

# If It's Broken, Fix It

Reviewed by Barry C. Field

## POLLUTION CONTROL IN THE UNITED STATES: Evaluating the System

by J. Clarence Davies and Jan Mazurek  
319 pp. Washington, D.C.: Resources for the Future, 1998

**P**OLLUTION CONTROL IN THE United States is a contentious issue, as it is almost everywhere else. The conflicts of environmental regulation are played out across the political spectrum, in federal, state, and local legislatures, in courts, in public agencies, in the actions of private groups, profit and nonprofit. The "system" of the title refers to the apparatus of public regulation around which this process currently revolves. The authors' objective is to evaluate this regulatory system.

The book is divided into two sections: "Part I: Evaluating the Process" and "Part II: Evaluating the Regulatory System."

The first part examines "key processes and institutions"; the objective of the second is to evaluate the system according to a number of criteria, including efficiency, effectiveness, and equity considerations. Here are its conclusions: "... the fragmented system is seriously

broken. Its effectiveness in dealing with current problems is questionable, it is inefficient, and it is excessively intrusive" (p. 269). Although this is presumably a judgment on the entire system, the primary focus is on the 1,000-pound gorilla in the process: the Environmental Protection Agency (EPA). This focus is understandable, as one of the authors (Davies) was present at the creation, having been an assistant administrator in the early days of the agency.

### EPA IN ACTION

GIVEN THE CENTRALITY OF EPA IN FEDERAL pollution-control activities, it is not

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unreasonable to ask a couple of questions: Has it done a reasonable job? Should changes be made? The chapters of Part I are devoted to uncovering the various pathologies of EPA operation:

- Reliance on command and control (a legalistic culture; seriously reduces flexibility)
- Fragmentation (lack of priorities, media focused)
- Overlaps and inconsistencies (every law is different)
- Disparity between resources and responsibilities (unfunded mandates at the federal agency level)
- Lack of information (scientific information, as well as high-quality benefit-cost information).

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These are the diagnoses of the problem, the prescriptions follow: more incentive-based programs carried out by a better-funded agency that has been revamped to reduce inconsistencies and fragmentation, and that has developed a better base of scientific and economic information for their decisions. One gets a slight whiff of envy here for a more European-style system, in which environmental bureaucracies supposedly sit above the fray and issue better-informed and more widely accepted decisions.

Chapter 4, "The Federal-State Division of Labor," is important, especially in the light of what is happening today. In it, the authors discuss the increasing roles of the states. It is becoming apparent that for many environmental problems the grand

shift to the federal level that took place in the 1970s was not helpful. The federal scene involves unattached interest groups: one side represents the benefits of environmental cleanup with little thought to the costs; the other represents costs with little emphasis on the benefits. But efficient pollution control requires weighing the benefits and costs; for many problems, this can better be done at the state and local levels, where individuals and small groups can accomplish the balancing that efficiency requires more directly.

A paradigmatic case, not mentioned in the book, was Shintech's proposal to build a plastics plant in Convent, Louisiana. National and regional groups were concerned about possible emissions from the plant. Local groups were willing to consider the proposal from a more balanced perspective, considering both the possible emissions and the expected economic gain from more local jobs. The nonlocal groups won. Despite the authors' emphasis on the various ways in which states lack the ability to come to grips with environmental issues, it is clear that for many issues the current evolution is from the federal level back to states and localities.

Part I is missing an important chapter. The U.S. Congress established EPA and enacted the major laws the agency is supposed to administer. So, if performance pathologies exist at the federal level, they are very much a reflection of congressional behavior. A chapter on how this behavior might influence future federal regulatory actions would have been useful. Events in Congress may or may not continue to push the regulatory focus back to the state and local levels.

### LOOKING AT RESULTS

IN PART II, THE AUTHORS SWITCH FROM looking at the system to looking at its results. Chapter 5 is pivotal. Here, they try to assess the extent to which environmental pollution has declined in the United States over the last few decades. Data show that many, though not all, airborne emissions have declined. Lead emissions have declined substantially; those of the other criteria pollutants more modestly.

