

LITIGATING MOLD CLAIMS

CRISIS? WHAT CRISIS?

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I. INTRODUCTION¹

The April, 2003 edition of *For the Defense*, the monthly magazine of the Defense Research Institute, published an article in which mold litigation was described as "The Perfect Storm."² The authors' thesis was that a combination of events outside the courtroom, promoted by a media-savvy, well funded plaintiff's bar, feeds a media machine desperate to fill air time on 24-hour cable channels, trying to break the next "big" story. Just as defense verdicts do not sell newspapers, scientific studies concluding that there is *no* association between the "toxin du jour" and some dread disease are rarely reported. A classic example is the widely reported verdict for \$32 million dollars in what is known as the *Ballard* mold case.³ A significant portion of that judgment was

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1. Thanks to my partner, Thomas Burke, for permission to use material for this article.
2. Borman & McDonald, *The Perfect Storm*, *For the Defense*, Vol. 45, No.4 Pg. 59, April, 2003.
3. *Allison v. Fire Insurance Exchange*, 98 S.W. 3d 227 (Tex. App. 2002).

reversed on appeal. The reversal, including a damage reduction to approximate actual losses, wiping out all punitive and mental anguish damages, was barely reported in the media.

The media frenzy has not just been limited to alternative media or the internet. Significant mold stories have appeared in the *New York Times*, CBS "48 Hours," and the *National Law Journal* and other "mainstream" media outlets. But the roots of the "mold crisis" go much farther back than current media hype.

II. HISTORICAL BACKGROUND

The controversy surrounding mold has even focused on the Old Testament as evidence of the longstanding potential for mold to induce illness in humans. A quote often cited is Leviticus 14:33-48 in which it is said that God told Moses and Aaron how to decontaminate a house in which mold or mildew had appeared. But even this story may be apocryphal. The entire Chapter 14 of Leviticus, in the traditional King James Version, including the 1611 and 1982 translations, addresses leprosy, and what to do with people and houses found to have it. Only the newer and more modern translations of the original Hebrew have substituted mildew or skin disease for leprosy.

Additionally, the once famous curse of King Tut's tomb has been resurrected, so to speak, to argue that the rash of sudden deaths among those who opened the boy King's tomb were precipitated by the out rush of mold spores when the tomb was breached. There are several references in the vast literature concerning King Tut about mold being discovered when the tomb was opened, but a retrospective cohort study of those present at the opening in 1923 established that there was no relationship between exposure to the tomb's interior and survival⁴ and that many lived to ripe old ages. Clearly, it is better left to Biblical scholars to debate what Leviticus really said, and to Egyptologists to study Tut's tomb. But mold is like cockroaches; it has been around forever, has incredible survival skills and has always had the capacity to incite a strong case of revulsion in most people.

The modern history of mold as a toxin capable of causing personal injury arose from a series of reports in 1993 and 1994 that a number of infants in the Cleveland, Ohio area had experienced pulmonary hemorrhage. After initially finding no common causal factors,⁵ the investigators concluded that a particular type of mold,

4. Nelson, Mark R., *The mummy's curse: historical cohort study*, 325 *British Medical Journal* 1482, Dec 21-28 2002, (www.bmj.com)

5. CDC. *Acute pulmonary hemorrhage/hemosiderosis among infants—Cleveland, January*

Stachybotrys Chartarum,⁶ played some role in the occurrences to a potentially vulnerable population.⁷ Although the CDC and an expert panel reanalyzed and reevaluated the original data to conclude there was no link between *S. Chartarum* and the infants' disease,⁸ the retraction came too late, the horse had been out of the barn and has been running amuck in courtrooms ever since.

III. MOLD LITIGATION

There are two general types of mold litigation that have developed over the last few years. Originally, mold litigation was an offshoot of construction defect litigation. A building owner would have water intrusion and resulting mold growth due to some defect in the construction or design of the building. The owner would file a lawsuit against the architect/engineer and constructors of the building for repair/remediation damages plus any relocation costs involved. Mold would simply be another component of that litigation. Additional costs would be required to properly remediate mold contaminated materials but the damages were quantifiable in the sense that repair/remediation costs can be estimated and considered during the litigation to determine the risk of proceeding to trial. Personal injury claims were not part of this type of litigation.

The second type of mold litigation are the personal injury lawsuits which are fueling the current explosion in mold litigation. A building owner/occupant (typically a homeowner, apartment tenant or employee) claims, in addition to repair/ remediation costs, medical injury, plus pain and suffering damages that are not as quantifiable and certainly are more emotional (and more media worthy) than the repair/remediation type of damages in the construction defect litigation. One example of the second type of claim is the Ballard case in Texas where the Ballards sued their homeowners insurance carrier for repair/remediation damages as well as damages for mental anguish and medical injuries. The trial court refused to admit evidence of the medical injuries due to mold

1993-November 1994. *MMWR Morbidity Mortality Weekly Report*. 1994; 43:881-83.

6. This greenish black mold has been singled out by the media and given the suggestive labels "toxic mold" and "fatal fungus."

7. CDC. Update: pulmonary hemorrhage/hemosiderosis among infants-Cleveland, 1993-1996. *MMWR Morbidity Mortality Weekly Report* 1997; 46:33-5; Montana E, et. al. Environmental risk factors associated with pediatric idiopathic pulmonary hemorrhage and hemosiderosis in a Cleveland community. *Pediatrics* 1997;99:e5; Etzel, RA, et. al. Acute pulmonary hemorrhage in infants associated with exposure to *Stachybotrys atra* and other fungi. *Archives Pediatric Adolescent Medicine*. 1998;152:757-62.

8. CDC. Update: pulmonary hemorrhage/hemosiderosis among infants-Cleveland 1993-1996. *MMWR Morbidity Mortality Weekly Report* 2000;49:180-84.

yet awarded the Ballard's \$32,000,000 for repair and replacement cost, mental anguish, punitive damages and attorney's fees. A Texas appellate court struck the punitive damage and mental anguish awards reducing the judgment to \$4,000,000.⁹

IV. WHAT IS MOLD AND WHY DO WE CARE ABOUT IT

There are numerous sources available to review the properties of molds and fungi, many of them created and/or updated to address issues raised in the media and other public forums. They include the Environmental Protection Agency (EPA), Centers for Disease Control (CDC), American Industrial Hygiene Association (AIHA), American Conference of Governmental Industrial Hygienists (ACGIH) and the American College of Occupational and Environmental Medicine (ACOEM). Given the long standing and ubiquitous nature of molds and fungi, there is little disagreement on the basic characteristics.

Molds and fungi are everywhere, indoors and out. There are literally thousands of species (CDC estimates as many as 300,000 or more discrete species)¹⁰ and all play a vital role in the ecology of the earth by decomposing organic matter. Molds need humid, damp conditions such as the average Florida bathroom between 6 and 9 A.M. most days of the week, to air conditioning equipment and ductwork in buildings of all sizes and shapes.

