THE PRESENCE OF ASBESTOS IN EVERYDAY HOUSEHOLD PRODUCTS[1]

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Presented at the Asbestos Update Seminar
Asbestos Sub-Committee
All Party Parliamentary Group on Occupational Safety and Health

London
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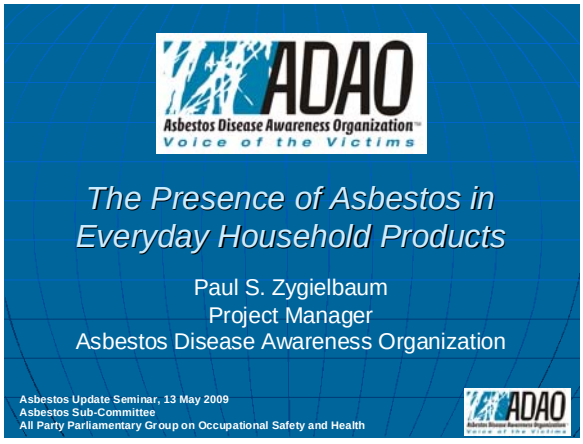


Good afternoon, ladies and gentlemen. I find myself in the unenviable position of standing between you and your evening repast. There is nothing for it but to forge ahead and hope for the best.

I'm humbled by the honor of addressing this group on the subject of the presence of asbestos in everyday household products. One might ask what it is that qualifies me to speak on this topic.

The journey began with my having been diagnosed with malignant peritoneal mesothelioma in 2004. I was treated that year and again in 2006. I'm often asked about my exposures to asbestos. It so happens that my known exposures run the gamut of the typical types of exposures: para-occupational, home repair, and occupational exposures in the aerospace and electric utility industries.

My passion to survive and to fight back has been fueled by my anger at being poisoned with asbestos, at having to undergo brutal treatments and ongoing medical monitoring, at the permanent presence of a killer stalking me, and at the anguish of my loved ones. That passion is shared by Michelle, my wonderful wife of 36 years, who is here with me today and is an effective activist in her own right. We strive for the day that will see asbestos poisoning become a thing of the past, when so many thousands of others will not have to endure what we have.

An important part of our asbestos activism is our volunteer work with the Asbestos Disease Awareness Organization, the ADAO, an important non-profit advocacy group based in the United States but welcoming participants from many nations around the world. The ADAO seeks to serve as the united voice for all asbestos victims, to educate the public and medical community about asbestos-related diseases, to support research that leads to early detection, prevention and a

cure, to ensure equitable compensation for victims and their families, and to ban the use of asbestos. I speak on behalf of ADAO here today.

It's shameful for me as an American to have to draw attention to the failure of the US, to this day, to ban the use of asbestos. It's rather astonishing to realize that it fell to private citizens to bring to the attention of the Congress the presence of asbestos in everyday household products, as well as the reasons that it's there.

The US is not alone in being slow to awaken to this health hazard. A rather curious example emerged just a few weeks ago in South Korea, where the Health Ministry had banned 1,122 medical products because they contained talc contaminated with asbestos. This action followed a week in which the "Korean media began reporting on baby powders, cosmetics and drugs that were found to contain asbestos," but it came some 21 years after the Labor Ministry had recognized the risk posed by the use of talc in such products. [2]

Here in the UK, a very recent article on occupational, domestic and environmental mesothelioma risks in Britain, published in the *British Journal of Cancer*, concluded, in part, as follows:

"The increasing trend in female rates in Britain and a comparison between British and US female rates both suggest that a substantial proportion of mesotheliomas with no known occupational or domestic exposure were probably caused by environmental asbestos exposure. The sources of this presumably included construction, building maintenance and industrial activities but may also include release of asbestos from buildings due to normal occupation and weathering."[3]

It apparently did not occur to the authors that the rapidly increasing incidence of mesothelioma among British women might be, at least partly, the result of asbestos exposure from ordinary household products, even though their qualitative arguments could have fit either scenario.

Now, I would not for a moment suggest that the presence of asbestos in everyday household products is by any means as great a threat to health in the UK as has been its widespread presence in buildings and ships, for example. Nor would I like to see British attention in this area deflected toward the smaller risk. But I think we should all be aware of such a risk that can exist in the cupboards and on the shelves of our own homes and gardens, schools and churches, restaurants and grocery stores, even while we remain vigilant about the buildings and the ships. For, once we strip away the deception and shine a light on that risk, we create a powerful opportunity to eliminate it.

