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Book review
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Stabilisation/Solidification of Contaminated Soil and Waste: Science and Practice

C. Hills, P. Gunning and E. Bates. Hygge Media, Greenmount, UK, 2015, ISBN 978-0-9932-7294-3, £159·99, 528 pp.

This book comprises two parts in separate volumes: *Science* and *Practice*. It draws predominantly from US practice but also uses examples from around the world.

Both volumes are very well written and the *Practice* volume includes an extensive range of brief case histories. The volumes are also pragmatic in relation to discounting a process where it is not applicable. The general layout of both volumes makes them easy to follow through the process of selection of method and binders, and treatment of contaminated soils by stabilisation/solidification.

The *Science* volume initially outlines stabilisation/solidification technology and deals with properties of soil and soil binder systems. The following chapters deal with the treatment of soils with inorganic and organic contaminants, and the chemistry of stabilisation/solidification depending on the chemistry of the contaminants and the nature of the proposed binders. The final chapters deal with performance and monitoring of stabilisation/solidification systems.

The *Practice* volume opens with a useful summary of the history of stabilisation/solidification and follows with the applicability of the process for soils with both inorganic and organic contaminants. The following chapters provide a comprehensive description of ex situ and in situ techniques that will be seen as common to the practice in the UK. Quality assurance and control are covered in detail. Performance specifications are explained for all treatable contaminants with the range of available binders and followed by a comprehensive chapter on the development of effective stabilisation/solidification formulations. The final chapter deals with capping of treated soils and long-term performance monitoring of treated soils.

The *Practice* volume contains over 200 summaries of remediated sites across the USA and Europe, with links to the authors who have contributed, together with 47 detailed case studies. A further eight case studies are included in the *Science* volume. Both volumes contain extensive lists of references for further research into specific regulatory processes.

Both volumes are clearly set out and easy to follow; they also include explanatory abbreviations for those who are not familiar with geo-environmental practice. The price of the book is likely to discourage the casual reader, but this book constitutes a very valuable reference volume for geo-environmental engineers and practitioners as well as waste regulators, although it is somewhat centred on US practice.

Paul Nowak