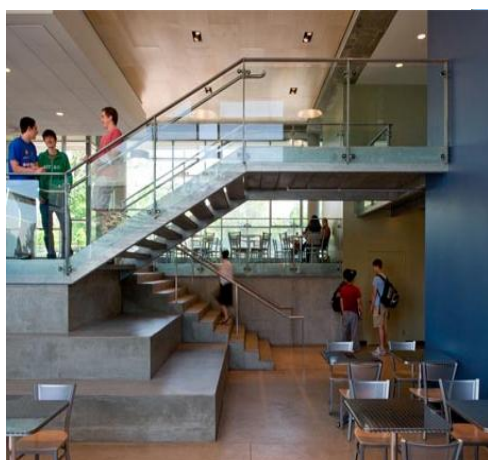




INDOOR AIR QUALITY INVESTIGATION REPORT

School District of New Richmond
New Richmond, WI 54017



DATE OF REPORT:

May 28th, 2014

DATE OF INVESTIGATION:

May 13th, 2014

CONTACT/TITLE:

Bob Parent

ASSESSMENT PERFORMED BY: Luke Krumenauer
CESA 10

Environmental Health and
Safety Consultant

CESA 10 Environmental, Health, and Safety Program Indoor Air Quality Investigation Report

Report Summary	
Prepared By	Luke Krumenauer, CESA 10 EHS Consultant
Prepared For	School District of New Richmond
Address	701 East 11 th St, New Richmond, WI 54017
Phone	715-243-7401
Contact(s)	Bob Parent
Investigation Date(s)	May 13th, 2014
Type of Assessment	Fungal spore air sampling
Scope	Indoor Air Quality Investigation of Head Start Wing
Facility Investigated	Community Commons
Address	421 South Green Ave., New Richmond, WI 54017
Phone	715-243-7403
Laboratory	EMC Labs, Inc. 9830 S 51 st Street Ste B-109 Phoenix AZ, 85044
Method/Certification	EMO1/1, Fungal Spore Count on Spore Trap Media
Project Code	NewRichmond.140513

INVESTIGATION SUMMARY

On May 13th, 2014 an Indoor Air Quality Investigation was performed at the School District of New Richmond by Luke Krumenauer, CESA 10 Environmental Health and Safety Consultant. The scope of the indoor air quality investigation was to visually inspect the areas identified as being potentially affected as directed by Bob Parent, building and grounds supervisor employed with the School District of New Richmond and test the ambient air for fungal spore count. One field blank sample from the same series of air sample cassettes was also taken. CESA 10 then sent the samples to EMC Labs, Inc. where the slides were removed and direct microscopic analysis was immediately performed, i.e. fungal spore count analysis.

MATERIAL AND METHODS

Baseline air sampling was performed using a high volume rotary pump and air-o-cell cassettes. The Air-O-Cell is a unique air sampling cassette specifically designed for the rapid collection of a wide range of airborne aerosols including mold spores, pollen, insect parts, skin cell fragments, fibers (e.g. asbestos, fiberglass, cellulose, clothing fibers, etc.) and inorganic particulate e.g. ceramic, fly ash, copy toner, etc.). The Air-O-Cell collects both viable and non-viable sample specimens providing a much broader overview of potential allergens contaminants than convention sampling techniques. The high volume rotary pump was calibrated to 15 liters/min using Sensidyne Gilibrator 2. Ambient air samples were collected through the air-o-cell cassettes for a period of 5 minutes for a total volume of 75 liters. Relative temperature and humidity readings were collected at each sample site. To determine scope of work, we used the Material and Methods Information found in Appendix B.

Table 1. High Volume Rotary Pump Calibration.

	PRE (LPM)	POST (LPM)
	Pre sampling values #1-10	Post sampling values #1-10
#		
1	15.06	15.11
2	15.08	15.24
3	15.06	15.18
4	15.06	15.18
5	15.06	15.20
6	15.07	15.15
7	15.10	15.17
8	15.08	15.17
9	15.03	15.14
10	15.09	15.21
AVE	15.069	15.175

SAMPLING RESULTS

Table 2. See attached EMC laboratory analysis report for detailed breakdown of fungal spore counts, calculated counts and percentages.

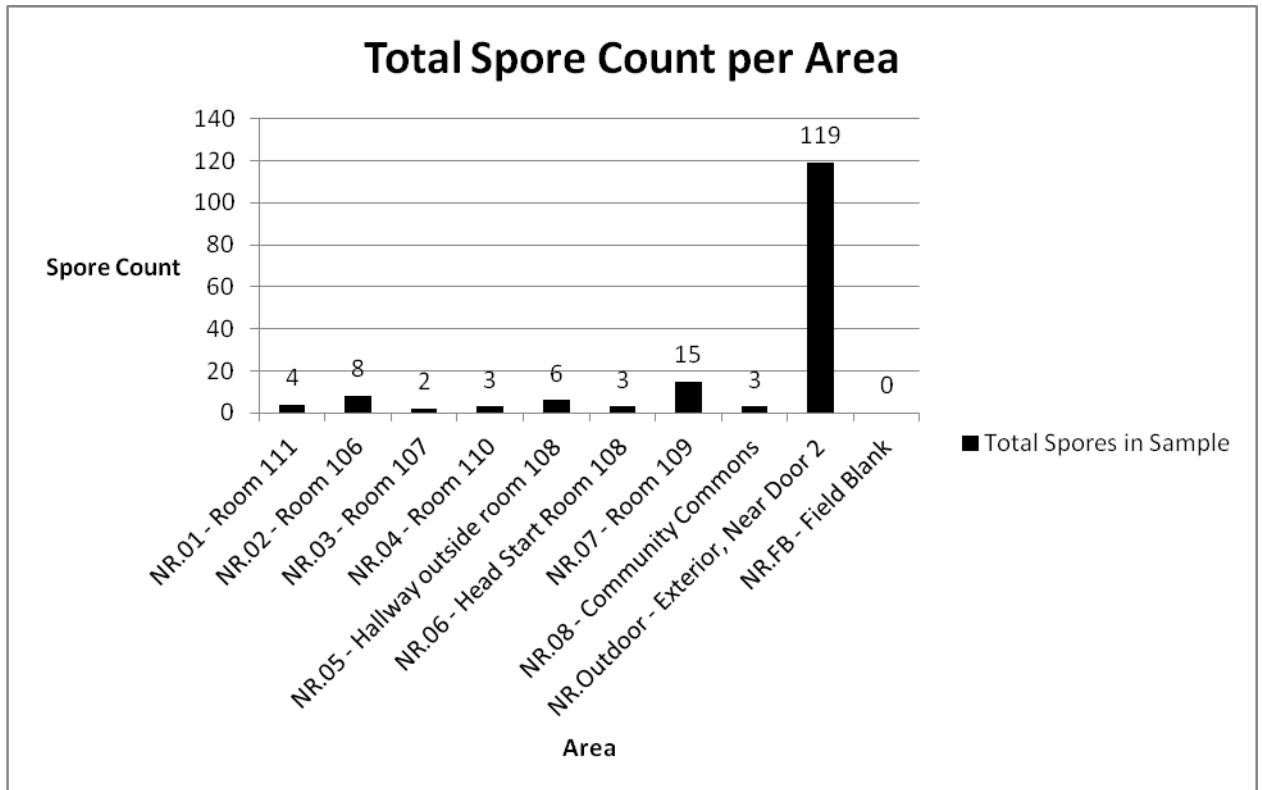
Sample ID	Location	Run Time (Min)	Volume Collected (L)	Debris Rating	Total Spore Count	Spore Count By Type	Concern
NR.01	Room 111	5	75	1	4	Cladosporium (4)	Low
NR.02	Room 106	5	75	1	8	Ascospores (1), Cladosporium (7)	Low
NR.03	Room 107	5	75	1	2	Ascospores (2)	Low
NR.04	Room 110	5	75	1	3	Ascospores (1), Cladosporium (2)	Low
NR.05	Hallway outside Room 108	5	75	2	6	Ascospores (1), Basidiospore (2), Cladosporium (3)	Low
NR.06	Head Start Room 108	5	75	2	3	Ascospores (1), Cladosporium (1), Myxomycetes/Smuts (1)	Low
NR.07	Room 109	5	75	2	15	Ascospores (1), Basidiospore (4), Cladosporium (10)	Low
NR.08	Community Commons	5	75	2	3	Cladosporium (3)	Low
NR.Out-door	Exterior, Near Door 2	5	75	2	119	Ascospores (11), Cladosporium (92), Myxomycetes/Smuts (12)	Low
NR.FB	Field Blank	0	0	0	0	None	N/A