Molds live in the soil, on plants, and on dead or decaying matter, or on indoor organic material such as wood, ceiling tiles and gypsum board. The terms mold, mildew and fungus are synonymous. Fungi have been described as "the garbagemen of nature". They are found naturally both indoors and outdoors and are carried about by air currents, objects or people and animals. Mold provides benefits: it is used in the baking of bread, fermenting of alcohol, production of cheese and production of medicine, such as penicillin. Mold can also be detrimental. Fungal spores and by-products such as mycotoxin can cause allergic reactions in people as well as hypersensitivity reactions. Molds belong to the kingdom Fungi, and unlike plants, they lack chlorophyll and must survive by digesting plant materials, using plant and other organic materials for food. Without molds, our environment would be overwhelmed with large amounts of dead plant matter.

Molds produce tiny spores to reproduce, just as some plants produce seeds. These mold spores can be found in both indoor and outdoor air, and settled on indoor and outdoor surfaces. When mold spores

9. *Allison v. Fire Insurance Exchange*, 98 S.W. 3d 227 (Tex. App. 2002).

10. <http://www.cdc.gov/nceh/airpollution/mold/moldfacts.htm>

land on a damp spot, they may begin growing and digesting whatever they are growing on in order to survive.¹¹ Three things needed for the development of fungi are: (1) fungal spores; (2) a food source and (3) water. The microscopic spores can spread everywhere indoors and outdoors by air movements, people and animals. It is physically impossible for the average building to be free of fungal spores. A fungus can live on practically anything; therefore the focus on preventing fungal growth is the control of water. Moisture can enter a building through several ways: outside air infiltration, water diffusing through the building envelope, moisture in construction materials, moisture in people, leaks into the building and water damage from burst pipes or from fire extinguishment. Of these possible ways of entry, the more complex to control are humidity problems arising from the intrusion of humid outside air and water diffusing through the building envelope.

Certain molds are water-loving, such as aspergillus, penicillium, stachybotrys, and acremonium, and experts generally agree that excessive growth of these types can cause allergic reactions in mold-allergic individuals. A wide variety of humidity-causing conditions can facilitate indoor mold contamination. Water intrusion, often from defective construction or faulty plumbing, can be the problem. A leaky roof, a burst pipe, or reoccurring water penetration into the building will provide a moist area for mold to grow. Wood, ceiling tiles, gypsum board, and many other standard building materials may provide nutrients for mold growth. It has been found that vinyl siding on the interior side of an exterior wall may permit mold growth if any moisture reaches the inside of the vinyl siding. Building humidifiers, air-conditioning systems, damp storage areas and crawl spaces may also provide a welcome environment for mold growth. Paints, coatings, and lacquers applied to wood products are alleged to cause mold growth when the wood is wet.

Mold growth may be found on drywall, acoustical ceiling tile, carpets, upholstered furniture, and wall coverings. Some obvious signs of mold contamination are musty, earthy odors; peeling of wall coverings or paint; pink or purple areas on wallpaper; and blistering of plaster walls. As previously noted, mold growth requires moisture, a food source, and a relatively warm temperature.¹²

11. "Mold Remediation In Schools and Commercial Buildings" at <http://www.epa.gov/iaq/molds>. This EPA website is an excellent source of information as well as links to many IAQ organizations and websites.

12. A.-L. Pasanen et al., Occurrence and Moisture Requirements of Microbial Growth in Building Materials, 30 INT'L BIODETERIORATION AND BIODEGRADATION 273 (1992).

Sources of moisture may include improper "drying in" during construction; or improper design, construction, or maintenance of the building envelope, the HVAC system, or both.¹³ Sources of moisture for mold growth typically include:

- (1) stagnate water and slime found in drain pans of fan coil units and other elements of the HVAC system;
- (2) water spray components of HVAC systems;
- (3) excessive relative humidity within the building or HVAC system;
- (4) flooding or excessive water or fluid leaks within the building;
- (5) flooded carpeting;
- (6) permeable materials such as acoustic dust liners within the HVAC system;
- (7) external microbial contaminants drawn into the building as a result of improperly located air supply intakes; and
- (8) other external water leak sources such as roof leaks.¹⁴

V. BUILDING RELATED HEALTH ISSUES

The scientific and medical literature contain differing opinions regarding the potential health impacts of mold exposure. Many plaintiffs in toxic mold cases say that exposure to mold has either made them sick, caused them to lose their job, or exacerbated pre-existing physical conditions. Others allege that mold growth has damaged and destroyed their property, causing them to move out, or damaged and destroyed their business, causing them to have to sell the business.

"Although the causative role of fungi in individual cases of respiratory allergy and asthma has been known since the eighteenth century, their overall significance in respiratory health is still debated."¹⁵ Medical research has shown a potential link between certain mold growth in buildings and human disease.¹⁶

13. Thomas Icard and W. Cary Wright, *Sick Building Syndrome and Building-Related Illness Claims: Defining the Practical and Legal Issues*, 14 CONSTR. LAW. 1 (1994).

14. Gene J. Heady, *Stuck Inside These Four Walls: Recognition of Sick Building Syndrome Has Laid the Foundation to Raise Toxic Tort Litigation to New Heights*, 26 TEXAS TECH L. REV. 1041, 1048 (1995).

15. Comm'n of European Communities, *Biological Particles in Indoor Environments*, in INDOOR AIR QUALITY & ITS IMPACT ON MAN (1993).

16. See generally Banaszak, *Hypersensitivity Pneumonitis Due to Contamination of an Air Conditioner*, 283 NEW ENG. J. MED. 6 (Aug. 6, 1970); B. P. Ager and J. A. Tickner, *The Control of Microbiological Hazards Associated with Air-Conditioning and Ventilation Systems*, INT'L J. BRITISH OCCUPATIONAL HYGIENE SOC'Y (1983); Robert E. Dales, *Adverse Health Effects Among Adults Exposed to Home Dampness and Molds*, 56 ANNALS ALLERGY 3 (1986); R. Ruotsalainen et al., *Dampness and Molds in Day-Care Centers as An Occupational Health Problem*, 66 OCCUPATIONAL ENVTL. HEALTH 369 (1995).

However, the lack of specific "dose-response" data and the numerous other sources of indoor air pollution (tobacco smoke, chemicals, dust mites, and so forth) present problems in proving that exposure to a specific mold caused specific symptoms.

Much of the media hysteria, plaintiff concern and litigation confusion stems from the nonexistence of scientific and regulatory standards regarding mold. The various agencies and entities (e.g., EPA, CDC, NIOSH, ACGIH) that are charged with determining safe levels of exposure to toxins in the workplace or the environment have not reached a consensus on what level of mold is appropriate and to which of the thousands of molds and fungi any standard should be applicable.¹⁷ Needless to say, the absence of a standard adopted as a regulation leaves a huge void in the approach to any particular case. If no one can say what is/is not a safe or unsafe level of mold in a home, apartment or office building, how can anyone say that a person's illness was/was not caused by a particular exposure? Is toxicology to be reduced to a qualitative exercise in which the experts will opine that a "lot" of mold is bad, and a "little" is OK? And what is a "lot" or a "little?" Paracelsus¹⁸ would not be happy.

