

STRUCTURAL MOLD CONTAMINATION ISSUES REVISITED: THE WAR THAT WENT "POOF" IN A PEN STROKE!

By: J. Robert Eckley

The Great Arizona Mold and Mildew Battle continues to rage! As the dark forces of fungus amass at the borders of our homes, schools and businesses, menacing our families, our investments and ourselves, the public forces arrayed for our protection have leaped into action, mobilized huge bureaucratic armies, cranked up powerful and heretofore unknown technologies and assembled into formation an imposing lobby of armament. Then, with the "charge" signal shouted and a mighty departmental din...they have roared out into the field with flaming exhausts, bugles blowing, flags fluttering and mud flying. ***Heading hell-bent and utterly panic-stricken in the opposite direction!***

Three months ago in this column I disclosed the growing structural mold epidemic infecting Arizona properties and opined from my experiences in the trenches that most of it has been brought on as a direct consequence of Arizona's notoriously low-ball construction standards and the even more notoriously inept, "the-fix-is-in" regulatory climate. I asked: Where is the Registrar of Contractor's statutorily-mandated workmanship standards for this significant issue in its published Guide for Contractors (Registrar's Office, January, 2000)? Where is the Pest Control Commission who is statutorily charged with seeking, reporting and treating it (ARS 32-2301, et. seq.)? Where is the Arizona Health Department when reputable physicians are reporting finding serious physical ailments in their patients, developed from interior airborne mold exposures? Where, I asked, after the millions and millions of taxpayer dollars spent to fund these agencies which exist solely for consumer protection, is the defense paid for by this huge public investment?

I got my answers promptly from the Registrar and Pest Control: Stony silence. That is not to say they were not busy. Stung by accusations of inaction, they huddled with the brass of other agencies in the command tent, pored over the "spin control" maps, and assessed the enemy. After due deliberation, they nominated the Health Department as acting Field Marshal to take complete control of the terrain by boldly reassuring the embattled, mold-contaminated consumers that the "crisis was in hand" and to announce (in this very magazine last month) the brasses' "Two Offensive Thrusts That Would End the War." They were as follows: First Thrust--the "enemy"--widespread mold damages to property and health--***did not really exist!*** Second Thrust, ***anyone who said it did***--construction defect remediators, industrial hygienists, home inspectors, physicians--***was the real enemy*** and deserved only isolation and contempt!

In sum: A defensive miracle was worked: Rather than standing to fight the enemy, instead of hearing the whistling of incoming shells (structurally degenerative infestations) the explosions were referred to as "imaginary," the health loss connection as "exaggerated," the injured as "phonies" and those engineers, builders, scientists and physicians who attend to all of the foregoing wounds as "charlatans." Presto! The war is over! It is over because "it never existed" and those who say it did are crooks and crazies. Is this a strategic masterstroke or what! The agency generals looked over the denial that has made the war go "poof" in a pen stroke and said, "we did good."

Well. Now for the real, uncensored news from the battlefield, your homes, schools and work places where this writer has had to spend a lot of time standing in sick structures and seeing sick people:

INTERIOR STRUCTURAL MOLD/FUNGUS ATTACKS: ARE THEY FOR REAL? *Yes they are.* The culprit is a fungus and is even statutorily recognized as a "wood-destroying organism" in ARS 32-2301 (25.) which is mandated for "structural pest control" under ARS 32-2301 (21.) and ARS 32-2301 et seq., which allows for chemical treatment and radical structural removal. It is primarily caused by the coming together of a spore (or fungal gametangia), water and any cellulose, such as the wood products that compose the major part of a structure. In this environment, it rapidly colonizes, spreads and eats what it contacts, utterly destroying the host. It is not just a surface contamination. Its hyphae penetrates deeply beyond the surface of the cellulose product feeding it, following microscopic faults and capillaries in the host, just like the roots of a plant in even the hardest of soils. Claude A. Villee, et al, Biology, Second Ed., Saunders College Publishing, 1989, pp. 597-615.

