

ASSESSMENT OF MOLD IN INDOOR ENVIRONMENTS

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So, you say you have mold? Or you suspect mold is in your house, and you do not know what caused it? Should you have it tested? If so, whom should you call?

These are all questions that may plague the average homeowner, when faced with an unknown allergen. Many clients believe it must be "that mold stuff I saw on TV or on that full page newspaper ad I saw the other day." I hope the following helps you make more of an educated decision, when determining your particular course of action.

What are you reacting to? - First of all, are you sure it is mold that is your main concern or is it possibly another environmental trigger? Have you been tested for other allergens? A fair analogy may be changing the oil in your car because it "knocks" going up a hill, when all along it may be a timing problem, which the oil change will not fix.

Moisture - Addressing the source of the problem - Now that you know you are reacting to mold, you need to be aware that many well-known websites say to address moisture as the main culprit. Think about your house, and make a note of any moisture sources that would contribute to mold growth. Examples include water leaks, which are obvious, but a majority of complaints in buildings stem from VAPOR LEAKS.

Who should I hire? Know your Inspector - A competent engineer or building inspector, who can look objectively at your building, and is there as an unbiased expert, should be hired to assess the cause and origin of moisture intrusion. Ask questions as to their licensing and the years of experience the inspector has before hiring the consultant. Once the moisture issue is properly diagnosed, a plan can be implemented for mitigation of the moisture, and possibly mold if encountered. Too many times clients will hire a tradesman to look at moisture issues or they will see an ad in the paper for a "free crawl space inspection". If an air conditioning (HVAC) technician arrives to do an inspection of the building, what deficiencies do you think he will be most focused on?

Visual Inspection - Now that you have selected your inspector, the inspection can begin. A good inspection should begin within the structure to look for obvious signs of problems. It should proceed to the attic, then should proceed to the crawl space. If you are testing that day, don't allow the inspector to enter or open the attic. They will bias the sampling. A good diagnostician will typically find issues with a building during the visual inspection, if there is a mold issue. If it is a vapor issue, plan on it being a more difficult assessment.

Testing - There is significant debate about what type, if any, of testing to use for indoor air quality testing. The Indoor Air Quality Association Annual Conference in 2007 cited particle counting by instrumentation as a viable means of assessing problematic areas.

For air sampling, there are several types of cassettes for capturing particles. Some cassettes use higher flow for capture of particulate, and some specialize in a lower flow for sampling. Some hygienists will like to test using agar plates, so they can identify the species of mold present. It's all very confusing, but it goes back to picking the person you are most comfortable with and matching the level of assessment with the need for data.

Report - The report should identify the visual findings and should discuss the laboratory findings, if samples were taken. Conclusions and recommendations should be included that address the main problem, as the diagnostician sees it, and long-term solutions for repair. In some cases, the consultant will be able to estimate the cost for mold cleanup, based on their experience in the field. This can be very helpful, so ask the inspector if they have any experience with cleanup, and if so, in what capacity.

Cleanup - Finally, the Institute of Inspection Cleaning Restoration Certification (IICRC) publishes an industry standard for mold cleanup called IICRC Standard S520. This standard succinctly addresses the requirements of parties involved in the cleanup of mold. The objective is to return the site to a Condition 1, Normal Fungal Ecology. You can find this document at www.IICRC.org.

Post-cleanup Sampling - Current real estate law in South Carolina mandates disclosure of mold in real estate transactions. If you have a mold incident, you will need documentation from the independent consultant to verify to the buyer that it was handled properly. This will typically involve more testing, so be prepared to have the consultant close at hand to see the project through. It will save you money in the long run.

ABOUT THE AUTHOR:

Mr. John Albrecht received his B.S. in Civil Engineering from the Citadel in 1985 and has been a Professional Engineer licensed in South Carolina (License #13896) for the last 18 years. He was an Environmental Engineer for the Department of Defense from 1987-1991, and began working in the private sector in 1991. Since 1993, Mr. Albrecht has managed his own environmental consulting firm in Charleston. Since 2000, the firm has focused solely on indoor air quality, building science, and energy efficiency issues. The firm was awarded the Emerging 10 Award for the Charleston Metro Chamber of Commerce in both 2003 and 2004. Mr. Albrecht holds accreditation from the American Indoor Air Quality Council as a Certified Indoor Environmental Consultant (CIEC).