

TRANZON AUCTION PROPERTIES' NOTE:

Following receipt of this report, the Seller restored power, increased airflow and circulation, and applied spray treatments to inhibit mold growth to both buildings.

The information in this report was derived from sources believed correct, but is not guaranteed. Interested parties shall rely entirely on their own information and judgment. Property is being sold on an "AS IS, WHERE IS" basis.



MOLD and WATER INTRUSION REPORT

AMERICAN INDOOR
AIR QUALITY
ASSESSMENT SERVICE, LTD

Commissioned by:

**College of St. Joseph
Dr. Jennifer Scott, President
71 Clement Rd.
Rutland, VT 05701**

Subject Property Location:

**39 and 69 Main ST
Proctor, Vermont**

Inspection/Testing Date:

16 August 2018

By:

Francis X. Finigan

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MOLD and WATER INTRUSION REPORT



College of St. Joseph
Dr. Jennifer Scott, President
71 Clement Rd.
Rutland, VT 05701

2 August 2018

Sent via e-mail to: [REDACTED]

Re: Preliminary inspection to determine the scope required for indoor air quality screening for fungal contamination at 39 and 61 Main St., (henceforth subject property).

Dear Ms. Scott,

Per your request, or the request of your representatives, a consultant from our office, Francis Xavier Finigan (IEP or Consultant), personally inspected the above described subject property on 16 August 2018. Where relevant obtained parametric in accordance with guidelines established by EPA, American Conference of Governmental Industrial Hygienists, manufacturer's recommendations, and good industry practice.

In accordance with our discussions, this report represents the findings, conclusions, and recommendations developed from observations and testing during the preliminary inspection of both subject properties to determine the scope of work required to effectively determine the cost of mold screening and subsequent remediation, if needed.

Numerous field samples were obtained at the subject property to assist the Consultant in making these determinations.

The IEP conducted a visual and olfactory assessment of readily accessible areas in an attempt to determine the presence or absence of apparent mold growth or conditions that would support mold growth. Parametric samples were obtained with digital hygrometers, moisture meters, and laser particle counters at various locations in the subject properties. The data from the samples was logged in my field notes and utilized in rendering the opinions contained in this report.

The samples were not sent to a laboratory for analysis. An ERMI sample was not obtained. Results from ERMI samples can be important to medical staff and may increase the scope of remediation recommendations.

FINDINGS

Mitigating circumstance during testing includes: no samples analyzed at a lab were obtained from the subject property. The lack of samples reduces The IEP's ability to draw conclusions. Floor coverings, furniture, and items stored obstructed the IEP's ability to fully view surfaces. This IEP did not observe the attic, and makes no representations regarding the conditions that may exist at areas not observed or tested.

The subject properties consists of the following:

39 Main St 2 1/2 story wood frame structure with stone veneer exterior on a full masonry foundation;

61 Main St is a four-story cut marble building constructed on top of a full masonry foundation.

This IEP observed the following:

- gray staining at the lower section of walls at basement and first floor of each building exhibiting the characteristics consistent with mold growth or conditions that could support mold growth,
- elevated concentrations of particles, identified by the laser particle counter, existed in both basement area;
- concentrations of particles, identified by the laser particle counter, were lower on each floor traveling from the basement upward;
- the relative humidity in the basements of both buildings ranged between 65% and 69%;
- the relative humidity readings were lower on each floor traveling from the basement upward;
- at the top floor of each building, stains exhibiting the characteristics consistent with past water leakage existed; and
- strong musty odors exhibiting the characteristics consistent with areas containing mold growth or conditions that can support mold growth existed in both basements.

This Consultant interviewed the CFO and Pres. of the College of St. Joseph as well as the Realtor® Raymond Ault; they described how the power had recently been terminated and environmental cooling and/or heating had not occurred for several months.

CONCLUSIONS

Based on the concentration of particles in laser particle counter samples, odors emanating from the basement and first floor, black to gray staining on walls at basements, and high relative humidity readings, significant fungal amplification exists in the ambient air and on surfaces of the basement of the subject properties at the time of inspection. To some extent, because of similar conditions, at a minimum, surface mold exists on the first floor of each building.

The most significant areas of concern in order of magnitude are as follows:

- At the lower section of all walls, in both basements, significant concentrations of mold exists on the surfaces and very likely in some areas in the wall cavities as well. Absent additional testing this IEP is unable to determine the extent of damage in wall cavities or to substrates in the basement areas.
- At the first floor of each building the mold may be isolated to wall and floor surfaces. Absent additional testing this IEP is unable to determine the extent of mold contamination on the first floor.

There is a strong likelihood the condensation has wetted wall surfaces and floor surfaces causing mold amplification to occur.

The types of mold amplification present at the subject property may cause adverse health effects to humans.

The Asthma and Allergy Foundation of America has classified the following symptoms for mold allergies:

- **Sneezing**
- **Chronic cough**

- **Runny nose**
- **Nasal congestion**
- **Itchy, watery and red eyes**
- **Skin rashes and hives**
- **Sinus headaches**
- **Reduced lung capacity and difficulty breathing**

RECOMMENDATIONS

Conduct additional testing to develop a complete remediation plan.

