

January 3, 2018

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

Re: Mold Inspection: Haines Elementary School

Dear Mr. Adams;

We performed air and surface testing for mold in the Main Office at the Haines Elementary School on December 11, 2018. We inspected the room and collected samples due to air quality concerns.

The room finishes include 9x9 floor tiles and painted masonry walls. We did not observe any leaks or moisture intrusion that would contribute to mold growth. The room is heated by a radiator along the exterior wall. The room is cooled with a window air conditioner.

The window air conditioner was set to 64°F and is likely kept this low temperature during the cooling months. The office staff stated that the room gets very warm and the window unit is unable to keep the room at a comfortable temperature.

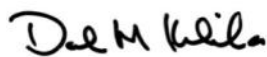
An air sample was collected in the Main Office and one air sample was collected outside for comparison purposes. As shown in Table I, the main office air sample is reported with a concentration of 130 S/m<sup>3</sup>. The sample collected in the Main Office is lower than the outside sample concentration of 210 S/m<sup>3</sup>.

Based on the visual inspection and sample results we conclude that the air quality in the room is within normal ranges. We recommend that the window air conditioner be operated at a moderate setting during the cooling months.

The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) recommends that temperatures be maintained in the range of 74 to 79 °F during the summer months to avoid moisture condensation and mold growth during the cooling season.

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

**Table I**  
**Fungi Result Summary**  
**Haines Elementary School**  
**December 11, 2018**

Sample Identification	Result	Identification, %
<b>Air Samples, s/m<sup>3</sup></b>		
1. <b>Main Office</b>	130	Basidiospores, 40% Cladosporium, 40% Smuts, Periconia, Etc., 20%
2. <b>Outside</b>	210	Basidiospores, 75% Cladosporium, 25%

**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/m<sup>3</sup>).

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.