

Much of the majority's concern arose from the totally unmanageable nature of the asbestos litigation. Class actions based on group exposures that are not as disparate from one another as they appear to be in the asbestos context might not meet with the same degree of judicial hostility.

E. RELATIONSHIPS BETWEEN TOXIC TORT AND PUBLIC LAW

The common law's private remedies, of course, do not stand alone. Public law — governmental regulatory action — plays an even larger role in environmental law. Like many environmental issues, the mass toxic tort problem is simply too large for adequate control by after-the-fact damage suits and the rare injunction based on prospective nuisance.

The public law statute most readily applicable to the Woburn case was the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, popularly known as Superfund), passed in 1980; a second major statute of potential applicability is RCRA, the Resource Conservation and Recovery Act. These are examined in Chapters 19 and 18 respectively. Both laws work to achieve cleanups of contaminated parcels. Neither grants private remedies for bodily injury or compensation for property damage, although CERCLA creates a private cause of action to obtain reimbursement for cleanup costs. On the governmental enforcement side, both laws allow the federal government to issue administrative orders requiring responsible parties to undertake cleanup, and CERCLA requires responsible parties in appropriate cases to pay damages to government for natural resource damages. RCRA also has elaborate requirements that seek to prevent releases of hazardous wastes into the environment in the first place, but events had moved far past that at Woburn by the time RCRA was enacted in 1976.

Section 1. CONTRASTING PRIVATE AND PUBLIC LAW

In the *Anderson* wellwater contamination case, as in many toxic tort controversies, both private law and public law ultimately played extensive roles. Private law and public law tend to be two different and uncoordinated worlds, both absorbing huge amounts of time and resources, and imposing major legal constraints on the industrial marketplace. Given the complex economic, political, and technical context, it is not surprising that systemic questions are constantly being raised whether the two legal régimes are redundant and ought to be rationalized, most often by proposals for limiting or eliminating toxic tort litigation.

The Woburn case offers an opportunity to consider larger questions about the systemic role of tort civil actions against the backdrop of state and federal statutes and regulatory agencies. What observations can be drawn from the following partial chronology of the parallel processes in the Woburn case's public and private law?

A WOBURN TOXICS TIMELINE:

- 1979** Government agencies (the federal EPA, the state environmental agency, and the local health board) take the first legal actions after testing groundwater around the

wellfield: they close the wells, fence the site, and identify potentially responsible parties (PRPs).

1980 EPA began the Superfund process: Preliminary Assessment: site investigation and analysis of the need and method for remediation, under §§106 and 107 of CERCLA (a cleanup process that averages 12 years; see Chapter 19).

1980–1981 Robbie Robbins, Jimmie Anderson, and Jarrod Aufiero died.

1981 The future plaintiffs ask the federal CDC to study the seeming leukemia cluster, and the CDC affirms that leukemia cluster is extraordinary.

1982 EPA places Wells G & H on the National Priorities List (NPL).

Lawsuit filed; discovery and other extensive trial preparations begin; Schlichtmann and plaintiffs give presentation at Harvard School of Public Health that launches field study. Grace admits using TCE and begins to undertake voluntary groundwater investigatory work.

1983 EPA Remedial Investigation and Feasibility Study (RIFS) complete.

EPA issues an Administrative Order to Grace to look for buried drums, excavate them, and install groundwater monitoring wells.

1983–1986 Plaintiffs' intensive investigation into medical causation of leukemias.

1984 CERCLA implementation process continues; Beatrice and Riley tell EPA they never used subject chemicals; Grace completes testing, inventory, and some drum removal as required by the 1983 Administrative Order.

Harvard School of Public Health Study published showing local health anomalies.

1985 EPA and USGS conduct a 30-day aquifer test. Plaintiffs' on-site testing accompanied by government investigators.

1986 Anderson et al. v. Grace & Beatrice: Trial on exposure phase begins in February, verdict at end of July: ambiguous verdict against Grace; plaintiffs cannot prove Beatrice tannery's contamination on terms required by court.