When remediation is undertaken, additional areas of contamination may be discovered that were not readily accessible while finish surfaces and insulation were present. This report and preliminary remediation plan is designed to assist the workers in arresting the current mold-growth. Mold can be, and in this case is a growing concern.

Conduct the following, responsively, prophylactically and, in some cases, as ongoing maintenance:

- Identify any and all leaks at the roof causing water intrusion at the subject property, including, but not limited to those identified in the FINDINGS section of this report, and eliminate same.
- Have electrical power turned on both buildings.
- Isolate the upper floors from the basement and first floor of both buildings utilizing six mill polyethylene as critical barriers secured with tape and typical work entry doors.
- Deploy dehumidification units at both the basement and first floor of the subject properties.
- Deploy negative air machines in several locations of the 61 Main St. building and one in the basement of 39 Main St.
- Remove all furnishings, carpet, and debris that has become saturated in the basement of both buildings. Dispose of same using conventional disposal methods.
- Winterize all plumbing throughout the building.
- Superheat the basement of both buildings with portable warm air furnaces.
- After areas have dried out, spray the floors and walls in the first and second floor with a broad-spectrum biocide containing a quaternary and hydrogen peroxide.
- At basement area after spraying surfaces scrub with sponge mops to remove surface mold, changing wash water frequently.

This report and plan represent a diminimous guide for performance. It is an interim plan designed arrest the fungal growth currently occurring at the subject properties.

In areas that component removal or alteration is contemplated we strongly recommend appropriate testing be conducted to identify the presence or absence of substances like lead paint and asbestos.

If this work is conducted by maintenance staff personnel from the college they should be restrained in donning and doffing personal protective equipment (PPE) including, booties, gloves, disposable coveralls, safety glasses, and HEPA filtered respiratory safety equipment, i.e. half masks.

- Create negative air containment (aka engineering controls) of six mill polyethylene appropriately taped to surfaces at edges and seams with appropriate work area entry door ways to isolate the work areas.
- To prevent spores from being spread to other areas, create negative air pressure within containment exhausted to the exterior through HEPA filtration.

- To establish adequate negative pressure in a containment, exhaust must develop:
 - at least 4 air changes every hour,
 - manometer readings indicating negative pressure of -0.02 inches of water column (" WC),
 - manometer must be checked every 2 hours
 - manometer must be zeroed before work begins each day
 - manometer must be calibrated at least once a year.
- Workers must wear appropriate PPE (Personal Protective Equipment), like respirators fitted with HEPA filtration, disposable coveralls, gloves, and safety glasses while in containment and dry decontaminate and remove same in a decontamination chamber adjacent to the containment area.

Overview of a remediation:

When remediation is undertaken, it is necessary to isolate, personal possessions, rooms, and floor areas with protective plastic (critical barriers) edge taped with duct tape, conduct work under appropriate negative air pressure, and remove debris directly to exterior. Negative air pressure in containment should provide a minimum of four air changes per hour.

At a minimum, remediation must include removal of the affected areas of finish surfaces including; sheetrock, insulation, and/or other porous wall, ceiling, or floor materials described above. After removal of such components, where visible mold, excessive moisture or enzyme staining is present, remediate substrates as needed by sanding, scraping, soda blasting, dry ice blasting, or other methods typically used and industry accepted. Removal should include not only areas with visible staining or enzyming, but those areas that are immediately adjacent as well.

When mechanical components or plumbing fixtures, including, but not limited to hydronic baseboard, radiators, sinks, toilets, etc. obstruct the remediators access, cause component to be properly removed without substantially damaging same for future reinstallation.

While areas are open review same for signs of leakage and other staining. Prior to closing floor or wall conduct measures to prevent condensation and uncontrolled moisture behind wall and below floor as well as remediate mold in accordance with IICRC S 520.

The work should be conducted by healthy individuals experienced in mold remediation and biohazard cleanup adhering to good work practices for removing damaged or contaminated materials. The goal of the work scope should be to remediate the fungal amplification in the areas described in this reports and others areas that may be more clearly identified through additional testing or during remediation. All debris should be removed in such a fashion as it does not spread mold spores or other hazards to parts of the subject property not undergoing remediation.

After the preliminary remediation team has eliminated the root cause of the fungal amplification and completed remediation of surfaces, prior to reconstruction, post remediation testing should be conducted by a qualified IEP to ensure the health and safety of the occupants.

Some individuals may decide it is prudent to seek alternative occupancy to avoid potential health conditions that have been associated with these types of mold. Decisions regarding alternative occupancy are beyond the scope of most environmental consultants and should be made by the client/occupant after

reviewing this report with medical personnel who are familiar with the effects mold may have on humans. The medical practitioners should also be familiar with the individual's medical history.

