



Assess | Design | Solve

March 18, 2020 Revised

Martin C. Kofman
American Package Company
226 Franklin Street
Brooklyn, NY 11222
718 389-4444
martyck@gmail.com

Subject: Limited Water Intrusion Inspection

Location: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222

Dear Mr. Kofman;

In accordance with your authorization, ALC Environmental has completed the Limited Water Intrusion Inspection for 226 Franklin Street, Apartment G21, Brooklyn, NY 11222. The objective of this assessment was to determine if there is residual microbial contamination following the remediation of previously identified impacted materials. ALC inspector, Candice Kowalewski, MPH, conducted the inspection on February 07, 2020. The investigation entailed visual and olfactory observations, and moisture testing of surfaces. Mr. Christian Gray, resident of the above named address, provided access and background information.

ALC Environmental and Candice Kowalewski, MPH are licensed by the NYS Department of Labor. Please see attached certifications.

ALC identified visual microbial growth and water damaged materials. Since the impacted materials are greater than 10 square feet, NYS regulations require the work to be completed by a licensed mold remediator and then cleared by a licensed mold assessor. These rules also require that minimum protection and cleaning procedures be completed. See **Results and Recommendations**.

If you have any questions and/or comments, please contact us directly at 212-675-5544. We appreciate the opportunity to be of service.

Sincerely,

ALC Environmental

A handwritten signature in black ink, appearing to read "Candice A. Kowalewski".

Candice A. Kowalewski, MPH
Asst. Director of EHS Division

A handwritten signature in black ink, appearing to read "Jack Glass".

Jack Glass, MS, CIH
Vice President, EHS

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FK_CR_TR_JG

Inspection Performed At:

226 Franklin Street
Apartment G21
Brooklyn, NY 11222

Inspection Date:

February 07, 2020

Purpose

ALC Environmental has been retained by American Package Company to determine if there is residual microbial contamination following the remediation of previously identified impacted materials. ALC inspector, Candice Kowalewski, MPH, conducted the assessment in this apartment on February 07, 2020.

Mold Information

Mold is a microscopic organism, whose primary role in the ecosystem is to break down organic materials. Mold may begin growing indoors when mold spores land on wet surfaces. Mold will not grow without moisture.

Indoor exposures to mold have been associated with immunologic reactions (allergies). The most common health complications linked to mold exposure include sneezing, itching eyes, nasal discharge and aggravation of asthma. The presence of mold in a building, however, does not necessarily lead to the described symptoms. Mold spores, fragments, or metabolites must become airborne for humans to be exposed indoors.

The dose-response information relating mold exposure to health effects is very limited and not well-defined at this time. Health complications have been observed from short-term and long-term exposures as well as from high and low exposure levels. Furthermore, the susceptibility among individuals varies with age, state of health, genetic predisposition and continuous exposures. Since biological markers of exposure to mold are largely unknown, experts have been unable to recommend exposure level thresholds.

General Information

Individuals react differently to the varying degrees of exposure to irritants, allergens, toxins, etc. Some individuals are more prone to allergic reactions to particular mold species than others. The dose-response information relating mold exposure to health effects is very limited and not well-defined. Therefore, it is prudent to take a conservative approach and remove all growth from the environment. Prompt remediation of contaminated materials and infrastructure repair is the primary response to mold contamination in buildings. The emphasis should be placed on preventing contamination through proper building maintenance and the prompt repair of water damage.

Methods

Building materials were tested for temperature, relative humidity and the presence of moisture with an Amphenol Protimeter Moisture Measurement System2 Model (MMS2). When held against the surface, the moisture meter transmits a signal into the material. The Measure Mode, pin or pinless, uses a sensor which penetrates down to ¾" inch (19mm). The relative moisture level is shown on the digital display indicating the moisture condition of the material. Moisture readings will vary depending on type of material, i.e., wood, drywall, concrete.

Pin (% WME) 8 to 99; below 15 (dry), 15-17 (damp), and 17+ (wet).

Pinless up to .75 in. (19 mm) deep: 60 to 1000 (relative)

When describing the conditions in each room the walls are referred to as North, South, East, and West corresponding to the cardinal direction respectively.

Background Information

The Client has requested a moisture intrusion investigation at the above specified apartment. The request was related to a flood event that took place October 2019, caused by a faulty sprinkler from the fire suppression system. ALC has been asked to identify the presence or absence of active or visible microbial growth and to prepare a report detailing our findings. The project information was provided by Martin Kofman of American Package Company via a telephone conversation with Candice Kowalewski on February 04, 2020.

