (Method #P003). The samples were transported directly from the site to Prestige EnviroMicrobiology, Inc., located at 242 Terrace Boulevard, Suite B-1 in Voorhees, New Jersey. Prestige is accredited by the American Industrial Hygiene Association (AIHA) for Environmental Microbiology analysis. Table I summarizes the analytical results. Copies of the chain of custody forms and Certificates of Analysis for the samples have been provided as Attachment B.

Table I – Swab/Tape Lift Material Laboratory Results

Sample ID/ Location/ Substrate	Sample Dimension	Fungal ID	Fungal Structures Observed	Fungal Density	Notes
220203-03-007 T-01 Former Dental Room- Drywall Closet	3/4" x 2"	<i>Cladosporium</i> <i>Stachybotrys</i>	spores, conidiophores, hyphae spores, conidiophores, hyphae	<1 2	Fungal growth, some fungal structures in fragments; insects and their fecal matter observed.
220203-03-008 T-02 C-127 by Pipe Chase	3/4" x 2 1/2"	<i>Stachybotrys</i>	spores, conidiophores, hyphae	<1	Light fungal growth.
220203-03-009 T-03 A-137 Ceiling Tile	3/4" x 2 1/2"	ND	No fungal growth structures observed	NA	Mostly dust and debris, no signs of fungal growth or contamination.
220203-03-010 T-04 B-208 Ceiling Vent	3/4" x 2 1/2"	ND	No fungal growth structures observed	NA	Mostly dust and debris, no signs of fungal growth or contamination.
220203-03-011 T-05 E-225 Metal Duct	3/4" x 2 1/2"	<i>Cladosporium</i>	spores, conidiophores, hyphae	5	Fungal growth, some fungal structures in fragments.

Note: Fungal density rating 1-5 (1 being the lowest and 5 the highest) indicates density of fungal growth structures observed. No fungal density is provided for loose spores, hyphal fragments and other structures. (<1) is used to indicate a light fungal density. NA = not applicable, ND = not detected.

RECOMMENDATIONS:

ACER’s inspection and tape lift sampling confirmed mold growth to be present on the drywall walls located in the boiler room, former dental room, cafeteria, Rooms C127, C233, and A510.

1. The drywall walls the above referenced rooms should be removed. All exposed surfaces should be cleaned and disinfected properly to prevent further mold growth.
2. The wall cavity should be inspected by ACER while opened to further investigate the cause of the of the water intrusion and to verify all mold has been remediated.

Ceiling tiles located in rooms referenced in the Visual Inspection showed visible mold growth and water damage. The majority of the ceiling tiles located on the 1st through 4th floor were located below classroom unit ventilators located on the floors above. Some stained ceiling tiles in 2nd floor classrooms were located below kitchen floor drains which leaked. The mold growth and water



damaged ceiling tiles located on the 5th floor were caused by roof leaks.

1. Classroom Unit Ventilators (CUVs) throughout the building should be evaluated and serviced to reduce humidity levels to <60%. This evaluation should be completed during cooling season to investigate areas for condensation and excessive humidity.
2. CUV covers and interior components should be cleaned with a biocide. Fiberglass pipe insulation should be removed and replaced.
3. Drywall and plaster behind CUV should be removed in order to prevent microbial growth. Fiberglass pipe insulation, wood framing, any other exposed surfaces should be cleaned and disinfected properly to prevent further mold growth.
4. The wall cavity should be inspected by ACER while opened to further investigate the cause of the of the water intrusion and to verify all mold has been remediated.
5. The affected ceiling tiles in the areas should be removed and the source of the moisture be determined and repaired prior to replacing ceiling tiles. Due to the potential for the ceiling tiles to contain asbestos, ACER recommends the ceiling tiles be sampled prior to any work.

ACER's inspection and tape lift sampling confirmed mold growth to be present on the metal ducting in the Boys and Girls Locker Rooms, and Gym. Mold growth was also observed on metal diffusers located in the Main Office suites on the 2nd, 3rd and 4th floors. All metal materials should be cleaned and disinfected properly to prevent further mold growth. Additionally, cardboard boxes and fiberglass pipe insulation in the long storage hallway and Girl's Locker Room Coach's Office, showed visible mold growth. The cardboard boxes and fiberglass should be removed and disposed of. The floor around the boxes and the pipes should be cleaned and disinfected. The piping should be reinsulated once remediation has been confirmed to be satisfactorily completed.

ACER's inspection of classroom unit ventilators was limited to units which were already open. Every unit throughout the building should be inspected for the issues identified above and addressed accordingly.

All remediation activities should be conducted by a qualified mold contractor with properly trained personnel using accepted industry standard procedures for mold remediation. ACER recommends post remediation verification inspection and sampling be conducted to ensure the remediation has been satisfactorily completed.

During the inspection, water damage was evident on additional ceiling tiles and plaster walls in classrooms and the hallways throughout. No mold growth was observed during the inspection, however, the potential exists for future mold growth if the water intrusion issue continues in these areas. These areas should be monitored to ensure the water intrusion is no longer active or persistent.