Back on the other side of the Atlantic, the American public generally believes that asbestos was banned in the 1970s. The press generally treats the entire topic as old news.

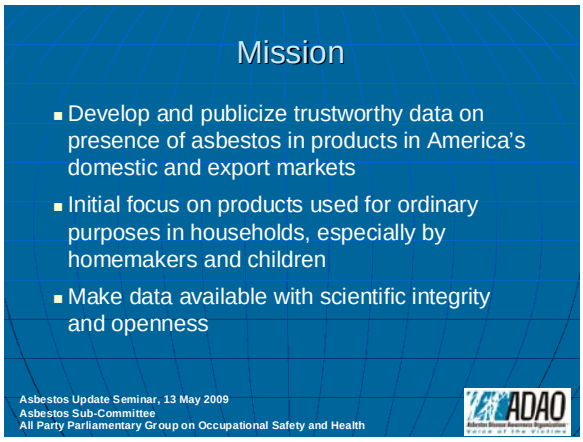
Meanwhile, the legal and regulatory environment in the United States continues to allow commercial and industrial products to contain asbestos. Regulations instituted by the US Environmental Protection Agency and the Occupational Safety and Health Administration allow the presence of asbestos in bulk construction materials and drinking water, and exposure of workers to airborne fibers. State laws vary in certain ways, such as requirements for product labeling and notification to building occupants. All in all, these restrictions offer little protection to individual Americans from exposure to asbestos.

This combination of limited awareness and limited regulation poses the potential for unreported asbestos content and contamination in everyday products on American store shelves.

Early in the course of our advocacy work, Michelle and I had encountered the assertion that there are some 3,000 products on the US market that contain asbestos. The available information was nonspecific but seemed to apply only to construction and automotive materials. Still, there were nagging rumors about asbestos in consumer products. So in 2006, we proposed a project to ADAO, a project to examine a variety of household products for asbestos content.

The original list included things commonly used by homemakers and children. That's because the continuing legality of asbestos use and its presence in construction and automotive materials did not seem to cause much concern. We reasoned that, if we found asbestos in things that homemakers and children use every day, that fact might cause sufficient public outrage to generate the political support necessary to achieve a ban.

The project objective was defined as developing and publicizing trustworthy data on the presence of asbestos in products in America's domestic and export markets. The project is focused on products used for everyday purposes by homemakers and children. The results are being made available, with scientific integrity and openness, to the media, research institutions, consumer advocacy organizations, and government agencies.



Samples were drawn from diverse product categories, including foods, drugs, toiletries, cosmetics, hardware, cleaning products, and children's toys. Products were purchased from national and regional retail chains. Country of origin or manufacture was not considered in the selection process.

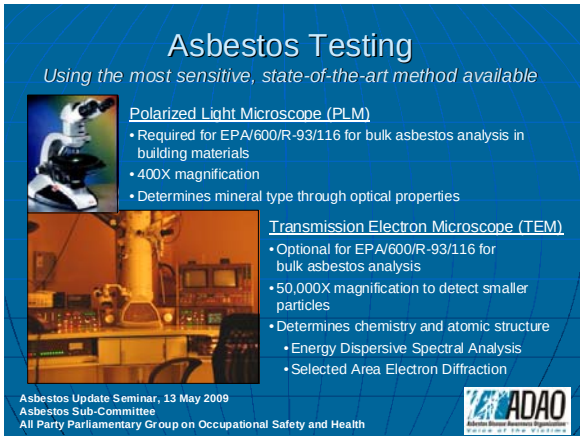
The testing of products for possible asbestos content is quite a complex undertaking. First of all, the sampling is subject to manufacturing variability between lots of the product, or even between packages of the same lot. If the product contains talc or titanium dioxide, for example, the mineral ore may be contaminated on one day and not the next, as the mining equipment moves between veins of the ore. As the ore proceeds through the manufacturing process, asbestos may or may not be present in the material stream, and its composition may vary substantially over time.

