

## ASBESTOS AND HEALTH: A CASE OF INFORMAL SOCIAL CONTROL

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### Publicity and Business Regulation

The purpose of this paper is to show that just as informal social control can be more important than formal social control with petty juvenile misconduct, this can also be so for the most massive forms of corporate misconduct. Informal social control may broadly be defined as behavioural restraint by means other than those formally directed by a court or administrative agency. Because of the traditional criminological preoccupation with formal sanctioning we often neglect informal control mechanisms such as adverse publicity and stigma. Stigma is, of course, a mixed blessing when harnessed to control individual deviance — it can either shame transgressors into compliance with norms or, through the mechanisms of labelling, strengthen deviant patterns by fostering deviant self-conceptions (Becker, 1963). West and Farrington (1977) have provided the most widely cited data in support of the labelling hypothesis. However, stigma and the adverse publicity which produces it are more unqualifiedly advantageous when channelled against misconduct by powerful corporations.

Stigma does not push law breaking corporations further and further into a criminal self-conception. While one meets people who have a self-conception as a thief, a safecracker, a prostitute, a pimp, a drug runner, and even a hit man, how often does one come across a person or a company with a self-conception as a corporate criminal? Corporations and their officers respond to bad publicity with moral indignation and denials, not with assertions that “if you think I’m bad, I’ll really show you how bad I can be”, as common delinquents sometimes do.

Given the limited efficacy of formal social control against corporate offenders (Stone, 1975; Clinard and Yeager, 1980; Braithwaite, 1980) informal social control is all the more important. The present study of the role of adverse publicity in transforming industrial health in the Australian asbestos industry is one of a number of such case studies being compiled for a larger work (Fisse and Braithwaite, in press). The present study does not typify the effect of adverse publicity on large corporations: at this stage in the development of empirical understanding it is impossible to typify how social control works against corporate misconduct. Nevertheless, the Australian asbestos scare does illustrate how control through adverse publicity is possible — not that such control is ubiquitous or typical, but that it is possible.

The study was made possible by the cooperation of James Hardie in allowing us to interview a number of employees from the managing-director down at the company’s Sydney head office and Camellia plant. We are also grateful to the New

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### The Asbestos Scare

Working in an environment which contains asbestos dust increases the risk of contracting at least three diseases: *asbestosis*, a form of pneumoconiosis (dust disease of the lung); *lung cancer*; and *mesothelioma*, a cancer of the lining of the chest or abdominal cavity. Awareness in the United States that asbestos is a health hazard can be traced back at least to the 1930s. In 1934, Roscoe Gray, surgical director of Aetna Life Insurance Company, the insurer of two of America's largest asbestos companies, wrote:

Asbestos particles inhaled into the lung produce an exceedingly severe and perhaps fatal inflammation. This condition, called asbestosis, is not so important as many other forms of mineral irritation of lung tissue, because of its infrequency. However, it will become more prevalent as the industry grows. . . . Since asbestosis is incurable, and usually results in total permanent disability followed by death, care and caution should be used before a claim is assumed.

This is a very serious disease and is practically incurable. Particles once ingested continue their slow, insidious, tissue destruction through years, even though exposure may long have terminated. . . . Death usually occurs within a year after the patient can no longer work (Subcommittee on Compensation, Health and Safety, 1978: 53).

The story of how the US asbestos industry covered up the dangers of asbestos for so many years to forestall dust control regulations has been well documented elsewhere and will not be repeated here (Epstein, 1976; Subcommittee on Compensation, Health and Safety, 1978; Ermann and Lundman, 1982:68-9). Ultimately, the gravity of the problem came to be realized, one graphic instance being the estimate in 1978 of Secretary of Health, Education and Welfare, Joseph A Califano, that 67,000 people will die from cancer each year in the United States for the next 30 to 35 years as a result of exposure to asbestos (O'Hare, 1978:55). There was, however, a lag between US public health authorities becoming concerned in the early 1970s and the Australian anti-asbestos campaign of the late 1970s.