Should you have questions or require clarification, please call us at (856) 809-1202.

Sincerely,
Acer Associates, LLC

Prepared By:



J. Chuck Wilkins
Environmental Scientist

Reviewed By:



J. Scott Horn, PG, CHMM, CMC
President

Attachments:

- A. Photographs
- B. Tape Sample/Swab Sample Analytical



Attachment A

Photographs



Photograph 1: Drywall in the former dental lab.



Photograph 2: Drywall in Room C127.



Photograph 3: Ceiling tile in Room A121.



Photograph 4: Moldy boxes in long storage hallway.



Photograph 5: Ceiling tiles in long storage hallway.



Photograph 6: Diffuser in 2nd Floor Office suite.



Photograph 7: Ceiling tiles in Room C233.



Photograph 8: Ceiling tiles below kitchen.



Photograph 9: Moldy boxes in Girl's Coach's Office.



Photograph 10: Ceiling tile in Room E330.



Photograph 11: Previous water building in Classroom Unit Ventilator.



Photograph 12: Metal ducting in Boy's Locker Room.



Attachment B

Tape/Swab Sample Analytical

Prestige EnviroMicrobiology, Inc.



Analytical Test Report

Client: ACER Associates, LLC., 1012 Industrial Drive, West Berlin, NJ 08091

Client Project/Name: 20220011/Chester High School

Sample date: 2-1-2022

Submittal date: 2-3-2022

Samples submitted by: Chuck Wilkins

Date analysis completed: February 4, 2022

Prestige Report number: 220203-03

Microscopic Method (P003): Analysis of Tape-Lift Samples for Fungi by Optical Microscopy

Prestige # Client sample ID Location	Sample dimension	Fungal ID	Fungal structures observed	Fungal density	Notes
220203-03-007 T-01 Former Dental Room Closet	3/4" x 2"	<i>Cladosporium</i> <i>Stachybotrys</i>	spores, conidiophores, hyphae spores, conidiophores, hyphae	<1 2	Fungal growth, some fungal structures in fragments; insects and their fecal matter observed.
220203-03-008 T-02 C-127 by Pipe Chase	3/4" x 2 1/2"	<i>Stachybotrys</i>	spores, conidiophores, hyphae	<1	Light fungal growth.
220203-03-009 T-03 A-137 Ceiling Tile	3/4" x 2 1/2"	ND	No fungal growth structures observed	NA	Mostly dust and debris, no signs of fungal growth or contamination.
220203-03-010 T-04 B-208 Ceiling Vent	3/4" x 2 1/2"	ND	No fungal growth structures observed	NA	Mostly dust and debris, no signs of fungal growth or contamination.
220203-03-011 T-05 E-225 Metal Duct	3/4" x 2 1/2"	<i>Cladosporium</i>	spores, conidiophores, hyphae	5	Fungal growth, some fungal structures in fragments.

Report approved: _____

Theresa Lehman, MPH, Lab Director

Technical Manager: _____

Chin S Yang, Ph.D.

Analyst: Ching-Yi Tsai, Ph.D.

1. The samples in this report were received in good, acceptable conditions. Prestige EnviroMicrobiology has not performed sample collection for the sample items listed in this report. Results relate only to the items tested.
2. Fungal density rating 1-5 (1 being the lowest and 5 the highest) indicates density of fungal growth structures observed. No fungal density is provided for loose spores, hyphal fragments and other structures. (<1) is used to indicate a light fungal density. NA = not applicable, ND = not detected.
3. Growth coverage, if provided, is based on estimation of the entire bulk sample surface on all sides.
4. Fungal contamination is noted when an analyst, at times during sample analysis, can differentiate the unusual compositions (types or numbers) of fungal spores or structures from background fungal compositions.
5. For more information on the results and their interpretation, please visit our website www.prestige-em.com.

Chain-of-Custody and Analysis Request Form

Client Name: ACER Associates LLC Tel: (856) 809-1202 ACER Proj#: 20220011
 Address: 1012 Industrial Drive Fax: (856) 809-1203 Project Name: Chester High School
West Berlin, NJ 08091 Email: scotthorn@acerassociates.com Date Sampled: 2/1/22

Sample ID	Location or source	Sample type	Air vol (L) ¹ Area (inch ²)	Water: potable or non-potable	Analysis requests code or description	Turnaround time	Notes or special instructions
T-01	Former Dental Room ^{under closet}	Tape	✓	✓	P003	24hr	
T-02	C-127 by pipe chase	Tape			P003	24hr	
T-03	A-137 Ceiling Tile	Tape			P003	24hr	
T-04	B-208 ceiling vent	Tape			P003	24hr	
T-05	E-225 metal duct	Tape				24hr	

Contact name: Chuck Wilkins @ acer associates.com Submitted by: (print) Chuck Wilkins Date submitted: 2/3/22
 Submitted by: (sign) _____

Received by: (sign & print) Ching Yi Tsai Date & time received: 2/3/2022, 9:05 am Delivered by: Fedex, UPS, USPS, In Person
 (For lab use only) Processed by: _____ Sample Type: _____ Date: _____