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ENVIRONMENTAL GEOTECHNICS

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EDITED BY
T.F. Zimmie



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Abstract: The 12 papers included in this proceedings are quite diverse, and attest to the multidisciplinary nature of geoenvironmental engineering. The first section deals with landfill settlements, including municipal landfills as well as landfills utilizing recycled waste paper sludge, and the use of recycled materials in road construction and as a concrete aggregate. The second section deals with contaminant transport through waste contaminant barriers, the use of various materials for barrier systems, including slurry trench cutoff barriers. The third section deals with processes used in waste remediation projects, properties of a modified bentonite, and biological clogging.

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Preface

This publication contains the twelve papers that were presented at GeoDenver 2000, August 5-8, 2000, an ASCE Geo-Institute conference held in Denver, Colorado. A wide range of topics is included, in the general area of geoenvironmental engineering. The title of this GSP, *Environmental Geotechnics*, was selected only to allow differentiation between this publication and accompanying sessions, versus other geoenvironmental publications and sessions which were part of the GeoDenver conference. The geotechnical profession appears to have settled on the usage of the term geoenvironmental engineering, which can loosely be defined as the application of geotechnical engineering principles to the solution of environmental problems.

The 12 papers included in this proceedings are quite diverse, and attest to the multidisciplinary nature of geoenvironmental engineering. The papers were organized into three sections, but there is a considerable amount of overlap between the sections. The first section, entitled landfills and recycled materials, deals with landfill settlements, including municipal landfills as well as landfills utilizing recycled waste paper sludge, and the use of recycled materials in road construction and as a concrete aggregate. The second section, barrier systems, deals with contaminant transport through waste contaminant barriers, the use of various materials for barrier systems, including slurry trench cutoff barriers. The third section, processes and properties, deals with processes used in waste remediation projects, properties of a modified bentonite, and biological clogging.

Each of the papers included in this volume received at least two positive peer reviews. Essentially the review process followed the same procedures used for the Journal of Geotechnical and Geoenvironmental Engineering of ASCE. All of the papers are eligible for discussion in the Journal of Geotechnical and Geoenvironmental Engineering, and are eligible for ASCE awards. The editor would like to thank the reviewers for the time and effort spent on the reviews. Reviewers were:

Tarek Abdoun
Carsten Floess
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Christine LaPlante

Juan Quiroz
Pickett Simpson
Mourad Zeghal

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