

Public Health and the Law

Chemical Industry Accidents, Liability, and Community Right to Know

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The Bhopal, India tragedy and other industrial accidents (e.g., Seveso, Flixborough, Mexico City, Institute, WV) have frightened the citizens of developed and undeveloped countries. These accidents, along with numerous hazardous waste problems, have led to a dramatic loss of public confidence in chemical industry management and their safety experts. The occurrence of such accidents also provides vivid evidence of the serious gap between government legislative promises and government performance in the actual control of industrial hazards.¹

As a result, persons who believe they have been injured or put at risk by industry are now using tort law to secure private remedies in the courts, and seeking increased information on industrial hazards from companies and agencies to develop new risk reduction measures. This public shift away from passive reliance on industry and government for protection to self-help strategies is most discernible in the United States, but is also taking place in the European Community.

Tort Liability

Over the past decade, workers suffering occupational disease have used dual strategies to secure compensation and other remedies. They have filed for the limited "benefits" available under state workers' compensation systems from their employer's insurer. And they have become increasingly successful in using tort law against the suppliers of injurious products, (such as asbestos) to secure large awards of compensatory and punitive damages, by arguing that the supplier's failure to warn of product hazards constituted tortious conduct. The Occupational Safety and Health Administration has responded to these circumstances by enacting important regulations which impose affirmative duties on employers to warn workers of the hazardous chemicals in use, and which provide workers with rights of access to company medical and exposure records.²

Residents of communities with unusual clusters of disease are also filing tort actions against firms whose activities (routine emissions, accidents and spills, and waste management failures) have contaminated water supplies, crops, soil and other features of the community environment, and put them at risk of disease. In one well known case, *Ayers v. Jackson Township*, 350 residents sued the town for water supply contamination, emotional distress, and in the absence of any evidence of clinical illness, for being put at increased

risk, arising from improper management of hazardous wastes. They were initially awarded \$16 million, of which \$8.2 million was to be set aside for ongoing medical surveillance and testing of the population for disease symptoms over time, to facilitate medical intervention. On appeal, the award was reduced to \$5 million for impairing their "quality of life" and water supply (eliminating the awards for medical surveillance and emotional distress).³

The threat of such suits brought under state tort law, which has been modified in recent years to the advantage of the victims, is now often enough to compel industrial defendants and their insurers to quickly settle, rather than incur litigation costs, large damage awards, and adverse publicity.

Faced with numerous "toxic tort" actions by workers and community residents and evidence of wrongdoing by companies and other parties, state courts have sought to "do justice"—to modify tort law and procedural requirements so that plaintiffs have a reasonable opportunity to secure compensation and other remedies from those at fault.⁴ The major adaptations, which have invigorated the tort system and led to large jury awards, include:

- *modifying the statute of limitations* (the period during which a tort action can be brought), by holding that the state statute begins to run at the time the illness was discovered or reasonably ascertainable, rather than at the time of exposure, in recognition of the long latency period for chronic health hazards. (If left to run from the time of exposure, most toxic tort actions would be stifled.)

- *providing for strict liability theory*, so that a plaintiff needs to prove injury and causation, but no longer need establish the defendant's negligence or lack of due care, in order to prevail (thereby easing the evidentiary requirements for plaintiffs).

- *providing for imposition of liability on a "joint and several" basis*, under which one firm at fault can be held fully liable for the actions of all firms involved in causing the harm, leaving it to this one firm to later file claims or other actions against the other firms to secure their respective shares of the liability. (Another easing of the plaintiff's evidentiary burden.)

- *permitting the introduction of circumstantial scientific evidence of causation* (e.g., various epidemiological or toxicological studies of populations) as relevant to the particular victim's claim, and according substantial weight or significance to such evidence.

- *expanding the "duty to warn" concept*, so that evidence of defendant's failure to warn serves as a basis for finding the defendant liable for the plaintiff's harm under strict product liability theory and negligence theory.

