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THE RELOCATION OF HAZARDOUS JOBS IN DEVELOPING COUNTRIES

Leigh West*

A Case Study

Worldly wisdom teaches us that it is better for the reputation that one should fail conventionally than to succeed unconventionally.

John Maynard Keynes

There has been longstanding and bitter criticism of the practice of "dumping" outdated technology, and establishing hazardous industries in developing countries. To ensure some accountability, critics have called for binding international controls,¹ industrial codes of ethical conduct² and voluntary self-regulation by the multi-nationals.³ Although international organizations have studied the problem for years surprisingly little has, in fact, been done.⁴ The long wait for international action has been disappointing and frustrating. Either by design or default, a "double standard" continues to allow multi-nationals to operate overseas without the strict regulatory rules and enforcement present in the developed countries. The result is the exploitation of the environment and of the health of workers and citizens in poor countries.

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1. See Greenwood, C., "Restrictions on the Exporting of Hazardous Products to the Third World: Regulatory Imperialism or Ethical Responsibility?," (1985) 5 *Boston College Third World Law Journal* 129.

2. In late 1984, 450 corporate and government officials making up the Organization for Economic Cooperation met near Paris to discuss a voluntary code of uniform and stringent standards which was to apply to overseas industrial operations. This industrial code of conduct provides for 1) disclosure by companies to host governments of potential hazards, 2) detailed emergency planning and 3) assessment of environmental impact. See Diamond, "The Pain of Progress Racks the Third World," *N.Y. Times*, Dec. 9, 1984 at E-1.

3. See Leonard J., "Rapidly Industrializing Countries: Myths, Pitfalls, and Opportunities" (1985) 12 *Ecology Law Quarterly* 779.

4. See Alston, "International Regulation of Toxic Chemicals" 7 *Ecology L.Q.* 397,409-434. Alston outlines in detail numerous international organizations which have studied and proposed ways to regulate hazardous chemicals.

The purpose of this paper is to explore some of the issues related to the exporting of hazardous jobs to developing countries and to examine ways in which the exporting countries and multinationals can be held accountable to the developing nations. In Part I, a case study is used to illustrate and illuminate, in a very concrete way, the nature of the problem and the potential role to be played by the local populations. Part II outlines the role played by both the host and exporting governments and by the multinationals. In Part III, the paper explores the possibilities of alternative self-help solutions and makes recommendations for legislative reform and community action which will help build in some measure of accountability.

Bukit Merah: The Case in Point

Bukit Merah is a small community of 1500 residents in the Perak region of Malaysia. In early 1980 a factory was built there under a joint venture agreement between Mitsubishi Chemical Co. of Japan, a Malaysian Chinese group (BEH Minerals), several Malay businessmen and the Tabung Haji (Pilgrim Management Fund Board) a religious group which helped fund religious pilgrimages. Mitsubishi was the chief shareholder. The company Asian Rare Earth (ARE) was in the business of extracting rare earth chlorides and carbonates from monazite for export to Japan. The chief product the plant produced was yttrium, a product used in the electronics industry in Japan. In the production process, monazite, which is a substance found in tin tailings, was crushed and milled, resulting in the creation of two by-products: lead sulphate and radioactive thorium hydroxide — a substance which remains toxic for millions of years. The radioactive waste by-product was to be retained by the Malaysian government for use by Tun Ismail Atomic Research Centre (PUSPATI) and was, in the meantime, to be stored up for use as a nuclear fuel in the form of radioactive cakes.

Some residents of the town and the surrounding area became concerned that the plant posed a health problem, and that it was not adhering to the strict standards required of plants producing radioactive materials. Individuals had reported that they had seen the

radioactive waste stored in flimsy oil drums and in plastic bags strewn around the factory yard and adjacent lands. The Perak Anti-Radioactive Committee (PARC) was formed, and it began protests alleging a failure of the factory to comply with internationally recognized measures in the storing and disposing of the radioactive waste. The company was urged to adhere to the same health and safety standards as it would in developed countries. ARE's response to the complaint was an attempt to mask the problem by covering the waste storage area with sand. PARC then went to court in 1985 and obtained a court injunction and an order directing the company to take immediate steps to alleviate the problem.

