The field of environmental law is, by practically any standard, adolescent. Yet, within it, the law developing on the subject of hazardous waste is positively nascent. Issues relating to hazardous waste are just beginning that lengthy process of evolution through the interaction of legislatures, courts, administrative agencies, and the public. The subject is already testing, and will continue to test, both our political and legal processes.

The emerging responses to hazardous waste reach deeply into many of the traditions and principles of our legal system. Yet, as is true in so many areas of environmental law, the problem will also generate new concepts and approaches. The problem raises questions with common law roots: What circumstances involving hazardous waste give rise to legal duties? What kinds of injuries are compensable? What remedies are appropriate? As legislatures begin to address these questions, a second panoply of issues regarding administrative law, program design, and political strategy presents itself: What methods of administrative or regulatory intervention should be adopted to change personal and corporate behavior? How should risks be assessed? Finally, responses chosen to deal with the hazardous waste problem may give rise to constitutional questions concerning federal-state relations and concepts of private property. The Developments in this issue touch on some of these questions, describing and analyzing recent steps in a process that, hopefully, will lead to effective protection of present and future health and welfare. For, if the general pattern holds true, actions taken in this country will color the debate and the response to this global problem in developed and developing nations alike.

Hazardous waste is yet another manifestation of the tremendous quantities of matter and energy that our modern civilization, as a society based on technology and oriented toward acquisition and consump-
tion, has come as a matter of course to generate. Our understanding of the effects of producing this waste, however, is surprisingly limited. When attention is turned to a specific problem, the ability of both the private and public sectors to churn out data and analysis is staggering. Unfortunately, we are much better at data processing than we are at fact gathering. We tend, therefore, to massage in ever more elaborate ways, very little hard information. It is not surprising, then, that the extent of the hazardous waste problem is not fully understood and that when there are attempts to investigate or to regulate past or present practices the most honest response to any relevant question is that we don’t know.

Just one bit of data, however, reveals how great and pervasive the hazardous waste problem has become. In the period from 1930 to 1975, synthetic and organic chemical production has grown from a few thousand to more than 500 billion pounds per year! These materials or their byproducts have routinely been cast aside from one end of our culture—as manufacturing process waste, to the other—as discarded products. Notwithstanding contemporary rhetoric and jargon about ecological principles, our society’s operational practices regarding the flow of this matter have changed very little; a linear pathway from exploitation to use, and finally discard, still characterizes our system.

The folly of this approach will become more apparent as increasing population and consumption rates produce shortages, environmental degradation, and significant risks to health and welfare, as well as global and regional vulnerabilities. Hazardous waste, in fact waste of all sorts, is also giving rise to a new—or at least newly elevated—pressure that might be called the result of political demagoguery. Waste conjures in the public mind an identity with hazard. Feeding on natural fears concerning risk, our society has developed what in the aggregate is a national paralysis with respect to management of waste. High-volume waste generation and improper disposal continue while efforts to reduce, segregate, and properly manage waste are frustrated in the political process. Efforts to locate, construct, and operate waste management facilities under stringent environmental and health standards are being hampered. So “midnight dumping” in all its variations is being encouraged at the same time that responsible officials are led to despair at the lack of sound management systems.

“Don’t put it here” has become a common and largely successful refrain applying to everything from chemicals to manure. The problem is exacerbated by an extension of the linear assumptions that suggest a Hobbesian choice: waste must go either into the air or water or on

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2. See S. REP. No. 848, 96th Cong., 2d Sess. 3 (1980).
land. Simply finding a new dump site is not, however, a viable solution as we face the prospect of even more technologically-oriented societies. Residuals obviously will have to be stored and deposited somewhere under controlled circumstances. But, what is commonly considered a residual should in many cases be treated as a resource. Just as land, water, and air should be cared for according to the legal concept of trust, so should matter, especially synthetic chemicals that move through our society. In short, before we can make significant inroads on the “waste” problem, we must make a transition from linear assumptions to those based on recycling and reuse. People, corporations, and organizations of all sorts must begin to consider management of material as a custodial responsibility. Only then can we reduce the amount of material now called waste. Accomplishing this objective represents a great challenge for the law.

Hazardous chemicals raise, in addition to the basic questions of storage and reuse, legal issues associated with notions of risk. Increasingly and as a necessary function of large aggregated systems of production, societies, through both public and private mechanisms, assess risk and impose it on individuals who have no choice about whether to assume it. For example, if the release of a given chemical will cause one excess death in a given population size, that risk is imposed on society with no one knowing the identity of the one who will die. Society should seek to avoid assessing and imposing risks that cannot, in any meaningful sense, be assumed by individuals. When society does impose such risks, the choice to do so must be arrived at through the most explicit and democratic processes—perhaps even referenda.

Chemicals can be kept under positive management and control. No release, meaning no loss of custody in production and product use, should be the norm against which performance in the area is measured. Special burdens of justification should be established before activities or systems that do release chemicals into the environment are permitted. These objectives can be found in recent federal legislation including the Resource Conservation and Recovery Act, \(^3\) which specifically addresses hazardous waste.

Even as the implementation of such legislation is begun, however, we see signs that its promise will not be met. These signs, while unmistakably present prior to the 1980 election, have grown dramatically under the new Administration. Not only do they portend a movement away from an environmentally sound society, they signal a return to an environmentally degrading economy of short-run viability. Implementing regulations under all environmental statutes are being re-

viewed with an intention to relax requirements. The immediate effect of this slackening in regulation is to allow industry, and ultimately consumers, to continue to externalize costs. In the longer run, it will result in diversion of intellectual and engineering resources, especially in the private sector, that are just now reaching the capability to achieve significant breakthroughs in avoiding release of pollutants into the environment from a myriad of industrial processes. This brake on innovation in pollution control is the most dismaying aspect of current developments. It is inescapable that when requirements are relaxed, investment and innovation will be relaxed.

The process of decommissioning regulatory controls operates in more subtle ways than simple budget cutting and explicit relaxation of regulatory requirements. It intimidates public officials of all levels with the result that enforcement wanes, interpretation of statutes is softened, often to the point of meaninglessness, and progress is generally slowed. Moreover, decisionmaking at all levels, especially agency rulemaking and adjudication, is distorted by the imbalance of resources poured into the process by the public and private sectors, including public interest groups. One can only hope that these developments will represent an aberration in the path toward protecting health and welfare and that the basic strength of the statutes and the momentum established over the last decade will, in the end, prevail.