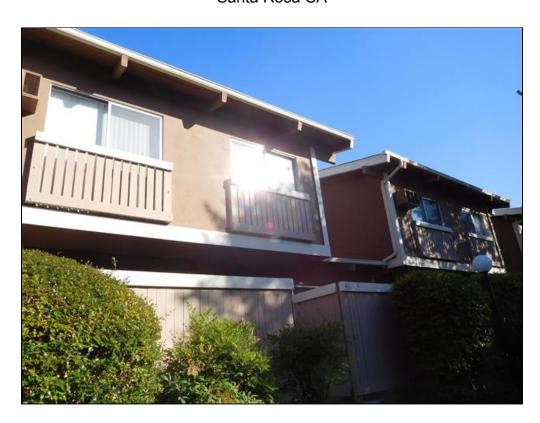


Inspection Report

Sample Mold Report

Sample Mold Report

Property Address: 123 Main St. Santa Rosa CA



Guaranteed Property Inspection & Mold Investigations Inc.

Steve Zivolich, MA, CMC, ACI, ASHI, CREIA, ACAC www.gpinspect.com (707) 239-2601

123 Main St. Page 2 of 38

Table of Contents

<u>1</u>
3
4
5
6
10
11
12
14
20
24
26
30
33
37
38

123 Main St. Page 3 of 38

Date: 6/30/2016	Time:	Report ID: msample
Property: 123 Main St. Santa Rosa CA	Customer: Sample Mold Report	Real Estate Professional:
	Sample Mold Report	

Whether this report reveals mold in the building or not, the customer, should consider:

- 1. Whether or not to have any sample tests performed at any area that was noted in the report: "Visible Evidence Present".
- 2. Whether or not to hire a qualified ACAC certified mold remediation company for corrective procedures either now, before the lab tests results, or afterwards.

Comment Key or Definitions

The following definitions of comment descriptions represent this inspection report. All comments by the inspector should be considered.

<u>No Visible Evidence (NVE)</u> = The physical inspection of accessible surface areas did not indicate any moisture stains, mold-like substance or growth.

<u>Visible Evidence Present (VEP)</u> = There was a moisture stain, mold-like substance or growth seen on the surface that would suggest the presence of mold, fungi or microbial activity. A sample collect for a laboratory analysis for this area should be considered.

<u>Authorized (ATH)</u> = A microbial sample was collected and submitted to an AHIA certified laboratory for analysis.

<u>Moisture Evidence Present (MEP)</u> = Moisture signs, or elevation measurements are present. Moisture signs or elevated measurements can cause viable mold or other microbial growth.

<u>Probable Contamination (PC)</u> = Based on the physical inspection, probable mold or other microbial contamination is present in this area.

Client Present:Radon Test:Rain in last 3 days:YesNoNo

123 Main St. Page 4 of 38

I. OVERVIEW

Items

1.0 INTRODUCTION

Comments:

Two level apartment with common walls.

1.1 INSPECTION DESCRIPTION

Comments:

Limited area of inspection based on client directive: Stair closet and kitchen kickplate and lower sink shelf areas.

123 Main St. Page 5 of 38

II. INTERIOR

Items

2.0 KITCHEN: WALLS, FLOORS, CEILINGS AND CABINETRY

Comments: Visible Evidence Present, Probable Contamination

(1) Signs of rust and therefore historical unwanted moisture at the right corner kickplate sink cabinet. Repair and paint at the sink lower shelf.

These are indications of probable hidden mold under paint and lower shelf areas.



2.0 Item 1(Picture)

(2) Probable hidden mold area.



2.0 Item 2(Picture)

2.1 FURNACE: FILTER, INNER PLENUM INTERIOR WALLS, RETURN, REGISTERS (ACCESS VIEW ONLY) AND ENCLOSURE

Comments: Visible Evidence Present

123 Main St. Page 6 of 38

(1) The inspection of the plenum through the filter access is limited. It is not possible to inspect the interior ducting without a scope. This inspection does not include inspecting the interiors of ductwork.

Aging and poorly maintained heater: Damaged access door to filter that is breach and can result in carbon monoxide issues, dirty filter, dirty air return, moisture stains at the lower platform drywall which could be an indication of hidden mold growth in the system.



2.1 Item 1(Picture) Moisture stain

(2) Breach at access panel.



2.1 Item 2(Picture)

(3) Smoke detector located at too low of a level at upper area.

123 Main St. Page 7 of 38



2.1 Item 3(Picture)

2.2 INTERIOR ROOMS: WALLS, FLOORS, AND CEILINGS

Comments: Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

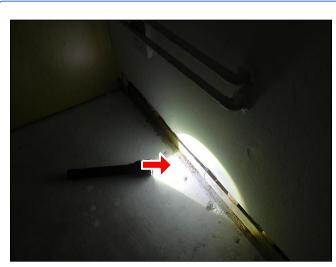
(1) The lower stair closet had lower drywall removed at two of three areas. There was visible mold at the openings where the drywall had been removed.



2.2 Item 1(Picture) Visible mold

(2) Visible mold area.

123 Main St. Page 8 of 38



2.2 Item 2(Picture)

This inspection was performed visually, and it was limited to visually accessible areas of the building at the time of the inspection. Mold or mold-like substances can be blocked from view and not found during inspection due to personal items or appliances and are out of view or not seen by the inspector. *The inspector is limited to visual access and this inspection is not all inclusive.*

If "Visible Evidence Present" is noted, the building owner or buyer should be aware that this identification is not a determination of the amount or its significance. Whether visible or not visible but hidden, there is a possibility that more mold or growth could exist in unseen areas. Perhaps only discovered after the inspection when personal belongings are removed revealing mold, or during remodeling, or further investigative inspections that may involve more sampling or dismantling and removal of building components.

Note: This is not a home inspection. This inspection will not contain the condition of any component even if the component or components are deteriorated, non-operational, dangerous, damaged or defective. This inspection is to attempt to visually identify a mold-like substance and to offer to send to the lab for testing. The decision for removal or remediation is at the sole discretion of the buyer and is not part of this inspection.

123 Main St. Page 9 of 38

III. SAMPLING / TEST RESULTS

Items

3.0 LIMITATIONS

Comments: Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

Mold sampling results have limited reliability and are <u>not</u> the primary data to determine recommendations. Sampling is an adjunct to our physical inspection, to help determine the presence, type and exposure potential (to occupants) of atypical mold conditions. IF SAMPLING WAS AUTHORIZED, PLEASE REFER TO THE SEPARATE PDF WITH LAB RESULTS.

3.1 DATA INTERPRETATION

Comments:

REFER TO SEPARATE LAB PDF WHEN REVIEWING THIS SECTION.

Moisture meter tests were normal at all areas tested.

Mold proteins were confirmed at the visible mold in the lower stair closet openings with an on site test.

