

Introduction to special issue on geosynthetic clay liners II

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SPECIAL ISSUE ON GEOSYNTHETIC CLAY LINERS II

Volume 22, No. 1, of *Geosynthetics International* is a special issue devoted to geosynthetic clay liners (GCLs). GCLs are manufactured products consisting of bentonite clay bonded to a layer, or between layers, of geosynthetic material. In the 33 years since the GCL was invented, acceptance of these products has grown to the point where they are now commonly specified in the design of waste disposal facilities and other facilities requiring hydraulic barriers. Acceptance has been rapid because GCLs offer many advantages over compacted soil liners, not the least of which is a lower cost for many applications. Equally rapid developments in manufacturing, testing, design, construction, and the regulatory environment have sparked research on various issues related to GCL performance. This special issue contains some of the latest research on the engineering behavior and performance of these unique barrier materials.

The *Special Issue on Geosynthetic Clay Liners II* represents a 10 year update to the original *Special Issue on Geosynthetic Clay Liners* organized by Dr Fox as guest editor in 2004. For this current effort, we decided to team as guest editors and then jointly invited submission of papers from leading international experts. These invita-

tions produced 10 submitted manuscripts from which eight technical papers were ultimately accepted for publication. Each paper received rigorous peer review by two or more anonymous reviewers. This special issue provides our readers with coverage of a wide range of topics including: shear strength, hydraulic performance, chemico-osmotic behavior, internal erosion, bentonite migration, and thermal exposure conditions. The scope and content of some papers go beyond that typical for a journal article as the intent was to provide contributing authors with the flexibility to submit comprehensive papers if desired. The electronic format allows this impressive collection of papers to be published together as a single issue of *Geosynthetics International*.

This special issue of *Geosynthetics International* would not be possible without the high-level contributions of the contributing authors. We would also like to gratefully acknowledge the assistance of the Editor, R. J. Bathurst, and the Chair of the Editorial Board, J. P. Giroud, and the many reviewers who ensured that each paper met the high technical standards of *Geosynthetics International*.

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