Results

Inspection Findings:

The assessor detected musty or mildew odors throughout the apartment, however they were strongest in the foyer, studio 1 and studio 2. **See Appendix B: Photos for more information.**

Layout of: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222

Living Room/Bedroom	Studio Acoustic Room 2		Studio Acoustic Room 1	
	Hallway			Foyer
Kitchen	Bathroom	Hallway	Studio Acoustic Room 3	

Results

A) Visual Inspection:

Foyer/Hallway: The wooden saddle and entry doors to the hallway were buckled and water damaged. Wooden beams have suspect visible microbial growth (approximately 5 square feet). On the ceiling, paint was deteriorating, and there is evidence of water damage. Visible microbial growth was observed on the drywall north wall (approximately 4 square feet).

Acoustic Studio 1: Visible microbial growth was observed on the drywall east wall (approximately 15 square feet). Visible microbial growth was observed on the drywall south wall (approximately 15 square feet). Water damaged carpet and padding was observed. It is likely the subfloor is also impacted. (approximately 192 square feet).

Acoustic Studio 2: Visible microbial growth was observed on the drywall west wall (approximately 3 square feet). Water damaged drywall ceiling was observed (approximately 140 square feet). Water damage and cracking on the west wall was observed (approximately 140 square feet). Water damaged bamboo floor was observed. The resident advised the inspector that underlayment, MDF, OSB, and dipped underlayment exists above subfloor. The bamboo floor is uneven, with gaps and expansion noted. The entry door did not close.

Bathroom: Visible microbial growth in the bathroom and lack of grout between tiles and caulking was observed (approximately 7 square feet). This may not be associated with the primary loss, and may be associated with occupancy conditions. Water damaged drywall on west wall behind water heater was observed.

Living Room and Bedroom: Visible microbial growth on the drywall north wall was observed (approximately 13 square feet). Ceiling joists were sagging. The main support beam shows signs of cracking and splitting. Above the ceiling joists is drywall, inaccessible to measure for moisture.

B) Measured Findings:

Bathroom: The tile floor measured at risk or damp with the moisture meter pinless.

Living room and Bedroom: The west brick wall measured wet with the moisture meter (see Appendix B: Pictures for further details). The concrete floor in the living room measured wet with the moisture meter (pinless 287-999).

Probable or Possible Source of Moisture Intrusion

According to the Client, a flood event took place on October 13, 2019 caused by a faulty sprinkler from the fire suppression system. According to the resident, the water "gushed" from the ceiling from approximately 11:30pm until 5:30am.

Recommended Remediation Work Plan for Affected Areas

Contract a licensed mold remediation company and follow level II guidelines to remove the visible microbial growth (drywall) from Acoustic Studio 1, 2, hallway, and living room as described in the Results Section (approximately 62 square feet). As obstructive materials are removed, water impacted areas should be inspected for visible microbial growth such as behind the drywall walls, insulation, subfloors etc. in the living room, hallway, acoustic studio 1, 2, 3, and foyer. If discovery is made, it is permitted to remove water damaged materials.

Contract a licensed mold remediation company and follow level II guidelines to remove the water damaged impacted materials (includes drywall, carpet, and subfloors) from the Acoustic Studio 1, 2, hallway, bathroom, and living room as described in the Results Section (approximately 750 square feet).

Contract a licensed mold remediation company and follow level II guidelines to dehumidify the brick south wall in the foyer, and the west wall in the living room.

Inspect integrity of the sagging ceiling joists in the living room by a building engineer or qualified professional. The main support beam showed signs of cracks and splitting.

The concrete floor in the living room, and tile floor in the bathroom should be monitored during the remediation process. The floor measured wet and is painted. If the foundation beneath the concrete floor is soil, this may contribute to this finding. Use professional discretion; however no corrective action is required.

If odors or other indications of mold amplification appear, contact ALC immediately to re-evaluate the area.

We anticipate this as a level II remediation.

Conduct Post Remediation Verification prior to repairs and repainting as per NYC Guidelines for level II remediation.

NOTE: In accordance with Local Law 61 of 2018, responses to more than 10 square feet of visible microbial growth requires a 2-day initial notification to the NYC DEP, and a final notification to the NYC DEP upon completion of the project.

Cost and Time Estimates:**Level I: \$5,000 or Less (1-3 Days)****Level II: \$5,000-\$10,000 (4-6 Days)****Level III: \$10,000 or More (6 Days or More)**

Remediation services should be conducted in accordance with New York City Department of Health & Mental Hygiene (NYSDOHMH) "Guidelines on Assessment and Remediation of Fungi in Indoor Environments" and the NYC Dept. of Labor Recommendations. Following remediation, a Post Remediation Verification (PRV) must be conducted by a NYS Licensed Mold Assessor.

Appendix A

Fungal and Microbial Remediation

In all situations, the underlying cause of water accumulation must be rectified or fungal growth will recur.

There are four different levels of remediation:

Level I: Areas less than 10 Square Feet (SF);

Level II: Areas 10 SF to 100 SF;

Level III: Areas greater than 100 SF;

Level IV: Remediation of HVAC systems.