That should have been the end of the matter. It was not. Even after the court intervention, the people of Bukit Merah were not satisfied that the factory environs were safe. Certain illnesses, including leukaemia, were turning up too frequently in children who lived close to the plant. A young woman who worked in a saw mill across the road from the plant had a severely brain damaged third child. The community's concern centered around the possible effects of low-level radiation and, in 1987, the town activists brought in a Japanese scientist, Dr. Ichikawa, to test the area for radioactivity. He found radiation levels much higher than normal and in excess of the International Commission Radiological Practices. The company challenged the findings and assured the townspeople that the levels were well within the safe zone. The problem escalated.

A former factory worker came forward to reveal that the workers wore no protective clothing to counter the radioactive dust and that they did not wear radiation detection badges. A self-employed trucking contractor hired by the plant to transport the waste stated that he had been directed to dump toxic wastes in unprotected waste sites. He alleged that the company had not warned him of the hazard and that he had not only dumped the waste in these sites but that he had given a proportion of the waste load to his uncle who had used it as fertilizer in his fields. Fear was then expressed about the safety of the vegetables in the market which had been grown in potentially radioactive soil.

As information about the problems in Bukit Merah became known, other environmental and citizens groups became active,

including the international group Friends of the Earth. In 1987, there were public demonstrations attracting up to 3,000 people protesting the company's practices, and the problem received wide publicity. The Perak Anti-Radioactive Committee called in three experts from the International Atomic Energy Agency (IAEA) who ordered that immediate steps be taken to improve the situation. International visitors were invited to Malaysia to review the community's concerns and to examine the situation first hand. Among the visitors was Dr. Rosalie Bertell, a dynamic nun, an anti-nuclear activist, and a respected scientist who is a Canadian expert in the effects of low level radiation. Dr. Bertell, who was the recipient in 1986 of the Right Livelihood Award, the alternative Peace prize, recommended that tests be conducted to determine the health status of the local children.⁵ A Chinese Canadian doctor arrived and carried out the tests. Elevated lead levels were found in the blood of several children, and four children had levels exceeding safe limits. When blood tests were repeated on these children again in 1988, 44 of the Bukit Merah children were found to have toxic blood levels. In a subsequent test, all 60 children tested reached toxic lead levels.

PARC decided to go back to court. It raised \$10,000 for a legal fund by holding a two day sale of food items donated by Bukit Merah stall owners. A public litigator was hired and eight citizens filed suit asking for a declaration, an injunction and other appropriate relief. They won. The High Court in Malaysia awarded an interim injunction and ordered the factory to stop operations until it could assure the plaintiffs that no further leakage of radioactive waste would occur.

During the course of the court hearing, some interesting facts were revealed. It was discovered, for example, that during the period from 1982-1985 Asian Rare Earths had been operating illegally as it did not have the required permit to carry out production involving radioactive by-products. The permit was received in 1985, the same year as the first injunction.

5. Dr. Bertell is the founder and director of the International Institute of Concern for Public Health. It is through the auspices of this Institute that the author received access to the information about this case.

Further, testimony given by the plant manager, Mr. Shigenobu, revealed that in the early 1970's the Japanese government had information which revealed that radioactive materials in wastes from monazite would pose a hazard to Japanese workers and the general population. Mr. Shigenobu admitted that he knew of the hazard. Production of yttrium in Japan stopped in 1972 and thereafter Japan set up business abroad and imported 300 to 400 tons of monazite products yearly from countries like Malaysia which apparently were either not informed of the hazards involved or who chose to ignore them.⁶

Additionally, an economist at the hearing testified that the plant was also a disaster economically. It provided no investment benefits at all to the host country. The factory had been losing money, it paid no taxes, few local people were employed, its main product was for export only and the by-products were toxic.⁷

