

## **MOLD INSPECTION & REMEDIATION**

In-Spect provides prompt, professional service aimed at detecting the presence of, and effectively removing, potentially hazardous and damaging molds from your property. Whether for a residential or commercial building, In-Spect has the expertise and experience to get the job done right, the first time around. Don't settle for second best, and don't let a general contractor perform these important services for you. While contractors are good at what they do, they are not mold professionals or specialists. Proper protocol is the key for a successful remediation, and if not followed precisely, the original problem can be multiplied exponentially. Since every mold-related situation is unique, a thorough inspection and analysis must first be performed in order to accurately identify the cause of the mold problem.

### *Why be Concerned with Mold?*

People may suspect that they have a mold problem for several reasons, even if active mold growth is not visually obvious. Excess moisture or water infiltration can be an indicator that mold growth is likely, as once mold has a water source and an organic substrate (food source), active growth can occur in as little as 36 hours. Once growth becomes active, the mold spores will become airborne in an attempt to colonize other food sources where moisture is present. Mold spores are extremely small, and can travel great distances once released into indoor air. Airborne spores can cause medical problems for some people, some of which can be serious. These problems can range from allergies and sinusitis (a large percentage of cases of this can be directly linked to elevated mold levels), to respiratory problems, cold and flu-like symptoms, eye, nose, and throat complications, dermatitis and other skin disorders, headaches, fatigue, and more serious conditions such as aspergillosis, edema, bronchospasms and other lung infections, kidney and liver complications, and developmental disorders. The mycotoxins which are released by active mold spores can be carcinogenic, teratogenic, and mutagenic. Otherwise unexplained illnesses or symptoms can often be attributed to high levels of mold, some of which have been Classified as 'toxic' by the Environmental Protection Agency (EPA), Centers for Disease Control (CDC), and other credible organizations. The timely detection of these molds, and their underlying causes is paramount in protecting health and property.

Visual mold growth and odors can also be a dead giveaway that there is active mold growth inside of a building. Most building materials in use today provide an ideal organic substrate for many different species of mold to grow on and digest. Molds can grow on just about any of these building materials, including drywall, paneling, wooden studs, baseboards, rafters, and other structural elements, carpet, carpet backing, padding, and glue, ceiling tiles, furniture, paper, cardboard, particle board, wallpaper, and any porous surface. In addition, mold can also grow on any surface which collects sufficient organic dust and dander to act as a food source. Once a water source is present for as little as 36 hours, mold can begin actively growing on any of these surfaces, and will continue to grow if left unchecked. In addition to the potential health effects of active indoor mold growth, the mold destroys organic substrate as it digests it, thereby causing considerable property damage. Prompt detection and remediation is a must in order to eliminate further cosmetic, and even, structural damage to a building. When growing on visible surfaces, mold is also very unsightly.

### *How Do We Find the Mold?*

In-Spect uses various methods to determine when and where elevated levels of mold exist. We respect your health and property, and will use the least invasive procedure possible in order to accurately locate potential sources of active mold growth. Infrared imaging and remote camera technology allow us to see into your walls to locate water infiltration sources, water damage, mold growth, and structural or cosmetic damage. These procedures often involve no cutting of walls or ceilings, and can be extremely revealing. Our thermal imaging devices allow us to look into walls, ceilings, floors, roofs, windowsills, etc. and precisely identify sources of water infiltration. Once the water source is located, we know precisely where to look for mold growth.