The size of the area impacted by fungal contamination is the primary determinant of the type of remediation. The goal of remediation is to remove or clean contaminated materials in a way that prevents cross contamination from the work area to a non-abatement area while protecting the health of workers performing the remediation. The listed remediation methods were designed to achieve this goal, however, due to the general nature of these methods it is the responsibility of the people conducting remediation to ensure the methods enacted are adequate. A worksite survey for other recognized hazards should also be accomplished. Occupants of the building should be notified against entry into the work area. Further vacating of people from spaces near the work area is recommended in the presence of infants less than 12 months old and people with chronic inflammatory lung diseases such as asthma, hypersensitivity pneumonitis and severe allergies.

Level I: Areas less than 10 SF:

Remediation can be conducted by regular building maintenance staff. They should receive training on proper cleanup methods, personal protection and potential health hazards. Respiratory protection in accordance with the OSHA respiratory protection standard, 29 CFR 1910.134 is recommended. At a minimum this would include an N-95 disposable filtering face-piece. Also gloves, disposable suit and eye protection should be worn. The work area should be unoccupied. Containment is not necessary. Contaminated materials that cannot be cleaned should be removed from the building by double-bagging the materials in two 6 mil sealed plastic bags. There are no special requirements for the disposal of moldy materials. The plastic drop cloth, and plastic critical barriers used for sealing the HVAC system and disposable PPE used by the remediation workers should be double bagged in 6 mil sealed plastic bags and disposed of. All areas should be cleaned with a damp cloth and/or mop and a detergent solution and should be left dry and visibly free from contamination and debris.

Level II: Areas greater than 10 SF to 100 SF:

A health and safety professional or an industrial hygienist with experience performing microbial investigations and remediation should be consulted prior to remediation activities should be consulted prior to remediation activities to provide oversight for the project. Personnel trained in the handling of hazardous materials and equipped with respiratory protection in accordance with the OSHA preparatory protection standard (29 CFR 1910.134) is recommended. Disposable suits, gloves, and eye protection should be worn. The work area and areas directly adjacent should be covered with 2 layers of plastic sheeting and taped before remediation to contain dust,

debris and fungal contamination. Lockout and tag out the HVAC system if possible and seal ventilation ducts and grills. The work area and areas directly adjacent should be unoccupied. Dust suppression methods such as misting surfaces prior to remediation are recommended to keep air borne spore levels to a minimum. All areas should be left dry and visibly free from contamination and debris. Contaminated materials that cannot be cleaned should be removed from the building sealed in plastic bags. There are no special requirements for the disposal of moldy materials. The work area and surrounding areas should be HEPA vacuumed and cleaned with a damp cloth and/or mop and a detergent solution. All areas should be left dry and visibly free from contamination and debris. Air sampling should be considered prior to occupancy to determine if the area is fit to reoccupy.

Level III: Areas greater than 100 SF:

A health and safety professional or industrial hygienist with experience performing microbial investigations and/or remediation should be consulted prior to remediation activities to provide oversight for the project. The work area should be assessed for recognized safety and health hazards. Appropriately trained personnel with proper PPE should be utilized. A regulated area should be established to keep out unauthorized individuals. The ventilation and electrical systems should be secured. All items in the work area should be pre-cleaned and removed. All stationary items should be sealed in place. Containment should be constructed with a decontamination area. Negative pressure should be established in the work area utilizing HEPA equipped air movers. Wet, remove and remediate all visible molds. Dust suppression methods such as misting surfaces prior to remediation are recommended to keep air borne spore levels to a minimum. Dry all areas. Thoroughly clean all work areas. Apply antimicrobial encapsulants and/or biocides where necessary in accordance with applicable regulations. All areas should be left dry and visibly free from contamination and debris. Contaminated materials that cannot be cleaned should be removed from the building sealed in plastic bags. There are no special requirements for the disposal of moldy materials.

Level IV: Remediation of HVAC Systems:

Small isolated area of Contamination (<10 SF) in the HVAC

Remediation can be conducted by regular building maintenance staff. Such persons should receive training on proper cleanup methods, personal protection, and potential health hazards. Respiratory protection is recommended in accordance with the OSHA preparatory protection standard (29 CFR 1910.134). Disposable suits, gloves, and eye protection should be worn. The work area should be unoccupied. Containment of the work area is not necessary however shutting down and isolation the HVAC should be done using lockout/tagout procedures. Dust suppression methods such as misting should be used. Porous materials such as insulation and paper on the interior of lined ducts and filters should be removed and discarded. The work area and the areas immediately surrounding the work area should be HEPA vacuumed and cleaned with a damp cloth and/or mop and a detergent solution. All areas should be left dry and free from visible dust and debris. Biocides are often recommended by HVAC manufacturers for use with HVAC components such as cooling coils and condensation pans. HVAC manufacturers should be consulted for the products they recommend for use in their systems.