The insurers of the industrial firms being sued have borne much of this liability. Courts have consistently held

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that insurers have a "duty to defend" their insureds against these claims (which is a costly proposition), and must provide compensation for most accident and pollution incidents, despite policy language used by insurers which had attempted to narrow insurance coverage only to "sudden and accidental occurrences." As a result, property and casualty insurers and reinsurers in the United States and Europe, which are linked by "treaties" in order to provide coverage at high dollar levels for chemical firms, lost several billion dollars in 1985 (their worst loss year in 80 years), largely due to tort liability awards and settlements in the US.⁵

Consequently, the insurance market for chemical industry coverage has "collapsed", and chemical firms subject to the jurisdiction of American courts are finding it virtually impossible to obtain adequate insurance coverage at affordable prices.

Because of these new tort law developments and their extreme vulnerability to large economic losses without insurance, chemical firms are now pursuing several protective strategies. One is political, and involves their lobbying for changes in the US tort system (e.g., elimination of joint and several liability and contingent fees, limits on the dollar levels of awards). This solution will not be completely successful, since the changes in the tort system have deep roots in the values of Americans and new scientific findings, and cannot now be easily discarded. Further, attorneys for plaintiffs are adept at devising innovative tort law strategies to overcome new obstacles.

The analytic strategy involves the conduct of extensive in-house risk assessment and risk management initiatives by major chemical firms.⁶ What these firms are finding is that risk assessment is fraught with difficulty since it is an art form not reduced to generic practice or confident results; that technical uncertainty prevails; that public values and attitudes about risk are shaped without apparent regard for probabilistic risk estimates by industry or experts; and that there is no "stopping point" at which a firm can determine with confidence that enough assessment and control measures have been undertaken. Since accident risks require both preventive measures as well as "post-loss" measures (to control losses after the accident), firms must cooperate with local officials, but encounter the further difficulty that the local government officials lack the necessary skills, authority, and resources to develop, test, and manage emergency response systems.

Community Right to Know

Given their mistrust of industry and government, citizens are now seeking risk information from these two sectors in order to take various self-protective actions (ranging from litigation to curb industrial activities to the design of emergency systems for responding to accidents). Laws in the US and the European Community (EC) now require industry to communicate various types of risk information to government agencies at national, state, and local levels, and in some cases, require industry and government agencies to disclose risk information to workers and community residents.⁷ In the US, laws establishing that persons at risk have a "right to know" certain information held by agencies and companies are based on at least three premises:

a) that one who possesses information which can enable another to avoid harmful consequences arising from their

relationship has a duty to disclose such information in timely fashion.

b) that risk management should be a joint enterprise which provides for the informed participation of persons at risk, along with the industrial risk generator, the government risk control agencies, and their various experts, since defining, measuring and preventing risk is a complex problem which transcends the economic concerns of industrial firms, and their insurers.

c) that risk communication informs the public, and thereby promotes agency accountability.

For chemical industry accident hazards, a major concern since Bhopal, a multitude of old and new laws are now being used in the United States to promote the communication of relevant information about accident risk.

State and Local Laws for "Community Right to Know" (CRTK)

Some 12 states and dozens of communities have recently enacted laws and ordinances requiring company communication of industrial accident hazard information to local officials, and in certain instances to the citizenry.* These laws vary considerably as to the chemical substances and industry installations covered, the information formats and communication processes to be used, and various disclosure and access requirements. A federal court has recently held that the CRTK provisions of New Jersey's law are not preempted or in conflict with the federal worker right to know rule promulgated by the Occupational Safety and Health Administration (OSHA) to inform workers.⁸ Presumably, state laws with variable requirements for community right to know will now proliferate, but their implementation will require the infusion of resources and skilled personnel, and sustained political support. Experience in Massachusetts and other states with these laws indicates that actual performance will fall far short of legislative promise without continuing public pressure.