DATA INTERPRETATION

Standards, Threshold Limit Values (TLVs), and/or Permissible Exposure Limits (PELs) for airborne concentrations of fungal spores have not been set. Currently, there are no federal regulations or standards for airborne fungal spore counts. Data interpretation is performed by comparing indoor air contaminant levels with outdoor air levels in non-winter months. Species identified indoors and outdoors should be similar. During winter months indoor air contaminant levels are compared with other indoor air contaminant levels of areas not in question. This investigation compared both indoor and outdoor samples.

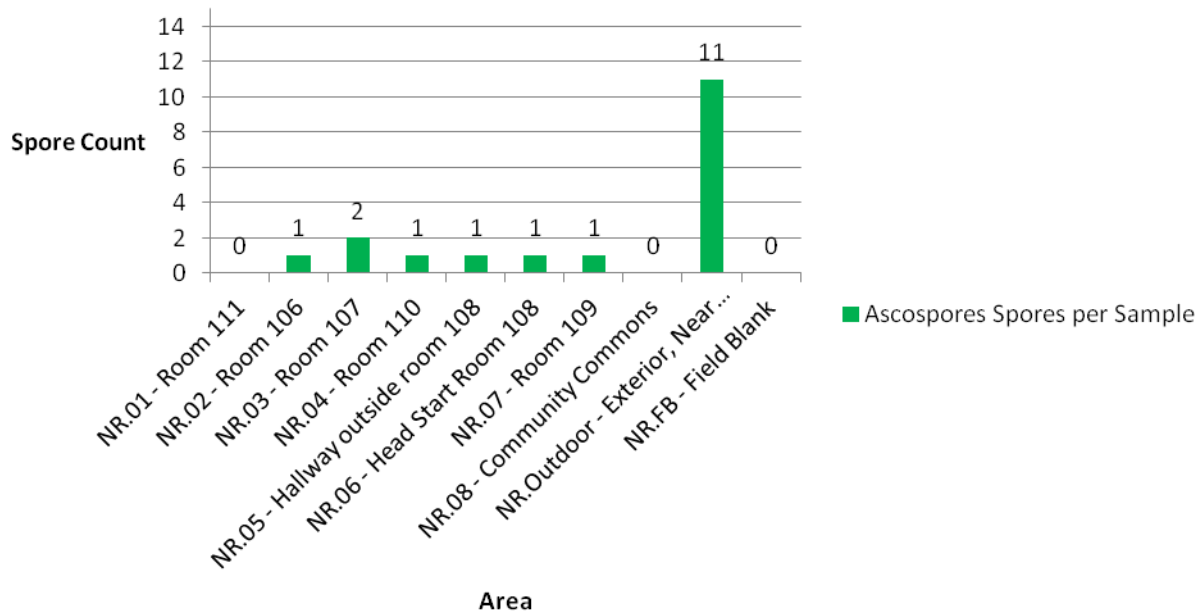
DISCUSSION

Air Sampling Summary

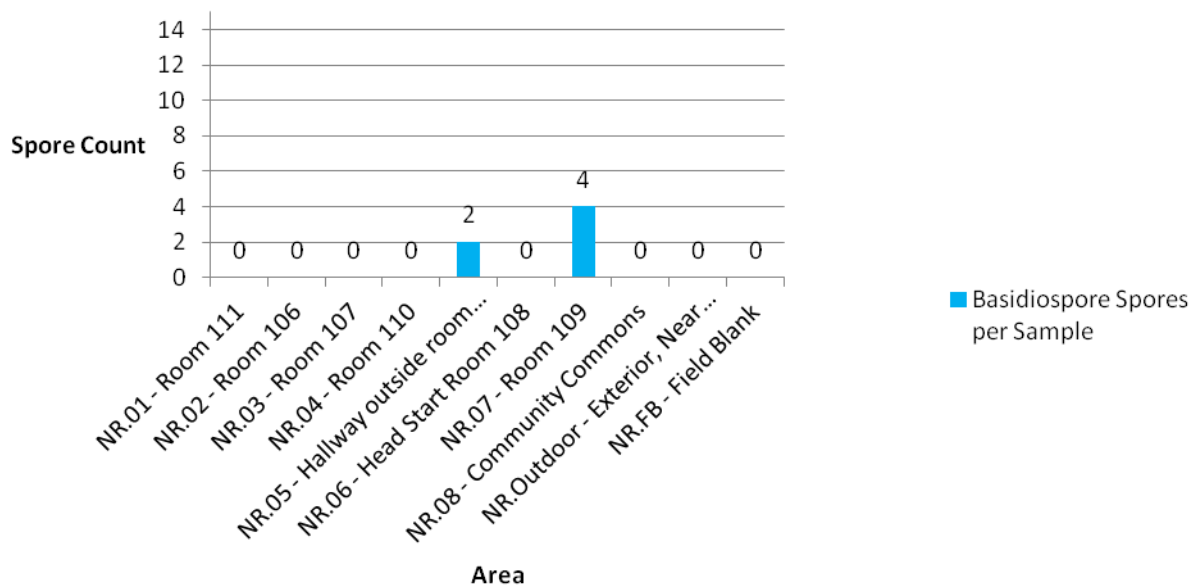


The graph above identifies the sample ID and room number, as well as the identified spore counts per sample as witnessed by EMC Labs, Inc. on the spore trap media within each sample. This graph shows that all samples have far less than the spore count as found exterior of the building on sample NR.Outdoor (119 spores). This is an indication that the buildings HVAC system and filters are most likely filtering the exterior air prior to distributing the warmed air throughout the building. No visible mold was identified. It is important to note that zero spores of Stachybotrys were identified during this Investigation. The following graphs identify the varying spores found within the samples:

