IAQ/MOLD Inspection REPORT





QED Service Michael Burroughs 2203 Essex Street Monroe, LA 71201 Phone: 318-376-0482

Mr. & Mrs. Tom Barulli 2049 Bayou Bend Dr Bossier City, LA 71039 Today's Date 11/13/2021

Dear Mr.& Mrs. Barulli,

I want to personally thank you for the time you have taken with me to help expedite this NORMI™ Certified IAQ/Mold Inspection. I am satisfied that we now have enough information to draw some important conclusions and make some specific recommendations to substantially improve the indoor air quality of your home.

Enclosed you will find the report for your home. I am eager to solve the problems as I have found them and hope you will help me expedite a solution. To your improved health and the health of your family, I remain sincerely yours.

Respectfully yours,

Michael Burroughs Environmental Consultant

NORMITM Certified IAQ/Mold Inspector

NORMI certified Mold Inspector
NORMI Certified Mold Assessor
Louisiana License Home Inspector
Veterans Administration Compliance Inspector
HUD Administration Compliance Inspector
Certified NORMI Member
Certified American Society of Home Inspector Member
Certified Louisiana Chapter of the American Society of Home Inspectors Member
Member of the Louisiana State Board of Home Inspectors



General Information

- On November 10, 2021, I performed an IAQ/Mold Inspection on your possible new home at **2049 Bayou Bend Dr. Bossier City, LA**, for the purpose of determining the quality of the indoor air. The collection of information is included herein along with my findings and recommendations. It is our determination that REMEDIATION IS recommended to solve the current problems found in your indoor environment. When REMEDIATION is required, I recommend that you use the following criteria to select a REMEDIATOR:
 - ✓ Must be licensed and bonded in compliance with the municipality,
 - ☑ Must be **fully insured** (Worker's Compensation and General Liability)
 - \square Must be familiar with **Mold-Free Construction**TM, and
 - ✓ Must have at least **five (5) good references** for your review,

Once the REMEDIATION process is completed, I request that you give me permission to come back to complete "clearance testing" and confirm that proper SANITIZATION solutions have been implemented. Those solutions are listed at the end of this report and will also include addressing the areas of specific IAQ/Mold concerns in your environment as well as recommendations for improving the quality of living indoors. By partnering with us, you will be able to create a healthier indoor environment for you and your family.

Our recommendations are in accordance with standards established by NORMITM(National Organization of Remediators and Mold Inspectors) and have proven to be successful in substantially improving indoor air quality throughout the United States. For more information on IAQ/Mold issues and their solutions, please reference the book entitled **Mold-Free ConstructionTM** by D. Douglas Hoffman, available at www.MoldFreeConstruction.com. You will find this book insightful and easy-to-follow as you continue to improve the environment indoors.

Our IAQ/Mold Inspection references the following property: 2049 Bayou Bend Dr. Bossier City, LA

My reason for inspecting this property is to comply with your request and concerns about the possible environmental issues in the home. Visible growth noted in home. Moisture damaged noted to home.

Property History

From my IAQ/Mold Assessment Interview, I learned the following things about the subject property. This property appears to be occupied. The HVAC system is being operated in normal living conditions. The home has the typical level of humidity at the time of the testing. Slight odor noted in the home. Discoloration noted on surfaces of the interior.



Visual Inspection

We collected information from the occupants, visually inspected the exterior and interior of the residence and report the following information we consider pertinent to developing a clear IAQ/Mold Profile of your indoor environment. Conclusions from the factors listed here have already been drawn regarding SANITIZATION or REMEDIATION but it is important for you to understand our intention to provide a holistic solution to whatever problems may exist in your indoor air quality.

From my IAQ/Mold Assessment Interview, I learned the following things about the subject property. This property appears to be occupied. The HVAC system has been in operation. During a visual exam of the home, I noticed several areas which appeared to have roof water leakage stains noted on the interior of the home. Slight film and suspected mold growth noted on surfaces. Some repairs were noted on surfaces of the interior.

