RPF Environmental
TESTING & CONSULTING SERVICES

Hazardous Materials Inspection & Assessment
Asbestos, Mold, Lead Paint, Radon, PCBs
Air Quality Testing and Investigations
Industrial Hygiene, Safety & Training

April 27, 2023

Thomas Touseau
Facilities Director
SAU 26, Merrimack School District
36 McElwain Street
Merrimack, NH 03154

Re: Indoor Air Quality Testing
SAU 26; Office Building Basement
RPF File 230073

Dear Mr. Touseau,

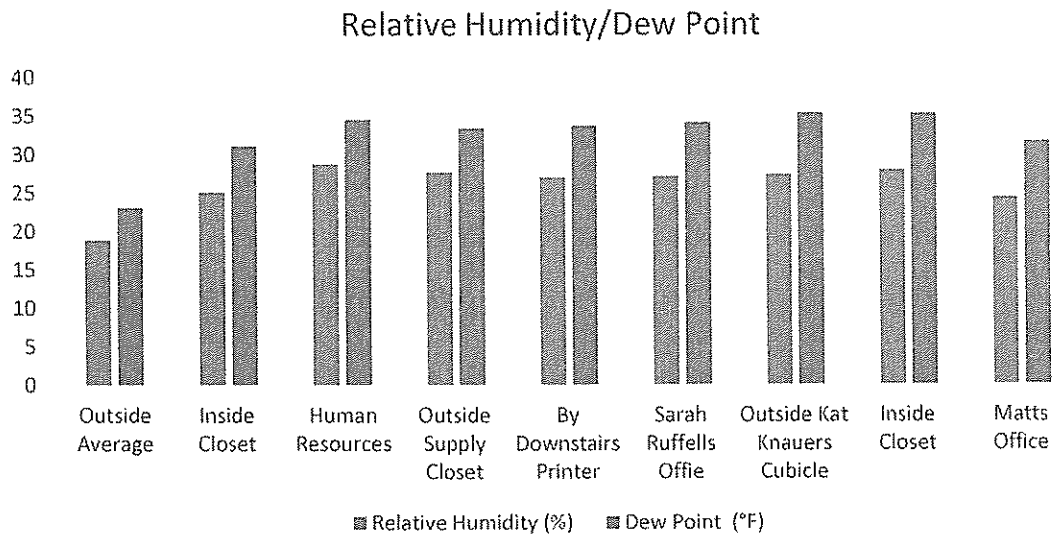
In accordance with our scope of work dated February 7, 2023, RPF Environmental (RPF) completed indoor air quality (IAQ) testing at the SAU office basement located at 36 McElwain Street located in Merrimack, NH. As part of this preliminary survey, testing was completed for several common IAQ parameters including temperature, relative humidity, dew point and airborne fungal spores and particulates. The survey was completed on February 14, 2023, by Jaylyn Acres.

The SAU 26 office building is a 1 story structure with an attic and a basement. The portions of the building that were included as areas of focus for the survey were Matt's office and the basement closets.

RESULTS

Temperature, Relative Humidity and Dew Point

Temperature, relative humidity and dew point are all interrelated, and all play a role in the interior environment. Measurements were taken for all three on the day of testing and are presented in the following chart with actual testing locations and results included in appendix A.



Temperature will affect the occupant's perception of IAQ based on employee comfort levels, effect of drafts or airflow, and humidity levels in a building. In most cases, simple adjustments to thermostats and direction of airflow from registers can improve perceived IAQ. As a reference, the temperatures recommended by ASHRAE for general office space ranges from approximately 68° to 75° Fahrenheit in the winter, and from approximately 75° to 80° Fahrenheit in the summer. Temperature readings at all indoor locations tested were documented in the range of 72° to 75.2° Fahrenheit.

