

Heat treatment method offers options for relief efforts in coastal region

For insurers facing extraordinary exposure from Hurricanes Katrina and Rita, unmatched losses beyond any other natural disasters in U.S. history, the bad news continues. Serious mold contamination is now threatening water-damaged homes and commercial properties throughout the region. With losses mounting on the Gulf Coast and other areas and more than 15,000 claims adjusters deployed—a look at new products in mold remediation may provide some alternative options to this seemingly overwhelming task.

“ThermaPureHeat is an effective alternative to traditional demolition-based remediation and building dry-out methods”, said Alan Forbess, creator and president of Criterion Environmental, a consulting firm based in Ventura, Calif.

Forbess is a registered environmental assessor in California and a certified microbial consultant with the American Indoor Air Quality Council. He has provided expert witness testimony in legal cases and managed over 1,000 mold assessments for commercial, residential and educational properties.

The ThermaPureHeat process, developed by E-Therm, an environmental remediation innovator based in Ventura uses superheated, dehumidified air to disinfect, decontaminate, and dry out buildings in much the same way heat is used to pasteurize milk and kill bacteria in wine.

In the ThermaPureHeat process, technicians use propane-powered portable heaters and air blowers to inject superheated air into the affected space, raising the temperature of a single room or entire structure to as much as 160° F for several hours. Heat has shown to be effective in destroying active mold growth sites, and kills viable mold spores, bacteria, viruses, insects, and other heat-sensitive pests and organisms.

“Heat also accelerates the off-gassing of odors and toxins, even in inaccessible areas, such as wall cavities, without the use of chemicals,” Forbess said. “And, one of the main benefits of

heat is that the proper application can dry out wet buildings much quicker than the traditional method of simple air movement and dehumidification typically used by flood restoration contractors.”

“Another real plus of this product is that it is non-chemical and actually reduces pollution in the damaged environment,” Forbess said. Years ago it won the best new product award given by the National Society of Professional Engineers.”

Traditional mold remediation typically includes limited or extensive demolition of impacted building materials, and extensive cleaning using techniques such as wire brushing, sanding, HEPA vacuuming and microbial wipe down.

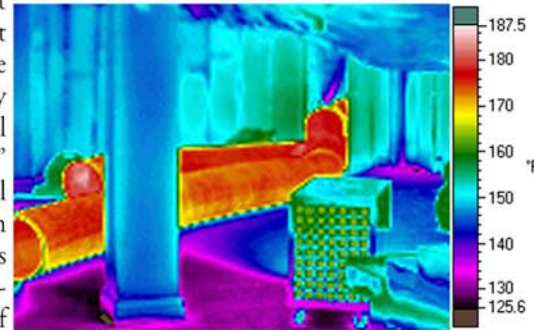
“This has been the standard mold remedy, which is costly and time consuming,” Forbess said. Forbess provided some examples of how his product saves money.

“When a water loss incident with detectable but no visible mold affected office space at a Juvenile Hall in a Monterey County, Calif., gross removal including the impacted wall cavity was estimated at \$20,000. Instead, the County opted to manage the mold in place using the ThermaPure process. The impacted area was heated to 160° F while maintaining 145° F in wall cavities and other inaccessible spaces in excess of two hours. Mold remediation protocol including critical barriers, negative air containment, and HEPA vacuuming were implemented as well.

“Afterward, post remediation viable samples analyzed by Hygeia Labs of Pasadena, Calif., revealed no viable mold/fungi detected within the impacted wall cavity. Costly gross remediation was avoided and inaccessible areas received additional drying. The savings to the County using ThermaPure, in lieu of gross remediation, was \$17,000.”

PDG Environmental, a national environmental remediation contractor, used the ThermaPure process in New Orleans after recent hurricane activity. “We used it to polish off any mold or bacteria left after traditional remediation on a commercial site that was flooded with sewage-contaminated water,” said John Regan, chairman and CEO of PDG Environmental. “It dried out the building extremely quickly and helped us meet clearance levels.”

Forbess believes if the heat treatment had been widely used in New Orleans and other hurricane ravaged areas, buildings with minor to moderate water damage could have been rapidly rehabilitated for far less than the typical “remove and replace remediation.”



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Insurers and property owners are finding that heat offers an effective alternative or adjunct to costly traditional demolition-based remediation and flood restoration.