Compounding the problem is the fact that a building may have both microbial and chemical contamination with multiple causes for each type. Poor indoor air quality may result from fumes or gases emitted from plastics, fibers, coatings, or chemicals used in building components or furnishings, office operations, or building cleaning. Volatile organic compounds (VOCs) emitted from these substances have been targeted,¹⁹ and at least one commentator has noted that "virtually every office product and piece of furniture emits VOCs."²⁰ Some fungi also emit VOCs that cause unpleasant odors, including the characteristic moldy smell associated with damp basements.²¹ Thus, pinpointing mold as the cause of an individual's health complaints can be difficult where there are multiple materials in that individual's environment.

While the link between a particular illness and the indoor air contaminant may be clear in some cases; e.g., Legionnaire's disease is caused by *Legionella pneumophila* bacteria, it is not so clear with mold. Despite the lack of a direct causal link to disease, the

17. <http://www.cdc.gov/nceh/airpollution/mold/moldfacts.htm>

18. The first toxicologist who is said to have voiced the still vital phrase "the dose is the difference."

19. THAD GODISH, SICK BUILDINGS, DEFINITION, DIAGNOSIS AND MITIGATION (1995) at 1.

20. Michael T. Pyle, *Environmental Law in an Office Building: the Sick Building Syndrome*, 9 J. ENVTL. L. & LITIG. 173, 178 (1994).

21. *Fungi*, in BIOAEROSOLS (Harriet A. Burge, ed.), at 90 (Center for Indoor Air Research 1995).

potential health risks from mold cannot be ignored. In suits for costs to repair design and construction conditions that cause mold growth, building owners sometimes may not be required to prove that the building conditions actually made anyone sick in order to establish liability, but may merely need to establish that it was reasonable to incur costs due to the potential health threat.²²

VI. MEDICAL ASPECTS OF MOLD CONTAMINATION

Although full coverage of the medical aspects of mold contamination is beyond the scope of this material, certain medical issues are important for building professionals whether they are architects, engineers, lawyers, contractors, owners, or suppliers. Over the last ten years there has been a huge increase in lawsuits involving mold.

Property damage and personal injury against insurers;

Construction defect claims against builders, contractors, and architects;

Personal injury claims against building owners and managers;

Workers' compensation claims against employers; and,

Contractual claims between occupants and landlords.

There have been personal injury awards and settlements of millions of dollars to building occupants who claimed adverse health impact due to mold. The issues causing these verdicts are the risks to health caused by the presence of contaminants in indoor air. Those individuals affected by these contaminants may be workers who are present in the building during their work day or they may be temporary occupants.

One additional factor with mold contamination is that of the psychogenic effects of mold. Once an individual complains about health concerns due to mold, other occupants may begin to experience similar symptoms or believe they are suffering similar

22. *Centex-Rooney Constr. Co. v. Martin County*, 706 So. 2d 20 (Fla. 4th DCA 1997), rev. denied, 718 So. 2d 1233 (Fla. 1998) ("Centex's claim that the County was required to prove that the construction defects caused an actual health hazard misses the mark.")

symptoms even though these additional individuals may not have been exposed to mold. This reaction has several names, the most common is “Mass Psychogenic Illness.” The symptoms may exist but have no physical sign nor laboratory findings of disease.²³

Regardless of the source of the complaints, building owners/managers, contractors, subcontractors and designers should not ignore them. Complaints related to hot/cold temperatures, excess humidity, unusual odors (chemical or musty) or health complaints of headaches, sinus problems, lethargy, shortness of breath and similar types of health issues must be taken seriously. There may be a pattern to these complaints that indicate a problem with indoor air quality due to mold. If a pattern is shown or the complaints exceed a minimum number, the building owner/operator should hire qualified experts to investigate. The options for investigation will depend on the nature and severity of the symptoms. They may range from isolating the specific area to a large scale epidemiological survey and evacuation of the building. Mold problems can be extremely difficult to pinpoint due to the multiple factors involved. For example, if the evidence indicates that mold is the potential source of the symptoms there are a number of ways to test for and remediate the mold with conflicting theories on the best method.²⁴

VII. COMMON INDOOR MOLD SPECIES

Of the numerous species, the CDC believes that only four species of mold occur frequently inside homes and other buildings. These include *Cladosporium*, *Penicillium*, *Aspergillus*, and *Alternaria*. While *S. Chartarum* has received a great deal of media attention, there is no data to suggest that it is more common than the other four molds that are routinely seen indoors.²⁵ It should be remembered that the mere presence of a type of mold proves nothing but its existence at a date and time.

Cladosporium exists in as many as thirty different species. It is the fungus most commonly isolated from air, both indoors and outdoors. There is medical literature associating it with skin lesions, keratitis (inflammation of the cornea), onychomycosis (fungal infection of the nails), sinusitis and pulmonary infections.²⁶

23. GODISH, *supra* note 19, at 31

24. ACGIH, *Bioaerosols Assessment and Control*, 1999.

25. <http://www.cdc.gov/nceh/airpollution/mold/stachy.htm#Q1>

26. Collier, L., A. Balows, and M. Sussman. 1998. *Topley & Wilson's Microbiology and Microbial Infections*, 9th ed, vol. 4.; Pritchard, R. C., and D. B. Muir. 1987. Black fungi: a survey of dematiaceous hyphomycetes from clinical specimens identified over a five year period in a reference laboratory. *Pathology*. 19:281-4; Sutton, D. A., A. W. Fothergill, and M.

Penicillium. While there are over two hundred species of penicillium, it may cause the most problems as a common occurrence in food. Because the average consumer cannot differentiate between beneficial and potentially harmful strains, the common practice is to discard foods showing the development of any mold. At the same time, some species of *Penicillium* are used to ripen cheeses such as Roquefort, Brie, Camembert, Stilton, etc. and present no risk with consumption. Additionally, the drug penicillin is produced from *Penicillium chrysogenum*, a mold commonly found in many homes. *Penicillium* has been associated with occasional infection in humans, called penicilliosis. *Penicillium* has also been isolated from patients with post traumatic keratitis,²⁷ necrotizing esophagitis, pneumonia, endocarditis, peritonitis, and urinary tract infections. Most *Penicillium* infections are encountered in immunosuppressed individuals such as those with HIV infections, those receiving chemotherapy or undergoing bone marrow transplants.

Aspergillus consists of approximately 185 species, 20 of which have been identified as causing opportunistic infections in man and animals.²⁸ As noted above, the major predisposing factor identified in these infections is immunosuppression.²⁹ Opportunistic infections have occurred during the use of medical equipment and devices,³⁰ such as catheters, and a higher risk of infection has been identified in neutropenic (inadequate neutrophils, a type of white blood cell) patients in hospital settings.³¹ Some species of *Aspergillus* have been identified as fungal allergens and may initiate allergic bronchopulmonary aspergillosis in an atopic host.³² Certain *Aspergillus* species can produce mycotoxins including the well known aflatoxin that often appears as a contaminant in peanuts.³³

G. Rinaldi (ed.). 1998. *Guide to Clinically Significant Fungi, 1st ed.*

27. Deshpande, S. D., and G. V. Koppikar. 1999. A study of mycotic keratitis in Mumbai. *Indian J Pathology and Microbiology*. 42:81-7.