### World Reaction

Because of the corporate cover-up of the dangers of asbestos, it was only in the past decade that governments throughout the world became fully aware of the hazard and began at all stringently to regulate usage of the fibre. In many countries the standard was progressively tightened from 4 or 5 fibres per cubic centimetres of air (averaged over 8 hours) to 2 fibres and in the case of West Germany and New Zealand, to 1 fibre. In the United States on 9 October 1975, the Occupational Safety and Health Administration proposed that the standard be lowered to 0.5 fibres, while the National Institute of Occupational Safety and Health on 15 December 1976 recommended a 0.1 standard. Sweden and Denmark have now passed laws banning asbestos from a wide variety of products and Japan has enacted legislation requiring a reduction of asbestos content in asbestos cement products to a maximum of 5%.

Increasingly, we are seeing the replacement of asbestos in a variety of products by glass, mineral, ceramic and silica fibres. Asbestos replacement technology has been prompted primarily by the anti-asbestos campaign. Once the longstanding corporate knowledge of the dangers of the product was thrust into the public arena,

largely by the work of American activists, governments were forced to act and this government reaction fuelled public concern. In the developed world, the mixture of increased government regulation of asbestos and growing consumer resistance to asbestos products has left industry little alternative but to invest in asbestos-replacement innovation (Freeman, 1981: 42). By the end of the century industry forecasters predict that worldwide consumption of asbestos will be less than half the present tonnage.

Within this overall contraction of the asbestos industry, there are three growth areas — the Third World, South Africa and the Soviet Union. In many Third World countries there is no organized consumer or worker resistance against asbestos and governments have not introduced asbestos control regulations or, if they have, they lack the inspectors to enforce the regulations. Castleman (1979: 570-8) has shown how some major American corporations have shifted their asbestos manufacturing off-shore to unregulated countries like Venezuela, Mexico and India. Brazil and Taiwan are other growth centres for the asbestos industry.

The second asbestos haven is South Africa. Recently an entire Hamburg asbestos factory was “dismantled in Europe and moved to Capetown” (Castleman, 1981: 339). In South Africa 92% of asbestos miners are black, another 3% coloured, and the percentage of blacks in the highest risk jobs is even higher (Myers, 1981: 228). Given these figures it is surprising to find that, of the cases of mesothelioma recognized by the South African government, 52% are whites (Myers, 1981: 235).

The third growth market is that workers’ paradise, the Soviet Union. While Soviet health authorities adopt the official line at international conferences that asbestos is a hazard which they are acting to control, unofficially their view is that Western medicine has exaggerated the problem. Soviet mines extract more than half the world’s asbestos, and the USSR consumes more asbestos than the rest of the world put together. Moreover, while the remainder of the world reduces its present levels of production and consumption, Soviet production and consumption of asbestos grows at over 20% per annum (its asbestos exports doubled between 1970 and 1977 (Castleman, 1981: 339)).

### **The Australian Scene**

Unknown thousands of Australian workers have been killed by asbestos since its dangers first became known in the 1930s. The worst single disaster was CSR’s Wittenoom Gorge asbestos mine in Western Australia which employed 6200 men between 1943 and 1966. In three attempts to sue CSR for damages, the former workers died before their cases were fully heard. CSR regards asbestos as a public relations nightmare. It made a decision to end the nightmare: it sold the Wittenoom mine back to its original owner, Lang Hancock, in the late 60s and in 1977 sold its Wunderlich subsidiary, which made building products containing asbestos, to James Hardie Asbestos. This latter takeover made James Hardie a virtual monopolist of the Australian asbestos manufacturing industry. Only one asbestos mine remains in Australia at Barraba in New South Wales; owned by the Canadian company, Woodreef, it is an economically marginal operation which is unlikely to survive in the long term.

The prime target for the Australian anti-asbestos campaign inevitably became James Hardie, a billion dollar public company heavily committed to the manufacture of a wide range of asbestos products, including wall-board, pipes and

brake-linings. What follows is an account of the allegations made against James Hardie, the nature of the adverse publicity surrounding those allegations, and the financial, non-financial and reform impacts of the publicity which resulted from the campaign.

### **The Allegations against James Hardie**

James Hardie executives expressed some regret over the atrocious conditions which existed for many years at their Baryulgil asbestos mine near Grafton in northern New South Wales. The company sold the mine in 1976. One critic described conditions in the mill attached to the mine as follows:

In the mill, the dust was shovelled by hand into bags and sometimes it was so thick that the shoveller could not even see the man who was holding open the bag — and he was less than a metre away. Until as recently as 1972, years after such practices would have been outlawed in the company's more visible operations in the capital cities, hessian bags were being used and re-used for the asbestos dust. Men shook out the bags, standing in a cloud of asbestos dust (Hall, 1980: 30).

