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FEATURE

The Mixed Messages of
Recycling Standards

MARKETING

Taking Scent-er Stage

MOLD PREVENTION IN POST-CONSTRUCTION



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Our buildings, both residential and commercial, are living, breathing organisms. The indoor environment of each is unique and dynamic, ever-changing based on the way the building is used, the number of occupants and environmental conditions. Our buildings can become petri dishes harboring all sorts of contaminants, affecting the health and well-being of those who work within them. Addressing the issues properly with the right kind of cleaning and maintenance can assure a healthier environment for the occupants and reduce the possibility of bacterial or fungal growth.

Many people seem to think that a newly constructed building is the best way to avoid indoor air contamination, and so building-from-scratch is often the most desired alternative to cleaning up what's already there. This perception is a misperception. The truth is that new buildings, post-construction, have all types of indoor air quality (IAQ) issues.

For instance, there is some evidence that submicron construction dust can linger in a building for up to ten years after the building is finished. Paints and construction materials which incorporate some petroleum products can produce VOCs (volatile organic compounds) and off-gas for months after someone has moved in. Organic construction materials, like wood, may retain higher levels of moisture even after the air conditioning system has been initiated, and that moisture can feed mold. From there, it is easy to imagine what contaminants might be brought in with the new furniture that is purchased or moved in from a previous location. Some of these concerns may be addressed during the construction process to mitigate potential problems, but more often they are not.

Identifying potential mold issues is relatively easy because, when mold is growing, it produces a distinctive

musty odor which most of us recognize immediately. Also, excessive amounts of dust could, and probably do, include mold spores, which acts as another indication of mold growth even when we can't see where it's growing.

When a problem is suspected, simple lab testing should be done to see exactly what the problem might be, and then the problem should be properly addressed to resolve it. These simple diagnostics could be done in-house by properly trained personnel or outsourced to a professional IAQ/mold assessor. Under rare circumstances, molds can prove to be a serious health concern for those who are young, elderly or immunocompromised. Evaluating the level of mold and the type of mold present will help the decision-maker determine whether the building should remain occupied during the sanitization process or evacuated. In some cases, the contamination is so severe that leaving an empty building in the hands of a well-trained and certified remediator will make the most sense. In most cases, that is not necessary.

Removing the source of contamination, controlling the relative humidity and implementing good sanitization or remediation protocols could quickly resolve a mold problem. Once the problem is resolved, maintaining a healthier environment for the occupants is not difficult. We suggest the implementation of an IAQ Management program to ensure mold will not become an issue in the future. Mostly, this is about awareness and scheduled maintenance.

The issue of awareness is key, as it's important for those inside a building to trust their subjective observations regarding potential IAQ/mold problems. Am I smelling something unusual, does the environment feel clammy to me or am I seeing what appears to be mold growth? My senses will tell me if I should take things to the next level.



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In order to address the issue of maintenance properly, we should make sure our scheduled maintenance program produces a cleaner environment. Removing clutter to allow air flow, managing

the temperature and relative humidity to remove moisture and cleaning up dust wherever one finds it will reduce the possibilities of mold becoming a problem now or in the future.

The goal is to create and maintain

a healthier indoor environment for the occupants, and a little attention paid to the details of these guidelines will do just that.

By D. Douglas Hoffman, Executive Director, NORMI

IT'S NOT A MATTER OF AGE

Prevention is the best course of action when it comes to exposure to unhealthy levels of mold and other indoor air contaminants, but how do we avoid this type of exposure in our workplace when mold and bacterial growth can be hidden inside walls and ceiling plenums?

The answer to this question can be complex given that people experience varying levels of sensitivity to different contaminants based on their age, health history, prior exposure levels, and the location they primarily frequent in the dwelling as well as other factors. Indoor air that causes one person to become ill may not even bother another person, which can make realizing a budding problem exists even harder. But with a limited amount of knowledge, a person can become more equipped in preventing indoor air quality problems from developing.