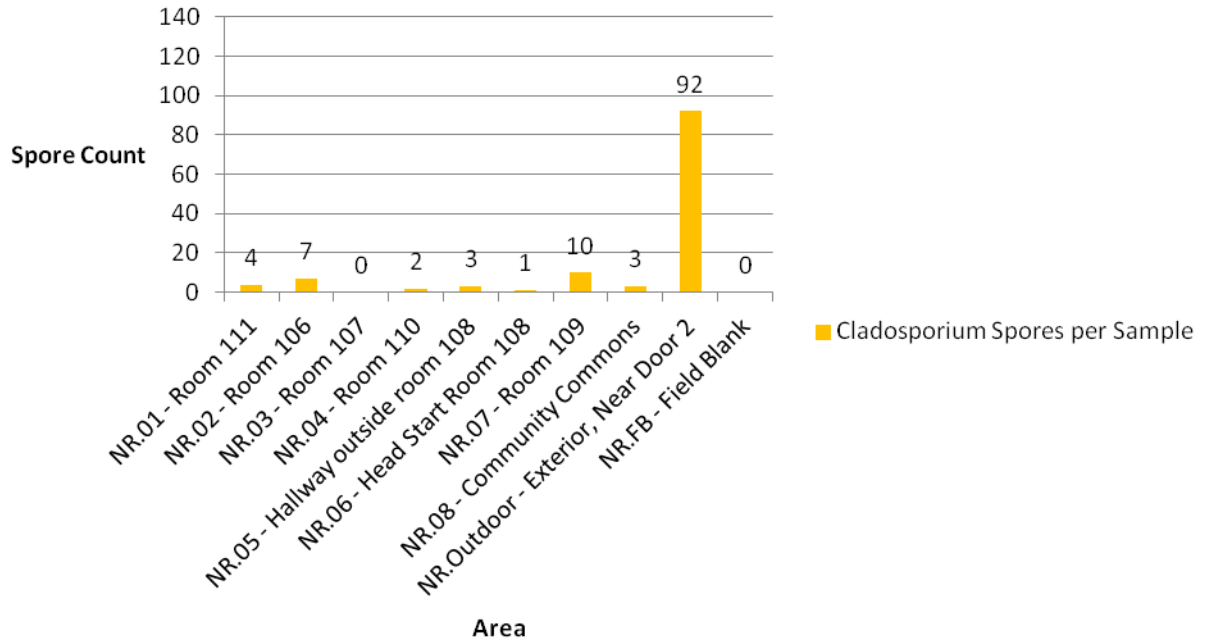
Ascospores Spore Count per Area



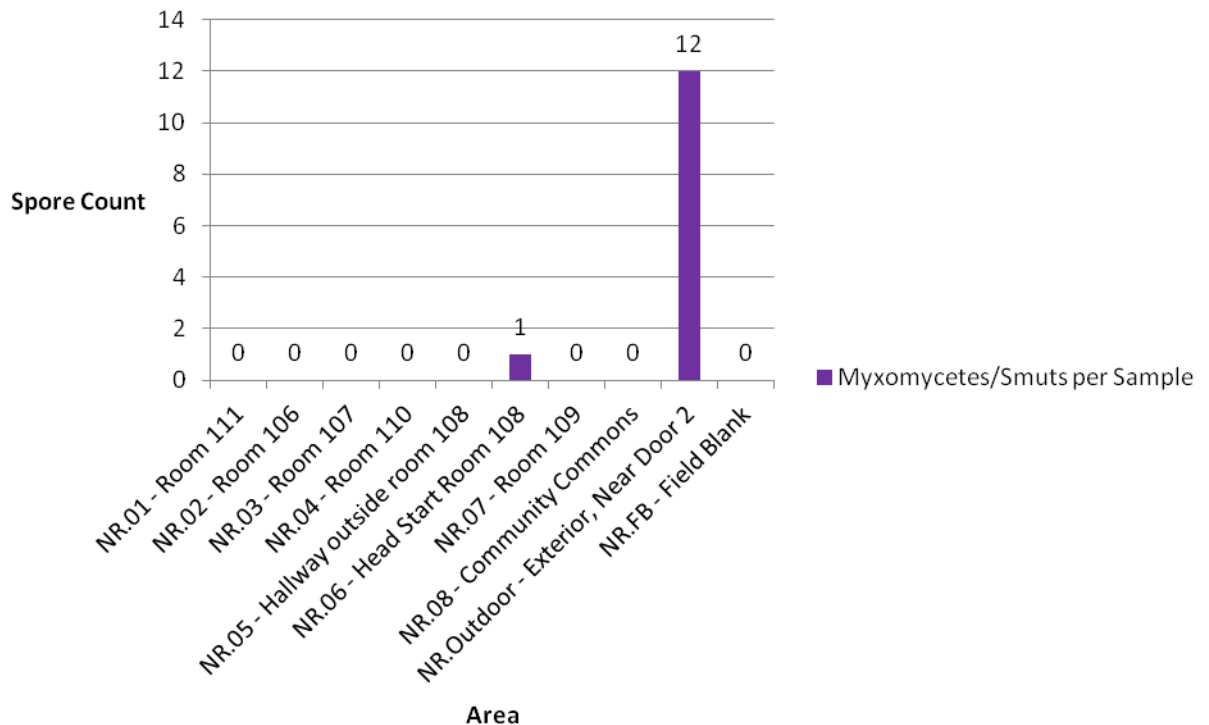
Basidiospore Spore Count per Area



Cladosporium Spore Count per Area



Myxomycetes/Smuts Spore Count per Area



It is important to note that all spores identified resulted with lower spore counts than the outdoor control sample, except the Basidiospores. Please see the information below within the Investigation Assessment Summary on Headstart Room 108 for more information.

Ascospores: An ascospore is a spore contained in an ascus or that was produced inside an ascus. This kind of spore is specific to fungi classified as ascomycetes. This type of spore is found everywhere in nature, internally and externally where growing conditions are adequate (interior with damp substrates and externally everywhere). According to www.environix.com, ascospores have been poorly studied to be determined as a potential allergen and few cases have been reported to cause disease.