A non-viable mold sample was collected at the lower stair opening and submitted to an AIHA certified laboratory for analysis. **The lab results confirmed visible mold growth in the area tested.**



3.1 Item 1(Picture) Confirmed mold protein test at lower stair closet.

123 Main St. Page 10 of 38

IV. FINDINGS: INSPECTION / TESTING

Items

4.0 FINDINGS / RECOMMENDATIONS

Comments: Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

Visible mold confirmed by mold lab test results, at the lower stair closet wall openings, we recommend level 1 mold remediation of the area by an ACAC certified professional.

Signs of historical moisture event at the kitchen kickplate and lower sink shelf, we recommend invasive evaluation under containment by an ACAC certified professional.

Poorly maintained HVAC system with breach to air return. We recommend repair of the breach for safety, and hygiene cleaning by a licensed HVAC contractor. We recommend further evaluation of the air return for visible mold by an ACAC certified mold remediation professional.

123 Main St. Page 11 of 38

V. SCOPE OF WORK

Items

5.0 Level 1 Abatement

Comments: Probable Contamination

Level 1: Mold remediaiton of the lower stair closet open wall areas.

The following procedures at a minimum are recommended:

- a. GPI recommends that a national board certified ACAC and or IICRC mold remediation professional be retained for this project. It is recommended that (IICRC) S520 guidelines, CAL-OSHA, OSHA Hazard Communication Standard (29 CFR 1910.1200) and EPA asbestos and lead paint regulations be followed.
- b. Respiratory protection (e.g., N95 disposable respirator), in accordance with the OSHA respiratory protection standard (29 CFR 1910.134), is recommended. Gloves and eye protection should be worn.
- c. The work area should be unoccupied. Vacating people from spaces adjacent to the work area is not necessary but is recommended in the presence of infants (less than 12 months old), persons recovering from recent surgery, immune suppressed people, or people with chronic inflammatory lung diseases (e.g., asthma, hypersensitivity pneumonitis, and severe allergies), and persons diagnosed with fungal related diseases.
- d. Containment of the work area is not necessary, but recommended, also airflow management is recommended; The work area should be covered with plastic sheet(s) and sealed with tape before remediation, to contain dust/debris. : Barrier tape and warning signs, as applicable, should be installed surrounding the affected areas. All applicable openings should be sealed, as required, with critical barriers constructed of 1 layer of (6 mil) flame retardant polyethylene. All microbial contaminated waste should be double bagged or wrapped in (6 mil) flame retardant polyethylene. Waste bags should be transparent, leak tight. All contaminated waste should be disposed of in an appropriate waste landfill. The designated work area should include taping along seams, isolating HVAC system, sealing all openings, caulking or foaming any cracks, and regulated HEPA filtered intake air from outside and a HEPA negative air system exhausting the work area to outside, as required. Bilingual warning signs must be properly posted. Provide 5 to 7 PASCAL's of negative air pressure, as required, within the containment area utilizing variable speed, thermal protected HEPA air filtration system with a primary two stage poly filter with 35% efficiency; a secondary pleated poly filter with 70% efficiency; and a final HEPA filter with 99.97% @.3 micron efficiency rating. Utilize carbon assisted HEPA air polishers for 24 hours to provide final level of microbial remediation. Provide mechanical dehumidifiers of sufficient capacity to create an effective drying system.
- e. Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag. There are no special requirements for the disposal of moldy materials.
- f. The work area and areas used by remedial workers for egress should be deep cleaned. Bleach and other Biocides are not recommended.

123 Main St. Page 12 of 38

- g. All areas should be left dry and visibly free from contamination and debris.
- h. HVAC filtration replacement and upgrades should be implemented.
- i. Bleach and other Biocides are not recommended. Encapsulant should not be applied prior to post-remediation assessment.
- Prior to re-construction of work area or application of encapsulant a post-remediation inspection and sampling should be completed by Guaranteed Property Inspection's ACAC Board Certified Microbial Investigator. Contact GPI to schedule a post remediation evaluation at 888.252.2274. Note that new building materials should not be re installed until laboratory tests have been received by GPI that indicate a "clear" rating.

5.1 HVAC REMEDIATION

Comments: Visible Evidence Present

We recommend hygiene cleaning of the HVAC by a licensed HVAC contractor to include AC coils (if present). This does not include duct cleaning.

123 Main St. Page 13 of 38

VI. REMEDIATION BEST PRACTICE

Items

6.0 Overview and Definitions

Comments:

Overview:

This section provides information for the client and retained remediation professional to determine the final scope of work, and types of best practice remediation actions. Further guidance regarding moisture, asbestos, radon, lead or microbial/mold removal procedures and written scope of work specifications should be finalized by an ACAC and or IICRC S500/S520 certified microbial remediation professional following: IICRC, NYC, ACGIH, AIHA, EPA, Cal OSHA and OSHA guidelines as appropriate.

Microbial contamination can be defined as the presence of microbial growth, and or mold spores, whose identity, location and quantity are not reflective of a normal fungal ecology for similar indoor environments, and which may produce adverse health effects, cause damage to materials and or adversely affect the operation of function of building systems. The size of the area impacted, type of fungal contamination, as well as contaminant exposure condition primarily determines the level of remediation recommended.

Samples if collected, were analyzed in order to determine the type(s), approximate amount, exposure and ranking of fungal or other microbial components present at the sampling location(s). The sample(s) analyses represent the conditions present at the time of collection. The information these results provide may be used to help decide if additional investigation and or remediation should be performed.

In the event there is no action recommended, this means that the inspection observations, measurements and or collected samples indicate that the sampled locations exhibited normal fungal ecology (Condition 1): "an indoor environment that may have settled spores, fungal fragments or traces of actual growth, whose identity, location and quantity is reflective of a normal fungal ecology for a similar indoor environment." (IICRC).

IICRC Definitions of Indoor Conditions Relative to Water/Moisture and Mold:

Mold/Microbial Conditions:

Contaminated as the presence of indoor mold growth and/or spores, whose identity, location and amplification are not reflective of a normal fungal ecology for an indoor environment, and which may produce adverse health effects and cause damage to materials, and adversely affect the operation or function of building systems.

<u>Condition 1</u> (normal ecology) - may have settled spores, fungal fragments or traces of actual growth whose identity, location and quantity is reflective of a normal fungal ecology for an indoor environment.

123 Main St. Page 14 of 38

<u>Condition 2</u> (settled spores) - an indoor environment which is primarily contaminated with settled spores that were dispersed directly or indirectly from a Condition 3 area, and which may have traces of actual growth.

<u>Condition 3</u> (actual growth) - an indoor environment contaminated with the presence of actual growth and associated spores. Actual growth includes growth that is active or dormant, visible or hidden.

Water/Moisture Conditions:

The Water Damage Restoration Standards identify three water conditions:

<u>Category 1</u> water- "water originating from a source that does not pose substantial harm to humans...clean water."

The Water Damage Restoration Standards identify two contaminant water conditions that require intervention:

<u>Category 2</u> water- "water originating from a significant degree of chemical, biological and/or physical contamination and having the potential to cause discomfort or sickness if consumed by or exposed to humans...grey water." e.g. dishwasher, urine (no feces); any water untreated for more than 48 hours may change to category 3.