A common fallacy that it is important to not fall prey to is believing that structural mold is only a

problem in old buildings—this is not true at all. Any time adequate moisture exists in a building—regardless of the age of the structure—a mold problem can arise.

The age of the building does not matter as long as the three components needed to facilitate mold growth are present:

1. **Moisture**—From any source such as a pipe leak, flooding or elevated levels of indoor humidity.
2. **Mold Spores**—From the ambient air that is always present in various concentrations.
3. **Food Source for Mold**—From cellulose-based materials (such as building materials like wood, drywall, etc.), personal belongings (such as foods, furniture materials, cardboard boxes, books and paper), and organic matter (such as soap scum, skin particles, pet dander) found in dust and on surfaces of building materials such as concrete and tiles.

Another common fallacy is that exposure to mold cannot make one sick, which again, is just not true, especially for people in high-risk groups. According to the Centers for Disease Control and Prevention (CDC), subpopulation groups considered at high-risk for mold exposure include the following:

- Children younger than 12 years
- People older than 65 years
- Anyone pregnant
- People with pre-existing respiratory conditions worsened by mold such as allergies, asthma, and COPD
- Immune-compromised people

Whether a structure is old, new, or somewhere in between, preventing structural mold growth can be accomplished by implementing IAQ best practices, which includes controlling indoor humidity and addressing water intrusion or leakage immediately. Building owners and

occupants should keep a vigilant eye out for signs of wet building materials, as mold growth will ensue within 24-48 hours. Such growth has the potential to adversely affect the health of building occupants.

In summary, should any visible mold be spotted or a musty smell noticed—a sure sign of active mold growth—the source of moisture should be immediately sought out, identified and appropriately fixed to preserve the health of the indoor space and its occupants.■

By Lee Ann Billings, Co-author of MOLD: The War Within, Lessons Learned from Katrina



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SPRAY AWAY MOLD

Finding new ways to attack an old enemy

I invented the Spray Away Cleaner due to necessity. Spray Away the Everything Cleaner and Stain Remover is a non-toxic germ and mold killing cleaner that I originally invented to be a stain remover—I was not able to find an effective non-toxic stain remover at the time that accomplished what I needed. After I created it, it was not until the solution was lab tested and found to be non-toxic and effective at killing 99.9% of household germs, mold and other contagious viruses and bacteria that I realized the importance of what I had made in my kitchen.

I excelled in chemistry in college,

but never imagined I would be working with chemicals for a living. After college, I was in my kitchen pouring chemicals into a spray bottle when a chemical reaction occurred. This chemical reaction caused the hydrogen molecule in the water to do all the work. This process was caused by a combination of a few chemicals that reacted with water, which in turn helped to keep things that were cleaned stay clean for longer due to the solution's reaction to the presence of moisture. Through research, I also found that this non-toxic chemical solution works well with sunlight to kill mold, keeping it at bay indefinitely.

Today, I have been selling this product in stores and to local businesses and resorts on Cape Cod for nearly seven years. Cape Cod

is a place known for mold growth because it is often damp, and there is a large boating community present. Due to my experience managing and dealing with mold, I understand well what is at stake. In particular, black mold is a serious problem, whether it is found on boating equipment or inside a building. Black mold can cause respiratory distress and death, and, like all mold, is caused by dampness. The dampness must be completely eliminated in order to keep the mold from returning.

A common method of managing mold for many is using bleach, but bleach does not kill mold, it burns it. Finding a solution that effectively kills mold is the key. Spray Away Cleaner is one option, as it lifts mold from the surface, making it easy to wipe away. Yet, no matter what product is used, a mask over the nose and mouth are highly recommended as mold spores can travel through the air and down into someone's lungs. Above all else, it is important for anyone that is managing and eliminating mold to take precautions to ensure their own health and wellness, as well as the health and wellness of anyone who may encounter the mold in their day-to-day lives.

By Beth Chester, Inventor & Owner, Spray Away Cleaner