Diagnostic Testing

Attached find copy of laboratory results from tests conducted by us on your indoor air quality. There are five different types of testing we could have performed and it is our responsibility to use our experience and expertise to assess which testing procedures will give us the best IAQ/Mold Profile of your indoor environment. Should additional testing be required, we may select one or more of these methods to enhance our understanding of your environment so we will have an objective overview of your indoor air quality. The five methods from which we choose are:

- 1) Air-O-Cell Sampling—in this process we collect particulate from the air to get a comparison count between the indoor air and the outdoor air. This method does not evaluate the viability of the spores collected.
- 2) Impaction Sampling—this process uses gravity or pressure to plate a petri dish with airborne particulate and then incubate for the laboratory to identify. This method only represents a small sample of the entire indoor air environment.
- 3) SWABTM Sampling—this is an effective way of collecting "dust" which includes viable mold spores, plate them to a petri dish, and have the laboratory identify and count the number of live colony forming units (cfu). This method recognizes only the viable mold that has settled out in the location where it has been collected.
- 4) Lift / TAPE™ Sampling—where visible mold is present, this tape lift method allows the laboratory to identify and count the number of dead or live colony forming units (cfu). This method does not recognize viability of mold growth only the presence of mold.
- 5) Bulk Sampling—occasionally we determine that specific construction materials or other items require laboratory testing to identify and count the number of either dead or live colony forming units (cfu). This method does not recognize viability of mold growth only the presence of mold.

We are not attempting to make you a Certified IAQ/Mold Inspector but want you to understand the different methods of collection so you will better understand why we choose the following methods. I chose to use three different methods to properly sample the home for possible mold.



Collection Samples

Sample ONE— air cell, test site Exterior, the sample is for a base line for the sampling operation.

Sample **TWO**—air cell sample from master bathroom area. The sample did not indicate as an elevated sample when compared to the exterior but is unusual in mold reading with Penicillium/Aspergillus and Cladosporium mold counts present. This type of mold was not present in the exterior sample and this mold is an indicator of high moisture.

Sample **Three** — air cell sample from the Return air with the resulting finding of a normal readings with no elevated mold spore counts. The sample has a high count of Penicillium/Aspergillus. This type of mold was present in the exterior sample and this mold is an indicator of high moisture.

Sample **Four**—tape lift from the wall of Master Bath reading shows the presence of Chaetomium and Cladosporium. This type of mold was not present in the exterior sample and this mold is an indicator of high moisture. The mold spore of Chaetomium was not present in the outdoor sample.

Moisture Meter Readings

Moisture Meter readings can add to your understanding of the indoor environment. The moisture meter we use is a Wagner BI-2200 which is a non-penetrating meter designed to recognize moisture content of construction materials that have been tested. The general rule of thumb in our industry is that moisture content in construction materials in excess of 17% MAY indicate a moisture problem. Since we are often unable to test in wall cavities, attics, or other non-visible locations, we can only draw limited conclusions about the moisture of any area tested. These conclusions, however, are included in our over-all assessment and evaluation of the IAQ/Mold Profile in your environment.

Test Site **ONE**—ceiling of bathroom. The reading showed an elevated level of moisture in the sample location. Test Site **TWO**—sample sited was at the master bathroom walls. The meter indicated elevated moisture levels in the building materials.

Test Site THREE – sample site was floor under master bedroom window. The meter indicated an elevated moisture level in the building materials.

Inspection Summary

Based on the lab results and the moisture readings in the home, I would see the need for corrections to the home at this time. Improved a/c filters and regular maintenance may reduce issues with the indoor air quality. Monitoring moisture levels in the home may be needed. The repair of all moisture entry points in the roofing materials and around the windows.

The SANITIZATION Protocol

It is our recommendation, based on all of the information we gathered, our expertise, experience, and the clear IAO/Mold Profile we have developed from this inspection, that you SANITIZE the indoor air environment

using the following protocol. By partnering with us in this process, you will be able to provide a clean air environment for years to come and create a healthier living space for you and your family.

The information contained herein comes from Chapter TEN of **Mold-Free ConstructionTM** and is copyrighted and should not, therefore, be reproduced without the express permission of the author, D. Douglas Hoffman, Environmental Consultant. The NORMI Certified IAQ/Mold Inspector has been trained to understand these techniques and has been granted permission to use this information to the betterment of your indoor environment.

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"BEYOND"—This is taking the extra step of prevention. This list comprises suggestions for keeping your home clean so mold will not have a chance to get a foothold. Some of these may seem "extreme measures" but have proven to be invaluable in maintaining a mold-free environment. Use these, as you will...

