

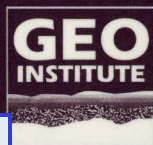
RISK-BASED CORRECTIVE ACTION AND BROWNFIELDS RESTORATIONS

EDITED BY CRAIG H. BENSON,
JAY N. MEEGODA, ROBERT B. GILBERT
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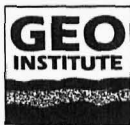
RISK-BASED CORRECTIVE ACTION AND BROWNFIELDS RESTORATIONS

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EDITED BY
Craig H. Benson
Jay N. Meegoda
Robert B. Gilbert
Samuel P. Clemence



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of Civil Engineers*
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Abstract: This proceedings, *Risk-Based Corrective Action and Brownfields Restorations*, contains papers presented at sessions sponsored by the Geo-Institute of ASCE in conjunction with the ASCE Annual Convention held in Boston, Massachusetts, October 18-21, 1998. These papers describe the tools and methods employed in risk-based corrective action, provide illustrative examples through case histories with an emphasis on brownfields restoration. This proceeding provides practitioners with an introduction to the concepts that are employed and the lessons that have been learned by others.

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|----|--|
| 44 | <i>Ground Failures Under Seismic Conditions</i> |
| 45 | <i>In Situ Deep Soil Improvement</i> |
| 46 | <i>Geoenvironment 2000</i> |
| 47 | <i>Geo-Environmental Issues Facing the Americas</i> |
| 48 | <i>Soil Suction Applications in Geotechnical Engineering</i> |
| 49 | <i>Soil Improvement for Earthquake Hazard Mitigation</i> |
| 50 | <i>Foundation Upgrading and Repair for Infrastructure Improvement</i> |
| 51 | <i>Performance of Deep Foundations Under Seismic Loading</i> |
| 52 | <i>Landslides Under Static and Dynamic Conditions—Analysis, Monitoring, and Mitigation</i> |
| 53 | <i>Landfill Closures—Environmental Protection and Land Recovery</i> |
| 54 | <i>Earthquake Design and Performance of Solid Waste Landfills</i> |
| 55 | <i>Earthquake-Induced Movements and Seismic Remediation of Existing Foundations and Abutments</i> |
| 56 | <i>Static and Dynamic Properties of Gravelly Soils</i> |
| 57 | <i>Verification of Geotechnical Grouting</i> |
| 58 | <i>Uncertainty in the Geologic Environment</i> |
| 59 | <i>Engineered Contaminated Soils and Interaction of Soil Geomembranes</i> |
| 60 | <i>Analysis and Design of Retaining Structures Against Earthquakes</i> |
| 61 | <i>Measuring and Modeling Time Dependent Soil Behavior</i> |
| 62 | <i>Case Histories of Geophysics Applied to Civil Engineering and Public Policy</i> |
| 63 | <i>Design with Residual Materials: Geotechnical and Construction Considerations</i> |
| 64 | <i>Observation and Modeling in Numerical Analysis and Model Tests in Dynamic Soil-Structure Interaction Problems</i> |
| 65 | <i>Dredging and Management of Dredged Material</i> |
| 66 | <i>Grouting: Compaction, Remediation and Testing</i> |
| 67 | <i>Spatial Analysis in Soil Dynamics and Earthquake Engineering</i> |
| 68 | <i>Unsaturated Soil Engineering Practice</i> |
| 69 | <i>Ground Improvement, Ground Reinforcement, Ground Treatment: Developments 1987-1997</i> |
| 70 | <i>Seismic Analysis and Design for Soil-Pile-Structure Interactions</i> |
| 71 | <i>In Situ Remediation of the Geoenvironment</i> |
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| 73 | <i>Innovative Design and Construction for Foundations and Substructures Subject to Freezing and Frost</i> |
| 74 | <i>Guidelines of Engineering Practice for Braced and Tied-Back Excavations</i> |
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| 76 | <i>Geosynthetics in Foundation Reinforcement and Erosion Control Systems</i> |
| 77 | <i>Stability of Natural Slopes in the Coastal Plain</i> |
| 78 | <i>Filtration and Drainage in Geotechnical/Geoenvironmental Engineering</i> |
| 79 | <i>Recycled Materials in Geotechnical Applications</i> |
| 80 | <i>Grouts and Grouting: A Potpourri of Projects</i> |
| 81 | <i>Soil Improvement for Big Digs</i> |
| 82 | <i>Risk-Based Corrective Action and Brownfields Restorations</i> |

PREFACE

Vast resources have been expended during the last two decades on remediating sites contaminated as a result of poor waste management practices in the past. Recently, the costs of these remedial actions have come under scrutiny, particularly regarding the ultimate reduction in risk that is obtained relative to the economic resources committed. Risk-Based Corrective Action (RBCA) and Brownfields Restoration are an outgrowth of this scrutiny, and are now playing a significant role in remediating contaminated sites. In recent years, RBCA has become more widely used, and has become an integral part of the burgeoning brownfields programs. RBCA provides the necessary framework for balancing health and environmental risks with costs with the ultimate objective of implementing sensible remedial actions. Brownfields restoration is a reasonable and economical approach for remediating contaminated land that is intended for industrial use.

This Geotechnical Special Publication (GSP) was developed to describe the tools and methods employed in RBCA, and to provide illustrative examples through case histories with emphasis on Brownfields restorations. The intent is to provide practitioners with an introduction to the concepts that are employed and lessons that have been learned by others. Selected representatives of the Geo-Institute's Environmental Geotechnics and Soil Properties Committees invited the authors to prepare the papers in this GSP. Each paper received at least one positive review before being accepted and was revised to conform to any mandatory revisions required by the reviewers. All papers in this GSP are eligible for discussion in the *Journal of Geotechnical and Geoenvironmental Engineering* and are eligible for ASCE and Geo-Institute awards.