Federal Regulatory Requirements for Risk Communication between Industry, Federal Agencies, and Persons at Risk

Numerous laws and regulations require firms to report risk information to federal agencies such as the Environmental Protection Agency (EPA), the Department of Transportation and the Nuclear Regulatory Commission. For example, the *Toxic Substance Control Act* requires pre-manufacturing notice information and various health and safety findings on chemicals to be reported to EPA, and federal pesticide laws require similar reporting of risk information. Other statutes and regulations dealing with hazardous waste management and cleanup, and with permits for the discharge of pollutants into air and water, also require the reporting of

*State laws recently enacted fall into two categories:

1) *Comprehensive Community Right-to-Know Laws*: (local official and individual person right to know)

Iowa Chapter 1085 of the Acts of 1984

Massachusetts *Mass. Gen. Laws* ch. 111E

New Jersey *Worker and Community Right to Know Act*, Chapter 315 of the Acts of 1983

Pennsylvania Act No. 159 of the Acts of 1984

2) *Limited Community Right-to-Know Laws*: (local official right to know only)

Connecticut *Conn. Gen. Stats.* Ch. 557, 31-40c et seq.

Delaware *Hazardous Chemical Information Act*, Chapter 334 of the Acts of 1984

Florida Chapter 223 of the Acts of 1984

Illinois Chapter 240 of the Acts of 1983

Maine Chapter 823 of the Acts of 1984

Maryland *Md. Code Art.* 89

New Hampshire *N.H. Rev. Stat.* Ch. 277A

Rhode Island *Hazardous Substances Right to Know Act*, Chapter 18 of the Acts of 1983

various risk information by firms to EPA.** Once such risk information is acquired by an agency, it is subject to federal *Freedom of Information* law which provides for public access (discussed below).

Several OSHA rules go further in that they require industrial communication of risk information to the agency and also to workers. As a practical matter, information provided workers can be expected to flow to members of the community as well. As noted earlier, OSHA's rules provide for worker access to their company-held medical and exposure records, and require manufacturers and importers of certain chemicals to provide material safety data sheets (MSDSs) and labels to their industrial customers, with all manufacturing firms involved in this "downstream" process of communication to then provide the MSDSs to workers at risk, together with education and safety programs.***

Laws Guaranteeing Citizen Access to Agency-Held Information in General

Federal and state *Freedom of Information Acts* (FOIA) provide citizens with the right of access to agency-held information, including information secured from industry, subject to various exceptions under which trade secrets and intra-agency memos can be withheld by the agencies. Other provisions confer on citizens rights of access to agency meetings and advisory committee activities.⁹

Common Law Duty to Disclose and Warn

State common law imposes on industry the duty to disclose risk information and warn those who are at risk from reasonably foreseeable hazardous circumstances. Well established for product hazards to consumers and workers, the duty to warn also applies to situations involving industrial hazards to community residents.¹⁰ Failure to warn has had tragic health consequences for persons at risk (e.g., workers handling asbestos) and great economic impacts on the firms involved (e.g., punitive damages running to the millions of dollars, which are not insurable in many states).

Use of State Police Power to Protect Health and Safety

Over the centuries, use of state "police power" has led to a multitude of state and local laws empowering state and local health and fire officials to control accident hazards. Local authority to regulate, site, inspect, and license dangerous activities, and to require industrial disclosures of risk information, is found in every state. Although dormant for decades in many communities, they are now being used as authority for bold new actions by these officials, including the shutdown of industrial activities deemed to create health risks to community residents.¹¹

Other Developments—Since Bhopal

Representative James J. Florio, Senator Frank R. Lautenberg, and others in Congress have proposed sweeping new laws in 1985 for regulation of chemical industry accident hazards. Their bills essentially would require firms to inform state and local authorities about hazards, to permit evalua-

**15 U.S.C. 2601. Sections 5 and 8 of TSCA are of most relevance regarding risk communication. The pesticide law, 7 U.S.C. 136, also requires labeling and information for registration and approval procedures. The hazardous waste laws at 42 U.S.C. 6901 and 9601, and the air and water pollution control laws at 42 U.S.C. 7401 and 33 U.S.C. 1251, respectively, contain numerous reporting and inspection requirements which generate risk communications.