September: Grace settles for \$8 million.

1987 Plaintiffs discover Yankee Report in EPA files in September, showing contamination at the tannery site itself in test results.

1987–1990 Plaintiffs appeal Beatrice verdict and attempt to get a new trial to prove Beatrice's contamination based on Beatrice's withholding of reports during discovery. First Circuit tells Judge Skinner to review; he does and denies a retrial based on a Rule 11 theory, cert. denied.

1988 EPA begins criminal action against Grace based on its responses to a 1982 information request; Grace agrees to a settlement for approximately \$10,000 on a plea equivalent to nolo contendere.

1989 February: EPA proposes Remedial Design with on-site incineration. Major local opposition during comment period.

September: EPA finalizes second version of Remedial Design for site remediation, with off-site incineration and some removal of materials to RCRA-approved landfills.

September 14: EPA final Record of Decision (ROD).

1991 EPA Remedial Action begins with pump tests and pilot study of pump-and-treat system.

Remediation will take "several years," and will take place only on the property of the individual PRPs. No cleanup is scheduled for the contaminated well sites. EPA negotiates a consent decree with Beatrice, Unifirst, New England Plastics, Grace,

and others for cleanup. Estimated cost of \$69.5 million, with each party paying its own share. EPA will oversee and charge PRPs for administrative costs.

- 1992** Pump-and-treat remediation system in full operation; to remain so for indefinite future. Remediation under the modified plan is based on substantial removal of soils to RCRA-certified landfills.
- 1997** State Dept. of Public Health releases study concluding that the contaminated well-water was the cause of increased likelihood of childhood leukemia in the plaintiffs' Woburn neighborhood.³⁸
- 2000** Final remediation largely achieved for selected contaminated parcels (except well sites); groundwater not to be safe until 2020 at the earliest. The total amount of contaminated soil estimated by EPA for removal and incineration had been seriously underestimated; the final total has not yet been announced.

There is still major contamination of the land in Woburn. EPA has required the cleanup of only some of the contaminated parcels — Grace/Cryovac, New England Plastics (near Grace), Unifirst, Olympia Nominee Trust (land near Unifirst), and Wildwood Conservation (the tannery's low-lying 15-acre parcel). There are three additional sites being cleaned up under a state statute (Whitney Barrel, Aberjona Auto Parts, and Murphy's Waste Oil, all small entities along Salem Street at the bottom of the site map). Massachusetts would sign on to the settlement only if these latter sites were included. EPA had not gone after these sites because they were small and their contamination was predominantly oil, which is not covered under CERCLA. There is no cleanup being done on Well Sites G & H themselves because EPA is waiting to see whether the cleanup of the "contribution sites" will eventually result in a decontamination of the well sites. Note also that the tannery itself is not one of the sites being cleaned up, much of its soil reportedly having been removed informally during the course of the litigation.

COMMENTARY & QUESTIONS

1. Did public law contribute to the private law civil action and vice versa? Looking at this chronology, one can ask, "To what degree, if any, did the parallel processes facilitate one another?" Were they at all coordinated, or were they moving on two quite separate tracks?

It is clear that EPA's initial studies helped to target plaintiffs' efforts and that the CDC's study confirmed the likelihood of wrongful causation of the leukemias. Governmental findings of cleanup liability might have helped prove some of the elements of tort liability, especially Beatrice's contamination of the wells, and improved the plaintiffs' momentum, but they were not finalized until five years after trial.³⁹ The state epidemiology study might have helped prove causation, but it was not completed until ten years after trial. During the tort litigation, as is so often the case, government staffers were hesitant to provide active aid to plaintiffs, who only by chance found the 1983 Yankee Report in EPA files.

