

# ***Integrity Lead-based Paint Services***

## ***MOLD ASSESSMENT REPORT***

Project Location (LOCATION):

Residential Dwelling  
4410 Aspenglen Drive  
Houston, Texas 77084

Prepared For (CLIENT):

Karen Cannella  
4410 Aspenglen Drive  
Houston, Texas 77084

Project Date(s):

June 15, 2019

Prepared by:



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Steven Veedell

TDLR Mold Assessment Consultant # MAC1492

License Expiration: 12/19/2019

Integrity Lead-based Paint Services

1607 Vermont Avenue  
Houston, Texas 77006  
713-532-9300

# Project Information

## Integrity Lead-based Paint Services

PROJECT NUMBER: **2019-06-15-1**

Integrity Lead-based Paint Services (INTEGRITY) was retained by CLIENT to conduct a Mold Assessment within the premises of concern at the LOCATION. The assessment included visual observations, on-site measurements (i.e. temperature, relative humidity, and moisture measurements), and the preparation of a Mold Assessment Report. If the home qualifies, a Certificate of Mold Damage Remediation (CMDR, MDR-1) will be prepared.

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# Mold Assessment Report

## AREA DESCRIPTION & SOURCE OF MOISTURE

At the time that Integrity Lead-based Paint Services (INTEGRITY) was contracted by **CLIENT** to conduct a Mold Assessment, the residential premises had been previously flooded by water from hurricane Harvey. According to information provided to INTEGRITY, there were no other known sources of moisture intrusion.

On the date of the Mold Assessment, INTEGRITY Mold Assessment Consultant Steven Veedell arrived at the LOCATION. At that time, INTEGRITY provided the individual providing access to the premises, a copy of the Texas Department of Licensing and Regulation (TDLR) **Consumer Mold Information Sheet**.

## VISUAL OBSERVATIONS

The premises had been repaired following a flood Harvey flood. There was NO VISIBLE MOLD at the time of the inspection.

## TEMPERATURE, HUMIDITY, AND MOISTURE MEASUREMENTS

The following table describes the measurements that were collected during the assessment at the LOCATION. The temperature and relative humidity measurements were collected utilizing a digital thermometer / hygrometer. Moisture measurements were also collected during the assessment using a penetrating moisture meter.

Location	Humidity	Temperature
Indoor	61 %	70 degrees
Outdoor	71 %	81 degrees

All measurements taken on structural components were below 15%.

## TESTING METHODS

INTEGRITY's mold assessment procedures included the following steps:

### **Initial Walkthrough and Visual Inspection**

INTEGRITY's survey team member(s) performed an initial walkthrough and visual inspection of the areas affected with moisture / water intrusion.

### **Moisture Measurement**

Moisture measurements were taken of suspect surfaces. The instrument used was a Protimeter Surveymaster model BLD-5365. This unit is a dual function moisture meter with pin and non-invasive measurement. All moisture readings were below 15% moisture. Since all readings were considered to be within acceptable range, no map of test locations will be drawn and/or provided.

## Conclusions & Recommendations

**Based on information reported to INTEGRITY, visual observations, and moisture readings taken at the LOCATION, INTEGRITY concludes that the building materials within the LOCATION that may have been affected by moisture / water intrusion sources have been properly dried and are mold free at the time of the inspection.**

## Assessment Limitations

### DESCRIPTION OF ASSESSMENT AND REPORT LIMITATIONS

Assessment findings and recommendations are subject to the following limitations:

1. This assessment was based on a limited assessment of conditions existing at the time of the site assessment and presumes that the conditions that caused the initial moisture incursion and any mold growth have been corrected. Failure to correct the initial moisture / water intrusion source in a timely manner may allow for increased mold contamination, and therefore an additional assessment and report may be required. The extent of water damage and/or mold contamination and resultant proliferation may or may not be fully delineated.
2. The samples collected are representative of the specific time and location where they were collected and may or may not be indicative of conditions throughout the entire structure. Mold samples are highly variable from day to day with results depending directly on environmental factors such as temperature, humidity, airflows, and sunlight levels.

