



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

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ABEX-169

SCF-ABEX-1835

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to the above, new information has been forthcoming within the United States on the toxic effects of asbestos. To put it succinctly, the data indicates that at exposure levels of 2 fiber/ml. and above, deaths on the order of 10-11% from neoplasms can be predicted.

Based on the research data accumulated internationally to date, we do not feel that the 0.5 fiber/ml. standard is unreasonable, nor do we concur that the asbestos industry, product manufacturing in particular, has been singled out as a scapegoat or "whipping boy." Intensified attention to physical and chemical agents in the work environment will inevitably encroach into the various segments of industry. We cite as an example the hue and cry surrounding the vinyl chloride exposures of two or three years ago which developed after revelation by B. F. Goodrich of three known deaths from angiosarcoma. OSHA proposed a permissible 8-hour exposure limit of PPM which is for all intents and purposes a "no detectable limit." The petrochemical industry protested vigorously and accused OSHA of acting prematurely without valid evidence or substantiating data. Despite the protestations which in no way refuted the toxicological findings, vinyl chloride was assigned as a human carcinogen, and the PPM permissible limit was sustained. It is interesting to note that since adoption of the standard, the petrochemical industry, with the major producers taking the initiative, are successfully eliminating this serious exposure source.

It is our contention that reduction of asbestos exposures by Abex to comply with the 0.5 fiber limit is not a multi-million dollar program and will definitely not require scrapping or replacement of all existing exhaust systems as asserted in previous correspondence. An excellent start has been made in Book Preform where the exhaust systems are well designed as they are based on the concept of total enclosure. Although air sampling has not been conducted in the department since installation of the systems, it is likely that exposure levels will approach or fall within the 0.5 fiber limit. If excursions are observed, they can be reduced through improved housekeeping and possible enclosure of the mix buggies. The remaining exposures

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can primarily be attributed to Blok Preform, Blok Finish, and Disc Finish. The requirements for elimination of these exposures have been detailed in several previous Industrial Hygiene survey reports, and will not be reiterated herein. In brief, point source collection should be replaced with hoods which enclose the operations to as great an extent as possible. Duct velocities should be sufficient to provide flow rates of at least 200 feet per minute at the hood faces.

Our main objection to the promulgated standard relates to the recordkeeping requirements for exposure and medical records. The standard directs that such records be kept for a period of at least 40 years or for the duration of the employee's employment plus 20 years, whichever period is longer. This time period is excessive and contributes to the burden of compliance to which the employer is subject. In the case of larger employers, records maintenance will require the services of a full time clerk, and storage will pose a serious problem. There is one consolation however. If exposures are eliminated, the number of records requiring preservation will be reduced since only those locations where asbestos fibers may be released are subject to monitoring. This stipulation also applies to medical records since condition of exposure must exist to warrant maintenance of extensive records.

SPNY 003476



Rec'd 12/4/75
CAB

Holiday Inn OF RAMSEY

RAMSEY, NEW JERSEY 07446

To: Geoffrey Nicholson
Chief, Kings
Windsor 7.8.75

In reference to your letter of 11/18/75, subject: "Proposed Tightening of OSHA Standards for Asbestos," I have reviewed the contents and offer the following comments. I sincerely hope that they will be considered pro-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 accurately measured and 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 fiber/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



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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 fber/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 to the above, new information has ~~been~~ forthcoming ~~rationally~~ within the United States on the toxic effects of asbestos. To put it succinctly, the data indicates that at exposure levels ~~in excess of~~ 2 fber/ml and above, deaths on the order of 10 to 11% from neoplasms can be predicted.

Based on the research data accumulated internationally to date, we do not feel that the 0.5 fber/ml standard is unreasonable nor do we concur that the asbestos industry, product manufacturing in particular, has been singled out ~~for special~~ ~~examination~~ as a scapegoat or "whipping boy." Intense attention to physical and chemical agents in the work environment will inevitably encroach into the various segments of industry. We cite as an example the hue and cry surrounding the vinyl chloride exposures of ~~two or three years ago~~ ^{which developed after ~~only~~ ^{revelation}} ~~the~~ ^{of 3} ~~known deaths from~~ ^{angiosarcoma} ~~liver cancer~~. OSHA proposed a permissible 8 hour exposure limit of ~~1~~ ¹⁰ fber/ml.



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"detectable limit". The petrochemical industry protested vigorously and accused OSHA of acting prematurely with valid evidence or substantiating data. Despite the protestations which in no way refuted the toxicological findings, vinyl chloride was assigned as a human carcinogen, and the ~~low~~ PPM permissible limit was sustained. It is interesting to note that since adoption of the standard, the petrochemical industry, ~~like~~ with the major producers taking the initiative, are successfully eliminating this serious exposure source.

It is our contention that reduction of asbestos exposures by Abex to comply with the 0.5 fiber limit is not a multimillion dollar program and will definitely not require scrapping or replacement of existing exhaust systems as asserted in previous correspondence. An excellent start has been made in Block Perform where the exhaust systems are well designed as they are based on the concept of total enclosure. Although air sampling has not been conducted in the department since installation of the systems, it is likely that exposure levels will approach or fall within the 0.5 fiber limit. If excursions are observed they can be reduced thru improved housekeeping and possible enclosure of the mix buggies. The remaining exposures can probably be attributed to Block Perform, Block Finish, and Disc Finish.



have been detailed in several previous industrial hygiene survey reports, and will not be reiterated herein. In brief, point source collection should be replaced with hoods which enclose the operation as far as possible. Duct velocities should be sufficient to provide flow rates of at least 100 feet per minute at the hood faces.

Our main objection to the promulgated standard relates to the recordkeeping requirements for exposure and medical records. The standard states that such records be kept for a period of at least 80 years or for the duration of the employee's employment plus 20 years whichever period is longer. This time period is excessive and contributes to the burden of compliance to which the employer is subject. In the case of large employers, records maintenance will require the services of a full time clerk, and storage will pose a serious problem. There is one consolation, however. If exposures are eliminated, the number of records requiring preservation will be reduced since only those locations where asbestos fibers may be released are subject to monitoring. This stipulation also applies to medical records since condition of exposure must exist to warrant maintenance of extensive records.

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