- 1) Keep the premises clean and regularly dust, vacuum, and mop.
- 2) Install an air purification system in the home to maintain good indoor air quality and reduce dust.
- 3) Use hood vents when cooking, cleaning, and dishwashing.
- 4) Keep closet doors ajar, where possible, to increase airflow in the closets or install vented doors.
- 5) Avoid excessive amounts of indoor plants.
- 6) Use exhaust fans when bathing/showering.
- 7) Leave exhaust fans on long enough to remove moisture from the room.
- 8) Use ceiling fans.
- 9) Water all indoor plants outdoors, if possible.
- 10) Wipe down any moisture and/or spillage.
- 11) Wipe down bathroom walls and fixtures after bathing/showering. There are some good products out there for this very purpose.
- 12) Wipe down any vanities/sink tops.
- 13) Avoid drying clothes by hand drying indoors.
- 14) Avoid air-drying dishes.
- 15) Open blinds/curtains to allow light into premises.
- 16) Wipe down floors after any water spillage.
- 17) Hang shower curtains within the bath when showering.
- 18) Securely close shower doors, if present, when showering.
- 19) Leave bathroom and showers door open after use.
- 20) Use dryer if present for wet towels.
- 21) Use household cleaners (we prefer biodegradable enzyme cleaners) on any hard surfaces.
- 22) Remove any moldy or rotting food
- 23) Remove garbage regularly.
- 24) Wipe down any and all visible signs of moisture.
- 25) Regularly scan the ceiling for evidence of roof leaks.
- 26) Periodically check the air conditioning vents to be sure they are clean.
- 27) Change the air conditioning filter regularly.



- 28) Perform scheduled maintenance on your air conditioning system, including, but not limited to, cleaning the evaporator coil.
- 29) Wipe down windows and sills if moisture is present.

- 30) Regularly, inspect for leaks under the sinks and around the base of the water closets, around the washing machine and water heater.
- 31) Check all washer hoses and outside garden hose connections.
- 32) Regularly empty dehumidifier, if present.
- 33) Clean behind the refrigerator and around the air conditioning air handler if possible.
- 34) Empty the refrigerator condensation pan where possible.
- 35) If possible, pour a small amount of bleach in the drip pan of the air conditioning air handler to decrease the potential for mold growth.
- 36) Answer this question regularly and check for the signs of mold: "If I were mold and liked moisture, where would I feel most comfortable to set up a home and build a family?"

It is our opinion that these recommendations will substantially improve the indoor air environment of your home and, as in addition, reduce the potential for mold or other IAQ problems in the future. There is no "overnight" solution but we believe the improvement will be significant and, over a relatively short period of time, the occupants and visitors in your home will feel better about their environment. If we may be of further service to you in the future, please do not hesitate to call. We appreciate your business and thank you for choosing a NORMI Certified IAQ/Mold Inspector.

Michael Burroughs LHI #10044, CMI, NORMITM Certified IAQ/Mold Inspector

Enclosures:

- Mold Inspection report
- HVAC Checklist
- Lab results
- Invoice
- Etc.



Inspector's notes: Moisture inspection of the home indicated high levels of moisture. The moisture appears to be elevated in the air in the home. Installing a u/v light may improve the air in the home. Cleaning and servicing the system should improve the health of the home. A moisture control unit may need to be installed to keep the moisture levels in the home to a healthy level. Most of the molds found were the type that require high moisture to grow. If the moisture in the home does not change, improvement of the air quality in the home may not improve. A slight odor was noted in the home that is commonly associated with mold growth. The inspector did not find all the sources of the of the moisture and it would require a technical inspection of the home. The inspector recommends discussing the lab findings with your doctor to ensure no reactions the any found mold in your home.



Water stains and damp sheetrock noted in attic.



Shower valve faulty.





Chimney clearances through the roof improper and

signs of water draining down the metal chimney.



Flex ducting improperly hung or supported. This can

lead to air flow issues in the home and moisture build up.



Insulation baffles missing at soffits which will lead to

poor air flow and increase moisture issues.





Electrical power line in contact with WH exhaust

pipe.



Window does not appear to have the safety labeling on

the window.



Shower grout damage and cracked. The damage grout

can be leading to moisture damage in the home.

2049 Bayou Bend Dr. Bossier City, LA



Exhaust vent not properly installed through roof.



Sink missing overflows drains in sinks.



Roof decking questionable and faulty. Daylight

visible through materials which if light is entering so can water.

