

ASBESTOS INTERNATIONAL ASSOCIATION

(Limited by Guarantee)

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MEMORANDUM

TO: Member Associations
Medical Advisory Panel
Executive Committee

AIA/5/FIB

FROM: Director-General

10 June 1981

Cape Blue Asbestos

Please find attached a well referenced paper on Cape Blue Asbestos which Mr. Baunach has asked me to circulate.

Tn Stack

Sir Neville Stack

PLAINTIFF'S EXHIBIT

CAP-1361

CAPCO JEN 0013170

11-11-1977
MA/5/FIB

PREMATURE PREJUDICE AGAINST CAPE BLUE ASBESTOS

1. For more than 20 years, attention has been focused all over the world on potential health hazards associated with asbestos and particularly Cape blue asbestos.
2. Since the 1972 Lyon Conference, it has repeatedly been stressed at almost every international scientific meeting on health hazards of asbestos that there is no significant difference between commercial asbestos fibre types in relation to the incidence of asbestosis and bronchogenic carcinoma.

(1 - 4)

3.1. It is only in relation to mesothelioma that the United Kingdom and subsequently some other countries such as Denmark, Holland, Ireland, Japan, Norway and Sweden assumed a higher risk for crocidolite. However, according to current scientific knowledge there is no conclusive evidence for this assumption. (5-8) Therefore, the question arises whether there is any justification for discriminatory legislation or control measures as initiated in Britain in 1969.

3.2. It would appear that the proved number of primary diffuse mesothelioma cases up to 1977 from all over the world was confined to roughly 5 000 as indicated by Prof. J.C.

McDonald at the Johannesburg Asbestos Symposium in October 1977 (p 10)

3.2.1. In general, Prof. McDonald's paper did not give any essentially additional information to that presented at the Brighton Conference in 1975, except for quoting and over-emphasising the incidence of the disease in personnel employed during World War II in two gas-mask factories, one in England and the other in Canada, with high rates of cases at "relatively low exposure". However, during discussions at the Conference, it was strongly implied that those exposures were not as low as claimed by Prof. McDonald, but were in fact very high. Crocidolite is dustier to handle than other asbestos types and the packing in the gas masks of loosely bound pads gave rise to higher exposures. It is noteworthy that Australian crocidolite was used in the gas mask factories and it is possible that the risk for this fibre is at variance with that of Cape crocidolite.

3.2.2. 5 000 cases were reported throughout the world over a period of 25 years. By comparison, the annual incidence of deaths from lung cancer among males in the UK amounts to over 25 000 (10%)(12) and in the USA to more than 50 000 cases (5%). According to Prof. Selikoff at the Johannesburg Asbestos Symposium (13) and subsequently confirmed by Dr R. Saracchi (for the IARC/WHO) at the Washington Conference, December 1977,

lung cancer in asbestos workers is in fact a far bigger risk than mesothelioma, mainly in conjunction with smoking.

3.2.3. Where employment records were available, 66% of mesothelioma cases could be attributed to asbestos exposure. (14) There was no asbestos exposure in 34% of the cases of the McDonald survey. It seems strange that no attention has been paid to this phenomenon, although for several years it had been known that there are other causes for mesothelioma.

(15) For instance, in two villages of Eastern Anatolia, Turkey, pleural and peritoneal mesothelioma were of higher incidence than reported anywhere else in the world. All soil samples were free of asbestos fibres and zeolite minerals were shown to be the causative agents of these mesothelioma cases in Turkey.

(16) There are several reports from India dealing with mesothelioma caused by bagassosis.

3.2.4. The ecology of mesothelioma is still unknown and there is as yet no reliable method of early diagnosis of the disease. (17) The indictment of blue asbestos came mainly from South Africa where it was considered to be the sole causal agent of mesothelioma, but not so in other countries.

3.2.5. Hammond and Selikoff report a high incidence of cases

among insulation workers who, they emphasise repeatedly, were exposed largely to chrysotile and amosite.