***Worker access to medical and exposure records rule at 29 CFR 1910.20. Hazard communication rule at 29 CFR 1910.1200. See Baram M: the right to know and the duty to disclose hazard information *Am J Public Health* v. 74. n. 4 (April 1984) p. 386.

tion of the internal activities of the firms, and to authorize these officials to develop local and regional emergency response plans across the nation.¹² Under the threat of congressional action, industrial organizations (e.g., the Monsanto Company and the Chemical Manufacturing Association) have voluntarily proposed community right-to-know initiatives whereby the material safety data sheets developed and used to inform workers under the OSHA "Hazard Communication Rule" would also be made available to state and local officials. In addition, unions have recommended new measures for the communication of industrial risk information to workers and communities.¹³

Thus, we now have in the US a broad and growing array of legal authority for risk communication between industry and government, and in many instances between industry and citizens. Some of the new state right-to-know laws promote citizen access to industry-held information, without going through an agency intermediary, as noted earlier. And of course, once any litigation begins, there are pre-trial discovery procedures which enable plaintiffs' attorneys to secure many internal corporate risk studies and documents.¹⁴

There is no need in the US for further legislative authorization of risk communication, from a legal perspective, since the authority needed is now in place. But the existing authority is difficult to use. The yields of information are fragmented and limited, and the authority now in place has little forcing effect on industry to cooperate with community officials and residents, nor does it impose emergency response plan requirements on local officials in most instances. As a result, new measures are being taken in the US, which are now discussed and compared to the approach being taken in the European Community.

EPA and European Initiatives

After considerable deliberation, EPA published in late 1985 a set of materials to stimulate and guide state and local efforts at improved risk communication, accident hazard analysis and control, and the local development of emergency response systems.¹⁵ The EPA materials consist of a "guidance package" for state and local officials as to how to establish an effective program for identifying the industrial hazards in their midst, and how to develop emergency response plans.

EPA also included a list of some 400 substances with high propensity for accident hazards (e.g., due to their volatility, corrosivity, vaporization, flammability and toxicity characteristics), and *fact sheets* for each of the 400 substances, providing basic information on their accident hazard characteristics, and various self-help and emergency response options (e.g., first aid, evacuation, etc.).

This initiative will not be legally enforceable by EPA. However, it does provide a set of principles about corporate responsibility to warn of certain chemical accident hazards, and establishes a state of knowledge as to accident hazard prevention. Thus, if a company does not comply or act voluntarily by informing local officials, even if the officials do not actively seek the information, such company becomes more vulnerable to punitive damages in tort actions which may be brought after an accident occurs, and to injunctive relief (e.g., stop work orders) before accident occurrence.

The EPA initiative will do little to promote the uniformity of risk communication and accident control systems across the nation, and will probably promote a multitude of

new, highly variable state and local laws on industry accident hazards. Citizens will have access to much of the information communicated by firms to state and local officials under these new laws and other state FOIA-type laws, and this will lead to controversies at town meetings and litigation in state courts to shut down or otherwise restrict corporate activities involving designated toxic chemicals.

In addition, citizens will seek more information from companies than what is contained in MSDSs, and companies will assert that such information is proprietary or trade secret. This will lead to further litigation in state courts, since trade secrets issues are matters of state law. Given the high potential for these controversies, industry has some hard choices to make about the information it will provide, and the research and other information-generating activities it will conduct on safety matters.

