

Horsehair in Old Plaster May be Arsenic-Laden, Investigator Warns

A Delaware engineer investigating old tannery sites is warning remodelers of a possible risk of arsenic exposure from old plaster that contains animal hair.

Tasked with evaluating former tannery sites in Delaware, Kevin Hansen of the environmental firm Tetra Tech looked into the history of tanning in



Horsehair used in old plaster may have been soaked with arsenic, making plaster demolition particularly harmful to remodelers.



the area, which dates back to at least the early 1800s and continued up to the 1950s. Historical documents and interviews with surviving workers revealed that the leather-making industry routinely used arsenic to strip hair off animal hides. On the side, says Hansen, the tanneries sold horsehair to the plaster industry.

"The hides were soaked in a slurry of lime and arsenic," he explains, "which was enough to soften the hair and cause it to begin to fall out. The workers would scrape the remaining hair off, so they were soaking themselves in the arsenic." Tannery workers often developed a malady called "blackfoot disease" from the arsenic exposure.

"The waste product was a cake containing horsehair, lime, and arsenic," says Hansen. "The arsenic amounted to a few percent by weight of the total mass of lime." Plasterers mixed the whole mess into their product, he says, but the proportions were held as a trade secret.

It's clear that the tannery's

lime cakes were toxic, says Hansen: "Their other big customer was the folks selling rat poison." But he can't say for sure whether today's remodelers risk any harmful exposure: He's not a health expert, and he hasn't tested any old plaster. "That would be the next step," he says.

"This is the first indication I've seen in the literature that this is a potential risk," says Hansen. "It obviously raises a whole lot of questions that I can't answer. I can't say that the presence of hair means that there is arsenic, because I can't support that. But one has to wonder, where did the hair come from? And in this case the obvious answer is the tanneries. My hope is that people will be spurred to caution, and that people will investigate."

Any good industrial lab can measure arsenic levels in plaster for about \$50, says Hansen. And given the known risks of silicates and allergens, he points out, dust protection is common sense anyway for workers doing demolition. "My intention is just to get the word out," he says. "Ninety percent of the benefit is simply warning people."

OFFCUTS

City officials in Dallas have informed 32 building inspectors that they will be fired for filing false paperwork to cover up the fact that they weren't working, the *Dallas Morning News* reported in June. Seventy building department employees in all, about half the total workforce, will be disciplined as a result of a city investigation into sham timesheets. The misbehavior came to light when administrators counted fewer inspection reports on file than the total number of inspections city employees had reported conducting.

The Portland Cement Association (PCA) has received American National Standards Institute (ANSI) accreditation as a standard-writing organization, and invites interested parties to help create a new ANSI standard on prescriptive design and construction requirements for concrete walls in residential construction. To conform with ANSI requirements, says PCA, "the standard-development committee will comprise a balance of concrete producers, users, and general interest groups ensuring that no one group dominates the process."

Beazer Homes has set aside \$24 million to pay anticipated claims related to mold in hundreds of Indiana homes, reports the *Atlanta Business Chronicle*. Beazer inherited hundreds of mold problems when it purchased Crossing Communities in 2002. The homes, mostly in the Indianapolis area, were originally built by Trinity, LLC, which Crossman had bought in 2000. State prosecutors have stepped in to investigate many of the Indiana cases, which reportedly relate mostly to moisture in poorly detailed brick-veneer exterior stud walls.