

35/233

5th July 1966

CRIST QUARRY ENQUIRY

Before reading his statement, Dr. J. C. Wagner stated that he was speaking in his own personal capacity and not as a member of the Medical Research Council.

Dr. Wagner said that he had visited the Quarry on the evening of 4th July, after tipping had ceased. He did not go down into the Quarry, but looking at it from the road he could see no evidence of excessive dust.

As far as he knew, the white asbestos dust, bagged and tipped as had been described, would not cause a hazard to health. However, investigations were still going on, as pleural tumours had occurred from relatively slight exposure to asbestos dust. Any asbestos dust would cause asbestosis, and in Canada and the United States it was believed pleural tumours had also been caused by white asbestos. Asbestosis, or scarring of the lung, was only due to excessive exposure to dust, for example, in people working in daily constant exposure to it. Therefore, there was a need to control all unnecessary exposure to this mineral. Dr. Wagner agreed that as long as a clear definition was made between what was dust and what was broken material, and floor sweepings were bonded with resin, that was sufficient. Dr. Wagner thought that the present arrangements for tipping (bagging, sealed containers and a covering of earth) were remarkable and a very good idea. He added that, in the present stage of knowledge, the bagged dust would not be a hazard to health.

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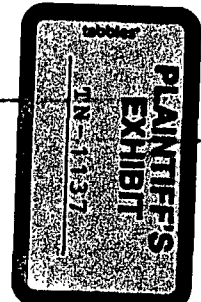
Dr. Wagner said that he did not fully agree that tumours would occur as a result of exposure to chrysotile asbestos. There was, however, some evidence from the United States to the contrary and more comparative surveys would be necessary. Chrysotile asbestos was suspected of causing tumours, but opinion was still doubtful. Carcinomas of the lung were not limited to any one type of fibre, chrysotile included.

An experiment of Dr. Wagner's involved the exposure of rats to fine chrysotile dust. One rat had developed a pleural tumour and had died, and the tumour was found to be similar to those seen in human beings. However, this was only an early experiment and there was a large number of experiments still going on.

He said that it was true people in the United States were dying of asbestosis which could be traced to chrysotile asbestos, but there were no tumours.

People living in the vicinity of a certain factory using chrysotile asbestos were found to be suffering a health hazard. However, although the factory was using chrysotile asbestos today, it was not possible to ascertain what they had been using 20 years previously.

Dr. Wagner agreed that if the dust escaping from Crist Quarry was excessive, there would be a health hazard, but the amount of asbestos dust in the atmosphere must be higher than the figure obtained as a result of the dust counts. It was necessary for a considerable amount of white asbestos dust to be in existence to cause cancer of the lung and asbestosis.



He agreed that there should be fencing round the Quarry to prevent children playing there, although the risk of exposure was not great if the dumped material was covered. Any quarry should be fenced to stop children falling down.

Dr. Wagner agreed there would be a health risk if exposure were excessive. "The conditions where it is really dangerous is where you cannot see the chap working next to you", he said.

JCW/Y

22nd June, 1966

POSSIBLE HAZARDS DUE TO ENVIRONMENTAL EXPOSURE
TO ASBESTOS DUST

It has been accepted for at least forty years that there is a risk to individuals exposed to excessive amounts of asbestos dust in industry. The dust produces a progressive fibrosis (scarring) of the lung, called asbestosis. For the last twenty years it has also been shown that there is an association between severe asbestosis and cancer of the lung. The asbestos industry is well aware of these health hazards and rigorous control of the dust within the factories is now widespread.

The non-occupational cases of asbestosis have been reported from various countries but the number is still compared to the total cases of asbestosis, and the disease is usually not severe.

Within the last ten years there have been three findings which are relevant to the health hazard of non-occupational exposure to asbestos dust. These observations are still under intensive investigation and it is not possible to reach a final conclusion as to their significance at this time.

The first of these findings is the discovery of asbestos fibres in the lungs of people with no known occupational exposure to asbestos. Reports have been published from hospitals in Great Britain, South Africa, The United States and Finland, and other countries. Between 25% and 60% of older individuals have been shown to carry asbestos fibres within the lungs. In the majority of individuals the number of fibres present is not numerous except in those who have been exposed occupationally or lived in areas more than usually closely associated with asbestos mining or production.

The second of these observations is the discovery in Finland and in Germany and in some other countries that there are definite areas of thickening of the layers lining the chest cavity (the pleura) in people living in the vicinity of asbestos mines and factories. These pleural thickenings can sometimes be observed on the chest radiograph particularly when they contain calcium salt, but they may be present to a slighter degree in those in whom no X-ray abnormality is detected. This thickening of the pleura has been long known to be a feature of those who have occupational exposures to asbestos. The thickening of the pleura does not of itself appear to cause disability in most instances.

The third finding, and probably the most important, is the discovery of an association between the exposure to asbestos