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statement that, "the changing of asbestos brake linings for automobiles was also dangerous because mechanics usually use an air hose to blow out the loose dust after removing the old lining." The implication here is that the brake lining debris that is trapped in the drum contains significant amounts of asbestos that can become airborne after being blown out of the drum by the air hose. This too will be touched upon shortly.

Exhibit 1, copy attached, is an abstract along with the reference regarding brake lining decomposition products. Mr. Lynch, the author, was a member of the U.S. Public Health Services when he presented his finding in May, 1968 that the high temperatures involved in braking converts asbestos to other minerals and that the very small amounts of free fiber appear to be an inconsequential health hazard.

Exhibit 2 is an abstract of a submission made by Caterpillar Tractor Company to the Illinois Pollution Control Board on October 19, 1971 as its documented argument against the banning of asbestos-containing friction materials. Beginning on Page 13, a section titled "B. Brake Wear Products" is pertinent to our present discussion. Here, Caterpillar draws information from Mr. Jeremiah Lynch who published an article in the Air Pollution Control Association Journal entitled "Brake Lining Decomposition Products". (This may have been part of the study referred to in Exhibit 1, but the findings are reported in greater detail.) The gist of the article is that little or no free asbestos is present in the dust taken from drums and only insignificant amounts of asbestos may become airborne during braking operations. (Incidentally, we do not know if there even was a page 14 in this presentation. The continuity of the thought content suggests that there never was a page 14 -- that an error occurred in numbering the pages.)

Exhibit 3 is an EPA supported, long term project that was presented in May, 1973. The most informative figure from this comprehensive article is that less than 0.3% of asbestos fiber originally present may be emitted to the atmosphere during brake life, the remainder will have been converted to other mineral products.

The information presented in the three exhibits leads me to the inescapable conclusion that if there were significant amounts of free asbestos generated during braking that both OSHA and EPA would have made all concerned aware of this. On the contrary, all experimental data points to the fact that insignificant amounts of free asbestos is generated and either emitted to the atmosphere or trapped within a brake drum and the amount is not large enough to raise the fears of even the most militant of the anti-asbestos forces.

As far as J. W. Penney & Sons Company is concerned, my thoughts are that very little, if any, asbestos is released to the air during clutch engagement. While there may be some dust or smoke observed during severe