Basidiospores: These spores are distributed by the wind and stem from dry rot (in wood), and are common in nature. Some individuals may experience hay fever, asthma, Lycoperdonosis and mushroom culture hypersensitivity. Poisoning (toxicosis) is usually attributable to ingestion of mushrooms that produce the following toxins: amanitins, monomethyl-hydrazine, muscarine, ibotenic acid, and psilocybin (information provided by www.environix.com)

Cladosporium (or Hormodendrum): Cladosporium spores are commonly found on dead plants, food, textiles and a variety of other surfaces. This genus compromises perhaps the most common isolates in both the indoor and outdoor environment. Some species produce a mycotoxin, epicladosporic acid that acts in an immunosuppressive manner. Illnesses caused by this genus can include phaeohyphomycosis, chromoblastomycosis, hay fever and common allergies. This is a common indoor mold according to the Centers for Disease Control and Prevention (CDC).

Myxomycete/Smuts: Smuts and Myxomycetes are parasitic plant pathogens and can produce type I fungal hypersensitivity reactions. Both are typically grouped together due to their association with plants, the outdoors and because they share similar microscopic morphology.

The field blank contained zero spore counts.

INVESTIGATION ASSESSMENT SUMMARY

Please see the appendix with the building map and correlating pictures for additional sampling and inspection information.

Classroom 106: Temperature: 79°F. Relative Humidity: 33%
No visible mold identified. Uni-Vent is running. No odor at time of investigation.

Classroom 107: Temperature: 75.4°F. Relative Humidity: 39%
Uni-Vent is running. No odor at time of investigation. Previous leak evidence was found at time of inspection, and the average moisture content of this somewhat damaged building material was 8.9% (over three readings of 8.4%, 9.1% and 9.2%). This determines that the damaged plaster is somewhat moist in this area.

Headstart Room 108: Temperature: 77.6°F. Relative Humidity: 38%
Uni-Vent is running at time of investigation. No odor at time of investigation. Window has deteriorated wood trim with a 10.6% moisture content. This determines that the small section of wood trim is moist. This possibly may be the source for the very low quantity of Basidiospores sampled within the room; as well as the sample taken just outside Room 108 within the hallway.

Headstart Classroom 109: Temperature: 75.8°F. Relative Humidity: 37%
Uni-Vent is running at time of investigation. No odor at time of investigation. Children within this classroom during time of investigation (children were not present during air sampling). No access for investigation above ceiling tiles during investigation. However, any spores identified were of low concern at the time of the investigation.

Classroom 110: Temperature: 78°F. Relative Humidity: 35%
No visible mold identified. Uni-Vent is running at all times supplying air to room during investigation, no odor at time of investigation, or large amounts of clutter.

Classroom 111: Temperature: 82.1°F. Relative Humidity: 33%
No visible mold identified. Uni-Vent is not running at moment of 11:00am. A small odor lingers such as a classroom that has not been utilized that day.

Outdoor sample location outside door #2: Temperature: 48°F. Relative Humidity: 68%

Suggested for this particular situation

- Conduct periodic visual inspections for mold and water intrusion in the identified area and perform periodic monitoring for mold growth.
- If mold is identified, take EPA actions or contact a mold abatement company.
- Excessive storage contributes to poor air quality.
- No materials should be stacked on or around univents or other ventilation. This creates poor air circulation and contributes to inadequate ventilation and poor air quality.
- At the time of the investigation, the results indicate spore counts within the building were low, however, environmental factors can change and influence results rapidly.

DISCLAIMER AND LIMITATIONS

The statements made in this document are my professional opinion based upon current information available from EPA (Environmental Protection Agency), NIOSH (The National Institute for Occupational Safety and Health and OSHA (Occupational Safety and Health Administration) and are based on the observations made, interviews held, and conditions present at the time of the evaluation. The air sampling results produced at the time of evaluation does not provide complete protection from future building occupant irritation or possible health consequences that may be caused by adverse indoor environmental conditions that may arise in the future. The above evaluation was not an all-inclusive, comprehensive IAQ Evaluation. The scope of work was to evaluate fungal growth within the designated areas through air sampling.

During the visual assessment process, certain specific areas may not have been physically accessible by natural means. For any identified fungal sources on building materials, appropriate EPA AHERA regulations are required to be followed.

REMARKS

Thank you for choosing to work with CESA 10's Environmental, Health and Safety Program. If you have any questions or concerns, please do not hesitate to contact me at 715-456-2860.

RESOURCES

EPA "Mold Remediation in Schools and Commercial Buildings"

<http://www.epa.gov/mold/pdfs/moldremediation.pdf>

"CDC Basic Facts – Mold"