Large Areas of Contamination (> 10 SF) in the HVAC System

A health and safety professional or industrial hygienist with experience performing microbial investigations and/or remediation should be consulted prior to remediation activities to provide oversight for the project. Appropriately trained personnel with proper PPE should be utilized. Disposable suits, gloves, and eye protection should be worn. A regulated area should be established to keep out unauthorized individuals. The ventilation and electrical systems should be secured. Seal ventilation ducts and grills in the work area and areas directly adjacent with a minimum of 1 layer of 4 mil plastic sheeting. The work area and areas directly adjacent should be unoccupied. Dust suppression methods such as misting are recommended to keep spore levels to a minimum. Contaminated HVAC ductwork and components that cannot be cleaned should be removed from the building in sealed plastic bags. Many commercial products and tools are available for duct cleaning activities. An evaluation of options and costs should be considered in making the appropriate remediation decisions. The work area and the areas immediately surrounding the work area should be HEPA vacuumed and cleaned with a damp cloth and/or mop and a detergent solution. All areas should be left dry and free from visible dust and debris. Biocides are often recommended by HVAC manufacturers for use with HVAC components such as cooling coils and condensation pans. HVAC manufacturers should be consulted for the products they recommend for use in their systems.

Hazard Communication

The building owner, management, or the employer should notify occupants in the affected areas of a remediation project. Notification should include a description of the remedial measures to be taken and a timetable for completion.

Post Remediation Verification

A post remediation verification is recommended prior to restoration of the work area. Air sampling (spore trap air samples or equivalent) is the recommended method for clearance sampling. The outside air should contain higher mold spore concentrations than the indoor air. The types (genera) of the indoor and outdoor air should be comparatively similar. The work area should be free of dust, dirt, debris, rot, active sources of moisture and any other indicator of unusual moisture conditions. Significant damage to the building that may result in water intrusion must be repaired prior to the post remediation assessment. A visual assessment and moisture survey shall be performed prior to collecting air samples. Work area containment, if used, shall remain in place until successful written confirmation of a successful post remediation assessment is provided.

When there is No Visible Mold

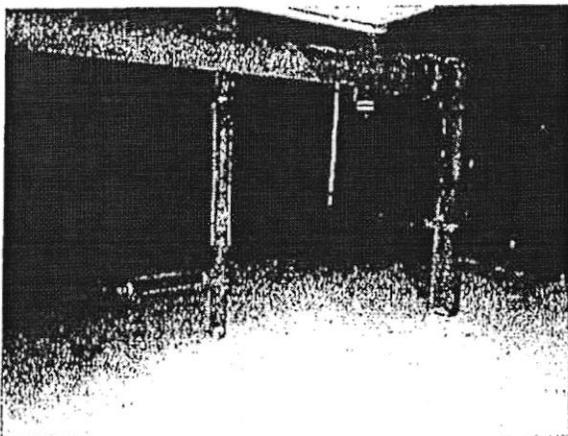
Water-damaged materials can be addressed without special controls or establishment of containment. In general, water-damaged materials that are delaminating, deformed or have otherwise lost their integrity should be removed and discarded. Where materials are stained but have not lost their integrity, the materials can generally be repaired by repainting or refinishing. General dust control measures should be implemented during removal of water-damaged material that does not contain visible microbial growth. Dust control measures may include, but not be limited to, removal of personal effects and furnishings from the work area, covering floors and non-movable items with polyethylene sheeting, and the use of local exhaust ventilation equipment.

If removing water-damaged materials, care should be taken to initially remove small amounts of the material while evaluating the back sides of the material or exposed cavities for the presence of visible microbial growth. If microbial growth is observed during removal of water-damaged material, work should stop and the microbial growth evaluated in terms of degree of growth, quantity and remediation methods required prior to proceeding. Often, if the amount of microbial growth is small (i.e. less than 10 square feet) a HEPA vacuum or damp wiping with a detergent solution can be used to remove the microbial growth prior to the removal of the material as water-damaged material. However, where any amount of microbial growth is removed, it is recommended that access to the work area be restricted to those performing the work using limited containment methods and that personal effects be removed or protected as necessary during the work. Previously unidentified areas of microbial growth larger than 30 square feet in area should be evaluated prior to removal.

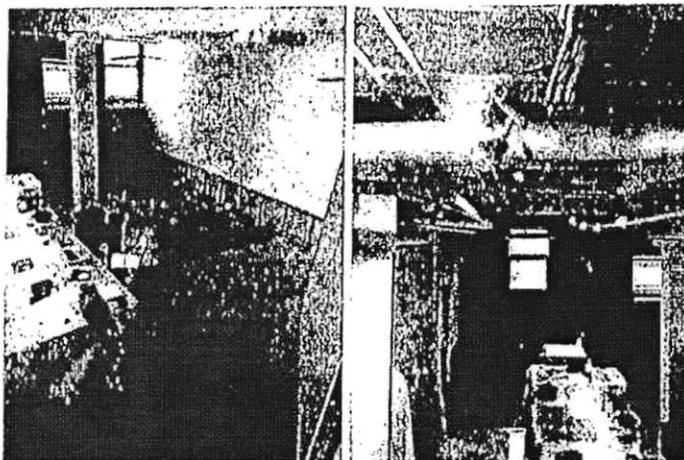
The EPA recommends that the Relative Humidity (RH) levels in the living spaces are maintained between 30% - 50%. Relative Humidity levels that exceed 50% can influence dormant mold to grow or may promote favorable conditions for new mold growth. It is further recommended that RH levels do not go below 30% as that may cause an uncomfortable living environment.

