

Chapter 16

FOUR IMPORTANT CHANGES IN THE AMERICAN APPROACH TO ENVIRONMENTAL REGULATION

L.E. Susskind

Prologue

The United States has had a comprehensive system of environmental regulation for almost twenty years. Beginning with the passage of the National Environmental Policy Act in 1969 (and the creation of the Environmental Protection Agency in 1970), federal, state and local governments in America have been involved in activities aimed at eliminating air, water, noise, and other kinds of pollution and managing the country's natural resources more wisely.

During this twenty year period, there have been several important changes in the American approach to environmental regulation. We have shifted from (1) strict to flexible deadlines and standards; (2) independent forecasting of impacts and risks to integrated management of impact and risk reduction efforts; (3) purely public to expanded private responsibility for enforcement; and (4) an over-emphasis on costly and time-consuming litigation to a more balanced reliance on consensual approaches to resolving regulatory disputes.

While the American approach to environmental regulation will surely change again in response to political, economic, technological, and scientific pressures, it may be helpful for other countries to look closely at the way the American system of environmental regulation has evolved thus far.

Deadlines and Standards¹

In the early 1970s the US Congress sought to reduce the risk that EPA would abuse its discretionary authority or succumb to pressure from regulated industries. It did this by spelling out goals for the agency to meet by specific deadlines. The 1970 Clean Air Act required EPA to achieve clean air by 1975, and the 1972 Federal Water Pollution Control Act required EPA to eliminate discharges into the nation's waterways by 1985.

Under the 1970 Clean Air Act, EPA was given three key deadlines:

- (1) Thirty days after passage of the act, EPA was required to propose national ambient air quality standards to protect public health

(primary standards) and welfare (secondary standards).

- (2) Within a year after proposing these air quality standards, EPA was required to approve state implementation plans prescribing specific emission limitations for various types of polluters. (The states had the authority to use transportation control measures, if necessary.)
- (3) EPA was required to implement emission levels for motor vehicles that would reduce auto emissions by 90% within five years. (They were also required to implement emission levels for new and modified stationary sources of pollution and for pollutants the agency considered toxic).

Under the 1972 Water Pollution Control Act, EPA was given two more deadlines:

- (1) Within one year after the Act was passed, EPA was required to promulgate effluent guidelines that designated allowable discharges for various industrial categories (such as cement manufacturers, petroleum refiners, etc.). The effluent guidelines specified best practicable technology (BPT) objectives that were to be met by 1977 and best available technology (BAT) goals to be met by 1985.
- (2) Within two years after the act was passed, EPA was required to issue permits to individual manufacturers that would achieve PBT and BAT in the time allowed.

These were not the only laws requiring EPA to meet specific deadlines and standards. In 1970 and 1972 Congress expanded EPA's responsibilities for regulating the use of pesticides and ensuring more effective disposal of solid wastes. Congress also passed the Noise Control Act of 1972, the Safe Drinking Water Act of 1974, and the Toxic Substances Control Act of 1975 giving EPA additional objectives to meet.

The agency was not able to meet any of these specific timetables. As a brand new organization, EPA had to work out its internal administrative arrangements. Then, it had to initiate the basic research needed to provide a scientifically-sound basis for setting standards. The agency's authority was challenged in court and it took more than five years to legally affirm EPA's mandate.

As Alfred Marcus, an expert commentator on the history of EPA points out:

Economic, technological, and administrative obstacles prevented the agency from achieving statutory goals according to the original timetable(s) established by Congress. These obstacles, however, were

not the only ones EPA faced in its efforts to make rapid progress in a short time. The media, professional norms, the courts, and interest groups influenced the agency's ability to achieve goals by statutory deadlines.

By 1977, over 90% of America's water polluters had achieved best practicable technology. And, by 1975, 75% of the major stationary sources of air pollution in the country complied with state implementation plans. In the year Congress intended clean air for the nation, about 30% of the nation's 247 air quality control regions met clear air goals. While the deadlines slipped, real progress was made.

One of the reasons Congress enacted strict deadlines and standards was to ensure that America's national environmental protection goals would be achieved quickly. Most pre-1970 legislation had vague regulatory objectives. Administrative theorists argued for strict standards and deadlines as a remedy to lax regulatory enforcement. But when strict deadlines and standards also failed to achieve what Congress intended, there was a move toward still another set of regulatory reforms - 'market incentives'-highlighting greater flexibility.