The amount of water vapor that can be contained in the air varies by the temperature and pressure of the air. The ratio of water vapor in the air to the maximum amount of water vapor the air can hold at a given temperature is expressed as relative humidity (RH). The recommended RH comfort range is 35% to 55%. In general, for buildings, the presence of excessive moisture can lead to mold growth and other biological contaminants. Low RH, common for buildings in New England during colder months, may contribute to irritated mucous membranes, dry eyes and sinus discomfort while high relative humidity, common in summer, may cause discomfort, as it hinders the body's use of perspiration as a cooling mechanism. RH levels at the indoor locations tested during this survey were below the generally accepted comfort range.

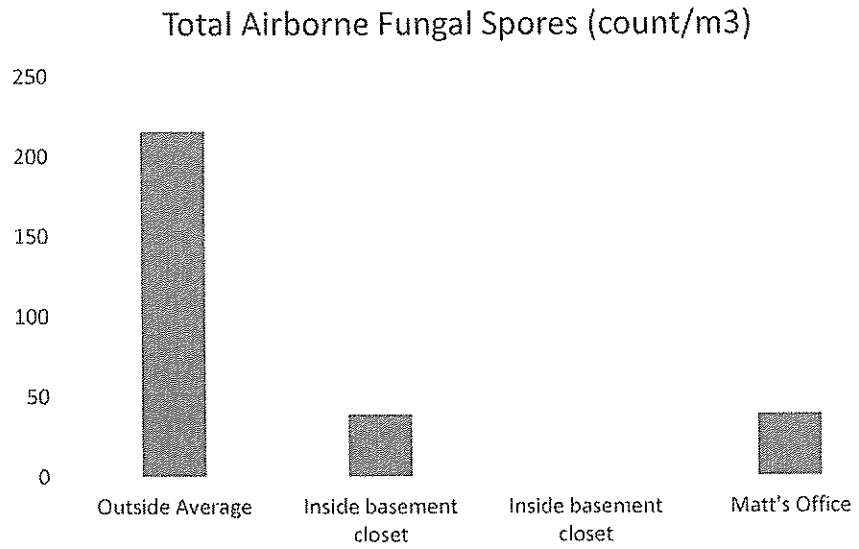
Dew point is related to humidity and is the temperature below which water vapor may start to condense to form water droplets on a surface. If dew forms on interior building materials, the material may become wet, and subsequent fungal growth can occur. For instance, an uninsulated cold-water pipe may form condensation when the temperature of the metal surface is colder than the environmental dew point, and drip onto surfaces causing them to become wet. Dew point measurements on the day of testing ranged from 31.1° to 35.3° Fahrenheit. Based on these results, the interior temperature readings were all above the Dew Point readings. The results and testing locations are presented in Appendix A.

Microscopic Screen and Fungal Identification-Airborne Fungal Spores

There are currently no regulatory methods or exposure limits for airborne spores or fungal metabolites for indoor air quality. General guidelines indicate that the indoor and outdoor concentrations should be similar for unaffected buildings. However, elevated concentrations of fungi and their various metabolic by-products can lead to allergic or sensitization reactions, toxic reactions to metabolites, and infections in susceptible populations of people. For those buildings with symptoms, inside airborne concentrations are typically elevated above the outdoor concentrations. In addition, the species documented inside and outside of the structure should be similar and the identification of species found in the indoor air sample(s) and not found in the outdoor air sample(s) would be indicative of the building as a likely source of contamination.

Area air samples were collected from inside the basement closet and Matt's Office on the first floor. Two area air samples were also collected outside as controls. The requisite analytical field blank was also submitted, for a total of six (6) area air samples. The concentrations of airborne fungal spores and each testing location are presented below with actual laboratory analysis included in Appendix A of this report.

Sample ID	Location	Results
021423-A01 & 021423-A05	Outside Control Samples	Concentrations of Ascospores, Basidiospores, and Cladosporium spores present.
021423-A02	Basement, inside of closet	Similar concentrations of Cladosporium spores when compared to the outside controls.
021423-A03	Basement, inside of closet	No Spores Detected
021423-A04	First floor, Matt's Office	Similar concentrations of Ascospores spores when compared to the outside controls.