Dr. Rosalie Bertell was also called as an expert witness at the hearing. She testified that the health problems she saw in the community could well be caused by low level radiation. But her presence and commitment to the people of Bukit Merah had an added result which sets a very interesting precedent in community action. In her role as a nun, she called on the Japanese Catholic community in Japan to establish a fund to provide for the people in Bukit Merah who had been made ill by the operation of the plant. This group raised a substantial fund which has been turned over to trustees in Malaysia to be paid out to those in the community who can reasonably satisfy the trustees that they have suffered injury on account of the pollution. The fund's trustees have agreed to give the Bukit Merah claimants the benefit of the doubt in close cases where the causal link between the disease and the plant is hard to prove. This solution to a tragic situation is worthy of some study. It is a remarkable precedent which has been achieved outside both the legal and political systems. Leadership has been taken by concerned citizens who felt they could no longer wait for governmental, international or legal action to

6. See "Japan Shifted Plant to Malaysia to Stop Pollution at Home," from the *Utusan Konsumer*, April, 1989.

7. See *The Star*, 19/7/88.

remedy what was clearly an unethical and negligent behaviour on the part of the multinational, the government of Malaysia and the Japanese government. This kind of initiative is part of a growing phenomenon which has made a place for citizen action in the forefront of social change.

The Role of the Host Government

Governments in developing countries are under considerable political and economic pressure to attract and promote foreign investment in order to accelerate industrial development, to relieve poverty and to supply jobs for burgeoning urban populations. In their haste to catch up to the industrialized nations, there is a temptation to relax standards in order to attract investment.⁸ The government of India, for example, in spite of its knowledge of the hazards of producing pesticides, enticed Union Carbide to locate in Bhopal by offering investment incentives and a means to cut transportation costs.⁹ In other instances, developing countries have made conscious decisions to accept pollution producing industries in order to attract investment by large multinationals.¹⁰ As a result, some have abdicated control and supervision of the transferred technology to large sophisticated multinationals and have permitted them to operate in substandard facilities and under conditions which would not be tolerated in the multinational's home country.¹¹ Alternately, some countries have entered into joint contracts with the multinationals which have included conditions that the host country be allowed to design, engineer, build and operate the plants.¹² In an effort to

8. See Castleman, "The Double Standard in Industrial Hazards," in *The Export of Hazard: Transnational Corporations and Environmental Control Issues*, 1985 at 60.

9. See McGarity, T., "Bhopal and the Export of Hazardous Technologies" 20 *Tex. Int'l L.J.* 333 at 338 (1985); and see Reinhold, "Disaster in Bhopal: Where Does Blame Lie?" *N.Y. Times* Jan. 31, 1985 p. 1 col. 4 and see Anderson, p. 267.

10. See Shrivastava, Paul, *Bhopal: Anatomy of a Crisis* 19-20 (1987).

11. See U.N. Centre of Transnational Corporations, *Transnational Corporations in World Development, Third Survey*, at xvii, U.N. Doc. ST/CTC/46, U.N. Sales No. F.83.II.A.14 (1983).

12. See Diamond, S. "Plant had to be Locally Designed and Operated" *N.Y. Times*, Dec. 13, 1984 p. 8.

provide employment, host countries tend to opt for a high degree of manual operations, even when a more automated system is safer.¹³

The host government must accept a major share of the responsibility for the health and welfare of its citizens. To suggest that the exporting country is solely or mainly responsible is both paternalistic and unrealistic. However, it must be recognized that governments in developing countries have serious limitations in their ability to act responsibly in that they do not possess the technological knowledge, the economic resources or the social infrastructures necessary to adequately control, monitor and regulate the multinationals.¹⁴ The adaptation of foreign technology to a Third World reality is no easy fit. In particular, the host country's lack of informed, accurate and comprehensive technical information is a major problem. Despite an international commitment to a notification process whereby the developing country is supposed to be made aware of any environmental hazard which it may be importing,¹⁵ there is often a failure to warn on the part of the exporting country,¹⁶ and a further failure to pass on the information to workers and citizens by the government of the developing country.¹⁷

The ARE operation in Bukit Merah is a prime example of the complicity of the host country when technology goes awry. Malaysia left the supervision of the plant almost exclusively to Mitsubishi

13. *Id.* This was the case with Union Carbide in India. The Indian government rejected the company's intent to install a computerized monitoring system of the pressure gauges in favour of the labour intensive system which ultimately failed.

