

ENVIROSCIENCE CONSULTANTS, INC.

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January 23, 2014

Mr. Steve Valenti
Assistant Superintendent for Business
Island Park Schools
99 Radcliffe Road
Island Park, NY 11558
Ph: (516) 431-7268 Fax: (516) 431-7550

Re: **Indoor Air Quality - Hegarty Elementary School**

Dear Mr. Valenti:

Attached please find results of sampling performed at the above referenced location. If you should have any questions, please feel free to contact me.

Sincerely,



Bart Gallagher

Enclosures: 2

Microbial Air Sample Results
IAQ Sample Data & Results

Island Park Schools

Indoor Air Quality - Hegarty Elementary School

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WWW.ENVIROHEALTH.ORG

Job # 10621

PROJECT SUMMARY

INDOOR AIR QUALITY - HEGARTY ELEMENTARY SCHOOL

Prepared for: ISLAND PARK SCHOOLS
Mr. Steve Valenti
99 Radcliffe Road
Island Park, NY 11558

Prepared by: ENVIROSCIENCE CONSULTANTS, INC.

Project Manager: *Bart Gallagher*
Bart Gallagher

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1.0 Executive Summary

On January 20, 2014, Enviroscience Consultants, Inc. performed microbial spore trap sampling and an indoor air quality assessment at the Hegarty Elementary school in the Island Park School District in Island Park, NY. The purpose of this sampling was to identify what impact, if any, indoor air quality might be having on the health and/or comfort of the building occupant(s). This inspection was performed in response to complaints of a mold like odor in Room 214.

Results of sampling and inspection indicate normal concentrations of common microbial organisms.

There are no recommendations for any corrective actions at this time.

2.0 Methods & Results

Spore trap testing for mold and other allergens was conducted to identify airborne spore levels in areas of concern using spore traps. Air samples were collected using allergen collection media and high-volume electric sampling pumps. These samples undergo laboratory analysis for mold types and concentrations through microscopy as the analytical method.

There are currently no regulatory guidelines outlining 'safe' or 'unsafe' levels of airborne mold. An individual's reaction to airborne mold ultimately depends upon that individual's sensitivity, allergies, and general health. Results of sampling indoors were 213- 320 CTS/m³. Results of sampling outdoors was 267 CTS/m³.

Generally speaking, total concentrations for indoor airborne microbial spores of common environmental organisms should not exceed those found outdoors, or 3,000 CTS/m³. However, buildings with little or no ventilation (HVAC) filtration may have airborne fungal counts higher than those outdoors. Results of sampling within complaint areas should be higher than those in non-complaint areas, if fungal growth is an issue. A comparison of fungal spore type, indoor versus outdoor, and complaint versus non-complaint areas is also made. All should generally be similar. Results strikingly different may indicate areas of concern with respect to fungal growth.

Marker or signature fungal spores may also indicate cause for concern. *Chaetomium*, *Stachybotrys*, *Memnoniella*, *Ulocladium*, and *Eurotium* may be associated with water damage. *Chaetomium*, *Stachybotrys*, *Memnoniella*, and *Ulocladium* thrive in moisture-rich environments. *Eurotium* indicates persistent high relative humidity, poor ventilation and condensation problems. Spores and structures of these fungi may also come from outdoors, but the probability is low. *Aspergillus/Penicillium-like* (or *Asp/Pen-like*) spores are common indoors and outdoors at ground level. If the prevalence of *Aspergillus/Penicillium-like* spores indoors is consistently higher than those outdoors, then the difference may be indicative of a water-damaged environment.

An indoor air quality monitor was used to measure temperature, relative humidity, carbon dioxide, and carbon monoxide in areas of concern. The indoor air quality monitor is a real-time direct-read digital instrument that measures and displays air quality parameters at one-second intervals.

Measured temperature, relative humidity, and carbon dioxide levels were compared with standards 55-1992 and 62-2001 of the American Society of Heating Refrigerating, and Air Conditioning Engineers (ASHRAE). These standards state the following:

- Acceptable indoor temperatures during the winter season range 68°F to 74°F.
- Acceptable indoor temperatures during the summer season range 73°F to 79°F.
- Acceptable indoor relative humidity levels range 30% to 60%.
- Acceptable indoor carbon dioxide levels should be no greater than 700 ppm above outside levels.

Measured carbon monoxide levels were compared to the U.S. Environmental Protection Agency (EPA) National Ambient Air Quality Standard for carbon monoxide, which is a maximum average concentration of 9 ppm for eight hours.

These results can be found in Appendix B.

3.0 Conclusion

Results of sampling and inspection indicate normal concentrations of common microbial organisms

There are no recommendations for any corrective actions at this time.

As with any air quality tests, the results of Enviroscience's sampling are relevant to the sampling period and the parameters tested for and are only indicators of overall conditions in the area of sampling. Standardized measurements and biological markers of exposure to mold are largely unknown. Because of this it is not possible to determine 'safe' or 'unsafe' levels of exposure for people in general. An individual's reaction to mold ultimately depends upon that individual's sensitivity and allergies and should be taken into account when assessing indoor air quality.

