ENVIRONMENTAL HOME

Good, bad, ugly truth about mold remediation

By Dan Howard
For Trib Total Media

Imagine you are a professional mold remediator. You know that the goal you are pursuing is to correct nasty mold levels. You also should make corrections so that the mold doesn't return.

The customer is paying you thousands of dollars to achieve those goals. Hanging in the balance is the health of the family living in the home.

Now that you have a vivid picture of the importance of proper mold remediation in your mind, let me tell you about my recent experience as an environmental consultant.

Earlier this week was the fourth time this professionally remediated home has failed clearance. Each previous time it failed, I have spoken with the remediator about ways that his company can properly remediate the home. Each time, he has ignored the advice. I truly want this job done correctly, so the family living in the home can enjoy a healthy home forever more.

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Mold is visible on this window frame even after remediation.

Mold Remediation 101

Choosing remediation systems and reliable professionals: There are many mold-treatment systems available that encompass a wide range of chemicals of varying toxicity. Some of the chemicals that have superb effectiveness are very dangerous to health and safety. Others require precise attention to detail.

The goal is to select the best treatment system for a project that will fully remove or kill mold in a safe environment for workers and occupants of a building.

Treatment systems for chemically sensitive individuals: In the case of mold or chemically sensitive individuals, we highly recommend exposure to a sample of treatment products before a system or chemicals are used in their property.

This can easily be accomplished by provision of a sample cloth treated with a product and given to the sensitive occupant prior to remediation treatment. They should also have "test" exposure to any building material or product brought into a building.

Even reaction to a common product such as caulking can create problems for chemically sensitive individuals.

Preparation for remediation: Remediation systems require proper preparation and conditions for the treatment system to be effective. One example is that the building should be less than 50 percent relative humidity. Another example is that mold and biological debris should be removed before treatment. Moldy contents need to be addressed with treatment or removal from the site. All water leaks and events need to be corrected and promptly addressed and resolved. We need to avoid the types of surfaces and materials that might be a substrate for mold growth.

Protecting the occupants and workers: Depending upon the level, location, use and extent of remediation required, the remediation needs to be done with appropriate levels of protection for the premises, occupants and workers.

Persons handling building materials, contents and debris contaminated by mold are exposed to elevated mold levels. This is because the disturbed mold spreads in the same way as when you blew on a dandelion that turned white.

As kids, we were amazed as the tiny seeds went everywhere. If you are like me, you never gave a thought to the fact we were spreading dandelion seeds. We know better now. Personal Protective Equipment, or PPE, needs to be worn by those exposed to airborne mold during work.

At a minimum, workers need to be protected with masks. In higher mold conditions or closed areas, gloves and suits might also be crucial and necessary protective equipment.

Stopping the spread of mold during remediation: If an area of remediation has disturbed materials, the area being cleaned first needs to be contained from spreading disturbed mold through other areas of the building envelope.

Contaminated materials need to be arried out of the building while enclosed or wrapped so as not to allow the mold contaminated materials to harm others.

In areas of significant disturbed mold contaminated materials, the area of work might need to be protected with an airlock, usually simple, overlapping plastic doors that look like the scene you might remember from the movie "ET the Extraterrestrial. This is called containment.

Exhausting mold spores outdoors: In situations where there is concern and risk that disturbed mold might be drawn from the disturbed area into the other areas of the building, the work area needs placed under a negative pressure.

That means the air is drawn from that area and sent to the exterior. Furnace ductwork might need to be sealed within work areas to avoid the furnace or AC blower pushing mold through the building while the unit is operating. The process of establishing a negative air flow away from the non-contaminated areas is called negative air.

Filtering the mold floating in the air: Another aspect of the professional mold remediation job is air scrubbing. Disturbed mold spores go into the air. The mold floating in the work area can be collected onto a filter in a piece of equipment called an air scrubber. This is a highly efficient air filter designed to capture small particles such as mold.

Drying out the building: Dehumidification to a low moisture level is required for effective mold remediation. Portable commercial dehumidifiers are often used for that purpose.

Trust but verify after remediation

At the end of the work, you should have proof that the work was effective in removing the mold. This is done by conducting a "clearance test," also known as a "Post-Remediation Verification," or PRV.

The remediation firm should not conduct their own PRV. They have the obvious temptation to "pass" the job when it should fail. They want to be paid for the work and do not want to say they did a bad job. Even the very best firms can fail a clearance because of an oversight or hidden mold source.

Clients need an independent Post Remediation Verification test for several reasons. We can't see mold spores, there can be multiple sources of contamination or an ineffective treatment. Mold can hide in areas we can't see.

Back to earlier today, and the remediator that has ignored the basic principles of remediation.

Four times he did not clean visible mold and the dirt and debris that holds mold.

Four times he didn't correct the obvious water leaks creating more mold.

The remediation contractor in today's story is a pleasant person, and I believe meant well and wanted to succeed. He just lacked the discipline and experience to do the job correctly.

The lesson is that it is critical to have a PRV or Post Remediation Verification test after a mold remediation.

Go to Envirospect.com/MoldRemediation for a PDF download of the article and additional information and links to important disaster planning and response resources.

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