



The Web Site of The Sacramento Bee

This story is taken from [El Dorado](#) at sacbee.com.

Foothills asbestos risk doubted

But experts scoff at study dismissing danger in El Dorado Hills

By Chris Bowman -- Bee Staff Writer

Published 3:15 am PDT Sunday, April 2, 2006

For the past few months, the El Dorado County superintendent of schools has been circulating a mining industry study that contradicts government findings of asbestos on school yards and playgrounds in El Dorado Hills.

From Capitol Hill to the state Legislature to town halls, Vicki Barber has personally delivered the report to dozens of officials with potential influence over the U.S. Environmental Protection Agency and its approach to the region's naturally occurring asbestos.

Barber stops short of endorsing the National Stone, Sand & Gravel Association's critique. But the mining report fuels doubts she and many other local officials harbor over the reliability of EPA air and soil tests that have caused local school districts to spend millions of dollars on dust and erosion controls.

"Doesn't it make sense that someone should be continuing to ask questions?" asked Barber, an El Dorado County Chamber of Commerce board member.

"Has adequate research been done? Is that science reliable? Has it met the test of generally accepted scientific standards?"

The very report Barber showcases, however, runs afoul of generally accepted scientific and regulatory standards for measuring asbestos concentrations in the environment.

Though endorsed by some prominent mineralogists, the industry analysis by R.J. Lee Group Inc. of Pittsburgh does not recognize the full range of particle types and sizes that public health agencies deem potentially cancer-causing and count as "asbestos."

"I would certainly stick with the EPA (tests) as being the appropriate analysis," said Richard Lemen, an expert on asbestos-related diseases who served as assistant surgeon general of the United States and deputy director of the National Institute for Occupational Safety and Health.

"R.J. Lee really has no right to take out the fibers they think are not regulated," Lemen said.

Omitting such particles from asbestos measurements would underestimate the breathing hazard, said Jill Dyken, environmental health scientist with the federal Agency for Toxic Substances and Disease Registry in Atlanta, which plans to translate the playground test results into cancer risks.

"They are setting their own criteria. They are excluding whole ranges of fibers that the risk models were based on. I don't think that's appropriate," Dyken said.

R.J. Lee officials acknowledged in an interview that they evaluated the EPA test data using the company's own, unpublished criteria for identifying and counting asbestos fibers in air and soil samples.

"We have an internal document that lays out for the analysts what they should look at," said Richard Lee, company president, who provided a copy to The Bee.

The company's protocols detour from the national and international laboratory standards the EPA contract labs used to analyze the playground samples under the microscope.

That is not to say the R.J. Lee method is scientifically unsound, stressed Drew R. Van Orden, a senior scientist with the firm.

"All of our methods are based on scientifically accepted principles," Van Orden said.

Dan Meer, the EPA official who supervised the El Dorado Hills testing, called the R.J. Lee evaluation "a ruse."

"It's akin to tobacco industry scientists who will look at you straight in the face and say smoking doesn't cause cancer. They can cite several papers, and they get paid a lot of money to do this," Meer said.

Mining industry experts and many mineralogists long have argued that federal health agencies inflate asbestos concentrations with seemingly identical "fragments" - bits of fibrous minerals that broke off, say, in mining or construction, as opposed to naturally formed, needlelike "fibers."

The gravel association, the world's largest mining organization, maintains such fragments are neither asbestos nor toxic.

Barber, a specialist in school finance and student psychological services, makes no pretense of expertise in the arcane world of asbestos - fibrous minerals that have been used for insulation in thousands of products, from brake pads to ceiling tiles.

But she wants the EPA to fully address the industry criticisms before health officials embark on the cancer-risk study of the playgrounds, an assessment that could drive local school and park districts to spend more on asbestos controls.

"Data that has been seriously questioned by top experts in the field will have far reaching adverse economic consequences," Barber said in a recent letter to the EPA chief, Stephen L. Johnson.

Officials at the EPA and other federal health agencies, however, said they ruled on those industry concerns at least 15 years ago and see no reason to change the position.

The agencies concluded that fragments of similar size to asbestos fibers should be considered no less hazardous, in part because it's practically impossible to distinguish the two forms.

The mining industry nonetheless continues to raise the objections, often relying on R.J. Lee, a materials testing firm with 250 employees at five labs nationwide.

In the past 25 years, the company has weighed in on asbestos conflicts on several fronts, from play sand to crayons to talc mines.

Its critique of the EPA's work in El Dorado Hills reframes the debate over asbestos dust from foothills development.

For years, the questions have centered on the level of protection: To what extent must schools, builders and homeowners pave, water and vegetate to keep the breathable fibers grounded? How much asbestos exposure is too much?

The R.J. Lee report, released in January, has Barber and other skeptics asking a more fundamental question: Are the airborne particles that regulators have been calling "asbestos" truly asbestos?

All sides agree that asbestos-bearing rocks and soil occur in portions of the lower foothills, including the campus of El Dorado Hills' Oak Ridge High School.

The dispute centers on the identity of particles the EPA collected October 2004 in air and soil sampling at Community Park - across the street from the high school - and on playgrounds at Silva Valley Elementary, Jackson Elementary and Rolling Hills Middle School.

Technicians wearing air monitors simulated dust-raising games: baseball, soccer, hopscotch and the like. The findings, released last May, were striking: Every activity "significantly elevated" individual

exposure to particularly toxic kinds of asbestos called actinolite and tremolite, the EPA reported.

The test results spurred school and park managers to instigate or add dust controls, such as extended irrigation. But Barber wanted a second opinion.

A geologist with Granite Construction Inc. in Sacramento, whose children play on the tested school yards, suggested the mining association, based just outside Washington, D.C. The lobby paid \$81,000 for the study.

The report concluded that the "EPA methodically inflated the reported asbestos concentrations" and said the air tests "showed no significant exposure" to particles of health concern. Virtually all the particles the EPA's contract labs recorded as asbestos are fragments from the fibrous rocks or from minerals that do not bear fibers, the report said.

"You ... have an absolute obligation and duty to separate out those things that aren't absolutely (asbestos)," Lee said.

Asked whether any other testing laboratories in the country applied the same criteria, Lee said he knew only of one: the federal Occupational Safety & Health Administration's Technical Center in Salt Lake City.

But Dan Crane, a senior scientist with the OSHA lab, said his agency's asbestos measuring methods were developed strictly for occupational settings, where the presence of the fibrous minerals is not in question - as, for example, in the demolition of old buildings with asbestos insulation and fireproofing.

In the general environment, asbestos is found in a wider range of sizes, shapes and chemical compositions than the commercially prized fibers regulated by OSHA.

"That doesn't mean these other particles are safe," Crane said.

The R.J. Lee report on El Dorado Hills is much the same as its testimony on behalf of the chemical and manufacturing company W.R. Grace & Co., a defendant in litigation surrounding asbestos contamination in Libby, Mont.

A U.S. District Court judge in Missoula rejected the company's argument that EPA largely misidentified mineral particles as asbestos. The 9th U.S. Circuit Court of Appeals affirmed the decision last December.

About the writer:

- The Bee's Chris Bowman can be reached at (916) 321-1069 or cbowman@sacbee.com.

Go to: [Sacbee](#) / [Back to story](#)

This article is protected by copyright and should not be printed or distributed for anything except personal use.
The Sacramento Bee, 2100 Q St., P.O. Box 15779, Sacramento, CA 95852
Phone: (916) 321-1000

[Copyright © The Sacramento Bee](#)