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Inter Office

Purchasing
Ford North American
Automotive Operations
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L. M. Chicoine

cc: P. E. Prill
C. D. Lauer
L. W. Kaul

Subject: Proposed Federal Regulations on Asbestos of .5 Fibers per Cubic Centimeter of Air

The Material Planning Department has conducted a series of meetings with the major suppliers of asbestos parts. The purpose of the meetings was to determine if the supply community could meet the proposed OSHA standard of .5 fibers per cubic centimeter of air. Members of NAAO Purchasing, Vehicle Materials Engineering, Supply Staff and the various Product Engineering Offices participated in the meetings.

A brief review of our findings by major part category and supplier is summarized below.

Brakes (Manufacture of Pads & Linings)

Bendix (Friction Materials Div.) 5/20/77 Mtg.	Approx. 80% of Bendix Friction Material Division's production operations comply with a 1 fiber per cc limit. To bring the balance of their operations down to this level will require capital expenditures of $1.5 million. An additional investment of $5.5 million would be required to have all operations meet a .5 fiber per cc standard. Bendix is of the opinion that final legislation will require only a 1.0 level and is planning expenditures accordingly.
Thiokol 5/4/77 Mtg.	Thiokol reports that present fiber concentration by operation are: Unload rail car = .5, Loading Mixer = .8, Unloading Mixer & Preform = .8, Press Cure = .8, Post Cure = .8, Loading Sander = 1.4, Unloading Sander = .4, Edge Branding = 1.1, Packing = .7, Drilling = 1.4. Air-borne asbestos fiber concentrations in excess of .5 will be corrected by installation of new equipment for pre-forming which will make a cleaner, denser product. A new tumbler and wash system is also planned.

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Thiokol (continued)	Installation of this equipment in the next 2-3 months should bring all operations into compliance with the potential .5 fiber per cc regulation.
Thermoid (H.K. Porter) 5/19/77 Mtg.	Thermoid anticipates a Federal standard of .5 fibers per cc and reports that they plan to meet that level and continue supplying asbestos products. While Thermoid did not provide details on present fiber counts by operation, they did report that major expenditures made to reduce contamination from 5 to 2 fibers per cc will be an important factor in meeting the .5 standard Note: In our judgement, Thermoid does not have firm, approved plans and of companies interviewed is most likely to experience serious difficulty meeting a .5 fiber standard.

Brakes (Assembly of Calipers and Bands)

Bendix (Brake & Hydraulics Division)	Bendix is presently in compliance with the proposed .5 fiber limit in all but one operation. Equipment is on order and targeted for installation in August to bring that operation into compliance.

Mufflers

Arvin Industries 6/17/77 Mtg.	Arvin Industries reported that Ford Engineering is in the process of releasing fiberglass as an approved substitute for asbestos in mufflers. Arvin presently purchases asbestos sheet from Nicolet and Celotex and performs only assembly operations. Typical air born concentrations of asbestos approximate 1 fiber per cc of air in the assembly area. If the Federal government mandates a .5 standard, Arvin plans to substitute fiberglass for the asbestos at a minimal cost penalty.

Catalytic Converters

Arvin Industries 6/17/77 Mtg.	The 1977 design does not contain asbestos. The 1978 clamshell design, however, released for the Fairmont-Zephyr provides for use of an asbestos seal to eliminate blow-by gases. Arvin will monitor the asbestos concentrations when assembly operations commence and advise Ford of typical dust levels and of any plans to reduce employe exposure.

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Gaskets

Armstrong Cork
6/22/77 Mtg.

Armstrong gaskets are manufactured by a wet electrostatic system that minimizes asbestos contamination. The greatest potential for worker exposure is from damaged containers of in-bound asbestos. Asbestos concentrations in the receiving area have averaged 1.3 fibers per cc. This area can be brought into compliance with a .5 standard by use of worker respirators.

Monitoring of other manufacturing operations provided readings of .5 or less with the exception of one area where a value of .8 was recorded. If process modifications and added ventilation do not reduce exposure to .5, plans are to require the operator to use a respirator.

Note: Johns Manville reported that Armstrong Cork's gasket operation should have the least problem meeting a tight standard of a U.S. user of asbestos.

Basic Raw Material

Johns Manville
6/21/77 Mtg.

The major mines which produce asbestos are located in Quebec. Present exposure standards of 5.0 fibers per cc are expected to be reduced to 2.0. Asbestos represents approx. 16-17% of the Canadian exports from Quebec. It is the judgement of several industry experts that the Canadian government will not aggressively pursue standards under the 2.0 level for mines. Johns Manville has approved $70 million for expansion of the mine and reduction of asbestos airborne concentrations to levels of approximately 2.0 fibers per cc.

It is planned to visit Johns Manville on Aug. 4 & 5 to assess more fully any basic supply risks at the raw material level.

In summary, the above suppliers have active programs designed to bring their manufacturing operations into compliance with levels under the present standard of 2.0 fibers per cubic centimeter of air. Since there is conjecture as to the ultimate level which the government will mandate, there are some variances in supplier compliance programs. From a historical standpoint, we are advised that OSHA has permitted manufacturers to continue producing product providing programs are under way to resolve deviations from standards (otherwise known as abatement programs). It, therefore, is unlikely that we would encounter a sudden and unpredictable cut-off in the supply of asbestos bearing products.

It is planned to continue monitoring asbestos legislation and supplier capabilities and to advise you of any significant developments.

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