Under the 1977 amendments to the Clean Air Act, for instance, EPA was allowed to create a limited 'market' for emission rights in non-attainment areas. Basically, this allowed a factory in an area that had not met its clean air objectives to expand by buying the 'right to pollute'. It could do this by purchasing and closing down an old polluting plant in the same area while expanding its existing plant. Thus, instead of holding every facility in the same industrial category to the same strict technological and emission requirements, EPA could be more flexible as long as it met area-wide performance standards.

Advocates of 'market-incentive' approaches to regulation argue that EPA has not yet gone far enough in exploring still more flexible approaches to environmental regulation. These advocates are fond of pointing out that the 'heavy hand' of government regulation is inefficient and not cost-sensitive enough. For example, they cite various studies suggesting that the cost of achieving 95% effluent reduction in the United States will be around \$119 billion while the cost of achieving the remaining 5% reduction (to get to 'zero discharge') will add \$200 billion more. This, they conclude, proves that arbitrarily set administrative standards are usually less appropriate than market-driven approaches to regulation.

No one is quite sure whether a more flexible approach would have

achieved as much as strict standards and timetables achieved in the 1970s. Also, since it is difficult to measure the full range of costs and benefits associated with each attempt at environmental regulation, it is hard to say whether flexible approaches are really better. What is clear, though, from the American experience to date, is that strict deadlines and timetables will always fall short.

There is much to learn along the way about how to implement each new environmental regulation. Mid-course corrections are necessary. Legal requirements alone do not compel the necessary technological innovation; these take time. Inflexible deadlines and standards ignore the need to take account of agency experience as it accumulates.

Impact and Risk Assessment

The National Environmental Policy Act of 1969 (NEPA) stipulates that 'for major Federal actions significantly affecting the quality of human environment' alternatives to each proposed action must be considered. The guidelines issued by the Council of Environmental Quality state that:

.....agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for them having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternatives in the final statement unless another law prohibits the expression of such a preference...

Federal and state agencies have responded to these requirements by developing procedures for evaluating alternative courses of action. Indeed, the art and science of environmental impact assessment has spawned new professional firms, journals, associations, and educational programs.² Many countries have adopted some form of the American approach to environmental impact assessment. But that approach has changed significantly over time.

As the practice of environmental impact assessment has evolved, it has become clear to close observers that non-objective judgements play a crucial

part in what was thought to be an objective and purely technical forecasting activity. For instance, there are no technically correct geographic boundaries for circumscribing an 'impacted' area. Nor are there technically correct timeframes, discount rates, amalgamation techniques or indices of impact to use in preparing an impact statement. While these must all be specified before an impact assessment can be completed, expert judgement or techniques alone can not provide definitive answers.

EPA recognized this when the agency adopted new 'scoping' guidelines in 1977. The requirement to scope each impact assessment is basically a stipulation that the lead agencies (which must prepare formal impact statements) meet with all groups who might be upset about the non-objective judgements that will be made in the course of preparing the impact assessment. Presumably, the scoping process will identify acceptable non-objective (as opposed to technically correct) judgements.

Impact assessment requirements are nothing more than common sense 'look-before-you-leap' procedures. They presume that it is possible to forecast the adverse environmental impacts likely to be caused by a proposed action (or alternatives to that action). Initially, Congress presumed that independent analysis could be called upon to prepare technically correct forecasts that would then be scrutinized by all those who are part of the decision-making process. The appropriate decision-makers are expected to make the 'environmentally intelligent' decisions (i.e., choosing either the least environmentally detrimental alternative or accepting responsibility for mitigating the adverse environmental impacts associated with the course of action they have chosen). This, however, did not always happen. Many times, the EISs were ignored or prepared in a manner designed only to justify decisions that had already been made.

Most analyses of NEPA (and related state NEPAs) are not very positive about the extent to which impact assessment requirements have improved the quality of environmental decision-making in the United States. The best that can be said is that impact assessment requirements have probably caused 'really terrible' projects not to be proposed in the first place. There are very few examples, however, of major projects or policies that were radically altered as a result of an impact assessment.

The most sophisticated environmental policy analysts in the United States now question whether it makes sense to separate impact assessment procedures from all other decision-making requirements. Indeed, few environmental planners would argue any longer that an independent analyst should prepare an impact assessment 'at arms length' from those involved in

and affected by the proposed action under scrutiny. The participation of all those affected by a decision in every aspect of impact assessment design and implementation is now seen as the only way of ensuring that important non-objective judgements are made in an accountable fashion.