28. http://www.doctorfungus.org/thefungi/Aspergillus_spp.htm

29. Ho, P. L., and K. Y. Yuen. 2000. Aspergillosis in bone marrow transplant recipients. *Crit Rev Oncol Hematol*. 34:55-69.

30. Lucas, G. M., P. Tucker, and W. G. Merz. 1999. Primary cutaneous *Aspergillus nidulans* infection associated with a Hickman catheter in a patient with neutropenia. *Clin Infect Dis*. 29:1594-1596.

31. Loo, V. G., C. Bertrand, C. Dixon, D. Vitye, B. DeSalid, A. P. H. McLean, A. Bronx, and H. G. Robson. 1996. Control of construction-associated nosocomial aspergillosis in an antiquated hematology unit. *Infect. Control Hosp. Epidemiol*. 17:360-364.

32. Germaud, P., and E. Tuchais. 1995. Allergic bronchopulmonary aspergillosis treated with itraconazole. *Chest*. 107:883; Kurup, V. P., and B. Banerjee. 2000. Fungal allergens and peptide epitopes. *Peptides*. 21:589-599.

33. Mori, T., M. Matsumura, K. Yamada, S. Irie, K. Oshimi, K. Suda, T. Oguri, and M. Ichinoe. 1998. Systemic aspergillosis caused by an aflatoxin-producing strain of *Aspergillus*

Alternaria appears in approximately 50 species. The most common form isolated from human infections is *Alternaria alternata*. As with *Penicillium* and *Aspergillus*, infections most often occur in immunosuppressed patients and may lead to invasive disease. For patients with functioning immune systems, *Alternaria* has been found to grow in the paranasal sinuses, leading to chronic hypertrophic sinusitis. *Alternaria* has been identified as one of the causes of otitis media (middle ear infection) in agricultural field workers.³⁴

Stachybotrys exists in only one well known species, *Stachybotrys chartarum* or *S. chartarum*. It is known to produce the mycotoxin trichothecene which has been extensively studied since its pathogenicity first appeared in Russia in 1920. Various symptoms, including stomatitis (trench mouth), rhinitis, conjunctivitis, pancytopenia (inadequate blood cells of all types) and neurological disorders developed in animals following ingestion of hay contaminated with *Stachybotrys*. The disease complex was called stachybotrytoxicosis.³⁵ In laboratory studies in which the effect of the direct injection of trichothecenes into the nasal cavities of mice was studied, significant inflammation of nasal tissues and structures occurred.³⁶ But when more studies were done to determine if the mycotoxin could be volatilized with high air flows over large amounts of stachybotrys, the toxic effects seen with direct injection could not be duplicated, leading to the conclusion that mycotoxins of *Stachybotrys* can be produced or get airborne only under certain limited environmental conditions.³⁷

Stachybotrys has also been associated with "sick building syndrome," the media-friendly label given to residential or commercial structures thought to have conditions that adversely impact indoor air quality (IAQ). *Stachybotrys* has been detected in buildings with problematic ventilation systems, but it is less

flavus. *Medical Mycology* 36:107-112.

34. Wadhvani, K., and A. K. Srivastava. 1984. Fungi from otitis media of agricultural field workers. *Mycopathologia*. 88:155-9.

35. Fung, F., R. Clark, and S. Williams. 1998. Stachybotrys, a mycotoxin-producing fungus of increasing toxicologic importance. *J Toxicol Clin Toxicol*. 36:629-631; Mahmoudi, M., and M. E. Gershwin. 2000. Sick building syndrome III. Stachybotrys chartarum. *Journal Asthma*. 37:191-198.

36. Nikulin, M., K. Reijula, B. B. Jarvis, and E. L. Hintikka. 1996. Experimental lung mycotoxicosis in mice induced by Stachybotrys atra. *Int J Exp Pathol*. 77:213-8.

37. Sudakin, D. L. February 29, 2000. Stachybotrys chartarum: Current knowledge of its role in disease. Medscape General Medicine; Wilkins, C. K., S. T. Larsen, M. Hammer, O. M. Poulsen, P. Wolkoff, and G. Nielsen. 1998. Respiratory effects in mice exposed to airborne emissions from Stachybotrys chartarum and implications for risk assessment. *Pharmacol Toxicol*. 83.

common and in lesser amounts compared to other molds such as *Aspergillus*, *Penicillium*, *Alternaria*, and *Cladosporium*.³⁸

VIII. RECENT STUDIES ON HEALTH EFFECTS OF MOLD

The last few years have seen an explosion of mold claims in the courts and in the media. Due to the lack of scientific evidence supporting these claims there have been conflicting results when evidence of the health effects of mold is offered to a court. Compare the Texas case of *Allison v. Fire Insurance Exchange*, 98 S.W. 3d 227 (Tex. App. 2002), where the trial court, affirmed by the Texas Court of Appeals, barred the admission of medical evidence that mold caused the plaintiff's physical injuries, with the Nebraska case of *Mondelli v. Kendel Homes*, 262 Neb. 263, 631 N.W. 2d 846 (2001), where the Nebraska Supreme Court reversed the exclusion of medical evidence that would support the causation of health effects due to mold.

The Centers for Disease Control is studying the health effects of mold. OSHA has issued a Safety and Health Information Bulletin called a Brief Guide to Mold in the Workplace. Health Canada, the Canadian government health agency, Office of Laboratory Security issued a Material Safety Data Sheet for the *Aspergillus* species of mold.

Until further studies are done, which could take years, we must rely upon the current information and any new reports that are released. Here is a survey of a few recent reports about the health effects on mold.

In July, 2002, in conjunction with consideration of House Bill 5040, Toxic Mold Safety and Protection Act of 2002 ("the Melina Bill"), the United States House of Representatives Committee on Financial Services, Oversight and Investigation Subcommittee heard testimony from a number of witnesses about the health effects of mold.³⁹ One of the witnesses was Stephen C. Redd, M.D., Chief, Air Pollution and Respiratory Health Branch National Center for Environmental Health, Centers for Disease Control and Prevention, United States Department of Health and Human Services.

Dr. Redd opened his testimony by stating that: "While there remain many unresolved scientific questions, we do know that

38. Trout, D., J. Bernstein, K. Martinez, R. Biagini, and K. Wallingford. 2001. Bioaerosol lung damage in a worker with repeated exposure to fungi in a water-damaged building. *Environmental Health Perspectives*. 109:641-644; Cooley, J. D., W. C. Wong, C. A. Jumper, and D. C. Straus. 1998. Correlation between the prevalence of certain fungi and sick building syndrome. *Occupational Environmental Medicine*. 55:579-584.