Mold growth can then be detected visually, or by air, surface, or bulk sampling. There are other phenomenon which can visually resemble mold, which means that testing is necessary in some cases where active mold growth seems visually obvious. When this is performed, it is to assure our customer that unnecessary work is not being performed. Since it is possible (and often probable) that high levels of mold are present without any visual growth noted, the only definitive way to detect mold is to sample the air inside of a building. This is done by drawing 15 liters of air per minute, for a duration of 5 minutes, through the collection media. Exactly the same procedure is performed outside of the building, in order to identify the species and spore counts of molds in the outside air. The inside sample is compared to the outside sample, and if the inside levels are substantially higher than the outside levels, this is indicative of active growth inside of the building. The laboratory results for non-viable (shows living as well as dead spores) are available from a nationally accredited, third-party laboratory anywhere from 1-3 days from the time of sampling. In-Spect is happy to provide our customers with a copy of the laboratory report, and to explain the findings in easy to understand terms. By using a third-party laboratory, In-Spect puts to rest any conflicts of interest. We are not performing the actual lab analysis, therefore we cannot inaccurately provide you with false, or fabricated results. We believe that this instills trust into our customers from the beginning, showing that we are determined to provide professional, honest service as we have to so many satisfied customers before. In some instances, the necessity may arise (either by circumstance, customer request, or both) to take viable (only showing live spores) samples in a building. While the collection media for these tests is different (a cultured agar dish), the procedure is almost identical, with the major difference being in the availability of the results. When dealing with a viable sample, the spores in the potato dextrose culture must incubate for 7-10 days before analysis can be completed. Although this is slightly more time consuming (especially important when dealing with real estate transactions), sometimes these types of samples are necessary to obtain specific information and criteria for a mold remediation action plan, or indoor air quality investigation or assessment. In-Spect will always fully explain to our customer the mold detection procedures which are being implemented, and will not damage any property with invasive detection techniques without first exhausting all other options, and only after being granted permission from the customer. If you are concerned about elevated mold levels for any reason, rest assured that In-Spect not only finds hidden mold as a profession, but also as a matter of pride. Also remember that by the time you can see visible mold growth, the problem has more than likely become very serious. According to standards set into place by the New York City Department of Health, all visible mold should be remediated immediately, without further testing or analysis, once it is visually observed. This is due to the fact that information concerning 'safe' and 'unsafe' levels of molds indoors are currently unavailable, although studies are ongoing by various agencies to discover this information. Since it is unknown when mold exceeds 'safe' levels, all visible mold must be removed. It is also important to understand that dangerously high levels of mold can and do exist in the indoor air long before it can be seen. So remember, if you think you have mold, for any reason, even as simple as an odd smell or odor, call In-Spect for a mold inspection or consultation right away. Free remediation estimates are available in most instances. Don't let a potentially simple mold problem go unchecked and get out of hand, as this will only make the solution more expensive, more time consuming, and a bigger headache for you. We will not leave your home or business until we are sure that you either have no elevated levels of mold, or until we provide you with a cost-effective, situation specific remediation plan to cleanse your property of existing toxic and/or potentially harmful active mold growth.

### *Why have Mold Remediated Professionally?*

Due to the ramifications involved with toxic or allergenic mold exposure, it the importance of prompt, professional mold remediation cannot be overstressed. Over recent years, litigation involving mold and mold related insurance claims is on the rise, one of the most publicized cases being a \$100 million lawsuit and subsequent criminal investigation filed in Texas in February of 2000. Instances like this one are becoming more commonplace, although only a small portion of these cases receive enough publicity to become well known to the general public. In addition to legal problems it can cause, mold is becoming an increasingly important health concern, as more and more effects of toxic, allergenic, tetragenic, and mutagenic molds become known. It must be understood that proper remediation techniques and protocol *must* be followed, or the problem can, and usually is, multiplied exponentially.

It is possible for anyone to remove mold or mold affected building materials. There are however, circumstances, variables, and specifics which most people are not aware of when it comes to mold remediation. Perhaps the most common misconception involving mold is that it can be eliminated simply by spraying it with common household bleach. This could not be less true. There are a number of reasons that bleach is ineffective for the purposes of killing mold, and additional reasons not to use household bleach for this purpose. Bleach is too diluted and weak to permanently kill mold, unless the mold is simply growing on the surface of a hard, non-porous surface. The ion structure of chlorine bleach prevents the chlorine from penetrating into porous materials such as drywall, wood, and other common building materials. The chemical merely stays on the top surface of the material, while the mold has protected enzyme rods and roots growing deep inside the porous materials. When using bleach on porous surfaces, the chlorine chemical sits on the surface for a short time, kills the surface layer of mold, and then gasses off completely. Meanwhile, the water in the bleach soaks into the porous material, and actually feeds the mold growing there. Therefore, while the bleach will discolor the mold on the surface, making it appear dead, it is actually making the mold growth problem worse. The already insufficient mold-killing power of bleach is diminished significantly as the product sits on warehouse and store shelves. It loses 50% of its killing power in the first 90 days it is inside of a sealed container. In addition, the chlorine ions are constantly escaping through the plastic walls of common bleach containers. If you still are not convinced, simply read the label on any brand of chlorine bleach. You will not find an EPA registration number for killing mold on any of these. That is because chlorine bleach is *not* registered with the EPA as a cleaner or disinfectant to kill mold. Besides the important reality that bleach is not effective at killing mold, there are other reasons that it should not be used in an attempt to eliminate mold. Bleach can make some dirt and soil become transparent, giving the illusion that the surface has been cleaned, when in fact, it has not. Bleach adversely affects floor coatings, eating them away and reducing their effectiveness. It also corrodes hard surfaces and discolors carpet fibers. There are also health concerns involved with using bleach in certain applications. These can include the creation of hazardous vapors from chemical mixing, and can also contaminate ground and drinking water.