<http://www.cdc.gov/mold/faqs.htm>

<http://www.epa.gov/iaq/schools/tfs/guidtoc.html>

<http://www.epa.gov/iaq/schools/tfs/guideh.html>

<http://www.healthyschools.org/index.html>

<http://www.environix.com/mold-iaq-library/mold/>

Sincerely,

Luke Krumenauer

Environmental, Health, and Safety Consultant

CESA 10

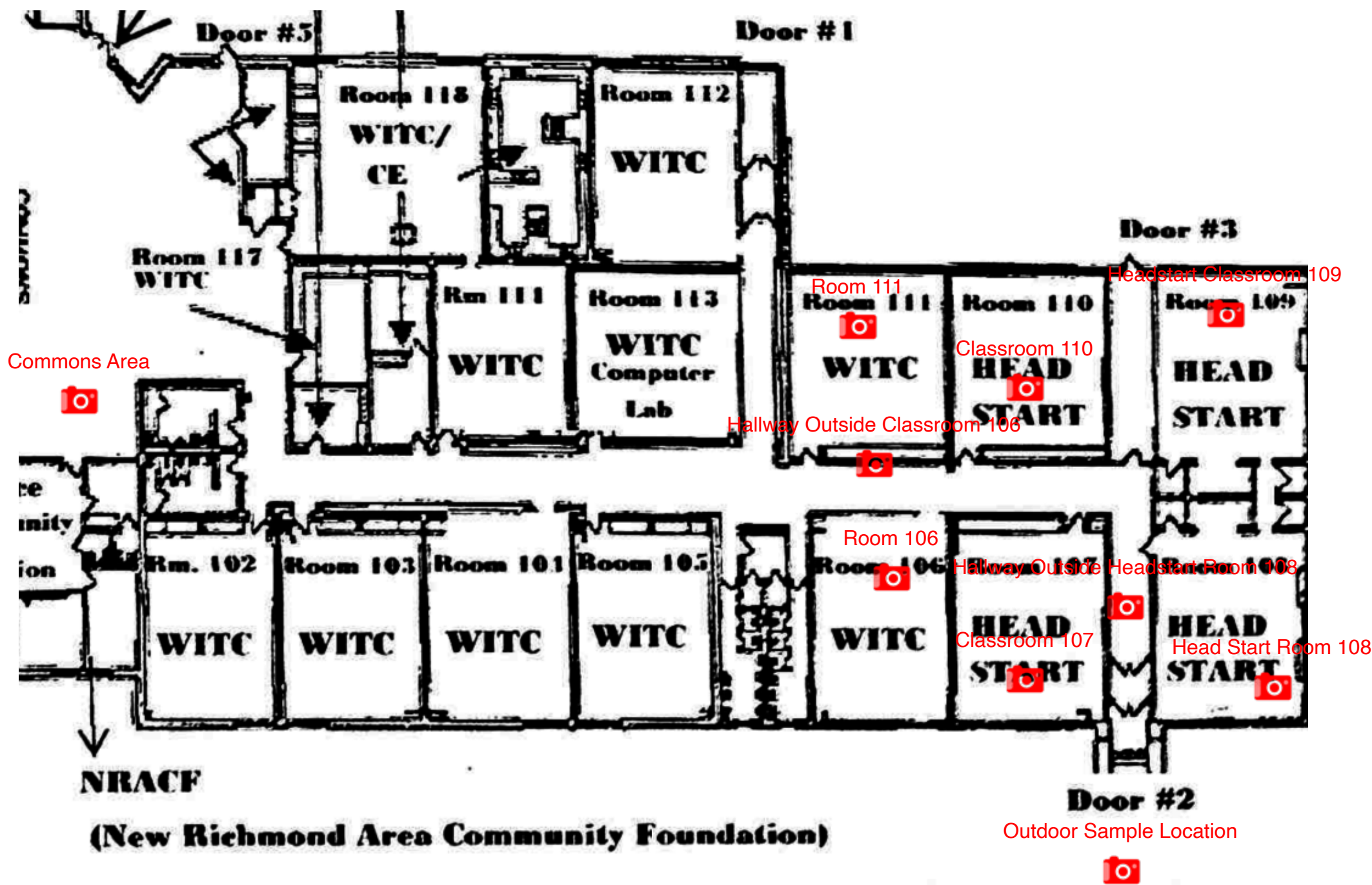
725 West Park Ave

Chippewa Falls, WI 54729

Office: 715-720-2138

Cell: 715-456-2860

New Richmond Community Commons - I1





Date Taken: May 13, 2014, 11:02 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 111

www.plangrid.com



Date Taken: May 13, 2014, 12:14 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 111

www.plangrid.com



Date Taken: May 13, 2014, 12:14 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Room 111

www.plangrid.com



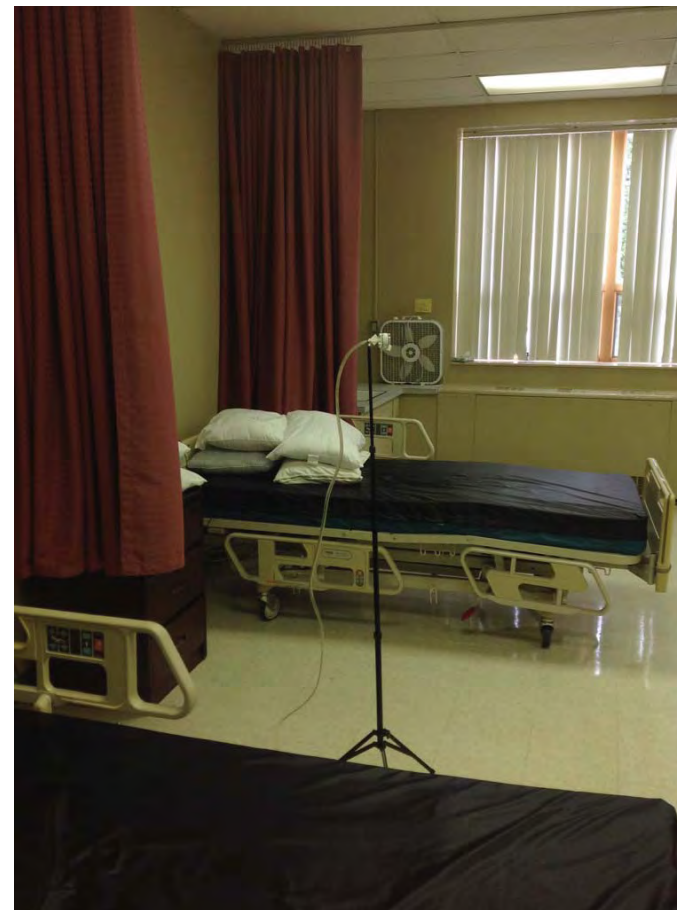
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 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Room 111

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Date Taken: May 13, 2014, 12:23 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Room 106

www.plangrid.com



Date Taken: May 13, 2014, 12:23 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Room 106

www.plangrid.com



Date Taken: May 13, 2014, 11:10 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 106

www.plangrid.com



Date Taken: May 13, 2014, 11:08 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 106

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Date Taken: May 13, 2014, 11:08 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Room 106



Date Taken: May 13, 2014, 11:08 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Room 106



Date Taken: May 13, 2014, 11:06 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 106

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Date Taken: May 13, 2014, 11:04 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Room 106

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Date Taken: May 13, 2014, 12:29 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 107

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Date Taken: May 13, 2014, 12:29 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 107

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Date Taken: May 13, 2014, 11:19 AM
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Sheet Name: 11
Group: Classroom 107

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Date Taken: May 13, 2014, 11:19 AM
Project: New Richmond Community Commons
Sheet Name: 11
Group: Classroom 107

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Date Taken: May 13, 2014, 11:19 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 107

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Date Taken: May 13, 2014, 11:19 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 107

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Date Taken: May 13, 2014, 11:19 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Classroom 107

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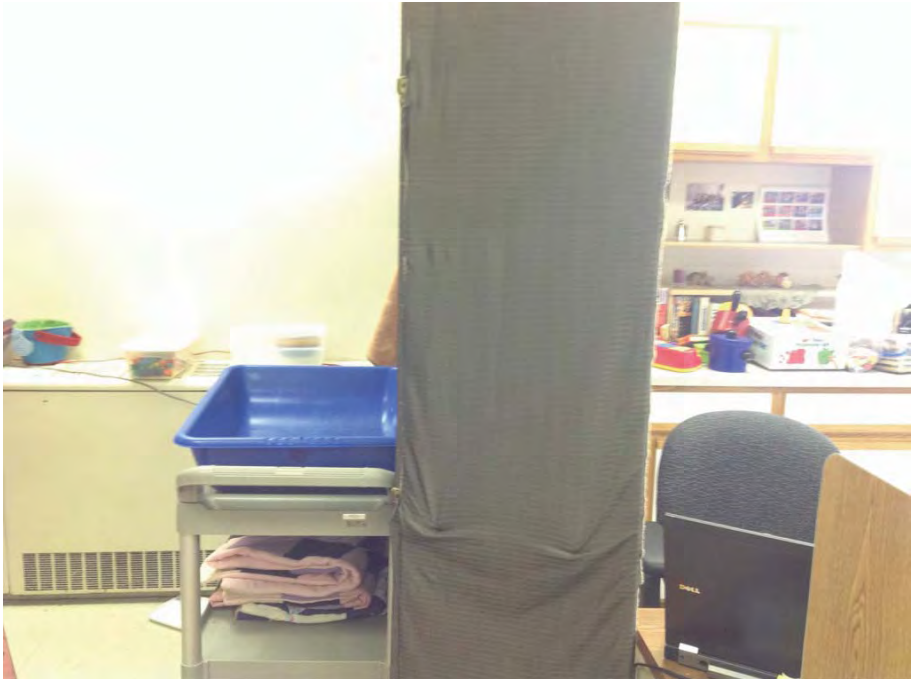