Did the private litigation aid the government's efforts? Without the plaintiffs, the government agencies probably never would have discovered Al Love, whose testimony

38. Mass. Dept. Pub. Health, Bur. of Env'tl. Health Assessment, Woburn Childhood Leukemia Follow-Up Study (July 1997).

39. Tort plaintiffs often seek to go to trial after the government has successfully prosecuted the same defendants for the same acts, riding the coattails of governmental findings of administrative liability or criminal penalties. A conviction or administrative penalty substantially aids private claims, but given uncoordinated statutes of limitations, the timing is often difficult.

about Grace's dumping produced criminal fines for perjury against the company. On several occasions, government field investigators lacked sufficient funds to do ongoing field studies and requested permission to come along when plaintiffs hired backhoes to dig for evidence of contamination. Without the dramatic tort case, is it likely the land and water would still ultimately reach the same level of remediation by EPA? Some government staffers said that the media climate around the case made it easier to negotiate with the corporations and pushed the file with greater internal momentum within the agency. Others denied this. Plaintiffs' evidence tending to show active contamination by the tannery was of no special assistance to the government because in the Woburn defendants' context, the toxic cleanup statutes made mere ownership of contaminated land a basis for strict liability.

2. Comparative advantages of public law. For the people of Woburn, the public law's cleanup mechanisms for contaminated land and groundwater presented some substantial advantages over private law. Emergency protective actions can be ordered instantaneously, as were those ordering the well closings. Sophisticated land remediation techniques are applied under expert agency supervision at no expense to the neighborhood, paid for by the responsible corporations. Proof in a public law case can be far easier than in tort law. Unlike private plaintiffs, administrative agencies engaged in environmental protection are not required to prove causation by a preponderance of the evidence. Plaintiffs recovered zero from Beatrice's contamination of wellwater, while EPA got a large part of \$69.5 million.⁴⁰ The agencies' presumed expertise and authority to protect public health entitle their decisions to great deference from reviewing courts. Courts can overturn agency decisions only where they have been found to be "arbitrary and capricious" or the equivalent. See Chapter 7. When scientific uncertainty and potential danger are both great, reviewing courts show even greater deference and accept administrative records that they would reject under other circumstances. When EPA issued its regulations prohibiting lead in gasoline (suspected to pose particular risks to urban children), for example, the agency admitted that scientific knowledge regarding the harmful effects of lead was highly uncertain. The evidence never would have supported tort liability. In *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976), however, the court upheld the public law prohibition:

From extensive and often conflicting evidence, the EPA in this case made numerous factual determinations.... Some of the questions involved in the promulgation of these standards are on the frontiers of scientific knowledge, and consequently as to them insufficient data is presently available to make a fully informed factual determination. Decision making must in that circumstance depend to a greater extent upon policy judgments and less upon purely factual analysis.... We note that many of the issues in this case do not involve "historical" facts subject to the ordinary means of judicial resolution. Indeed, a number of the disputes involve conflicting theories and experimental results, about which it would be judicially presumptuous to offer conclusive findings. In such circumstances, the finder of

40. Under the settlement, the companies agreed to pay \$58.4 million to clean up polluted soil and groundwater, \$5.8 million to fund EPA oversight of the cleanup, \$2.7 million to the government for its previous work at the site, and \$2.6 million for further studies and cleanup costs. EPA assessed Beatrice for the majority of these costs, based on EPA's determination that Beatrice had been responsible for the majority of the contamination.

fact must accept certain areas of uncertainty, and the findings themselves cannot extend further than attempting to assess or characterize the strengths and weaknesses of the opposing arguments....

Where a statute is precautionary in nature, the evidence difficult to come by, uncertain, or conflicting because it is on the frontiers of scientific knowledge, the regulations designed to protect public health, and the decision that of an expert administrator, we will not demand rigorous step-by-step proof of cause and effect. Of course, we are not suggesting that the Administrator has the power to act on hunches or wild guesses. His conclusions must be rationally justified. However, we do hold that in such cases the Administrator may assess risks.... He may apply his expertise to draw conclusions from suspected, but not completely substantiated, relationships between facts, from trends among facts, from theoretical projections from imperfect data, from probative preliminary data not yet certifiable as "fact," and the like.... Operating within the prescribed [statutory] guidelines, he must consider all the information available to him. Some of the information will be factual, but much of it will be more speculative scientific estimates and "guesstimates" of probable harm, hypotheses based on still-developing data, etc. 541 F.2d at 26–29.

This process of imposing public law liability, needless to say, is totally different from the process of proving legal liability in a tort case like the Woburn setting. As studied later, in Chapters 18 and 19, government hazardous waste remedies have no need to prove specific causation of harm, the scientifically subjective task that overturns most tort plaintiffs. Agencies merely have to show that a responsible party owned the site, or transported, dumped, or arranged for the disposal of toxics at the site. The burden of proof in this context is effectively on the PRP, not the prosecuting agency. It may take an average of 12 years to clean contaminated sites, but government eventually gets the job done.

3. Comparative advantages of private law. But private law offers major utilities as well. Public law remedies depend on official decisionmaking, which in some settings can be held back by politics or inertia. At common law, however, if a plaintiff pays the filing fee and has competent proof on point, a court has to hear the case, and if the facts are there, a remedy is likely to issue. Public law produces no compensation for injured citizens. Common law damages are a driving force behind many private law actions against toxic industrial cost externalizations. The self-interest of affected citizens, as in *Boomer*, or in citizen suits authorized by statutes such as the CWA often are a better motivator to bring important issues into the law. Courts in tort actions, moreover, as noted in this and the preceding chapter, also have a variety of equitable remedies to tailor outcomes to public and private needs, a flexibility in available remedies that few agencies know to exercise. (Tort remedies, however, especially punitive damages, may have no necessary proportionality in the burdens they impose. Public remedies, which are developed in standardized administrative procedures, may have greater uniformity and circumspection.) Tort remedies, evolved over centuries and familiar to judges, can sometimes be mobilized more readily and applied more flexibly, without attenuated technical procedures, than can public regulatory law.

Note in the Woburn toxics case a further societal utility of private law: In public law, there is little or no legal obligation of official agencies to investigate and remedy public

health threats. The vigilance and perseverance of official agencies in investigating and defending against public toxic exposures depends on a variety of logistical and political conditions. A charged-up media climate is often necessary to attract official response to a diffuse health threat such as a possible leukemia cluster. Private law tort actions can bring health considerations into the central focus of the legal forum and serve to mobilize governmental attention. Public and private law thus operate in two different realms, serving quite different functions.

Do the two realms conflict with one another? On the ground they seem at most to supplement one another. To marketplace industries, however, the two forms of liability understandably seem like duplicative overkill — you can comply with CERCLA and still get sued by the neighbors for an even more stringent common law cleanup order⁴¹ — which leads to calls for “tort reform” relief.

4. The “tort reform” efficiency debate. Does the Woburn toxics case throw any light on arguments that complex cases involving scientific subtleties and public risk should be handled in the future by government agencies under public laws rather than by private litigation in courts? Over the years there have been recurring calls (from many academics as well as defense attorneys) for tort reform, based not only on perceptions of the growing size of tort recoveries (the radio talk shows’ favorite example probably is the plaintiff who initially was awarded \$2 million for burns from spilled coffee) but also on perceptions of the common law’s limitations in coping with the problems of mass tort and toxics cases. The plaintiffs’ bar responds that the average recovery in tort cases has not increased disproportionately, and that the insurance industry, in decrying the need to raise premiums, focuses on tort payments to the exclusion of its own internal investment policies. That debate is likely to be noisy and continuing.

