ASBESTOS MULTINATIONALS IN INDIA: THE EXPERIENCE OF TURNER & NEWALL

DR. GEOFFREY TWEEDALE

***Dr. Geoffrey Tweedale**, Manchester Metropolitan University Business School, England;*
email: G.Tweedale@mmu.ac.uk

"If the conditions prevailing in India were to be transferred to Europe, there would almost certainly be instantaneous revolution."

Richard A. Wells (T&N director), Notes on a Visit to Hindustan Ferodo, October 20/24, 1982.

In what remains of the world's asbestos industry, it is an article of faith that asbestos under "controlled" conditions is safe. This argument is still being used to promote asbestos manufacture and usage in India. Supporters of the "magic mineral" give the impression that asbestos, particularly chrysotile, is almost benign and that not to utilize its many advantages would be almost a crime in itself.

In these contemporary debates, it is often forgotten that India already has over seventy years' experience in manufacturing asbestos. Ever since the multinational asbestos industry saw India as an important market in the early twentieth century, an asbestos industry has existed in India. Not surprisingly, the country also has the experience of dealing with the occupational disease fallout from its involvement with asbestos. The history of asbestos in India is not a comforting one.

India was once part of the British Empire, so it was logical that Britain – an early pioneer in the production of asbestos – should lead the way in India. British involvement began in the 1920s, when a company specializing in asbestos-cement, Bell's United Asbestos, set up a marketing agency in Bombay (Mumbai) for imported asbestos-cement sheets. That company was soon taken over by Turner & Newall (T&N), the leading British asbestos conglomerate. T&N decided to begin production in India by building an asbestos-cement factory at Kymore in Madhya Pradesh (formerly the Central Provinces). The company, part-owned by Indian interests, was registered as Asbestos Cement (India) Ltd. in 1934.

Evading Indian tariffs was one of the key reasons for the move, though the potential Indian market for building materials was an obvious attraction. T&N's output, mostly construction materials such as roofing sheets, competed against locally-made clay tiles and so the factory initially made slow progress. However, a second sheeting factory was built at Mulund (Mumbai) in 1937, which became the company's head office in India. A third factory was established the following year at Garden Reach, Calcutta. In 1953, a fourth factory was opened at Podanur, Coimbatore District, in Tamil Nadu. The group's brand name in India was "Everest."

The management of AC (India) Ltd. had Colonial sentiments. A company brochure, published in about 1949, related how the company "looked to the simple unsophisticated peasantry" for its labor force. Having recruited these "likeable and unspoiled people," it then returned the favor by providing housing, education, and co-operative societies. However, T&N's concerns did not extend to protecting them fully from the risks of asbestosis, which in 1931 had become the subject of government regulation in the UK. In 1937, a T&N director, Robert Turner, told the Mulund Works director (W.H. Rooksby) that instead of introducing dust control, he should simply rotate his workforce. He added: "I should not issue an instruction on this subject, as once the word gets around that asbestos is a dangerous occupation, it may seriously affect our labor force at some future date."[1] Turner told Rooksby that the Mumbai factory inspector might soon read the UK Asbestosis Regulations. But Turner believed that should present no problem, because T&N would claim that there was no dust or disease from asbestos-cement manufacture. Thus Mulund would be able to "avoid tiresome regulations and the introduction of dangerous occupation talk."

Turner proved prescient. At the start of 1938, the Chief Inspector of Factories in Mumbai wrote to the Mulund Works, expressing concern at British government statistics on disease and deaths from asbestos.[2] Turner responded to Rooksby: "All asbestos fiber dust, whether it arises in a factory or elsewhere, is a danger to lungs, and especially so where the person breathing it has not healthy lungs to start with. I should think the average Indian would be very inclined to suffer from any dust irritation."[3] However, Rooksby was told to "correct" the Factory Inspector's ideas, by stressing that asbestosis was only a risk in asbestos textiles, not cement. The letter containing this instruction admitted that T&N in the UK had cases on record of asbestos-cement workers suffering from asbestosis. The Indian Inspector was probably reassured, but he had not been told the truth.