The same evolution is being repeated as risk assessment emerges in the United States. Risk assessment is yet another procedure that agencies responsible for public health and environmental quality are now expected to perform as part of decision-making. Initially, the thought was that risk assessments would be provided by independent analysts who would not be 'influenced' by political or other decision-making considerations. As it has turned out, though, risk assessment is also more of an art than a science and dependent on a series of non-objective judgements (such as the value that ought to be attached to human life or the appropriateness of extrapolating from laboratory rat assays to potential health impacts on human populations). In the past few years, there has been a substantial debate about the proper link between risk assessment and risk management. We seem to be moving away from the notion of independent analysis by experts to integrated decision-making by all those affected.

The notion that the link between analysis and action in environmental decision-making ought to be severed is probably wrong. What we have realized in the United States is that we need to make the link between the two explicit and learn how to manage the linkage more effectively.

Expanded Private Responsibility for Enforcement

As interest in environmental protection grew in the United States in the 1960s and early 1970s, public awareness of the lack of credible enforcement mechanisms increased. This awareness and the public dissatisfaction it engendered led directly to the creation of citizen suits.³ The citizen suit requirements in federal environmental legislation are intended as a response to the government's failure to enforce compliance. Congress believed that citizen suits would provide a goad to government enforcement and, if that goad did not work, an alternative means of enforcement.

The citizen suit was included in almost all new federal environmental statutes or major amendments in the 1970s. Citizen suits 'authorize any person to commence legal action to enforce the requirements of an act against any person alleged to violate them or to require the government to perform a mandatory duty under the act.' They confer jurisdiction on the federal district courts to hear such suits without regard to who is bringing

the action or the costs at stake. A suit may not be commenced if EPA is 'diligently prosecuting an enforcement action.'

While the citizen suit was conceived and designed to allow private enforcement of the law against polluters, its most celebrated uses have been against EPA itself for its failure to implement its environmental statutes in a timely and complete manner. There have not been as many citizen suits as proponents expected. Probably fewer than two hundred suits have actually been heard to completion. Many of these were undertaken in the early 1980s when EPA seemed to be pulling back from its enforcement responsibilities. A growing number of notices of proposed citizen suits are filed with EPA each year, forcing the agency to act (and forestalling completion of the suits while EPA seeks compliance).

Citizen suits typically focus on failure by an implementing governmental agency to perform mandatory duties. Some also cover enforcement against violations of rules, regulations, permits, licenses, or leases.

Under the Superfund Law (passed in 1980 and amended in 1986) corporations and not just citizens are pursuing private enforcement actions. Companies that own property containing hazardous wastes are suing other companies who, while not currently connected with the wastes, historically were connected with them. They have begun suing for the cost of cleaning up these sites.

The availability of a private cause of action to enforce Superfund closely resembles the various citizen suit options contained in most pieces of environmental legislation.

The net effect of these citizen suits and corporate causes of action is to expand private enforcement. Unfortunately, this can result in substantially different degrees of cleanup than might have occurred at the same sites if the government were handling enforcement. Thus, private enforcement may result in under- or over-enforcement. Various efforts are underway to remedy this situation.

There has been a shift from purely public enforcement to expanded private enforcement of federal regulations. This is partly the result of EPA's unwillingness in the early and mid-1980s to vigorously enforce the law. Private enforcement received support from both citizen activists (who do not feel that government can be counted on to be vigorous enough in its enforcement efforts) and regulatory reformers (including business leaders) who view privatization of enforcement as a step back from an ever-growing federal enforcement bureaucracy.

Alternative Dispute Resolution⁴

There are several conferences every year in the United States devoted solely to reviewing the latest court cases extending and clarifying judicial interpretations of environmental statutes. The number of lawyers specializing in environmental litigation has grown substantially. For many citizen action groups and public interest organizations, litigation (through the citizen suits I have already described as well as through more traditional legal challenges to administrative actions or inaction) has been the primary means of pressing for enforcement of environmental protection statutes.

There has been a growing dissatisfaction, however, with the cost and time consuming nature of litigation. Moreover, the courts are increasingly unable to cope with the science-intensive nature of most environmental regulatory disputes. The courts, concerned about overcrowded dockets and complex cases that can tie up a judge and a jury for years, have endorsed the search for alternative dispute resolution (ADR) techniques.