Appendix A
Microbial Air Sample Results



Enviroscience Consultants, Inc.
2150 Smithtown Avenue
Ronkonkoma NY 11779
631-580-3191

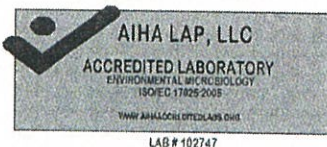
Job Number 14012107
Date Collected: 1/20/2014
Date Received: 1/21/2014 10:02:03 AM
Date Analyzed: 1/21/2014

Site: 10621/HEGARTY ELEMENTARY SCHOOL (I

SPORE TRAP STANDARD

Accession #	14012107-001		14012107-002		14012107-003		14012107-004	
Sample ID #	1		2		3		4	
Sample Location	ROOM 215		ROOM 214		HALL BETWEEN 21		OUTSIDE	
Air Volume (Liters)	75		75		75		75	
Results	Raw Ct	Cts/m ³	Raw Ct	Cts/m ³	Raw Ct	Cts/m ³	Raw Ct	Cts/m ³
Alternaria	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-
Asp Pen like spores	1	53	3	160	-	-	3	160
Basidiospores	-	-	-	-	-	-	-	-
Chaetomium	2	107	1	53	3	160	-	-
Cladosporium	1	53	1	53	1	53	2	107
Curvularia/Pithomyces	-	-	-	-	-	-	-	-
Hyphae	-	-	-	-	1	53	-	-
Periconia/Smut/Myxo	-	-	-	-	1	53	-	-
Stachybotrys	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-
Unspecified	-	-	-	-	-	-	-	-
Total count	4	213	5	267	6	320	5	267
Epithelial cells	35	1867	68	3627	101	5387	-	-
Fibrous glass	-	-	1	53	-	-	-	-
Insect fragments	-	-	-	-	-	-	-	-
Other fibers	3	160	5	267	9	480	1	53
Pollens	-	-	-	-	-	-	1	53
Background	-	Light	-	Light	-	Moderate	-	Light
Minimum Detection Limit	1	53	1	53	1	53	1	53

Comments:



Cathy Pepe
Laboratory Supervisor

Sample received in acceptable condition unless otherwise stated.

Unstated results apply to above sample only.

Report Date/Time 1/21/2014 11:48:08 AM

1/21/2014

Enviroscience Consulta

14012107

SPA 24 Hour

14012107-001 - 004 (4)

in of Custody Analysis Request Form

ENVIROSCIENCE CONSULTANTS, INC
 2150 Smithtown Ave,
 Ronkonkoma, NY 11779
 PH (631) 580-3191 FAX (631) 580-3195

Project # 10621

Pure Earth Lab 7184 North Park Drive Pennsauken, NJ 08109 (856) 486-1177	Sampling Site Address and/or Project: Hegarty Elementary School, Island Park, NY	Indicate Analysis Requested Spore Trap CMBF Other ↓
Sampled By: Joe Piro	# of Samples: 4	

14012107-001
 SPA
 14012107-002
 SPA
 14012107-003
 SPA
 14012107-004
 SPA
 Enviroscience
 Consultants, Inc.

Lab Use Only	Sample No.	Sample Location Sample ID	Matrix (W) Water, (S) Soil, (A) Air, (SL) Sludge, (O) Other	Flow Rate	Min	Sampling Time	Analysis Requested
	1	Room 215	A	15	5	11:30	Spore Trap
	2	Room 214	A	15	5	11:40	Spore Trap
	3	Hall Between 214 & 215	A	15	5	11:50	Spore Trap
	4	Outside Air	A	15	5	11:59	Spore Trap

Released By: JP Time: 12:00	Shipment Date: 1/20/2014	Delivery Method: UPS	Received By: <i>CNC</i>	Date: 1-21-14 Time: 9:40	Condition: OK
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Comments: 24 Hr TAT	Reporting Info: gln@envirohealth.org jbaltz@envirohealth.org	Login: 1-21-14 CNC	Analyzed: 1-21-14 AK
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Appendix B
IAQ Sample Data and Results

IAQ Sample Data and Results

Project #: 10621

Sampling Site Address and/or Project:
Hegarty Elementary School, Island Park, NY

Sampled By: Joe Piro	# of Samples: 4	Date of Sampling: 1/20/2014
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Sample No. ↓	Sample Location Sample ID ↓	Matrix (W) Water, (S)Soil (A) Air, (SL) Sludge, (O) Other	Flow Rate ↓	Min ↓	Sampling Time ↓	Analysis Requested ↓	Temp F ↓	Rel Hum %RH	CO2 ↓	CO ppm ↓
1	Room 215	A	15	5	11:30	Spore	84.1	33.6	485	
2	Room 214	A	15	5	11:40	Spore	77.3	24.5	472	
3	Hall Between 214 & 215	A	15	5	11:50	Spore	79.1	33.0	483	
4	Outisde Air	A	15	5	11:59	Spore	38.0	45.7	449	

Additional Comments: