Asbestos peril exaggerated

By DR. JAMES R. DUNN

ON APRIL 11, 1985, I participated in what many Americans would consider a remarkable phenomenon. Without benefit of face masks or protective covering of any type, the geologists at the 1985 Forum on the Geology of Industrial Minerals toured the "worst Superfund site" in Arizona, a closed chrysotile asbestos processing plant and an adjacent abandoned mobile home park.

The state of Arizona plans to break up the mobile homes and put the pieces, along with the top layer of soil in the park, onto a conveyor belt over a highway and drop it all into a hole. The estimated cost is $3.8 million. Ultimately the plant, its upper soil layer and remaining ore piles will probably be similarly handled at some unknown but substantial additional price.

All of the hundred or so people on our buses went through the plant, many collected samples of chrysotile ore, and all were perfectly well aware that they were breathing asbestos fibers and that they were getting fibers on their clothes, probably to take home with them. And many would also take the ore samples back and further expose their families.

Were these some kind of stupid or ill-informed beings from another planet? Hadn't they heard about the dangers? No, quite to the contrary, they were very well-informed scientists who knew that the danger to them was so trivial that it was about like the probability of getting hit by a meteorite.

Most of them knew, for instance, that the families of workers at Canadian asbestos mines living in mining camps, sometimes with their homes surrounded with asbestos-bearing waste rock, were in no more danger of getting lung or other cancer than the average Canadian. They also knew that asbstosis takes years of exposure to atmospheres clouded with asbestos fibers before any problem could develop.

In a very real way, these scientists were, quite unintentionally, "voting with their feet," showing as clearly as possible their disdain (1) for the fears of so many citizens, (2) for the "reporting" and veracity of most newspapers, and (3) for the accuracy of our government's conclusions regarding the dangers from chrysotile asbestos.

Incidentally, in California 40 years ago, I lived for about one year at the north end of about 16 square miles of mostly bare rock containing about 50 percent chrysotile asbestos. If our government were to be consistent, it would bury that mountain, along with the many outcrops of asbestos-bearing rock in the San Francisco area. But although local people have been drinking chrysotile-rich water and breathing chrysotile-rich air for lifetimes, there is no cancer epidemic in that area of California.

In part, our views of asbestos have resulted from the unfortunate situation that a type of hard asbestos called crocidolite is very dangerous; amosite, another hard asbestos, is also dangerous but to a lesser degree; but the common soft asbestos, chrysotile, which is 95 percent of all asbestos used and the only one mined in the U.S., Canada and Russia is relatively benign.

It took years of exposure in processing plants where the chrysotile content of the air used to be hundreds or thousands of times higher than any which usually exists in buildings or in nature before anyone was in danger of lung cancer, mesothelioma, or asbestosis. Asbestosis is not much different from the lung problems that result from coal dust, silica dust, baking flour, etc. Any dust breathed in excess is potentially harmful. Normal precaution, such as covering the nose or mouth with a cloth, should be taken when any dust laden atmosphere must be breathed.

One wonders why a particular thing is turned into a media event. Why asbestos? Why not electricity, wood stoves, automobiles, bathtubs? The dangers from all of these things are real with most far worst than asbestos.

And why have not our government or our media decided to turn mineral wool and fiberglass into "media events"? Man-made mineral fibers (MMMF: fiberglass, rock wool, etc.) are much more carcinogenic than common chrysotile asbestos. This is the conclusion from two major scientific reports covering 41,876 workers in Europe and the United States. There is far more fiberglass and mineral wool than asbestos in U.S. homes. Isn't fiberglass "in" this season?

In response to media coverage, much asbestos has been removed from schools. It is interesting to know that disturbing chrysotile by tearing it out liberates large quantities of chrysotile fibers, in one case so much that Johns Manville proved in court that there was more asbestos in the air *after* removal than before. This may be the situation in about 75 percent of the time asbestos is removed. Further, in many asbestos removal projects, the chrysotile is replaced by the *more* carcinogenic MMMF ...

The government-media-sponsored hysteria, once again, has caused people to do illogical things; has, yet again, caused us to waste vast amounts of money, emotional energy, and technical time. What makes it more tragic is that in the case of chrysotile removal, much of the misdirected funding — some $10 billion — is out of our education system.

Some of us have often thought that such disinformation must be a plot to weaken our country by throwing our money away. Certainly that is one effect. However, I suspect that such things are merely examples of our government trying to protect us from dangers — even if they have to make them up — and our newspapers just trying to make a buck. After all crises — real, imagined or created — sell newspapers. The newspapers' only concern seems to be that of making the crises believable to most people.

I suppose that as a mineralogist who has worked on asbestos problems for several years and financially profited from it, I should be grateful for our media and our government and not say anything about the situation. In fact, were I to be consistent with the ethical practices of much of our media and government, I would encourage the asbestos hysteria and thereby profit more.

People should be told that such things as chrysotile and glass fibers are like electricity, gasoline, or baking flour. Handled improperly they can be dangerous; handled prudently with knowledge of the hazard, the benefits overwhelmingly exceed the problems. But, of course, good news and genuine information rarely sell newspapers. And our goverment does have to feel needed.

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