

BOOK REVIEWS

THE POLITICS OF CANCER. By Samuel S. Epstein, M.D. San Francisco: Sierra Club Books, 1970. Pp. 583.

In *THE POLITICS OF CANCER*, Dr. Epstein, an authority in the field of chemical-related toxic and carcinogenic health hazards, suggests his dissatisfaction with both the efficacy and the sincerity of many of our society's past efforts to "cure" cancer. The theme of this, his most recent book, is that it has become increasingly clear that the overwhelming majority of all human cancers are environmentally induced or related, and thus are preventable. The failure to regulate the introduction and presence of carcinogens in the workplace, in consumer products and throughout the general environment has imposed staggering economic and human costs upon society.

Dr. Epstein believes that the control and prevention of cancer is an essentially political process. He argues that future efforts should focus upon public utilization of the political system to counter the continuing, well-financed propaganda of the "medical-industrial complex." In the book the author defines this complex as a shifting alliance of industrial manufacturers, their medical and scientific staffs, the ostensibly independent research organizations which they fund, and even some government regulators. He succeeds in his attempt to communicate the present state of scientific knowledge about cancer to the public in a scholarly yet comprehensible form. The book seeks to equip an informed public for an active participatory role in the policy debates in this area. Dr. Epstein expresses a sense of both frustration and urgency, for he feels that there are adequate laws and sufficient scientific knowledge to deal effectively with cancer, but that neither has been effectively utilized.

The figures on the magnitude of the cancer epidemic are truly staggering. Research indicates that cancer properly perceived not as one disease but rather as a spectrum of diseases with common features but different causes, develops in some form in about one-

fourth of the population, and will be a cause of death of approximately one-fifth of the population. The Department of Health, Education and Welfare has estimated that in a single year, the recognized national costs of cancer are \$25 billion, and its hidden costs may total tens of billions of dollars more. The author hypothesizes that the goals of long-term industrial growth and the prevention of cancer need not necessarily conflict. Industry has traditionally guided its behavior by narrowly assessing short-term market interests. The failure to recognize the societal costs of cancers induced by avoidable exposures has forced the public to bear the full costs of industry's deficient cost/benefit analysis. Dr. Epstein unequivocally rejects the proposition, strongly supported by industry, that there is some ascertainable threshold level of exposure to carcinogens which is safe in humans.

The author's treatment of the role played by the federal government in the cancer area is particularly insightful. As a consultant to and witness before various regulatory agencies and congressional committees, he understands the fragmentation and personal influences which affect government activities in the health field. The failure of the federal government to develop an integrated policy toward cancer is largely a result of these factors. The regulatory agencies apparently are dependent upon information, frequently supplied in inadequate or biased form, compiled by the same industries the government is seeking to regulate. The response of these agencies to indications of cancer dangers has been slow, and only recently have the efforts of public interest groups and some labor organizations spurred effective action.

Dr. Epstein has resisted the temptation to engage in diatribes and his book is a dispassionate analysis rather than a sensational exposé. In setting forth the deficiencies in the governmental response to cancer, he evenhandedly dispenses praise and criticism to particular individuals, corporations, government agencies, and private groups. Nevertheless, he is bluntly critical of those government agencies which he feels have consistently ignored the need for emphasis on cancer prevention measures, and have most often yielded to industry arguments. The government has failed to place upon industry the burden of proving the safety of chemicals and products, thus forcing the unorganized public and overextended government regulators to shoulder the burden of proving the dangerous qualities of these hazards.

The author employs a lucid and engaging style, and has or-

ganized the book in a manner which allows the reader to utilize his or her increasingly sophisticated understanding of cancer in considering the suggested future and present strategies for preventing future occurrences of cancer. Much of Dr. Epstein's study consists of case studies on carcinogens, ranging from several which have already received wide media attention (tobacco, vinyl chloride and saccharin) to other more obscure products such as bischloromethylether (an intermediate product in nuclear fuel processing) and acrylonitrile (a component of some plastic bottles). The book includes numerous tables and charts, lengthy appendices (which should satisfy the curiosity of any reader), and many concrete suggestions as to ways in which members of the public can take steps on the personal and political levels to stop cancer. The work is well balanced, persuasive, and useful reading for any person interested in the way our society and government have failed to respond effectively to the American cancer epidemic.

William D. Greiter

CURRENT ISSUES IN U.S. ENVIRONMENTAL POLICY. Edited by Paul R. Portney. Baltimore: The Johns Hopkins University Press, 1978. Pp. 207.

The authors of the six essays comprising *Current Issues in U.S. Environmental Policy* consider a range of policy questions confronting this nation in the control of air and water pollution and toxic substances. An economic approach is taken; the effects of various policies on the distribution of economic benefits and upon the national economy generally are analyzed. As background to considering these far-reaching policy issues, existing federal regulatory policies regarding air and water pollution and toxic substances are examined.

A. Myrick Freeman III discusses the Clean Air Act Amendments of 1970 and the Federal Water Pollution Control Amendments of 1972, with particular reference to the enforcement problems faced by the Environmental Protection Agency because of its increased responsibilities under those statutes as compared with earlier laws. Freeman maintains that present policies are wasteful and advances various alternatives as being more cost-effective. Among these are economic incentives for pollution control, such as charges for non-compliance with clean-up deadlines, and marketable discharge permits. Freeman's essay reflects the current shift in emphasis among many experts in the environmental field; his concern is focused more on the protection of public health than on conservation and land management. Thus, one of Freeman's conclusions is that our national air quality standards (and their underlying policies) fail to reflect recent evidence of the long-term effects of air pollutants on public health (*e.g.*, promotion of lung cancer and respiratory illnesses).