The concentration of total airborne fungal spores in each indoor sample was less than the concentration of total airborne fungal spores in the outdoor control samples. In addition, all individual types of spores detected were consistent with those outside and at lower concentrations than outside. RPF recommends HEPA vacuuming as part of routine maintenance to reduce indoor spores and to reduce dust in general. Many spores are carried indoors from the outdoors where we know spores are present.

Continual inspections for water damaged building materials and fungal growth are recommended as part of routine maintenance. RPF recommends removing water damaged building materials which, at any point, were wet for greater than 24 to 72 hours.

PRELIMINARY OBSERVATIONS AND COMMENTS

In addition to the findings and recommendations provided above, RPF opinions related to the IAQ within the areas of the facility tested based on the results and our observations are presented below.

- Overall, the readings collected inside the building for each IAQ parameter tested during this survey were either within or below their respective standard and/or comfort range, except for Dew Point and RH. The RH levels in the building were below the generally accepted comfort range of 35 to 55%, which is not uncommon during colder months in New England. On the day of the testing, the RH levels outside of the building were also below the generally accepted comfort range and could have contributed to the low RH levels in the building. Low RH levels can contribute to irritated mucous membranes, dry eyes and sinus discomfort. The RH levels will naturally increase with the coming warmer weather but, in the meantime, humidifiers can be used to alleviate symptoms. However, it should be noted that if not properly cleaned and maintained, these units can become sources

of future fungal growth. The RH levels will naturally decrease with the coming colder weather but, in the meantime, dehumidifiers can be used to decrease moisture in the air. However, it should be noted that if not properly cleaned and maintained, these units can become sources of future fungal growth.

- RPF recommends that building occupants document and track concerns of indoor air quality issues. Occupants should be encouraged to record perceived IAQ discomforts in an effort to track potential concerns and aid in diagnosing future problems. RPF also recommends periodic inspection of areas in and around occupant concern areas throughout the year.

- Looking at the airborne fungal spore samples collected in the building, the total fungal spore concentrations of each of these samples were below the concentration present in the outside control. Comparing the fungal species to the outside control samples, the samples collected inside the building had similar fungal species and concentrations well below outside side controls.

- Visible fungal growth, if identified in the future, should be removed by qualified personnel using appropriate methods in accordance with current industry standards and guidelines. Although no visible indicators of moisture intrusion were observed at the time of the RPF testing, all sources of water or moisture incursion onto building materials must be addressed, controlled and/or rectified or fungal growth will occur. Work plan development and post remediation verification by a third-party industrial hygiene firm, independent from the remediation contractor, is also recommended as standard of care. Regardless of the level of effort expended to remediate fungal growth, the potential for fungal growth to return exists if the building materials were to become wet again or be subject to elevated humidity levels.

  Prior to any demolition or renovation of building materials, the areas of impact must be inspected for presence of asbestos by a qualified asbestos inspector pursuant to various state and federal regulations. This inspection should also address other items that could be impacted by work resulting in contamination or health risks, including but not limited to lead paint, mercury containing products, and other common hazardous building materials.

If you have any questions or require additional information on any sample results or recommendations, please feel free to contact our office. Thank you for utilizing the services of RPF for this important project.

Sincerely,
RPF Environmental

Kara Forsythe, SMS
AHERA Compliance Manager

Enclosures: Appendix A: Testing Results
Appendix B: General Fungal Descriptions
Appendix C: Limitations and Methodologies