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Sheet Name: I1
Group: Classroom 107

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Sheet Name: I1
Group: Classroom 107



Date Taken: May 13, 2014, 11:17 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Classroom 107



Date Taken: May 13, 2014, 11:17 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 107



Date Taken: May 13, 2014, 12:36 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Classroom 110



Date Taken: May 13, 2014, 12:36 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Classroom 110

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Date Taken: May 13, 2014, 10:47 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Classroom 110

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Date Taken: May 13, 2014, 10:47 AM
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 Sheet Name: I1
 Group: Classroom 110

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Date Taken: May 13, 2014, 10:47 AM
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 Sheet Name: I1
 Group: Classroom 110

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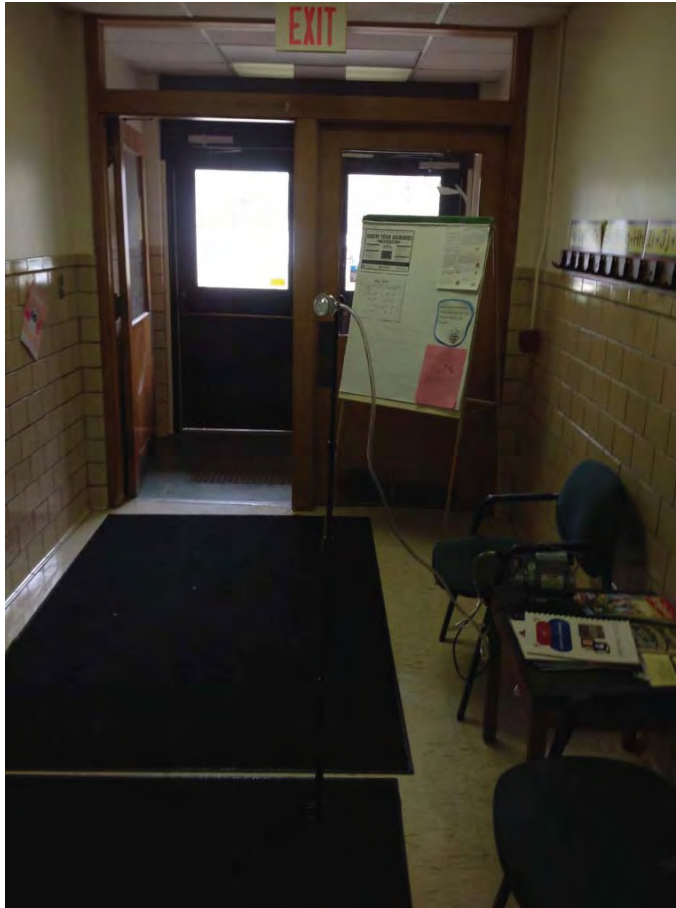
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 Sheet Name: I1
 Group: Classroom 110

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Date Taken: May 13, 2014, 12:44 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Hallway Outside Headstart Room 108

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Date Taken: May 13, 2014, 12:44 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Hallway Outside Headstart Room 108

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Date Taken: May 13, 2014, 12:48 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Head Start Room 108

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Date Taken: May 13, 2014, 12:48 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
Project: New Richmond Community Commons
Sheet Name: 11
Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
Project: New Richmond Community Commons
Sheet Name: 11
Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:34 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Head Start Room 108

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Date Taken: May 13, 2014, 11:42 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Head Start Room 108

www.plangrid.com



Date Taken: May 13, 2014, 11:40 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Head Start Room 108



Date Taken: May 13, 2014, 11:32 AM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Head Start Room 108



Date Taken: May 13, 2014, 12:59 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Commons Area

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Date Taken: May 13, 2014, 12:57 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Commons Area

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Date Taken: May 13, 2014, 1:05 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Headstart Classroom 109



Date Taken: May 13, 2014, 1:05 PM
 Project: New Richmond Community Commons
 Sheet Name: I1
 Group: Headstart Classroom 109



Date Taken: May 13, 2014, 11:49 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Headstart Classroom 109

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Date Taken: May 13, 2014, 11:46 AM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Headstart Classroom 109

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Date Taken: May 13, 2014, 1:12 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Outdoor Sample Location

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Date Taken: May 13, 2014, 1:12 PM
 Project: New Richmond Community Commons
 Sheet Name: 11
 Group: Outdoor Sample Location

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Date Taken: May 13, 2014, 10:53 AM
Project: New Richmond Community Commons
Sheet Name: I1
Group: Hallway Outside Classroom 106

EMC Labs, Inc. Fungal Spore Count on Spore Trap Media

Client: CESA 10
725 W. Park Ave
Chippewa Falls, WI 54729

Client Project ID: NewRichmond.140513
Client Job Number: NewRichmond.140513
Client P.O.:
Sample(s) Submitted By: Client

EMC Lab# M20689

Date Submitted: 05/19/14
Date of Analysis: 05/20/14
Date Reported: 05/20/14
EMC Method# EMO1/1

Client Sample ID: NR.01 EMC Sample Number: M20689-1 Sample Collection Date: 05/13/14 Sample Location: Room 111 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 1				Client Sample ID: NR.02 EMC Sample Number: M20689-2 Sample Collection Date: 05/13/14 Sample Location: Room 106 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 1				Client Sample ID: NR.03 EMC Sample Number: M20689-3 Sample Collection Date: 05/13/14 Sample Location: Room 107 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 1			
Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage
Pollen		<13		Pollen	1	13		Pollen		<13	
Mycelial Fragments	2	27		Mycelial Fragments		<13		Mycelial Fragments	2	27	
Limit of Detection	1	13		Limit of Detection	1	13		Limit of Detection	1	13	
Alternaria		<13	-	Alternaria		<13	-	Alternaria		<13	-
Arthrini		<13	-	Arthrini		<13	-	Arthrini		<13	-
Ascospores		<13	-	Ascospores	1	13	13	Ascospores	2	27	100
Aspergillus/Penicillium		<13	-	Aspergillus/Penicillium		<13	-	Aspergillus/Penicillium		<13	-
Basidiospore		<13	-	Basidiospore		<13	-	Basidiospore		<13	-
Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-
Chaetomium		<13	-	Chaetomium		<13	-	Chaetomium		<13	-
Cladosporium	4	53	100	Cladosporium	7	93	87	Cladosporium		<13	-
Curvularia		<13	-	Curvularia		<13	-	Curvularia		<13	-
Memnoniella		<13	-	Memnoniella		<13	-	Memnoniella		<13	-
Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts		<13	-
Nigrospora		<13	-	Nigrospora		<13	-	Nigrospora		<13	-
Oidium		<13	-	Oidium		<13	-	Oidium		<13	-
Pithomyces		<13	-	Pithomyces		<13	-	Pithomyces		<13	-
Rusts		<13	-	Rusts		<13	-	Rusts		<13	-
Stachybotrys		<13	-	Stachybotrys		<13	-	Stachybotrys		<13	-
Stemphylium		<13	-	Stemphylium		<13	-	Stemphylium		<13	-
Torula		<13	-	Torula		<13	-	Torula		<13	-
Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-
Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-
Total Fungal Spores	4	53	100	Total Fungal Spores	8	107	100	Total Fungal Spores	2	27	100

The analysis contained in this report applies only to the samples tested and may not be indicative of the area tested due to the sampling process. EMC Labs, Inc. is a participant in the AIHA EMPAT Program for fungi. This report is for the exclusive use of the

addressed client and will not be reproduced wholly or in part without written permission.