Therefore, the recommendations and conclusions made in this report may change or need to be amended as new information is obtained. The recommendations and conclusions contained within this report represent the best professional judgment of INTEGRITY based on the data contained herein and should be reviewed in its entirety. INTEGRITY is not responsible for third party review of this document or for the use of this information outside of its intended purpose.

Any occupant health inquiries should be referred to a physician knowledgeable in the health effects of environmental mold exposure.

# Consumer Mold Information Sheet



*State rules require licensed mold assessors and remediators to give a copy of this Consumer Mold Information Sheet to each client and to the property owner, if not the same person, before starting any mold-related activity [16 TAC 78.70].*

## **How does Texas regulate businesses that do testing for mold or that do mold cleanup?**

The Department of Licensing and Regulation (TDLR) regulates such businesses in accordance with the [Texas Occupations Code, Chapter 1958](#). Under the **Texas Mold Assessment and Remediation Rules (rules)** ([16 Tex. Admin. Code, Chapter 78](#)), all companies and individuals who perform mold-related activities in Texas must be licensed by TDLR unless exempt. (See Page 2 regarding owner exemptions.) Individuals must meet certain qualifications, have required training, and pass a state exam and criminal history background check in order to be issued a license. Applicants for a mold remediation worker registration must have training and pass a criminal history background in order to be registered by TDLR. Laboratories that analyze mold samples must also be licensed and meet certain qualifications. The rules set minimum work practices and procedures and also require licensees to follow a code of ethics. To prevent conflicts of interest, the rules also prohibit a licensee from conducting both mold assessment and mold remediation on the same project. While the rules regulate the activities of mold licensees when they are doing mold-related activities, the rules do not require any property owner or occupant to clean up mold or to have it cleaned up.

## **How can I know if someone is licensed?**

A licensed individual is required to carry a current TDLR license certificate with the license number on it. A search tool and listings of currently licensed companies and individuals can be found at: <https://www.tdlr.texas.gov/LicenseSearch/>.

## **What is “mold assessment?”**

**Mold assessment** is an inspection of a building by a **mold assessment consultant** or **technician** to evaluate whether mold growth is present and to what extent. Samples may be taken to determine the amount and types of mold that are present; however, sampling is not necessary in many cases. When

mold cleanup is necessary a licensed mold assessment consultant can provide you with a **mold remediation protocol**. A protocol must specify the estimated quantities and locations of materials to be remediated, methods to be used and clearance criteria that must be met.

## **What is meant by “clearance criteria?”**

**Clearance criteria** refer to the level of “cleanliness” that must be achieved by the persons conducting the mold cleanup. It is important to understand and agree with the mold assessment consultant prior to starting the project as to what an acceptable clearance level will be, including what will be acceptable results for any air sampling or surface sampling for mold. There are no national or state standards for a “safe” level of mold. Mold spores are a natural part of the environment and are always present at some level in the air and on surfaces all around us.

## **What is “mold remediation?”**

**Mold remediation** is the cleanup and removal of mold growth from surfaces and/or contents in a building. It also refers to actions taken to prevent mold from growing back. Licensed **mold remediation contractors** must follow a mold remediation protocol as described above and their own **mold remediation work plan** that provides specific instructions and/or standard operating procedures for how the project will be done.

Before a remediation project can be deemed successful, a mold assessment consultant must conduct a **post-remediation assessment**. This is an inspection to ensure that the work area is free from all visible mold and wood rot, the project was completed in compliance with the remediation protocol and remediation work plan, and that it meets all clearance criteria that were specified in the protocol. The assessment consultant must give you a **passed clearance report** documenting the results of this inspection. If the project fails clearance,

further remediation as prescribed by a consultant will be necessary.

