J. R. Inspection Services, Inc.

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State of Florida Licensed Building Inspector State of Florida Licensed Home Inspector State of Florida Licensed Mold Assessor State of Florid Licensed Roofing Inspector State of Florida Licensed Termite Inspector ICC Certified Building Inspector Registered Professional Building Inspector

Member of Florida Association of Building Inspectors (FABI) Member of Home Inspectors Association of Florida (HIAF) Member of Indoor Air Quality Association, Inc. (IAQA)

Certified Red Cross Disaster Damage Assessment Inspector Member of International Code Council (ICC)

Certified Indoor Environmentalist

May 2, 2022

XXXXXXXXXXXXXX 12345 Alphabet Road Delray Beach, FL 33446

Dear Mr. and Mrs. XXXXXX,

Pursuant to your request, our company performed an onsite visual Mold Inspection on the above referenced property, at the locations listed below, on April 29, 2022 to determine if mold is present.

I Observed the following:

- a) Carpet in both front bedrooms was wet
- b) Baseboards, walls, and ceilings are wet at the NW bedroom including the closet
- c) Visible mold growth found on the baseboard and drywall in the NW bedroom closet
- d) Furniture at NW bedroom is wet and damaged
- e) Baseboards and drywall in the hallway leading to the bedrooms are wet
- f) Walls in the Guest bathroom are wet
- g) Vanity in Guest Bathroom is wet and damaged
- h) Baseboard and drywall in hallway closet is wet
- i) Baseboard at front entry is wet

Per the American Society, Heating, Refrigeration and Air Conditioning Engineers, (ASHRAE), the optimal indoor thermal comfort ranges are 73 to 81 Fahrenheit in the summer months and 68 to 76 Fahrenheit in the winter. The ASHRAE standard for indoor relative humidity is between 30% and 60%.

The potential for microbial growth increases as the relative humidity increases over 60%

The Surface Sample Analysis represents the condition present at the time of the inspection:

1. A surface sample (swab) was taken @ the wall in the NW Bedroom closet which indicates mold growth. (Aspergillus/Penicillium, Zygomycetes, Hyphal Fragment)

The air samples represent the condition present at time of collection:

Air samples were collected using Mold Snap Cassettes. Air was drawn through the cassette at a rate of approximately 5 liters per minute for 5 minutes. The air sampling pump was field calibrated prior to sampling by making sure the stainless-steel ball in the flow meter is sitting above the 5-liter line marker. The purpose of the air samples collected is to determine the amount (s) and type(s) of fungal components present in the indoor sampling locations compared to those found on the exterior. The sample(s) collected represent the conditions present at the time the samples were taken. There are no current government regulations or health standards defining the allowable number of airborne fungal spores in buildings. However, there are several accepted protocols and studies that are currently used as industry standards. These include the New York City Department of Health Guidelines on Assessment and Remediation of Fungi in Indoor Environments.

Air samples were taken at the following locations and compared to the front exterior to determine if the air quality is elevated and therefore compromised:

- NW Guest Bedroom indicates elevated mold spores (Aspergillus/Penicillium and Trichoderma)
- 2. NE Guest Bedroom indicates elevated mold spores (Aspergillus/Penicillium)
- 3. Family Room/Kitchen indicates elevated mold spores (Aspergillus/Penicillium)
- 4. Master Bedroom indicates elevated mold spores (Aspergillus/Penicillium)

Aspergillus/Penicillium- Possible allergen. Common causes of respiratory irritation and infection. Found on water damaged wallpaper, carpet and organic materials.

Hyphal Fragments- Branched structures with cell walls. Hyphae are somewhat analogous to stems of roots in plants whereas the spores would be analogous to the seeds.

Trichoderma spores are commonly found on gypsum board and water saturated wood, wallpaper, carpet and mattress dust, paint, and air-conditioning filters. Human infection by species of *Trichoderma* is limited to individuals with severely weakened immune systems.

Molds have potential to cause health problems. Any or all health questions or concerns should be addressed by a qualified physician and or an Immunologist, to give appropriate clinical meaning.

A complete set of lab results are enclosed.

Recommended Remediation:

We recommend consulting a State of Florida Licensed Mold Remediation Contractor. They can provide a free mold consultation.

The following is to be used strictly as a general protocol, it is the responsibility of the remediation company to further review, evaluate, and perform all necessary remediation to eliminate the elevated mold conditions found.

