mixes containing more of the longer asbestos fibers in their composition are associated with higher airborne asbestos concentrations. The mixes containing the longer asbestos fibers are generally lighter and fluffier than the mixes containing more of the shorter asbestos fibers. The lightness of the mix adds to the propensity for the airborne distribution of the asbestos fibers.

Regarding wet mixes and the amount of airborne asbestos that they generate, reference is made to Appendix #2, samples #14 & #15 and #20 & #21. These four samples were taken at two similar strip roll machines (#3 & #4). These two machines were sampled in the morning and in the afternoon on the same day. The only variable was that the operators switched machines in the afternoon. Both operators selected were about the same height, and both work very cleanly. The resulting airborne asbestos concentrations were as follows: strip roll machine #3 - (sample #14 0.50 fibers > 5μ/ml), strip roll machine #4 - (sample #15 0.43 fibers > 5μ/ml), strip roll machine #3 - (sample #20 0.29 fibers > 5μ/ml), and strip roll machine #4 - (sample #21 0.18 fibers > 5μ/ml). The average of these four samples is 0.35 fibers > 5μ/ml which is very low especially when there is no local exhaust ventilation provided at these machines. The wet mixes, by binding the asbestos fibers with the other components in the mix, generate very little airborne asbestos in the preforming stages.

The length of the asbestos fibers used in the various mixes is also a significant factor related to airborne asbestos concentrations. Referring to Appendix #2 again, most of the mixes studied contained approximately 50% of the long fibered asbestos and 50% of the short fibered asbestos. The average fiber count computed for these mix types was about 1.5 fibers > 5μ/ml. This average figure can be compared with samples containing only the longer fibered asbestos. Samples #3 and #11 were such samples containing 100% of the longer asbestos fibers. The mix used for these two samples was 80 mix used in the block preform department. The results for these two samples were - (sample #3 4.10 fibers > 5μ/ml) and (sample #11 3.59 fibers > 5μ/ml). These results are approximately 2½ times the average count associated with mixes containing equal amounts of the short and long fibered asbestos.

Another comparative observation made was between the 80 mix results versus results taken at the same machine with the same operator but with another mix (mix 551C8C). This was sample #16 and the resulting concentration was 1.24 fibers