ESI Environmental Solutions, Inc.

www.esi4u.com (410)-867-6262

Discovery Environmental Inspection Report

Project Contact Information

Alex Baylor Environmental Specialists Environmental Safety Office 13306 Old Marlboro Pike Upper Marlboro, MD 20772 301-952-6760	Springhill Lake Elementary School 70,993 square feet	Bryan Harrington Certified Indoor Environmentalist Environmental Solutions, Inc. 6114 Drum Point Rd Deale, MD 20751 410-867-6262 Bryan@esi4u.com

Property Location

6060 Springhill Drive, Greenbelt, MD 20770

Date of Inspection 3/6/2019

Prepared By: Bryan Harrington

Certified Indoor Environmentalist (CIE)

Dear Mr. Baylor,

The results of the inspection and testing performed at Springhill Lake Elementary School, which is located at 6060 Springhill Drive, Greenbelt, MD 20770, are concluded and the findings are enclosed. I want to thank you for allowing ESI the opportunity to service your indoor environmental needs. Included in this report are the observations, lab results, and recommendation from ESI's 3/6/2019 inspection and testing.

Background Information

The Prince George's County Public School Environmental Team has taken a proactive approach in cleaning the above-mentioned school to ensure there are no health or environmental risks related to microbial hazards. Historically elevated levels of humidity, condensation from pipes, periodic steam leaks, and outdated HVAC systems may have contributed to water damage ceiling tiles and colonization of mold spores in various areas of the school.

Purpose

ESI was engaged to inspect the school in a random sufficient manner. Classrooms, administration offices and common area building materials and contents, will be visually inspected for water damage and microbial growth.

In each location inspected, the indoor air quality will be tested for elevated levels of carbon monoxide and carbon dioxide, in addition to measuring the relative humidity and temperature. Microbial hazards within the breathable airspace will also be tested.

Based upon the visual assessment, instrument readings and lab results, ESI will determine if additional remediation in required.

Observations and instrument readings

The following table is designed for this project. Some of the fields may not be filled in due to not being applicable during the time of the inspection. You will notice either a '**YES**' or 'NO' in the table. '**YES**' indicates water damage and/or suspected microbial growth was detected and 'NO' indicates it was not. If 'YES' is noted, remediation recommendation will be included for the area inspected. Please note that the cubic feet of air in the rooms inspected is an approximate number.

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Kdg. No. 1	2378055	**YES**	35.2%	65.5	796	000	11,550	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU	1	4	9	9	1	0	1
YES	NO	NO	NO	NO	NO	NO	NO	**YES**

Observation Notes

- There were two water damaged ceiling tiles.
- There was rust on the drop ceiling grid.
- There was pre-existing water damage and suspected microbial growth within the sink cabinet. A surface sample was collected and "Rare" Aspergillus/Penicillium and "Heavy" Chaetomium species were identified on the water damaged sink cabinet.
- The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 320 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.

Recommendations

- Remove the water damaged ceiling tiles and place in a contractor's bag for disposal. Replace ceiling tiles as needed.
- Monitor relative humidity during warm/humid summer months to prevent condensation on drop ceiling grid.
- HEPA vacuum mold growth from underneath sink cabinet. Clean/treat or remove the sink cabinet.
- Engage HEPA filtered air filtration device during and after handling of the sink cabinet.

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Room No.8	2378060	N/A	8.1%	69.4	688	000	8,525	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU	1	28	4	10	1	0	1
NO	NO	NO	NO	NO	NO	NO	NO	**YES**

Observation Notes

- There was no visible mold growth within this location.
- There was pre-existing water damage within the sink cabinet/doors.
- The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 160 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.

Recommendations

- Clean/treat the sink cabinet/doors.

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Room No.11	2378020	N/A	8.3%	74.6	662	000	9,765	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU	1	2	12	13	1	0	1
NO	NO	NO	NO	NO	NO	NO	NO	NO
Observation Notes								
• There was no visible mold growth within this location. • Discolorations on the underside of the rectangular tables were found to be cosmetic staining. • The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 920 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.								
Recommendations								
NONE								

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Room A-6	2378015	N/A	4.2%	78.8	519	000	6,916	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU	1	0	6	15	0	3	1
NO	NO	NO	NO	NO	NO	NO	NO	**YES**
Observation Notes								
• There was pre-existing water damage and suspected microbial growth within the sink cabinet. • The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 40 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.								
Recommendations								
• Clean/treat the sink cabinet.								

