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	John Hanson Montessori School 110,413 sq. feet	Environmental Solutions, Inc. Bryan Harrington 6114 Drum Point Road Deale, MD 20751 410-867-6262 bryan@esi4u.com

Property Location

6360 Oxon Hill Road Oxon Hill, MD 20745

Date of Inspection 3/28/2019

Prepared By: Bryan Harrington

Certified Indoor Environmentalist (CIE)

Dear Mr. Baylor,

The results of the indoor air quality testing performed at John Hanson Montessori School, which is located at 6360 Oxon Hill Road, Oxon Hill, MD 20745, 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 recommendations from ESI's 3/28/2019 inspection and testing.

Background Information

On 2/272019, ESI detected amplified concentrations of Carbon monoxide (CO) throughout various classrooms and the library. Amplified concentrations of Carbon monoxide were also detected outside the building.

Purpose

ESI was engaged to re-test the classrooms. In each test location, the indoor air quality will be tested for elevated concentrations of Carbon monoxide (CO) and Carbon dioxide (CO2), in addition to measuring the relative humidity and temperature.

Observations and instrument readings

The following table is designed for this project. You will notice the Carbon monoxide and Carbon dioxide readings are in **BLACK** or **RED**. **RED** indicates the concentration was amplified/elevated and **BLACK** indicates it was not.

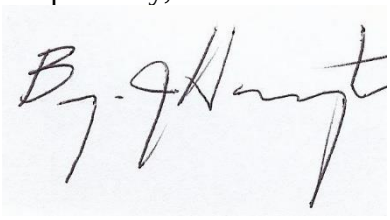
Location	R/H (%)	Temp (°F)	CO2 (ppm)	CO (ppm)	Notes
Room 103	26.3%	71.6	799	000	
Room 205	27.3%	72.6	672	000	
Room 211	23.8%	71.4	704	000	
Room 215	23.1%	71.4	615	000	
Room 203	24.6%	71.7	502	000	
Room 204	21.8%	72.1	452	000	
Room 120	28.8%	70.3	711	000	
Room 121	33.8%	69.2	758	000	
Room 117	35.0%	70.7	813	000	
Room 112	37.8%	68.5	903	000	
Library	25.0%	70.5	786	000	
Room 124	26.9%	74.8	799	000	
Room 107	29.4%	71.7	645	000	
Room 116	38.5%	70.2	960	000	
Room 123	27.3%	69.9	699	000	
Room 215	28.3%	71.6	545	000	
Room 200	50.9%	71.4	887	000	
Outdoors	27.6%	57.9	523	000	Front parking lot
Outdoors	28.8%	56.6	539	000	Rear parking lot

Conclusions/Recommendations

The Carbon monoxide levels were recorded at zero parts per million (ppm) and the Carbon dioxide concentrations were typical of occupied indoor spaces with good air exchange (350-1,000 ppm).

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)**