The ADR movement in the United States is still in its infancy. Yet, numerous complex civil cases have been settled through informal negotiation and mediation while other 'hybrid' ADR techniques (including mini-trials, negotiated rulemaking, summary jury trials, and joint fact-finding) have been used to unknot enforcement disputes, licensing and permitting conflicts, and other disagreements that have not yet blossomed into full-scale litigation.

Several federal agencies, in particular EPA, have been experimenting with various forms of 'assisted negotiation' aimed at encouraging settlement without the cost and delay of litigation. While these experiments have for the most part been successful, they have not been without controversy. Agency personnel are often suspicious of and defensive about negotiated settlements. If they settle, they may appear to have 'sold out.' Furthermore, involving mediators or other 'neutral intervenors' appears to infringe upon agency prerogatives. Agreeing to 'assisted negotiation' might even appear to be admitting failure.

Environmental advocacy groups have also been reluctant to back alternative dispute resolution too enthusiastically. In some instances, they need a clear cut court decision to establish 'whether' EPA has the right or responsibility to do something. When they want to set a precedent, negotiated settlement of a case will be of little or no help. Environmental advocates are also nervous about EPA negotiating 'deals' with industry groups. The environmentalists sometimes feel 'outgunned' in informal

negotiations where technical expertise or financial resources are not distributed evenly. They have come to believe that only the courts provide a 'level playing field.'

ADR advocates are quite careful to spell out the circumstances under which negotiated settlement (whether assisted by a neutral mediator or not) makes sense and when it does not. They argue, for example, that constitutional issues and questions about fundamental rights should not be negotiated. But once these issues have been litigated, case-by-case application of general principles might better be handled through negotiations in which all interested parties are given whatever assistance they need to participate on an equal footing.

The Administrative Conference of the United States (ACUS) - a body made up of senior administrators from every federal agency - has recently endorsed the use of ADR techniques in environmental and other kinds of civil disputes. The endorsement by ACUS has given ADR new legitimacy.

The shift from litigation as the primary means of dealing with differences between EPA and industry or between EPA and environmental organizations to a search for alternative dispute resolution techniques is only just beginning in the United States. In a country as devoted to litigation and lawyers as America is, it is nothing short of amazing that consensual approaches to environmental dispute resolution are gaining any attention at all.

Summary

When the United States broadened and expanded its environmental regulatory activities twenty years ago, there was no clear logic to the design of the regulatory system that emerged. Through a process of trial and error, reforms have been proposed and adopted. What began with a focus on strict statutory deadlines and standards has evolved to a more flexible system, including partial reliance on market approaches to regulation. Independent forecasting of impacts and risks in advance of decision-making is more common than ever, but now instead of viewing forecasts as the responsibility of expert analysts whose technical judgements should not be protected from political and non-objective considerations, we think of impact and risk assessment as part of a larger managerial process of reducing adverse impacts through decision-making that acknowledges the importance of political and non-objective considerations.

What was once a regulatory scheme that presumed only public responsibility for enforcement has broadened to encompass citizen suits and

other forms of private responsibility for enforcement. And at the same time as this has increased the importance of litigation as an enforcement mechanism, we have seen the rise of the ADR movement - a search for consensual approaches to negotiating settlement than will cost less, take less time, and truly reconcile the legitimate differences of regulators and regulatees.

While more needs to be done to perfect the American approach to environmental regulation, I believe these changes represent important steps in the evolution of the American system. They have not been taken as pruposefully as I may have implied. They have evolved a bit at a time. The transformation they represent, however, may well be instructive for other countries, particularly those that are now seeking to avoid some of the mistakes that the United States has made.

Notes

1. This first section draws heavily on Alfred Marcus' excellent history of EPA. 'Environmental Protection Agency', in James Q. Wilson (Editor), *The Politics of Regulation*, New York: Basic books, 1980.
2. The changing nature of the practice of impact assessment and risk assessment is monitored in the international quarterly, *Environmental Impact Assessment Review*, published at the Massachusetts Institute of Technology.
3. For an excellent legal summary of citizen suits see Jeffrey Miller's three-part series entitled 'Private Enforcement of Federal Pollution control Laws' in *The Environmental Law Reporter*, October-December 1983.
4. This section draws from Lawrence Susskind and Jeffrey Cruikshank, *Breaking the Impasse: Consensual Approaches to Resolving Public Disputes*, New York: Basic Books, 1987.