<u>Category 3</u> water- "grossly unsanitary water containing pathogenic agents, arising from sewage or other contaminated water sources and having the likelihood of causing discomfort or sickness if consumed by or exposed to humans. This category includes all forms of... ground surface water...black water." any water untreated for more than 48 hours may change to category 3. e.g. toilet backflows beyond the trap is always considered black water.

6.1 Disposition Guidelines of Personal Property

Comments:

Disposition Guidelines of Personal Property:

All personal property in areas of contamination exposure should be considered as condition 2 (settled spores); (IICRC).

Personal property: (without moisture or water damage) Includes items with visible mold growth if it is strictly on the surface: •Porous, semi-porous, non-porous: Clean and restore.

Personal property: (with moisture or water damage) •Porous objects (e.g. Upholstery furniture, mattresses, carpet padding, carpets, stuffed animals, pillows, paper products, books, pressed wood furniture, acoustical ceiling material and tiles, gypsum wallboard); Remove and discard.

Semi-porous; (e.g. Wood furniture) Remove and discard.

Nonporous; (e.g. Metal, glass, tile, stone, plastic) Clean, sanitize and restore.

123 Main St. Page 15 of 38

Clothing and Fabrics: Can be washed or dry cleaned if the fungal contamination is not severe. Items that do not show visible contamination, but which have been subjected to very high levels of airborne spores, can be laundered or dry-cleaned.

Irreplaceable personal items or other modifications of disposition: (see (IICRC) S550 and S520 guidelines, and consult with contracted cleaner).

6.2 General Recommendations for Scope of Work

Comments:

General Recommendations for Scope of Work:

1. Resolve the source(s) of moisture for the area of concern. Mold or other microbials can reoccur if the cause of moisture is not remedied. Moisture repair must be completed prior to any remediation for any water intrusion related procedures.

- 2. Implement (IICRC) S500 standards for water intrusion.
- 3. Remove and properly dispose of affected area drywall, starting at the source and continuing towards each side until there is no visible mold or staining and then removing an additional 2 feet beyond.
- 4. Remove and properly dispose of affected area insulation; starting at the source and continuing towards each side until there is no visible mold or staining and then removing an additional 2 feet beyond.
- 5. Remove all floor covering and adhesives in the area of concern.
- 6. Provide for abrasive cleaning of wood structures; in the areas of concern and or where water stains and fungal growth are visible, and an additional 2 feet beyond.
- 7. Implement abatement level description below.

Microbial Abatement Guidelines

General Guidelines:

123 Main St. Page 16 of 38

Failure to adhere to the (IICRC) S520/S500 Remediation Procedures and other guidelines such as EPA, NYC, Cal OSHA, OSHA, AIHA, NIOSH, and ACGIH can result in inadequate microbial abatement as well as health hazards to workers and occupants of the property. In addition, an increase in "clearance testing" and cleaning costs may result from improper or inadequate remediation procedures.

Because of the potential health effects associated with elevated concentrations of microorganisms, only competent individuals familiar with the precautionary measures required should perform remediation. Specific guidelines governing this type of remediation are contained in (IICRC) S520, NY City Guidelines, and EPA (402-K-01-2001). In addition, general occupational safety is addressed by CAL-OSHA and in two Occupational Safety and Health Administration (OSHA) regulations. The general duty clause of the 1970 OSHA Act requires employers to provide a work environment "free from recognized hazards" and the 1987 Hazard Communication Standard provisions for employers to inform employees of chemical work-place hazards, including carcinogens, sensitizers and neurotoxins. Precautionary measures that may be required include - (1) negative pressurization, (2) physical isolation, (3) the use of respirators equipped with high efficiency particulate (HEPA) filters, (4) protective equipment for eyes and skin and (5) the use of asbestos abatement precautions.

The goal of remediation is to remove or clean contaminated materials in a way that prevents the emission of fungi and dust contaminated with fungi from leaving a work area and entering an occupied or non-abatement area, while protecting the health of workers performing the abatement as well as occupants.

The remediation methods listed were designed to achieve this goal; however, they are not meant to exclude other similarly effective methods and are not a substitute for a site-specific work plan. Since little scientific information exists that evaluates the effectiveness and best practices for mold remediation, these guidelines are based on principles used to remediate common indoor environmental hazards; it is the responsibility of the people conducting remediation to ensure the scope, methods, and engineering controls enacted are adequate. Mold remediation always requires some level of isolation of materials or containment. The lower level of containment or isolation involves sealing removed moldy materials in a plastic bag for disposal. Local area or full area containment decisions are made based on the type, level of mold burden and size of the probable area of growth and the potential for occupant exposure or building contamination without containment.

Any exclusions to the minimum remediation methods listed here should be carefully considered prior to implementation. Prior to any remediation, consideration must also be given to the potential presence of other environmental hazards, such as asbestos and lead. These guidelines are based on possible health risks from mold exposure and may be superseded by standard procedures for the remediation of other indoor environmental hazards.

Moisture Control and Building Repair:

123 Main St. Page 17 of 38

In all situations, the underlying moisture problem must be corrected to prevent recurring mold growth. Indoor moisture can result from numerous causes, such as: façade and roof leaks; plumbing leaks; floods; condensation; and high relative humidity. An appropriate building expert may be needed to identify and repair building problems. An immediate response and thorough cleaning, drying, and/or removal of water-damaged materials will prevent or limit microbial growth. Relative humidity should generally be maintained at levels below 65% to inhibit mold growth. Short-term periods of higher humidity would not be expected to result in mold growth. However, condensation on cold surfaces could result in water accumulation at much lower relative humidity levels. Relative humidity should be kept low enough to prevent condensation on windows and other surfaces. Emphasis should be placed on ensuring proper repairs of the building infrastructure so that water intrusion and moisture accumulation is stopped and does not recur.

Cleaning Methods:

Non-porous materials (e.g. metals, glass, and hard plastics) can almost always be cleaned. Semi-porous and porous structural materials, such as wood and concrete can be cleaned if they are structurally sound. Porous materials, such as ceiling tiles and insulation, and wallboards (with more than a small area of mold growth) should be removed and discarded. Wallboard should be cleaned or removed at least six inches beyond visually assessed mold growth or wet or water-damaged areas.

A professional restoration consultant should be contacted to restore valuable items that have been damaged. Cleaning should be done using a soap or detergent solution. Use the gentlest cleaning method that effectively removes the mold to limit dust generation. All materials to be reused should be dry and visibly free from mold. Consideration should also be given to cleaning surfaces and materials adjacent to areas of mold growth for settled spores and fungal fragments.