In direct contrast to this tentative and non-regulatory EPA approach is the bold promise of the European Community's (EC) "Seveso Directive." By 1989, each of the 10 European nations which belong to the EC and subject to the Directive, is required to have, in place, an enforceable system for accident hazard control, risk communication and emergency planning, authorized by national legislation.

Under "Seveso", each firm handling any of some 178 chemicals in certain quantities is to develop an internal risk analysis or "safety case", which evaluates the storage and uses of the chemicals, potential accident hazards, existing systems to prevent accidents, events which can overwhelm the systems (internal malfunctions, external forces), and emergency response plans for workers. The safety case constitutes a package of company-developed information, much of which is proprietary and traditionally protectable as trade secrets. It is to be submitted to a designated public official in each nation for review, and this official can then act to force additional accident control measures to the extent provided by national law. The official must also act to establish community emergency plans.¹⁶

The Seveso system differs from the EPA Guidance and the existing legal mosaic in the US in several respects:

- Seveso clearly imposes responsibility for accident risk analysis and disclosure on industry.

- It requires government review at the national level, permits national controls and licensing programs for chemical industry facilities, and requires emergency planning by designated public officials.

- It provides a blanket of trade secret protection by requiring that national officials withhold proprietary information from the public.

- It affirms traditional European views that citizen access to risk information be limited to what citizens "need to know" (e.g., under the British implementation plan being developed, citizens would learn only the accident warning signal, evacuation route, and recommended medical treatment).¹⁷

- It provides for accident reporting and analysis systems, a structured research program, and development of an automated "expert system" for accident control and emergency response programs.

The European chemical industry has voiced its concerns about the Seveso Directive—such as its potential for leakage of trade secrets, its extension of government authority into the management of chemical plants, and its mandate for a new licensing system to control chemical facilities.

But the core issue for the managers of European firms is that of responsibility for plant accident hazards and control.

If control over in-plant activities is now shared with government officials and their consultants, responsibility for control will also be diffused among several parties. As corporate autonomy and control are diminished, so is corporate responsibility. If an accident occurs, who will be at fault among the new trio of plant managers: industry ?, government ?, independent consultants?¹⁸

American adoption of the Seveso model has been recommended by many who admire its explicitness as to duties, and its systematic approach. But obviously, it has at least three major limitations as a model for the US. First, its protection of trade secrets is more expansive than protection in the US; second, its view of public access to information held by government officials on a "need to know" or other narrow basis conflicts with American "right to know" doctrines; third, its diffusion of management responsibility would blunt or reduce the risk deterrent effect of US tort law on American firms, since responsibility is the basis for determining liability in the US system.

If these three problems are carefully resolved, the Seveso model could become appropriate for American use. An American version would require a narrow definition of trade secrets, and a careful limitation on public "right to know" so that industry willingness to disclose information on safety hazards to officials would not be chilled. Finally, it would have to address the allocation of liability in accordance with the actual exercise of responsibility. If these issues are appropriately addressed, American adoption of the Seveso model could lead to an acceptable and effective system for controlling chemical industry accident hazards.

Conclusions

The communication of hazard information is now recognized as a vital feature of the new self-help efforts being made by workers and community residents to prevent industrial risks and avoid harms. Legislation at state and federal levels, regulatory actions, and common law doctrines now impose on industry the duty to warn of hazards, and also provide persons at risk with the right-to-know hazard information. Thus, hazard communication is more than a theory or moral imperative; it is now rooted in explicit and enforceable legal doctrines.

Moreover, hazard communication is not an isolated development: it has broad implications for corporate management. The *duty to warn* imposed on industry carries with it two concomitant duties for industrial officials: the *duty to identify* hazards through reasonable efforts and the use of expertise so that the duty to warn will be meaningful; and the *duty to act* diligently to control or reduce the hazards, once they have been identified, so that the duty to warn will not be dispositive on the matter of corporate responsibility. Thus, three corporate functions for risk management are inextricably linked.

