

MR. K. H. DIXON

TURNER & NEWALL LIMITED

MANCHESTER

FROM

H.D.S. HARDIE

TO

AJA/ADB/MCP/AHW

COPY TO

RDNS
VNK/PMR/NV

7th September 1981

CONFIDENTIAL

ASBESTOS AND HEALTH

I attach a copy of an article which appeared recently in an Indian journal. As you will see, this repeats significantly the text of the article which appeared in the New Scientist in London earlier in the year and which I sent to you on 16th April. However, it adds a paragraph towards the end which follows the only visit of any of the three authors to any T&N plant in India and it shows the ignorance of the author on the subject of filtration.

Although the article enclosed is repetitive of much that I have sent to you before, I have sent it again to emphasize three points:

1. investigative journalism does not respect national boundaries;
2. those who dislike multinational companies and those who believe that the use of asbestos fibre is sinful can come together to accuse the multinational of exporting pollution;
3. our critics know that we are sensitive about our reputations and therefore look for weaknesses where weaknesses might be expected, i.e. in Third World Countries.

I would not now be surprised if journalists now tried to find out about T&N's asbestos operations in Africa. There is evidence in Europe that the anti-asbestos lobby is now making a determined effort to attack the asbestos-cement industry. It rightly believes that if asbestos-cement can be driven off the world market the majority of asbestos mines will be forced to close down. If doubts can be created about the safety of asbestos-cement, and these doubts are discussed in newspapers, then perhaps specifiers will turn to alternative materials. Moreover, pressures would build up which governments themselves might find difficult to ignore.

More than ever, therefore, we have to ensure that our operations are to standards which defeat criticism. The essential elements in achieving these standards are:

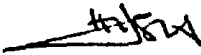
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1. asbestos fibre and asbestos soft waste should only be transported in impermeable bags or other containers;
2. in asbestos processing factories bag opening should utilise the best technology available. At present, the best bag opener on the market is of Belgian design. Even Hyderabad Asbestos Cement Products Ltd. in India has purchased a Belgian bag opener, even though they themselves are manufacturers of asbestos-cement machinery. Where import regulations permit purchases I consider that this should be our preferred bag opener also;
3. where engineering has not yet brought dust levels down below a maximum of 2 f/ml, correctly fitting regularly serviced respirators should be worn by operatives and supervisory staff;
4. education programmes on industrial hygiene and good house-keeping should supplement in-house medical surveillance;
5. employees should change into work clothes on the factory site and such clothes must not be taken home for laundering. Where the company is unable to arrange its own laundry facilities a contract service should be arranged and the contractor instructed on the precautions to be taken. Periodic visits must be arranged to the contractors to ensure that those precautions are being followed;
6. asbestos waste dumps must be visited regularly to ensure that dumped waste is adequately covered by top soil. Normally the top soil covering operation should follow immediately the dumping of the waste. Asbestos dust levels at a waste tip should be monitored in exactly the same way as dust levels are monitored in factories.
7. a close working relationship should be established with the factory inspectorate and other regulatory authorities.

A final point which reflects my own prejudices: I believe that every T&N company should take an initiative to persuade other companies in its industry to adopt the Asbestos International Association's approved 'a' label which incorporates an asbestos health warning. Experience in western Europe and Australasia has shown that the use of this label has no adverse effect on sales.

Progress towards achievement of the items above should be covered in your annual report which I asked for under cover of my letter of 6th April 1981.


H.D.S. HARDIE

Industrial Hazards Exported to India

Barry I Cardemian

Rakesh Madan

Robert Mayes

ASBESTOS is the name for a family of fibrous minerals that have found widespread use in industry over the past century. This is due to asbestos' excellent resistance to heat and chemicals and its tensile strength. In 1977, eleven facilities produced 420,000 tons of asbestos-cement (A-C) sheet and 81,000 tons of A-C pipe in India (1). There were more than one million tons of A-C pipe produced in the US in 1980, but A-C sheet is hardly used at all in the US anymore (about 70,000 tons in 1980).