14. See Bent, M. "Exporting Hazardous Industries: Should American Standards Apply?" (1988) 20 *N.Y. Univ. J. of International Law and Politics* 777 at 781-782; and see Walls, "Chemical Exports and the Age of Consent: The High Cost of International Export Control Proposals", 20 *N.Y. Univ. J. of International Law and Politics* 753 at 770 (1988).

15. See Principle 6 of the U.N. Environmental Programme's Principles of Conduct in the Field of the Environment, noted in Handl, "The Environment: International Rights and Responsibilities," 74 *Am. J. Int'l L. Proc.* 222, 226 (1980).

16. For a full discussion of the obligation to inform see McGarity, T., *supra* note 10, at 335. Union Carbide itself admitted after its investigation of the Bhopal tragedy that it had never fully advised India of the dangers involved in producing and storing MIC.

17. *Id.* at 335. See also Morell and Poznanski, "Rhetoric and Reality: Environmental Politics and Environmental Administration in Developing Countries," in *Divesting Nature's Capital* 137-138 (H. Leonard ed. 1985); Renn, "Risk Analysis: Scope and Limitations," in *Regulating Industrial Risks* 111 at 120 (H. Otway & M. Peltu eds. 1985).

officials. ARE was managed by Japanese executives who purported to have expertise in the extraction of rare earth chemicals. The government of Malaysia apparently relied completely on the technical skill and knowledge of Mitsubishi and preferred to take its word that there was no danger to the community, rather than believe its own citizens, an independent Japanese scientist, and various other international experts. Furthermore, Malaysia does not appear to have been notified by the company of the dangers involved in monazite processing or of the decision of the Japanese government to terminate such production in Japan. In fact, the Malaysian government itself decided to retain the radioactive waste for possible use as a nuclear fuel but it turned over to the company the critical task of the storage and disposal of the waste and then failed to act when problems arose.

Basically there was an absence of any sort of planned, reasonable industrial strategy on the part of Malaysia. The most telling indication of this is the fact that ARE was of virtually no benefit financially or otherwise to Bukit Merah. Few jobs were created, the major product was of no use except for export, the company was losing money and paid no taxes. Even the licensing requirement was not fulfilled or enforced.

The lessons from the Malaysian experience can apply to all developing countries. First and foremost, developing countries need to establish a rational industrial development strategy which truly scrutinizes incoming products and industry to determine if such transfers really are in the best interests of the country.¹⁸ Supporting health and safety and environmental protection legislation should be in place and enforced.

Complete information, adequate training for the local staff and more accountability should be demanded from the multinationals. Finally, emergency measure plans and zoning regulations should exist. These are measures which are not perfectly worked out in even the

18. For an excellent discussion on the kinds of policy choices which must be made in developing an economic strategy see Leonard, J. "Rapidly Industrializing Countries: Myths, Pitfalls, and Opportunities" (1985) 12 *Ecology Law Quarterly* 779. Leonard lists the most important policy choices as; industrial specialization, ownership of industrial plants, location of plants, allocation of the right to pollute, provision of infrastructure and anticipation of long-term environmental hazards.

most highly industrialized countries, but the increased risks accompanying hazardous production in the more vulnerable countries make the adoption of strict standards even more important there. Greater attention to and concern for health and safety must be a priority for developing countries.

The Role Of The Multinationals

Some research suggests that multinationals are in fact good corporate citizens in developing countries, and that only a few multinational industries have "dumped" or taken advantage of poorer countries.¹⁹ Commentators have suggested that domestic companies which are importing technology to gear up their factories are even more likely to injure workers and create harm in the environment.²⁰ However, examples abound of the well-intentioned multinationals which have failed to protect the environment or the citizens of a developing country because they have failed to understand the cultural environment in which they operate.²¹

Perhaps the most important failure is the lack of full disclosure about all of the hazards involved in the operation. Even Union Carbide, which was held up as a model company before Bhopal, admitted that it had not adequately advised officials of the potential dangers. Another of the lessons of Bhopal was that strict siting standards must be in place to prevent residential areas from growing up around factories. In addition, labour intensive systems, subject to human error, may have to be sacrificed to computerized fail-safe

19. *Id.* at 782 and 783. Leonard maintains that there are three categories of industries that have left the U.S. to avoid strict pollution and health and safety laws. These categories are 1) manufacturers of toxic, carcinogenic products which are already declining in production in the U.S. e.g. asbestos, 2) basic mineral processing industries which are effected by various economic factors, e.g., copper, lead, and zinc processing; 3) "intermediate" organic chemicals needed for the manufacture of other chemicals.