230073 SAU Office Mold Rpt

APPENDIX A

Direct Exam: Spore Trap Analysis

SAI Method B-SOP-003

Lab ID # 173190

Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Kara Forsythe

Lab Order ID: 10016554
Analysis: STA
Date Received: 02/16/2023

Project: Mold IAQ SAU 26 Office Building Basement

Sample ID	021423-A01			021423-A02			021423-A03			EXTERIOR		
Lab Sample ID	10016554_0001			10016554_0002			10016554_0003			AVERAGE		
Description	Outside			Inside closet			Inside closet			N/A		
Lab Notes										N/A		
Volume (L)	150			150			150			N/A		
Analytical Sensitivity (counts/m³)	39			39			39			N/A		
IDENTIFICATION	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total
Ascospores	4	157	44.4%				No Spores Detected			2	78.5	40.0%
Basidiospores	4	157	44.4%							3	118	60.0%
Cladosporium	1	39.2	11.1%	1	39.2	100.%				<1	19.6	N/A
TOTAL	9	353	100.%	1	39.2	100.%	<1	<39.2	100.%	5	216	100.%
Non-Cellulosic Fibers	-	-	-	-	-	-	-	-	-	-	-	-
Hyphal Fragments	-	-	-	-	-	-	-	-	-	-	19.6	-
Insect Parts	-	-	-	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-	-	-	-
Skin Cell % of Total Debris		20-40%			60-80%			60-80%			N/A	
Total Debris in Background		20-40%			60-80%			60-80%			N/A	

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA EMPAT program for fungi. EMPAT Laboratory ID: 173190 Reporting Limit equals Analytical Sensitivity. Unless indicated, areas and volumes were provided by the customer

Palmer Hines (6)

Analyst

Approved Signatory

Direct Exam: Spore Trap Analysis

SAI Method B-SOP-003

Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Kara Forsythe

Lab Order ID: 10016554
Analysis: STA
Date Received: 02/16/2023

Project: Mold IAQ SAU 26 Office Building Basement

Sample ID	021423-A04			021423-A05			021423-A06			EXTERIOR		
Lab Sample ID	10016554_0004			10016554_0005			10016554_0006			AVERAGE		
Description	Matt's office			Outside			Blank			N/A		
Lab Notes										N/A		
Volume (L)	150			150			0			N/A		
Analytical Sensitivity (counts/m³)	39			39			1.0			N/A		
IDENTIFICATION	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total	Raw Count	Concentration (counts/m³)	% Of Total
Ascospores	1	39.2	100.%				No Spores Detected			2	78.5	40.0%
Basidiospores				2	78.4	100.%				3	118	60.0%
Cladosporium										<1	19.6	N/A
TOTAL	1	39.2	100.%	2	78.4	100.%	<1	<1.00	100.%	5	216	100.%
Non-Cellulosic Fibers	-	-	-	-	-	-	-	-	-	-	-	-
Hyphal Fragments	-	-	-	1	39.2	-	-	-	-	-	19.6	-
Insect Parts	-	-	-	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-	-	-	-
Skin Cell % of Total Debris		80-100%			20-40%			0%			N/A	
Total Debris in Background		80-100%			20-40%			0%			N/A	

Palmer Hines (6)

Analyst

Approved Signatory

APPENDIX B

Regulatory standards for the testing for and exposure limits for airborne mold, and fungal spores have not been established. The presence of fungi and mold is common in many environments with over 1,000 fairly common species of mold, many we are routinely in contact with are not hazardous under normal conditions.

Ascospore

Ascospores are a general category of spores that have been produced by means of sexual reproduction (in a sack-like structure called an ascus). These are ubiquitous saprobes and plant pathogens, many of which are easily identifiable (i.e. *Chaetomium*). This group contains potential opportunistic pathogens, toxin producers, and allergens depending on the genus and species. A rupture in the top portion of the ascus disperses the spores during rain or in times of high humidity. Some asexual fungi, such as *Aspergillus* and *Penicillium* can become sexual under specific conditions, these are then considered ascomycetes and are given distinct names. The presence of these sports normally is associated with indoor air infiltration.

Basidiospore

Basidiospores are a general category of sexual spores that have been released from the basidium of a fungus. A ubiquitous type I & III allergen, saprobe and plant pathogen, mainly found in gardens, forests, and woodlands. Spores disseminate during rain or in times of high humidity. Rarely opportunistic pathogens, Basidiospores may produce toxins, including amanitins, monomethyl-hydrazine, muscarine, ibotenic acid, and psilocybin. Basidiospores are an agent of dry wood rot, which may destroy the structure wood of buildings.

