AIR Consulting Services, LLC

May 2, 2017

John Swanson, Facilities
Pemberton Board of Education
P.O. Box 228
Pemberton, NJ 08068

Re: Mold Inspection: Helen Fort Middle School Room 45

Dear Mr. Swanson;

We performed air testing for mold in Room 45 in the Helen Fort Middle School on April 26, 2017. The testing was conducted due to a leak at the chiller line that penetrates the roof.

In general, the finishes in the room were observed to be clean and dry. The finishes include vinyl floor tile, masonry block walls and tectum acoustical roof panels. The room finishes are largely non-porous and do not support significant mold activity.

The tectum ceiling is getting wet at the area of the roof penetration. We also observed the presence of rust on the univent supply diffusers and an accumulation of dirt and debris inside the unit.

An air sample was collected in Room 45 and one air sample was collected outside for comparison purposes.

As shown in Table I, the indoor air sample in Room 45 is reported as 550 S/m3. The sample is much lower that the outside sample result of 3,800 S/m3, and is comprised of a mixture of common environmental fungi. The air sample reflects substantially normal air quality in Room 45.

We conclude that the air quality in Room 45 is normal and suitable for continued occupancy. As a precaution, we recommend that routine cleaning be performed on the HVAC unit. In addition, he water damaged tectum panel should be encapsulated with an antimicrobial paint to ensure that mold spores are not released from the water damage area.

Please contact us should you have any questions or comments. We look forward to the opportunity to be of continued assistance. Your time and cooperation are greatly appreciated.

Sincerely,

David M. Kichula, CIH

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Table I
Fungi Result Summary
Helen Fort Middle School
April 26, 2017

Sample Identification	Result	Identification, %
Air Samples, S/m³		
1. **Room 45**	550	Cladosporium, 68% Basidiospores, 29% Smuts, Periconia, Myxomycetes, 2%
2. **Outside**	3,800	Basidiospores, 74% Ascospores, 22% Two Others, 4%

Sample Procedures:

Total Non-Viable Fungi:

Air samples for non-viable 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. The cassette contains an adhesive strip on which virtually all particulates in the passing air stream adhere. 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 by size, color and morphology. The concentrations of other particulate agents, such as pollen grains, skin fragments, insect fragments and fibers can also be estimated by this method.

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 Pen/Asp 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 Cherry Hill, 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.