A vacuum equipped with a High-Efficiency Particulate Air (HEPA) filter could also be used to clean these adjacent areas. Disinfectants are seldom needed to perform an effective remediation because removal of fungal growth remains the most effective way to prevent exposure. Disinfectant use is recommended when addressing certain specific concerns such as mold growth resulting from sewage waters. If disinfectants are considered necessary, additional measures to protect workers and occupants may also be required. Disinfectants must be registered for use by the United States Environmental Protection Agency (EPA). Any antimicrobial products used in a HVAC system must be EPA-registered specifically for that use. The use of gaseous, vapor-phase, or aerosolized (e.g. fogging) biocides for remedial purposes is not recommended. Using biocides in this manner can pose health concerns for people in occupied spaces of the building and for people returning to the treated space. Furthermore, the effectiveness of these treatments is unproven and does not address the possible health concerns from the presence of the remaining non-viable mold.

Cleaning and painting (encapsulation) should only be considered if removal and replacement is not an option and if the contamination area and extent is limited. EPA scientists have identified three effective paints that were tested as limiting microbial growth for cleaned areas of growth: Permawhite, M-1 Additive and Porterscept.

123 Main St. Page 18 of 38

Quality Assurance Indicators:

Measures to ensure the quality and effectiveness of remediation should be undertaken regardless of the project size. Evaluations during as well as after remediation should be conducted to confirm the effectiveness of remedial work, particularly for large-scale remediation. At minimum, these quality assurance indicators should be followed and documented: The underlying moisture problem was identified and eliminated; Isolation of the work area was appropriate and effective; Mold removal and worksite cleanup was performed according to the site-specific plan; Any additional moisture or mold damage discovered during remediation was properly addressed; Upon completion of remediation, surfaces are free from visible dust and debris.; If environmental sampling was performed, the results of such sampling were evaluated by a trained building or environmental health professional.

Restoring treated spaces should not be completed until these quality assurance steps are completed.

• Prior to re-construction of work area or application of encapsulant a post-remediation inspection and sampling should be completed by Guaranteed Property Inspection's Board Certified Microbial Consultant. Contact GPI to schedule a post remediation evaluation at 888.252.2274. Note that new building materials should not be re installed until laboratory tests have been received by GPI that indicate a "clearance" rating.

123 Main St. Page 19 of 38

VII. METHODS AND PROCEDURES

Items

7.0 Instruments and Sampling

Comments:

Description of Specialized Inspection Instruments:

Moisture Meter

The presence of moisture on the surface of building materials or inside structural components is the primary factor in sustaining microbial growth, which may lead to exposure to microbial emissions of spores, mycotoxins and microbial Volatile Organic Compounds (mVOCs).

To avoid microbial growth, it is recommended that moisture content of structure wood products be below 15%. Other building and construction materials, such as drywall and plaster, should measure at or below the baseline reading(s) taken from dry or unaffected materials of similar composition. All elevated moisture findings are confirmed with two moisture meter instruments to avoid false negatives or positives. There are two types of moisture meters typically used in the microbial industry. Pin-type meters, which utilize the principle of electrical resistance. Pin-less meters use radio frequency signals to penetrate the material being tested. GPI moisture meters currently in use are: Protimeter (Pin-type) and General MMD5NP (Pin-less).

Thermometer Hygrometer

The U.S. Environmental Protection Agency states that mold growth can occur on surfaces whose temperature ranges between 40° and 100° F. Unfortunately, most molds grow very well at the same temperatures that humans prefer. Therefore, it is not feasible to control mold growth in our home environment through the control of temperature. Most molds requires the presence of considerable moisture for growth. Obviously, the word "considerable" is key here. The mycologists (fungi scientists) refer to "water activity" when describing the required conditions for mold growth. The various species of mold have different water activity requirements. A material's "water activity" is equivalent to the relative humidity of the air that would be in equilibrium with the material at that material moisture content. The vast majority of mold species require "water activity" levels that are equivalent to material equilibrium moisture contents corresponding to relative humidity of at least 70%. The EPA reports that some molds can grow at 60% relative humidity or above. Indoor relative humidity (RH) should be kept below 60 percent -- ideally between 30 percent and 50 percent, if possible. Low humidity may also discourage pests (such as cockroaches) and dust mites. We measures temperature and relative humidity with the digital RH thermometer hygrometer.

Thermal Imaging

The FLUKE Portable Infrared Thermal Imager Camera offers a noninvasive means of monitoring and diagnosing the condition of buildings. It provides immediate documentation of as-built or post restoration quality, post-casualty cause and origin data, plumbing and building envelope water leakage, post-flood and fire water-damaged material assessment, energy use inefficiency, and roofing. Extending human vision with

123 Main St. Page 20 of 38

electronic imaging is one of the most powerful techniques available to science and industry, particularly when it enables us to see light in the infrared, or IR portion of the spectrum.

Sampling Methodology:

Microbial Accredited Laboratory

Samples are collected and submitted to an independent accredited microbial laboratory: EMLab, EMSL, Mycometrics, Hayes, Assured Bio Technology and or Aerotech. Samples are typically delivered to the lab by the investigator or express mailed.

Since important health, remediation and financial decisions will be based on results of these analyses, it is vital that the laboratory analyzing the samples be proficient in producing high quality data. EMLab, EMSL, Mycometrics, Hayes, Assured Bio Technology, and Aerotech have the distinction of having an AIHA EMLAP accredited labs. The accreditation complies with International Standard ISO/IEC 17025, general requirements for the competence of testing and calibration laboratories. When a laboratory is accredited by AIHA, the laboratory and its clients have the assurance that the laboratory has met defined standards for performance based on examination of a variety of criteria. When a laboratory is accredited by AIHA, it becomes part of an elite group of laboratories achieving and maintaining a high level of professional performance.

AIHA's EMLAP program is designed for laboratories specializing in analysis of microorganisms commonly detected in air, fluids and bulk samples, as part of IAQ investigations. The AIHA accreditation program is a rigorous, thorough and lengthy process involving all operations and personnel of the accredited site. The scope and program requirements for EMLAP accreditation include: Personnel Qualifications, Methods of Analysis, Quality Assurance, Laboratory Records, Standard Operating Procedures, Facilities, Site Visits & Participation in the EMPAT program.

Sampling and Analysis Methods

Direct Surface/Bulk

Substrates suspected of microbial contamination should be sampled to identify sources of airborne contamination. When mold/microbial or suspected mold/microbial is visible, direct surface sampling is recommended. This sample method can help determine types of microbials that are present, however it is not a reliable measure of the quantity of mold/bacteria that may be present in the indoor environment. A swab or bulk cultured analysis of a direct sample is considered the best method of analysis. The cultured method may help resolve a specific microbial species identification problem. Cultured sampling can also provide information on: mold spore counts, fungal growth, bacterial, sewage, E. Coli/Coliform, Legionella, and yeast ID. Tape lift or swab direct samples are also useful for non-cultured analysis and provide for a quicker result turn around.

Direct sampling does not provide information about other mold/bacteria which are not directly on the sampled spot. Visible microbial contamination that is confirmed by direct surface sampling is evidence of indoor contamination (ACGIH), however it is not a confirmation of potential exposure levels.