Hallway, Bathrooms, Guest Bedrooms

- Containment barriers will need to be used to seal off hallway from main house to Guest Bedrooms. All entryways must be sealed with Polyethylene Sheeting and duct tape. All return and supply vents in the area of remediation must be sealed.
- Air Scrubbers and dehumidifiers will need to be brought into the Hallway and Both Guest Bedrooms, in accordance with the IICRC S520 (Standards and Reference Guide for Professional Mold Remediation)
- Remove all baseboards in hallway, closet, bathroom, both guest bedrooms
- In the NW Guest Bedroom remove drywall from floor to ceiling in the closet and along the west wall. Remove section of ceiling in the closet and bedroom. The north wall remove drywall to the window sill
- Remove damaged/wet furniture in the NW Bedroom
- Remove damaged bathroom vanity
- Remediation Company to determine how many square feet of bathroom walls needs to be removed
- Once baseboards are removed in other rooms to expose the drywall, remove all
 affected areas of drywall with mold growth from floor minimum four feet high and two
 feet beyond the last visible trace of mold and dispose of it properly.
- Remove and discard any exposed insulation.
- The inner wall cavity areas must be hepa vacuumed and cleaned with an approved antimicrobial sanitizer. Inspect the exposed (wood) framing for microbial growth and decay. All (wood) studs that support microbial growth will need to be damp wiped with

- an approved microbialcide, wire brushed, sanded, hepa vacuumed and an antimicrobial coating applied.
- Do to the high mold spore counts, coupled with the wet carpeting, remove and discard carpeting at both guest bedrooms, tack strip, and padding. The concrete flooring must be cleaned with an approved mild disinfectant detergent before any flooring is laid back down.
- All surfaces inside these rooms must be HEPA vacuumed. Germicidal wiping with a
 detergent solution will be needed on all walls, ceilings, doors (including tops, bottoms,
 and both sides),ceiling fans/blades, flooring, etc. to kill existing spores. If a through
 cleaning of the remediation areas is not done, this will be reflected by failure of
 clearance testing.

Remainder of House

- Remove baseboard at front entry which was wet
- Air Scrubbers and dehumidifiers will need to be brought into the Family Room/Kitchen, Living Room and Master Bedroom, in accordance with the IICRC S520 (Standards and Reference Guide for Professional Mold Remediation)
- All surfaces inside these rooms must be HEPA vacuumed. Germicidal wiping with a
 detergent solution will be needed on all walls, ceilings, doors (including tops, bottoms,
 and both sides),ceiling fans/blades, flooring, etc. to kill existing spores. If a through
 cleaning of the remediation areas is not done, this will be reflected by failure of
 clearance testing.

HVAC System

Mold growth was detected to the HVAC Ventilation System. The air handler unit (AHU) (i.e. coil, insulation, fan motor, etc.) and all duct work must be properly cleaned in accordance with the NADCA Standard ACR 2006 Assessment, Cleaning and Restoration of HVAC Systems. It is imperative that after cleaning the air duct system, all fiberglass boots, junction boxes and panel insulation be sealed with Fiber Lock 8000 or equivalent to prevent any fiberglass particulate release. However, it is the responsibility of a licensed A/C contractor to determine the feasibility of cleaning or replacing the air ducts

All work should be conducted in accordance with ANSI/IICRC S520 Standard for Professional Mold Remediation and IICRC R520 Reference Guide for Professional Mold Remediation 4th edition, 2015, and the New York City remediation of fungi in indoor environment guidelines April 2000, which should be followed in their entirety. These guidelines are considered to be industry standard and will reduce liability of cross contamination. The following Scope of Work complies with the American Conference of

Governmental Industrial Hygienist (ACGIH) guidelines) for remediation of mold contaminated building components that have been chronically water damaged.

Institute of Inspection, Cleaning and Restoration Standards and Reference Guide for Professional Mold Remediation S520 (www.iicrc.org).

The American Conference of Governmental Industrial Hygienist (AGGIH), the EPA (www.epa.gov/iag/molds/ondex.html).

The New York City Department of Health published in 2000 (www.NYC.GOV/HTML/DOH/HTML/EPI/MOLDRPTI.HTML).

Clearance Testing/Post Testing:

Clearance testing should be performed after any type of mold removal or remediation to verify that the remediation was successful in reducing indoor microbial levels of equal to or below ambient outdoors. Testing is to be done after the clean-up phase of the remediation is completed, but prior to any walls being closed or componets such as cabinets/flooring being reinstalled. This includes testing inside and outside the containment areas.

Limitations:

It is important to understand that changes in occupancy, remodeling, maintenance procedures and many other factors can have a significant effect on indoor air quality. Walls behind wallpaper, paneling and furnishings may have a chance to have mold growth behind them, which is not visible until exposed. Maintaining acceptable indoor air quality is an ongoing effort and must be continually monitored to be effective.

Our recommendations are based on the above findings, per EPA and NYC published guidelines and upon our professional expertise with no warranty or guarantee implied herein. This report is exclusively for the use and benefit of the client identified above. J.R. Inspection Services, Inc. accepts no responsibility for interpretations of this report by others. The contents of this report shall not be used or relied upon by other parties without prior written authorization by J.R. Inspection Services, Inc.

Thank You for the opportunity for performing this inspection. If you have any questions regarding the text of this report, please feel free to contact our office.

Enclosures

Very Truly Yours,

Greg Rothberg

Certified Indoor Mold Environmentalist # 01333 State of Florida Licensed Mold Assessor MRSA #121