39. The Melina Bill was reintroduced in Congress in May, 2003 as HR 1268.

exposure to high levels of molds causes some illnesses in susceptible people. Because molds can be harmful, it is important to maintain buildings, prevent water damage and mold growth, and clean up moldy materials."⁴⁰

The doctor testified that studies show mold infections occurring in susceptible people such as immunosuppressed individuals in hospitals and that mold is associated with some cancers. There are two mycotoxins produced by mold that are classified as human carcinogens: aflatoxin and ochratoxin A. Ingestion of these toxins has been associated with liver and kidney tumors. Other respiratory infections, such as hypersensitivity pneumonitis, as well as allergic reactions due to mold exposure have been reported.⁴¹

Dr. Redd cited the 1993 Institute of Medicine study which concluded that there was sufficient evidence of an association between exposure to airborne fungal allergens allergic diseases such as allergic rhinitis, allergic asthma and hypersensitivity pneumonitis. But he also testified that the CDC does not know if molds cause other health effects such as pulmonary hemorrhage, memory loss or lethargy. However, mold growth should be prevented because some people are, or may become, allergic to molds.

Dr. Redd concluded by stating that since there are no accepted standards for mold sampling or for analyzing or interpreting the data in terms of human health, and since it is not known what quantity of indoor mold is acceptable, the studies have focused on environmental data rather than dose response data, "for these reasons, and because individuals have different sensitivities to molds, setting standards and guidelines for mold exposure levels is difficult and may not be practical."⁴² [emphasis added] In other words, these may never be standards established for acceptable mold exposure.

In October, 2002, the American College of Occupational and Environmental Medicine issued a report entitled: "Adverse Human Health Effects Associated with Mold in the Indoor Environment." The ACOEM examined three aspects of mold and human health: allergy and other hypersensitivity reactions, infection, and toxicity.⁴³

40. State of the Science on Molds and Human Health, House Financial Services Subcommittees, Statement of Stephen C. Redd, M.D., July 18, 2002.

41. *Id.*

42. *Id.*

43. Adverse Human Health Effects Associated with Molds in the Indoor Environment, American College of Occupational and Environmental Medicine, ACOEM Evidence-based Statement, October 27, 2002.

For allergic reactions, the report estimated that 10% of the population have allergic antibodies to common molds and about half of those, or 5% of the total population, have allergic symptoms from mold exposure. Mold exposure includes outdoor mold exposure which is much more prevalent than exposure to indoor molds. While there are studies that indicate a link between damp buildings and allergic reactions, these studies do not identify mold as the only cause. Damp buildings can result in mold growth but can also cause growth of dust mites and bacteria which also can cause allergic reactions.⁴⁴

As far as mold infections, the report states that while mold infections can occur in certain environments, exposure to molds is not a specific risk factor in office, home or school environments. Only people with immunocompromised conditions should be concerned about fungal infections.⁴⁵

Mold toxicity has become the hot button issue in the media with "toxic mold" screaming from the headlines. Yet there is little known about whether all molds produce mycotoxins or under what conditions toxigenic species produce mycotoxins. Just because a toxigenic species of mold exists indoors doesn't mean that mycotoxins will also be present. Plus, mycotoxins are not particularly "volatile", in other words, they are hard to aerosolize. Inhalation of mycotoxins would require some action to aerosolize the material.⁴⁶

For mycotoxins to adversely effect human health they must be actually present in the building environment, there must be a pathway of exposure from the source of the mold to the person and an absorption by that person of sufficient dose of mycotoxin. There must be a sufficient concentration and duration of exposure for toxicity to occur.⁴⁷

Since there is no standard of human exposure for mycotoxins, the AECOM estimated the potential exposure based on animal studies and concluded that a significant spore count would be necessary to impact human health, far above what surveys have found in moldy buildings.⁴⁸

Their report recommends that the presence of toxigenic mold does not mean that mycotoxins are present or that occupants have been exposed to mycotoxins. The source of moisture that supports

44. *Id.*

45. *Id.*

46. *Id.*

47. *Id.*

48. Adverse Human Health Effects Associated with Molds in the Indoor Environment, American College of Occupational and Environmental Medicine, ACOEM Evidence-based Statement, October 27, 2002.

mold growth should be removed and the mold growth eliminated, materials contaminated by mold should be cleaned and individuals with health complaints evaluated but "the possibility of a mycotoxicosis as an explanation for specific signs and symptoms in a residential or general office setting should be entertained only after accepted processes that are recognized to occur have been appropriately excluded and when mold exposure is known to be uncommonly high."⁴⁹

The report concludes that molds are common and important allergens and that about 5% of individuals will likely have allergic reactions to mold but molds are not as common in indoor environments as outdoors and most allergic reactions are due to outdoor exposure. Because of potential allergic reactions, mold should not be allowed to grow unchecked indoors but "[c]urrent scientific evidence does not support the proposition that human health has been adversely affected by inhaled mycotoxins in home, school, or office environments."⁵⁰

In October, 2003, the Occupational Safety and Health Administration (OSHA) issued a Safety and Health Information Bulletin entitled: "A Brief Guide to Mold in the Workplace." The bulletin is not a standard or regulation and it creates no new legal obligations. Under the section "Health Effects" the bulletin states that "Most typical indoor air exposures to mold do not present a risk of adverse health effects. Molds can cause adverse effects by producing allergens (substances that can cause allergic reactions). Potential health concerns are important reasons to prevent mold growth and to remediate existing problem areas."⁵¹

There are other papers and studies that are beyond the scope of this material but a partial list is as follows:

Commentary on Neuropsychological Performance of Patients Following Mold Exposure, by Paul R. Lees-Haley, Ph.D., Health Education Services, Huntsville, Alabama

Indoor Health Problems in Commercial Municipal and School Buildings: A Sound Process for Resolution, ICTM Electronic Report Vol. 2, No. 1, by Ronald E. Gots, M.D., Ph.D. and Suellen W. Pirages, Ph.D.

49. *Id.*

50. *Id.*

51. A Brief Guide to Mold in the Workplace, U.S. Dept. of Labor, Occupational Safety and Health Administration, SHIB 03-10-10.

Continuing Perspectives on Indoor Mold and Diseases, ICTM Electronic Report Vol. 2, No. 2, by Ronald E. Gots, M.D., Ph.D. and Suellen W. Pirages, Ph.D.

Material Safety Data Sheet – Infectious Substances, Office of Laboratory Security, Health Canada, 2001

IX. THEORIES OF LIABILITY IN MOLD CASES

A. *Design and Construction Claims*

When confronted with a mold claim most owners look to the original designer and constructor to recover the cost of repair on the basis that the owner did not contract for a moldy building, the owner did not cause the problems and the owner should not be required to finance correcting the problems.

There are numerous legal theories available to building owners in pursuing such claims: breach of contract, breach of express or implied warranty, negligence, strict liability and insurance claims. Each of these theories has specific benefits and limitations.

1. *Contract Claims*

Breach of contract claims require proof of a written or an oral contract, failure to perform some aspect of the contract, and damages resulting from the failure to perform, subject to any contractual damage limitations. Since owners usually have contracts with the architect and with the general contractor or construction manager they typically make breach of contract claims against those parties for mold-related problems.