In the US, testing laboratories are bound by law to report as asbestos only those findings that meet the legal definition of asbestos. That definition includes only a few of the many asbestiform minerals that we might hold in suspicion. Furthermore, the law recognizes only fibers longer than a certain length as asbestos. That's because the regulations were established in the 1970s, using the imaging technology available at the time, and the industry has vigorously resisted updating those regulations to include shorter fibers. We chose to apply the legal definition in our project.

Another complexity in the design of our testing project is the fact that many testing laboratories are not independent of asbestos interests. Many have long-term consulting contracts with asbestos producers or manufacturers of asbestos-containing products. It is easy to see how such labs would be reluctant to report information that may be damaging to larger clients. Certainly we have been exceptionally careful in the choice of labs for our test program.

To perform our testing, ADAO engaged the Scientific Analytical Institute (SAI), a privately owned, independent testing laboratory. Together we identified broad categories of suspect products for investigation. To ensure that our results would be scientifically valid, ADAO convened its Science Advisory Board to establish technical rules for the test program. The adopted rules prescribed that three separate laboratories be required to confirm the type and amount of asbestos in a particular sample, before ADAO would consider the results valid and publishable. Thus, we engaged two additional independent laboratories, MVA Scientific Consultants and Bureau Veritas North America, as subcontractors to SAI.

To simplify outside review and acceptance of our results, the project is applying the US Environmental Protection Agency's standard analytical method for determining the asbestos content of bulk building materials.[4] The samples are examined by a combination of polarized light microscopy and transmission electron microscopy. Polarized light microscopes are the type that a person looks through to see a magnified image of an object. Transmission electron microscopes use high-energy electrons, instead of light, to produce detailed images of objects at the atomic scale. Through these means, samples were inspected at optical magnifications ranging from 100 to 50,000 times actual size.



Since the field of suspect products was so large, only a few screening samples from each category were tested for the qualitative presence or absence of asbestos. When asbestos was found in a product, more sensitive duplicate tests were run where possible, and similar or parallel products were screened.

In Phase 1 of the project, completed in 2007, SAI subjected over 250 different products to nearly 350 tests, including repeated tests. To assure accuracy and repeatability of results, duplicate tests were conducted on the original commercial product package tested and on different packages of the same product.

Samples of products found by SAI to contain asbestos, and a few that were not, were sent to the two secondary laboratories for confirmation testing. MVA Scientific Consultants tested duplicate products in unopened, "unadulterated" condition. Bureau Veritas North America was sent splits of samples tested by SAI, without identifying marks, other than code labels such as "Sample 1" or

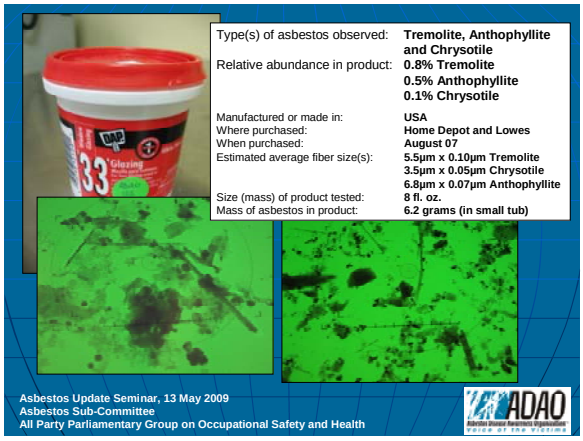
"Exhibit A." The differences in sampling technique were devised to ensure scientific integrity and to examine lot-related variability in results.

Among the more than 250 different suspect products tested in Phase 1, SAI confirmed asbestos content in 18 different products, of which 8 were confirmed by at least one of the secondary laboratories, and of which 5 were confirmed by all three. We announced these results in a press conference in November of 2007 at the National Press Club in Washington, DC, and we sent a full report on Phase 1 to the US Consumer Product Safety Commission and the US Environmental Protection Agency.

The five products discussed at the press conference were:

- Planet Toys "CSI Fingerprint Examination Kit": This popular toy is based on a popular television show. SAI purchased a kit, made in China, from a national retailer. The kit contained 5 suspect materials: white, black, and day-glow green fingerprinting powders, black ink, and invisible ink. The white fingerprinting powder was found to contain about 5% tremolite asbestos. It is noteworthy, as well, that a significant concentration of respirable-size silica particles was observed in the black powder. Ironically, we also noted that the outside carton bore a choking-hazard warning for small children.

