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Introduction

Thank you for inviting me to comment on the status of asbestos problems in the US and the world. I am trained in chemical and environmental engineering, and have a Doctor of Science degree from the Johns Hopkins School of Public Health. I have spent the past 30 years working on asbestos as a public health problem. I have been a consultant to numerous agencies of the US government and other governments, international bodies, and environmental groups dealing with a wide range of public health issues. I have also testified in civil litigation in the US, on the history of asbestos as a public health problem and the reasons for failures to properly control asbestos hazards.

Why Ban Asbestos?

Around 30 years ago, new federal agencies were created to deal with such things as asbestos (EPA, OSHA, NIOSH, CPSC). Looking back, we can see that one lesson of the past 30 years of asbestos regulation is that nothing works better than a ban.

- There are still over 1000 OSHA asbestos citations/yr. in recent years including a brake plant still dry-sweeping more than 25 years after this was forbidden by first OSHA regulations.
- Some manufacturers facing specific product bans have waited until the day the ban took effect to stop selling the products, even products associated with substantial long-term liabilities. I shudder to think how long Georgia-Pacific would have taken to stop selling asbestos-containing drywall patching compounds if the Natural Resources Defense Council had not pressed the government (CPSC) to ban those products.
- The EPA ban on asbestos-containing sprayed fireproofing insulation was for some reason finally issued with a loophole allowing such products to be sold if they had less than 1% asbestos in them. Even I only learned in recent months that this scientifically unjustified tolerance enabled WR Grace to continue marketing sprayed products with just under 1% asbestos in them, marketed as “asbestos-free” for many years after the EPA rules took effect.

I am not saying the EPA regulations justified WR Grace selling that attic insulation as “asbestos-free”. Grace should at least have warned consumers of the presence of asbestos in the product from a mine that was originally called the Vermiculite and Asbestos Corporation when it opened back in 1919. I think that there should be personal, criminal liability for selling such products without warnings to consumers in the 1970s

and 1980s. The history of asbestos product marketing is unfortunately replete with stories of what many people might regard as toxic corporate crime.

But my main subject here is regulation, not incarceration.

There is no safe variety of asbestos, and international and US authorities have repeatedly stated that there is no safe level of exposure to asbestos. It is impossible and unnecessary to try to control the hazards to workers from asbestos in automotive brake shoes and linings in new cars. Sweden led the world in showing in the 1980s that cars and trucks would stop just as surely with asbestos-free brakes. They started with replacement brakes for older cars and by 1987 added the requirement that new cars could not be sold in Sweden with asbestos brakes. In 1996, France decided that asbestos-cement construction product plants would have to either convert to non-asbestos substitutes or shut down. All asbestos products were banned. The A-C products plants converted to safer fibrous substitutes, and now use cellulose, fibrous glass, and/or polyvinyl alcohol fibers.

Starting with the Nordic countries, many leading nations in the control of occupational and environmental hazards have banned asbestos. By 1999, all the leading economic powers of Europe had banned asbestos, and the European Union had in place a deadline of 2005 for all member countries and countries that want to join the European Union. Meanwhile, most of the countries of Asia and Latin America continue to use lots of asbestos, although they are wising up.

The EPA's Attempt to Ban Asbestos in the USA

The EPA tried to phase out the use of asbestos here in regulations published in 1989. All major uses of asbestos would have been banned in three groups, the last by 1997. When this was challenged in court, the rules were overturned because the court blamed EPA for not performing a quantitative risk analysis for all the substitute products that would replace the asbestos ones. EPA was miffed that the court thought that EPA laid such a burden on the agency and later wrote, "EPA believes the court made significant legal errors in interpreting the Toxic Substances Control Act (TSCA) and in substituting its judgment for that of EPA in balancing the costs and benefits of the asbestos-containing products banned by the rule." Nonetheless, EPA did not appeal the court decision, and 10 years later we still have asbestos products manufactured in and imported into the United States.

EPA attempted to get agreement of the auto manufacturers to phase out the use of asbestos in 1992, after the court overturned the ban rule. Though the initial response was encouraging, the auto companies scattered when the asbestos industry threatened an anti-trust suit. And asbestos parts are still used in some new vehicles to this day.