In 1972 the NSW Division of Occupational Health recorded a dust reading of 280 fibres per cubic centimetre of air at Baryulgil. This compares with the current Australian standard of 2 fibres per cc. The mine employed almost exclusively Aboriginal labour, leading to allegations that Australia's dirty-work was being done by its most oppressed group.

Much safer conditions prevail at James Hardie's largest manufacturing plant at Camellia, Sydney. However, there have been at least 10 inspections of this factory by the NSW Health Commission since 1972 which have reported dust concentrations in excess of the asbestos standard under the NSW Factories Regulations. None of these reports resulted in prosecution, even though dust concentrations of over 20 fibres per cc were reported in some cases. The legal limit until 1977 was 4 fibres per cc and from 1977 2 fibres per cc. However, higher concentrations are permissible if workers wear respirators in the area. Even though, as we shall see later, considerable improvements in asbestos levels were achieved by the company throughout the 1970s, as recently as 1980 a NSW Health Commission inspection report on the Camellia plant indicated that "approximately 20% of work positions tested were found to have excessive exposures indicating a need for remedial action". In fact three inspections in 1980 reported violations.

A third target of public criticism for James Hardie during the asbestos scare concerned its dumping of asbestos waste. Reject and broken scrap had been used over the years as filling for driveways, parking lots, paths and for many other purposes. The Camellia plant alone was revealed to have 19 known major tip sites. Public concern rose when many of these sites were found to have surface exposure of asbestos in places frequented by the general public.

In addition to mining, manufacturing and dumping, a fourth area of criticism has centred on the warnings given to the public over the dangers of asbestos. Regulatory agencies have expressed concern to James Hardie from time to time over asbestos warnings. For example, on 3 December 1979, Dr Crawford of the NSW Health Commission wrote to James Hardie about the labelling of its "fire-rating board":

The present label states "This product contains a small percentage of asbestos bound firmly into it by cement and other materials". The approximately 45% asbestos content of FR Board cannot be considered to be "a small percentage". Also the asbestos in the FR board is not "bound firmly into it" in the manner of your asbestos cement products.

The information on the label in fact infringes the Trade Practices Act.

Accordingly, I suggest a more suitably worded label should be prepared for this product forthwith.

The company retorted that the asbestos content of the FR board was not 45% but only “approximately 20%”. Nevertheless, the company agreed to change its label to: “Caution. This product contains asbestos. Breathing asbestos dust can damage health. Keep dust down.” Critics have been most concerned with statements from the company which might be called subtly misleading, in the sense of playing down the problem. One example which attracted some unfavourable comment was the final sentence of James Hardie’s “Asbestos and Health” pamphlet: “Asbestos cement products have been used in Australia for 75 years by tradesmen, builders and handymen and to our knowledge these people have suffered no ill effects”. An earlier (1968) company statement read: “Asbestos is by no means alone in having suspicion directed at it of being a possible health hazard. There are hundreds of substances as mundane as fuel oil, charcoal-grilled steak and iron rust which are known or suspected of being cancer causing agents under certain experimental conditions”.

### Publicity

One morning in December 1979 two large brass plates reading “Asbestos House” were removed from the facade of James Hardie’s Sydney headquarters. The renaming of its head office building as James Hardie House followed the dropping of “Asbestos” from the former company name, James Hardie Asbestos. While the company did not run a counter-publicity campaign over the asbestos scare, these two actions testified to the need felt within the company to protect its image.

James Hardie was not a tailor-made corporate villain for the media, the workers’ health action groups, and the unions. Throughout the campaign it remained open, always willing to talk to the press, and to have critics look over its plants. On one occasion, a television crew trespassed onto the Camellia plant by climbing a fence. When this was discovered, the manager invited the cameras into the plant, an offer which was declined on the ground that the journalist did not want to have his independence compromised by the company. There was some downright misrepresentation by critics who did not avail themselves of the company’s open door policy. For example, a film on Baryulgil suggested that when the company sold this mine it opened another in Indonesia. James Hardie owns a manufacturing plant in Indonesia but not a mine. The company contemplated legal action against the misrepresentations of some of its critics, but decided that the aggravation and further highlighting of the problem would be counter-productive.