Cladosporium

Cladosporium is widely distributed in air and rotten organic material. *C. herbarum* is the most frequently found species in outdoor air in temperate climates. It is often found indoors, usually in lesser numbers than outdoors. The dry conidia become easily airborne and are transported over long distances. This fungus is often encountered in dirty refrigerators, especially in reservoirs where condensation is collected. It can easily be seen on moist window frames covering the whole painted area with a velvety olive-green layer. *Cladosporium* often discolors interior paint, paper, or textiles stored under humid conditions. Houses with poor ventilation, houses with thatched straw roofs and houses situated in damp environments may have heavy concentrations of *Cladosporium*, which will be easily expressed when domestic mold is analyzed. It is commonly found on the surface of fiberglass duct liner in the interior of supply ducts. It is also found naturally on dead & woody plants, food, straw, soils, paint, and textiles. The ability to sporulate heavily, ease of dispersal, and buoyant spores makes this fungus the most important fungal airway allergen; and together with *Alternaria*, it commonly causes asthma and hay fever in the Western hemisphere. More than 500 species have been identified. A few species of this genus cause disease, which range from phaeohyphomycosis, a group of mycotic infections characterized by the presence of dematacеous septate hyphae. Infections of the eyes and skin by black fungi (also classified as phaeohyphomycosis), and chromoblastomycosis, chronic localized infection of the skin and subcutaneous tissue that follows the traumatic implantation of the etiologic agent are also caused by this fungus. Chromoblastomycosis lesions are verrucoid, ulcerated, and crusted. Skin abscesses, mycotic keratitis and pulmonary fungus ball have been recorded in immunocompromised patients. It may also cause corneal infections and mycetoma, characterized by localized infections that involve cutaneous and subcutaneous tissue, fascia, and

bone consisting of abscesses, granulomata, and draining sinuses, usually in immunocompromised hosts. *Cladosporium* produces the toxins cladosporin and emodin, but neither of these is very toxic. Fungal colonies are powdery or velvety olive-green to olive-brown.

Information Source: Aerotech Laboratories Inc., 1501 W. Knudsen Drive, Phoenix, AZ, 85027; Microbial Fungi Glossary; www.aerotechlabs.com and EMSL Analytical, 107 Haddon Avenue, Westmont, NJ 08108; Fungi Summary; www.emsl.com

APPENDIX C

LIMITATIONS

1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.

2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.

3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.

4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.

5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm^2 be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

6. Air testing is to be considered a "snap shot" of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.

7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.

8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.

9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.

10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client's Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client's Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.

11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections

of the work area to determine completeness of work prior to air clearance testing by RPF.

12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.

13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.

14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.

15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.

16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.

17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.

18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.

METHODOLOGY

The results of the air quality testing are representative of the conditions present on the day of the testing and should be considered a snap shot of conditions within the facility. Additional rounds of testing may be required to obtain a statistically valid set of data representative of a variety of conditions which may be present within the facility.

Each of the methods used is discussed separately below.

Relative Humidity, Temperature, and Dew Point

Direct reading determinations for carbon dioxide (CO_2), carbon monoxide (CO), relative humidity (RH), temperature (T), and dew point were completed using a TSI IAQ-Calc Indoor Air Quality Monitor. The TSI IAQ-Calc is calibrated annually through the manufacturer.

Microscopic Screen and Fungal Identification-Airborne Fungal Spores and Particulates

Sampling for airborne fungal spores and particulates was completed using a hi-volume air-sampling pump calibrated at a rate of approximately 15 liters of air per minute (lpm) using Zefon Air-O-Cell spore trap cassettes. All samples were collected at approximately three to five feet above the ground for a period of ten minutes per cassette per location. The Air-O-Cell cassette sampling and analysis method provides for the identification and quantification of many, but not all, genus of fungal spores that may be present in the air on the day of the testing and does not determine the viability of fungi spores but rather a total count of spores, both viable and non-viable. At the completion of the sampling, the samples were sealed, labeled, and shipped under chain of custody to Scientific Analytical Institute (SAI) of Greensboro, NC for microscopic analysis. This method will detect many but not all fungal spores present in the air on the day of the testing. SAI is accredited by the AIHA for analysis of microbiological samples. Additional rounds of testing may be required to fully document fungal ecology due to high variability of spore concentrations.