Inertial Impaction Air Quality Sampling

123 Main St. Page 21 of 38

With the absence of scientific fungi exposure limits in non-industrial settings, the traditional common accepted industry practice as supported by ACGIH, AIHA, and EPA guidelines, is to compare biodiversity of outside bioaersol concentrations and species to inside concentrations and species. The species of fungi found indoor and outdoor air typically are similar if outdoor air is the primary source. If fungal concentrations indoors are consistently higher than those outside, then indoor sources are indicated. However, indoor problem fungal growth may also be present in situations where indoor concentrations of airborne fungi are equal to or lower than those outdoors, and interpretation of data depends on a knowledge of the kinds of fungi present in the two environments.

In buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors sampled should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors and the absence of the same kind outdoors may indicate a moisture problem and degraded air quality. Levels of similar genera 10 times higher than the outside can indicate "significant" contamination of interior substrates. Further, the consistent presence of certain indicator fungi (that can be determined by non-viable, culture or DNA sampling) such as Stachybotrys chartarum, Chaetomium, Aspergillus versicolor, or various Penicillium species over and beyond background concentrations may indicate the occurrence of a moisture problem and a potential atypical exposure.

Air sampling alone is considered insufficient when the objective of a microbial IAQ survey is to determine the nature and extent of fungal growth and the implications. Air sampling of any kind cannot provide an estimate of mold exposure over an extended time period. Air sampling should be combined with other methods to properly evaluate an indoor space. Non-viable spore trap sampling is also considered inadequate to specifically characterize the air quality for fungi, since microscopic examination only allows for identification of a very few genera/species spores. As a result cultured or Quantitative Polymerase Chain Reaction sampling techniques may need to be added to better determine mold species. Nonetheless, spore trap sampling can be a useful tool and has advantages over culturable media, i.e. rapid turnaround time, and more reliable for non-culturable spores.

In wall air cavity air sampling is a controversial area of industrial hygiene practice, with some discouraging its use because of both false positives and false negatives being common. In wall testing can be useful to assist with the location of suspected hidden mold growth, when it is combined with other mold testing approaches.

Non-viable air samples are collected using a Model B520 Bioaerosol Sampling controlled flow sampling pump for bioaerosol sampling with Allergenco-D™ or Air-O-Cell™ cassette. The B520 pump is calibrated before and after each sample collection job with a mini-BUCKÔ Primary Flow Calibrator.

Quantitative Polymerase Chain Reaction

Quantitative Polymerase Chain Reaction (QPCR) is cutting edge molecular technology that analyzes for the genetic material called deoxyribonucleic acid (DNA) that is found in every cell. DNA is unique for every individual organism. Using QPCR allows for the detection of fungi, bacteria and certain viruses by identifying the presence of their specific DNA in their genome. The development and utilization of real-time polymerase chain reaction (RTPCR) in detection and quantitation of fungi in the indoor environment has been made possible by a patented technology developed by the US Environmental Protection Agency (US-EPA).

123 Main St. Page 22 of 38

QPCR can detect the presence of small quantities of organisms whether they are alive, dead or cannot be cultured. For these reasons, QPCR is a fast, accurate, sensitive and specific alternative analysis that has many advantages over traditional microbiological methods that involve microscopic direct examination or culturing.

Environmental Relative Moldiness Index (ERMI)

The ERMI has been developed by EPA (Environmental Protection Agency) scientists for research using a sophisticated research DNA test method by which to compare and interpret fungal data at the molecular level. The ERMI was developed by EPA scientists as a screening tool for the evaluate potential risk of an indoor mold growth problem. Using ERMI protocols, targeted mold species can be quantified bio-chemically. Mold species are divided into two groups by the ERMI. The first group of 26 indicator species represents molds associated with water damage, while the second group represents common indoor molds. The ERMI report includes the detection and concentrations of 36 specific mold species along with the combined ERMI value itself. The overall ERMI measurement provides a rank of the "moldiness" to compare the results to a national scale, based on a national HUD survey of 1,096 homes. An ERMI score is also used in conjunction with individual mold species quantifications to determine mold conditions. More recent research also considers the value of "group two" molds as an indicator of problem mold conditions. The preferred method collects dust from a measured floor area with a dust sample collection kit. The dust sample will contain not only mold spores (like previous traditional test methods) but also mold particles (which also cause negative health symptoms) that have settled out of the air onto carpet, floor or surfaces. The dust is then analyzed in the laboratory using a DNA-based technology called mold-specific quantitative polymerase chain reaction, or MSQPCR. The results of the test provide a scientifically derived value between about -10 to 20 that are compared to the national ERMI scale to determine the relative moldiness and average mold species levels of the sampled home or business. The ERMI is not meant as an instantaneous measure of moldiness, but a long-term history of the mold growth in the particular indoor environment.

ERMI values have now been correlated with laboratory assays and negative health symptoms. Further, it has been reported that after medical treatment, and re-occupation of the home provided the post-remediation ERMI score is below an accepted value of -1.0 or 2.0 (depending on the occupants antigen blood test measurements), treatment benefit has been reported as maintained by medical researchers.

123 Main St. Page 23 of 38

VIII. HEALTH EFFECTS

Items

8.0 Microbial Exposure

Comments:

Microbial Exposure

Shoemaker (2010) identifies "Mold illness" as a subcategory of biotoxin illness, called Chronic Inflammatory Response Syndrome (CIRS). CIRS is defined as: an acute and chronic, systemic inflammatory response syndrome acquired following exposure to the interior environment of a water-damaged building (WDB) with resident toxigenic organisms, including, but not limited to fungi, bacteria, actinomycetes and mycobacteria as well as inflammagens such as endotoxins, beta glucans, hemolysins, proteinases, mannans, c-type lectins and possibly spirocyclic drimanes, plus volatile organic compounds. The EPA has indicated that 21% of all new cases of asthma are due to exposure to WDB.

The California Department of Public Health (2011) has concluded that the presence of water damage, dampness, visible mold, or mold odor in schools, workplaces, residences, and other indoor environments is unhealthy. Human health studies have led to a consensus among scientists and medical experts that the presence in buildings of (a) visible water damage, (b) damp materials, (c) visible mold, or (d) mold odor indicates an increased risk of respiratory disease for occupants. Known health risks include: the development of asthma, allergies, and respiratory infections; the triggering of asthma attacks; and increased wheeze, cough, difficulty breathing, and other symptoms. In addition, evidence is accumulating, although not yet conclusive, that the more extensive, widespread, or severe the water damage, dampness, visible mold, or mold odor, the greater the health risks.

The EPA reports that inhalation exposure to mold indoors can cause health effects in some people. Molds produce allergens (substances that can cause allergic reactions), irritants, and, in some cases, potentially toxic substances or chemicals (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals. Mold does not have to be alive to cause an allergic reaction. Dead or alive, mold can cause allergic reactions in some people.

Allergic reactions to mold are common and can be immediate or delayed. Repeated or single exposure to mold, mold spores, or mold fragments may cause non-sensitive individuals to become sensitive to mold, and repeated exposure has the potential to increase sensitivity. Allergic responses include hay fever-like symptoms such as headache, sneezing, runny nose, red eyes, and skin rash (dermatitis). Molds can cause asthma attacks in people with asthma who are allergic to mold. In addition, molds can irritate the eyes, skin, nose, throat, and lungs of individuals whether or not they are allergic to mold.