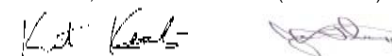
Debris Rating Scale: 0=Blank; 1=1-20% Occluded; 2=20-50% Occluded; 3=50-75% Occluded; 4=75-95% Occluded; 5=95-100% Occluded (Unreadable)

page 1 of 4

One hundred percent of the trace is analyzed

EM AOC form Rev. 4/01/10

Analytical Sensitivity (Spores/m³) is calculated by multiplying the LOD and 1000 divided by the volume of air.



EMC Labs, Inc. Fungal Spore Count on Spore Trap Media

Client: CESA 10
725 W. Park Ave
Chippewa Falls, WI 54729

Client Project ID: NewRichmond.140513
Client Job Number: NewRichmond.140513
Client P.O.:
Sample(s) Submitted By: Client

EMC Lab# M20689

Date Submitted: 05/19/14
Date of Analysis: 05/20/14
Date Reported: 05/20/14

EMC Method# EMO1/1

Client Sample ID: NR.04 EMC Sample Number: M20689-4 Sample Collection Date: 05/13/14 Sample Location: Room 110 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 1				Client Sample ID: NR.05 EMC Sample Number: M20689-5 Sample Collection Date: 05/13/14 Sample Location: Hallway Outside Room 108 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 2				Client Sample ID: NR.06 EMC Sample Number: M20689-6 Sample Collection Date: 05/13/14 Sample Location: Head Start Room 108 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 2			
Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage
Pollen		<13		Pollen	1	13		Pollen		<13	
Mycelial Fragments		<13		Mycelial Fragments	2	27		Mycelial Fragments		<13	
Limit of Detection	1	13		Limit of Detection	1	13		Limit of Detection	1	13	
Alternaria		<13	-	Alternaria		<13	-	Alternaria		<13	-
Arthrinium		<13	-	Arthrinium		<13	-	Arthrinium		<13	-
Ascospores	1	13	33	Ascospores	1	13	17	Ascospores	1	13	33
Aspergillus/Penicilium		<13	-	Aspergillus/Penicilium		<13	-	Aspergillus/Penicilium		<13	-
Basidiospore		<13	-	Basidiospore	2	27	33	Basidiospore		<13	-
Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-
Chaetomium		<13	-	Chaetomium		<13	-	Chaetomium		<13	-
Cladosporium	2	27	67	Cladosporium	3	40	50	Cladosporium	1	13	34
Curvularia		<13	-	Curvularia		<13	-	Curvularia		<13	-
Memnoniella		<13	-	Memnoniella		<13	-	Memnoniella		<13	-
Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts	1	13	33
Nigrospora		<13	-	Nigrospora		<13	-	Nigrospora		<13	-
Oidium		<13	-	Oidium		<13	-	Oidium		<13	-
Pithomyces		<13	-	Pithomyces		<13	-	Pithomyces		<13	-
Rusts		<13	-	Rusts		<13	-	Rusts		<13	-
Stachybotrys		<13	-	Stachybotrys		<13	-	Stachybotrys		<13	-
Stemphylium		<13	-	Stemphylium		<13	-	Stemphylium		<13	-
Torula		<13	-	Torula		<13	-	Torula		<13	-
Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-
Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-
Total Fungal Spores	3	40	100	Total Fungal Spores	6	80	100	Total Fungal Spores	3	40	100

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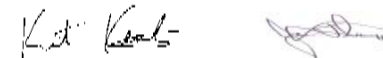
Debris Rating Scale: 0=Blank; 1=1-20% Occluded; 2=20-50% Occluded; 3=50-75% Occluded; 4=75-95% Occluded; 5=95-100% Occluded (Unreadable)

page 2 of 4

One hundred percent of the trace is analyzed

EM AOC form Rev. 4/01/10

Analytical Sensitivity (Spores/m³) is calculated by multiplying the LOD and 1000 divided by the volume of air.



EMC Labs, Inc. Fungal Spore Count on Spore Trap Media

Client: CESA 10
725 W. Park Ave
Chippewa Falls, WI 54729

Client Project ID: NewRichmond.140513
Client Job Number: NewRichmond.140513
Client P.O.:
Sample(s) Submitted By: Client

EMC Lab# M20689
Date Submitted: 05/19/14
Date of Analysis: 05/20/14
Date Reported: 05/20/14
EMC Method# EMO1/1

Client Sample ID: NR.07 EMC Sample Number: M20689-7 Sample Collection Date: 05/13/14 Sample Location: Room 109 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 2				Client Sample ID: NR.08 EMC Sample Number: M20689-8 Sample Collection Date: 05/13/14 Sample Location: Community Commons Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 1				Client Sample ID: NR.Outdoor EMC Sample Number: M20689-9 Sample Collection Date: 05/13/14 Sample Location: Outside Door #2 Volume (Liters): 75 Analyst: JT Debris Rating for Sample: 2			
Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage	Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage
Pollen		<13		Pollen		<13		Pollen	233	3107	
Mycelial Fragments	3	40		Mycelial Fragments	1	13		Mycelial Fragments		<13	
Limit of Detection	1	13		Limit of Detection	1	13		Limit of Detection	1	13	
Alternaria		<13	-	Alternaria		<13	-	Alternaria	4	53	3
Arthrinium		<13	-	Arthrinium		<13	-	Arthrinium		<13	-
Ascospores	1	13	7	Ascospores		<13	-	Ascospores	11	147	9
Aspergillus/Penicillium		<13	-	Aspergillus/Penicillium		<13	-	Aspergillus/Penicillium		<13	-
Basidiospore	4	53	27	Basidiospore		<13	-	Basidiospore		<13	-
Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-	Bipolaris/Drechslera		<13	-
Chaetomium		<13	-	Chaetomium		<13	-	Chaetomium		<13	-
Cladosporium	10	133	66	Cladosporium	3	40	100	Cladosporium	92	1227	78
Curvularia		<13	-	Curvularia		<13	-	Curvularia		<13	-
Memnoniella		<13	-	Memnoniella		<13	-	Memnoniella		<13	-
Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts		<13	-	Myxomycetes/Smuts	12	160	10
Nigrospora		<13	-	Nigrospora		<13	-	Nigrospora		<13	-
Oidium		<13	-	Oidium		<13	-	Oidium		<13	-
Pithomyces		<13	-	Pithomyces		<13	-	Pithomyces		<13	-
Rusts		<13	-	Rusts		<13	-	Rusts		<13	-
Stachybotrys		<13	-	Stachybotrys		<13	-	Stachybotrys		<13	-
Stemphylium		<13	-	Stemphylium		<13	-	Stemphylium		<13	-
Torula		<13	-	Torula		<13	-	Torula		<13	-
Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-	Ulocladium/Peronospora		<13	-
Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-	Unidentifiable Spores		<13	-
Total Fungal Spores	15	200	100	Total Fungal Spores	3	40	100	Total Fungal Spores	119	1587	100

