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August 11, 1977

TO: Asbestos Study Committee

SUBJECT: Asbestos Study Committee Meeting Agenda

Recently I talked with John Marsh at Raybestos-Manhattan concerning action that the Institute might take in the asbestos area. Mr. Marsh indicated that when the Consumer Product Safety Commission was proposing the ban on the use of asbestos in spackling compounds and in artificial emberizing materials (fire-place logs) it was questioned whether the Asbestos Information Association should make a formal presentation to CPSC in defense of these uses of asbestos. It was then indicated, as I understand it, that it would be necessary for those in the spackling compound business and the fireplace log business to defend the use of asbestos in these type applications. Mr. Marsh felt that a corollary existed for the friction materials industry should the CPSC propose a ban on consumer use of asbestos containing brake linings. Such a proposal would then require members of our industry and/or the Institute to defend this use of asbestos to the CPSC.

While the Asbestos Information Association would help, the responsibility for an industry presentation (if it is strictly brake linings) would become a problem for the FMSI and in particular for the Asbestos Study Committee. A main area of consumer concern could be the type of warning used in a package of brake linings or other friction materials. The standard OSHA warning label on the outside of the package is not enough. The "Recommended Procedures for Reducing Asbestos Dust During Brake Servicing" that the Institute promoted and distributed is perhaps too lengthy for an insert in a package. Mr. Marsh felt that the "NIOSH Recommended Procedures for Asbestos Brake and Clutch Servicing" is not realistic for all brake shops. For example, he asked how one posted a warning at an entrance to an area where there might be tire, muffler, shock and other auto service in addition to brake servicing, in a multi-bay garage. Mr. Marsh felt that the insert that Raybestos-Manhattan had with six "do's and don'ts" might be better suited for insertion in a package of brake lining. It may be that those packing brake linings for subsequent use should include warnings along the ideas of these "do's and don'ts" suggested by Raybestos or at least an insert along the lines of that recommended by NIOSH. Mr. Marsh indicated that where these simple work practices were followed that asbestos concentrations in the shop could be maintained at reasonably low levels.

Copies of the Institute recommendations, the NIOSH recommendations and the six "do's and don'ts" are enclosed. It is suggested that activities of the Consumer Product Safety Commission and the idea of a condensed warning for those servicing brakes be considered as agenda items for the next Asbestos Study Committee Meeting.

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Enc:

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RECOMMENDED PROCEDURES FOR REDUCING ASBESTOS DUST DURING BRAKE SERVICING

1. Because studies have indicated that exposure to excessive amounts of asbestos dust may be a potential health hazard, OSHA has set maximum limits of levels of airborne asbestos dust to which workers may be exposed. Since most automotive friction materials normally contain a sizable amount of asbestos, it is important that people who handle brake linings and clutch facings understand the nature of the problem and know the precautions to be taken.

Areas where brake work is done should be set aside if possible, and entrances should be posted with an asbestos exposure sign as follows:

**Asbestos
Dust Hazard
Avoid Breathing Dust
Wear Assigned Protective Equipment
Do Not Remain in Area Unless Your Work
Requires It
Breathing Asbestos Dust May Be Hazardous
To Your Health**

2. The amount of asbestos in the dust from brake lining wear is normally at an extremely low level because of chemical breakdown during use, and if machining of friction material does not take place, simple procedures will minimize exposure. During brake servicing, the mechanic should wear an air purifying respirator, either a throwaway or one with replaceable particulate filter(s), as approved by the Mining Enforcement and Safety Administration or NIOSH. It should be worn during all procedures starting with the removal of the wheels and including reassembly.
3. During disassembly, all parts should be carefully placed on the floor to minimize the possibility of creating airborne dust. Dust should first be cleaned from the brake drums, brake backing plates and brake assemblies using an industrial type vacuum cleaner equipped with a high efficiency filter system. After vacuum cleaning, any remaining dust should be removed by using a rag soaked in water and wrung until nearly dry. Under no circumstances should compressed air or dry brushing be used for cleaning.
4. Of extreme importance are the precautions which must be taken during machining of friction material. This is the operation in brake servicing when exposure to asbestos dust is at its highest. In addition to the approved respirator, there must be local exhaust ventilation such that the worker exposures are maintained at least below the 1976 OSHA asbestos standards. If there is any question as to the efficiency of asbestos dust removal by the machine, the manufacturer should be contacted.
5. Industrial vacuum cleaner bags containing asbestos dust and cloths used for wiping brake assemblies should be sealed in plastic bags and labeled with the following warning label printed in letters of sufficient size and contrast to be readily visible and legible:

**Caution
Contains Asbestos Fibers
Avoid Creating Dust
Breathing Asbestos Dust May Cause Serious
Bodily Harm**

All asbestos waste should be disposed of in accordance with the OSHA asbestos regulation. During removal of vacuum bags, an approved respirator, as described in (2) above should be worn.
6. All floor cleaning in areas where brakes are repaired should be done with the high efficiency industrial vacuum cleaner as described in (3) above. Under no circumstances should dry sweeping take place. Grinding (arcing) machines should also be cleaned with such a vacuum cleaner and any remaining dust wiped with a damp cloth. An approved respirator, as described previously should be used during this cleaning.
7. Although adherence to the above procedures should minimize any contamination of work clothing, it is necessary that the appropriate sections of the OSHA regulations on asbestos be followed when ceiling levels on asbestos dust exceed current standards. This could involve special clothing, change rooms, etc. At the very least the work clothes should not be taken home but should remain at work for industrial laundering.
8. Proper hygiene practices will help minimize exposure to asbestos dust. Wash thoroughly before eating and do not eat in the work area. Remember, smoking is harmful to the health, and smoking coupled with breathing asbestos dust is extremely dangerous.

CAUTION: DO NOT BREATHE ASBESTOS DUST

NIOSH RECOMMENDED PROCEDURES FOR
ASBESTOS BRAKE AND CLUTCH SERVICING

1. All procedures performed in a restricted area of facility. Entrances posted with an asbestos exposure warning sign.
2. Respiratory protection during all servicing operations. MESA and NIOSH approved air purifying respirators.
3. Loose wear dust to be removed by well maintained shop vacuum. After vacuum cleaning, remaining material removed with water soaked rag.
4. All new lining grinding machines provided with local exhaust ventilation.
5. All floor and equipment cleaning performed with high efficiency shop vacuum.
6. Vacuum cleaner bag and all other waste sealed in plastic bags and labeled asbestos warning label.

PRELIMINARY

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RECOMMENDED INSERT FOR BRAKE LINING PACKAGES

IMPORTANT

ASBESTOS DUST HAZARD

- Do Not Breathe Dust
- Do Not Use Air Hose for Cleaning
- Do Not Machine Without Dust Collection Equipment

- Do Use Vacuum or Wet Cleaning Methods
- Do Dispose of Dust in Sealed Container
- Do Wear Mask if Unable to Avoid Dust