

Post-Remediation Mold Inspection Report

Subject Property Located At:

1234 Neptune Ave. Bikini Bottom, CA

July 31, 2013

Prepared for: **Bob Sponge**

Crusty Crab Property Management

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<u>Post-Remediation Inspection Report - Reliance Statement and Warranty</u>

Gold Health and Safety Consulting, Inc. ("GSC") was engaged by Bob Sponge ("Client") of Crusty Crab

Property Management to conduct an inspection of the real property located at 1234 Neptune Ave., Bikini

Bottom, California, with respect to the mold remediation project that had recently occurred, as based on

available information and data at the time of GSC's inspection. GSC performed the post-remediation

inspection at the subject property on July 9, 2013.

GSC's services consist of professional opinions and recommendations made in accordance with generally

accepted engineering principles and practices and are designed to provide a tool to assist the Client. GSC or

those representing GSC bear no responsibility for the actual condition of the structure or safety of an inspected

site regardless of the actions taken by the Client.

Upon acceptance of the report, the Client agrees that GSC's inspection(s) shall be limited by the terms and

conditions stated in GSC's report, and that the actual site conditions at the subject property may change with

time; that hidden conditions (not discoverable within the scope of this assessment) may exist at the site; and

that the scope of inspections may be limited by time, budget and other constraints imposed by the Client.

Regardless of the findings of GSC's inspections, GSC makes no warranty that the site is free from existing or

threatened mold, bacteria, or other contaminants, and GSC is not responsible for consequences or conditions

arising from facts that were concealed, withheld, or not fully disclosed at the time the inspection(s) was

conducted. Suspect asbestos-containing building materials and suspect lead-based paints were not

characterized during the inspection(s). Removal and disposal of asbestos or lead containing materials must

follow all applicable Federal, State, and local regulatory requirements.

GSC represents to the Client that it has used the degree of care and skill ordinarily exercised by environmental

consultants in the preparation of the inspections of the subject property and in the assembling of data and

information related thereto, in accordance with generally accepted professional practices. No other warranties

are made either expressed or implied.

GSC is not licensed as medical professionals; therefore the conclusions and recommendations

contained within this report do not constitute medical opinions, human health risk analysis, or public

health alerts. A licensed physician should be consulted for such opinions.

1234 Neptune Ave., Bikini Bottom, CA

Gold Health and Safety Consulting, Inc. July 31, 2013

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A. MOLD ANALYTICAL RESULTS

Section 1.0 – EXECUTIVE SUMMARY

Gold Health and Safety Consulting, Inc. ("GSC") conducted a limited post-remediation mold inspection at the subject property on July 9, 2013. The inspection included a visual check of the remediated areas, a building materials moisture assessment, and collection and analysis of samples for total airborne mold spores.

Table I: Summary of Post-Remediation Inspection

Criteria	Result	Interpretation
Visual Inspection for Mold	None observed	Pass
Building Materials Moisture Assessment	Normal tolerances	Pass
Total Airborne Spore Counts	Normal tolerances	Pass

The results of GSC's inspection concluded that the mold remediation project had been acceptably completed, and that the remediated areas were ready for reconstruction.

Section 2.0 - GENERAL BACKGROUND

2.1 Introduction and Purpose

Gold Health and Safety Consulting, Inc. ("GSC") was engaged by Bob Sponge ("Client") to conduct a limited mold post-remediation inspection at 1234 Neptune Ave., Bikini Bottom, California. The sole purpose of the inspection was to provide the Client with information regarding the condition of the subject location at the time of the inspection, with respect to the recently conducted mold remediation project.

2.2 Site Background and History

The subject property is a one-story bachelor apartment unit on the ground floor of a two-story residential building located in Bikini Bottom, CA. General construction type of the apartment consists of a concrete slab-on-grade foundation, wood frame walls, exterior walls finished with stucco, and interior walls and ceilings finished with plaster on gypsum board.

GSC had previously conducted investigations at the subject property on behalf of the Client on May 22 and June 3, 2013. The investigation discovered the presence of mold growth in the following areas of the apartment:

- South and west walls of the living room.
- South, west, and north walls of the coat closet.
- South, west, and north walls of the bathroom.

As a result of these findings, GSC provided the Client with an emailed Scope of Work for professional mold remediation of the aforementioned areas on June 4, 2013.