Probably the most influential component of the anti-asbestos campaign in Australia was a series in 1977 by the ABC current affairs radio program, Broadband. While the series did not enjoy high ratings, its detailed treatment of the asbestos problem provided a springboard for many follow-up stories in the popular press and on television. The most important was a three part series “The Fatal Dust”, which opened on page one of the *Sydney Morning Herald* (17, 18, 19 November 1977; also see *The Age*, 1 February 1978 p 5; *Canberra Times*, 14 November 1978 p 13; *Daily Telegraph*, 28 July 1978 p 13; *The Western Australian*, 16 November 1978 p 54; *Sydney Morning Herald*, 23 March 1979 p 2; *Australian Financial Review*, 16 October 1978 p 24; *Canberra Times*, 25 July 1978 p 12; *National Times*, 10-5 October 1977 p 10). The Broadband series actually gave some favourable as well as unfavourable recognition to James Hardie. Anchorman Matt Peacock stated on his 21 July 1977 program that “Most authorities I’ve spoken to



point to them [James Hardie] as models of good behaviour so far as occupational health goes. . . .” Nevertheless, the program went on to hammer James Hardie by quoting from internal documents, including the following:

. . . half dust respirators should as a rule only be issued where it has been shown, or where commonsense suggests there is good reason to believe that exposure exceeds 4 fibres per millilitre per shift. Heretofore it has generally been the practice to issue a respirator to any man requesting it. This practice is now contrary to policy. It is desirable that the new policy should be introduced as quickly and as completely as possible. However, discretion should be used. If a man requests the issue of a respirator despite the fact that his exposure is below 4 fibres per millilitre per shift, every effort should be made to persuade him that he has no need of the respirator, and it may be useful to seek the help of officers of the State Government Health Departments in this endeavour. On the other hand, the matter should not be allowed to develop into an industrial dispute and if this seems a possibility, a respirator should be issued. Even where such an issue has been made under duress all efforts should continue to be made to relieve the man of his respirator either by continuing to persuade the man that he has no need of the respirator in his present job or by moving him to some other job in which he manifestly has no need of such a respirator. The aim is to ensure that no man has a respirator who has no need of it but that any man who has need of a respirator has a respirator of the appropriate kind and that the same is properly cared for and maintained.

The point made by the Broadband program was that, because there is no level of exposure which is completely safe, a policy which in certain circumstances encourages employees not to wear masks is indefensible. At any level above zero, “there will be some risk associated with the exposure to asbestos” (Nicholson, 1976: 165). Even when the dust concentration is down to 4 fibres per cc, a worker will inhale about 32 million fibres longer than five microns in a working day (New York Academy of Sciences, 1977: 56). The company no longer discourages the wearing of masks in any circumstances.

The Broadband attack was followed by protest action at the 1978 annual meeting of the company. There was a demonstration, “Asbestos House” was defiled with graffiti, and a motion was put that a proportion of the dividend for the year be directed towards the compensation of an Aboriginal victim of the Baryulgil mine.

Adverse publicity did not ensue from the many unfavourable reports on factory and mine conditions by the various State occupational health authorities. Improvements were negotiated without any alleged violations being aired publicly in court. James Hardie has a reputation with regulatory agencies for a reasonable and cooperative approach to rectifying deficiencies reported by inspectors. The company has gone to the extent of paying for overseas study trips on asbestos hazards by Australian health officials. While the company justifies this as part of its policy of helpfulness and openness with health authorities, its critics have attacked it as “buying off” the officials.

James Hardie did not run any counter-publicity campaign in the sense of paid advertisements to answer its critics. In this they differed from the British asbestos industry which ran a vociferous and well funded campaign against the “unwarranted, biased and inaccurate” asbestos scare (ABC, 1978: 97). However, the company did change its name and image — a specialized asbestos cement company was transformed into a diversified firm. Extensive corporate image advertising on “James Hardie — the name behind the names” was used to foster this diversified image. The company also went to considerable lengths to ensure that their own employees were briefed and given literature to counteract the publicity which was seen as undermining the company’s stature and internal morale.

### Financial Impacts

The financial impacts of the asbestos campaign have been nowhere near as severe for James Hardie as they have been for Johns-Manville, the largest asbestos manufacturer in the United States. In 1981 Johns-Manville's financial statements for the previous two years were qualified by their accountants until such time as they could reasonably assess the ultimate costs of its growing asbestos litigation (*Wall Street Journal*, 3 March 1981 p 18), and in 1982 the company filed for protection under the Federal Bankruptcy Code, citing the large number of asbestos workers compensation claims against it. The 1980 US annual report of the Keene Corporation indicated that total asbestos litigation costs amounted to approximately 3% of sales. In Australia, by contrast, there have been few common law suits for asbestos-related occupational injury, and to date none have been successful.