The numbers at risk in T&N's AC group in India grew steadily from about 350 in 1935, to nearly 2,500 by the end of the Second World War, and to over 5,000 in the mid-1960s. After the war, the group was particularly profitable, especially during the 1960s when dividends were regularly over 20 percent. By the 1960s, the group was producing about 180,000 tons of asbestos sheeting and pipes annually.

This expanding market had further potential, which T&N as an expert in a wide range of asbestos products was quick to recognize. After the war, it decided to expand its production facilities in Mumbai. In 1949, it established another company named Asbestos, Magnesia & Friction Materials Ltd. at Sewri, Mumbai. Once production began to expand, in 1956 a new site for the factory was chosen at Ghatkopar, Mumbai, where asbestos textile manufacture was launched. The production of asbestos jointings was added in 1958; woven brake linings in 1960; and molded brakes in 1962. In 1964, a company reorganization brought Hindustan Ferodo into existence. A major expansion programme began with the addition of asbestos millboard and Ferobestos (a resin-coated asbestos cloth). The factory, which employed

over 1,200 workers, was similar to T&N's plant in Rochdale, England, which also had a wide range of asbestos products. T&N had a controlling interest in Mumbai, but Indian shareholders were also involved.

Hindustan Ferodo was profitable, but its formation was badly timed for the company. The 1960s was a decade in which asbestos manufacture came under unprecedented scrutiny, because of the publicity in the West concerning mesothelioma and other asbestos-related diseases. At this time, Harry Hardie was the T&N director charged with responsibility for the company's overseas operations. He was acutely aware that not only T&N's UK factories would be scrutinized, but also those overseas. In 1966, he stated:

"The Indian Factories Act does not contain special regulations comparable with the asbestosis regulations in the UK and this is not a notified disease under the Act. Factory Inspectors in India are well aware of the British regulations, but because conditions in the Works at Ghatkopar are so immeasurably superior to those obtaining in the majority of cotton textile mills in Bombay, we are regarded as a model factory, and arguing from strength, have managed to discourage the Factory Inspectorate from making air analyses inside the Works."[4]

Hardie also stated that the company was still rotating workers if they showed any symptoms of asbestosis. Worryingly, a medical examination of workers using the sprayed asbestos process in 1956 had shown several suffering from asbestosis. But the men had been allowed to continue spraying (partly because they received danger money and could not be offered any alternative well-paid work). As Hardie admitted, "over a period extending beyond ten years, we have created for ourselves a situation which cannot be solved easily." The company belatedly terminated spraying asbestos in 1966.

Despite these problems, T&N was still attracted to the developing world, as a way of offsetting falling sales in Europe and North America.[5] At a meeting of asbestos industrialists in London in 1971, Bill Raines from the American asbestos giant Johns-Manville and T&N's chairman Ralph Bateman discussed the marketing of asbestos-cement products in developing countries. According to Raines, Bateman had this to say:

"His point is that in many of these countries the life expectancy is so low, as a result of deaths from diseases from impure drinking water, for example, as well as starvation, and inadequate housing, that the question of the very, very, small risk of mesothelioma that may exist in exposure to asbestos in some situations, is totally outweighed by the contribution that asbestos pipe and other products can make to improving the living standards and, indeed, the life expectancy of people in these countries."

Raines thought that this was "an interesting philosophy," though he added: "it has to be expressed rather carefully."[6]

Hardie was still grappling with the problems of T&N's overseas factories in the 1970s. In 1975, the company physician, Dr. Hilton Lewinsohn, was despatched from the UK to assess and report on the Indian situation. Lewinsohn was an important witness. First, he was an expert in occupational lung diseases; second, although he had to work within the constraints of his profession, he was not afraid to criticize the company. On November 10, 1975, Lewinsohn toured Hindustan Ferodo, which employed about 1800 staff (with 1600 on the shop floor). About 600 men worked in the dustiest operations. He judged that general housekeeping was satisfactory, but in the asbestos textile areas the carding and spinning sections were dusty. No vacuum cleaners were available and no dust counts had ever been taken. Nor was it possible to assess the incidence of asbestos-related disease, because no medical records existed and it was only very recently that the company had introduced medical screening.