Contract theory's limitations are that, obviously, it is limited to defendants with contractual relationships. This may reduce the number of possible defendants and the possible sources of funds to pay settlements or judgments. In addition, some contracts contain notice requirements for claims and limit the recoverable damages. Contract damages are generally limited to damage that were reasonably foreseeable by the parties at the time the contract was signed so a breach of contract theory may preclude recovery of all costs that the owner incurred.⁵² Although mold remediation and relocation costs may be foreseeable damages.⁵³

52. *Hadley v. Baxendale*, 9 Ex. 341, 156 Eng. Rep. 145 (1854).

53. *Centex-Rooney Const. Co. v. Martin County*, 706 So. 2d 20 (Fla. 4th DCA 1997).

Some owners may assert claims against the architect's subconsultants, such as the mechanical engineer, as a third-party beneficiary of the architect-consultant contracts. One court rejected such a claim because there was no evidence that the owner was an "intended beneficiary" of the architect's subconsultant agreement.⁵⁴ To avoid this result, owners may require architects to include specific language in their subconsultant contracts to designate the owner as an intended third-party beneficiary of these agreements.

If the general contractor provided a performance bond, the owner may be able to make a bond claim in addition to the construction contract claim. However, if the IAQ problems do not arise until after the building is completed, there is a split of authority as to whether such latent defects are covered under the surety bond.⁵⁵ California courts have held sureties liable for latent defects even if the contractor is no longer liable due to a statute of repose.⁵⁶ In *Federal Insurance Co. v. Southwest Florida Retirement Center, Inc.*,⁵⁷ the Florida Supreme Court held that, because the performance bond guaranteed completion of a construction contract according to its terms and conditions, the surety's liability was not dependent upon whether the defect was discovered before or after substantial completion. The Florida Supreme Court rejected a previous Florida appellate court decision holding that the surety was relieved of further responsibility once a construction contract was substantially completed.⁵⁸ However, the Florida Supreme Court found that the statute of limitations for the owner's breach of contract action began to run when the owner accepted the project. Consequently, the bond claim was barred by the statute of limitations.⁵⁹ Many surety bonds contain provisions requiring suits be brought within one or two years of project completion. Before pursuing a bond claim, the owner's attorney should determine if the contractual statute of limitations is enforceable in the applicable jurisdiction. Under Florida law, a contract provision shortening the time limit to file suit is void.⁶⁰

54. *City of Tampa v. Thornton Tomasetti, P.C.*, 646 So. 2d 279 (Fla. 2d DCA 1994).

55. *Florida Bd. of Regents v. Fidelity & Deposit Co. of Maryland*, 416 So.2d 30 (Fla. 5th DCA 1992) (surety not liable for latent defects); *School Board of Pinellas County v. St. Paul Fire & Marine Ins. Co.*, 449 So.2d 872 (Fla. 2d DCA), *rev. denied*, 458 So.2d 274 (Fla. 1984) (surety liable for latent defects).

56. *Regents of the University of California V. Hartford Acc. & Indem. Co.*, 581 P.2d 197 (Cal. 1979).

57. 707 So. 2d 1119 (Fla. 1998).

58. *Florida Bd. Of Regents v. Fidelity & Deposit Co. of Maryland*, 416 So. 2d 30 (Fla. 5th DCA 1982).

59. *Southwest Florida Retirement Ctr.*, 707 So. 2d at 1121.

60. Florida statute provides that any contractual provision shortening the time period to begin an action on the contract is void. However, other states do not have a statute

An owner considering a surety bond claim should carefully review the bond for notice requirements and should comply with such requirements as soon as possible.

2. *Warranty Claims*

Many construction contracts contain express warranties for the overall building; subcontractors and manufacturers often warrant specific building components as well. These warranties may provide additional bases for owners' claims. However, warranties may be so limited both in scope and in time as to have little value. Owners considering claims on written warranties should carefully review them for notice provisions and time limits. Notice letters should be sent as soon as possible.

Many states have created implied warranties of fitness for residential construction. Although such implied warranties have generally not been applied to commercial construction, some courts have questioned why there should be such a distinction in the legal remedies available to purchasers of different types of property.⁶¹ Perhaps commercial owners will be able to make such claims in the future; at present, their viability is questionable.

Of course, the presence of mold in an HVAC duct or on a construction surface does not automatically justify an owner's demand for costly cleanup measures. Certain molds are common in the atmosphere, and an owner may have difficulty insisting that indoor mold levels be reduced to a level below the levels that will prevail soon after the building is placed into normal use. To require cleanup by a contractor, an owner may be required to demonstrate that the project is contaminated with molds of a potentially dangerous variety that were caused by construction defects.

Assigning responsibility for mold growth in buildings is more difficult in climates where construction materials are typically exposed to substantial moisture during the construction process. Often project specifications provide special requirements for handling or storing materials. If there are no such specifications, it is unclear whether good building practice requires contractors to anticipate and to protect materials from moisture or from molds with which they may be unfamiliar. For example, it may be difficult or even impossible in some climates to protect large air handling units and duct segments from moisture. Contractors may argue

prohibiting or shortening statutes of limitations. FLA. STAT. § 95.03 (1998); *see also* Board of Education v. Hartford Accident, 504 N.E. 2d 1000 (Ill. App. 3d 1987) (surety bond could impose shorter time limit on claims than that provided by statute).

61. Florida Eastern Properties, Inc. v. Southeast Commercial Developers, Inc., 479 So.2d 793 (Fla. 5th DCA 1985).

that the designer should be responsible for taking environmental conditions into account and specifying any special steps required to avoid unacceptable growths of mold, especially before a building has been enclosed.

3. *Negligence Claims*

Negligence theories may allow recovery of greater damages than under a contract theory. It is not uncommon to find both theories pursued in the same case. Until recently, the "economic loss rule" defeated negligence claims for purely economic damages (that is, damages other than for personal injuries and property damage).⁶² The economic loss rule may also prevent recovery on a negligence theory where the damage is to the product itself. Many courts have agreed that the presence of a defective product within a larger whole, without some attendant damage to the larger structure, does not constitute "property damage."

Application of the economic loss rule may prevent an owner from pursuing claims against a responsible third-party manufacturer, supplier, or subcontractor to recover the cost to remediate and reconstruct the building. In 1999, the Florida Supreme Court receded from strict application of the economic loss rule, allowing a homeowner to pursue a professional malpractice claim against an individual engineer, even though the homeowner had a contract with the engineer's corporate employer.⁶³ Some jurisdictions have allowed plaintiffs to bring actions based on negligence for indoor pollution claims, finding asbestos contamination sufficient to invoke the property damage exception to the economic loss rule.⁶⁴ However, this rule remains a significant bar to negligence claims in these cases.

