



Marsh Grammar School – Rooms 107, 216, 143

Indoor Air Quality Assessment

Methuen Public Schools

9 Branch Street, Methuen, MA 01844

Prepared by:

SLR International Corporation

2 Commerce Drive, Suite 110, Bedford, New Hampshire, 03110

SLR Project No.: 144.021306.00001

December 4, 2024

Limitations

The services described in this work product were performed in accordance with generally accepted professional consulting principles and practices. No other representations or warranties, expressed or implied, are made. These services were performed consistent with our agreement with our client. This work product is intended solely for the use and information of our client unless otherwise noted. Any reliance on this work product by a third party is at such party's sole risk.

Opinions and recommendations contained in this work product are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this work product.

No investigation can be thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, practical limitations, and cost of the work performed.

Environmental conditions that are not apparent may exist at the site. Our professional opinions are based in part on interpretation of data from a limited number of discrete sampling locations and therefore may not be representative of the actual overall site environmental conditions.

The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the site, analysis of the data, and/or reevaluation of the findings, observations, and conclusions in the work product.

This work product presents professional opinions and findings of a scientific and technical nature. The work product shall not be construed to offer legal opinion or representations as to the requirements of, nor the compliance with, environmental laws rules, regulations, or policies of federal, state or local governmental agencies.

This report, which presents our findings, shall not be used as a bid document/work plan, or in place of a work plan, for conducting any abatement activities.

The observations described in this report were made under the conditions stated herein. The conclusions presented in the reports were based solely upon the services described therein and not on scientific tasks or procedures beyond the proposed scope of services.

The conclusions and recommendations contained in this report are based on environmental sampling and visual observations (not including inaccessible areas) and were arrived at in accordance with generally accepted standards of industrial hygiene practice. No other warranty, express or implied, is made.

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

Only the areas mentioned within this report were assessed.



Indoor Air Quality Assessment of Marsh Grammar School – Rooms 107, 216, 143

Prepared for:

Methuen Public Schools
9 Branch Street, Methuen, MA 01844

This document has been prepared by SLR International Corporation (SLR). The material and data in this report were prepared under the supervision and direction of the undersigned.

Sincerely,

SLR International Corporation



Ryan D. Rouillard, M.S., IH, CRMI
Principal, Building Sciences



Keith Allard, CHST
Associate Building Sciences Specialist



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Appendices

Appendix A Fungal Analytical Laboratory Report and Chains of Custody



Acronyms and Abbreviations

| | |
|-------|---|
| ACM | Asbestos Containing Material |
| AFFF | aqueous film-forming foam |
| ASTM | American Society for Testing and Materials |
| bgs | below ground surface |
| BTEX | benzene, toluene, ethylbenzene, and xylenes |
| CAP | Corrective Action Plan |
| CFR | Code of Federal Regulations |
| COC | chain of custody |
| cy | cubic yards |
| LBP | Lead Based Paint |
| MDL | method detection limit |
| µg/Kg | microgram per kilogram |
| µg/L | microgram per liter |
| mg/Kg | milligrams per kilogram |
| mg/L | milligrams per liter |
| MRL | method reporting limit |
| ND | not detected |
| NIMS | National Incident Management System |
| PCM | Phase Contrast Microscopy |
| pfc | per cubic feet |
| PID | photoionization detector |
| PLM | Polarized Light Microscopy |
| PPE | personal protective equipment |
| ppm | parts per million |
| QA | quality assurance |
| QAR | quality assurance review |
| QC | quality control |
| RCRA | Resource Conservation and Recovery Act |
| SLR | SLR International Corporation |
| TCLP | toxicity characteristics leaching procedure |
| TEM | Transmission electron microscopy |
| µg/L | micrograms per liter |
| µg/kg | micrograms per kilogram |
| USEPA | U.S. Environmental Protection Agency |



1.0 Introduction

SLR International Corporation (SLR) is pleased to present the results of the Indoor Air Quality Assessment conducted at the Marsh Grammar School (Site) on November 29, 2024. Mr. Bruce Stella accompanied SLR throughout the facility and provided background information. More specifically, only Rooms 107, 216, and 143 (Project Areas) were assessed.