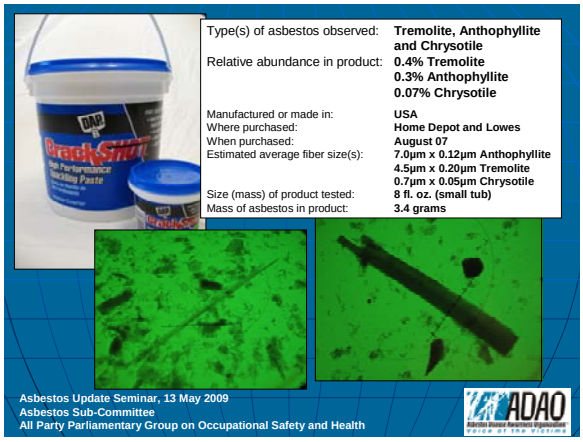
- DAP "33" Window Glazing: Manufactured in the USA and available in most home repair centers frequented by "do-it-yourselfers," this material is recommended for sealing windows and other applications. Eight-ounce buckets from national retailers were tested, but one-gallon buckets are available. The material was found to contain 0.8% tremolite, 0.5% anthophyllite, and 0.1% chrysotile asbestos.

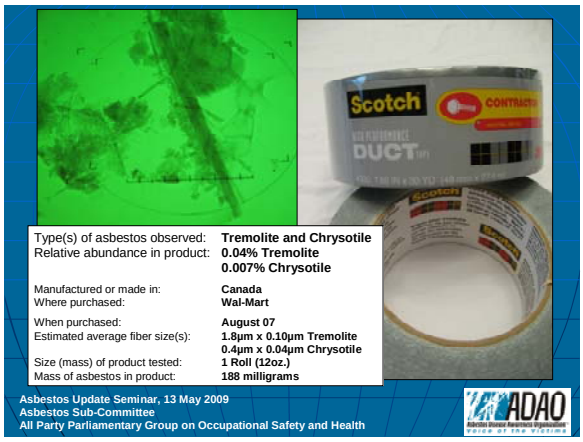


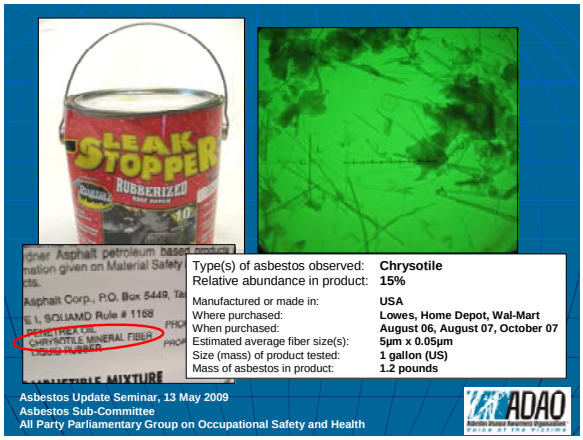
- DAP "Crack Shot" Spackling Paste: This caulk or spackling putty is recommended for joints, cracks, and other applications in drywall or similar material, and is available in many home repair centers. Crack Shot is made in the USA. Eight-ounce buckets from national retailers were tested, but one-gallon buckets are available. The material was found to contain 0.4% tremolite, 0.3% anthophyllite, and 0.07% chrysotile asbestos.

- Scotch “High Performance” Duct Tape: Sold in many different stores, this “Contractor Grade,” “High Performance” tape differs little in appearance from “ordinary” duct tape and is the ubiquitous grey color. Our product samples were found and purchased from a national retailer and were labeled as products of Canada. Asbestos was repeatably found in all reductions of fabric and adhesive, in the relative abundances of 0.04% tremolite and 0.007% chrysotile asbestos.
- Gardner “Leak Stopper” Roof Patch (in the form that lists asbestos as an ingredient): Manufactured in the USA, this product is available in many discount department and hardware stores for sale to the general public. The gallon-sized buckets purchased from national retailers were found to contain 15% chrysotile asbestos. Note that Gardner Leak Stopper had two nearly indistinguishable varieties available at the time: one labeled as containing “Chrysotile Mineral Fiber” in fine print, and the other with a small label reading, “Asbestos Free Product.” A follow-up survey of national retail store shelves by SAI in October of 2007 found both products available in many stores, with no clearly visible difference other than the fine print on the back of the can.