The persons who volunteered to review the papers were essential to the timely publication of this GSP. These persons are:

| | | |
|--------------------|-------------------|-------------------|
| Shobha K. Bhatia | William Librizzi | George Newell |
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*Craig H. Benson, Jay N. Meegoda, Robert B. Gilbert,
and Samuel P. Clemence*

June 1998

Contents

An Overview of Brownfields Restorations

| | |
|---|-----------|
| The Greening of New Jersey's "Brownfields" as Viewed by the Department of Environmental Protection | 1 |
| Richard J. Gimello and Phyllis E. Bross | |
| Innovation in Brownfields Site Assessment..... | 16 |
| Gerard F. McKenna | |

Tools for Risk-Based Corrective Action (RCBA)

| | |
|--|-----------|
| Development of Risk-Based Remediation Strategies | 30 |
| Stephen T. Washburn and Kristen G. Edelmann | |
| The Evolution of Risk-Based Corrective Action..... | 44 |
| Jim Rocco and Leslie Hay Wilson | |
| A Risk-Based Approach for a National Assessment | 55 |
| Gene Whelan and Gerard F. Laniak | |
| Overview of ASTM Proposed Standard Guide to the Process of Sustainable Brownfields Redevelopment..... | 75 |
| Michael B. Taylor, James R. Rocco, and James Gibson | |
| Risk Evaluation in Brownfield Slurry Wall Containments by Contaminant Transport and CalTOX Models | 92 |
| Shailesh Chirputkar and Dorairaja Raghu | |

Case Histories: I

| | |
|---|------------|
| Hitting a Home Run for the Giants Stadium: A Risk Management Approach to Site Investigation and Remediation..... | 109 |
| Amanda L. Spencer and Gregory P. Brorby | |
| Impact of Remedial Landfill Cover Systems and Gas Extraction Systems on Groundwater VOC Concentrations | 121 |
| Lisa R. Blotz, Robert B. Gilbert, and James R. Stout | |
| Lessons Learned: An Assessment of Performance for Completed Remediation Projects..... | 141 |
| Lizan N. Koerner, Lisa R. Blotz, and Robert B. Gilbert | |
| Uncertainties Associated with the Preliminary Ecological Risk Assessment Process: Case Study | 159 |
| Harold A. Tuchfield, Julia Schulten, Joseph Voor, Thomas Peel, and Leo Gentile | |

Past Performance and Emerging Trends

| | |
|--|------------|
| Risk-Sharing Mechanisms for Brownfields Redevelopment | 178 |
| Lawrence S. Bacow | |

| | |
|---|------------|
| An Analysis of the Success of RBCA in Tennessee UST Site Management..... | 196 |
| Kimberly Davis and Chris Bolton | |
| Integration of Risk Management and Project Management for Efficient RCRA Corrective Action | 209 |
| Gerald Phillips, James R. Rocco, and Lesley Hay Wilson | |
| Development of a Site Corrective Action Cost Comparison Model Based on the ASTM RBCA Guide and Decision Theory | 217 |
| Lesley Hay Wilson and James R. Rocco | |
| Engineering Controls for Risk Reduction at Brownfield Sites..... | 229 |
| Hilary I. Inyang, John L. Daniels, and Vincent Ogunro | |
| <i>Case Histories: II</i> | |
| Site Remediation and Brownfields Redevelopment of the Former Koppers Seaboard Site, Kearny, New Jersey | 253 |
| Michael L. Hornsby and Peter W. Sawchuck | |
| Brass Factory to Regional Mall: A Model Brownfield..... | 267 |
| William F. Kay Jr., and Elizabeth C. Barton | |
| Case History of a Successful “Brownfields” Site in Wichita, Kansas. Part 1: Innovative Approaches to Funding and Liability | 277 |
| Mark P. Mitsch, Roger L. Olsen, and Jack Brown | |
| Case History of a Successful “Brownfields” Site in Wichita, Kansas. Part 2: Innovative Approaches to Remediation..... | 284 |
| Mark P. Mitsch, Roger L. Olsen, and Jack Brown | |
| Subject Index | 301 |
| Author Index..... | 303 |

THE GREENING OF NEW JERSEY'S "BROWNFIELDS"- AS VIEWED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

By Richard J. Gimello, Assistant Commissioner,
Site Remediation Program
and
Phyllis E. Bross, Deputy Attorney General

I. OVERVIEW

A. Addressing Impediments To Brownfields Redevelopment

Not unlike other states, New Jersey finds itself heavily involved in brownfield issues. Many commercial and industrial properties are in need, a need that cannot be ignored or avoided. In New Jersey and across the nation, factories, gasoline stations, dry cleaning establishments, chemical storage companies -- even former landfills¹ -- have, in a sense, been used up. Some of them have then been shunned and simply discarded. This State's goal is to encourage redevelopment, especially because some of these sites now being avoided have only been avoided because of perceived contamination (or perceived high cleanup costs). Clearly, our goal to revitalize these properties requires creativity.

For a number of years, New Jersey has possessed a vast body of statutes, regulations, and agency practices which effectively address contamination, whether in the form of pollution prevention or cleanup of already contaminated sites. But, in order to truly promote the reuse of brownfields, encouragement of increased numbers of land investments and redevelopment projects must also be accomplished. That effort, which has required not only legislative enactments such as the 1998 Brownfields Act, but innovative decision-making by various State Departments and other stakeholders as well, is underway.

Some time ago, New Jersey concluded that it should encourage the use of private funds to address contaminated areas of the State. Since that time, this