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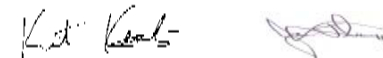
Debris Rating Scale: 0=Blank; 1=1-20% Occluded; 2=20-50% Occluded; 3=50-75% Occluded; 4=75-95% Occluded; 5=95-100% Occluded (Unreadable)

page 3 of 4

One hundred percent of the trace is analyzed

EM AOC form Rev. 4/01/10

Analytical Sensitivity (Spores/m³) is calculated by multiplying the LOD and 1000 divided by the volume of air.



EMC Labs, Inc. *Fungal Spore Count on Spore Trap Media*

Client: CESA 10
725 W. Park Ave
Chippewa Falls, WI 54729

Client Project ID: NewRichmond.140513
Client Job Number: NewRichmond.140513
Client P.O.:
Sample(s) Submitted By: Client

EMC Lab# M20689
Date Submitted: 05/19/14
Date of Analysis: 05/20/14
Date Reported: 05/20/14
EMC Method# EMO1/1

Client Sample ID: NR.FB.140513			
EMC Sample Number: M20689-10			
Sample Collection Date: 05/13/14			
Sample Location: Filed Blank			
Volume (Liters): 75			
Analyst: JT			
Debris Rating for Sample: 0			
Spore Type or Genus	600X Mag. Counts	Calculated Counts/m ³	Approx. Calc. Percentage
Pollen		<13	
Mycelial Fragments		<13	
<i>Limit of Detection</i>	<i>1</i>	<i>13</i>	
Alternaria		<13	-
Arthrinium		<13	-
Ascospores		<13	-
Aspergillus/Penicilium		<13	-
Basidiospore		<13	-
Bipolaris/Drechslera		<13	-
Chaetomium		<13	-
Cladosporium		<13	-
Curvularia		<13	-
Memnoniella		<13	-
Myxomycetes/Smuts		<13	-
Nigrospora		<13	-
Oidium		<13	-
Pithomyces		<13	-
Rusts		<13	-
Stachybotrys		<13	-
Stemphylium		<13	-
Torula		<13	-
Ulocladium/Peronospora		<13	-
Unidentifiable Spores		<13	-
Total Fungal Spores	0	0	0

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addressed client and will not be reproduced wholly or in part without written permission.

Debris Rating Scale: 0=Blank; 1=1-20% Occluded; 2=20-50% Occluded; 3=50-75% Occluded; 4=75-95% Occluded; 5=95-100% Occluded (Unreadable)

page 4 of 4

One hundred percent of the trace is analyzed

EM AOC form Rev. 4/01/10

Analytical Sensitivity (Spores/m³) is calculated by multiplying the LOD and 1000 divided by the volume of air.



CHAIN OF CUSTODY

EMC Labs, Inc.
 9830 S. 51ST St., Ste B-109
 Phoenix, AZ 85044
 (800) 362-3373 Fax (480) 893-1726

LAB#: <u>M20689</u>
TAT: <u>1 day</u>
Rec'd: <u>5/19/14</u>
EMC USE ONLY

COMPANY NAME: CESA 10
725 W. Park Ave
Chippewa Falls, WI 54729

CONTACT: Luke Krumenauer **SCAN COC**
Phone/Fax: Phone: (715) 720-2070 Fax: (715) 828-9572
Email: Lkrumenauer@cesa10.k12.wi.us

BILL TO: _____ (If Different Location)

Now Accepting: **VISA – MASTERCARD**

Price Quoted: \$ _____ / Sample \$ _____ / Layers

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] (1-Day) [2-Day] [3-Day] [5-Day] [6-10 Day]

****Prior confirmation of turnaround time is required

****Additional charges for rush analysis (please call marketing department for pricing details)

****Laboratory analysis may be subject to delay if credit terms are not met

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [AOC, W-D, Bulk, Swab, Tape]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]

(If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: NewRichmond.140513

P.O. Number: _____ **Project Number: (Same as project name)**

EMC SAMPLE #	CLIENT SAMPLE #	DATE & TIME SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
<u>1</u>	NR.01	5/13/14; 12:14PM	Room 111	<u>N</u>	12:14	12:19p m	15 lpm
<u>2</u>	NR.02	5/13/14; 12:21Pm	Room 106	<u>Y N</u>	12:21	12:26p m	15 lpm
<u>3</u>	NR.03	5/13/14; 12:28	Room 107	<u>Y N</u>	12:28	12:33p m	15 lpm
<u>4</u>	NR.04	5/13/14; 12:35	Room 110	<u>Y N</u>	12:35	12:40p m	15 lpm
<u>5</u>	NR.05	5/13/14; 12:41pm	Hallway Outside Room 108	<u>Y N</u>	12:41	12:46p m	15 lpm
<u>6</u>	NR.06	5/13/14; 12:48pm	Head Start Room 108	<u>Y N</u>	12:48	12:53p m	15 lpm
<u>7</u>	NR.07	5/13/14; 12:55pm	Room 109	<u>Y N</u>	12:55	1:00pm	15 lpm
<u>8</u>	NR.08	5/13/14; 12:55pm	Community Commons	<u>Y N</u>	12:55	1:00pm	15 lpm
<u>9</u>	NR. Outdoor	5/13/14; 1:05pm	Outside Door #2	<u>Y N</u>	1:05p m	1:10pm	15 lpm
<u>10</u>	NR.FB.140513	NA	Field Blank	<u>Y N</u>	0	0	0

SPECIAL INSTRUCTIONS: Email COC with results to: lkrumenauer@cesa10.k12.wi.us ; Drywall and/or Joint Compound samples must be analyzed by Layers and a Composite sample as well; Additionally, point count if results are 0% < X < 1% (between zero and one percent asbestos).

Sample Collector: (Print) Luke Krumenauer (Signature) [Signature]

Relinquished by: [Signature] Date/Time: 5/19/14 Received by: [Signature] Date/Time: 5/19/14
 Relinquished by: [Signature] Date/Time: 5/19/14 Received by: [Signature] Date/Time: 5/19/14
 Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____

*** In the event of any dispute between the above parties for these services or otherwise, parties agree that jurisdiction and venue will be in Phoenix, Arizona and prevailing party will be entitled to attorney's fees and court costs.