### **What is a Certificate of Mold Damage Remediation?**

No later than the 10<sup>th</sup> day after a mold remediation project stop date, the remediation contractor must sign and give you a **Certificate of Mold Damage Remediation**. The licensed mold assessment consultant who conducted the post-remediation assessment must also sign the certificate. The consultant must truthfully state on the certificate that the mold contamination identified for the project has been remediated and whether the underlying cause of the mold has been corrected. (That work may involve other types of professional services that are not regulated by the mold rules, such as plumbing or carpentry.) Receiving a certificate documenting that the underlying cause of the mold was remediated is an advantage for a homeowner. It prevents an insurer from making an underwriting decision on the residential property based on previous mold damage or previous claims for mold damage. If you sell your property, the law requires that you provide the buyer a copy of all certificates you have received for that property within the preceding five years.

### **How is a property owner protected if a mold assessor or remediator does a poor job or damages the property?**

The rules require licensees to have commercial general liability insurance in the amount of at least \$1 million, or to be self-insured, to cover any damage to your property. Before hiring anyone, you should ask for proof of such insurance coverage. You may wish to inquire if the company carries additional insurance, such as professional liability/errors and omissions (for consultants) or pollution insurance (for contractors), that would provide additional recourse to you should the company fail to perform properly.

### **How is my confidentiality protected if I share personal information about myself with a company?**

Under the code of ethics in the rules, to the extent required by law, licensees must keep confidential any personal information about a client (including medical conditions) obtained during the course of a mold-related activity. Further, you may be able to negotiate a contract to include language that other personal information be kept confidential unless disclosure "is required by law." However, licensees are required to identify dates and addresses of projects and other details that can become public information.

### **How do I file a complaint about a company?**

Anyone who believes a company or individual has violated the rules can file a complaint with TDLR. For information on this process, call 1-800-803-9202, or complete the online complaint form at <https://www.tdlr.texas.gov/complaints/>.

### **Can property owners do mold assessment or remediation on their own property without being licensed?**

Yes. A homeowner can take samples for mold or clean it up in the home without a license. An owner, or a managing agent or employee of an owner of a residential property is not required to be licensed, **unless** the property has 10 or more residential dwelling units. For non-residential properties, an owner or tenant, or a managing agent or employee of an owner or tenant, is not required to be licensed to do mold assessment or remediation on property owned or leased by the owner or tenant, **unless** the mold contamination affects a total surface area of 25 contiguous square feet or more. Please refer to 16 TAC §78.30 for further details on exceptions and exemptions to licensing requirements.

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*For more information about mold and the Texas Mold Assessment and Remediation Rules, contact:*

**Texas Department of Licensing and Regulation**

**Mold Assessors and Remediators**

**PO Box 12057, Austin, TX 78711**

**Phone: 512-463-6599 or 800-803-9202**

**[www.tdlr.texas.gov](http://www.tdlr.texas.gov)**

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# Methodology

INTEGRITY Lead-based Paint Services performs all mold assessment and survey work in accordance with the following methodologies and/or guidelines where applicable:

- **Texas Mold Assessment and Remediation Rules** of the Texas Administrative Code; Title 25, Part1, chapter 295.
- Environmental Protection Agency, Office of Air and Radiation, Indoor Environments Division. **Mold Remediation in Schools and Commercial Buildings**. March 2001. EPA 402-K-01-001.
- New York City Department of Health, Bureau of Environmental and Occupational Disease Epidemiology. **Guidelines on Assessment and Remediation of Mold in Indoor Environments**. November 20,2000.
- American Conference of Governmental Industrial Hygienists. **Bioaerosols: Assessment and Control**. ACGIH, Ohio. 1999.
- American Industrial Hygiene Association. **Report of Mold Growth Task Force**. AIHA, May 2001.
- National Institute for Occupational Safety and Health. **NIOSH Manual of Analytical Methods, 4th Edition. Method 0800. BIOAEROSOL SAMPLING (Indoor Air)** January 1998.
- OSHA Respiratory Protection Standard, 29 CFR Parts 1910 and 1926.
- Current industry best practices and guidelines.



