A decision-tree for estimating human risk from exposure to toxic chemicals was introduced to the Symposium, and the estimated doses of TCDD received by pesticide applicators and farmworkers are presented. Disposal methods are discussed in some detail.

This book contains much to recommend it to serious students.

H.H. FAWCETT

Reducing Hazardous Waste Generation: An Evaluation and a Call for Action, Committee on Institutional Considerations in Reducing the Generation of Hazardous Industrial Wastes, Environmental Studies Board, National Research Council, National Academy Press, Washington, D.C., 1985, 76 pages, \$4.95.

While much attention has been given to the clean-up of hazardous waste sites in the U.S., relatively little literature has appeared on the reduction of waste generation as a practical and cost-effective contribution to the problems of the future. This report, by a highly qualified committee, was asked to examine the public policy approaches that may lead industries to reduce generation of hazardous waste, and has outlined the measures which should advance that goal. It was noted that the development of industrial waste reduction programs is a dynamic process that can be expected to grow in three phases: first, consideration of opportunities for low-cost waste reduction opportunities, such as "good housekeeping" and separation of waste streams; second, the development phase by review and implementation of more comprehensive strategies; third, confronting the political, economic, and technical limits of waste reduction activities. Nontechnical considerations critical to waste reduction decisions vary in importance as waste management programs become more sophisticated (including dissemination of information, fostering of competition for novel means to reduce generation, public demonstration of existing methods, and assistance to waste exchanges).

The committee recommends it is essential to increase the cost of land disposal options, such as landfills and surface impoundments, to bring their costs more in line with the true social costs of such options; that waste reduction should not be viewed as an end itself, policies appropriate to the initial phase of waste reduction are now needed; and regulations must play a continuing role in the overall waste treatment policy, but nonregulatory means are currently most likely to lead to waste reduction.

This report should be of interest to industry, to academics, and to environmental groups who are concerned with the long-range fate of chemicals.

H.H. FAWCETT