AIR Consulting Services, LLC

November 30, 2018

Dean Adams, Facilities
Pemberton Board of Education
P.O. Box 228
Pemberton, NJ 08068

Re: Mold Inspection: Newcomb Middle School

Dear Mr. Adams;

We performed air and surface testing for mold spores in Room 305 at the Newcomb Middle School on November 16, 2018. We inspected the room and collected samples due to air quality concerns.

The room finishes include wood flooring, masonry walls and tectum ceiling deck. We did not observe any leaks or moisture intrusion that would contribute to mold growth. We did observe evidence of rust and water damage to the HVAC fiberglass interior liner. We collected a sample from the fiberglass insulation to characterize the conditions.

An air sample was collected in Room 305 and one air sample was collected outside for comparison purposes. As shown in Table I, the Room 305 air sample is reported with a concentration of 1,100 S/m³. The sample collected in Room 305 is higher than the outside sample concentration of 430 S/m³. The dominant mold group is Pen/Asp, which is not present outdoors.

The bulk sample collected from the HVAC fiberglass liner is reported with a concentration of 3,700,000 cfu/g. The dominant mold genus is Cladosporium, which is among the first molds to colonize in the presence of adequate moisture.

Based on the visual inspection and sample results we recommend that the HVAC fiberglass liner be replaced and the interior surfaces be thoroughly cleaned and disinfected.

Please contact us with any questions or comments. We look forward to being of continued assistance. Your time and cooperation are greatly appreciated.

Sincerely,

David M. Kichula, CIH

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Table I
Fungi Result Summary
Newcomb Middle School
November 16, 2018

Sample Identification	Result	Identification, %
Air Samples, s/m³		
1. **Room 305**	1,100	Pen/Asp Types, 76% Basidiospores, 15% Two Others, 9%
2. **Outside**	430	Basidiospores, 88% Ascospores, 13%
Bulk Samples, cfu/g		
3. Heater Fiberglass Liner	3,700,000	Cladosporium, 96% Penicillium, 4%

Sample Procedures, Total Fungi:

Air samples for total fungi were collected on the Air-O-Cell cassette, connected to a high-volume BioPump calibrated at a flow rate of 15 liters per minute. A total of 75 liters of air were collected for each air sample. After collection, the cassettes were sealed, labeled and transported to the laboratory with full chain-of-custody documentation.

In the laboratory, the samples were examined under plain optical microscopy at 600X magnification. Fungal spores, conidiophores, hyphae and other fungal structures are counted and identified on a preliminary basis by size, color and morphology.

The Air-O-Cell air testing method provides a quantitative assessment of the number of airborne fungal structures. The identification of taxa is provided by microscopic examination of the fungal spores that are present. Many fungi can be identified solely by the size and morphology of the spores. Some spores of common fungi, such as Penicillium and Aspergillus, have very similar appearance, and can only be grouped together as Penicillium/Aspergillus like. The results are reported in units of fungal structures per cubic meter of air (S/m3).

The fungi analyses were performed by EMLab P&K Microbiological Services, located in Marlton, NJ. EMLab P&K is certified by the New Jersey Department of Environmental Protection and the American Industrial Hygiene Association (AIHA Laboratory No. 100305) for the analysis of microbiological contaminants in environmental samples.