Location	IAQ Sample #	Swab	R/H	Temp	CO2	Co	Cubic feet of air.	
A-Wing Testing Off.	2378019	N/A	5.9%	78.4	439	000	1,190	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x2'	CMU	1	0	1	6	0	1	0
YES	NO	NO	NO	NO	NO	NO	NO	N/A

Observation Notes

- There was one water damaged ceiling tile along the rear wall. Suspected microbial growth was evident on the ceiling tile.
- There was rust on the supply diffuser along the ceiling.
- There was suspected microbial growth on the backside of the door to this location.
- The levels of airborne mold spores may pose potential environmental and/or exposure risks. Aspergillus/Penicillium (1,840 Count/M^3), Cladosporium species (3,280 Count/M^3), and Stachybotrys species (280 Count/M^3) were detected at amplified levels.
- No elevated levels of Carbon monoxide or Carbon dioxide were detected.

Recommendations

- Remove the water damaged ceiling tile and place in contractor's bag for disposal. Replace ceiling tile as needed.
- Monitor relative humidity during warm/humid summer months to prevent condensation on the supply diffuser.
- HEPA vacuum the backside of the door to remove surface growth. Damp wipe the backside of door with ShockWave or equivalent.
- Engage HEPA filtered air filtration device in this location for 4-6 hours. Fog the breathable airspace and allow particulates to settle. Then, damp-wipe all horizontal surfaces with Shockwave or equivalent.

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Room No.21	2378026	N/A	17.5%	73.7	831	000	10,400	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU and Partitions	2	27	6	12	1	0	1
NO	NO	NO	NO	NO	NO	NO	NO	NO
Observation Notes								
• There was no visible mold growth within this location. • Discolorations on the underside of the rectangular tables were found to be cosmetic staining. • The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 200 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.								
Recommendations								
NONE								

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.	
Room No.16	2378025	N/A	16.5%	73.9	987	000	11,550	
Inspected								
Ceiling Tiles	Walls	Teachers Desk	Children's Desk	Tables	Cabinets Shelving	Convector	HVAC Diffusors	Sinks
2x4'	CMU and Partitions	1	26	5	15	1	0	1
NO	NO	NO	NO	NO	NO	NO	NO	**YES**
Observation Notes								
• There was pre-existing water damage and suspected microbial growth within the sink cabinet. • The indoor air quality should not pose environmental or exposure risks at these levels. The total spore count was 40 Count/M^3 and no elevated levels of Carbon monoxide or Carbon dioxide were detected.								
Recommendations								
• Clean/treat the sink cabinet.								

Location	IAQ Sample #	Swab	R/H	Temp	CO2	CO	Cubic feet of air.
Outdoors	2378021	N/A	13.9%	40.1	443	001	N/A

Interpretation of Lab Results

In the enclosed Air Cassette Analysis report, you will notice Fungal Identification, which is the genera detected in the breathable airspace, both indoors and/or outdoors (control sample). The Raw Count is the actual number of spores counted on the slide, and the Count/M^3 are the spores per cubic meter of air. The Other particles are non-living particles such as dander, mycelial fragments, pollens, etc…

In order for humans to be exposed indoors, fungal spores, fragments, or metabolites must be released into the air and inhaled, physically contacted (dermal exposure), or ingested. Whether symptoms develop in people exposed to fungi depends on the nature of the fungal material (e.g., allergenic, toxic, or infectious), the amount of exposure, and the susceptibility of exposed persons.

Susceptibility varies with genetic predisposition (e.g., allergic reactions do not always occur in all individuals), age, state of health, and concurrent exposures.

Air sampling Lab Results

SanAir Technologies Laboratory

Name: Environmental Solutions, Inc
Address: 534-A Deale Road
Deale, MD 20751
Phone: 410-867-6262

Project Number: 6060 Springhill Dr
P.O. Number:
Project Name: Springhill Lakes E.S.
Collected Date: 3/6/2019
Received Date: 3/7/2019 9:25:00 AM

SanAir ID Number
19010466
FINAL REPORT
3/11/2019 9:53:15 AM

Analyst: Acharya, Uttam

Air Cassette Analysis

ND = None Detected. Blank spaces indicate no spores detected.