IS THERE A RISK TO OUR PROPERTY IN THIS WAR? *Yes, there is.* As noted above, it has already been legally recognized as a wood-destroying organism that must be structurally treated, id. ARS 32-2301 et seq., above. In proper conditions, it colonizes rapidly at the contamination site, but also periodically becomes friable (airborne) to replant itself elsewhere in the same environment. In this way, a single contamination "leap-frogs" to reinfestations throughout a structure. Id, Biology; Michael Pinto, PhD., CSP, Housing Operations Manager, Sept/Oct 2000, "Mold Indoors," pp. 18-19.

IS THERE A RISK TO OUR HEALTH IN THIS WAR?: *Yes, again.* The risk is several fold: In static infestations, those not emitting airborne particles, some types can nonetheless emit mycotoxic gases that can, when the biomass is large enough, contaminate the air; other static infestations can host secondary contaminations of bacteria such as dangerous strains of e-coli (as in the case of past water damage from sewage) which can themselves come into contact with people or even become friable and highly infectious. In other infestations, spores or gametes become airborne, are inhaled, and can either (depending upon type) produce scarring mycotoxins inside the lungs or allergies of various severities which can also scar the lungs over time. Traditional, mainstream medicine has long known the clinical connection between these organisms and their adverse effect on human health. See such illnesses as hypersensitive pneumonitis and allergic bronchopulmonary aspergilliosis and aspergillus-generated pneumonia in the long-established, physician's reference text (one of the "bibles" in medical science), Mercks Manual, Hm. Ed. Sec. 4, Ch 39, "Diseases of the Lungs," pp. 1-7; also Consumer Product Safety Commission, American Medical Association, Environmental Protection Agency and American Lung Association, Indoor Air Pollution: Introduction for Health Professionals; (some new Arizona materials) Michael Gray, MD, MPH, CIME, "Molds, Mycotoxins and Public Health," (Unpublished Paper available through internet at the website of eckleyandassociates.com) August, 2001; David Rueckert, CIH, "Review of Arizona Department of Human Health Services Fact Sheet," (Unpublished Paper available through internet at the website of eckleyandassociates.com), August, 2001. See also R.C. Summerbell, Fungal Contamination in Public Buildings: A Guide to Recognition and Management, Environmental Health Directorate, Health Canada, (1985).

CAN JUST ANYONE SPOT THE ENEMY? *No*. Many are produced by structural design, workmanship and maintenance issues that only the trained eye of a sharp licensed construction contractor can see. Since the most dangerous exposure is often the airborne one and these are too small to see with the naked eye, technical equipment must be used to sample and lab the air and surfaces at the site. A certified industrial hygienist, a specially IAQ-trained construction contractor, health specialist and specially-trained and equipped home inspector using the larger local labs for sample-readings can do these. There are, of course, suspicious signs than most anyone can sense and here they are: Obvious interior water leaks or infiltrations from any source (whether or not you see growths); obvious surface growths; musty odors; unexplained respiratory issues that get worse at the site and better when it is left. Id., Molds, Mycotoxins; Review, above. See also Protocols for Investigation of Indoor Fungal Amplifiers, id. Fungal Contamination, above.

IS THIS A JUST A "CHLORINE AND WATER" CLEAN-UP SKIRMISH? *Not on your life* (and I mean that literally). First, it is usually photosensitive and so it lives best where you cannot see it to even clean it. Second, it is not just on the surface of its host and so it cannot be washed away. Some chemical control can be useful, but in most cases, the infected components must be excised. This means a liberal replacement of infected components to assure extinction, since it only takes one microscopic spore or gamete to recolonize. In addition, if there has been physical exposure, most particularly if it has been airborne, one needs to see a physician qualified in mold and fungi exposures. See "Managing Water Infiltration into Buildings," Environmental Health and Safety, University of Minnesota and remediation "Infosheet - Stachybotrys Chartarum," California Department of Health Services, Environmental Health Investigations Branch, (April, 1997).

So there it is, direct and unvarnished from the battleline, the place where the clash, the exploding shells and MASH units are real. You be the judge of what is the ugly truth and what is pure political propaganda in this war. You be the judge of whether regulatory action or nay-saying will win it. *Moreover: Be prepared to bet your home, real estate investments and your baby's life on your answer!*

'Nuff said.

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