Asbestos readily breaks down into a microscopic dust when handled, and unfortunately the inhalation of asbestos fibers is extremely hazardous. British and American medical authorities published reports of fatal asbestosis (a scarring of the lungs) in the early 1930s, among workers with as little as 6 to 8 months of heavy exposure to the dust. The disease does not usually manifest itself in less than 10 years from the onset of exposure, and in its early stages the main symptoms is shortness of breath upon exertion. The shortness of breath can eventually become incapacitating and lead to death. There is no cure for asbestosis, and the only hope lies in preventing workers from having to breathe the dust in the first place. D B Hanon has found high concentrations of airborne asbestos dust and diagnosed asbestosis in one-quarter of the workers (with more than five years on the job) employed in an asbestos-cement plant in India (2).

In addition to asbestosis, which can be caused by years of lower exposure as well as less than a month of intense exposure, asbestos causes a variety of cancers in man. The inhaled fibers migrate throughout the body, and cause cancers of the lung, stomach, and other sites. Otherwise-rare cancers known as mesotheliomas have afflicted not only asbestos workers, but also workers in all the building trades, asbestos workers' families exposed to dust brought home on the workers' clothes, and neighbors of asbestos plants, some of whom played as children on asbestos waste dumps. US health authorities acknowledge that the evidence does not

point to any level of asbestos exposure as being free from cancer risk. In the light of this, tougher standards have been recommended in cases where asbestos can't just be replaced by safer substances (3).

In 1978, US health authorities estimated that 50,000 new cases of cancer will occur annually for 30 more years as a result of past exposures to asbestos in America. The recognition of this catastrophe has led to bans on asbestos in insulated pipe insulation and other products, and increasingly severe regulations on both the use of asbestos in work and asbestos pollution. The decline in US consumption of asbestos accelerated in 1980 and asbestos cement products reflect this. One company, Johns-Manville, has recently closed four asbestos-cement pipe manufacturing plants. This is largely a result of public concern over the contamination of drinking water supplied by asbestos-cement pipes. US consumption of A-C pipes declined by one-third in 1980. Sweden, for example, has banned asbestos-cement (4).

To avoid the cost of regulations and lawsuits for damages, multinational firms have tended to developing nations as substitutes to manufacture cheaply, and as a "test market" for developing new markets.

A survey in 1980 focused on asbestos manufacturing activities in India that had been constructed and operated in collaboration with the world's largest multinational asbestos corporations. In Ahmedabad, Shree Digvijay Cement Company Ltd produces 50,000 tons per year of asbestos-cement pipe sheet. Its Indian collaborator is the Johns-Manville Corporation, the largest asbestos company in the Western Hemisphere. Shree Digvijay has been a steady customer for Canadian asbestos fibre mined by Johns-Manville. Asbestos-laden solid wastes and process water are dumped outside of the Ahmedabad plant in a completely wanton manner. Children play on the waste dumps, and workers are not informed of the lethal dangers of the dust. Johns-Manville is the exclusive seller of Shree Digvijay products

shipped to the Middle East and Africa. Ironically, these products bear no warning labels, yet Johns-Manville is being sued for billions of dollars by thousands of American workers with cancer and asbestosis for not having affixed warning labels on products sold in the US until 1984 (5). With juries sometimes awarding punitive damages to asbestos victims and new lawsuits being filed at the rate of over 5,000 per year, there is growing concern that even Johns-Manville and other large companies may not be able to "meet their obligation" (6).