SanAir ID Number	19010466-001			19010466-002			19010466-003			19010466-004		
Analysis Using STL	107C			107C			107C			107C		
Sample Number	2378055			2378060			2378020			2378015		
Sample Identification	Kindergarten NO. 1			Class NO. 8			Class NO. 11			Class A-6		
Sample Type	Air Cassette - Micro-5			Air Cassette - Micro-5			Air Cassette - Micro-5			Air Cassette - Micro-5		
Volume	25 Liters			25 Liters			25 Liters			25 Liters		
Analytical Sensitivity	40 Count/M^3			40 Count/M^3			40 Count/M^3			40 Count/M^3		
Background Density	1+			2			2			1+		
Other	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**
Dander	49	1960	n/a	70	2800	n/a	80	3200	n/a	15	600	n/a
Fibers	3	120	n/a	5	200	n/a	2	80	n/a			
Mycelial Fragments				1	40	n/a						
Fungal Identification	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**	**Raw Count**	**Count/M^3**	**%**
Ascospores	1	40	13									
Aspergillus/Penicillium	7	280	88	3	120	75	7	280	30			
Basidiospores										1	40	>99
Cladosporium species				1	40	25	16	640	70			
Stachybotrys species												
TOTAL	**8**	**320**		**4**	**160**		**23**	**920**		**1**	**40**	

Signature: Uttam Acharya Date: 3/8/2019 Reviewed: Johnathan Wilson Date: 3/11/2019

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Analyst: Acharya, Uttam

Air Cassette Analysis

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SanAir ID Number	19010466-005			19010466-006			19010466-007			19010466-008		
Analysis Using STL	107C			107C			107C			107C		
Sample Number	2378026			2378019			2378025			2378021		
Sample Identification	Class 21			A - Wing Testing Office			Class 16			Outdoors		
Sample Type	Air Cassette - Micro-5			Air Cassette - Micro-5			Air Cassette - Micro-5			Air Cassette - Micro-5		
Volume	25 Liters			25 Liters			25 Liters			25 Liters		
Analytical Sensitivity	40 Count/M³			40 Count/M³			40 Count/M³			40 Count/M³		
Background Density	1+			1+			2			1+		
Other	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**
Dander	72	2880	n/a	38	1520	n/a	126	5040	n/a	3	120	n/a
Fibers	1	40	n/a	3	120	n/a	4	160	n/a			
Mycelial Fragments												
Fungal Identification	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**	**Raw Count**	**Count/M³**	**%**
Ascospores												
Aspergillus/Penicillium	5	200	>99	46	1840	34				2	80	>99
Basidiospores												
Cladosporium species				82	3280	61	1	40	>99			
Stachybotrys species				7	280	5						
TOTAL	**5**	**200**		**135**	**5400**		**1**	**40**		**2**	**80**	

Signature: Uttam Acharya Date: 3/8/2019 Reviewed: Johnathan Wilson Date: 3/11/2019

Direct Identification Lab Results

SanAir Technologies Laboratory

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Received Date: 3/7/2019 9:25:00 AM

Analyst: Acharya, Uttam

Direct Identification Analysis

SanAir ID: 19010466-009 Sample #:Swab Kindergarten NO. 1 Sink Cabinet

D1 - Direct Identification Analysis on Surface Swab using STL 104

Direct ID of Mold

Fungi	Estimated Amount
Aspergillus/Penicillium	Rare
Chaetomium species	Heavy

Estimated Amount	Indication of Growth	Evidence of Mycelial Fragments/Conidiophores
Rare	Not Likely	None
Light	Possible	Some, 10 to 25% of Tape Covered
Moderate	Probable	Abundant, 25 to 50% of Tape Covered
Heavy	Significant	Throughout, 50 to 100% of Tape Covered

*Refer to additional information page for further details

Signature: Uttam Acharya
Date: 3/8/2019

Reviewed: Johnathan Wilson
Date: 3/11/2019

SanAir Technologies Laboratory

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Project Number: 6060 Springhill Dr
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Organism Descriptions

The descriptions of the organisms presented are derived from various reference materials. The laboratory report is based on the data derived from the samples submitted and no interpretation of the data, as to potential, or actual, health effects resulting from exposure to the numbers of organisms found, can be made by laboratory personnel. Any interpretation of the potential health effects of the presence of this organism must be made by qualified professional personnel with first hand knowledge of the sample site, and the problems associated with that site.

Dander - Comprised of human and/or animal skin cells. Counts may be higher in carpeted rooms and in rooms with more traffic.
Health Effects: May cause allergies.

Fibers - This category can include clothing, carpet, and insulation fibers.