Breathing in mold may also cause hypersensitivity pneumonitis, an uncommon disease that resembles bacterial pneumonia. In addition, mold exposure may result in opportunistic infections in persons whose immune systems are weakened or suppressed. When mold grows indoors, the occupants of a building may begin to report odors and a variety of symptoms including headaches, difficulty breathing, skin irritation, allergic reactions, and aggravated asthma symptoms. These and other symptoms may be associated with exposure to mold. But all of these symptoms may be caused by other exposures or conditions unrelated to

123 Main St. Page 24 of 38

mold growth. Therefore, it is important not to assume that, whenever any of these symptoms occurs, mold is the cause.

Although mold is frequently found in damp buildings, it is not the only potential contaminant - biological contaminants other than mold, and non-biological contaminants are often present and may also cause health effects. Damp buildings may attract rodents and other pests. Damp or wet building components and furnishings may release chemicals indoors.

Potential contaminants in damp or wet buildings include bacteria, dust mites, cockroaches and other pests, as well as chemicals emitted by damp building materials and furnishings.

8.1 Sampling

Comments:

Sampling

Any sampling conducted in this report does not identify whether the microbial(s) identified are alive or capable of causing disease. Further the presence of fungi or other microbials on building materials as identified by a visual assessment, bulk/surface, DNA, or air sampling results does not necessitate that people will be exposed to toxins or exhibit health effects.

8.2 Medical Referral and Relocation

Comments:

Medical Referral and Relocation

The question of what constitutes a serious health risk is difficult to assess for any bioaerosol without qualified medical involvement. Individuals with health problems that appear to be related to bioaerosol exposure should see their physicians for a referral to practitioners who are trained in Chronic Inflammatory Response Syndrome (CIRS), environmental medicine or related specialties and are knowledgeable about these types of exposures. There is no scientific evidence to support the assertion that only susceptible individuals are at risk from bioaerosol exposure in indoor environments. Pre-existing conditions and genetic make-up can make individuals more susceptible to the effects of an exposure to microbials.

Communication with building occupants is essential for successful mold remediation. Some occupants will naturally be concerned, and their concern may increase if they believe information is being withheld. The status of the building investigation and remediation should be openly communicated, along with information on known or suspected health risks.

123 Main St. Page 25 of 38

IX. LIMITATIONS AND CODE OF ETHICS

Items

9.0 Limitations and Code of Ethics

Comments:

Best Practice and Limitations

This report is designed to provide guidance as to the inspected and or sampled location(s) having a suspected microbial and or indoor air quality problem as well as further actions that should be considered to develop specific testing or remediation specifications. Guaranteed Property Inspection and Mold Investigation, Inc. (GPI) is not responsible to identify or find hidden moisture damage, air quality, microbials or other hazards, which are not readily visible, or identified by third party laboratory results. If hidden moisture, microbials or other indoor air quality problems are found, the client should retain GPI to further investigate. This report should be submitted for further recommendations from a certified IICRC, ACAC, or a qualified indoor environmental state licensed consultant i.e. asbestos, VOC's, radon, and or lead. Individuals with health problems should see their physicians for a referral to practitioners who are trained in environmental medicine or related specialties and are knowledgeable about these types of exposures.

GPI follows protocols based on the appropriate Standards of Practice and guidelines for investigation, sample collection and the assessment of indoor environments for microbial contamination, and air quality problems of the: American Conference of Governmental Industrial Hygienists (ACGIH), American Industrial Hygiene Association (AIHA), American Council for Accredited Certification (ACAC), New York City Health Department (NYC), California Department of Health, Environmental Protection Agency (EPA), Asbestos Hazard Emergency Response Act (AHERA), IICRC, American Society of Home Inspectors (ASHI) and the California Real Estate Inspectors Association (CREIA).

This report applies only to those areas of investigation and or sample collection approved, as well as directed by the client and taken at the time, place and location referenced by this report. Sample recommended protocols by GPI are often limited by client directives based on a goal to reduce costs. Limited investigation and sampling as directed by the client may result in partial information for findings and written remediation specifications. If the client has limited recommended tests or areas of investigation, the client understands that other consulting professionals may request additional testing and inspection information to provide further recommendations. Interpretation of these parameters is a scientific work in progress and may as such be changed at any time without notice. As such, this report is unique for the property identified and should be considered a living document. GPI reserves the right to modify its contents as needed to reflect new industry science or site findings. GPI makes no express or implied warranties or guarantee as to such use or interpretation, or sole reliance on this report and as to the testing methodology used. The client is solely responsible for the use of these tests and report results.

Reports are generated by GPI at the request of, and for the exclusive use of, the person or entity (client) named on this report, further it is assumed that the correction of the underlying cause of air quality or microbial contamination is the responsibility of the client or property owner and not GPI. Reliance on or use of this copyrighted© report by anyone other than the client, for whom it was prepared, is prohibited. No part of this document may be reproduced without the permission of the author, GPI, Irvine, CA 92603. No responsibility is

123 Main St. Page 26 of 38

assumed by the author for any injury and or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operations of any methods, products, instructions or ideas contained in the material herein. Reports or copies of this report will not be released or discussed by GPI without the prior expressed written contractual consent from the client named in this report. This report is the intellectual property of GPI; that is unique to each report and is a copyrighted document. Reliance or use by any third party, does not make said third party a third party beneficiary to GPI's contract with the client. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party. Any approved consultations with client-authorized individuals will be charged \$350 per hour. If recommended in this report, the testing, removal and cleaning of contaminated or hazardous materials should be undertaken only by properly certified and qualified professionals with adequate precautions, since disturbance of contaminated materials can impact the health of remediation workers and occupants.

GPI has applied best practice standards of practice to perform this analysis report, but this evaluation may have been limited in scope to the areas of investigation and testing by client directive. Applicability, limitations and exclusions include but are not limited to:

- 1.1 The inspection is a non-invasive visual survey of the structure.
- a. The inspection is limited to visible areas that are deemed by the inspector as easily accessible, and does not pose a physical hazard or damage/alter the structure or its contents, including but not limited to, attic space, crawl space, or roof access.
- b. Inspector does not move or alter any contents of the structure to gain access for inspection.
- c. Inspector does not operate or adjust any fixture or valve.
- 1.2 The results and recommendations made by the inspector relative to this standard are limited to ruling out significant sources of contamination.
- 1.3 Identification of suspect areas is not intended to be a health risk assessment for the occupants, clients are advised to seek further information from their medical professional.
- 1.4 It is not intended that the full scope and or cost of remedial action is to be fully based on the results and recommendations made by this inspector relative to this standard.
- 1.5 The inspector does not maintain a business relationship with any moisture or mold remediation companies or repair contractors.
- 1.6 The results and recommendations made by the inspector relative to this standard are applicable only to the area(s) inspected by client directive.
- 1.7 Inspections performed rely upon the opinion, judgment and experience of the inspector, and are not intended to be technically exhaustive.