If occupants begin developing any symptoms that have sometimes been associated with mold, such as itchy eyes, skin rash, upper respiratory distress you should contact medical personnel who are familiar with the effects mold have on humans and conduct additional testing. Under such circumstances consider avoiding areas or conditions that cause these reactions.

In the event the work is undertaken by individuals familiar with conventional construction methods, but not mold remediation I recommend a more detailed work planned be created and supervision by an IEP.

If you have any questions regarding this report please don't hesitate to call me at 802- 728-4015.
As always,

Francis X. Finigan, President

Attachments: Excerpts from IICRC S520, IEP Qualifications (Francis X. Finigan CV), IEP Certification, Limiting Conditions

TESTING EQUIPMENT AVAILABLE AND METHODOLOGY EMPLOYED

Assessment Method: visual, olfactory, enhanced by parametric readings

Testing Equipment: laser particle counter (ARTI HHPC-6 Airborne Particle Counter),
Protimeter in a moisture meter, thermal imaging device (Ti30 Raytek™)

Testing Media:

Methodology: all methodologies employed complied with manufacturers specifications, guidelines established by "Bioaerosols: Assessment and Control", ACGIH (American Conference of Governmental Industrial Hygienists) 1999 including: 5.11, 5.10 6.1.1.1, 6.1.1.2, 6.3.1.3, and IESO (Indoor Environmental Standards Organization) standard 2210, standard 1120, standard 1210, standard 1310.

CERTIFICATION OF IEP (INDOOR ENVIRONMENTAL PROFESSIONAL)

I certify that I have no present or future contemplated interest in the subject property. The fungal analysis has been conducted in accordance with:

- 1) IESO (Indoor Environmental Standards Organization); and
- 2) Guidelines for obtaining non-viable microbial samples described in "Bio Aerosol Assessment and Control" 1999 by ACGIH (American Conference of Governmental Industrial Hygienist); and
- 3) Good working practices.

This IEP has no personal interest in or bias toward the subject property, laboratory providing analysis, or the persons conducting other work at the subject property. I last inspected the subject property, both inside and out, on **16 August 2018**. Each of the samples and laboratory results were personally reviewed by me, and to the best of my belief, all the statements contained in this report are true and correct. No significant information pertinent to this assignment has knowingly been withheld.

All of the conclusions and opinions expressed are those of this IEP. Contingent and limiting conditions relating to this assignment are contained in this report.

Signed _____ Date 2 September 2018

CONTINGENT AND/OR LIMITING CONDITIONS

The certification of the IEP appearing in the report is subject to the following conditions along with other specific and limiting conditions contained elsewhere in the report.

This IEP is not an attorney and assumes no responsibility for matters of a legal nature affecting the subject property or contractual relations between the parties. No opinion of title is rendered.

The IEP is not a medical doctor or medical practitioner and assumes no responsibility for matters that relate directly to individuals health. Decisions regarding alternative occupancy are beyond the scope of most environmental consultants and should be made by the client/occupant after reviewing this report based on their personal experience at the subject property and/or with medical personnel who are familiar with the effects mold may have on humans. The medical practitioners should also be familiar with the individual's medical history.

When sketches are included in the report it is to assist the reader in visualizing the property and are not to scale; any dimensions are approximate measurements.

The IEP shall not be required to give testimony or appear in court because of having made this case study, unless previous arrangements are made for payment of same.

The IEP relies on the extraordinary assumption that there are no hidden or unapparent conditions of the property, subsoil, or structures, which would render it this report irrelevant or incorrect. The possible existence of other potentially hazardous material used in the construction or maintenance of the building, such as the presence of urea formaldehyde foam insulation, radon gas, lead paint, asbestos and/or existence of toxic waste, which may or may not be present at or proximate to the subject property has not been considered.

The IEP is qualified to detect many of the substances, described above, as expert in the indoor environmental testing fields. This assignment does not include a more extensive review, equipment use, or sampling procedures required to render an opinion regarding the presence or absence of any other hazardous material or toxic substances in or proximate to the subject property. I urge the client to retain this expert or other expert in the appropriate fields to render an opinion relative to the existence and/or harmful effects of any such substances and the impact they may have on this investigation.

This IEP is an expert in rendering an opinion as to the soundness of some structural, mechanical, electrical, plumbing or heating systems. This assignment does not include the more extensive review or considerations needed to render such an opinion. These systems are assumed to be typical and adequate unless otherwise stated in the case study. All representations made regarding the subject improvements are based on casual visual observations of readily accessible areas typical of a fungal investigation of a residential site. It should be noted that the following areas were obstructed by items stored and debris: finished basement 80%, general usable building area at first floor 60%. The attic was not accessed as part of this investigation. Information, estimates and opinions furnished to the IEP, which may be contained in the report, were obtained from sources considered reliable and believed to be true and correct. However, no responsibility for the accuracy of such items furnished the IEP can be assured by the IEP.

This IEP is a licensed real estate appraiser and professional capable of providing an opinion of value for the subject property including, cost to cure, fair market value, and potential diminution that may be caused by environmental contamination. This assignment does not include considerations necessary to provide an opinion of value.