James Hardie has taken the step of voluntarily making workers compensation payouts to employees totally disabled by an asbestos-related disease about \$16,000 in excess of their normal workers compensation entitlements. Only workers with a number of years service to the firm come under the scheme. In accepting the additional \$16,000 the employee does not forego his or her right to a common law action against the company for damages. To date only about 20 payouts have been made under this scheme.

One critic of Hardie's has claimed that they have "made at least two near hundred thousand dollar settlements to senior staff members killed by the asbestos who threatened to make highly embarrassing public disclosures about what they knew" (Hall, 1980: 34). A company spokesperson denied that these settlements were made because of threats of embarrassing public disclosures, and in any case he said such settlements were normally handled independently by the company's insurers.

James Hardie has certainly lost some important sales as a result of the campaign. Some of the State and municipal authorities whose workers were the victims of the most dangerous uses of asbestos as insulation materials have now, in response to union pressure, introduced an outright ban on the use of asbestos. Many of the safer applications of asbestos which James Hardie is still successfully marketing have been caught up in these bans. For example, after it was found that raw blue asbestos fibre was used for lagging on railways rolling stock, the New South Wales Public Transport Commission acting directly in response to union demand, issued a policy prohibiting the purchase of any product containing asbestos. Similar circumstances have led the State Electricity Commissions of both New South Wales and Victoria to cease the use of asbestos cement sheeting in their cooling towers.

Some architects refuse to specify any asbestos product on major city buildings lest their clients run into industrial trouble from building unions which might refuse to work with asbestos or alternatively demand danger money for doing so. Customers have also opted out: in one example a single director vetoed the purchase of Hardie asbestos building materials by his company, saying that they would be used "over my dead body". Likewise, a number of local government engineers had adopted a play-safe approach by recommending steel or PVC pipes rather than asbestos cement pipes.

Few of the lost sales could be attributed to exploitation of the asbestos scare by competitors. James Hardie's management was aware of only one case where a competitor in the building-sheet market placed a poster in several of its shop

windows which used a skull and crossbones to denote the alleged dangers of Hardie products. Management of the company responsible were horrified when told of the posters and James Hardie accepted their explanation that they were made by "overzealous sales people".

While these lost sales were never sufficient to jolt James Hardie's steadily rising earnings, there can be little doubt that the asbestos campaign created some buyer resistance against James Hardie shares. As one commentator summed up: "The health scare is not something that investors will suddenly stop associating with James Hardie" (*Rydges*, September 1979, p 55). Hardie share prices were on an upwards climb until the end of 1976, but from 1977 until the end of the decade, against the general trend of the market and in spite of the company's strong financial performance, they showed a marked decline. The period of the decline coincided exactly with the worst period of adverse publicity. While top management admits that the health scare may have been a factor in the decline of the late 70s, they point out that there were other factors as well. There was a lack of shareholder confidence that James Hardie could make its bold 1978 takeover of Reed Consolidated work. Questions were asked about whether James Hardie could be as financially successful as a diversified company as it had been as a more specialized asbestos manufacturer. Also the company had its first-ever rights issue. In 1981 James Hardie shares recovered almost to their 1976 peak. There is no way of knowing how much of the decline of the late 70s was attributable to the asbestos scare, and there is no way of knowing how much the recovery of the early 80s can be explained by the shift away from asbestos in the company's products. But few observers of the market would disagree that investor concern over the health problems of asbestos played some part in both the fall and rise of James Hardie.

### **Non-Financial Impacts**

The adverse effects of the asbestos campaign on corporate prestige have been amply demonstrated. The decision to change the company's name clearly evidenced a desire to keep the corporate image dust-free, even though the managing-director claimed that they were "not so much pulling down James Hardie Asbestos as we were building James Hardie Industries". The company's official line is that the change of image and structure to a diversified company was animated by the positive virtues of diversification rather than by any need to combat the stigma of asbestos. We think both factors were relevant, and informally management conceded as much.