Our announcement of these results garnered significant press attention. As a result of the press coverage, public awareness of asbestos issues and of ADAO’s efforts increased. One product, the Planet Toys “CSI Fingerprint Examination Kit,” was subsequently investigated by state government laboratories in Connecticut and New York, confirming ADAO’s results and, ultimately, causing the product to be pulled from store shelves. ADAO’s communications with Congressional delegations favorably influenced the language of draft legislation to ban asbestos in the US during the last session of Congress and helped to win supporters for such legislation. These public, corporate and governmental reactions to our test results strongly support the premise of this project: While the continuing legality



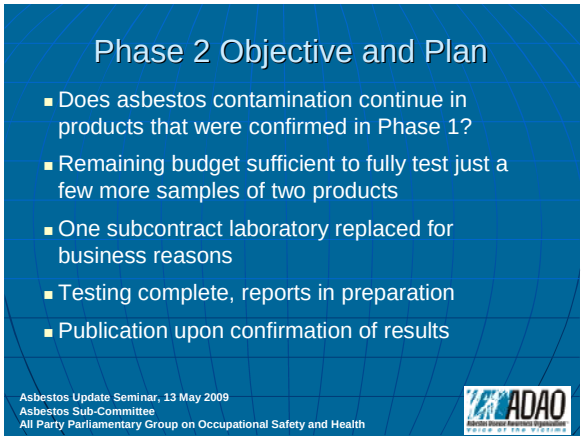




of asbestos in the US does not cause public outrage or even excessive concern, it appears that actually revealing the presence of asbestos in everyday products may very well do so.

Now let me brief you on the status of Phase 2 of this project, which began last year.

We had purchased our Phase 1 samples primarily in late 2006, about a year before announcing the test results. In view of the modest funds remaining in the project budget for Phase 2, we have undertaken to determine whether new samples of a particular two of those triple-confirmed products might still contain asbestos.

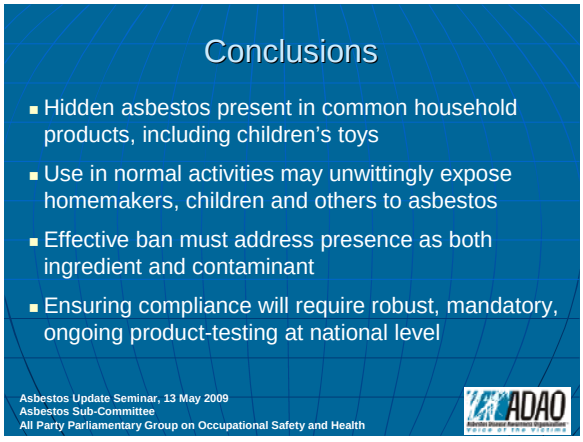


At the end of Phase 1 in 2007, Bureau Veritas chose, for business reasons, not to continue in the project and was replaced by another laboratory, Fiberquant, Inc.

Phase 2 product testing has been completed, and report preparation is in progress. Because the results have not yet been reviewed by our Science Advisory Board, I am not at liberty to reveal the results here. We hope to complete publication of the Phase 2 results in the near future. Let me just observe that the results I've seen are not in the least surprising.

The completion of Phase 2 of our project leaves an enormous amount of work to future investigators. Of the 18 products found by one or more labs to contain asbestos, 13 remain to be confirmed by all three labs, a task that will require substantial coordination as to the details of sample preparation and inspection. ADAO may or may not access the resources to fund the completion of that work. Many thousands of consumer products remain suspect. SAI occasionally gives me informal information as to tests that they have performed on suspect products for individual consumers, as a result of the publicity about our project. They continue to detect significant asbestos content in products freely purchased and used in ways that could easily result in substantial exposure of families in their own homes.

Taken as a whole, ADAO's Product Testing Project has established that hidden asbestos is present in a variety of common household products on American store shelves, including children's toys.



Use of such products in normal activities in homes and gardens, or anywhere else, may unwittingly expose homemakers, children and others to asbestos. Asbestos is not just a workplace hazard but must be considered a hazard anywhere that such products are used.

