

Mold: What Appraisers Should Know

by Michael V. Sanders, MAI, SRA

BIOLOGICAL POLLUTANTS ARE OFTEN ASSOCIATED WITH POOR INDOOR AIR QUALITY AND CAN INCLUDE ANIMAL DANDER, DUST MITES, FUNGI, BACTERIA AND POLLEN. Mold in particular has rapidly become a significant real estate issue, considered problematic because of possible structural deterioration and potential health impacts to building occupants. While the public's awareness of mold has been heightened over the past decade as a result of landmark lawsuits and sensational media coverage, there is little evidence that mold is more prevalent now than in the past, with references to mold dating back to biblical times.

What is mold?

Molds are simple fungi (such as dry rot, mildew, yeasts, plant rusts, smuts and mushrooms), which require an organic food source high in cellulose and sufficient moisture to sustain growth. Unfortunately, organic matter containing cellulose is a component of many common building materials, including wood, drywall, insulation, ceiling tiles, carpet and textiles. Fungal growth is sometimes observed on nonorganic materials as well – ceramic tile, stone, grout, caulking and metal. Substrate degradation and metabolic by-products often produce characteristic musty odors associated with the growth of mold, sometimes resulting in the production of compounds with toxic properties (mycotoxins).

In contrast to some other contaminants, molds are naturally found almost everywhere in the environment, both indoors and outdoors, thus identifying a mold “problem” is often difficult, requiring the services of a properly qualified and trained professional. Air sampling that compares indoor and outdoor types and concentrations of various mold species is common practice in determining the existence of an indoor air-quality problem. Handheld moisture meters are often used to measure the moisture content of materials, and psychrometers to measure humidity; surface sampling of potentially contaminated areas is also common. Air and surface samples are typically sent to accredited laboratories for

analysis, and reports identify the types and quantities of various fungal species found.

Mold growth on building materials most often occurs in conjunction with excessive and/or persistent moisture conditions, including flooding, high humidity, plumbing leaks or water intrusion through the building envelope. Inadequate ventilation is frequently a contributing factor. Mold is often blamed on defective construction and/or improper maintenance. Some observers also note that structures built since the energy crisis of the 1970s are more airtight, possibly contributing to mold, sick-building syndrome and other problems associated with indoor air quality. The appearance of mold can vary from small dots to continuous sheets of mold colonies; colors and textures can also vary widely. Conditions supporting mold growth sometime foster bacterial contamination as well, particularly from sewage leaks and spills.

Government's role

Laws governing disclosure of mold vary by state. The last federal legislation relating to mold safety, The United States Toxic Mold Safety and Protection Act (H.R. 1268), was introduced in early 2005, but never passed committee status. Attempts to define threshold limits or standards relating to mold exposure have generally been unsuccessful, with uniform standards considered impractical due to the broad range of fungal species, geographic differ-

ences, seasonal variations, varied human responses and lack of conclusive data regarding health impacts. Standard mold disclosures in real estate contracts are becoming common, as are mold exclusions or caps on coverage in insurance policies, with widespread litigation relating to water intrusion and mold claims.

Mold damage is similar to many other physical conditions requiring repair. Repair and restoration costs, however, are extremely project-dependent and more difficult to generalize than many other conditions requiring repair. Contaminated materials must be either cleaned or replaced, and large remediation projects often involve specialized contractors, protective clothing and construction of elaborate containment systems to prevent migration of mold spores to other parts of the structure.

Voluntary guidelines drafted by the federal government regarding indoor air quality contain suggested remediation standards for residential (available at www.epa.gov/iaq/molds/moldguide.html) and commercial and institutional (available at www.epa.gov/iaq/molds/mold_remediation.html) properties. Information published by the City of New York also contains recognized remediation protocols (available at www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html).

High-profile court cases and the attendant media coverage have unquestionably increased the awareness of mold issues by

the public, consumer groups and the legal and scientific communities over the past decade. Perhaps most notable was a \$32 million award by a Texas jury in 2001 in *Ballard v. Fire Insurance Exchange*, a residential insurance case involving water damage and mold. On appeal, this was later reduced to \$4 million. Heightened reactions associated with such publicity, similar to responses associated with other potentially dangerous materials – asbestos, radon gas, formaldehyde insulation and lead-based paint – normally subside as additional information becomes known.

Valuation issues

Appraisers should exercise extreme caution in identifying surface staining or other irregularities as mold without an expert opinion, which normally requires specialized expertise and testing procedures. Appraisers should be particularly careful not to fall victim to some of the hype surrounding mold, for example, by identifying black stains as “toxic mold.” The term “toxic mold” was originated by the media, without scientific basis. *Stachybotrys chartarum* is a usually black mold sometimes referred to as “toxic mold,” though other mold species can have a similar appearance. Laboratory testing is required to definitively identify a mold species. Observed conditions should be noted, however, including prior moisture or water intrusion, dampness, staining or discoloration of surface materials and unusual odors. Such conditions do not necessarily indicate the presence of mold but may warrant further investigation.

From a valuation standpoint, mold contamination is properly analyzed within the context of the Detrimental Conditions (DC) Matrix, with consideration of impacts on cost, use and risk during the assessment, repair and ongoing stages of the DC lifecycle, according to Randall Bell, MAI, in his book *Real Estate Damages: An Analysis of Detrimental Conditions* (Appraisal Institute, 1999). Identification and assessment of a mold problem and estimates relative to reme-

diation and/or restoration costs are clearly outside the expertise of most appraisers, although loss-of-use claims may necessitate estimates of fair rental value or the value of comparable housing for a specified period of time.

Perhaps the most debated aspect of mold on property value is the impact of disclosing a current or prior mold problem. As with most conditions requiring repair, the buyer of a damaged property will normally ask the seller to make appropriate repairs, or will discount the price of a property based on the scope of estimated repairs. Project incentive may also be an issue, if supported by the market. Lenders may require mold remediation prior to loan closure or, alternatively, might withhold funds to cover estimated remediation costs. The ability to obtain insurance in the wake of a mold disclosure is a controversial issue, with unconfirmed reports that water-loss claims have been used as the basis for denial of coverage. Market resistance (stigma) is often cited in lawsuits alleging water damage and mold, though such allegations must be properly supported by relevant market data. Stigma damage is far from being automatic. Case studies have indicated that properties once affected by water damage and/or mold have subsequently sold at full value in a post-repair condition.

Further reading

- U. S. Environmental Protection Agency, www.epa.gov/iaq/molds/moldresources.html
- Centers for Disease Control and Prevention, www.cdc.gov/nceh/airpollution/mold/
- Liability insurance Administration's 2002 claim Alert on mold, www.liability.com/claim_alert.asp ■

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