1.1 Scope of Services

The scope of services for this project included:

- General IAQ indicator measurements that include carbon dioxide (CO₂), temperature (°F), and relative humidity (%) at indoor and outdoor locations.
- Collection of mold-in-air samples for lab analysis.
- Observe conditions (*i.e.*, discoloration, water-damage, odors, etc.)
- Preparation of a written report describing sampling methods and the results of the limited IAQ assessment.

1.2 Standard of Care

This IAQ testing was conducted at the Site and was based on information provided to SLR relating to building conditions and occupant complaints. SLR did not attempt to identify every potential exposure or hazard present in the rooms of the subject building.

This testing was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results expressed in this report are based on conditions observed during our investigation. Many factors, such as weather conditions, building occupancy, ventilation patterns, and seasonal variations in fungal/bacterial concentrations or local sources of volatile chemicals, can affect the conditions observed. The information contained in this report should not be relied upon to represent conditions that existed prior to this assessment. SLR does not warrant the services of regulatory agencies, laboratories, or other third parties supplying information that may have been used in the preparation of this report.

1.3 Reliance

The report has been prepared on behalf of and exclusively for use by the Methuen Public Schools for specific application to its project, as discussed. No other individual or entity may rely on this report without written permission of SLR and the Methuen Public Schools. Reliance on this report by the Methuen Public Schools and all authorized parties will be subject to the key understandings and limitations stated in the proposal, this report, and SLR's Agreement for Services. The limitation of liability defined in SLR's Agreement for Services is the aggregate limit of SLR's liability to the Methuen Public Schools and all relying parties.



2.0 Field Activities

SLR's November 29, 2024 inspection of the Site's interior, by reasonable means, focused on the client-reported complaints within the Project Areas. Mr. Bruce Stella provided background information of the Project Areas, access to the various building locations to be assessed and building maintenance work. SLR conducted sampling and measurements within the Site.

2.1 Temperature, Relative Humidity, and Carbon Dioxide

Survey measurements were made for ventilation and general IAQ indicators (CO₂, temperature, and relative humidity). The air quality measurements were taken using a digital AZ 7755 Temp. RH. CO₂ meter and was calibrated prior to use.

According to the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 62.1-2022, Ventilation for Acceptable Indoor Air Quality, the indoor to outdoor differential concentrations of CO₂ should not be greater than 700 parts per million (ppm).

Indoor air temperature and relative humidity are physical conditions important to the perception of comfort. ASHRAE Standard 55-2017, Thermal Environmental Conditions for Human Occupancy, recommends a temperature range between 68- and 82-degrees Fahrenheit (°F) with relative humidity levels ranging between 30 and 50 percent for persons working at sedentary to moderately elevated physical activity levels.

2.2 Mold Sampling

No state or federal exposure limits have been established for fungal aerosols. Currently, no regulatory standards or medically based threshold limit or dose-response relationships have been established for exposure to airborne or surface concentrations of mold spores. SLR relies upon experience, professional judgment, current scientific literature, guidelines, and recommendations made by professional organizations and experts, and statistical methods in interpreting mold sampling results.

High variability in airborne fungal spore concentrations can exist in different geographic locations, during different seasons and weather patterns, and over the course of a given day. As a general rule, indoor air fungal spore concentrations in a heating, ventilating, and air-conditioning (HVAC) supplied building are typically less than, but qualitatively similar to, fungal spore concentrations found in the outside environment.

The total fungal air samples were collected on Air-O-Cell air cassettes. The Air-O-Cell cassette is a unique sampling device designed for the rapid collection and analysis of a wide range of airborne particles including fungal spores. A total of five (5) Air-O-Cell samples were collected; one (1) from the outdoors and four (4) from the interior (1 from each Room and 1 from a common hallway).