In recent years, environmental tort cases have regularly provided some of the nation’s largest damage recoveries.⁴² As to mass toxic torts, a substantial body of scholarship argues that toxic exposure cases are too massive and complex to be left to the common law. The nature of epidemiology, the size of exposed plaintiff classes, the emotional and economic repercussions of litigation, and the problems of latency all combine to recommend statutory and administrative overrides of the tort law. See Trauberman, Statutory Reform of “Toxic Torts,” 7 Harv. Envtl. L. Rev. 177, 188–202 (1983). Some scholars thus recommend statutory or administrative mechanisms that would permit compensation to be awarded on the basis of exposure and significant risk of disease, without the necessity of proving the existence of present injury. The size and arcane bureaucratic complexity of proposed public law remedies for mass torts, however, and their alleged vulnerability to political pressure from industry defendants combine to raise substantial doubts about any such preemption of common law. What is the verdict on tort reform to be drawn from Woburn’s Civil Action? Tort law is a known commodity that carries its own internal incentives to prosecution of claims. Public law

41. That in fact was exactly the situation in the *Escamilla* restoration damages case discussed in Chapter 3.

42. The *Exxon-Valdez* civil damage verdicts, totaling more than \$5 billion in suits brought by harmed users of the Gulf of Alaska, takes a prize, but asbestos recoveries often have major price tags as well. *Coyne and McCoubrey v. Celotex*, (settled), Wall St. J., 9 Feb. 1990, at B1 (\$76 million for each of two workers exposed to asbestos).

management cannot easily replicate the tort law's claims-processing mechanisms. For the time being, the legal situation is likely to continue with common law as an active and tangible element in most toxic exposure cases, with supplementary overlays from the public law system. Or is it vice versa?

Section 2. RISK MANAGEMENT CONCERNS

In an influential article, excerpts of which follow, Peter Huber (of the “junk science” debate, previously discussed in this chapter) argued that private tort law should be supplanted by a system of public law administered by expert agencies. In his view, tort claims wrongly fixate on public risks, which are only one part of society's risk “portfolio,” and this fixation often backfires by increasing total risk through discouraging public risks. As you read the article, consider what Huber might have to say about the comparative advantages of public and private law in the Woburn case.

Peter Huber, Safety and the Second Best: The Hazards of Public Risk Management in the Courts

85 Columbia Law Review 277, 277–281, 301–307, 329–337 (1985)

The devastating chemical plant tragedy in Bhopal, India will do little to reassure skeptics about the advantages of technological innovation and development. Those who already view the chemical, nuclear, pharmaceutical, and other high-tech industries with profound suspicion and fear can now point to the 2200 dead of Bhopal as martyrs to unbridled technological tyranny. And Bhopal will henceforth serve as the shrine of Nemesis for those who would defend the value of high technology.

But Bhopal is only one painfully vivid example in a much larger, longstanding legal debate in this country. The debate reflects a deep division among legal commentators regarding the role of mass production and technological change in the improvement of social welfare. Long before Bhopal, the standard diagnosis in many judicial opinions and in much of our scholarly legal literature has been that our society produces too much “public” risk, through its excessive or unwise use of dangerous new technology and the tools of mass production. The standard prescription has been for lawyers to do something about it. This article argues that the diagnosis is probably wrong, and that the prescription should certainly be rejected.

The legal debate about risks is very much a debate about “public” risks. These are threats to human health or safety that are centrally or mass-produced, broadly distributed, and largely outside the individual risk bearer's direct understanding and control. Public risks usually derive from new or especially complex technology — they are the hazards of large-scale electric power plants, air transport in jumbo jets, mass-produced vaccines, chemical additives and contaminants in food, or recombinant-DNA technology. For many lawyers, “advancements” such as these arouse deep suspicion and concern. “Private risks,” by contrast, are discretely produced, localized, personally controlled, or of natural origin. They are the risks of cottage industries, wood stoves, transportation by car, or exposure to natural toxins or pathogens. Typically, private risks arouse little anxiety among legal commentators.

The legal system's almost obsessive preoccupation with public risks is, in my view, entirely misguided.⁴³ I wish to develop this argument soberly; there can be no technological arrogance in

43. [Particularly at the outset, Huber is responding to the work of commentators who argued that public risk is being overproduced. Two articles in particular provoked Huber's attacks: Yellin, *High Technology and the*