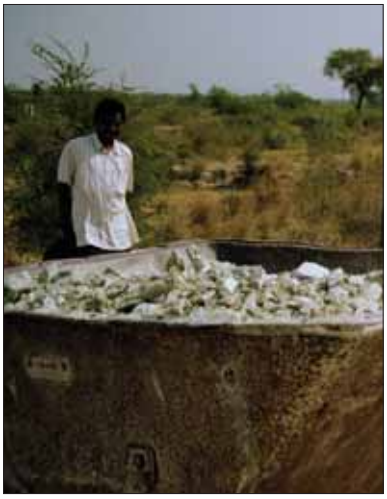
The following day, Lewinsohn went to the Mulund Asbestos Cement Works. It employed nearly 800 workers and used chrysotile from Russia, Canada and India. The Russian fiber arrived in dusty hessian bags, which were then recycled for further use in the factory – a practice of which Lewinsohn disapproved. He also disliked the policy of switching workers from the dustiest operations after a year, because "it merely leads to dose-sharing and the scattering of men with brief exposure to areas where under the old system they were lost to follow-up."[7] Medical monitoring was clearly not the company's strongpoint. Lewinsohn noted that although a few of the workers had been X-rayed annually since 1949, the plates had been lost because no one had bothered to store or trace them. Consequently, he was not able to give figures on the incidence of asbestosis or cancer, especially since workers who left were not followed up. That such diseases existed is implied in Lewinsohn's comments that sections of the factory involved in pipe-making were "dry and very dusty." The fiber-treatment plant was antiquated, with fiber tipped by hand from bags into bins. Vacuum-cleaning was not utilized, even though it was recommended in the UK.

In 1977 and 1978 the Indian asbestos industry organized two conferences at Simla and Bangalore, respectively. The events were under the aegis of the newly-formed Asbestos Information Centre, India, which had been modeled on similar quasi-public relations bodies in the UK. Harry Hardie was invited to provide the keynote address on both occasions. The conference affirmed a commitment to the 2 fibers per cubic centimetre (f/cc) threshold that had been set in

the UK in 1969, even though that threshold was almost obsolete. Moreover, not even T&N could meet such a threshold in India. Three years after Lewinsohn's visits, technologists arrived from T&N's Rochdale factory to assess more accurately the dust conditions in Bombay. Their report was circumspect. Even so, at Hindustan Ferodo asbestos-textiles dust counts up to 15 f/cc were recorded (well over the 2 f/cc threshold that had been introduced in the UK in 1969).[8] Various textile processes in the factory were judged "uncontrolled" or "unprotected." It was noted that: "The respirators presently in use in India would not be approved for use in the UK and it is questionable whether they serve any useful purpose other than emphasizing that a risk exists." The company tradition was that asbestosis was confined to the old spray process, but little confidence could be placed in this because workers could have left their employment and were not tracked. The T&N cement factories were not much better, with dust problems in the mixing and weighing areas ("fibre weighing is a good example of a poor working procedure"), and the only personal protection was the use of inadequate respirators.

Not surprisingly, workers suffered from asbestos-related diseases. In 1979, a new group medical director, Dr. James T. Allardice, toured the Indian factories and remarked:

"I found one case of asbestosis at Calcutta and one case at Kymore, with a further possible nine cases at Calcutta and the odd one or two elsewhere. This was after reviewing a fair sample of current workers' X-rays in the long-serving, most exposed group ... These findings of minimal disease are reassuring, but, one should not be complacent, since one cannot be certain about the position of lung cancer and mesothelioma ..."[9]



Such findings made multinational companies like T&N vulnerable to criticism – especially since the media could also cross national boundaries. As Hardie commented in 1981: "the nearer we get to sensible regulations in Western Europe and elsewhere the more hysterical will become the activities of pressure groups, and journalists sympathetic to them, who wish to see asbestos banned." Hardie warned that "anti-asbestos campaigns can erupt in developing countries as easily, and as swiftly, as in the developed countries."[10] He had in mind a recent article published in the British journal, *New Scientist*, in 1981, which had highlighted the "double standards" of the industry, which proclaimed its good intentions in the West yet apparently allowed poor working conditions to flourish unchecked in countries such as India. It was written by the campaigning environmentalist Dr. Barry Castleman. His research associate Robert Mayes had visited Hindustan Ferodo and, although denied access to the plant, had enlisted the help of a factory worker. The latter described the factory as "not pretty," with the textile areas spewing out dust "like a bus on a road in the dry season." Housekeeping was alleged to be poor, with little warning of the hazards of asbestos, few respirators, and inadequate medical monitoring. Floors were dry-swept and lockers contained both ordinary and works' clothes, thus contaminating the former. T&N issued a rebuttal, but Castleman stood by the investigation.