20. Leonard, *supra* note 18 at 784-787.

21. See Diamond, "The Pain of Progress Racks the Third World," *N.Y. Times*, Dec. 12, 1984, at B1, col. 1. For a listing of some of the major industrial disasters of the past ten years, see International Centre for Law and Development, *Industrial Hazards in a Transnational World* 133-137 (1987).

systems which employ fewer workers but ensure greater safety. Better training of local workers, planning and recognition of the problems resulting from waste disposal, and the introduction of the necessary supporting medical and engineering technology, must be taken into consideration from the outset.²²

A number of critics concerned with industrialization in the Third world, have called for the creation of an international organization which would provide comprehensive services to provide and help disseminate information about hazards.²³ Such an organization would assist governments and individuals to assess proposed industrial projects, and would flag environmental and health and safety problems wherever they arose in the world. It would also alert countries to products and industries that have been banned elsewhere.²⁴ Such a system would at least permit the recipient country to make its decision based on more accurate and more comprehensive information.

Other critics have advocated an international solution based on the imposition of strict or absolute liability on companies that export hazardous industries.²⁵ The claim presented on behalf of the Indian government in the Bhopal case would take international law in this direction if the suit should ever go to court. In the Bhopal complaint, there is an attempt to create a new form of vicarious liability or imputed negligence and a new tort of "multinational enterprise liability."²⁶ Such an expansion of vicarious liability, if it were accepted, would undoubtedly give any multinational pause before it

22. See Diamond, "The Disaster in Bhopal: Lessons for the Future" *N.Y. Times*, Feb. 3, 1985 p. 1, and see "Union Carbide Fights For Its Life: For Multinationals It Will Never Be the Same" in *Business Week*, December 24, 1984, at 52.

23. See Castleman, *supra* note 8. And see Handl, "Environmental Protection and Development in the Third World Countries: Common Destiny — Common Responsibility," 20 *N.Y.U. J. Int'l L. & Pol.* 603, 616 (1988); Lutz, "The Export Danger: A View From the Developed World," 20 *N.Y.U. J. of Int'l L. & Pol.* 629, 643-44 (1988); McCaffrey, "The Work of the International Law Commission Relating to Transfrontier Environmental Harm," 20 *N.Y.U. J. of Int'l L. & Pol.* 715, 721-722 (1988).

24. See Badwar, Interjit, "Exporting Hazards" Letter from Washington, *India Today*, Jan. 11, 1985.

25. See Bent, M., *supra* note 14, at 789-91. Bent suggests that multinationals should be held absolutely liable for ultrahazardous industrial activity.

26. See Schwartz, V. "India sues Union Carbide with a Unique Complaint" in *Legal Times*, May 6, 1985, at 25.

rushed in to take advantage of weak regulation and slack enforcement in a developing nation.

The Role of the Exporting Country

Exporting countries have failed to play a meaningful role in checking the harm done overseas. While industrialized nations are aware of the problems of doing business in developing countries, they have been unwilling to take a rigorous stand against the multinationals. Efforts were made in the U.S. to pass laws requiring American companies to meet U.S. health, safety and environmental standards in their operations abroad but such legislation has been opposed and blocked by multinationals.²⁷ In 1981, President Carter established a comprehensive policy curtailing the exportation of substances which had been banned or severely restricted in the U.S.²⁸ The Reagan Administration revoked this order claiming that it imposed too onerous a regulatory burden and that it was not cost-effective.²⁹ Other industrialized countries do not appear to have even considered regulation in this regard.

In short, the exporting countries have done very little to ensure the ethical behaviour of the multinationals. In Bukit Merah, there was no effort to notify Malaysia of the potential hazards nor did Japan insist on any particular conduct from Mitsubishi. The industrialized nations have not been willing to take the lead in ensuring responsible export policies or in initiating strict international export controls. It has remained up to the critics and ordinary citizens to show leadership in flagging the problems of exporting technology which can potentially lead to disastrous results.