Without a Ban in the US, Asbestos Products Continue to be Imported

At least one US-based corporation has a plant in Mexico making asbestos-containing gaskets. If these products are among the gaskets imported into the US from Mexico, they would amount to a circumvention of OSHA and EPA asbestos regulations (with the associated costs these regulations entail). The consequent savings to the manufacturer (in fixed and operating costs, insurance, and liabilities) would constitute an unfair advantage in that the lowering of production costs (i.e., the increase in profits) occurs at the expense of the Mexican workers, environment, and taxpayers. This “externalization of costs” that by right should be part of the costs of production borne by the manufacturer constitutes an unfair advantage over US manufacturers of safer, asbestos-free gaskets.

Once asbestos gaskets are imported, they constitute a hazard to workers and consumers in the US. Quite possibly, by the time anyone gets sick from these products in the US, there won't be any corporate entity left standing to cover the liabilities from the death and disease caused by these products.

The US continues to import substantial amounts of asbestos-cement construction materials, asbestos brake shoes and linings, and other asbestos products. In the year 2000, the US imported over 50,000 metric tons of asbestos-cement articles and over 200 m.t. of asbestos textile products (yarn, thread, clothing) -- these hazardous products are not even made in the US anymore, they haven't been for many years. These asbestos-cement products are mainly construction materials whose handling, transport, installation (with cutting, drilling, etc.), renovation, and demolition expose countless US workers and other citizens to hazardous occupational and environmental hazards. This is unnecessary contamination of the living environment. It is largely unrecognized asbestos exposure, and even when it is identified as asbestos exposure it is from a practical point of view uncontrollable by merely issuing and trying to enforce regulations on asbestos use. Asbestos textile products are generally made now only in the poorest countries, they are hazardous both to manufacture and to use. China, South Africa, Brazil, Mexico, and Korea are leading suppliers of these commodities imported in recent years by the US.

Included as an “asbestos” product import category is brake linings and pads, whose importation rose from \$59 million in 1996 to \$89 million in 2000. In the brake friction products category, leading exporters have been Brazil and Mexico. It is likely that some of the products included in this historically asbestos product classification are now asbestos-free, since we also have imported these products from Germany and Denmark in 2000, countries where asbestos has long been banned. But unless and until the International Trade Commission creates separate commodity numbers for asbestos- and asbestos-free brake products we have no way of knowing the true extent and trend of asbestos product imports of this type. The same is true for the \$9 million worth of “asbestos articles and friction material used in aircraft” the US imported in 2000. Even some of the asbestos-cement product import categories are defined broadly enough to encompass non-asbestos fiber-cements using such things as cellulose.

The only trade-neutral way to stop the continuing importation of asbestos products is to ban manufacture, use, and importation of asbestos products in the US.

The WTO Asbestos Decision

The World Trade Organization authorized national bans on asbestos in a case whose appellate decision was announced in March of 2001. Canada, which exports almost all of the asbestos it mines to the Third World, had challenged the ban on asbestos in France as an unfair trade measure. In the end, even the free trade fundamentalists at the WTO had to agree that “controlled use” of asbestos was unrealistic, that no level of exposure could be considered free from the risk of cancer, and that safer substitutes were available. The US, which usually sides with parties urging the elimination of barriers to trade, in this case agreed that France was justified in banning asbestos. I was a scientific advisor to the European Commission in defending the French ban at the WTO. (for further details, see “The WTO Asbestos Case and Its Health and Trade Implications” at www.ibas.btinternet.co.uk)

Auto Makers Lack Global Policy on Asbestos

In 1998, I learned that General Motors was using asbestos-containing engine gaskets in new cars made in Brazil. I contacted an engineer named in a 1992 GM letter to EPA regarding the EPA’s effort to obtain a voluntary phase out of asbestos by the car manufacturers. He explained that GM had converted to substitute materials in North America about 5 years earlier. At that time, GM was still using asbestos brakes on new Chevrolet Cavaliers and Pontiac Firebirds, and had no plan to change before 2002. By 1998, most of the cars and even replacement brake parts sold by GM and the other auto makers in Europe had to be asbestos-free. I decided to ask each of the “Big Three” US auto makers if they had a global policy for eliminating asbestos parts.