Within a year of the *New Scientist* exposé, working conditions in T&N's factories in India were seen on British television screens. A searing documentary, "Alice – A Fight for Life," featured, inter alia, the flight of asbestos to the developing world.[11] It filmed T&N's factories in Mumbai, where workers and their families lived in dusty asbestos-built compounds next to the factory. It was claimed that one in three T&N workers at one factory had asbestosis. The film focused particularly on Hindustan Ferodo, where asbestos could clearly be seen contaminating the streets and railway tracks around the factory. Worker protection was minimal and dust from the ventilation system was cleaned out by contract laborers, who had no protection from dust and no medical checks. The film cast considerable doubt on T&N's assertion that it applied UK standards to its factories overseas.

A nine-month strike at Hindustan Ferodo in 1982 underlined the poor conditions at the plant. T&N director Richard Wells arrived there in December of that year, armed with a copy of the "Alice" film, which was shown to a "limited audience." Commenting on the strike, Wells stated: "The mass of the workers appeared to be easily led or behaved like sheep." He noted that dust counts were "about" 2 f/cc and that damping fiber had only just been introduced. He criticized the rudimentary face masks and observed that they were worn for psychological reasons.[12]

T&N still owned a majority share in Hindustan Ferodo, but in 1991 it began selling its stock. In 1993, BBC correspondents traveled to see conditions at the factory. Working conditions had steadily improved from the 1970s, but many processes were inherently dusty. One worker stated:

"in the dark you could see lots of dust particles flying and there used to be complaints from other departments about the dust that flew out of the carding department because primarily it was that department ... where the problem arose ... [and] while the machines were in operation the dust would fly and at the moment they were stopped, they would sweep out the dust and collect it to one side, with their hand ... the naked hand. Just be swept up."[13]

John Waite, the BBC correspondent, went inside the factory and found conditions visibly dusty. Workers were routinely X-rayed, but the results remained the property of the management. One Indian chest physician recalled reviewing Hindustan Ferodo films in the late 1980s and found that up to nearly a third had lung damage consistent with asbestos exposure. When he tried to take it up with the company he was told his diagnoses were wrong. It was reported that court action against the company had been totally ineffectual.

In 1994, T&N sold off its remaining stock in Hindustan

Ferodo. The new owners immediately changed its name to Hindustan Composites Ltd. In the 1980s, T&N also wound down its shareholding in its Indian cement factories. In 1990, the Belgian Eternit interests took over and the group became Eternit Everest Ltd.

T&N's experience in India is instructive in the context of present debates about asbestos. First, for most of the twentieth century T&N was easily the most important multinational presence in the Indian asbestos industry. Until the appearance of Johns-Manville and Eternit after the 1970s, T&N seems to have been the only major foreign asbestos player in India. This partly reflected commercial realities that stemmed from the legacy of the British Empire. T&N has now gone, but the company's imprint remains in the existence of Hindustan Composites and the cluster of asbestos cement works in Coimbatore and Mumbai. Second, the T&N experience demonstrates the problems of manufacturing chrysotile asbestos under so-called "controlled conditions." The document trail relating to T&N's Indian factories is patchy, but it is consistent. It tells a story since the 1930s of dusty conditions, poor hygiene standards, a lack of medical monitoring, and workers suffering from asbestos-related diseases.

Contemporary Indian industrialists will claim that this relates to history and "old" conditions. But T&N's history is not that "old." It must also be remembered that T&N, despite its mixed record in India and elsewhere, was the most sophisticated manufacturer and user of asbestos in the twentieth century – in other words, a company that more than any other knew both the risks and the best way to avoid them. Yet by 1990, that company had decided that asbestos production was no longer profitable or feasible in India (or indeed world-wide). The Indian experience shows why the company reached that conclusion: ultimately asbestos dust cannot be controlled safely.

Who needs X-rays anyway