

TASK FORCE ON CARCINOGENS IN THE WORKPLACE

ASBESTOS ASSESSMENT

Vehicle Materials Development and Planning
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Asbestos Assessment

Beginning in mid 1978, Vehicle Materials Development and Planning has prepared various reviews on asbestos covering component usage, Advanced Engineering needs, and expected legislative actions. The most recent assessment (August 1979) resulted in the publication of a Car Engineering Practices Letter covering Asbestos content in components. The Practices Letter stated that the company meets applicable asbestos standards and directed the development of alternate materials to facilitate an orderly transition to non-asbestos substitutes as the need arises (Attachment 1).

This present paper is a status report which assesses current and potential asbestos legislation as well as component usage. Competition actions are also discussed.

Background

The 1975 OSHA proposed standard remains dormant. If promulgated it will lower the permissible occupational exposure limit for asbestos from the current 2 fibers per cubic centimeter to 0.5 fiber/cc. Formal hearings that normally precede issuance of a final standard have been delayed for several reasons:

- . A standard for the construction industry has not been prepared.
- . An economic impact study has not been released, although it has been in draft form for six months.
- . Continued attack on the proposed standard by asbestos and mining interests as being too restrictive.

Also of concern to the company is the fact that NIOSH has recommended documentation of the "life cycle" of asbestos from mining to disposal. A working group in EPA's Office of Toxic Substance is currently performing a "life cycle" analysis of asbestos. First priorities for regulation consideration are paper products (gaskets) and friction materials (brakes).

* Assessment of Legislative Actions

A study of the current regulatory situation indicates a high probability that tighter environmental restrictions on asbestos will be promulgated from some Federal agency, within the next 1-3 years. The scenario for a staged tightening of the OSHA standard remains a possibility. However, this is not expected because most industry meets 1 fiber/cc (the current standard is 2 fiber/cc) and the proposed standard of .5 fiber/cc has been "on-the-books" for nearly four years with no action.

The new emerging strategy by OSHA, EPA and CPSC is to restrict the growth of asbestos by "banning all non-essential uses". Asbestos consumption in the United States has been rising at the rate of 1 to 2% per year under current OSHA regulations. Since the regulatory agencies original intent in controlling asbestos was to reduce consumption, (as well as protect asbestos workers), additional actions were deemed necessary.

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An Advanced Notice of Proposed Rulemaking, under TSCA, has been issued. This indicates that automobiles and light truck components, containing asbestos, could come under new federal rulemaking.

Asbestos Usage

Asbestos is used in a wide variety of components ranging from clutches and brake pads, to sealers, gaskets and sound deadeners. There are some components such as sealers, where an alternate material may be substituted with minimal product impact. There are other components where it is not possible to simply use an asbestos substitute but the component must be completely redesigned, such as the semi-met disc brake pads.

A detailed listing of asbestos usage is shown in Attachment II. These applications are summarized in the table below showing which Product Design Offices are affected:

Item	Product Design Offices								
	BEPE	Chassis	Engine	T&A	Light Truck*	Heavy Truck*	GCD	EED	Tractor*
Clutch Components				X	X	X			X
Brake Components		X			X	X			X
Gaskets/Insulators	X	X	X	X	X	X	X	X	X
Adhesives/Sealers/ Sound Deadeners	X	X	X		X	X			X

* Applications not documented but extrapolated from similar applications in Car Engineering

Competition

Several years ago, GM reportedly considered a policy to get asbestos out of the brake linings because of the toxic concerns. They decided that the effort to find a substitute for asbestos would be better spent to improve the performance and durability of the lining material and opted for a development program with semi-mets by '81-'82 and all linings (disc and drum) by '85. The asbestos issue has helped keep the semi-met programs going over the years. There is no "official" company policy to remove asbestos from other component areas. However, because of toxic concerns and company awareness of asbestos, gaskets and heat insulators are slowly being replaced with asbestos free materials. Asbestos insulation reportedly has been removed from manufacturing plants and the facilities that manufacture brake linings meet the present standard of 2 fiber/cc. It appears obvious, regardless of company policy, that GM intends to eliminate the use of asbestos. Their approach of "no formal policy" is a result of uncertainties associated with cost and timing for substitutions, and a general awareness that issues must be dealt with before they become problems.

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Competition (continued)

Chrysler also has no formal program for asbestos removal. However, in the case of sealers and gaskets, they attempt to use non-asbestos materials wherever possible and in most cases, are now introducing the substitute materials. In the area of brakes, front wheel discs are being converted to semi-mets as new programs permit, but no plan exists for rear brake drum substitution.

Comment

The general assessment on asbestos has been done and the system advised of what is needed. It should be noted that a comprehensive listing of asbestos containing components, by part number, can only be supplied by the individual PEO's. A strategy approach of accommodation or elimination cannot be made on a general basis but will have to be answered for each component by the design responsible office..

A further recommendation might call for progress reports to the Task Force by the Product Offices. However what is needed is an on-going system to identify other Engineering areas that could be impacted by toxic and hazardous legislation, and develop responsive plans.

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