

With the British already using a method to count asbestos fibers in the workroom atmosphere, we felt it was necessary to arrive at a similar procedure.

In 1968 and 1969, the American Conference of Governmental Industrial Hygienists published notices of intended changes to lower the TLV from 5 mppcf to 2 mppcf based on light field counting techniques. In addition to this, a value of 12 fibers per milliliter of air was suggested as an alternative for the 2 mppcf. The fiber count was to be determined by the membrane filter method at 430 X magnification, phase contrast illumination. Only fibers greater than 5 μ m in length were to be counted.

In 1970 and 1971, the light field technique TLV was eliminated and only the fiber count technique was recommended. Also in these years, the TLV was lowered from 12 fibers per ml to 5 fibers per ml. This change in the sampling and counting technique was brought about by work carried out by the Division of Occupational Health of the U.S. Public Health Service. Their study carried out in asbestos textile plants, was concerned primarily with obtaining some relationship of dust counts by impinger sampling to fiber counts from membrane filters using a higher resolution microscope objective for the latter. The information they obtained was not meant at that time to replace the standard impinger method. With the ratios they obtained they attempted to:

- 1) indicate an approximation of the relationship of impinger counts to fiber counts from Britain,

DUP 0902031