It is important to note that the cause of any mold growth need to be identified, corrected and the mold/mold contaminated materials be appropriately cleaned or removed. IICRC S520 Standard and Reference Guide for Professional Mold Remediation states the use of detergents, antimicrobials, Ozone, heat treatment or other biological controls used in killing mold as a stand-alone method, has not been shown to eliminate the contaminants nor their potential allergenic or toxigenic properties.

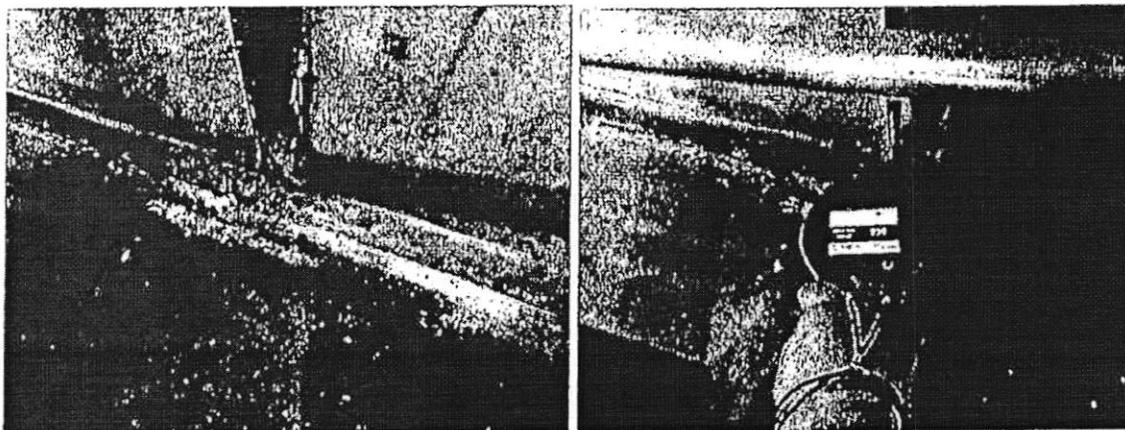
Appendix B Pictures: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222



Above: Sprinkler head that caused the pipe burst in October 2020 in the apartment above.



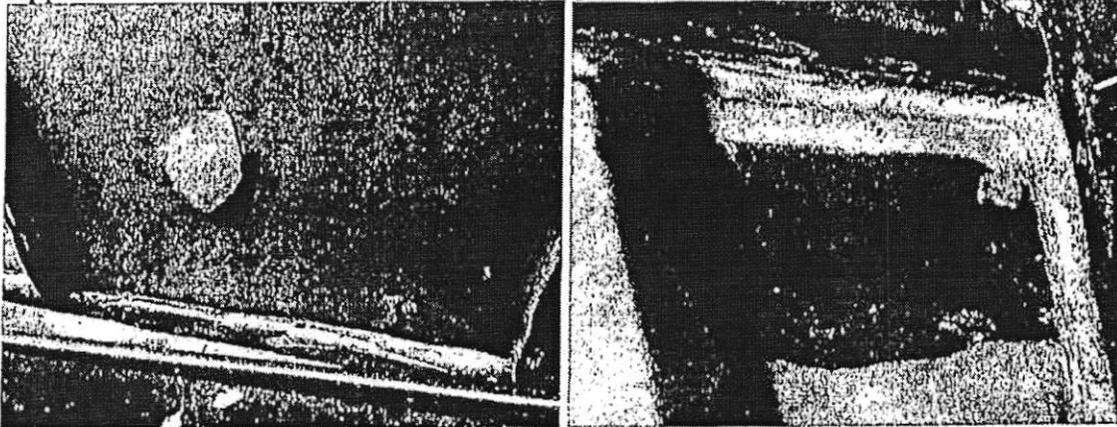
Above: Over view of living room and bedroom