III. Community Action

27. See Diamond, *supra* note 21, at 1. Diamond quotes Jack Early, President of the National Agricultural Chemicals Association who called such legislation "regulatory imperialism."

28. Exec. Order No. 12,264, 46 *Fed. Reg.* 2659 (1981).

29. 46 *Fed. Reg.* 1243 (1981).

The contribution and participation of the local action groups in monitoring health and safety has been largely overlooked and underestimated. Scarcity of resources and an agricultural society have tended to be equated with a lower level of civilization. Citizens in the less industrialized countries are recognizing the problems and mobilizing their resources, much as the early environmental and consumer groups did in the westernized countries in the 60's and 70's.³⁰ In Bukit Merah, the Perak Anti-Radioactive Committee led the drive for review of plant operations and then later coordinated the mass demonstrations which took place. Group action was also responsible for inviting in the outside experts who gave the community the evidentiary basis it needed to make its case. The publicity generated by the visits and by the constant pressure exerted by members of the group increased the awareness of the local population and served to educate the townspeople. It was also this group, with the help of the Penang Consumer Association, Friends of the Earth, and other anti-nuclear groups, which organized the fund drive for the legal challenge and which supported the plaintiffs in the court case. Such action is within the reach of communities in most developing countries. It has been an extremely useful tool in the industrialized countries for bringing attention and action to the problems of health and safety and the environment. It can be equally effective in developing countries. It is suggested that along with the technology and hazardous industries, industrialized nations should be exporting citizen action strategies to protect health and safety.

The Public Interest Litigator

After Bhopal, there was much negative comment about the workings of the Indian court system.³¹ In particular, the huge

30. Leonard and Morell, "The Emergence of Environmental Concern in Developing Countries: A Political Perspective," 17 *Stan. J. of Int'l L.* 281, 283-84 (1981). These authors trace the growth of environmental management agencies in developing countries.

31. See in particular Stewart, James "Why Suits for Damages Such as Bhopal Claims are very Rare in India: Huge Backlog of Other Cases, Paucity of Tort Precedent, Filing Fees are Deterrents" *Wall Street J.* Jan. 23, 1985, at 1.

backlog of cases and the necessity of filing a non-refundable filing fee of up to 5% of total damages were cited as real obstacles to the ability of the Indian courts to deal with the mass litigation for the compensation of the victims of the disaster. The local Indian bar was quickly overshadowed and out-manoeuvred by aggressive American attorneys who descended on Bhopal within days of the tragedy.³² An impression was left that India, at least, and probably most developing countries have inadequate or at least overloaded legal systems which are not capable of addressing the problems resulting from rapid industrialization. This is an unfortunate, paternalistic and unrealistic view of the actual situation.

In fact, public interest litigation has proven to be a very effective means of addressing some social problems in the less industrialized nations. Experienced and competent lawyers have managed to bring sophisticated and technical issues before the courts and have achieved satisfactory conclusions on a number of important social problems.³³ The obvious problem with public interest advocacy is that lawsuits are costly and time consuming. However, these are the same problems facing persons who wish to use the legal system in any jurisdiction (including the rich ones). The Bukit Merah example shows one community's creative response to the problem of cost, and it was not the first time that a bake sale or some other grassroots funding raising drive brought an issue to court.

A very progressive government in a developing state may even be persuaded to put aside funds for public advocacy in the area of health and safety and the environment. In Canada, for example, after the Canadian Charter of Rights and Freedoms was enacted, the Canadian government allocated funds to LEAF, a women's legal education and action fund. This advocacy group selectively mounts cases which it hopes will advance the cause of women. Consumer's groups also fund certain public and legal representations made in their behalf.

32. The conduct of the American lawyers who appeared on the scene with unseemly haste indicated an implied lack of confidence in the abilities of the local bar.

33. Dr. Alice Jacobs of the Delhi Institute of Law indicated a number of such cases to this author.

Legislative Reform

Developing nations are often criticized for their lack of adequate health and safety laws and for their failure to enforce whatever laws may be in place. They cannot afford and do not have large pools of health and safety specialists or inspectors. Whatever legislative reforms they propose must take these realities into account.