The adverse impact on corporate prestige was combined with a rather complex effect on employee morale. Personnel management described three stages in the impact of the asbestos campaign on the morale of the workforce. In the first phase there was a strengthening of morale as a backlash against the initial Broadband publicity. After this initial rallying of employees to the flag, phase two, the "siege mentality", depressed employee morale for about two years in the late 70s. The phase two drop in morale was said to be most noticeable among more senior people. It was pointed out that the adverse morale impact of sickness in the workplace is fundamentally different from what would be expected from a problem with a defective product which affected outsiders: "You knew the people who got sick, you saw them on television, and these feelings radiated out into the homes of workers". One executive reflected: "Mrs Jones had always been proud to say that



her husband was a factory manager at James Hardie, and now this pride was called into question". By the end of the decade, a third stage had been entered. In this phase the company "pulled through" the morale problem. The widespread view among employees became that the attacks had been unfair, and that due recognition had not been given to the fact that the company was a leader in occupational health innovation in Australia. The very real program of reform by James Hardie, as discussed in the next section, undoubtedly gave impetus to a return to employee confidence.

A further non-financial impact of the publicity was that it prompted a more activist interest in occupational health matters among the unions which represented James Hardie employees — primarily the Miscellaneous Workers Union. During the 60s, workers' health was generally something about which management approached the unions rather than vice versa. For example, when James Hardie sent an executive to an overseas conference on asbestos and health, one of his or her duties on returning would be to brief the union officials on what had been learned. In the 70s, however, management increasingly found the unions initiating disputes and discussions on health hazards. Recently, the Miscellaneous Workers Union has been particularly adversarial in fighting company resistance to giving asbestos workers access to their company medical records.

### Reform

Management claimed that, in the mid-1960s, James Hardie realized the potential gravity of the problems asbestos could cause them and became genuinely concerned about the need for greater control over exposures. Since then the policy has been to "engineer our way out of the problem". Improvements which occurred in the second half of the 70s must be viewed as more than simply a reaction to the adverse publicity of the period, but also as a continuation of a program of reform which started 10 years earlier. Equally, the reforms of the late 60s and early 70s must be viewed in part as changes made *in anticipation* of the adverse publicity of the late 70s.

James Hardie has made great progress towards engineering its way out of the problem. The problem of dumping hazardous wastes has been largely removed by capturing dust and waste within the factory and recycling it back into the production process. Since the mid-60s \$18 million has been spent on dust control technology by the company. In recent years the average asbestos dust exposures of James Hardie workers have improved significantly. Graphs supplied to us by the company show that for the 1976-77 financial year, 0.9% of the work force in Australia and New Zealand had time-weighted average exposures in excess of the current Australian standard of 2 fibres per cubic centimetre. The next year this figure dropped to 0.5% and in the two following years to less than 0.1%. Over four years, the percentages of the work force above the company standard of 1 fibre per cc were 6.1% in 1976-77, 2.0% in 1977-78, 3.3% in 1978-79 and 1.7% in 1979-80.

There are three reasons why we would accept that these company data, if anything, understate the reduction in the dangers to which James Hardie workers were exposed over the period. First, the technology for detecting fibres has improved, so that fewer would be slipping through the net today than in the past. Second, the fibres counted today, as in the past, include many non-asbestos fibres. The procedure specifies that fibres of a certain length, width, and length to width

ratio will be counted as asbestos fibres, even though in some cases non-asbestos fibres will happen to conform to these dimensions. Because James Hardie has reduced the percentage of asbestos content in its products over the period, one would produce lower readings and avoid the trouble spots. Such dishonesty as to be increasing. Third, in earlier times dust counts were not always done as rigorously as they are today. Testing might have been concentrated in places that would produce lower readings and avoid the trouble spots. Such dishonesty obviously could still occur today, but there are reasons for accepting that the testing is now done more scientifically. For one thing, government testing is more frequent today, so spurious company figures have less chance of passing unnoticed. Also the unions are now retaining independent consultants to come into plants and measure dust levels (eg Miscellaneous Workers Union, 1981). Cheating might still go on, but it's a lot harder.

The recorded readings on the files of the New South Wales Health Commission are consistent with this picture of marked improvement in recent years, though we must be mindful that those files also indicate that violations of the law were still occurring according to the most recent files we saw (for 1980) (see also South Australian government tests reported by the Miscellaneous Workers Union (1981: 236-49)). It should also be mentioned that many of the 99.9% of workers who have *average* asbestos exposures over the 12-month period of less than 2 fibres per cc may have exposures in excess of the standard for one week of the year, or two weeks, or even 20 weeks. A 99.9% average exposure of less than 2 over 12 months does not mean 99.9% compliance with the standard. Further data provided confidentially by the company, however, show that only a tiny fraction of the 99.9% are outside the standard for any prolonged period. Whatever the data mean in absolute terms, they certainly show a substantial improvement in relative terms.

