Referring to pages 5 and 6 of the Appendix, Book Preform samples exhibited higher concentrations than those encountered during previous surveys. This condition may have resulted from cold weather closure of exterior openings supplemented by direct air disturbance from the Dravo make-up air unit adjacent to the Preform machines. However, the reduced sampling time of the more recent samples may also be a factor. Prolonged collection tends to overload the filter, masking the fibers during analysis of the sample. Filter loading is especially common in areas where increased concentrations of airborne particulates are generated.

Reduction of elevated asbestos concentrations in Book Preform will require increased enclosure of the existing hoods above the preform units. All sides including a portion of the open front should be enclosed. In addition, the sides of the hoods should be extended downward to provide greater capture of asbestos dust generated during the pressing cycle. Adequate hooding should also be considered for the mix bins and weigh scales where intimate handling is a problem. Design and engineering considerations should include the possibility of automation of all or any part of the preform cycle as a means of reducing or eliminating exposures.

In Disc Brake Manufacturing, two automatic preform machines were sampled. Both units disclosed concentrations exceeding the 5 fiber limit. Intimate handling is a problem at these locations, and provision of additional ventilation should be considered.

A personal sample was collected from the Tennant sweeper operator during normal sweeping operations. The mobile sweeper was emptied of collected dust at least twice during the sampling period.

It is apparent that the majority of the exposure to the operator is incurred while emptying the unit. Heavy concentrations of airborne dust are generated while this activity is in progress.

Until further samples can be collected to determine sweeping and dumping exposures separately, the operator should be required to wear respiratory protection. In addition, the Tennant Sweeper should be emptied outside the plant in a protected area where scattering or spreading of airborne asbestos can be minimized.