This report as a whole or any part of the report is for the exclusive use of the client, or its successors and assigns. Any other use must have previous written consent of the IEP. The report shall not be conveyed to the public through advertising, public relations, news, sales brochures, or other media, without the written consent and approval of the IEP to ensure its accurate dissemination.

SUBJECT FLOORPLAN SKETCH

Not included

LABORATORY RESULTS

None.

The Following Are Excerpts From S520 That Directly Relate To Work That May Be Contemplated At The Above Described Subject Property:

**Institute of Inspection, Cleaning and Restoration Certification
Standard for Professional Mold Remediation S520**

This excerpt standard describes the procedures to be followed and the precautions to be taken when performing mold remediation in residential, institutional, and commercial buildings and on personal property contents of those structures.

The Standard explains mold remediation techniques, the principals of which may apply to other microbial remediation projects or services. This standard assumes that the determination and correction of the underlying cause of mold contamination is the responsibility of the property owner and not the remediator, although the property owner may contract with the remediator or other professionals to perform these services.

It is the purpose of this Standard to define criteria and methodology to be used by the remediator for inspecting and investigating abnormal moisture and mold contamination, and for establishing remediation and safety plans and procedures.

Because of the unique circumstances encountered in mold remediation projects, it is impractical to prescribe procedures that apply to every situation. In certain circumstances, deviation from portions of this Standard may be appropriate. Carelessness is never acceptable and common sense and professional judgment are to be exercised in all cases.

Among other things, S520 does not address *Histoplasma capsulatum*, *Cryptococcus neoformans*, hanta virus, animal-derived pathogens or other highly infectious agents, including those from bird and bat droppings. Refer to the Center for Disease Control (CDC) and/or the National Institute for Occupational Safety and Health (NIOSH) for appropriate decontamination procedures for these contaminants. See, for example, *Histoplasmosis, Protecting Workers At Risk*, NIOSH and NCID, U.S. Department of Health and Human Services, 1997.

- Cross-contamination:** the spread of contaminants from an affected area to an unaffected area.
- Engineering controls:** the utilization of methods, equipment or containment in such a manner that they limit the exposure of remediation workers and occupants to contaminants and prevent the introduction of contaminants to surrounding uncontaminated areas and contents.
- Fungus (plural “fungi”):** one of the five kingdoms into which living things are categorized. The other kingdoms are Animal, Plant, Bacteria, and Protista. Fungi have distinct nuclei and include a variety of types, such as molds, mildews, yeast, and mushrooms. Fungi range in size generally from 2 to 20 microns and are ubiquitous in soils, water and air. Unicellular fungi are called yeasts. Fungi formed by long chains of cells are called molds. Fungi are ubiquitous and are found in moist environments.
- HEPA:** an acronym for “high efficiency particulate air”, which describes an air filter that removes 99.97% of particles down to 0.3 microns in diameter.

Mold: a common term for filamentous fungi, often seen as a superficial or “wooly” growth of long chains of fungi cells formed on damp organic materials. Toxigenic molds may produce a potentially harmful substance called a mycotoxin. Mold growth can degrade materials and present potential health risks to humans.

Post-remediation evaluation: an inspection performed by a remediator after a remediation project, which may include visual and/or olfactory methodologies to confirm that the remediation process has been completed.

8.1 Engineering Controls

To the extent feasible, engineering controls must be used to assure worker safety and health, and to prevent cross-contamination. Engineering controls may include but are not limited to: contamination source control, isolation barriers, pressure differentials, dust suppression methods, HEPA vacuuming and filtration, detailed cleaning, temperature and humidity control, and a sanitary approach.

PPE for workers must be used when appropriate to supplement, but not to replace, engineering controls. It is highly recommended that engineering controls (e.g., containment, AFDs) protecting Condition 1 areas not be removed until post-remediation evaluation and/or verification have been completed. It is highly recommended that any alteration of designed engineering controls during a project take into account the potential environmental impact.

8.2 Source Control, Isolation Barriers and Containment's

Source control methods may be used alone to address relatively small areas of mold growth, or in combination with other engineering controls to reduce the level of spore release and dust generation.

Local or “mini” containments may be used when moderate levels of mold growth are visible or suspected. Full-scale containments normally are used when significant or extensive mold growth is present or suspected, and cannot be effectively controlled and remediated with source or local containment methods.

Isolation barriers include containment and critical barriers. Isolation barriers are used to isolate portions of the building, Mechanical system, elevator, elevator shaft or other building openings. It is highly recommended that containment barriers and decontamination chambers be used, as appropriate to separate Condition 1 areas of the building from areas classified as Condition 2 or 3. Additional containment barriers may be necessary when mold conditions are discovered to be more extensive than previously determined. More than one type of containment method may be used simultaneously for control in the same area.

Construction of containment barriers and other engineering controls may result in collateral damage to surfaces. It is recommended that care be taken by remediation workers to avoid damage to surfaces and that responsibility for collateral damage repairs be discussed by appropriate parties and documented before beginning the remediation project.