The reforms at James Hardie have been technological rather than organizational. Safety managers, hygienists, and physicians have not been granted any additional powers to overrule decisions made by managers concerned primarily with production and marketing. The company did not have a formal written corporate health and safety policy before the publicity and at the time of writing management had still not approved a draft policy which was being considered. One notable change, however, has been the establishment of employee/management safety committees. These committees, and the worker representatives on them, have access to dust counts. Management and the union are jointly considering the feasibility of a dust count register that would be available for scrutiny by all workers and union officials as well as government inspectors who come into the plant. The company is therefore moving towards greater accountability to its workforce for safety performance. On the debit side, however, a review of the company's occupational health program conducted by Noel Arnold, an industrial hygienist, concluded: "... union members did not, in general, feel that they were an integral part of safety committees." (Miscellaneous Workers Union, 1981: 7).

The heightened openness is part of a wider change in approach which largely can be attributed to the impact of the adverse publicity. Until the mid-70s, the attitude of the company had been that it was doing everything it reasonably could to abate the dust problem and that there was no point in alarming employees. Once the publicity broke, there was no choice but to communicate with the workforce about the dangers, because workers now were asking questions. One executive described

the new attitude of the company as: "To hell with the press: whatever they say will be distorted. But let's explain it ourselves to our own people." The old attitude is illustrated by a section of a letter from Hardie's medical adviser to the Health Commission on 30 April 1968: "The company employs a large number of people whose mastery of the English language is negligible. Among such groups it is impossible to be sure that an attempt to arouse proper concern will not result in a quite implacable alarm." The best evidence of the new attitude is an audio-visual program on the dangers of asbestos, and how to minimize them, which is shown to all new employees. The sound track is available in six languages. According to a senior personnel manager, the new openness and frankness had "resulted in a healthier attitude with the workforce".

The new openness is also manifest in the approach of the company's doctors in dealing with sick workers. The old practice had been for the company doctor not to worry workers with details of their condition unless they were positively diagnosed as suffering from asbestosis. Now employees are told in a fairly detailed fashion about any changes in their lungs that are likely to have been caused by asbestos, as by going over x-rays with them, even if those changes are giving rise to no symptoms. However, the company still refuses to hand over employee medical records to the union on the grounds that it would be unethical for physicians to provide such records to non-physicians.

Now that the workforce has a clearer understanding of the risks of asbestos various preventive programs can be expected to get a better reception. These include programs to persuade workers to use their respirators properly, to report dust leaks, to wet down dust before sweeping it up with a broom (or to vacuum), and to refrain from wearing work overalls home. Because smoking and asbestos may combine to multiply the risk of cancer, James Hardie has experimented with a variety of anti-smoking campaigns for the workforce. At its newest plant, the company has tried to ban smoking on the job, but this ran into opposition from employees. The compromise was to draw lines round certain parts of the plant which became non-smoking areas.

Critics of James Hardie claim that while there has been reform at home to deal with the dangers of asbestos, the company has resorted to exporting the problem to Indonesia, a country not noted for the stringency of its legislation to protect the health of workers. Indonesia has no regulations concerning asbestos dust, though late 1981 saw its government announce plans for the introduction of an asbestos standard. The Prime Minister, Mr Fraser, opened a new \$20 million James Hardie asbestos products plant in Indonesia in 1976. The building materials and pipes made in the factory are exported throughout the Pacific basin. Top management contends that anticipation of the problem of continuing asbestos manufacture in Australia was not a consideration in the decision to commence some manufacturing off-shore. Rather it was a move to expand market opportunities. Further, we were told that the company's dust control procedures and standards are applied with equal force in all countries. Contrary to the view of top management, a middle manager said to one of the authors that anticipation of the asbestos scare and of enormous costs of compliance with new regulations was a factor in the Indonesian decision.

In any event, James Hardie has now come up with a solution superior to moving off-shore — it is moving asbestos out of its products. This solution is available to James Hardie in a way that it is not to the vertically integrated European and

American asbestos companies — for the latter, shifting manufacturing off-shore is the preferred solution because the output from their asbestos mines must be consumed. James Hardie has no mines and therefore no vested interest in clinging to asbestos.

