

Book review

WASTE TREATMENT AND DISPOSAL, 2nd edn

P. T. Williams. John Wiley and Sons, 2005. ISBN 0-470-84912-6, £29.95 (softback), £85 (hardback), 390 pp.

This is the second edition of Paul Williams' comprehensive introductory text on waste treatment and disposal, first published in 1998. The material is well organised, with six main chapters covering the legislative and policy background; definitions and types of waste; recycling; landfill; incineration; and other treatment technologies such as pyrolysis, gasification, composting and anaerobic digestion. A seventh, rather shorter, chapter discusses integrated waste management with reference to case histories from the UK and Europe.

While the first edition was based largely on UK waste management practice, the second edition has a much more European focus. This is particularly apparent in the first two chapters on the legislative framework and on the definition and characterisation of waste, reflecting the influence of EU policy on waste management in the UK in recent years. These chapters contain much useful information, including summaries of the main relevant EU directives and data on waste composition and characteristics for a variety of wastes from different countries and socio-economic groups.

The technology chapters have been revised to incorporate the (mainly incremental) developments that have taken place since the first edition was published in 1998, together with some adjustments in focus and length. In general for each of the

technologies described, the book details the basic principles and processes involved, and discusses the legislative and regulatory frameworks, environmental protection and economic considerations. As with the earlier chapters, much useful data are presented in tables, and text boxes are used to highlight fundamental technical concepts and case studies.

The book has fewer pages (390 compared with 417) than the first edition. Most of this reduction has come from the chapter on landfill; perhaps this is not surprising, in view of the current focus on finding alternative uses or treatments for wastes.

Overall, the book is well and authoritatively written. It is set out in an accessible format, and the explanations and diagrams are clear. It is an excellent technical introduction to the wide-ranging and, if taken seriously, rather difficult subject of waste management. Inevitably someone working in a particular technology or area will need to consult more specialist texts and original papers, but as a first port of call this book will be hard to beat. Is it worth buying? Undoubtedly, yes. If you have and use the first edition, the second edition is an essential update in the light of legislative, policy and technological developments over the past five years or so. If you are a student of waste management it is a comprehensive, in-depth introduction to the subject. For the experienced professional, the book is a useful and convenient reference and a valuable source for those facts, figures, definitions and details whose authority can sometimes be so elusive.

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