Samples were shipped under chain of custody to EMSL Analytical, Inc. (EMSL) for microscopic analysis. EMSL is accredited by the AIHA® Laboratory Accreditation Programs, LLC under the Environmental Microbiology Laboratory Accreditation Program. Samples are analyzed via Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391). The results are reported as total amount seen, meaning they include both viable and nonviable fungal spores. Unfortunately, this technique does not allow for the differentiation between *Aspergillus* and *Penicillium* spores because they are morphologically identical. Additionally, the technique does not allow for cultivation or the identification of spores to the species level, except in a few cases. The laboratory analytical report is included in Appendix A.



3.0 Findings

This section includes the findings and a discussion of our sampling and air testing.

3.1 Temperature, Relative Humidity, and Carbon Dioxide

The outdoor temperature, relative humidity, and CO² concentrations were measured in the parking lot, approximately 100 feet from the entrance. Readings were collected in the Project Areas along with comparative readings in an adjacent hallway. The concentrations were measured at different locations and times as noted below.

Direct Reading Measurements

| Location | Time | Temperature (°F) | Relative Humidity (%) | CO ² (PPM) |
|----------------|------|------------------|-----------------------|-----------------------|
| Outdoor | 1206 | 41.2 | 24.4 | 528 |
| Room 107 | 1032 | 66.9 | 25.6 | 465 |
| Room 216 | 1048 | 71.6 | 21.8 | 470 |
| Room 143 | 1232 | 49.5 | 40.9 | 450 |
| Common Hallway | 1040 | 67.3 | 25.8 | 471 |

3.2 Mold Results

The Air-O-Cell sample results for total mold spore counts ranged from 20 spores per cubic meter (spores/M³) to 120 spores/M³. The samples collected from the Project Areas would be considered as acceptable levels.

The laboratory analytical report is presented in Appendix A.

3.3 Visual Observations

SLR observed discoloration associated with the suspended ceiling tile system and ceiling air vents within Room 143. Mr. Bruce Stella advised SLR that previous construction activities were conducted in the vicinity of the rooftop HVAC unit that supplies Room 143.

Please see section 4.0 Closure for recommendations for this section and others above.



4.0 Closure

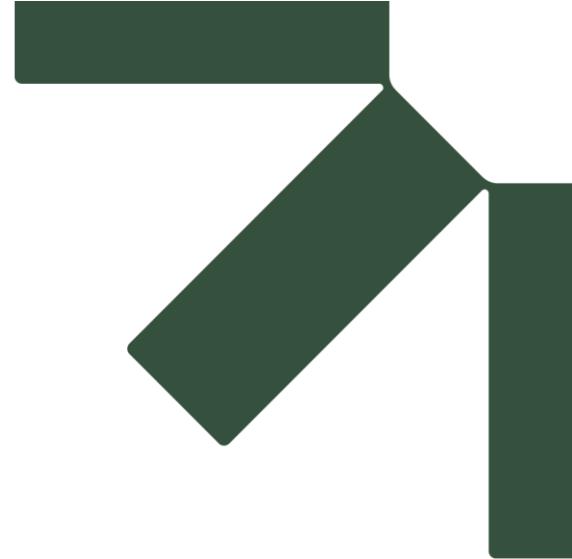
The air quality conditions within the Project Areas are within acceptable ranges. Due to the vicinity of the discoloration on the suspended ceiling tiles and ceiling vents in Room 143, SLR believes that it is electrostatic dust.

SLR recommends the following:

- Appropriately clean the electrostatic dust from the suspended ceiling tiles.
- Perform regular building/HVAC inspections and maintenance as scheduled.
- Fix any leaky plumbing and leaks in the building envelope (*i.e.*, roof, foundation, doors, windows, etc.) as soon as possible.
- Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible.
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).
- Keep heating, ventilation, and air conditioning (HVAC) drip pans clean, flowing properly, and unobstructed.
- Vent moisture-generating appliances, such as dryers, to the outside where possible.
- Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30 – 50%, if possible.
- Clean and dry wet or damp spots within 48 hours.
- Don't let foundations stay wet. Provide drainage and slope the ground away from the foundation.
- Appropriately remove and dispose of materials that contain mold.

