PLAINTIFF'S EXHIBIT

FD-1029

Inter Office

General Parts Division
Saline Plant

July 11, 1973

J. W. Clark
J. E. Chellman
R. L. Mosher
W. [illegible] Vandershot
R. [illegible] Pratt
D. [illegible] Reeve
L. [illegible]pica
J. [illegible] Woods

Subject: Asbestos in the Air

A follow-up meeting was held on July 11, to review progress toward eliminating asbestos contamination problems within the talc compounding area.

1. The vacuum cleaner which was installed in the talc room is still unsatisfactory for clean-up purposes. The following actions, however, have been instigated:

   a. Mr. Chellman reported that a new design has been completed which will utilize a hopper collector from which the dust can be dumped into plastic lined drums for disposal. Mr. Chellman reported that the work order will be written as of 7/11 and Plant Engineering is urged to incorporate this design as soon as possible.

   b. The vacuum cleaner has been modified through the elimination of the filter bag. This has substantially improved suction. Mr. Pratt requested additional attachments which will allow for cleaning in crevices. Mr. Chellman indicated that the vendor has been contacted and progress will be reported at the next meeting.

   c. Mr. Woods reported that American Drill Bushing has developed a new vacuum system capable of pulling 22 inches of mercury. Information will be available for the next meeting. In addition, Mr. Reeve and Mr. Woods were requested to investigate the feasibility of disposing of drums of talc material through the use of the compactor.

2. The layout which adds protection for the talc bags in the storage area has been completed. It is reported that is has been successful in reducing damage to bags which are stored in the area, however, it is not sufficiently large to include all talc requirements on hand. Mr. Chellman was requested to increase the size of the storage area and develop a hinged gate for access to the area.

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3. Production Control personnel continue to use face masks when unloading hopper cars of talc material. Recent history on talc shipments from Desert Minerals continues to be satisfactory in that no damage is being experienced. Material Handling reported that further improvements in shipping could be achieved through receipt of shipments in 40 ton, 60 foot rail cars with the material stacked one pallet high. The price pentalty for this type of shipment would be $3,400 per year. Since no problems are being experienced at the present time, no further action will be taken on this item.

4. The dump station for talc filled polypropylene into the flow bin container was investigated. It was noted that providing that the vent tube is cleaned and that the flow bin is properly located over the dump station, a satisfactory control of dust in the air can be maintained. It was requested that design modifications be made to fool-proof the system. The following actions were reported:

   a. A design has been completed and a work order is issued for modifications to prevent plugging of the vent tube. Plant Engineering has started construction of the modifications and a promise date will be given at the next meeting.

   b. As an interim move, Production will manually check the effectiveness of the vacuum on the vent tube prior to loading each flow bin.

   c. Material Handling was requested to investigate the addition of a second dust collector to the room. This would allow sufficient vacuum regardless of whether other areas of the system are in operation.

5. Mr. Chellman reported the following results regarding the new asbestos free talc materials Beaver White and stabilizer PDO-11:

3/4% PDO-11	96 hours heat aging
1% PDO-11	264 hours heat aging
2% PDO-11	230 hours heat aging

From these results, it appears that the proper mixture of Beaver White and PDO-11 will be approximately 1 to 1½%. In the interim, it was decided that a blend of 1½% will be run in a production tryout. Production will establish a 4 to 5 day minimum float of production material prior to entering a tryout. A one day material will be extruded and held until test data qualifies it for production use. Material Handling will be responsible for coordinating molding tryouts to assure that dimensional stability and ease of molding are consistent with the production material. Progress will be reported at the next meeting.

Presently 20,000 pounds of extruded Beaver White material is rejected because of heat aging problems. This material had originally been run with only ½% of PDO-11. It was decided that in order to salvage the material, an additional 1% of PDO stabilizer will be added to the material and it will be tumbled and sent to production without additional extrusion. The 1½% total additive should be sufficient to meet all requirements for heat aging.

The next meeting will be held in my office on Wednesday, ~~July 25~~, at 11:00 a.m.

8-15-73

F. E. Macher

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BRAKE LINING DUST REMOVAL SURVEY

Contact	Comments
Mel Huggins Performance Test Unit Supervisor	Really don't clean that much, but we do some air blow-off.
Lou Knight Senior Test Engineer	No more air blow-off at VEG. We purchased a special vacuum arrangement for attachment to vacuum plate. Disc brakes do not develop dust.
Bob Harmount Test Engineer	Use vacuum type removal so we don't blow asbestos dust in air. Not good to blow out dust. We sometime brush out.
John Dobbyn Maintenance Supervisor at MPG	We sometimes tap it (the dust) out - then use low air blow-off. But we generally brush it out because the dust is bad. We could easily live without air blow-off if we had vacuum means.
Don Melow Supervisor - Heavy Truck - VEG	We use vacuum cleaner almost all the time. We sometimes wipe or brush off dust. We use very little blow-off. We could do without it easily.
John Milke Supervisor - VEG	Not too much maintenance on brakes. We use vacuum. Very little air blow-off. We could do without blow-off altogether.
Amrico Ray Supervisor - VEG	We vacuum out when we do it.
John Finnerty Supervisor - VEG	We vacuum out when we do it.
John Hockaday Supervisor - VEG	Usually use vacuum, but sometimes use air blow-off. No problem doing without blow-off.
Ken Schou Administration Garage	We usually blow it out with air gun. Don't have too much brake work in this regard. We can easily live without blow-off. We can brush, wipe, vacuum.
Ray Nevi Brake Test Engineer	We do not do this type work, but it would be best to vacuum.

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GENERAL CONCLUSIONS

1. Vacuuming is the superior and proven method that is the safest.
2. None of those contacted felt that air blow-off is a necessity. All realized there is some degree of health ramifications involved. All agreed they could perform necessary brake maintenance without air blow-off method.

R. M. Quarles