

1. Record Nr.	UNINA9910961623003321
Titolo	Hazardous waste site management : water quality issues : report on a colloquium / / sponsored by the Water Science and Technology Board, February 19-20, 1987
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1988
ISBN	9786610214969 9781280214967 1280214961 9780309535366 0309535360 9780585142906 0585142904
Edizione	[1st ed.]
Descrizione fisica	1 online resource (224 pages) : illustrations
Disciplina	363.7/28
Soggetti	Hazardous waste sites - United States Water quality management - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Colloquium 3 of a series."
Nota di bibliografia	Includes bibliographies and index.
Nota di contenuto	Hazardous Waste Site Management: Water Quality Issues -- Copyright -- PREFACE -- Contents -- OVERVIEW -- Overview of Papers -- Current Methods -- Views of Impacted Parties -- The Status of the Technical Information Base -- Summary -- ISSUE PAPERS AND PROVOCATEURS' COMMENTS -- 1 Setting Environmental Standards for Hazardous Waste Sites: A Break from the Past or a Continuum? -- 2 Establishing and Meeting Ground Water Protection Goals in the Superfund Program -- APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS -- DEVELOPMENT OF GROUND WATER ALTERNATIVES -- DECISION ANALYSIS -- FLEXIBLE DECISION PROCESS -- References -- PROVOCATEUR'S COMMENTS -- 3 Some Approaches to Setting Cleanup Goals at Hazardous Waste Sites -- THE EPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL -- General Concepts -- Critical Toxicity Value -- Estimated Daily Intake -- Derivation of Acceptable Intakes for Subchronic and Chronic Exposure -- Estimation of Daily Intake --

Exposure to Multiple Chemicals by Multiple Routes -- Noncarcinogenic Effects -- Carcinogenic Effects -- Cleanup Criteria -- Site Assessment -- Target Levels -- CALIFORNIA SITE MITIGATION DECISION TREE -- General Concepts -- Derivation of MELs for Humans -- Threshold Substances -- Nonthreshold Substances -- Derivation of AALs -- Cleanup Level Determination -- Single Agent/Single Medium -- Single Agent/Multiple Media -- Multiple Agents with the Same Toxic Action/Multiple Media -- U.S. ARMY APPROACH -- General Concepts -- Derivation of the Acceptable Daily Dose -- Threshold Agents -- Carcinogenic Substances -- Derivation of Single-Pathway Preliminary Pollutant Limit Values -- Derivation of Preliminary Pollutant Limit Values -- Cleanup Level -- NEW JERSEY CLEANUP LEVELS FOR CONTAMINATED SOILS -- General Concepts -- Derivation of ASCLs to Protect Human Health from Contaminants in Ground Water. Derivation of ASCLs to Protect Human Health from Contaminants in Soil -- Carcinogens -- Noncarcinogens -- Determination of Cleanup Levels -- WASHINGTON STATE FINAL CLEANUP POLICY -- COMPARISON OF THE METHODS -- Terminology -- Environmental Media Addressed -- Environmental Partitioning -- Derivation of Media-Specific Numerical Criteria -- Estimation of Carcinogenic Risks -- Acceptability of Carcinogenic Risks -- Multiple Chemical/Multiple Route Exposures -- SUMMARY AND CONCLUSIONS -- References -- PROVOCATEUR'S COMMENTS -- 4 The California Site Mitigation Decision Tree Process: Solving the "How Clean Should Clean Be?" Dilemma -- COMPONENTS OF THE DECISION TREE PROCESS -- Preliminary Site Appraisal -- Site Assessment -- Risk Appraisal -- Environmental Fate and Risk Determination -- Development of a Mitigation Strategy and the Selection of Remedial Action -- APPLYING THE DECISION TREE PROCESS: TWO CASE STUDIES -- Case Study 1: An Arsenic-Contaminated Site -- Step 1: Determine Soil Particle Size Distribution -- Step 2: Estimate Threshold Friction Velocity (U_f) -- Step 3: Determine the Roughness Height (Z_o), of the Site Terrain -- Step 4: Determine the Threshold Wind Velocity (U_t) -- Step 5: Estimate the Respirable Particulate Emission Rate -- Step 6: Project Downwind Particulate Concentrations -- Case Study 2: Site with Ground Water Contamination -- Preliminary Site Appraisal -- Site Assessment -- Environmental Fate and Risk Determination -- Development of a Mitigation Strategy and Selection of Remedial Action -- CONCLUSION -- References -- PROVOCATEUR'S COMMENTS -- References -- 5 How Clean is Clean? The Need for Action -- CURRENT LEGAL/REGULATORY FRAMEWORK -- COST VERSUS CLEANUP LEVELS -- Case Study 1 -- Case Study 2 -- TECHNOLOGY CONSIDERATIONS -- BALANCING CLEANUP COSTS VERSUS FUTURE LIABILITIES -- WHO PAYS?. CONCLUDING REMARKS AND RECOMMENDATIONS -- Reference -- PROVOCATEUR'S COMMENTS -- 6 How Clean is Clean? An Environmentalist Perspective -- CLEANUP LEVELS -- POINT OF COMPLIANCE -- CLEANUP TECHNOLOGY -- CONCLUSION -- PROVOCATEUR'S COMMENTS -- 7 Ground Water Contamination Issues in Santa Clara County, California: A Perspective -- BACKGROUND -- REGULATORY AGENCY ROLES AND RESPONSIBILITIES -- Regional Water Quality Control Board -- California State Department of Health Services -- Environmental Protection Agency -- REMEDIAL ACTION STRATEGIES -- Active Approach -- Passive Approach -- Discussion -- Case Studies -- IBM, San Jose -- Fairchild Camera & Instrument Corporation, San Jose -- California Water Service Company Well, Los Altos -- CLEANUP OBJECTIVES-HOW CLEAN? -- Current Cleanup Policies -- Discussion -- CLEANUP COSTS-WHO IS RESPONSIBLE? -- SUMMARY -- CONCLUSIONS -- Bibliography -- PROVOCATEUR'S COMMENTS -- 8

