Series on Technology and Social Priorities

NATIONAL ACADEMY OF ENGINEERING

Hazards: Technology and Fairness

Zentrum für Interdisziplinäre Technikforschung Technische Hochschule Darmstadt Bibliothek

Inventar-Nr. 1936

NATIONAL ACADEMY PRESS Washington, D.C. 1986



Contents

Introduction: Emerging Issues in Hazard Management Robert M. White	1
Part 1. Uncertainty	
Science and Its Limits: The Regulator's Dilemma	9
Causality of a Given Cancer After Known Radiation Exposure	24
Dealing With Uncertainty About Risk in Risk Management Chris G. Whipple	44
Scientists, Engineers, and the Burdens of Occupational Exposure: The Case of the Lead Standard Ronald Bayer	60
Part 2. Equity and Compensation	
Hypersusceptibility to Occupational Hazards	79

CONTEN	TS
--------	----

The Bhopalization of American Tort Law89Peter W. Huber
Hazards Equity: A Perspective on the Compensation System
Hazardous Waste Facility Siting: Community, Firm, and Governmental Perspectives
Hazard Compensation and Incentive Systems: An Economic Perspective
Part 3. Managing Technological Hazards
Economic, Legal, and Practical Problems in Hazardous
Waste Cleanup and Management
Waste Cleanup and Management
Waste Cleanup and Management 167 Victoria J. Tschinkel 167 Focusing Private-Sector Action on Public Hazards 185
Waste Cleanup and Management 167 Victoria J. Tschinkel 187 Focusing Private-Sector Action on Public Hazards 185 John A. Klacsmann 185 Three Mile Island and Bhopal: Lessons Learned and Not 197 John F. Ahearne 197

viii