Negligence claims require proof of four elements: (1) defendant owed plaintiff a duty to act in some way; (2) defendant did not perform its duty; (3) defendant's failure to perform its duty caused plaintiff to suffer some injury; (4) the injury resulted in the plaintiff suffering a loss. Negligence actions can be brought against builders, general contractors, subcontractors, as well as

62. *See, e.g.* Economic Loss Doctrine and Its Impact Upon Construction Claims, 14 CONST. LAW 3, at 21 (1994).

63. *Moransais v. Heathman*, 744 So.2d 973 (Fla. 1999). The Florida Supreme Court explained that the primary purpose of the economic loss rule is to limit products liability actions or suits in which the policy considerations are substantially identical to those underlying products liability-type actions. It will be interesting to see if other courts follow this rationale. *See also*, *Hewett-Kier Const. v. Lemuel Ramos & Associates*, 775 So. 2d 373 (4th DCA 2001).

64. *Northridge Co. v. W.R. Grace & Co.*, 471 N.W.2d 179 (Wis. 1991); *80 South Eighth Street Ltd. Partnership v. Carey-Canada, Inc.*, 486 N.W.2d 393 (Minn. 1992).

architects/engineers. Potential duties that may have been violated include: the duty to maintain the premises in a safe condition, duty to design, install, operate and maintain the HVAC system; the duty to select, train and supervise contractors or maintenance personnel; the duty to appropriately monitor and respond to mold or other IAQ complaints; and professional malpractice.

Damages under a negligence cause of action include the same type of repair/remediation damages recoverable under a breach of contract/warranty claim, but also may include a claim for punitive damages if the conduct was sufficiently egregious.

4. *Strict Liability*

Strict liability theory holds a defendant strictly liable for a defective product without proof of negligence, without an intent to guarantee, without privity of contract and without consideration of contractual liability disclaimers.⁶⁵ This theory is widely used in products liability cases. The policy considerations underlying such cases are that a seller who places unreasonably dangerous products in the stream of commerce should be liable for physical harm its products cause. Applying these policy considerations to buildings is difficult because buildings are not usually thought of as products. The courts which have held that a building may be a "product" for strict liability purposes have considered mobile homes or mass produced homes, not occasional sales of homes.⁶⁶ Some courts have found that portions of structures, such as defective precast panels or facing tiles may be considered products.⁶⁷ A Georgia court declined to apply the doctrine of strict liability to an owner's claim against a homebuilder because the builder was not involved in the manufacture of personal property.⁶⁸

Courts have reached differing conclusions regarding whether strict liability can apply to economic losses alone, without physical

65. Reisman, David, "Strict Liability and Sick Building Syndrome: Defining a Building as a Product Under Restatement (Second) of Torts, Section 402A," 10 J. Nat. Resources & Envtl. L. 35 (1995).

66. Blagg v. Fred Hunt Co., Inc., 612 S.W.2d 321 (Ark. 1981); Kaneko v. Hilo Coast Processing, 654 P.2d 343 (Haw. 1982) (holding that buildings may be products); Oliver v. Superior Ct., 259 Cal. Rptr. 160 (Cal.Ct. App. 1989) (holding strict liability not applicable to occasional sales).

67. Chicago Bd. of Educ. v. A.C. & S, Inc., 525 N.E. 2d 950 (Ill. App. Ct. 1988); Trustees of Columbia v. Mitchell/Giurgola Assoc., 109 A.D.2d 449 (N. Y. App. Div 1985); *but see* Casa Clara Condominium Ass'n, Inc. v. Charley Toppino & Sons, Inc., 620 So.2d 1244 (Fla. 1993).

68. Seely v. Loyd H. Johnson Construction Co., Inc., 470 S.E.2d 283 (1996); *See* Golden, Brian M., "Strict Liability Applied to the Homebuilder: A Defect in the Law of Defective Products," 14 The Construction Lawyer 11 (October 1994).

injury.⁶⁹ Some courts have held where there is a risk or death or personal injury, tort remedies are available.⁷⁰

Strict liability theory may not apply to architects and engineers unless it can be shown that the design or the system was standardized or mass marketed.⁷¹

5. *Consumer Protection Statutes*

The Florida Deceptive and Unfair Trade Practices Act is intended to protect consumers and businesses against fraud, unfair methods of competition, and unfair or deceptive acts or practices in the conduct of trade or commerce.⁷² The act is to be construed liberally, allows punitive damages and provides for the award of attorneys fees to the prevailing party.⁷³ Because of the liberal interpretation of the statute, common law elements of fraud are not required as elements of proof. For example, a plaintiff does not need to prove misrepresentation or deceit under the FDUTPA.⁷⁴

No Florida case law has been found that addresses application of FDUTPA to mold contamination but other states have applied their deceptive and unfair trade practices acts to mold.⁷⁵ Unlike Texas law in *Ballard*, the FDUTPA specifically exempts insurance companies from application of the statute.⁷⁶ Failure to disclose mold contamination against a home developer or seller may be one area for application of FDUTPA.

6. *Failure to Comply with Building Code*

Chapter 553 of the Florida Statutes governs the building code for the State of Florida. Section 553.84 provides a civil remedy to anyone injured by a violation of the Florida Building Code. However, if proper building permits are obtained, plans approved, and proper inspections conducted, there is no remedy under this section unless there is personal injury or property damage to property other than the permitted work or the responsible party

69. *School Dist. of City of Independence, Missouri v. United States Gypsum Company*, 750 S.W. 2d 442 (Mo. App. 1988).

70. *United States Gypsum Co. v. Mayor of Baltimore*, 647 A.2d 405 (Md. 1994); *Council of Co-Owners Atlantis Condominium, Inc. v. Whiting-Turner Contracting Co.*, 517 A.2d 336 (Md. 1986).

71. *Sime v. Tvenge Assoc. Architects & Planners*, 488 N.W. 2d 606 (N.D. 1992).

72. FLA. STAT. ch. 501.202 (2002), *et. seq.*

73. FLA. STAT. chs. 501.202 and 501.2105 (2002).

74. *Donald Frederick Evans and Associates, Inc. v. Continental Homes, Inc.*, 785 F.2d 897 (11th Cir. 1986); *Latman v. Costa Cruise Lines, N. V.*, 758 So. 2d 699 (3rd DCA 2000).

75. *Allison v. Fire Insurance Exchange*, 98 S.W. 3d 227 (Tex. App. 2002); (the *Ballard* case).

76. FLA. STAT. ch. 501.212 (2002).

knew or should have known the violation existed. There is no provision for the recovery of attorneys fees.

7. *Insurance Claims*

One particular area of significant mold claims and litigation is insurance coverage that may apply to the mold contaminated structure.⁷⁷ As a plaintiff it is critical to know what insurance coverage is applicable and make the claim for coverage. There are several types of coverage to look for. If you are a building owner who retained professionals to design and construct the building, the professionals may have Design professional insurance.⁷⁸ A constructor may have Contractor's Commercial General Liability Insurance but you must be careful because commercial general liability insurance generally does not cover the cost to repair or to replace defective work or the material itself, but covers consequential damages arising from defective work. If the plaintiff is the homeowner, an examination of the Homeowner's Insurance policy is necessary to determine if a claim should be made. All insurance policies should be read carefully for notice requirements and exclusions and all requirements should be met. Insurance may provide the funds for recovery, attorneys fees and damages but many insurance companies are now excluding mold from their policies.

