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Remarks*

Thomas O. Mathues
Vice President, Manufacturing Staff
General Motors Corporation

The proper and safe use of asbestos is obviously an area of vital interest, and I know from experience that programs of this type can be extremely helpful in all our thinking.

General Motors is a large user of asbestos fiber and asbestos-containing products. We use these materials in many of our products, including passenger cars and trucks, buses, off-road vehicles, diesel-electric locomotives, and powerplants for stationary applications. They also are incorporated in some plant-maintenance items and other non-production materials. Both applications are used in General Motors operations around the world. But, in order to address the specific interests of this group, I would like to confine my comments today to our North American operations.

Asbestos is just one of hundreds of toxic materials which are constantly under study at GM. And, before we go further, let me make a distinction between "hazardous" and "toxic" materials. All chemical materials are, to some extent, inherently toxic. Ordinary tap water, for instance, is toxic -- though, obviously, to a very low degree. With improper use, however, toxic materials can become hazardous. If this room was filled with water right now, we would be faced with a rather hazardous situation.

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* A paper presented at the Fifth Industry-Government Conference, Washington D.C., September 17-18, 1980 sponsored by the Asbestos Information Association of North America.

General Motors Corporation has, for years, been committed to protecting our employees by recognizing, evaluating, and controlling exposure to toxic materials. To a large extent, these programs are only now being required by various regulations. It is our continuing practice to evaluate all materials prior to their use. The evaluation considers impact on the environment, health, product performance, and cost, including the cost of government control. Thus, if a material we might be considering requires environmental assessment, or the administration of medical examinations to employees, those costs are also included.

We are prepared to change present practices, when there is need to do so. For example, when it became accepted by the medical community that excessive air-borne exposure to asbestos fiber was more hazardous than previously thought, we re-evaluated our use of the mineral. Workplace and ambient air quality were monitored. Employees were given medical examinations designed to determine the presence of typical abnormalities caused by asbestos. New processes are continually being investigated and substitute materials are being sought.

The use of asbestos fiber and asbestos-containing products was reviewed by local GM plant hazardous materials control committees. The committees are composed of people knowledgeable about production processes, chemistry, and health and environmental effects. They evaluate all present or potential materials and recommend safe methods for storage, handling, use and disposal.

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As a result of all this review and testing -- which is continuing today -- we revamped our asbestos-related operations at many GM plants. The changes required a significant investment . . . but resulted in improvements in the environment and in the protection and preservation of employee health and safety.

Let me emphasize that we did this in response to new medical findings. Much of our work occurred before the federal government published its asbestos rules.

One phase of our evaluation of asbestos considered availability and cost of control. We do not foresee an imminent supply problem with grades currently in use at General Motors. But the legislative and regulatory climate is uncertain, and the cost of the continuing use of asbestos may be dependent upon the existence of stringent compliance requirements.

For example, if the exposure limit is reduced to that which NIOSH has proposed, our compliance costs will certainly increase. However, if the limit is not as stringent as presently proposed by NIOSH, we feel that with some added processing and tooling expense we could meet the standard in most of our operations.

Based on current information, however, we do not see an urgent need to curtail all asbestos usage. But we do believe alternate materials must be examined, should the need arise, for economic or health reasons, to replace asbestos-containing materials. Thus, we agree that nonessential uses of asbestos

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should be controlled whenever adequate substitutes are readily available . . . providing those substitutes are economically feasible, and providing they will not result in any new health risks.

At General Motors, our largest use of asbestos is in friction materials such as the 5-6 million sets of brake linings and about 44 million clutch facings we produce each year. Other uses include various gaskets, sound deadeners for metal, fillers in mastics and adhesives, and some electrical component parts. We also use construction materials containing asbestos -- cement, asbestos pipe, roofing felt, and floor tile, for example.

We believe there is a basic distinction between processes using raw asbestos fibers and those using asbestos-containing materials. Whenever loose fiber is used, we exercise great caution to minimize the potential release of fibers to the work place or the ambient environment. The same care is used whenever asbestos materials are handled in such a way that loose fibers could be generated -- for example, in cutting asbestos paper or grinding a brake lining.

For many asbestos-containing materials, such as adhesives, brake linings, mastics, and floor tiles, the asbestos is bound in a matrix. This matrix is either flexible -- as in tar-based sound deadeners -- or highly durable, as in asbestos cement products. In these kinds of materials, asbestos fibre generally is not released during our manufacturing processes unless the material is misused.

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In our view this is an important distinction. In considering risk analyses, or in considering regulations and standards, we think it is important to differentiate between applications involving loose fibers and those involving non-friable materials or encapsulated fibers. Such differentiation is not the case today -- and it should be in our opinion.

The techniques and devices used by General Motors are designed to control the release of asbestos fiber.

Recently, there has been considerable discussion about the use of substitute materials for automotive friction products. While asbestos substitutes are being used in some light duty brake systems, we have not found effective substitutes for many other applications. Various substitutes for asbestos in clutch plates have been investigated, but no suitable alternatives have been found.

Certain products, therefore, will probably continue to contain or use asbestos. So we should avoid any ban on use and distribution of either original equipment or replacement parts for which there are no substitutes. In most cases, for example, non-asbestos brake linings, if installed as replacement parts, will not provide suitable performance in older brake systems designed for asbestos linings. In such cases, the configuration of the entire braking system has to be changed. Changes of this magnitude would require extensive and costly modifications and testing. Since we cannot recommend substitution of non-asbestos linings in brake systems designed for asbestos, an adequate supply of replacement asbestos linings should continue to be available. This same situation will hold

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for friction materials used as clutch facings in both manual and automatic transmissions.

General Motors does not use body fillers containing asbestos. However, sound deadeners today contain asbestos as an inert filler. The matrix doesn't dry to the point of becoming brittle, nor is it sanded or ground during vehicle production. Thus, asbestos fibers used in sound deadeners and other types of under-coatings really do not constitute in our opinion a ready source of airborne asbestos fiber.

However, we are encouraging development of substitutes for most asbestos-containing mastics, sound deadeners, and the like. For example, mineral wools, and glass fibers may be effectively substituted in some applications. Perhaps some products can be reformulated to eliminate the need for fiber fillers. But we recognize that the substitute fillers may be more costly.

In conclusion, let me say that General Motors Corporation has a long standing commitment to protect the health and well-being of its employees, the general public and the environment. While we encourage the use of materials having little or no hazard, we are prepared to continue using materials that require more extensive controls whenever substitutes are not available.

We are proud -- justifiably -- of our record of safety in dealing with potentially hazardous materials. And I assure you, we will pursue every effort to continue that safety record.

Once again, it has been a great pleasure to take part in this program.

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