Additionally, prior to any disturbance of suspect asbestos containing materials (ACM), sampling must be conducted (or the material must be assumed to be ACM), for materials not already sampled, before any demolition/renovation activities





Appendix A Fungal Analytical Laboratory Report and Chains of Custody

Marsh Grammar School – Rooms 107, 216, 143

Indoor Air Quality Assessment

Methuen Public Schools

SLR Project No.: 144.021306.00001

December 4, 2024



EMSL Analytical, Inc.

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EMSL Order: 132407148

Customer ID: MMAC42

Customer PO:

Project ID:

Attention: Keith Allard

SLR International Corporation
2 Commerce Drive, Suite 110
Bedford, NH 03110

Phone: (603) 289-1951

Fax:

Collected Date: 11/29/2024

Received Date: 12/03/2024 10:35 AM

Analyzed Date: 12/04/2024

Project: 144.021304.00001 - Marsh School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

| Lab Sample Number: | 132407148-0001 | | | 132407148-0002 | | | 132407148-0003 | | |
|---------------------------|----------------|------------|------------|----------------|------------|------------|-----------------------|-----------|------------|
| Client Sample ID: | A01 | | 150 | A02 | | 150 | A03 | | 150 |
| Volume (L): | | | | | | | | | |
| Sample Location: | Ambient Sample | | | Room 107 | | | Hall adj. to Room 107 | | |
| Spore Types | Raw Count† | Count/m³ | % of Total | Raw Count† | Count/m³ | % of Total | Raw Count† | Count/m³ | % of Total |
| Alternaria (Ulocladium) | - | - | - | - | - | - | - | - | - |
| Ascospores | 1 | 20 | 6.1 | 1 | 20 | 16.7 | - | - | - |
| Aspergillus/Penicillium++ | 2 | 40 | 12.1 | 3 | 60 | 50 | - | - | - |
| Basidiospores | 13 | 270 | 81.8 | 1 | 20 | 16.7 | 2 | 40 | 100 |
| Bipolaris++ | - | - | - | - | - | - | - | - | - |
| Chaetomium++ | - | - | - | - | - | - | - | - | - |
| Cladosporium | - | - | - | 1 | 20 | 16.7 | - | - | - |
| Curvularia | - | - | - | - | - | - | - | - | - |
| Epicoccum | - | - | - | - | - | - | - | - | - |
| Fusarium++ | - | - | - | - | - | - | - | - | - |
| Ganoderma | - | - | - | - | - | - | - | - | - |
| Myxomycetes++ | - | - | - | - | - | - | - | - | - |
| Pithomyces++ | - | - | - | - | - | - | - | - | - |
| Rust | - | - | - | - | - | - | - | - | - |
| Scopulariopsis/Microascus | - | - | - | - | - | - | - | - | - |
| Stachybotrys/Memnoniella | - | - | - | - | - | - | - | - | - |
| Unidentifiable Spores | - | - | - | - | - | - | - | - | - |
| Zygomycetes | - | - | - | - | - | - | - | - | - |
| Total Fungi | 16 | 330 | 100 | 6 | 120 | 100 | 2 | 40 | 100 |
| Hyphal Fragment | - | - | - | - | - | - | - | - | - |
| Insect Fragment | - | - | - | - | - | - | - | - | - |
| Pollen | - | - | - | - | - | - | - | - | - |
| Analyt. Sensitivity 600x | - | 21 | - | - | 21 | - | - | 21 | - |
| Analyt. Sensitivity 300x | - | 7* | - | - | 7* | - | - | 7* | - |
| Skin Fragments (1-4) | - | 1 | - | - | 1 | - | - | 1 | - |
| Fibrous Particulate (1-4) | - | 1 | - | - | 1 | - | - | 1 | - |
| Background (1-5) | - | 1 | - | - | 1 | - | - | 1 | - |

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

EMSL Analytical, Inc. maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. EMSL Analytical, Inc. bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Skin Fragment and Fibrous Particulate ratings are based on the percent of non-fungal material they represent: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-99%), or 5 (100%; overloaded). Background ratings are based on the total area covered by non-fungal particles: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%). Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. *** Denotes particles found at 300X. -- Denotes not detected. Due to method stopping rules, raw counts >= 100 are extrapolated based on the percentage analyzed.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA LAP, LLC-EMLAP Accredited #180179

Initial report from: 12/04/2024 10:41 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

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Page 1 of 2



EMSL Analytical, Inc.