8.3 Pressure Differentials

Pressure differentials are used to manage airflow. The use of pressure differentials is a matter of professional judgement. If pressure differentials are used, it is highly recommended that they be created using HEPA air filtration devices (AFDs) set up as negative or positive air machines. It is recommended that exhaust air from AFDs be vented outdoors when possible. When venting an AFD indoors, it is recommended that a laser particle counter be used to monitor particle output.

If pressure differentials are used, contaminated areas must be negatively pressurized relative to unaffected or clean areas of the building to prevent cross-contamination and it is highly recommended that the integrity of the containment and negative air pressure differentials be maintained throughout the remediation project, including the clean up process. It is recommended that containment performance be checked visually and documented at appropriate intervals. It is highly recommended that work be stopped any time there is a breach in containment or loss of pressurization, and not resumed until the containment has been repaired and the pressure differential re-established. Report any breach in the Integrity of the containment to a supervisor. It is highly recommended that containment barriers be constructed so that if pressure differentials are lost, containment flaps will close to prevent a loss of control.

8.3.1 Minimum Pressure Differential

It is recommended that a minimum pressure differential of >5 Pa (0.02 inches w.g.) be maintained for negatively pressurized contained areas. It is highly recommended that pressure differentials be monitored and documented at regular intervals and that a minimum of four air changes per hour be maintained for ventilation and contaminant dilution.

8.4 Contents Protection

It is highly recommended that contents be removed from the remediation area. If it is not possible to remove them from the remediation area, it is highly recommended that unaffected contents be protected by wrapping or sealing them in polyethylene plastic.

8.5 Isolating HVAC Systems and Building Openings

To prevent cross-contamination, it is highly recommended that GVAC registers, building openings and fixtures in the remediation area be sealed off, or other engineering controls used. If HVAC registers are sealed off while the system is still in operation, it is recommended that the potential adverse impact on the operation of the mechanical system be considered. It is recommended that supplemental heating/cooling and dehumidification be considered to maintain appropriate environmental atmospheric conditions.

8.6 Work Area Preparation

It is highly recommended that the work area be prepared prior to beginning remediation work. The extent of preparation necessary is based on the pre-remediation inspection. It is highly recommended that remediators restrict access to the work/containment areas.

Work area preparation must comply with federal, state, provincial and local laws and regulations, including but not limited to, the availability of rest room facilities, eye wash stations, and appropriate lighting, fire protection, heat or cold stress protection, and temporary power and water when necessary.

8.7 Removal of Contaminated Structural Materials

It is highly recommended that contaminated materials not be disturbed until the containment is erected, negative air system installed and containment performance checked. It is highly recommended that remediation workers employ methods that minimize dust generation and dispersal of mold spores and fragments, in conjunction with HEPA vacuuming to control and remove dust immediately.

It is highly recommended that porous building materials with mold growth penetrating the surface (classified as Condition 3) be removed and discarded appropriately. Mold growth on framing members can usually be removed by damp wiping, wire brushing, sanding or other appropriate methods, while using HEPA vacuuming and other appropriate controls.

It is highly recommended that contaminated building materials be removed carefully in as large a section as possible for bagging or wrapping. It is highly recommended that sharp items capable of puncturing poly material be packaged in such a way as to prevent them from penetrating the material before being bagged or wrapped.

Spraying, wetting or misting moldy building materials, in preparation for removal, is not recommended because spores may be released or dispersed by the spray and the added moisture presents potential problems for mold amplification. When mold remediation is performed concurrently with asbestos abatement or other types demolition where the use of misting or wet showers is required, the mold remediation work must be performed with adequate engineering controls in place to limit the release or spread of mold fragments or spores and to prevent the development of additional mold growth.

8.7.1 Hidden Mold Discovery

During remediation, hidden or unanticipated mold growth may be discovered. It is highly recommended that this complication be addressed in accordance with appropriate notification or disclosure procedures as set forth in the Standard, before going beyond the approved scope of work, unless otherwise agreed by parties to the contract.

8.7.2 Handling and Disposal of Contaminated Materials

It is highly recommended that waste materials be moved from the work area to a waste container in a manner that minimizes the possibility of cross contamination or occupant and worker exposure. If timely disposal of demolition debris or contents is not possible, it is highly recommended that staged debris be stored in a reasonably secure location.

Non-regulated mold contaminated gypsum board and other structural materials can usually be disposed of in public landfills as compost or construction debris. Generally, other mold contaminated materials have no special disposal requirement; however, federal, state, provincial or local disposal laws and regulations apply. Regulated materials (e.g., those containing asbestos, lead or other restricted waste) must be disposed in accordance with federal, state, provincial or local disposal laws and regulations.

8.8 Detailed Structural Cleaning

To achieve Condition 1 status in the work area after demolition has been completed, it is important to thoroughly remove dust and debris from all surfaces. It is highly recommended that periodic damp wiping and/or HEPA vacuuming of all surfaces in the remediation areas be performed to remove settled dust and spores.