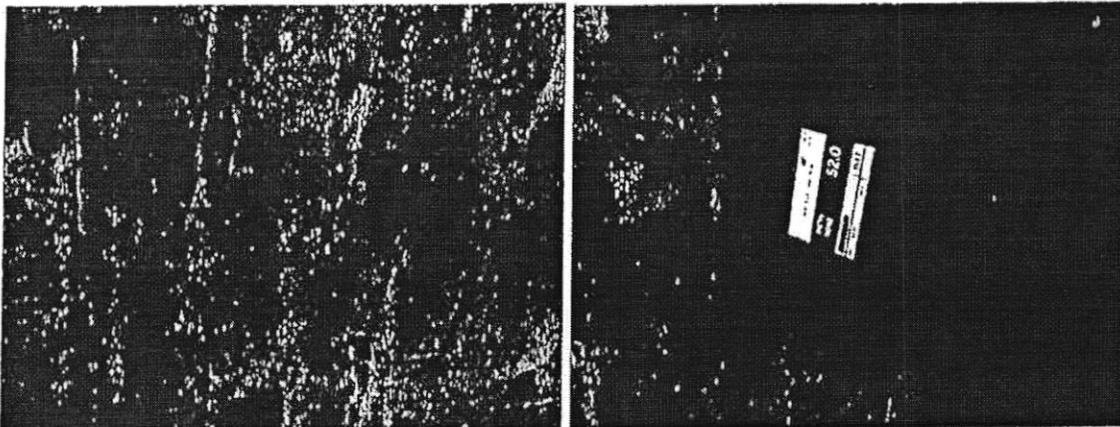
Above Left: visible microbial growth in living room north wall

Above Right: Moisture meter measured the concrete floor as wet near north wall in living room

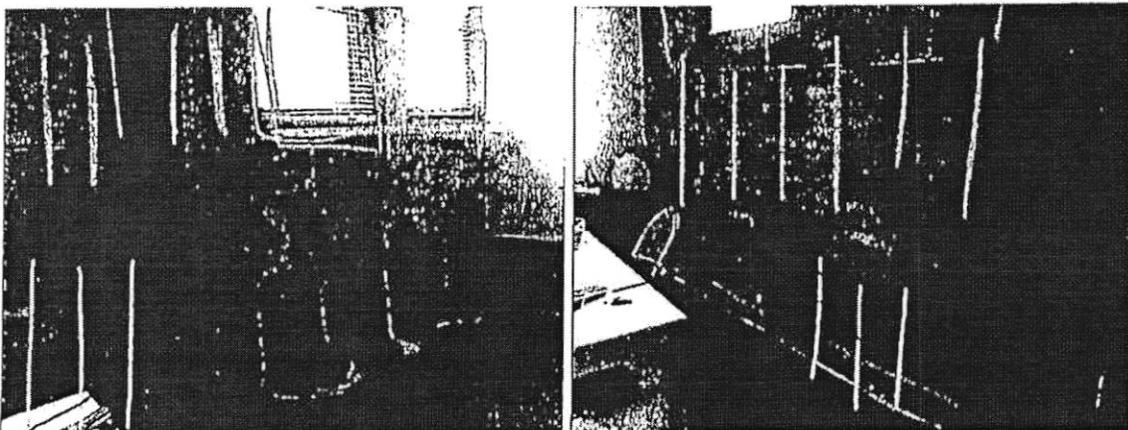
Appendix B Pictures: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222



**Above left: Water damage drywall on north wall in living room
Above right: Visible microbial growth on drywall north wall in living room**

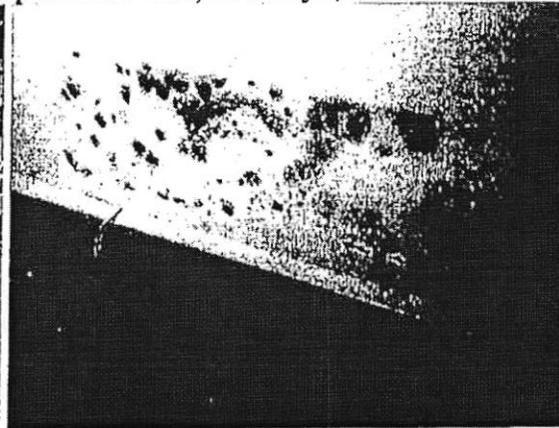
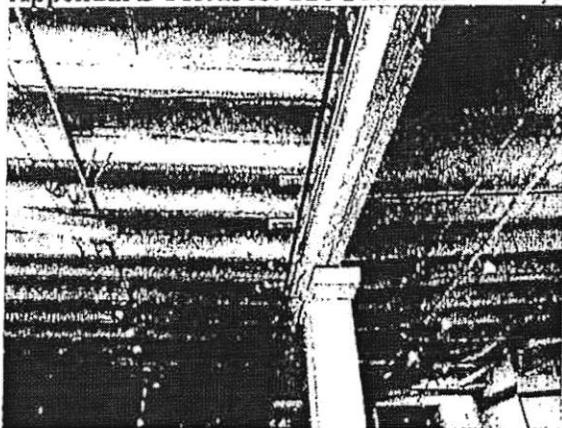


**Above left: Brick west wall in living room was wet to touch
Above right: Brick west wall in living room measured wet by pin measurement**