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Analyzed Date: 12/04/2024

Project: 144.021304.00001 - Marsh School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

| Lab Sample Number: | 132407148-0004 | | | 132407148-0005 | | | | |
|---------------------------|-------------------|-------------|------------|----------------|-----------|------------|--|--|
| | Client Sample ID: | A04 | | A05 | 150 | | | |
| | | Volume (L): | 150 | | 150 | 150 | | |
| Sample Location: | Room 216 | | | Room 143 | | | | |
| Spore Types | Raw Count† | Count/m³ | % of Total | Raw Count† | Count/m³ | % of Total | | |
| Alternaria (Ulocladium) | - | - | - | - | - | - | | |
| Ascospores | - | - | - | - | - | - | | |
| Aspergillus/Penicillium++ | - | - | - | - | - | - | | |
| Basidiospores | 1 | 20 | 100 | 2 | 40 | 66.7 | | |
| Bipolaris++ | - | - | - | - | - | - | | |
| Chaetomium++ | - | - | - | - | - | - | | |
| Cladosporium | - | - | - | 1 | 20 | 33.3 | | |
| Curvularia | - | - | - | - | - | - | | |
| Epicoccum | - | - | - | - | - | - | | |
| Fusarium++ | - | - | - | - | - | - | | |
| Ganoderma | - | - | - | - | - | - | | |
| Myxomycetes++ | - | - | - | - | - | - | | |
| Pithomyces++ | - | - | - | - | - | - | | |
| Rust | - | - | - | - | - | - | | |
| Scopulariopsis/Microascus | - | - | - | - | - | - | | |
| Stachybotrys/Memnoniella | - | - | - | - | - | - | | |
| Unidentifiable Spores | - | - | - | - | - | - | | |
| Zygomycetes | - | - | - | - | - | - | | |
| Total Fungi | 1 | 20 | 100 | 3 | 60 | 100 | | |
| Hyphal Fragment | - | - | - | - | - | - | | |
| Insect Fragment | - | - | - | - | - | - | | |
| Pollen | - | - | - | - | - | - | | |
| Analyt. Sensitivity 600x | - | 21 | - | - | 21 | - | | |
| Analyt. Sensitivity 300x | - | 7* | - | - | 7* | - | | |
| Skin Fragments (1-4) | - | 1 | - | - | 1 | - | | |
| Fibrous Particulate (1-4) | - | 1 | - | - | 1 | - | | |
| Background (1-5) | - | 1 | - | - | 1 | - | | |

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

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Initial report from: 12/04/2024 10:41 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

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Page 2 of 2

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

Microbiology Chain of Custody Form

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.

200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675

EMAIL: CinnMicroLab@emsl.com

132407148

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

| | | | |
|--|---|---------------------|--|
| Customer Information | Customer ID: MMAC42 | Billing Information | Customer Name: SLR International Corporation |
| | Company Name: SLR International Corporation | | Company Name: SLR International Corporation |
| | Contact Name: Keith Allard | | Billing Contact: Keith Allard |
| | Street Address: 2 Commerce Drive, Suite 110 | | Street Address: 2 Commerce Drive, Suite 110 |
| | City, State, Zip: Bedford, NH 03110 | | Country: US |
| | Phone: 603 289-1951 | | Phone: 603 289-1951 |
| Email(s) for Report: kallard@slrconsulting.com | Email(s) for Invoice: kallard@slrconsulting.com | | |

