

For the Client

Your Best 'Mold Insurance'

By Richard Garber, Vice President
A/E/C Risk Management Services
Victor O. Schinnerer & Company Inc.

The best "mold insurance" available to project owners may be the involvement of a professional engineer during the planning, design, and construction of a facility. An analysis of mold claims prepared by Victor O. Schinnerer & Co. Inc. (program administrator for the CNA professional liability insurance program) shows that mold problems are far less likely to occur on projects where qualified professionals were engaged to perform an appropriate scope of design phase and construction phase services. This is good news for project owners, because mold claims can be costly, and the insurance industry is becoming increasingly reluctant to underwrite the risk.

The Real Problem

Problems with mold are much more likely to occur when project owners try to cut corners. To save money, they may focus on controlling "soft costs," such as professional fees, even though they are a small part of the total cost of a project. Experience suggests that a reduction in the level of professional services results in a greater likelihood that a mold problem will be introduced into a facility during construction.

The problem can be compounded when the project owner is also trying to hurry the project to completion. Following construction, such a facility is less likely to have the necessary design features or construction quality to prevent mold from becoming a serious problem during operations.

How Mold Spreads

Mold is often introduced into facilities because of the use of improper construction materials, sequences, or procedures. The use of improper or damp materials has been common on projects built quickly and without the

watchful presence of qualified professionals. Improper sequencing of construction with materials that are vulnerable to mold growth frequently result in mold hidden in walls or housed in ventilation systems.

Without proper drying, mold can spread silently in concealed spaces. A continuing source of moisture, such as from uncontrolled condensation on pipes or other surfaces or from improper site or foundation drainage, may turn a limited mold problem into a source of significant property damage and health risks. Problems such as chronic fatigue, loss of balance and memory, respiratory infections, and speaking difficulties have been attributed to exposure to the mycotoxins produced by mold.

The Project Owner's Role

Some fear that the mold problem could become an asbestos-like liability crisis. We believe you, the client, can avoid that scenario by working closely with your consulting professional engineer.

The control of mold begins with a well-defined project. A definitive program of requirements will support sound design, quality construction, and proper maintenance. Professional engineers are skilled at preventing problems, if they are allowed to perform their services. We suggest that you take the following measures:

■ **Identify specific design criteria for your project**—During the design stage, a professional engineer must be made aware of the specific uses for your project and any unusual concerns, such as whether some users might have "multiple chemical sensitivities" or compromised health.

■ **Consider the PE's recommendation of options for design and systems**—Focus on investing up front in systems that have life-cycle benefits. For instance, a well-designed HVAC may minimize security risks such as biohazards and mitigate the possibility of mold problems. Do not compromise design standards.

■ **Evaluate design changes carefully**—Value engineering could bring a project in line with your budget but

result in long-term costs during operations. Anticipate the construction and maintenance problems involved in design changes and equipment substitutions.

■ **Contract carefully with contractors for skill and quality**—The weak link in the project delivery process is the storage and incorporation of materials and equipment. Nothing is more likely to cause mold problems than faulty construction. Requiring the contractor to control moisture during sequencing and construction can prevent future problems.

Also, check insurance coverage, especially of contractors. If mold coverage is excluded, you can still place responsibility where control exists. Demand indemnity for costs resulting from a contractor's or subcontractor's negligence.

■ **Use your professional engineer's expertise**—Having your design team perform construction phase services is essential to identifying deficient construction. This allows the professional engineer to identify possible deficiencies, before these "oversights" result in latent construction defects. Include postconstruction or operations phase services, so that documentation on moisture control and maintenance is part of your ongoing project management.

■ **Establish a baseline measure of mold and a plan to test during use**—Measuring the extent and type of mold—and comparing the interior air quality with that of the surrounding environment—will warn you of an immediate mold problem. A schedule of monitoring, testing, and maintenance will alert you to any growing problem. And developing a procedure to respond to catastrophic events that may cause water infiltration is essential for preventing mold.

Your professional engineer should be an integral part of your team effort to keep your project investment from being compromised by property damage due to uncontrolled mold. Engineering expertise also can help you avoid the bodily injury allegations that the presence of mold or the perceived effect of mold can generate.



**National Society of
Professional Engineers®**
Professional Engineers in Private Practice