A crash \$3 million research and development program since 1978 has found a replacement for asbestos in the building products which comprise 55% of James Hardie sales — a form of cellulose fibre. The CSIRO and several other research institutions did much of the basic research in developing a method of fibrillating the cellulose fibres to give them the required tensile and ductile properties. Retooling production lines to produce the asbestos-free building materials is costing a further \$10 million. In spite of these enormous costs, the replacement raw material is cheaper than asbestos so that in the long run it is expected that the investment will be more than recouped.

The advent of asbestos-free building products will be the culmination of a more gradual transition whereby Hardie building products were reduced during the 1970s from an average 14% to 4% asbestos. By the time this article goes to press, all James Hardie building products sold in Australia will be asbestos-free.

A major motivation of the shift out of asbestos has been the threat of increased regulation over the use of asbestos on building sites. Customer unwillingness to put up with these regulations, plus building workers' resistance to use asbestos materials, would have resulted in increasing losses of sales. The removal of asbestos from James Hardie's building products was as much motivated by the rising cost of asbestos as by this consumer resistance. However, the rising cost is itself attributable in part to the more stringent regulation of asbestos mining.

Considerable research has also been done on removing asbestos from the company's second major line of business — asbestos cement pipes. So far this has been unsuccessful. The only alternative raw materials with anything approaching the tensile strength of asbestos are more than twice as expensive. So the company has also begun to test various coatings for its pipes to totally immobilize the asbestos. To date this too has proved unsuccessful. James Hardie has also begun to innovate with asbestos-free brake linings; 25% of the brake-linings now sold are asbestos free.

Hence, as the years go by, James Hardie grows further away from its roots as an asbestos company. Many years ago it moved totally out of the most dangerous area of asbestos application — insulation. By the end of the 70s, it had abandoned mining with the sale of the Baryulgil mine and its 12½% stake in a Canadian asbestos mine. And by 1982 it had removed asbestos from the building products which up until 1978 had provided over 80% of the company's sales. Today James Hardie does not deserve to be called an asbestos company.

The James Hardie case study is thus one in which publicity played an important role in fostering change. In addition to the impacts on James Hardie mentioned above, the ABC, on the occasion of publishing the 1977 Broadband transcripts as a book, with some justification, made the following claims:

Within months of the first program the Australian asbestos standard was halved to two fibres per cubic centimetre and the NSW Government had introduced its first asbestos regulations. In June 1978, CSR established a charitable trust for former Wittenoom employees. As this book goes to press the Asbestos Association of Australia is discussing the introduction of an asbestos warning labelling scheme (ABC, 1978: 5).

The Commission might also have pointed out that prior to that first program only two of the States had any asbestos regulations. Now the National Health and Medical Council is urging another halving of the uniform State standard from two fibres to one for some types of asbestos. Its urgings may well succeed because of the wide public support for asbestos regulation which the publicity of the late 70s generated.

### Conclusion

In any large organization there are forces of good and evil, however one wants to define those terms. When a publicity campaign makes the social responsibilities of an organization a public issue, the public relations problem can strengthen the hand of the forces of good within the organization which wish to sharpen those social responsibilities. This analysis fits the reaction of trade unions and government regulatory agencies to the asbestos publicity catalysed by Broadband in 1977, as well as the reaction of James Hardie. Partly in response to both the anticipation of adverse publicity and the actual arrival of that publicity those progressive forces within the James Hardie organization were given their head. This "organizational rehabilitation" has taken place without anyone being punished or successfully sued in a court of law: the activating force was the informal social control which has begun to obliterate the asbestos industry in the Western world. Because of the capacity of large corporations to adapt and innovate, James Hardie and its employees are doing very nicely as the obliteration proceeds.

This view of the impact of publicity on James Hardie must be tempered by the realization that certain structural preconditions which prevented such organizational rehabilitation in asbestos manufacturers in North America and Europe were not present. Fundamentally, the difference was that James Hardie was not vertically integrated and therefore did not suffer from stockpiles of asbestos at its mines which had to be used. It could afford innovation in asbestos substitution which many of its overseas counterparts had to resist or deal with by shifting manufacturing to the Third World. Perhaps the real lesson of the case study, then, is that informal social control can work when structural realities make it possible.

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