



Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, Connecticut 06340

www.mysticalr.com

maq2@aol.com

800 247746

December 5, 2013

**Mr. William Trudelle
Sayles Elementary School
25 Scotland Road
Baltic, Connecticut 06330**

RE: Total Hydrocarbon -Sayles School Boiler room and adjoining Hallway

Dear Mr. Trudell

As requested on December 5, 2013, David Goldstein of Mystic Air Quality Consultants conducted limited and directed total hydrocarbon testing at facility cited above. Sampling was conducted in response to an oil spill in the Boiler room.

Sampling was conducted throughout the boiler room and adjoining hallway with a BW GasAlert Micro5 PID. At the time of the survey, all total hydrocarbon levels were below detect able limit of 1 ppm (part per million).

Sincerely,

A handwritten signature in black ink, appearing to read "D. Goldstein", written over a horizontal line.

David Goldstein MS CIH

Vice President

Emailed: btrudelle@saylesschool.org

April 20, 2007

Sayles School
25 Scotland Road
Baltic, Connecticut 06330
Attn: Mr. Bill Trudelle

**Re: Sayles School, 25 Scotland Road, Baltic, Connecticut 06330
Limited and Directed Indoor Total Fungi Air Sampling
April 11, 2007**

Encl: (1) Total Fungi Air Sample Results

Dear Mr. Trudelle:

As requested, on April 11, 2007 Mystic Air Quality Consultants, Inc. conducted ambient air sampling at the facility referenced above. Limited and directed air sampling for total fungi was conducted following roof leaks in the select areas of the school.

Enclosure (1) contains the fungal spore count results. Results reflect conditions only at the time the samples were taken. Samples were analyzed by an American Industrial Hygiene Association accredited laboratory.

At the time of the sampling the interior total spore counts were within the control air sample counts. Water indicator fungi, however, were present on all of the samples. While the samples appear to exhibit similar biodiversity and no significant water indicator fungi were present, statistically significant comparison of different types of fungi based on relatively small interior and exterior sample sizes is unfounded. It is important to note, however, that susceptible individuals may respond not only to fungi but also to the various by-products produced by these organisms including enzymes, mycotoxins and other chemical by-products.

As a general note, medical personnel should play a key role in identifying any potential building related illness. It is always recommended that medical expertise be sought in any situation where the probability exists for a potential building related illness. Additionally, please note that certain individuals may exhibit hypersensitive or allergic reactions in environments where there are contaminants below set standards or detectable limits.

Explanation of Cultural Fungi Air Sampling

With the present science, the primary method to identify microbial reservoirs is to identify liquid water and/or moisture sources. This fungi screening was of an extremely limited nature and it is imperative not to rely on these results as the sole criteria for determining remediation or post-remediation issues. Statistically significant comparisons of different types of fungi based on relatively small interior and exterior sample sizes are unfounded. More importantly, no results shall be used as a health risk exposure assessment. Sample results are for environmental purposes only and are used to assist in the determination of potential microbial reservoirs or amplifiers. Comparatively low results shall not be used to confirm the absence of microbial contamination. Additional air sampling as well as source sampling may need to be conducted to assist in the evaluation of this limited data. Suspected contamination could be collected by source sampling to confirm fungal and/or bacterial matter. This approach identifies not only the source(s) of contamination but also facilitates eventual removal and control of fungal and bacterial growth.

Because fungal bioaerosols may include a mixture of various fungal taxa, their composition varies widely depending on spatial and temporal changes. Hence, sampling during the different seasons as well as different periods during the day may produce varied results. There is also a lack of a dose response relationship, which makes defining standards and guidelines nearly impossible. A few proposed guidelines for fungi have been published, however, they should be used with care and only for screening purposes and not as a health standard.

Since there are no consensus health-based standards for bioaerosol levels, as recommended by the American Conference of Governmental Industrial Hygienists, (Bioaerosols, Assessments and Control, 1999) samples are interpreted in conjunction with a visual walkthrough of the facility that attempts to identify potential microbial sources and symptoms of building occupants that could potentially be linked to microbial growth. Note that the walkthrough is only attempting to identify accessible potential microbial sources. Inaccessible areas such as between walls, behind structural components, behind architectural components, above suspended ceilings and the interior of ventilation units are not included unless specifically referenced in this report.

Recommendations

Water damaged building materials consisting of suspended and acoustical ceiling tiles were noted throughout the areas tested. Since porous water damaged building materials are capable of fungi germination is as little as twenty-four hours, any water leaks or condensation issues that occur should be investigated by a building professional with water intrusion experience, the issues remedied, and any porous water damaged building materials be replaced. Semi-porous and non-porous water damaged surfaces, such as metal and concrete, should first be vacuumed utilizing high efficiency particulate air (HEPA) filtration and next be wet wiped with a water and surfactant (soap) solution, and

finally HEPA vacuumed again. It is important to be aware that where visible water damage is noted on interior construction surfaces there is the possibility that microbial growth is present in the enclosed ceiling/wall cavity or on the underside of insulation. It is recommended; therefore, that the areas above the ceilings be inspected for water damaged building materials and any potential microbial growth. Investigation of potential mold growth may be difficult and requires caution when the investigation involves the disturbance of potential sites of microbial growth. Proper personal protective equipment and possible containment procedures may be needed. Any hidden water damaged materials should be handled as stated. All remediation of visible microbial growth, if found, should be conducted using the recommendations from the guidelines issued by the American Conference of Governmental Industrial Hygienist's (ACGIH), "Bioaerosols, Assessment and Control", the Environmental Protection Agency's (EPA), "Mold Remediation in Schools and Commercial Buildings", the New York City Department of Health, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments" the American Industrial Hygiene Association's (AIHA), "Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings", the Institute of Inspection, Cleaning and Restoration Certification, "Standard and Reference Guide for Professional Mold Remediation" and the "Connecticut Guidelines for Mold Abatement Contractors". Please note that the recommendations in this report are in no way to be construed as a microbial abatement specification.

As a final note with regard to the disturbance of building materials, all building materials that potentially could be disturbed need to be tested for hazardous and/or regulated materials, such as but not limited to, lead and asbestos so that they are handled accordingly.

If you have any questions or concerns please do not hesitate to contact me directly.

Sincerely,

David H. Goldstein, MS, CIH
Vice President