Project Information

| | | |
|--|---|---|
| Project Name/No: 144.021304.00001 - <i>Marsh School</i> | Purchase Order: | |
| EMSL LIMS Project ID: (If applicable, EMSL will provide) | State Samples Collected: MA Zip Code Samples Collected: 01844 | State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-taxable) |
| Sampled By Name: <i>R. Raudlark</i> | Sampled By Signature: <i>B. J. S.</i> | No. of Samples in Shipment |
| Sterile, Sodium Thiosulfate Preserved Bottle Used: <input type="checkbox"/> Biocide Used In Source (specify) | | |
| Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by State. | | |
| Turn-Around-Time (TAT) <small>Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.</small> <input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 32 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week | | |

MICROBIOLOGY TEST CODES

| | | | |
|---|-------------------|---|--|
| M001 Air-O-Cell | M174 MoldSnap | M012 <i>Pseudomonas aeruginosa</i> (P/A***) | M115 Sewage Screen - Water (P/A***) |
| M030-Micro 5 | M032 Allergenco-D | M024 <i>Pseudomonas aeruginosa</i> (MFT*) | M116 Sewage Screen - Water (MPN**) |
| M041 Fungal Direct Examination | | M015 Heterotrophic Plate Count | M117 Sewage Screen - Swab (P/A***) |
| M169 Pollen ID & Enumeration | | M017 Total Coliform & <i>E. Coli</i> (Colilert P/A***) | M013 Sewage Screen - Swab (MFT*) |
| M280 Dust Characterization Level-1 | | M018 Total Coliform & <i>E. Coli</i> (MFT*) | M730 <i>Methicillin-resistant Staph. aureus</i> (MRSA) |
| M281 Dust Characterization Level-2 | | M114 Total Coliform & <i>E. Coli</i> Enumeration (Colilert MPN**) | M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration |
| M005 Viable Fungi-Air Samples (Genus ID & Count) | | M019 Fecal Coliform (MFT*) | M014 Endotoxin Analysis |
| M006 Viable Fungi-Air Samples (Includes <i>Penicillium</i> , <i>Aspergillus</i> , <i>Cladosporium</i> , <i>Stachybotrys</i> Species ID & Count) | | M020 Fecal Streptococcus (MFT*) | M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite) |
| M007 Culturable Fungi-Surface Samples (Genus ID & Count) | | M029 <i>Enterococci</i> (MFT*) | M095 Bacteroides |
| M008 Culturable Fungi-Surface Samples (Includes <i>Penicillium</i> , <i>Aspergillus</i> , <i>Cladosporium</i> , <i>Stachybotrys</i> Species ID & Count) | | M129 <i>Enterococci</i> (Enterolert P/A***) | Other - See Analytical Price Guide for Test Code |
| M009 Bacteria Culture Gram Stain & Count | | M180 Real Time qPCR-ERMI 36 Panel | <i>Legionella</i> Analysis Please use EMSL Legionella COC |
| M010 Bacteria Count & ID - 3 Most Prominent | | M025 Sewage Screen - Water (MFT*) | |
| M011 Bacteria Count & ID - 5 Most Prominent | | | |

*MFT= Membrane Filtration Technique

**MPN = Most Probable Number

***P/A = Presence/Absence

| Sample # | Sample Location/Description | Sample Type (Matrix) | Potable / Non-Potable (Only for Water) | Test Code | Volume/Area | Date / Time Collected | Temperature (Lab Use Only) |
|---------------------------|-----------------------------|----------------------|--|-----------|-------------|-----------------------|----------------------------|
| Example: Sample 1 | Kitchen | Water | Potable | M017 | 1,000 ml | 1/1/2021 3:30pm | |
| A01 - Ambient Sample | | Air | — | M001 | 150L | 1/29/2020 | |
| A02 - Rm. 107 | | | — | | | 1/29/2020 | |
| A03 - AMCL Adj. to Rm 107 | | | — | | | 1/29/2020 | |
| A04 - Rm. 216 | | | — | | | 1/29/2020 | |
| A05 - Rm. 143 | | | — | | | 1/29/2020 | |

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:

Sample Condition Upon Receipt:

Relinquished by:

Date/Time: *11/29/2024*

Received by:

Date/Time

Relinquished by:

Date/Time:

Received by:

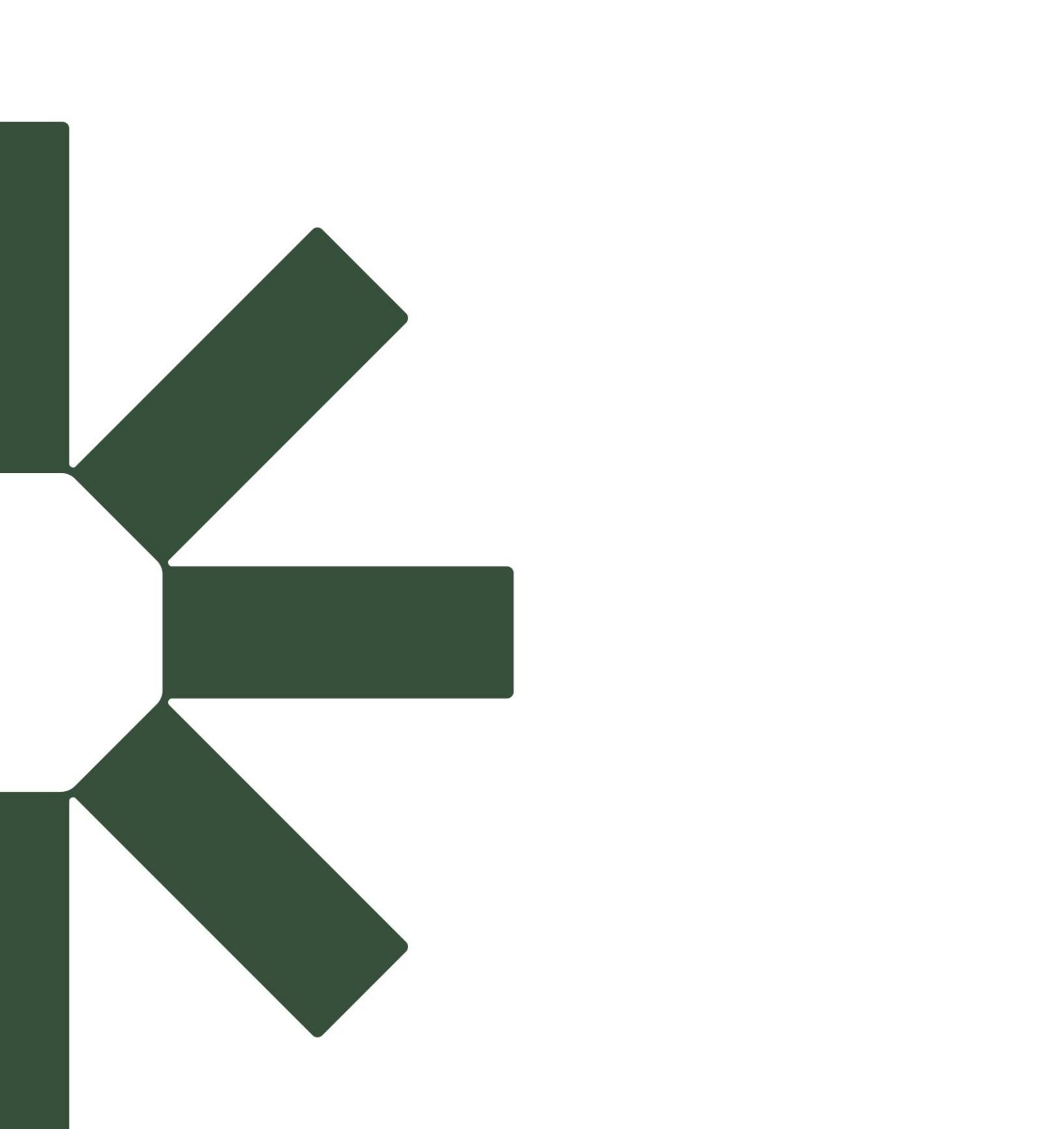
Date/Time

Controlled Document - COC-34 Micro R13 03/02/2021

 AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

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