123 Main St. Page 27 of 38

- 1.8 Sample collections shall not be construed as a compliance sample collection of any code, governmental protocol, or regulation. In the event a law, statute, or ordinance prohibits a procedure recommended, the inspector is relieved of the obligation to adhere to the prohibited part of the standard.
- 1.9 Findings in this report are limited to the date, time, and area of investigation.
- 2.0 No warranties are made with respect to the contents of this report. GPI cannot guarantee that individuals and environments will be free of hazards exposure. Due to the nature of air quality hazards, contaminants can be hidden and unknown in areas of this property even with exhaustive inspection and testing efforts; GPI cannot be held responsible if the client, remediation personnel, other inspectors, dogs (or other non-scientific approaches), current or future property owners discover such areas.

American Council for Accredited Certification (ACAC)

Code of Conduct:

Preamble: The American Council for Accredited Certification (ACAC) is a professional association that serves as a certifying body for those in the multi-disciplinary field of indoor air quality. The Board of Directors has adopted, and commends to its certificants, the following code of conduct.

Objective: The objective of this code is to provide standards of appropriate conduct for the certificants of the American Council for Accredited Certification as they engage in their individual professions, seeking to ensure the protection of individuals and their property from IAQ concerns.

Rules of Conduct: Certificants of the American Council for Accredited Certification shall:

Practice their respective professions following accepted Indoor Air Quality standards and guidelines.

Exercise caution not to misrepresent their credentials, training or experience when performing Indoor Air Quality services.

Deal responsibly in advising parties regarding potential damage to property and/or risk to health.

Maintain confidentiality concerning both personal and business information gathered in the performance of their professions, except in the case of overriding legal and/or health concerns.

Avoid instances where potential conflict of interest or compromise of professional judgment may occur.

Act with integrity to uphold the standards of their profession and of the Council and avoid any conduct that could adversely reflect on the Council and its certificants.

123 Main St. Page 28 of 38

ACAC Certification:

Founded in 1993, The American Council for Accredited Certification (ACAC) is North America's oldest and most prestigious certifying body dedicated to indoor air quality. ACAC offers consulting and remediation certifications in infection control, microbial, indoor environmental and other Indoor Air Quality (IAQ)-related fields.

ACAC is the only certifying body in the IAQ field to achieve independent third-party accreditation from the Council of Engineering and Scientific Specialty Boards (CESB).

Certification Process:

Candidates for an accredited ACAC certification must demonstrate a combination of college-level science education and verifiable field experience on a written application before taking the certification exam. ACAC staff members verify field experience documentation for every candidate. Certification boards develop each certification exam from standard industry reference texts, never from training course curricula. ACAC exams are developed and maintained according to accreditation guidelines published by the National Commission of Certifying Agencies (NCCA) and delivered at third-party proctoring centers around the world. ACAC certification boards set passing scores for each exam using psychometrically verified statistical analysis. In an average year, only about 70% of eligible candidates pass their ACAC certification exam. Candidates who pass their exams must await board review of their application files. ACAC certification boards are composed of no less than five (5) members, each of whom holds the certification in question. Board members may not be affiliated with those who provide prep courses for ACAC exams. Boards meet and discuss each application file and certify by unanimous vote only. ACAC certifications are current for two years, after which time recertification is required. Certificants must document and attest to 40 hours of professional development activities during each two-year certification cycle.

Integrity and Independence:

The Federal government specifies ACAC certifications for mold workers in its Unified Facilities Guide Specifications. ACAC exams are verified as psychometrically sound and independent from training courses. The American Lung Association recommends ACAC certification throughout its "Standard of Care for the New Hampshire Mold Industry: A Guide for Citizens Affected by Mold and Moisture in New Hampshire Buildings." The New York State Toxic Mold Task Force recognized ACAC certifications in its 2010 report to the New York state legislature. For more information about the integrity, credibility and independence of ACAC certification programs, visit the ACAC website at www.acac.org.

Inspector

Steve Zivolich, M.A., CMC, CMI, ACI

123 Main St. Page 29 of 38

X. INSPECTOR QUALIFICATIONS

Items

10.0 QUALIFACTION AND EXPERIENCE

Comments:

STEVE ZIVOLICH, MA

EXPERIENCE

Over 7,000 property, mold and environmental inspections.

National Microbial Certification Board Member, American Council for Accredited Certification.

Expert Witness for mold, and real estate litigation.

CERTIFICATIONS

Council-Certified Microbial Consultant (CMC), American Council for Accredited Certification

CREIA Certified Property Inspector (CCI), California Real Estate Inspector Association

ASHI Certified Property Inspector (ACI), American Society of Home Inspectors, #244157

Radon Measurement Provider, California Department of Public Health, #105129RT

Certified Partner, Environmental Date Resources

MEMBERSHIPS

National Microbial Certification Board, American Council for Accredited Certification

123 Main St. Page 30 of 38

California Real Estate Inspectors Association

American Society of Home Inspectors

National Environmental Health Association

American Society of Radon Scientists and Technologists

National Association of Home Inspectors

The California Healthy Homes Association

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123 Main St. Page 31 of 38

MEMBERSHIPS

National Microbial Certification Board, American Council for Accredited Certification

California Real Estate Inspectors Association

American Society of Home Inspectors

National Environmental Health Association

American Society of Radon Scientists and Technologists

National Association of Home Inspectors

The California Healthy Homes Association

123 Main St. Page 32 of 38

General Summary



Guaranteed Property Inspection & Mold Investigations Inc.

www.gpinspect.com (707) 239-2601

Customer

Sample Mold Report

Sample Mold Report

Address

123 Main St. Santa Rosa CA

This summary lists all areas where a mold like substance was discovered and a sample was collected. The samples are collected automatically and discarded if the customer does not authorize the inspector to send to the lab in the next 48 hours. Payment for each sample must be made before samples can be sent to the laboratory. There is an additional fee for any return trips back to the property.

Instructions:

- 1. Decide which surface samples are to be sent to the lab.
- 2. To authorize, decide which samples you want tested and call, fax or email your authorization by item number.
- 3. Make payment. The lab results will be delivered within 5 days.

Upon receipt of your lab results, review the information from the lab. Then decide if you need remedial action. If so, contact a mold remediation company.

II. INTERIOR

2.0 KITCHEN: WALLS, FLOORS, CEILINGS AND CABINETRY

Visible Evidence Present, Probable Contamination

(1) Signs of rust and therefore historical unwanted moisture at the right corner kickplate sink cabinet. Repair and paint at the sink lower shelf.

These are indications of probable hidden mold under paint and lower shelf areas.

