

December 12, 1975

MEMO TO THE FILE:

Reference Geoffrey Nicholson's letter of 11-18-75, subject: "Proposed Tightening of OSHA Standards for Asbestos," the contents have been reviewed and the following comments are offered. It is hoped that they will be considered pre-industry.

The recently promulgated 0.5 fiber/ml. proposed standard was a progressive reduction from the previously proposed 2 fiber/ml. standard based on new research and statistical data which revealed that carcinogenic and related effects do occur at exposure levels well below the latter proposed limit. The two fiber limit was first established from data collected on 290 asbestos textile workers in Great Britain. These workers exhibited some of the few exposures worldwide which had been consistently measured since 1933. In 1971, the available data on these workers showed little evidence of clinical disease and suggested that the incidence of cancer and asbestosis would be markedly reduced by reduction of occupational exposure to identified levels. The Committee of the British Occupational Hygiene Society came to the conclusion that by lowering the permitted level to 2 fibers/ml. as a time weighted average, employees could be permitted to work in such environments for a full working lifetime (50 years) without substantial risk. Since there were few data of comparable nature in the United States, the British standard was given great weight in the development of our own standard.

However, in 1972, results of evaluation of new x-rays of the original 290 British workers were reported as showing many abnormal findings, even in the face of prolonged exposure at levels less than 2 fibers/ml. There was clear evidence of an excess of lung cancer and respiratory deaths among those first exposed between 1933 and 1950. Equally important was the finding that there is still an excess of deaths due to lung cancer after 15 or more years of exposure, even among those first exposed in 1951 and subsequently. In addition