These problems, however, also exist in the industrialized nations, where workers and unions have long been struggling to find ways to reduce accidents and illness and to have more control over their workplaces. One example of a relatively inexpensive and innovative reform that has been adopted in the West, and which may provide some help to bolster the regulatory systems in developing countries, is the joint health and safety committee. In Canada and the U.S., joint health and safety committees have become the vehicle to enable workers to participate in workplace decisions.³⁴ While these committees have their critics, they are very useful in the sense that they require their members to have special training and expertise in hazard identification and elimination. The mechanism of a joint committee brings the worker into the decisionmaking process, alerts him or her to the hazards of the particular workplace and provides an additional educational and training experience which the committee member can then share with others.

In the aftermath of Bhopal, there are reports of the union frustration at having its health and safety concerns ignored.³⁵ A joint health and safety provision in the India Factories Act³⁶ might have provided a better way of reaching the management and sounding the alarm. Joint health and safety committees can also help alleviate the shortage of inspectors by providing for safety inspections to be carried out by the committee.

34. These joint health and safety committees are either built into the occupational health and safety legislation or they are bargained for and become part of the collective agreements. They are generally composed of equal numbers of management and labour.

35. See Ramaseshan, Radhika "Profit Against Safety", *Economic and Political Weekly*, Dec. 22, 1984 at 2147.

36. India Factories Act, LXIII of 1948.

Another progressive legislative reform empowering the workers and citizens of a community with a means to redress the health and environmental problems affecting them is the use of the occupational health and safety acts or their equivalents to allow a prosecution to be brought by an individual against the company. If the individual was successful in the action, he or she would be eligible to recoup a percentage of the fine (50% for example) levied under the act.³⁷ This provision would accomplish two goals: it would counter the reluctance of the state to prosecute companies whose investment is so badly needed and it would give persons liable to suffer harm as a result of the activities of hazardous industries some control over their fate. The possibility of collecting part of the fine offers some incentive for persons to take on the risky and expensive task of a lawsuit and provides some deterrent effect on companies who flagrantly breach health and safety standards.

This approach has been suggested but seldom implemented in North American legislation. It has been resisted by companies and by the legislators who fear a mass of litigation and the filing of frivolous suits.

However, in the view of this author, such a fear is unwarranted, especially in developing countries where litigation has not frequently been resorted to by ordinary citizens. It is highly unlikely that the prospect of receiving some percentage of a fine would trigger an avalanche of litigation, given the consequences in terms of cost if the action was lost. The expense incurred in mounting the lawsuit and in perhaps paying costs to the successful party would deter all but those persons who felt there was a serious violation of the health and safety laws and a real risk to the worker and the community. It provides an alternative means to keeping companies accountable, not only to the host government but to citizens of the country themselves who may have to take the lead in protecting their own health and the environment.

37. Such a solution has occasionally been proposed in the U.S. but has not been implemented. See e.g. Chelius, J. in *Workplace Safety and Health: The Role of Workers' Compensation* (1977) and see Note, "A Proposal to Restructure Sanctions Under The Occupational Safety and Health Act: The Limitations of Punishment and Culpability," 91 *Yale L.J.* 1446 (1982).

Conclusion

The increasingly rapid rate of industrialization in developing countries has brought with it serious pollution and occupational health and safety problems. While such problems exist in the developed countries, they are particularly acute in poor, overpopulated countries, already polluted and suffering from massive unemployment. Bukit Merah, is a typical example of the exploitation of a community in a developing country. The roles played here by the Malaysian government, by the Japanese government and by Mitsubishi, the multinational, are representative of what happens over and over in many communities in the Third world. The difference lies in the community response to the exploitation both in Bukit Merah and in Japan.

International law, voluntary codes of conduct and the intervention of international banking practices all provide some hope for the elimination of the problem of double standards in developing countries. However, the people affected by unenforced health, safety and environmental laws also need the power to protect themselves when their governments fail to act. Their access to the courts by means of public interest litigators, and by statutory reforms which empower them to prosecute in serious cases, is essential. The social activism which has been effective in raising awareness and in embarrassing governments and companies who act unethically in the industrialized nations should be exported to developing countries along with the technology.