One of the goals of mold remediation is to leave surfaces clean and dry. Source removal of contaminated porous materials is the preferred method for mold remediation. The use of treatments, such as encapsulants, sealants, ozone or ultraviolet (UV) light as a substitute for removal and detailed cleaning is generally not recommended.

When dust or debris is being generated as part of the work process, it is recommended that affected surfaces be HEPA vacuumed and/or damp wiped at the end of each workday.

It is highly recommended that cleaning inside a containment area be conducted starting from clean and working towards dirty areas in the following manner:

- From the top towards the bottom; and
- Towards the air filtration device, starting at the decontamination/air lock unit.

8.9 Remediation Equipment Selection and Decontamination

It is highly recommended that all equipment be operated and maintained in accordance with manufacturer specifications and that equipment service and maintenance be documented. It is recommended that equipment be cleaned before or after each use and inspected for proper performance at the job site.

When exhausting HEPA vacuums indoors, it is important to use only well-constructed professional HEPA vacuums so that mold spores and fragments are retained. Shop-type or non-HEPA portable vacuums are not appropriate for professional mold remediation activities. It is recommended that HEPA-filtered equipment be tested to demonstrate particle arrestance.

It is highly recommended that tools, HEPA vacuum cleaners (including the exterior of hoses) and AFDs be vacuumed and damp wiped to remove dust and spores before they are removed from the containment area. It is also highly recommended that openings, such as filter and vacuum hose inlets, be sealed with tape or plastic to prevent escape of particulates.

8.10 Moisture Monitoring

It is highly recommended that psychrometric conditions and measurements of moisture conditions of representative materials in the building be monitored as appropriate. It is highly recommended that additional controls, such as dehumidification or controlled restorative drying techniques, be used as appropriate, to prevent secondary damage to materials that are not scheduled for removal (IICRCS500).

8.10.1 Dehumidification Equipment

Dehumidification equipment may be necessary during the remediation process to dry the structure or maintain conditions that will not support additional mold growth. It is highly recommended that equipment operated in a Condition 2 or 3 area be cleaned between remediation projects.

8.11 Post-Remediation Evaluation

It is highly recommended that a post-remediation evaluation be conducted by the remediator to confirm that the remediation process has been completed. This evaluation involves application of the internal quality control procedures of the remediator, and a sensory inspection of the containment area, to ensure that mold, contaminated materials, visible dust and debris have been removed.

When post-remediation verification is to be performed by an IEP, it is highly recommended that the containment and the area within the containment pass the post-remediation verification before containment is dismantled. It is also highly recommended that new materials not be installed until post-remediation evaluation, and post-remediation verification, indicate the installation is appropriate.

Using the services of an IEP increases the cost of a mold remediation project. However, since the safety and health of the occupants and workers is a paramount principle of mold remediation, and since mold contamination hazards and health impacts remain uncertain, it is highly recommended that remediators engage the services of an IEP when necessary to protect the safety and health of occupants and workers, and/or when necessary to effectively complete a mold remediation project.

When the services of an IEP become necessary according to the procedures outlined elsewhere in this document, the work relationship and task coordination between the remediator and the IEP become elements important to the successful completion of the project.

It is highly recommended that the remediator be familiar with when to use the services of an IEP, the relevant duties of an IEP, and the resulting procedural requirements.

American Indoor Air Quality Assessment Services' President:

Francis Xavier (Rich) Finigan

Mission Statement:

My Mission in Business is to ensure that someone's American Dream remains intact by working closely, with individuals, national businesses, and nonprofits to develop reliable, affordable, and standardized indoor air quality and other environmental services.

Crowning Accomplishments:

- I am the President and founding member of Indoor Environmental Standards Organization (IESO, [INDOOR STANDARDS.ORG](http://INDOORSTANDARDS.ORG)) an ANSI (American National Standards Institute) standards setting body. Under my direction, IESO is currently developing standards including; residential mold assessment, assessment of fungal contamination in schools, a fire restoration, allergen screening, clearance testing of pressure treated structures for arsenic, and more. IESO has published the first residential mold assessment standard in the industry.
- I founded Allstate Home Inspection and Household Environmental Testing LTD., the first home inspection business in America to incorporate environmental testing as a key component. It grew from one office in central Vermont to over 70 offices in 43 states via the development of what has been recognized as the most robust training, marketing, sales and support system in the industry. Through this process I developed strong relationships with other industry leaders. With their interaction and my own efforts, I have been able to determine when and how to produce results in strategic business planning; including marketing, sales, and training.
- During the mid-1980s I provided consulting to the city of Boston that resulted in a national award winning housing program. When the city of Boston implemented my recommendations, it stimulated the local real estate and building industries while transforming city owned vacant lots into affordable housing without the use of nonprofit or government funding.

Francis X. Finigan:

My background is in architecture, building, and applied environmental science.

I began offering of environmental services began in 1979 when I conducted my first lead inspection. From that time forward, I've received extensive training and provided professional services in other environmental fields including: radon, UST and site remediation (underground storage tanks), domestic water supplies, and indoor air quality (mold, VOCs, bacteria, and allergen screening). My professional training, education, and experience in these fields include assessment and remediation (planning and supervision).