The corporate public relations people at GM, Ford, and Chrysler were unwilling to answer my letters, and I persisted with follow-up telephone calls. I also wrote letters to senior management executives during the past year. When Chrysler merged with Daimler-Benz, I wrote to James Thomas, Director of Health, Safety, and Environmental Affairs, that perhaps the merger with the German firm (Germany banned asbestos in 1994) would be accompanied by a recognition that international double standards in occupational and environmental health are unacceptable, at least in the case of asbestos. When the *New York Times* editorialized that Ford Motors Chairman William Ford appeared eager to make cars that were more socially acceptable, I wrote to him to ask if Ford has a global policy to eliminate asbestos. When GM Vice Chairman Harry Pierce had a letter published in the *New York Times* about “Getting Religion on Corporate Ethics”, I politely wrote to ask him if GM had a global asbestos elimination policy.

I have received only responses to the effect that, since I am listed as an expert witness in some product liability lawsuits brought by brake mechanics with asbestos diseases

against the auto companies for things that occurred in the past, the companies refuse to answer my questions about what they are doing now. Though I neither regarded these inquiries as having anything to do with litigation nor was I paid for my work on this, it made no difference to the corporate officials and lawyers who have discussed this with me in phone calls and depositions. One even threatened me with some unnamed legal action if I persisted in trying to contact corporate officials.

Maybe it would help get these and the rest of the giant automotive companies to stop using asbestos if the US market for cars, trucks, and replacement parts was made asbestos-free by an act of Congress. If all these countries below can ban asbestos, surely the US can, too.

Asbestos Bans

<u>Date</u>	<u>Event</u>
1983	Iceland introduces ban (with exceptions) on all types of asbestos (updated in 1996)
1984	Norway introduces ban (with exceptions) on all types of asbestos (revised 1991)
mid-1980s	El Salvador bans asbestos: first country in the Americas to do so.
1986	Denmark introduces ban (with exceptions) on chrysotile asbestos
1986	Sweden introduces the first of a series of bans (with exceptions) on various uses of chrysotile
1988	Hungary bans amphibole asbestos minerals
1989	Switzerland bans crocidolite, amosite and chrysotile (some exceptions)
1990	Austria introduces ban on chrysotile (some exceptions)
1991	The Netherlands introduces the first of a series of bans (with exceptions) on various uses of chrysotile
1992	Finland introduces ban (with exceptions) on chrysotile (came into force 1993).
1992	Italy introduces ban on chrysotile (some exceptions until 1994)

- 1993 Germany introduces ban (with minor exemptions) on chrysotile, amosite and crocidolite having been banned previously. The sole derogation remaining is for chrysotile-containing diaphragms for chlorine-alkali electrolysis in already existing installations. These will be banned as of 2011.
- 1996 France introduces ban (with exceptions) on chrysotile
- 1997 Poland bans asbestos
- 1998 Belgium introduces ban (with exceptions) on chrysotile
- Saudi Arabia bans asbestos
- Lithuania issues first law restricting asbestos use; ban 2004
- 1999 UK bans chrysotile (with minor exemptions)
- 2000 Ireland bans chrysotile (with exceptions)
- 2000/2001 Brazil - the four most populous states ban asbestos as well as many towns and cities
- 2001 Latvia bans asbestos (asbestos products already installed must be labeled)
- Chile bans asbestos
- 2002 Spain and Luxembourg plan to ban chrysotile, crocidolite and amosite having been banned under earlier EU directives
- 2003 Australian asbestos ban takes effect
- 2005 Hungary expects to ban chrysotile
E.U. members Portugal and Greece deadline for Bans
Slovak Republic expects to adopt EU asbestos restrictions

Other countries that have banned asbestos, for which ban dates are being sought: New Zealand, Czech Republic, Slovenia.