Waterborne emissions are harder to generalize about, but the evidence seems to suggest that water quality has improved in many areas. Volumes of municipal solid waste continue to climb, total releases of airborne toxins have stopped increasing, and the total amount of hazardous waste may be declining. The problem lies in attributing these changes to the regulatory system. Davies and Mazurek correctly note, "It is neither conceptually nor factually correct to assume that, because declines in many pollutants have followed investment in pollution control programs, the decline is due to the programs" (p. 95). There are several problems. Emissions are very much a function of changes in the structure of the economy, the drop in manufacturing and the rise of the service economy. Also, as the authors note, much emission reduction behavior is voluntary. "Voluntary compliance has significantly reduced pollution below what it would otherwise be" (p. 15). In the much-vaunted federal transferable emission program to reduce sulfur dioxide emissions from power plants, current total emissions are below the total permit holdings. What is causing overcompliance? The authors conclude, "Overall, it is impossible to document the extent to which regulations have improved environmental quality" (p. 54).

Chapter 7 is a review of some of the benefit-cost analyses that assess the accomplishments of federal pollution control regulation. EPA recently concluded a set of congressionally mandated studies to estimate the historical benefits and costs of federal air pollution regulations. Not surprisingly, these studies found that the benefits have far exceeded the costs. The consensus among economists is probably the following: Net benefits have been substantially positive for the Clean Air Act and Safe Drinking Water Act, perhaps slightly negative for the Clean Water Act and the Resource Conservation and Recovery Act, and strongly negative for the Superfund law. As for cost-effectiveness, there is widespread agreement that the main approaches embedded in most federal environmental statutes have been substantially cost-ineffective.

Other chapters in this book include—

6 "Targeting the Most Important Problems" (EPA is not allocating its budget in terms of real risk factors, but apparently on a political basis);

8 "Social Values" (more public involvement would be good in EPA regulation making);

9 "Comparison with Other Countries" (the United States sets more stringent standards but relies too much on end-of-the-pipe approaches and, of course, on litigation in regulation and enforcement);

10 "Ability to Meet Future Problems" ("... for the next fifteen to twenty years, the economic and population growth of the United States will probably not lead us over the environmental cliff" [p. 262]).

### CHANGES IN THE WIND

FEDERAL POLLUTION CONTROL IS STILL largely infused with the spirit of the 1970s. According to that view, pollution control is a technical and legal problem for which public authorities must step in, identify the best technical pollution control options, then mandate their use while pretending to overlook

cost considerations. But things are changing.

First, the notion that pollution is instead a behavioral and incentive problem is gaining much wider acceptance. This change accounts for the wider acceptance of the incentive-based approaches to pollution control, especially transferable permit programs.

Second, there has been a growing appreciation of the perverse incentives that lurk in naive command-and-control regulations. That is not to say that everyone has seen the light. Many in the environmental community still believe that any pollution-control law is better than no law.

Third, environmental politics are becoming less polarized (despite events seeming to the contrary—e.g., the World Trade Organization meeting in Seattle). There is more appreciation of the idea that, for many problems, reasonable people can together devise reasonable solutions—at the local level and often through voluntarism. The key is getting people the information on which they can act and make the appropriate tradeoffs. ■

## Where Politics Trumps Science

Reviewed by S. Fred Singer

SCIENCE AT EPA: Information in the Regulatory Process

by Mark R. Powell

433 pp. Washington, D.C.: Resources for the Future, 1999

**R**ESOURCES FOR THE FUTURE (RFF) is an independent research organization whose economics, natural resources, and risk-management programs have drawn support from the U.S. Environmental Protection Agency (EPA). RFF has nevertheless produced a report that severely criticizes EPA's use and management of science. But the report could have gone much further than it does. And it arrives at a rather surprising recommendation—a non

sequitur, in fact—which is to double EPA's science budget.

The author, Mark R. Powell, is an American Association for the Advancement of Science Risk Fellow with the U.S. Department of Agriculture. He is a former researcher with the Center for Risk Management at Resources for the Future. EPA and RFF funded the study.

According to the foreword, Powell's study "describes the basic inner workings of how scientific informa-

S. Fred Singer ([singer@sepp.org](mailto:singer@sepp.org)) is president of the Science and Environmental Policy Project, a nonprofit policy institute in Fairfax, Virginia, and professor emeritus of environmental sciences at the University of Virginia. His many academic and governmental positions have included service as director of the U.S. Weather Satellite Service.