My architectural and building experience has and continues to enhance my abilities in the residential and commercial environmental fields. During the late 1970s while attending The Boston Architectural Center, I owned and operated a small construction company Finigan Construction Company (FCC). We were primarily involved in design built additions, kitchens, and historic restorations.

FCC grew into a boutique real estate development business. It designed, built and brought townhouses to the marketplace in Boston/Cambridge, Massachusetts area.

In the mid-1980s I became the CEO of a Terra Firma Real Estate Development Corporation, the general partner for numerous commercial and residential real estate investment trusts. My position as CEO required me to take an active role in the syndication of capital, securing financing, oversight of design, construction, and marketing and sales development. In a nutshell, my job was to bring projects from concept to completion.

During the downturn of the housing market of 1989 opportunities emerged in the building inspection and environmental testing fields. By applying my acumen in architecture, building, and environmental science to consulting, I was able to provide clients with appraisals, inspections and wide variety of environmental testing services. I founded Allstate Home Inspection and Household Environment Testing Services, Ltd. (AHI) from these endeavors in 1994. By 1999, AHI had 4 offices around New England. By the end of 2006, AHI had more than 70 franchise offices in 43 states. From 2004 through 2006, Entrepreneur Magazine rated AHI as one of the top 500 franchises in America.

In February of 2007, I sold AHI to Environmental Service Professionals, Inc. (ESP) a publicly traded company. During my tenure as Division President and Board of Director at ESP, through of April of 2008, I was instrumental in the development of the CEHI (Certified Environmental Home Inspector) program. My work included the development of proprietary mold software, a broad environmental service offering, training programs, and business models.

My national participation in high profile nonprofit organizations since the late 1990s has provided me with insights into environmental and economic trends and an opportunity to share the broad these perspectives. Significantly, I am the national president of IESO (Indoor Environmental Standards Organization) an ANSI standards setting body.

Currently, I am the president of the American Indoor Air Quality Assessment Services, Ltd.(AIAQAS). AIAQAS is an environmental consulting business serving schools, hospitals, and municipal facilities throughout the northeast.

I am also the owner of American Radon Laboratory, LLC, (Americanradonlab.com) a web-based lab providing analysis for a Electret Ion Chambers (re: EPA the most accurate short-term radon test devices). It is a NEHA (National Environmental Health Association) accredited radon laboratory.

PROFESSIONAL EDUCATION:

The educational and professional training programs listed below required field experience, classroom study, and successful completion of an exam.

2007 Completed Home Energy Tune-up's Instructor Training provided by CMC (residential energy audits)
2006 Completed Allergen Screening training provided by Respicare Analytical and the American Society of Professional Real Estate Inspectors
2005 Completed infrared technology training provided by Snell Infrared
2005, 2002, 2000 & 1998 Completed 8 hour EPA Lead Risk Assessor Refresher
2002 Completed EPA Asbestos Inspector Management Planner Training Program
2001 Completed Indoor Air Quality Manager course by the American Indoor Air Quality Council
2001 Completed USPAP Instructor Training provide in accordance with Federal Guidelines by the Appraisal Foundation (Quasi Public agency set up by Congress in accordance with the Resource Recovery and Enforcement Act of 1989)
2001 CRMI (Certified Residential Mold Inspector) 16 hour IESO certification training program
2001 Completed the IESO certified instructor training program
2000 Completed Massachusetts Title V System Inspector (on site sanitary waste disposal required at point of sale)
1996- Completed EPA Lead Risk Assessor Training Program
1991- Completed state and federal real estate appraisal training program
1988- Completed Lead Paint Inspector program approved by the state of Massachusetts Department of Environmental Protection and Childhood Lead Poison Prevention.
1988- Completed Lead Paint Abatement contractor hour Massachusetts program approved by the state a Massachusetts Department of Environmental Protection and Childhood Lead Poison Prevention.
1976-1979 Studied Architecture at the Boston Architectural Center

Licenses and Accreditations

Radon Proficiency Technician 2004-present by the American Society of Professional Real Estate Inspectors
Certified Building Inspector by the American Society of Professional Real Estate Inspectors
Lead Risk Assessor/Inspector: 1988- 2008Currently (Vermont and formerly Massachusetts). I conducted my first lead paint inspection in 1978 (licensure went into effect in Massachusetts in 1988). 1996 received EPA Lead Risk Assessor Certification.
Certified by the state of Vermont Asbestos Inspector/Management Planner
Certified HUD 203K consultant. 203K consultants inspect properties to be granted HUD 203K funding for renovation purposes, design the renovation (including schematics and detailed cost break downs) and conduct periodic site visits to authorize release of escrowed loan funds.
Certified Indoor Air Quality Manager by the American Indoor Air Quality Council.
Certified Indoor Air Quality Investigator (formerly) by the American Indoor Air Quality Council.
Certified Indoor Air Quality Technician by The Association of Energy Engineers.
Certified Level One Mold Assessor by American Society of Professional Real Estate Inspectors.
Certified Level Two Mold Assessor Instructor by American Society of Professional Real Estate Inspectors.
Certified Residential Mold Inspector by the American Indoor Air quality Council
Certified Residential Mold Inspector Instructor formerly by Indoor Environmental Standards Organization.
Certified Indoor Environmental Consultant by the American Indoor Air quality Council (the highest designation granted by the Council)
Certified by the State of Massachusetts as a Title V System Inspector
Licensed Real Estate Appraiser (1991 – 2009) in the State of Vermont and registered with the federal government in