In Bombay, Hindustan Ferrodo Ltd produces brake linings, clutch facings and asbestos textiles. This company is 74 per cent owned by L.C. dominant British asbestos company, Turner and Newall. In late 1979, exports to the UK were halted after shipments were refused because they were not triple-packed in polyethylene bags. Inside the plant, conditions resemble those in British factories 50 years ago (4, 5). The workers are not informed about the hazards of breathing asbestos dust, which is present in visible concentrations in the plant atmosphere. Workers are not informed by management when their chest X-rays are hazardous. Even the simplest housekeeping measures are not employed: e.g. dust on the floor is dry swept, not wet mopped. The same brooms are used for street cleaning and the dusty work clothes, ensuring the recontamination of the workers' houses. Overwhelmed exhaust ventilation is used to remove dust in some processes. Suction dusts lead to a room where the waste dust is collected in canvas sacks. The wastes are transferred to jute sacks which leak dust profusely. When charged with such practices in print, management has simply denied everything, claiming, for example, that there are "very clear notices" that point the dangers (of asbestos) out in the plant. "The laborers who carry the dust away from the ventilation system have only to remove and close the polyethylene bags in which the dust lies and take it to the stores" (7).

In a plant tour conducted in March 1981, one of the present authors (Rakesh Madan) was informed that the dust is actually collected in canvas bags, then transferred to jute bags, which are loaded into an open truck and shipped to the dump in Danner. Nowhere in the dust collection process were polyethylene bags observed

to be used. Arin, the works director, explained, "We have to use canvas bags so the air can pass through them to facilitate collection". During two plant tours, no warning notices were seen in the plant. Asbestos waste was piled outside the plant and collected by ventilation ducts along a major commuter train line.

A management's assertion that "the factory has a good medical record" is a grim reminder that standards of health protection in the asbestos industry are rather low. *The Times of India* reported that Hindustan Fertilis had fired employees whose medical examinations showed they were suffering from asbestosis and noted "at least 15 per cent of those still on the job are affected and yet are neither discharged nor duly compensated" [9].

Even in the apparent vacuum of government regulation, it is appalling that these giant asbestos companies conduct business under such conditions in India and elsewhere. Yet the concealment of the hazards of asbestos is neither new nor necessarily denied. A meeting of asbestos firms based in 23 countries was held in 1978 to consider the matter of warning labels on their products. An international memorandum reflected their unanimous conclusion to avoid the use of warning labels wherever possible [11].

In those countries where it was felt it was still too early to start voluntary labeling, in fear of a possible negative influence on sales, steps should be taken to prepare commercial people for the idea, making them feel in the absence of an industry's initiative we could run the risk of being imposed the "black and white" standard for our products.

In response to the bad publicity about South Korea and Indian asbestos industries, to forming a trade association. The Indian companies will train now in a more adverse posture at a meeting set for June 1981 in Thailand.

Needless to say, the asbestos industry is not the only business of severe health hazards in India, though it is among the worst. Similar problems can be encountered in other industries, including pesticides, dyest, and other chemicals [10].

- [1] Bridgford, K. et al, "Evaluation of the Factors of Cancer in the United States Related to Occupational Factors", US Dept. of Health, Education, and Welfare, Washington, DC, September 15, 1978.
- [2] Castleman, B. I. and Vera Vera, M. I. "Hypothesis: Prevalence of Asbestosis", *Internat J Health Ser*, 10: 389-401 (1980).
- [3] Castleman, B. I. "Possible Standards: Asbestos in India", *New Scientist* 89: 522-523 (Feb 26, 1981).
- [4] "Says that Are Seizing Asbestos", *Business Week*, pp 109-109 (April 13, 1981).
- [5] N. Venkatarman, Managing Director, Hindustan Fertilis, letter

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- [6] Brown, R. K. "Hypothesis: Asbestos Men in America", *The Times of India*, March 1981.
- [7] Castleman, B. I. "The Hazards of Asbestos in India", *Internat J Health Ser*, 9: 569-608 (1979).
- [8] Castleman, B. I. "The Hazards of Asbestos in India", *Internat J Health Ser*, 9: 569-608 (1979).

[11] Conclusions

- [1] Asbestos is a major health hazard in India, and the asbestos industry is among the worst.
- [2] The asbestos industry is among the worst in India, and the asbestos industry is among the worst in India.