Using Models to Solve Ground Water Quality Problems -- MODELS FOR PREDICTING MOVEMENT AND FATE AND/OR RANKING RISK OF CHEMICALS IN GROUND WATER -- Quality Control/Quality Assurance for Models -- Concerns of Those Using Water Quality Models -- Role of Ground Water Quality Models in Regulatory or Policy Issues -- Development of Regulations and Policy -- Permitting -- Remedial Action -- Risk Assessment -- SUMMARY AND CONCLUSIONS -- References -- PROVOCATEUR'S COMMENTS -- 9 Estimating Health Risks at Hazardous Waste Sites: Decisions and Choices Despite Uncertainty -- BACKGROUND -- ASSESSMENT OF RISKS TO HUMAN HEALTH -- EXPOSURE CONSIDERATIONS -- ILLUSTRATIONS OF RISK ASSESSMENTS AT HAZARDOUS WASTE SITES -- Manufactured Gas Sites -- The Hyde Park Landfill -- Widespread Ground Water Contamination -- Single-Compound Disposal -- Future Risk to a Major Aquifer -- DISCUSSION -- Data Problems -- Additional Uncertainties. CONCLUSIONS AND RECOMMENDATIONS -- References -- PROVOCATEUR'S COMMENTS -- RAPPORTEURS' REPORTS -- Risk Assessment / Toxicology Workshop -- TOOLS FOR SETTING AMBIENT ENVIRONMENTAL STANDARDS -- Criteria for Evaluating the Approaches -- Setting Risk Goals -- Strengths and Weaknesses of Risk Assessment and Management -- The Strengths and Weaknesses of Setting Risk Goals -- CONCLUSION -- Hydrogeology Workshop -- METHODS USED IN EXPOSURE ESTIMATION -- STRENGTHS AND WEAKNESSES OF THE METHODS -- METHODS' EFFECTIVENESS UNDER DIVERSE CONDITIONS -- ASSOCIATED DATA BASE -- ASSOCIATED UNCERTAINTIES -- IMPORTANT ISSUES -- Engineering Workshop -- DISCUSSION OF POSSIBLE CHANGES IN THE ENGINEERING ROLE -- CONCLUSIONS -- Regulatory Strategies Workshop -- Appendix A Biographical Sketches of Principal Contributors -- Appendix B Colloquium Attendees -- INDEX.

Sommario/riassunto

Hazardous Waste Site Management addresses current methods used in the regulatory process with respect to water quality cleanup levels. Information and perspectives on the adequacy of these methods are provided by representatives from water utilities, industry, and environmental groups. Setting environmental standards, establishing and meeting ground-water protection goals, and specific approaches to setting goals are also fully examined.