Eugene P. Seskin examines the costs and benefits of mobile source air pollution controls, *i.e.*, auto emission standards. The 1970 Clean Air Act Amendments are discussed with respect to their emphasis on "technology forcing." Seskin argues that "technology forcing" (advancing the state of emission control technology by setting standards that are believed to be attainable within the near future but which cannot be met with existing technologies, thus stimulating industry innovation) may be unworkable. He fears that automobile manufacturers need merely put forth good faith efforts in developing emission controls because imposition of the Act's monetary sanctions for failure actually to

achieve those standards would result in a shutdown of the noncomplying manufacturer. This would be politically infeasible given the central position of this industry in the United States economy, about ten percent of G.N.P. This has resulted in an emphasis on short-term, high-cost technologies rather than longer-term, less costly ones. For example, development of the catalytic converter was chosen by United States automobile manufacturers as the least expensive means to meet current emission standards, though in the long run the stratified charge engine is likely to prove much less costly. Seskin advances several alternatives to current policy. Separate emission standards for vehicles used in areas of high and low automotive pollution is one possibility. This, however, would be difficult and costly to implement and administer since regulation of vehicle ownership would be required and because of the problems a two-tiered market for the vehicles would pose. Another suggestion is greater promotion of public transportation. However, according to Seskin, this is unlikely since there is evidence that commuters generally will not shift from automobiles to mass transit unless the price of automobile use rises drastically.

While toxic substances have recently gained much public attention, the control of this type of pollution poses unique problems that remain to be resolved. Paul R. Portney (the editor), in his essay on hazardous substances, maintains that the difficulty in regulating these substances arises from the lack of certainty as to their health effects. This evidentiary problem stems in part from the frequently long period between exposure, and manifestation or onset of disease.

Portney's discussion of this problem touches on the numerous federal statutes dealing with toxic substance control—the Clean Air Act Amendments, the Federal Water Pollution Control Act, the Occupational Safety and Health Act, the Federal Food, Drug, and Cosmetic Act, the Consumer Product Safety Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Federal Environmental Pesticide Control Act, the Toxic Substances Control Act, the Safe Drinking Water Act, and the Resource Conservation and Recovery Act. Portney finds that the Acts' differing approaches towards the problem of toxic substances lead to inconsistent policies. For example, toxic or hazardous substances are defined by the statutes in varying ways (when defined at all) so that the type of regulation and the degree of protection sought differ from statute to statute.

In keeping with the book's basically economic orientation, Portney recommends benefit-cost (or benefit-risk) analyses which would weigh the economic benefits gained from the use of a toxic substance against the added health costs. He also suggests that taxes on products containing harmful substances might discourage voluntary consumption of those substances.

Henry M. Peskin discusses the distribution of the costs and benefits of environmental policies in society. While it is apparent that a specific environmental policy will not affect everyone in the same way, Peskin points out that under current air pollution control policy only a minority of the population enjoys benefits greater than the costs it must bear. As evidence, Peskin submits that the benefits of compliance with the Clean Air Act go primarily to residents of the East and Midwest while the costs of air pollution control are more evenly distributed nationwide. Peskin argues that different emission standards for vehicles used in areas of high and low pollution, as suggested by Seskin, would be less costly, have little effect on benefits, and be less regressive than current policy.

Unfortunately, the contributors to the book generally view environmental issues in terms of the quantity of dollars and cents involved rather than the effect of these problems on the quality of human health. While economics must be taken into account in any realistic approach to environmental problems, so too, public health, which is much more difficult to quantify, must be considered when trying to promote industrial development.

In the last chapter of the book, Robert H. Haveman and V. Kerry Smith discuss the problems of unemployment and inflation as they relate to environmental protection. Expressing a genuine sensitivity to humanity's need for an environment free from life-threatening substances, Haveman and Smith assert that environmental quality need not lead to economic collapse; it can also lead to economic prosperity. They reject the commonly made argument that the expenditures necessary for pollution control equipment will place too substantial a burden on financial markets; rather, they argue that the reduction in real G.N.P. because of pollution abatement investments will not significantly inhibit the growth of real G.N.P. Haveman and Smith also reject the familiar warning that strict environmental regulation results in forced plant closings and job losses. They maintain that the number of plant closings due to strict environmental standards is minimal when viewed nationally, and that jobs that are lost due to closings are replaced by

other employment made available by production of pollution control equipment.

Unfortunately, Haveman and Smith's views are not shared by the book's four other contributors. While control of air and water pollution and toxic substances are indeed "current issues in U.S. environmental policy," the remaining authors' approaches toward those problems are themselves an issue. The four other contributors' emphasis on the means of environmental control (monetary costs of regulation) has caused them to lose sight of their end (preservation of human life). Thus, the authors have looked at only half the problem. The costs and benefits to *public* health, not just economic health, must be considered in a solution to the environmental problems facing this country. The monetary costs of regulation do not outweigh, nor are they as important as, human life, and this nation's environmental policies should reflect that.

Ileen P. Hayn