(18) Apparently, crocidolite was not used in the United States for insulation purposes. The largest U.S. asbestos manufacturer never used crocidolite for insulation at any time, employing it only in two product lines, namely AC pipes and packings. (19)

4. The whole concept of asbestos exposure was queried at the Johannesburg and Washington Conferences by Dr. George Wright who claimed that it was intellectual arrogance to speak about asbestos exposure "being characterised solely by the number of fibres of varying sizes present in the environment of the working place. In the real world of those exposed at working places nothing could be further from the facts." No people anywhere in asbestos mining, milling and/or manufacturing were exposed to asbestos only. There were various risks other than asbestos which, except for the synergistic effects of cigarette smoking, had so far been completely ignored. (20)
5. By modern standards, past exposure was incredibly high, definitely in the hundreds, peak periods in the thousands. (F/cc)(21-24)
Most exposure estimates were vague to the extent that one should not even bother to consider them. (25)
6. Except in the case of asbestos mining, it is unusual for workers to be exposed to one type of asbestos only in the course of a lifetime, and except for very few and fairly small applications, blue asbestos fibres are never used on their own but mainly in

relatively small quantities as supplementary fibres with fibrous mixes of the asbestos-cement industry. Although blue asbestos has been used in that industry all over the world for more than half a century, relatively few confirmed cases of mesothelioma have been reported from these factories.

7. Profs. A. and J.C. McDonald maintained that mining environments may well be free from carcinogens in the kind found in factories, ports and industrial cities. Moreover, fibre as produced at mills almost certainly differs in length and diameter from that used in subsequent industrial processing. (26)
8. Many observers completely ignore the fact that, in the earlier reports of Wagner, there were only a few cases of occupational exposure, the balance being environmental where other pollutants, tubercular scarring, climatic conditions, ethnic factors, etc. could have been contributory factors in the development of the disease.
9. In October 1977, the South African Asbestos Tumour Reference Panel had, according to Prof. Webster, 712 cases on its register, which included all recorded S.A. cases of mesothelioma since 1956. (27)
- 9.1. Occupational exposure had been established in 420 cases only but in 10% of these there were no firm indications of asbestos exposure.

9.2. Actual mining exposure accounted for 33% of these cases, or roughly 20% of the total. There were another 20% environmental cases, mainly from the northwestern Cape, 20% non-mining industrials and 30% with no knowledge of any exposure or details of occupational history.

10. At the 1978 New York Conference, it was emphasised that:

10.1. Respirable asbestos fibres are ubiquitous anywhere in the world. Many short fibres found in human lungs may have nothing to do with commercial fibres, but may have been completely untreated natural fibres inhaled from the ambient atmosphere.

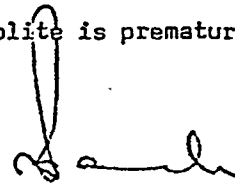
10.2. There must be an exposure level which can be tolerated otherwise we would have had many more cases of mesothelioma apart from many more asbestosis and lung cancer occurrences from primary production (mines and mills).

10.3. In British ships, extensive use was made of blue asbestos in spraying decks and bulkheads for several decades. Thousands of people must have lived constantly under these conditions. More than 1,5 million men have served in the British Navy between World War I and now. This suggests that there does exist a level of exposure which is safe. Unless respirable blue asbestos fibre is released through poorly controlled stripping or demolition, there appears to be no risk. (28)

11. CONCLUSIONS

The main arguments against crocidolite were and are still being taken from initial SA investigations of limited occupational and mainly environmental exposures, without any details on the actual extent of dust exposure and dust properties. Elsewhere in the world, industrial asbestos exposures were mixed and in most cases extremely heavy. Such conditions ceased to exist long ago. According to two recent independent surveys of published literature on epidemiological studies, animal experiments and toxicological tests, there is no conclusive scientific evidence justifying any differentiation between the potential health hazards of various asbestos fibres. (7-8) Moreover, there are still many serious gaps in the medical knowledge of asbestos-related diseases, apart from the fact that various medical evaluations of past conditions many years ago are not internationally comparable by reason of differences in diagnosis and incompatibility of statistical information and documentation.

Present knowledge of the mechanism of the cause of cancer is incomplete and the absolute carcinogenicity of the various asbestos fibres is still unknown. According to Langer, of the Mount Sinai Medical Centre N.Y., the present emphasis on crocidolite is premature. (29)


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Johannesburg
6th May 1981