It is our belief that only a modest amount of such testing is necessary to keep the issue in the attention of the press and, therefore, of the public. However, ADAO does not intend to serve over the long term as a testing or qualification service for products suspected of containing asbestos. It would not be appropriate or effective to leave such a monumental and nationally important task to the responsibility of volunteers and private donors.

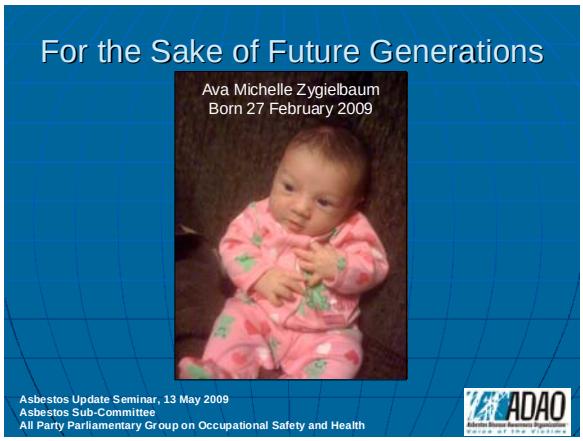
It is logical to conclude that an effective ban on asbestos must address its presence both as an intentional ingredient and as an unintentional contaminant, and that, due to the apparent pervasiveness of such contamination, ensuring compliance with such a ban will require a robust, mandatory, ongoing product-testing program at the national level.

In closing, I wish to acknowledge the indispensable contributions of the people listed here to the success of this project.

Michelle and I thank the Asbestos Disease Awareness Organization, the International Ban Asbestos Secretariat, and the Asbestos Sub-Committee of the All Party Parliamentary Group on Occupational Safety and Health, for creating the opportunity for this presentation.

Let me say that we never forget for one minute that we do this work because it is for the right and for the sake of future generations.

Thank you for your attention.



[1] Based on full project report available at http://www.asbestosdiseaseawareness.org/eLibrary/PressReleases/11.28.07.pressrelease.pdf
[2] "Asbestos found in 1,122 medical products from 120 companies," Seo Ji-eun, Joong Ang Daily, April 10, 2009
[3] Rake, C., et al., "Occupational, domestic and environmental mesothelioma risks in Britain: A case-control study," British Journal of Cancer (2009), 1-9
[4] Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

ADDENDUM

ALL PARTY PARLIAMENTARY GROUP ON OCCUPATIONAL SAFETY AND HEALTH

Chair: Michael Clapham MP
Vice Chairs:
Andrew Dismore MP
Michael Hancock MP
David Hamilton MP

Hon Pres: Lord Hunt of Wirral
Hon Secretary: Nigel Evans MP

Agenda: Asbestos Update[1]

3:15 to 6:00 pm, Wednesday, 13 May 2009
Boothroyd Room, Portcullis House, London, England

Objectives:

This meeting of MPs and invited guests is intended to:

- Keep asbestos high on the UK agenda;
- Explore topical UK issues such as asbestos contamination in Parliament, the incidence of asbestos-related disease amongst schoolteachers and protocols for managing asbestos waste and decontamination work;
- Examine UK asbestos developments in light of news from abroad.

Agenda:

3:15 ***Welcome***: Chair Michael Clapham MP
3:20 ***Management of Asbestos on the Parliamentary Estate,*** Mel Barlex, Parliamentary Director of Estates, and Lester Benjamin, Maintenance Service Manager
3:35 ***Asbestos in UK Schools,*** Mary Bousted, General Secretary, Association of Teachers & Lecturers, and Carole Hagedorn, Teacher & Mesothelioma Sufferer
4:00 ***Case Study: Asbestos Removal***, Wilf Flynn, UCATT
4:20 ***UK Regime for Disposal of Asbestos Waste: Strengths and Weaknesses –*** Phil Lodge, National Technical Services Manager, Environment Agency
4:40 ***The Asbestos Hazard and Maintenance Workers*** - Richard Morgan, GMB
5:00 Keynote Presentation***: Asbestos Testing of U.S. Consumer Products*** Paul Zygielbaum, Project Manager, Asbestos Diseases Awareness Organization, Vice President, C8 MediSensors, Inc.
5:30 ***Question and Answer Session***
6:00 ***Seminar Ends***

[1] An information seminar held under the auspices of the Asbestos Sub-Committee of The All Party Parliamentary Occupational Safety and Health Group