

Maximum Development Group, LLC d/b/a

**MDG ENVIRONMENTAL, LLC**

Corporate Office

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September 1, 2023

Mr. Ralph J. Condo  
Business Administrator  
Township of Mullica  
P.O. Box 317  
Elwood, NJ 08217

RE: Baseline Air Sampling  
Township of Mullica / Upper Level/First Floor  
4528 White Horse Pike  
Elwood, New Jersey  
MDG Project No. 23-227-2

Dear Mr. Condo:

Thank you for selecting MDG Environmental, LLC (MDG) for your indoor environmental needs. This correspondence is being forwarded to report the results of the baseline air sampling conducted on the first floor of the building at the above referenced property.

On September 1, 2023, Ms. Krystel Arana, Municipal Clerk/Registrar of Vital Statistics for Mullica Township requested MDG to collect fungal spore trap air samples from specific areas on the first floor of the building to include the Business Administration Office, Chief Financial Officer's (CFO) office, tax collection office, common area and construction office. The purpose of the air sampling on the first floor of the building is to generate a baseline in order to determine the necessity for future periodic air sampling on the first floor of the building.

On September 1, 2023, MDG's Certified Microbial Investigator/Industrial Hygiene Technician, Evan Cauler conducted the air sampling in the specified areas on the first floor of the building. Fungal spore trap air samples were collected in the Business Administration Office, Chief Financial Officer's (CFO) office, tax collection office, common area and construction office. A fungal spore trap air sample was collected from outdoors to be used as a background/comparison sample.

Fungal spore trap air samples are collected by using an Air-O-Cell™ cassette attached to a high volume vacuum pump. A volume of air is drawn through the cassette and the contents of the air are deposited upon a specially treated glass slide, which is then analyzed by a microbiologist who identifies fungal genera (type) and quantity. Fungal spore trap air samples measure both viable and non-viable fungal spores as well as fungal parts and fragments.

## MDG Environmental, LLC

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Fungal spore trap air samples are collected from the outdoors to be used as a comparison to the indoor samples. There are currently no standards of reference ranges for acceptable levels of airborne fungal concentrations when interpreting fungal air sample results. It is generally accepted that indoor airborne fungal concentrations should be approximately the same or less than those found outdoors and display similar genus distribution. Elevated indoor airborne fungal concentrations as compared to outdoor concentrations are often an indicator of a fungal amplification source due to a moisture condition.

Air sampling for mold is often referred to as a “snapshot in time”. The results of the mold sampling are not indicative of any past fungal contamination or any fungal contamination that may exist in the future, but only the conditions that existed at the time of sampling. The results of the samples are a reflection of the types of mold and quantity of those molds present in the air at the time and location of the sample collection. MDG cannot guarantee that mold does not exist in areas where no samples were collected during the inspection, nor can MDG guarantee that mold will not amplify (grow) at some point in the future in the areas that were sampled. The environmental conditions in a building, particularly the presence of moisture, dictate whether mold will grow. Isolating and correcting unwelcome sources of moisture is the only way to prevent unwanted mold growth.

Fungal spore trap air samples were collected in the following areas:

- AOC-01 – Outdoors
- AOC-02 – Business Administration Office
- AOC-03 – CFO Office
- AOC-04 – Tax Collection Office
- AOC-05 – Common Area
- AOC-06 – Construction Office

## MDG Environmental, LLC

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The results of the fungal spore trap air samples can be found in Table 1.0 below. Please note that a detailed analytical report from EMSL Analytical Inc. is attached to this report.

Sample Number	Sample Location	Total Spore Concentration		Background Concentration		Background Corrected
		Raw Count	CTS/m <sup>3</sup>	Raw Count	CTS/m <sup>3</sup>	
AOC-01	Outdoors	238	10,540	238	10,540	N/A
AOC-02	Business Administration Office	1	40	238	10,540	Less than Background
AOC-03	CFO Office	16	750	238	10,540	Less than Background
AOC-04	Tax Collection Office	15	560	238	10,540	Less than Background
AOC-05	Common Area	15	620	238	10,540	Less than Background
AOC-06	Construction Office	4	200	238	10,540	Less than Background

The total airborne fungal concentrations of the air sample collected in the first floor business administration office (AOC-02) were less than the background samples that was collected outdoors.

The total airborne fungal concentrations of the air sample collected in first floor Chief Financial Officers (CFO) Office (AOC-03) were less than the background sample that was collected outdoors. However, it should be noted that slightly elevated airborne fungal concentrations of individual types of mold spores, as compared to the background sample, were observed including Alternaria (Ulocladium) and Aspergillus/Penicillium like spores, but were within an acceptable range of the background sample and therefore should be considered representative of a normal airborne fungal load in an indoor air quality environment.

The total airborne fungal concentrations of the air sample collected in the first floor tax collection office (AOC-04) were less than the background samples that was collected outdoors. However, it should be noted that slightly elevated airborne fungal concentrations, as compared to the background sample, of Pithomyces were observed in the air sample, but were within an acceptable range of the background sample and therefore should be considered representative of a normal airborne fungal load in an indoor air quality environment.

The total airborne fungal concentrations of the air sample collected in the first floor common area (AOC-05) were less than the background samples that was collected outdoors. However, it should be noted that slightly elevated airborne fungal concentrations of individual types of mold spores, as compared to the background samples, were observed including Aspergillus/Penicillium like spores, Myxomycetes and Pithomyces, but were within an acceptable range of the background sample and therefore should be considered representative of a normal airborne fungal load in an indoor air quality environment.

The total airborne fungal concentrations of the air sample collected in the first floor construction office (AOC-06) were less than the background samples that was collected outdoors.

Based on the results of the fungal spore trap air sampling, it can be stated with a reasonable degree of scientific certainty that there are slightly elevated airborne fungal concentrations in the first floor CFO office, tax collection office and common area of the building, but were found to be within an acceptable range of the background sample collected outdoors and are considered representative of a normal airborne fungal load in an occupied indoor air quality environment for people who are healthy and have uncompromised immune systems.

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Based on the results of the baseline air sampling conducted in the upper level/first floor of the building, there are slightly elevated airborne fungal concentrations in the first floor CFO office, tax collection office and common area of the building, but are representative of a normal airborne fungal load in an occupied indoor air quality environment for people who are healthy and have uncompromised immune systems.

Once again, thank you for selecting MDG Environmental, LLC and we hope that you will consider us in the future for your environmental and safety and health needs.

Sincerely,

MDG Environmental, LLC

Prepared by:



Evan Cauler, CMI  
Certified Microbial Investigator/  
Industrial Hygiene Technician

Reviewed by:



Christopher Macri, IH, CMC, CIE  
Senior Industrial Hygienist