Exercise of their rights under these doctrines, and of other authority for the right to know by persons who perceive they may be at risk provides the continuing pressure on industry and agencies to comply with these duties, and assures corporate accountability in carrying out the duties to identify, warn and act. Thus, powerful tools are now available for use in the new self-help era of occupational and environmental protection.

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3. *Ayers v. Jackson Township*, 189 N.J. Super. 561 (1983); —N.J.— (May, 1985). (The award for impairing "quality of life" can be construed as liability for increased risk, a significantly new remedy under the tort system.).
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5. Id.
6. See Baram M: Charting the Future Course for Corporate Management of Health Risks *Am J Public Health*, v. 74., n. 10 (Oct. 1984) p. 1163.
7. See Baram M: Risk Communication and the Law. Paper presented at Conference on Risk Communication sponsored by US Environmental Protection Agency, Long Beach, California, Dec. 3, 1984 (to be published as EPA Conference Report, D. von Winterfeldt, V. Covello, P. Slovic (eds), in 1986).
8. *Manufacturer's Assoc. of Tri-County v. Knepper*, 12 OSHC 1553 (U.S.D.Ct., M.D. Pa., Dec. 12, 1985); and *New Jersey State Chamber of Commerce v. Hughey*, (Ct. App. 3d Ct., N.J., 1985), Nos. 85-5087, 5088, 5095; —F. 2d—. Also see Baram M: note 2 supra. State legislators are actively promoting new laws. See, for example, #A4145, the proposed Toxic Catastrophe Prevention Act of Assemblyman Byron Baer, in New Jersey (Sept. 9, 1985).
9. FOIA at 5 U.S.C. 552. See *Litigation Under FOIA*, Ctr. for National Security Studies, Washington, DC (annual reports).
10. *Restatement of Torts, 2d* at section 388.
11. See, for example, *A.D. Little, Inc. v. Cambridge Commissioner of Health*, 395 Mass. 535 (1985).
12. See Florio's proposed *Chemical Manufacturing Safety Act of 1985*, Feb. 1985, for example.
13. See *Chemical Week*, Jan. 30, 1985, pp. 17, 18, regarding industry initiatives. Also see *The Trade Union Report on Bhopal*, Int'l. Confederation of Free Trade Unions, Geneva, Switzerland (1985), (which recommends that chemical manufacturers provide full information on hazardous chemicals and processes to workers, the public, and purchasers).
14. See Brodeur P: note 2 supra, on the use of discovery techniques in litigation to acquire company-held information, such as the notorious Sumner Simpson file of memos evincing corporate activity to withhold risk information from asbestos workers, industrial customers and the public.
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10th National Conference on Correctional Health Care Call for Papers

The 10th National Conference on Correctional Health Care, to be held at the Washington (D.C.) Hilton Hotel on October 30–November 1, 1986, is sponsored by the National Commission on Correctional Health Care and the American Correctional Health Services Association.

In celebration of a successful decade of holding national forums for professionals working in correctional health care, the theme of the 10th national conference—Reasonable Health Care: What Is It? How Much is Enough?—will address practical, cost-effective, and efficient methods of providing health care and medical services, and will focus on clinical descriptions and treatment regimens for acute and chronic diseases frequently found by medical practitioners in correctional facilities. The Commission's 1986 revised standards for health services in prisons and jails will also be featured.

The National Commission on Correctional Health Care is a not-for-profit organization dedicated to improving health care in our nation's jails, prisons, and juvenile confinement facilities through the accreditation of facilities that comply with standards for health care and medical services originally developed by the American Medical Association.

The American Correctional Health Services Association is an organization of professionals concerned with health care and medical services in corrections.

A call for papers has been issued. Abstracts not exceeding 150 words should be submitted to the National Commission on Correctional Health Care, 333 East Ontario Street, suite 2902B, Chicago, IL 60611. For further information, contact Jodie Manes at (312) 440-1574.