Mycelial Fragments - A mycelium (plural = mycelia) is the "body" of a fungus. It is a collective term for hyphae (singular = hypha), which are the tubular units of the mycelium usually composed of chitin. The terms hyphae and mycelial fragments are used interchangeably. [This information was referenced from the mycology text "The Fifth Kingdom"]In some cases a fungal identification cannot be obtained due to lack of sporulation. Only the mycelial fragments are present, and cannot be identified without the distinguishing characteristics of the spores or the structures they grow from.
Health Effects: Allergic reactions may occur in the presence of spores (conidia) or mycelial/hyphal fragments.

Ascospores - From the fungal Subphylum Ascomycotina. Ascospores are ubiquitous in nature and are commonly found in the outdoor environment. This class contains the "sac fungi" and yeasts. Some ascospores can be identified by spore morphology, however; some care should be excercised with regard to specific identification. They are identified on tape lifts and non-viable analysis by the fact that they have no attachment scars and are sometimes enclosed in sheaths with or without sacs. Ascomycetes may develop both sexual and asexual stages. Rain and high humidity may help asci to release, and dispurse ascospores, which is why during these weather conditions there is a great increase in counts.
Health Effects: This group contains possible allergens.

Aspergillus/Penicillium - These spores are easily aerosolized. Only through the visualization of reproductive structures can the genera be distinguished. Also included in this group are the spores of the genera Acremonium, Phialophora, Verticillium, Paecilomyces, etc. Small, round spores of this group lack the necessary distinguishing characteristics when seen on non-viable examination.
Health Effects: Can cause a variety of symptoms including allergic reactions. Most symptoms occur if the individual is immunocompromised in some way (HIV, cancer, etc). Both Penicillium and Aspergillus spores share similar morphology on non-viable analysis and therefore are lumped together into the same group.

Basidiospores - From the Subphylum Basidiomycotina which contains the mushrooms, shelf fungi, and a variety of other macrofungi. They are saprophytes, ectomycorrhizal fungi or agents of wood rot, which may destroy the structure wood of buildings. It is extremely difficult to identify a specific genera of mushrooms by using standard culture plate techniques. Some basidiomycete spores can be identified by spore morphology; however, some care should be exercised with regard to specific identification. The release of basidiospores is dependant upon moisture, and they are dispersed by wind.
Health Effects: Many have the potential to produce a variety of toxins. Members of this group may trigger Type I and III fungal hypersensitivity reactions. Rarely reported as opportunistic pathogens.

Chaetomium species - It is an ascomycete. It is found on a variety of substrates containing cellulose including paper and plant compost. It can be found on the damp or water damaged paper in sheetrock after a long term water damage. Several species have been reported to play a major role in decomposition of cellulose made materials. These fungi are able to dissolve the cellulose fibers in cotton and paper, and thus cause these materials to disintegrate. The process is especially rapid under moist conditions.
Health Effects: Chaetomium can produce type I fungal hypersensitivity and has caused onychomycosis (nail infections).
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis,2001.

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Organism Descriptions

The descriptions of the organisms presented are derived from various reference materials. The laboratory report is based on the data derived from the samples submitted and no interpretation of the data, as to potential, or actual, health effects resulting from exposure to the numbers of organisms found, can be made by laboratory personnel. Any interpretation of the potential health effects of the presence of this organism must be made by qualified professional personnel with first hand knowledge of the sample site, and the problems associated with that site.

Cladosporium species - The most commonly identified outdoor fungus. The outdoor numbers are reduced in the winter and are often high in the summer. Often found indoors in numbers less than outdoor numbers. It is commonly found on the surface of fiberglass duct liner in the interior of supply ducts. A wide variety of plants are food sources for this fungus. It is found on dead plants, woody plants, food, straw, soil, paint and textiles. Often found in dirty refrigerators and especially in reservoirs where condensation is collected, on moist window frames it can easily be seen covering the whole painted area with a velvety olive green layer.
Health Effects: It is a common allergen. It can cause mycosis. Common cause of extrinsic asthma (immediate-type hypersensitivity: type I). Acute symptoms include edema and bronchiospasms, chronic cases may develop pulmonary emphysema. Illnesses caused by this genus can include phaeohyphomycosis, chromoblastomycosis, hay fever and common allergies.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis,2001.