Shock report on UK asbestos firm

by MARTIN BAILEY

THE BRITISH asbestos company Turner & Newall exposed its Swaziland workers to dust levels more than 25 times above the safety standard allowed by the company policy, according to an unpublished report obtained by THE OBSERVER.

The study reveals that dust levels at the Havelock mine and mill, employing 2,100 people, were above 50 fibres per cu cm in some areas until 1976. Although they have since decreased, they are still above the company's safety standard in parts of the plant.

The Havelock study, prepared by the UK Medical Research Council, also reveals that nearly a third of the workers sampled in 1976 had developed asbestosis. The company's former doctor in Swaziland, Dr Anthony Bradley, who helped write the report, admits that he was 'shocked' at the results. 'Before the survey we had simply been misdiagnosing what turned out to be asbestosis,' he said.

T & N, the company at the centre of a row over the Yorkshire Television film 'Alice', secretly considered closing down the mine three years ago. But Dr Bradley, who has since left T & N, said: 'It was right not to shut down the mine because of the effect it would have had on unemployment.'

But even now, according to the study, 'In dry, windy weather dust from the mill and waste tips is blown over the whole area, so that even estate workers are exposed to the "background" level.' These new revelations about T & N's safety standards are likely to put further pressure on the company to reduce dust levels. Its shares have already dropped

in value by £11 million during the past two weeks because of mounting concern of litigation from asbestos victims.

The study of the mine at Havelock, 60 per cent owned by T & N and 40 per cent by the Swaziland Government, was prepared by the Cardiff-based Medical Research Council's Pneumoconiosis Unit. Two of the five members of the team, Dr Bradley and Dr John Allardice, were doctors working for T & N.

The results of the study, which is due to be published later this year in the *British Journal of Industrial Medicine*, claims that for the period until 1976, 'no accurate estimates of dust exposure are possible, as monitoring of the airborne dust was not started' until then.

Dangerous

Dr Bradley, who was Havelock's doctor throughout the 1970s, has admitted to THE OBSERVER that, although there was no regular monitoring, dust levels were recorded on an occasional basis. These figures, he said, showed that white asbestos dust levels in some parts of the mill exceeded 50 fibres per cu cm.

Even outside the mill, conditions were also dangerous. The Cardiff study points out that until 1970 asbestos was packed into hessian sacks and transported on a 13-mile aerial ropeway, which resulted in the workers on the ropeway receiving a high dust exposure. A T & N publicity photograph shows nearly a hundred children playing outside the mine school, a hundred yards from the mill and its waste tips. In 1976 a dust suppression programme was introduced

according to Dr Bradley, partly because of pressure from the media. He said: 'Turners then made a real effort, and there was a major improvement. Compensation was also given to asbestosis victims ranging from £1,000 to £7,000.'

But conditions at Havelock have contradicted T & N's public stand. Mr Patrick Griffith, then the company's chairman, told shareholders in the 1976 annual report: 'It is our policy to apply the current British (safety) standard in our factories throughout the world.'

The UK legal limit, introduced in 1969, is 2 fibres per cu cm, which will shortly be reduced to 1 fibre. Yet according to the Cardiff study, the level at Havelock was 25 times this figure in 1976, and levels of exposure have 'gradually been decreasing' since then.

No figures of post-1976 dust levels are given in the Cardiff study. But Dr Bradley says that, when he left Havelock two years ago, the maximum level at the mill was 15 fibres. Last week a company spokesman told THE OBSERVER that the average personal exposure for the 2,100 workers at Havelock was now below two fibres, and 'only 4 per cent of the work force received the equivalent of between two and three fibres.'

But some dusty parts of the plant were therefore still above the UK standard.

The Cardiff study concluded that 43 per cent of the workers in the dustiest areas of Havelock had developed asbestos pneumoconiosis or asbestosis. Overall, 30 per cent of the 438 workers in the sample had contracted the first stage of the lung disease, known as category 1 pneumoconiosis.

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