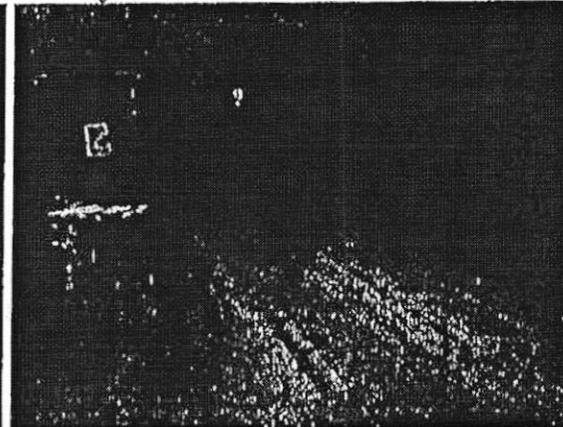
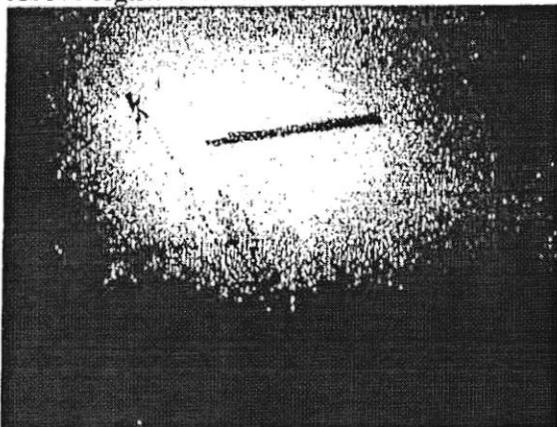


**Above left: Red (measured wet), Yellow (measured damp), Green (measured dry)
Above right: Red (measured wet), Yellow (measured damp), Green (measured dry)**

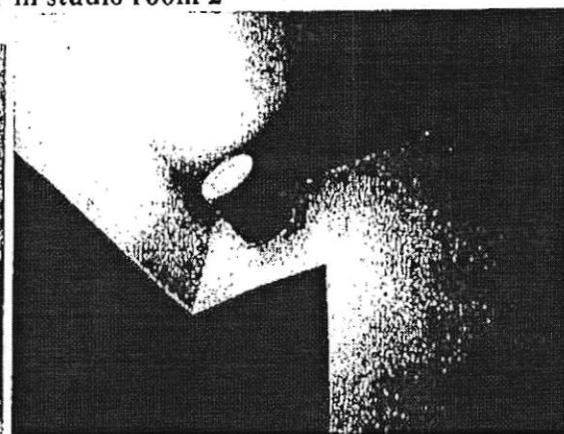
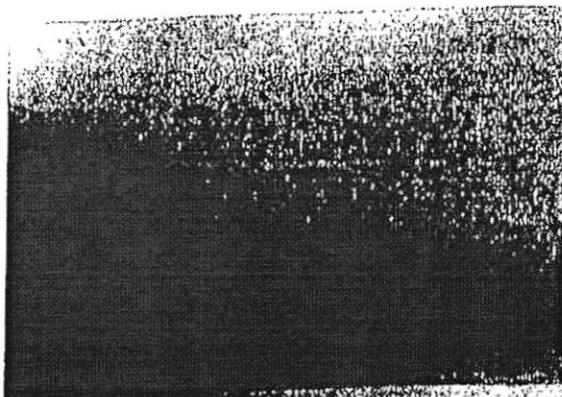
Appendix B Pictures: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222



**Above left: Living room ceiling with sagging ceiling joists and support beam cracking
Above right: Visible mold in studio room 2 west drywall wall**