# Common Mold Types

The following is a list of common mold types. It is not presented as a complete list and is provided as background information only. Please consult an appropriate microbiology or mycology reference source for more detailed or specific information.

## ***Acremonium* species**

*Acremonium* is widespread and grows in soil, on dead organic debris, hay and foodstuffs. It requires very wet conditions to grow.

## ***Alternaria* species**

These molds occur as common environmental mold that are parasitic upon plant material, especially grass. They are often found in carpets and textiles.

## **Ascospores**

Ascospores are sexual reproductive spores formed in sac-like structures called asci. Ascomycete mold form these spores. Ascomycetes reproduce by several methods of sexual reproduction. Types of Ascomycetes include *Pseudallescheria boydii* as well as some of the *Aspergillus* species and *Chaetomium* species.

## ***Aspergillus/Penicillium* group**

These molds are common outdoors but can grow indoors on a wide range of moist substrates such as on wallpaper, behind paint, and on moist chipboards.

## ***Bipolaris* species**

A common mold species with large spores that often grows on dead or dying plant material and in soils.

## ***Chaetomium* species**

These molds are found in soil, cellulose products and straw. They can grow indoors on wet sheetrock paper and other wet cellulose products.

## ***Cladosporium* species**

*Cladosporium* is the most commonly found type of mold in the outdoor air in temperate climates. The natural high season for outdoor air concentrations is typically late summer and autumn. *Cladosporium* has been isolated from a variety of soils and is a major colonizer of plant litter. These mold are found indoors as well, but usually in less numbers, unless there is an indoor source of contamination. Indoors, these molds may be encountered on supply air diffusers and on moist window frames as a result of condensation. *Cladosporium* often discolors interior paint, paper, and textiles stored in humid conditions. Houses with poor ventilation and those located in damp environments may have heavy concentrations of *Cladosporium*.

## ***Curvularia* species**

They can grow indoors on a variety of substrates.

## ***Fusarium* species**

*Fusarium* is a common soil fungus and is found worldwide. It is found on a wide range of plants, including San Augustine grass and many grain crops. It can also be found in humidifiers and other humid environments. It requires extremely wet conditions.

## ***Hyphae/ Mycelial fragments***

Filament that represents the structural entity or colony surface of most molds.

## ***Penicillium* species**

*Penicillium* species are commonly found in house dust and grows in water-damaged wallpaper, wallpaper glue, and paint.

***Rhizopus* species**

*Rhizopus* species are found on a variety of substrates. They are common on rotting food although less common in indoor surfaces.

***Stachybotrys* species**

These molds are found on wet materials with high cellulose content and low nitrogen content, such as sheetrock, paper, lumber, and dust.

***Stemphylium* species**

These molds are isolated from dead plants, cellulose material, soil, and are common in air samples in the late Summer and Fall. Certain species can occur as leaf-spotting parasites of hosts such as tomatoes and other plants.

***Trichoderma* species**

Commonly found in soil, dead trees, paper, and unglazed ceramics, it readily degrades cellulose.

**Yeast forms**

Yeast forms are common in moist habitats and are often able to grow at reduced oxygen levels.

# Licenses

*Mike Arismendez*  
*Chair*

*Thomas F. Butler*  
*Vice Chair*



*Helen Callier*  
*Rick Figueroa*  
*Ravi Shah*  
*Deborah A. Yurco*

*Mold Assessment Consultant*  
**STEVEN VEEDELL**

License Number: MAC1492

The person named above is licensed by the Texas Department of Licensing and Regulation.

**License Expires:** December 19, 2019

A handwritten signature in black ink that reads "Brian E. Francis". The signature is written in a cursive style with a horizontal line underneath.

Brian E. Francis  
Executive Director