Attempted Corrections

By 1989 the QAMA-McGill researchers realized that they needed to do something else to justify their high dose estimates. Since the chrysotile came from the same mine, the most obvious and simple explanation for this "mystery" was the inadequacy or non-comparability of the dose estimates from these two operations. After all, the QAMA-McGill researchers had already shown that there was at best no correlation between particle and fiber counts in the QAMA sampling. At worst, there was an inverse relationship between particle and fiber counts. (Gibbs and LaChance 1974) On the other hand, the textile particle counts correlated with fiber counts because each textile process produces a narrow range of particle/fiber ratios. The QAMA-McGill researchers tried to "fix" this irreparable problem with QAMA dose estimates by comparing particle counts to retained fiber levels in the lung.(Sebastien et al. 1989a) This could only add another level of error since as they noted, lung fiber counts depend on retention, clearance, and dissolution.

> "In the absence of an accepted model for lung retention of asbestos fibres comparison between the two groups was restricted to cases having similar time characteristics of exposure (duration and cessation). In these circumstances it was assumed that retention would be proportional to mean intensity of exposure. This assumption, impossible to test without good environmental data may be questioned, especially for chrysotile."(Sebastien et al. 1989a)

Sebastien even re-proved the inadequacy of the original QAMA-McGill exposure data,

> "Initially we thought it might be appropriate to use regression analysis to relate exposure, intensity (mpcf) to lung fibre concentrations in the two series and to compare observed values in one with those expected by application of the regression equations from the