Stachybotrys species - This organism is rarely found in outdoor samples. It is usually difficult to find in indoor air samples unless it is physically disturbed because the spores are in a gelatinous mass. Grows well on wet media, preferably containing cellulose. It proliferates in the indoor environment with long term water damage, growing on wallpaper, gypsum board, and textiles. As a general rule, air cultures for Stachybotrys yields unpredictable results, mainly due to the fact that this fungus is usually accompanied by other fungi such as Aspergillus and Penicillium that normally are better aerosolized than Stachybotrys. This is a slow growing fungus on media. It does not compete well with other rapidly growing fungi. The black fungi grow on building material with high cellulose content and low nitrogen content. Appropriate media for the growth of this organism will have high cellulose content and low nitrogen content.
Health Effects: It has worldwide distribution and has been reported to cause dermatitis, cough, rhinitis, and headache, although no definitive reports of human infections have been verified. It has the ability to cause type I hypersensitivity. It is a documented mycotoxin producer.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis,2001.

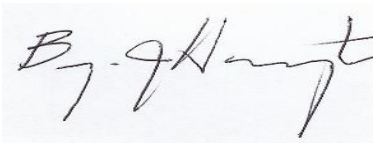
Conclusions/Recommendations

The furniture and contents throughout the inspected areas were clean of visible mold growth. Water damaged ceiling tiles were noticed in several rooms. Pre-existing water damage and/or suspected microbial growth were discovered underneath the sinks in Kindergarten No.1, Room No.8, and Room No.16. Recommendations for water damaged ceiling tiles and sink cabinets are outlined above.

Except for the A-Wing Testing Office, the air quality in the inspected areas should not pose environmental or exposure risks at the levels detected. Recommendations for the A-Wing Test Office are outlined above.

I hope you found our service beneficial. If you have any questions or concerns, please feel free to contact me at 410-867-6262.

Respectfully,



Bryan Harrington (CIE)
Environmental Solutions, Inc.

Industry References

Since the 1993 New York City Department of Health (NYCDOH) document (Assessment and remediation of *Stachybotrys Atra* in Indoor Environments) was produced, several other guidance documents have been written. This report was developed in accordance with and including:

- *Fungal Contamination in Buildings: A Guide to Recognition and Management* (Health Canada, 1995).
- *Control of Moisture Problems Affecting Biological Indoor Air Quality* (Flannigan and Morey, 1996).
- *Bioaerosols: Assessment and Control* (American Conference of Government Industrial Hygienists [ACGIH], 1999).
- *Guidelines on Assessment and Remediation of Fungi in Indoor Environments* (NYCDOH, 2000). [external link]
- *Mold Remediation in Schools and Commercial Buildings* (U.S. EPA, 2001).
- *Report of the Microbial Growth Task Force* (The American Industrial Hygiene Association, 2001).
- *Fungal Contamination: A manual for investigation, remediation and control (BECi) 2005*.
- *29 CFR 1910, Occupational Safety and Health Standards for General Industry, U.S. Department of Labor*
- Institute of Inspection, Cleaning and Restoration Certification Standard IICRC S520 *29 CFR 1926, Occupational Safety and Health Standards for the Construction Industry*, U.S. Department of Labor
- *40 CFR 61, National Emission Standards for Hazardous Air Pollutants (NESHAP), U.S. Environmental Protection Agency*
- *ACR 2006, Assessment, Cleaning and Restoration of HVAC Systems, National Air Duct Cleaners Association, 2006**
- *ASHRAE Standards 62.1 or 62.2*
- *ASTM D-1653, Standard Test Methods for Water Vapor Transmission of Organic Coating Films*
- *Bioaerosols: Assessment and Control,* American Conference of Governmental Industrial Hygienists, 1999
- *Field Guide for Determination of Biological Contaminants in Environmental Samples, American Industrial Hygiene Association, 2005*
- *A Guide for Mold Remediation in Schools and Commercial Buildings, US Environmental Protection Agency, 2001 Protecting the Built Environment: Cleaning for Health, Michael A. Berry Ph.D., 1993*
- *IICRC S100 Standard and Reference Guide for Professional Carpet Cleaning, Fourth Edition, Institute of Inspection, Cleaning and Restoration Certification, (S100)**
- *IICRC S300 Standard and Reference Guide for Professional Upholstery Cleaning, First Edition, Institute of Inspection, Cleaning and Restoration Certification, (S300)**
- *ANSI/IICRC S500 Standard and Reference Guide for Professional Water Damage Restoration, Third Edition, Institute of Inspection, Cleaning and Restoration Certification, (S500)**