Asbestos controversy heats up

A hygiene consultant claims the EPA hasn’t done homework

Just when the EPA had gotten out the word that asbestos exposure means big health problems, along came a New York hygiene consultant to claim the federal agency has overstated the public danger from the product. Coming down squarely opposite EPA guidelines, the consultant told an audience in Houston, Texas that not all asbestos found in insulation and building materials presents the health hazards commonly believed.

James T. Schirripa, drawing on findings of his own five-year study of a wide cross-section of structures in which asbestos was used, reasoned that federal testing methods have not been rigorous enough to define accurately the risk from all asbestos installations.

While the EPA and a hygiene expert may disagree about the seriousness of the asbestos problem, companies like Seagull, Inc. (Louisville, Ky. and Dayton, O.) illustrate the complexity of the health hazard. Seagull is marketing a franchised system for dealing with asbestos abatement -- including training, equipment, advertising and consultation -- and, as pictured here, the equipment utilized for asbestos removal is quite sophisticated.
Schirripa said his findings indicate asbestos removal can actually create -- in some cases -- a larger risk than simply leaving it in place.

Schirripa, of Industrial Hygenics, Inc. in Huntington, N.Y., claimed his tests were among the first sophisticated measurements of asbestos fibers in closed environments.

He spoke to participants attending the 1980 American Industrial Hygiene Conference in Houston in May.

He explained that the mere presence of asbestos fibers is not sufficient to cause alarm. What is needed, he said, is a true calculation of the problem. That calculation, he added, should assess the risk scientifically and determine cost and health returns from either removing the material or leaving it in place.

OSHA is currently using a standard of 2 fibers per cubic centimeter as a hazard base, but Schirripa points out that its school program suggests no testing method and instructs school officials to visually inspect for loose asbestos materials.

His own testing method involved the taking of methodical air samples in environments with asbestos materials, a qualitative measurement of asbestos materials within the samples, and a mathematical calculation of the time it would take to develop a tumor after exposure to that air.

Schirripa said all three elements of his method are crucial, and he noted his time-to-tumor computation had not been used by federal agencies in setting standards for asbestos.

He defined the equation as a generally accepted method for determining risk based on a
known dose of carcinogen leading to a tumor in a known amount of time.

“Our studies conducted over a period of five years beginning in 1975 generally demonstrate for the areas examined a time-to-tumor risk of well over 100 years, a risk far smaller than previously believed,” Schirripa said.

The sampling-analysis method used in the studies was identical to the model used by the government’s Consumer Product Safety Commission in other research, he added.

Industrial Hygenics conducted 100 tests in schools, office buildings, general work environments, ships at sea and in such specific areas as pharmaceutical packing rooms. Forty of the studies were analyzed for the research paper. The studies were done individually on contract for industry, schools and government, he said.

Schirripa said the studies demonstrated a range of low fiber concentrations, from one-hundredth to one one-thousandth fibers per cubic centimeter, with the mean at one-tenth to one-hundredth.

Removal of asbestos conceivably could lead to additional risks, Schirripa claimed, despite precautionary measures such as wetting the asbestos before removal to reduce the spread of airborne fibers.

Previous studies had suggested that after removal, airborne levels of fibers would exceed 100 fibers per cubic centimeter. Devising a new mathematical formula to analyze the effect, Schirripa concluded that the risk of removal often outweighs the risk of “doing nothing.”

“Our formula shows that the greatest rate of potential cancer cases as a result of continuous exposure in general occupancy buildings was 112 cases per million in the population over 40 years and 2,707 cases in 75 years. That’s the risk of doing nothing,” he said.

“The risk of doing something, removing the material, is 20 times greater in 40 years and 4.5 times greater over a 75-year period,” Schirripa said.

Schirripa urged that industry and federal agencies adopt better testing methods before dismantling of asbestos installations on what he termed a wholesale basis.

He said his studies amplify his concern that society may be spending too much money, with too little thought-- on risks that may not be as hazardous as believed.

Schirripa’s comments are particularly significant, because the EPA has made no bones about its position on asbestos fibers.

Says the agency, “EPA and the scientific community believe that any exposure to asbestos involves some health risk.”