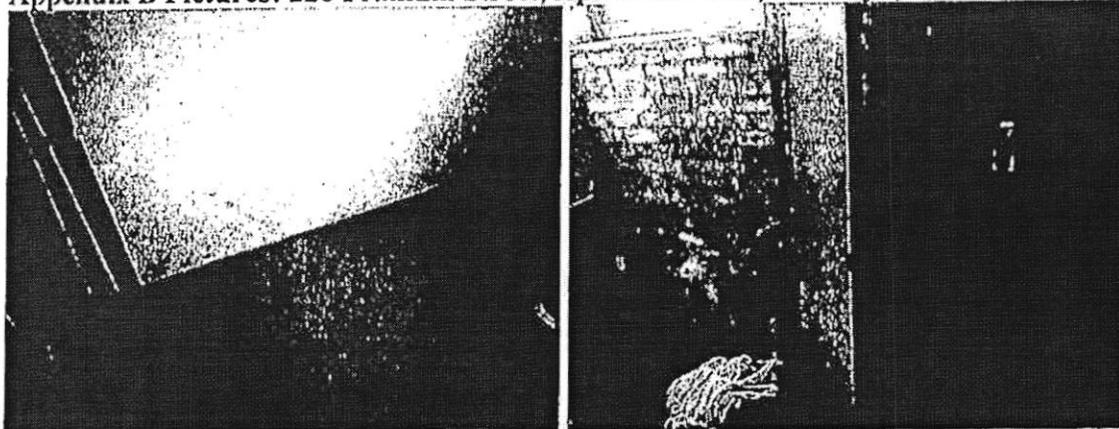


**Above left: Water damaged ceiling in studio room 2
Above right: Water damaged bamboo floor in studio room 2**



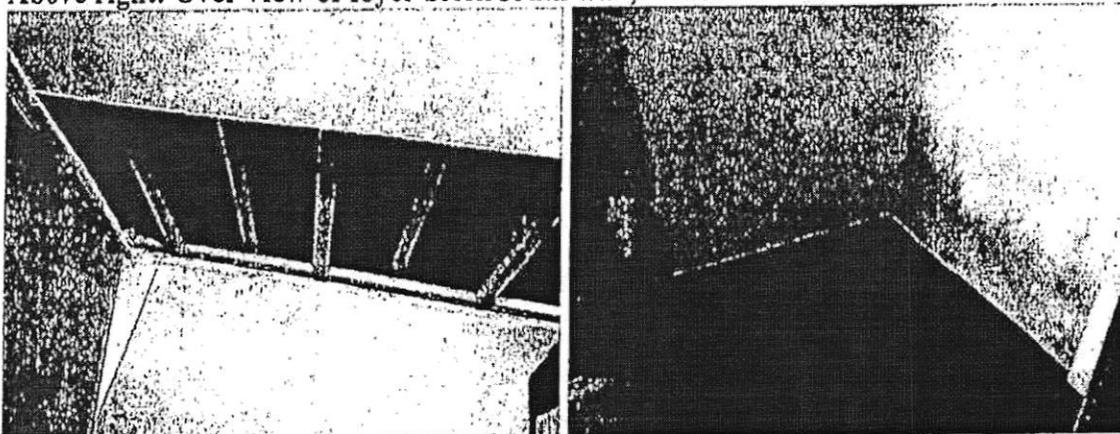
**Above left: Water damaged ceiling in hallway
Above right: Water damage, paint cracking on hallway ceiling**

Appendix B Pictures: 226 Franklin Street, Apartment G21, Brooklyn, NY 11222



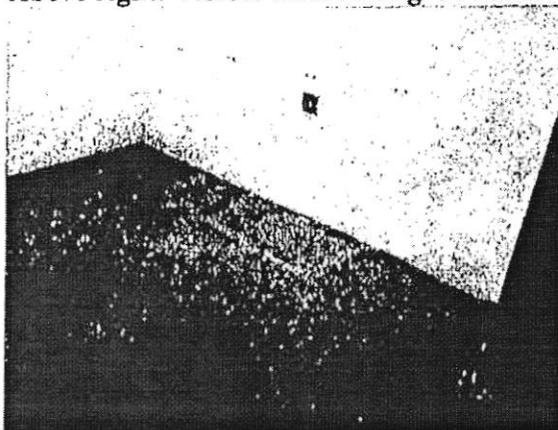
Above left: Visible microbial growth on hallway drywall north wall

Above right: Over view of foyer brick south wall, measured wet



Above left: Water damage and visible microbial growth in hallway south wall

Above right: Visible microbial growth on east and south wall in studio room 3



Above left: Water damage and visible microbial growth on drywall north and east wall, and water damaged carpet in studio room 3

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All the professional opinions presented in this report are based solely on the scope of work conducted and sources referred to in our report. The data presented by ALC in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report represents the conditions, locations, and materials that were observed at the time the fieldwork was conducted. The scope of work for this project did not include an assessment of other environmental conditions which might exist on the premises. No inferences regarding other conditions, locations, or materials, at a later or earlier time may be made based on the contents of the report. No other warranty, express or limited is made. ALC's liability and that of its contractors and subcontractors, arising from any services rendered hereunder, shall not exceed the total fee paid by the client to ALC for this project. This report was prepared for the sole use of our client. The use of this report by anyone other than our client or ALC is strictly prohibited without the expressed written consent of ALC. Portions of this report may not be used independent of the entire report.

Limitations and Exclusions

STATE OF NEW YORK - DEPARTMENT OF LABOR
MOLD ASSESSOR



CANDICE ANN KOWALEWSKI

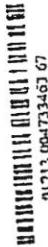
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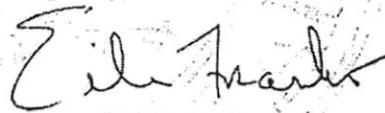
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DIVISION OF SAFETY AND HEALTH
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Mold Assessor Company License

The ALC Group, LLC
d/b/a: ALC Environmental
121 West 27th St Ste. 402
NEW YORK, NY 10001

LICENSE NUMBER 00034
DATE OF ISSUE: 12/27/2019
EXPIRATION DATE 1/31/2022

This license is valid only for the contractor named above.



Eileen Franko, Director
FOR THE COMMISSIONER OF LABOR