- (2) Probable hidden mold area.
- 2.1 FURNACE: FILTER, INNER PLENUM INTERIOR WALLS, RETURN, REGISTERS (ACCESS VIEW ONLY) AND ENCLOSURE

123 Main St. Page 33 of 38

II. INTERIOR

Visible Evidence Present

(1) The inspection of the plenum through the filter access is limited. It is not possible to inspect the interior ducting without a scope. This inspection does not include inspecting the interiors of ductwork.

Aging and poorly maintained heater: Damaged access door to filter that is breach and can result in carbon monoxide issues, dirty filter, dirty air return, moisture stains at the lower platform drywall which could be an indication of hidden mold growth in the system.

- (2) Breach at access panel.
- (3) Smoke detector located at too low of a level at upper area.

2.2 INTERIOR ROOMS: WALLS, FLOORS, AND CEILINGS

Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

- (1) The lower stair closet had lower drywall removed at two of three areas. There was visible mold at the openings where the drywall had been removed.
- (2) Visible mold area.

III. SAMPLING / TEST RESULTS

3.0 LIMITATIONS

Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

Mold sampling results have limited reliability and are <u>not</u> the primary data to determine recommendations. Sampling is an adjunct to our physical inspection, to help determine the presence, type and exposure potential (to occupants) of atypical mold conditions. IF SAMPLING WAS AUTHORIZED, PLEASE REFER TO THE SEPARATE PDF WITH LAB RESULTS.

IV. FINDINGS: INSPECTION / TESTING

4.0 FINDINGS / RECOMMENDATIONS

Visible Evidence Present, Probable Contamination, (Authorized- sample sent to Lab)

Visible mold confirmed by mold lab test results, at the lower stair closet wall openings, we recommend level 1 mold remediation of the area by an ACAC certified professional.

Signs of historical moisture event at the kitchen kickplate and lower sink shelf, we recommend invasive evaluation under containment by an ACAC certified professional.

Poorly maintained HVAC system with breach to air return. We recommend repair of the breach for safety, and hygiene cleaning by a licensed HVAC contractor. We recommend further evaluation of the air return for visible mold by an ACAC certified mold remediation professional.

V. SCOPE OF WORK

5.0 Level 1 Abatement

Probable Contamination

Level 1: Mold remediaiton of the lower stair closet open wall areas.

The following procedures at a minimum are recommended:

123 Main St. Page 34 of 38

V. SCOPE OF WORK

- a. GPI recommends that a national board certified ACAC and or IICRC mold remediation professional be retained for this project. It is recommended that (IICRC) S520 guidelines, CAL-OSHA, OSHA Hazard Communication Standard (29 CFR 1910.1200) and EPA asbestos and lead paint regulations be followed.
- b. Respiratory protection (e.g., N95 disposable respirator), in accordance with the OSHA respiratory protection standard (29 CFR 1910.134), is recommended. Gloves and eye protection should be worn.
- c. The work area should be unoccupied. Vacating people from spaces adjacent to the work area is not necessary but is recommended in the presence of infants (less than 12 months old), persons recovering from recent surgery, immune suppressed people, or people with chronic inflammatory lung diseases (e.g., asthma, hypersensitivity pneumonitis, and severe allergies), and persons diagnosed with fungal related diseases.
- d. Containment of the work area is not necessary, but recommended, also airflow management is recommended; The work area should be covered with plastic sheet(s) and sealed with tape before remediation, to contain dust/ debris.: Barrier tape and warning signs, as applicable, should be installed surrounding the affected areas. All applicable openings should be sealed, as required, with critical barriers constructed of 1 layer of (6 mil) flame retardant polyethylene. All microbial contaminated waste should be double bagged or wrapped in (6 mil) flame retardant polyethylene. Waste bags should be transparent, leak tight. All contaminated waste should be disposed of in an appropriate waste landfill. The designated work area should include taping along seams, isolating HVAC system, sealing all openings, caulking or foaming any cracks, and regulated HEPA filtered intake air from outside and a HEPA negative air system exhausting the work area to outside, as required. Bilingual warning signs must be properly posted. Provide 5 to 7 PASCAL's of negative air pressure, as required, within the containment area utilizing variable speed, thermal protected HEPA air filtration system with a primary two stage poly filter with 35% efficiency; a secondary pleated poly filter with 70% efficiency; and a final HEPA filter with 99.97% @.3 micron efficiency rating. Utilize carbon assisted HEPA air polishers for 24 hours to provide final level of microbial remediation. Provide mechanical dehumidifiers of sufficient capacity to create an effective drying system.
- e. Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag. There are no special requirements for the disposal of moldy materials.
- f. The work area and areas used by remedial workers for egress should be deep cleaned. Bleach and other Biocides are not recommended.
- g. All areas should be left dry and visibly free from contamination and debris.
- h. HVAC filtration replacement and upgrades should be implemented.
- i. Bleach and other Biocides are not recommended. Encapsulant should not be applied prior to post-remediation assessment.
- Prior to re-construction of work area or application of encapsulant a post-remediation inspection and sampling should be completed by Guaranteed Property Inspection's ACAC Board Certified Microbial Investigator. Contact GPI to schedule a post remediation evaluation at 888.252.2274. Note that new building materials should not be re installed until laboratory tests have been received by GPI that indicate a "clear" rating.

5.1 HVAC REMEDIATION

Visible Evidence Present

We recommend hygiene cleaning of the HVAC by a licensed HVAC contractor to include AC coils (if present). This does not include duct cleaning.

123 Main St. Page 35 of 38

This inspection was performed by visual inspection of readily accessible areas of the home. There was no drilling, probing or scoping into wall cavities or hidden areas. No attempts were made to inspect areas hidden from normal view. Areas in your home may have mold but was not seen or tested by this inspection. This includes not being able to inspect carpet, padding or the floor underneath floor coverings. The air tests help to reveal spore count and different possible allergens in the home. Compare the spore count inside the home to the spore count outside. It is logical to desire a lower spore count inside the home than the count outside. If the spore count is relatively equal to or more inside than outside would suggest concern, and you should consider and contact a remediation company for further consultation and remedy. Please be advised that the remediation company can cause more contamination if proper removal or remediation methods are not adhered to during repairs.

Prepared Using HomeGauge http://www.HomeGauge.com : Licensed To Steve Zivolich, MA, CMC, ACI

123 Main St. Page 36 of 38



INVOICE

Guaranteed Property Inspection & Mold Investigations Inc. www.gpinspect.com (707) 239-2601

Inspected By: Steve Zivolich, MA, CMC, ACI

Inspection Date: 6/30/2016 Report ID: msample

Customer Info:	Inspection Property:
Sample Mold Report	123 Main St. Santa Rosa CA
Sample Mold Report	
Customer's Real Estate Professional:	

Inspection Fee:

Service	Price	Amount	Sub-Total
BASE FEE	170.00	1	170.00

Tax \$0.00

Total Price \$170.00

Payment Method:

Payment Status: Paid At Time Of Inspection

Note:

123 Main St. Page 37 of 38



Guaranteed Property Inspection & Mold Investigations Inc.

Steve Zivolich, MA, CMC, ACI

www.gpinspect.com (707) 239-2601



123 Main St. Page 38 of 38