Subsequently, the Client retained Advanced Environmental of Torrance, California to perform the recommended mold remediation. Following the remediation work, the Client asked GSC to perform a post-remediation inspection which was conducted on July 9, 2013. The inspection revealed that the mold remediation project had been acceptably completed and that the remediated areas were ready for reconstruction.

Section 3.0 – INVESTIGATION METHODOLOGY

3.1 General Methodology

As stated above, GSC performed the limited post-remediation inspection at the subject property on July 9, 2013. The inspection was conducted in accordance with generally accepted professional practices. Our post-remediation inspections typically include the following components:

- Visually inspecting selected remediated areas within the subject location for signs of remaining mold growth and damp building materials;
- Checking remediated areas for building material moisture content;
- Collecting samples for airborne mold spores within the remediation area and beyond, as requested by the Client, and submitting them to an AIHA certified laboratory for analysis; and,
- Providing the Client with a written report of the inspection findings and conclusions.

3.2 Analytical Laboratory Services

All samples collected by GSC during the course of the inspection were forwarded to L.A. Testing of Garden Grove, California for analysis. L.A. Testing is accredited by the American Industrial Hygiene Association for Environmental Microbiology analysis. Samples were shipped by GSC to L.A. Testing via Federal Express next day service under appropriate chain-of-custody. Next day laboratory turnaround time was requested by the Client for the sample analysis.

3.3 Total Airborne Mold Spore Sampling

Non-viable spore trap air samples were collected by GSC through the use of a Buck Bioaire air sampling pump set at a flow rate of approximately 15 liters per minute for five (5) minutes. The sample pump is field calibrated through the use of a floating ball rotameter at the start of the sample collection process. The rotameter receives an annual calibration through the use of a primary calibration device. Zefon Air-O-Cell brand non-viable spore trap air sampling cassettes were utilized as the sample collection media.

After receipt by the laboratory, the samples are analyzed via direct microscopy for total mold spore count. This laboratory procedure is useful in providing rapid quantitative analyses of airborne mold spores, which are an indicator of the presence of mold growth reservoirs within building materials and their impact on indoor air quality.

Section 4.0 – OBSERVATIONS

As stated above, GSC representative Dave Gold, CIH CSP conducted the limited post-remediation inspection on July 9, 2013. Entry to the property was provided via the Client. GSC's inspection was limited to the areas that were involved in the recent mold remediation project.

4.1 Visual Inspection

A summary of GSC's visual observations of the remediation project are as follows:

- A remediation containment had been constructed to encompass most of the living space, except for the north side of the living room and the kitchenette. The remediation containment was in good condition and was free from visible dirt and debris.
- The sink and vanity base cabinet had been removed from the bathroom.
- The following wall surfaces had been removed to allow for cleaning of the underlying cavities (all distances are approximate):

o Living room:

- South wall: floor to ceiling from the southwest corner to 3' right of the entry door.
- South wall: from the floor to a height of 2' between the entry door to 3' right.
- South wall, between the left side of the entry door, around to the east wall, between the entry door to the right side of the closet door, to a height of 2'.
- East wall, right of the bathroom doorway to the corner, to a height of 3'
- North wall, left of the coat closet to the corner, to a height of 3'.
- West wall, from the southwest corner to right edge of the window, entire height.
- West wall, from right edge of the window to the northwest corner, from the top of the ceiling down 1'.
- Ceiling at the south wall, to 3' north along the open wall cavities.
- Ceiling at the west wall, 1' east from the southwest corner to the right edge of the window.

o Coat closet:

- South wall, entire length, to a height of 2'.
- North wall, entire length, to a height of 3'.
- West wall, between the left side of the doorway and the southwest corner, to a height of 2'.

Bathroom:

- Ceiling: a 4' by 4' section over the toilet.
- North wall, entire length to a height of 3'.
- West wall right of the doorway to the northwest corner, entire height.
- West wall left of the doorway, entire distance to a height of 3'.
- South wall, entire distance to a height of 3'.
- East wall, entire distance (excluding shower enclosure) to a height of 3'.
- There was no visible mold growth observed inside any of the open wall or ceiling cavities.
- Many wood members had been recently replaced with new wood at the southwest corner of the living room. It was reported to GSC that substantial wet rot damage had been discovered during the remediation process.

