



CLEANING UP environmental problems can cost millions of dollars.

Environmental Time Bomb

The increasing number of vacant properties creates a toxic brew of environmental risks. **BY ALEX WRIGHT**

The cost of failing to safeguard a vacant building against environmental risks such as mold and Legionella can run into multimillions of dollars.

And with tens of thousands of vacant and abandoned office buildings, hotels and other properties across the United States, according to federal government estimates, experts believe a growing list of serious health hazards is a time bomb just waiting to explode.

But that's only the tip of the iceberg. The biggest emerging threat on the horizon is the sudden proliferation of crystal methamphetamine production laboratories in empty urban buildings, fuelled by an industry believed to be worth almost \$30 billion globally.

Environmental risk, as a whole, is big business in the United States, with a market of more than 40 insurers estimated to be worth \$1 billion to \$3 billion, which is set to grow exponentially over the next decade as a result of a surge in demand.

VACANT BUILDING PROBLEMS

The difficulty mainly stems from a sharp rise in

buildings that have become vacant as a result of tenants being unable to pay their leases, or hotels partially shutting down during the off-season to save on running costs.

Veronica Benzinger, chief broking officer at Aon Risk Solutions Environmental Services Group, said the problem is exacerbated by increased vandalism, fire, and theft, as well as squatters and the general dilapidation of the building resulting from a lack of care and attention.

"A lack of basic supervision, security and maintenance can contribute to the building quickly falling into disrepair and becoming uninhabitable," she said.

MOLD: THE "NO. 1" ISSUE

Despite all of those issues, the No. 1 problem with vacant buildings remains mold, according to Richard Sheldon, environmental practice leader at Willis North America.

Once it finds the right conditions, he said, mold rapidly multiplies and spreads within 72 hours.

"The scale of the problem can be anywhere from

a simple and relatively inexpensive remediation process to full scale clean-ups running into the tens of millions of dollars, when you factor in business interruption," Sheldon said.

Benzinger said the worst form of growth is *Stachybotrys Chartarum*, known as black or toxic mold. It produces toxic compounds called mycotoxins, which when released into the air are harmful when they come into contact with humans.

Although mold can affect all buildings, she said, it's often worse in more modern properties where the air flow is restricted, creating greater potential for them to become breeding grounds for mold.

"The biggest problem is water intrusion," she said. "Once that happens, mold can grow and proliferate throughout the building.

"Mold can affect any building, but it's often worse in new buildings. All it needs to grow is the right temperature, moisture and food."

Susan Doering, vice president and director of Tokio Marine Specialty Environmental, said: "The bottom line is that vacant buildings are prime real estate for mold growth — which can lead to loss of property value, potential harm to new inhabitants, and costs incurred to mitigate the problem.

Construction projects that are restarted after a period of dormancy can also face issues related to damaged building materials that were exposed to the elements while the project was abandoned.

"The most common issue faced in this scenario is damp building materials that will be enclosed in the building envelope, creating an environment that is perfect for mold growth," Doering said.

SPREAD OF LEGIONELLA

Letting a building fall into disrepair carries with it a multitude of health risks, including the Legionella bacteria, which causes Legionnaire's disease. The bacteria can quickly develop and spread through the building's heating, ventilation and air conditioning systems (HVAC) if they are poorly maintained, Benzinger said.

This is prevalent in hotels that close down some of their units in the winter months, she said.

"It's particularly common in artificial water systems, fire sprinkler systems, and hot and cold water systems because the bacteria can survive at relatively low temperatures," Benzinger said.

"So unless the system is properly maintained, when the next person moves in and they turn on the taps again, they can get a nasty shock."

Or worse. If the bacteria makes contact with humans, it can become a potentially fatal form of pneumonia.

Sheldon of Willis said that, as a result of the potential threat it carries, Legionella has become one of the key areas of cover in environmental liability insurance in recent years.

"The issue has been around for quite some time now, but it hasn't necessarily been covered in standard policies previously and has only really come to light recently, which goes to show that the level of concern about it has heightened," he said.

"We have seen some big losses in the U.S. in the last couple of years, particularly in the hotel and hospitality trade, due to the spread of Legionella, which have resulted in payments of \$10 million and

Summary

- The number of vacant commercial buildings is increasing.
- Mold, Legionella and methamphetamine labs are common risks.
- More than 40 insurers offer environmental coverage.



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upwards.”

Sheldon said the costs aren't limited to the clean-up operation either.

He's also seen some substantial bodily injury claims due to exposure to Legionella, which have resulted in large settlements being paid.

“Our estimates are that some of these losses are in the multimillion range,” he said.

CRYSTAL METH PRODUCTION

Another fast growing problem, said Benzinger, is the proliferation of methamphetamine laboratories, where the drug can be quickly and cheaply manufactured using toxic substances such as drain cleaner and paint thinner.

“These hazardous toxins can quickly spread to and contaminate the adjoining properties, putting the health of residents at risk as the fumes permeate into shared amenities such as air conditioning systems and are inhaled,” she said.

“Ultimately, it can kill your brain cells and also damage your lungs and

owners to defend themselves against lawsuits arising from the threat of contamination.

But, Sheldon said, there are tailored policies available that allow building owners to manage these risks while protecting their main assets.

“There are insurance policies available that extend beyond the traditional general liability cover and will provide you with a high level of cover for mold and Legionella clean-up, as well as the remediation of methamphetamine labs and their contents,” he said.

A number of industry organizations have launched new practices in recent years to provide cover for vacant and distressed properties, in response to this growing list of environmental problems.

With many abandoned buildings in inner cities being demolished and removed, contractors' pollution liability insurance policies are also being put in place to protect workers against pollution claims brought against them, with cover limits starting from \$500,000 and rising to more than \$50 million.



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— VERONICA BENZINGER, CHIEF BROKING OFFICER, AON RISK SOLUTIONS ENVIRONMENTAL SERVICES GROUP

other vital organs.”

Sheldon said the clean-up costs of the residual toxins produced by methamphetamine labs can be “catastrophic,” depending on the quantity and type of materials used in its production.

“It has to be handled very carefully and generally involves a full blown hazardous waste disposal team to handle the materials involved properly and safely,” he said.

COVER AVAILABLE

On the whole, these types of environmental risks — and the litigation defense costs associated with them — are excluded from most general liability or property insurance policies, leaving property

Site pollution or pollution legal liability has also become more readily available, providing property owners with protection against third- and first-party claims — including defense costs — resulting from pollution conditions.

Variations of this policy include secured creditor environmental insurance and lender liability, which cover financial institutions and borrowers throughout the buying and selling process.

RISK STRATEGIES NEEDED

Tokio Marine's Doering said good property management is key to avoiding the build-up of mold and Legionella in the first place. HVAC systems need to be kept at a

Environmental Risks With Vacant Commercial Properties



INFOGRAPHIC COURTESY OF LOCKTON

moderate temperature, and regular surveys to check for leaks, musty odors or mold growth should be carried out.

She added that water systems should also be flushed regularly and drained when not in use to reduce the likelihood of Legionella spreading.

John Wasilechuk, account executive for commercial insurance at Lockton, said having a sound environmental risk management strategy is paramount, particularly in the hospitality industry, where a clearly defined water management plan and a comprehensive pollution prevention plan are essential.

“Environmental risk has

traditionally been viewed as an area with low frequency/high severity impact; however, due to more stringent environmental regulations and our increasingly litigious society, frequency of claims are on the rise,” he said.

Therefore it's fundamental for businesses to have an effective strategy in place to mitigate against those risks and to make sure they are covered should the worst happen.

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