8. *"Bad Faith" Claims*

When an insured believes it has a claim for mold damage under an insurance policy and files a claim with the insurance company, the insurer must investigate the claim to see if it is a covered claim. If the insurer denies coverage or unreasonably delays the investigation or settlement of the claim, such actions may constitute "bad faith" under Florida Statutes.⁷⁹ Damages in a bad faith action can include punitive damages as well as attorney's fees.

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77. There are several books on construction insurance that provide a thorough discussion of these issues, e.g., Owen J. Shean, *Construction Insurance: Coverages and Disputes* (1994); Scott C. Turner, *Insurance Coverage of Construction Disputes* (1992). See also, Patrick J. O'Connor, *Commercial General Liability Coverage*, 19 *Constr. Law.* 5 (1999); Patrick J. Wielinski, *Selected Coverage Issues in a Construction Defect Claim*, 8 *Coverage* 1 (1998); Martha C. Coleman, *Construction-Related Exclusions to the Commercial General Liability Policy* (ABA Forum on the Construction Industry/TIPS Fidelity & Surety Law Committee, Jan. 1995).

78. Another section of this seminar will provide details about each of the specific types of insurance.

79. FLA. STAT. ch. 624.155 (2002).

80. FLA. STAT. chs. 624.155(3) and 624.155(4) (2002).

No Florida case has been found addressing a bad faith claim in a mold contamination claim, although with the volume of mold claims now being processed by insurance companies reportable decisions on bad faith and mold should be available within the next year or so. Other states have already faced the bad faith/mold issue. In *Ballard*, the trial court awarded the insured \$32 Million for breach of the duty of good faith and fair dealing by the insurer in investigating a mold contamination claim. A Texas Court of Appeals reversed the award for punitive damages against the insurer but affirmed the award of \$4 million for actual damages.

In California, a court awarded an insured \$18 Million for the insurance company's bad faith in failing to adequately remove and repair mold damage and in failing to reasonably settle the matter. The appellate court reduced the punitive damage award to \$2.5 Million.⁸¹ In Arizona, a court awarded an insured \$4 Million against its insurance company for delay in remediating mold contamination.⁸²

In all of these cases the compensatory damages were a small fraction of the total damages awarded.

B. Personal Injury Claims

The recent surge in personal injury claims has fostered a great deal of media attention and legislation. The primary difference between the traditional building defect mold case and a personal injury case is the burden of proof for the plaintiff and the types of damages available.

1. Theories of Liability in Personal Injury Claims

Personal injury claimants generally use negligence or strict liability theories for their claims. The economic loss rule does not apply to personal injury claims.

The most difficult hurdle in personal injury suits is proving causation. The plaintiff must show that contaminants in the building caused his or her symptoms. "Scientific cause and effect relationships are generally hard to prove and precise diagnosis of certain diseases is possible only with an autopsy."⁸³ It is difficult to discover which of many possible agents caused illness and to identify the precise cause of that agent. "Proving causation becomes

81. *Anderson v. Allstate Insurance Co.*, 45 Fed. Appx. 754, 2002 WL 2021617 (9th Cir., Cal., 2002).

82. *Hatley v. Century National Insurance Co.*, CV 2000-0067134 (2001).

83. Gastel, Ruth, "Occupational Disease: Insurance Issues," *Ins. Info. Inst. Rep.*, (June 1994).

particularly difficult because a sick building may contain a multiplicity of suspect contaminants. Accordingly, individual contaminants might not be conclusively or exclusively linked to the alleged harm.”⁸⁴ Also, occupational diseases may take a long time to arise, making it difficult to determine at what point the worker contracted the disease.

Unlike a building defect mold case, a personal injury claim due to mold contamination requires significant proof that the physical symptoms are caused by the mold exposure. Plaintiffs must prove that mold contamination existed, the contamination was the cause of the alleged damage/injury and that actual bodily injury occurred. The most difficult part of the plaintiff's case is proving causation. There is a lack of adequate medical evidence regarding the effect of mold on human health. This lack of scientific backup makes it extremely difficult for plaintiffs to meet their burden of proof.

Toxic tort cases require the plaintiff to prove both general and specific causation. General causation is whether a substance is capable of causing a particular injury or condition in the general population. Specific causation is whether a substance caused the plaintiff's injuries. In *Ballard*, the Texas trial court held that the plaintiff could not prove general causation of the injuries by mold despite testimony of two doctors. On appeal the appellate court affirmed that ruling.

Despite these difficulties, some plaintiffs have been successful in obtaining large verdicts for IAQ-related injuries. In *Bahura v. S.E.W. Investors*, 754 A.2d 928 (D.C., 2000) (the “Waterside Mall” case), five plaintiffs were awarded just under \$1 million for injuries allegedly caused by exposure to various airborne toxins.

Damages

Specific elements of damage are described above under each cause of action. Damages in mold injury cases can include recovery for pain and suffering, past, present and future medical care, future medical monitoring, lost wages, loss of earning capacity, wrongful death, loss of companionship, loss of consortium and emotional distress.⁸⁵

For construction defect mold cases, damages can include repair costs, loss of market value, remediation, damage and degradation of building products, additional living expenses, and relocation costs.

84. Heady, *supra*, note 3.

85. See *Damages Recoverable in Mold Cases*, available at <http://www.themoldsource.com>.

Punitive damages may be available depending on the cause of action and the egregiousness of the conduct.

Attorney's fees are generally not available under any of the theories describe above unless the contract called for the award of attorneys fees or under the FDTPA or a "bad faith" claim.

Experts

The key to succeeding with a plaintiff's case will be selecting the appropriate experts and getting the experts' opinion presented to the factfinder. Any construction defect case requires experts and mold cases are no different; there are just more experts required. Potential experts to be considered include an industrial hygienist, microbiologist, mycologist and a toxicologist. For personal injury lawsuits, appropriate physicians will also be required for the individual injury claims, i.e., a pulmonologist for lung impairment or breathing problems, allergist, dermatologist, gastroenterologist, occupational physician, or a rheumatologist. As the plaintiff, the burden is on you to get these experts qualified and their opinions admitted. Expect an evidentiary challenge to the experts. Florida courts apply the standard set out in *Frye v. U.S.*, 293 F. 1013 (D.C. Cir. 1923) to the admissibility of scientific evidence. The *Frye* standard requires the proponent establish by a preponderance of the evidence the general acceptance of the scientific principle in the particular field of study.⁸⁶

VIII. CONCLUSION

Indoor air quality problems present substantial risk to building owners, design professionals, contractors, subcontractors, and their insurers. When faced with such claims, the parties are better served by focusing on the solution rather than on affixing blame. Because litigating these cases is extremely expensive, parties should look for creative alternative dispute mechanisms to try to resolve the case if possible.

86. Centex Rooney v. Martin County, 706 So. 2d at 26.