4.2 Moisture in Building Materials Readings

In order to determine the current moisture content of building materials, and to identify additional areas potentially impacted by mold growth and potential sources of moisture intrusion, GSC conducted testing at the subject location to determine moisture content of suspect building materials. Readings of over 65% relative moisture content in gypsum drywall, and over 20% for wood members, are considered at risk for mold infestation. Otherwise, elevated readings may represent either minor moisture intrusion or the current status of a material previously wetted that has since partially dried out.

Moisture readings were gathered at the subject location using a Delmhorst BD2100 handheld moisture meter. At the time of GSC's July 9, 2013 inspection, all building materials in the remediated and previously wet areas were within normal tolerances with respect to moisture content.

Section 5.0 – LABORATORY ANALYSIS FINDINGS

5.1 Summary of Air Sampling Results

Samples for total airborne mold spore counts were collected at the subject location on July 9, 2013 to ascertain if secondary airborne mold spore contamination was present in the remediated areas. In addition, one sample was collected from outside the structure for use as a background reading for comparative analysis.

Following on-site activities, the samples were subsequently submitted to the laboratory for analyses. The results of the laboratory analysis are summarized in Table II, below.

Table II: Summary of Final Total Airborne Mold Spores Analysis Results

Location	Result, Spores/M ³	Interpretation
Living room/bathroom – containment	80	Normal tolerances
Outdoors	1050	Baseline

The results of the sampling and analysis indicated that indoor airborne total mold spore counts were normal within the areas tested on July 9, 2013. In addition, at the time of the sampling, the results showed no significant magnification of mold spores species found indoors as compared to the typical normal range of outdoor ambient levels of mold spores. From these results, GSC concludes that with respect to airborne mold spores, at the time of the July 9, 2013 inspection normal conditions were prevalent.

For detailed information of the laboratory results, please review L.A. Testing's Spore Trap Report, which is included in Appendix A of this report.

Section 6.0 – DISCUSSION and CONCLUSIONS

GSC's conclusions are based upon the conditions observed at the date and time of the investigation, as well as the available information and data. Topics not explicitly discussed within this document should not be assumed to have been investigated. As mold can often be hidden or concealed from view, GSC does not guarantee that all areas of mold contamination within the structure have been identified. Also, it should be recognized by the client that the property's condition with respect to indoor air quality and mold may change over time, especially should additional or continued moisture intrusion problems occur.

There are currently no widely accepted guidelines or government regulations that determine "safe" or "normal" airborne mold spore levels. An "elevated" concentration of spores does not necessarily constitute an unhealthful environment because human response to elevated concentrations of mold spores varies greatly. Indoor counts are generally expected to be two-thirds to half the amount detected outdoors, and should typically reflect the same general distribution of spore varieties present outdoors. However, strictly interpreting results in comparison to outdoors alone at any given point in time is inadequate and often leads to faulty interpretation of results, as there is naturally a large degree of variation in spore concentration and types found in outdoor air. It is more accurate to compare indoor sample results to the *range* of spore concentrations that can be seen outdoors over the course of time to determine if results are within *normal tolerances*. GSC uses this method and our considerable experience (over 17 years performing literally thousands of mold assessments) to determine if normal or abnormal amounts of airborne mold spores are present indoors.

At the subject location, at the time of the July 9, 2013 post-remediation inspection, GSC observed that the mold growth reservoirs previously seen in the living room, coat closet, and bathroom had been removed. In addition, results for total airborne mold spores were within normal tolerances in the remediation containments and nearby areas. Finally, all building material moisture levels in the remediated areas were within normal tolerances.

Based upon these observations, GSC has determined that the mold remediation project has been adequately completed and that the property is ready for reconstruction and repair as required.

Section 7.0 – RECOMMENDATIONS

7.1 Specific Recommendations

- Assure that all moisture intrusion problems have been corrected. Failure to correct all
 moisture intrusion problems will result in additional moisture damage and the likely
 reoccurrence of mold growth.
 - a. It was reported to GSC that historic plumbing leaks had occurred over the bathroom and from a balcony patio over the southwest corner of the living room.

7.2 General Recommendations

In the event that any mold growth, discoloration, or deterioration of any building materials
or any contents are observed in the future at the subject property, GSC recommends that
the client consult with a structural engineer and industrial hygienist prior to
removing/cleansing any such growth, discoloration, or deteriorated building materials or
contents.

APPENDIX A

LABORATORY MOLD ANALYTICAL RESULTS