accordance with FIRREA) My first real estate appraisal was conducted in 1979. Licensing was not required until 1991. Formerly Licensed builder in Massachusetts (CDEF 1977 – 1989) to build of any material with no height limitation

PUBLICATIONS:

I have written scores of articles for national trade magazines beginning in 1997 through today. The following are some of the magazines to which I have contributed articles. My relationship with the editors of these magazines has stayed strong and my articles have been welcome additions to these fine publications.

For the Communicator and Real Estate Valuations I was a featured contributor

Working R.E., Published by the Organization of Real Estate Professionals. It is a widely read trade magazine for real estate appraisers and home inspectors.

Columns, published by Harris Martin a legal journal dedicated to mold litigation and awareness.

Communicator Magazine from 1997-2002 (formerly the largest appraisal and inspection magazine in America with a readership of approximately 125,000).

Real Estate Valuations published by Henry Harrison a widely read real estate appraisal magazine with a readership of about 85,000.

Indoor Environmental Connections and indoor air quality and environmental testing magazine with a readership of about 60,000.

Video and Television Experience:

1996- 2003 Authored the scripts and produced a distance learning series for home inspectors featuring 13 videos including 5.5 hours on environmental hazards and *Mold A Growing Concern*. *Mold A Growing Concern* is a mold documentary with thousands of copies distributed to real estate professionals across the USA presenting mold's history, health effects, testing, mitigation, impact on value, and due diligence.

2001 appeared as a featured guest on a New York television talk show aired by Cable Vision discussing home inspections and environmental testing.

BOOKS

Authored by Francis X. Finigan

Common Sense about Environmental Hazards by Francis X. Finigan the "Doctor Spock" of household environmental hazards provides the lay person with a common sense approach to a safer healthier home, copyrighted 2006 revised for publication projected mid 2009

The Everyday Environmental Screening Manual by Francis X. Finigan is used as a training manual for continuing education seminars throughout the USA, copyrighted 1994

How to Start and Operate a Home Inspection Business by Francis X. Finigan a 150 page how to inspection manual for real-estate appraisers and home inspectors and

Somerville Green Pages co- authored by Francis X. Finigan a 21 page recycling manual which was published & distributed to 36,000 households copyrighted 1988.

Mold a Growing Concern by Francis X. Finigan a companion manual to the interactive training video of the same name, copyrighted 1994

PROFESSIONAL MEMBERSHIPS

2001-2009 Founding Member of IESO (Indoor Environmental Standards Organization an ANSI standards setting body), Standards Committee, member of the IESO Board of Directors and former president. IESO is now part of ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers).

2004- 20098 Regional Chapter Director for the American Indoor Air Quality Council for the State of Vermont.

1999- 2009 Member Vermont Association of Realtors and National Association of Realtors

1998- 2008 Member and President of the American Society of Professional Real Estate Inspectors (ASPREI) as well as a Certified Master Inspector.

1997 -1999 Formerly Member National Association of Home Inspectors, and American Association of Home Inspectors.

1995- 1997 Former member of the Real Estate Educators of America.

POLITICAL EXPERIENCE:

Secretary of the Conservation Commission for the City of Somerville from 1986 - 1988. Conservation commissions in Massachusetts are part of the municipal executive branch and are the direct municipal representative to the State Dept. of Environmental Protection enforcing the Wetlands Protection Act. As secretary responsibilities included acting as the liaison to the appropriate municipal and/or state agencies. Drafting and submitting "Orders of Condition" to the Dept. of Environmental Protection detailing the cities requirements being placed on developers seeking permits. Such orders had to be in concert with complex environmental state and federal regulations and technology typically utilized to demonstrate specific performance.

1999 - 2002 Selectman Town of Randolph, VT responsibilities included budget development for all aspects of town government, normal operating budget, and capitol budgets and unique to our town the closing of a land fill budget as well as creating municipal legislation in concert with those of our state and country to the benefit of the community at large.

1983 an organizer and member of SUM (Stock Uranium Mining in Vermont) a small ad hoc organization that successfully influenced legislators to effectively ban uranium mining in the state of Vermont. The opponents to this organizational effort were powerful uranium mining interests from Europe that had been conducting test boring's throughout southern Vermont.

The above referenced education and experience represent the most relevant study, certifications, and developed acumen to the Environmental Consulting fields. I have completed or have received many of other training courses, projects, and certifications not listed that serve to enhance and support those listed.

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