

Book Reviews

Treatment Technologies for Solvent-Containing Wastes, by M. Breton, P. Fricilli, S. Palmer, C. Spears, M. Arienti, M. Kravett, A. Shayer and N. Suprenant, Noyes Data Corp., Park Ridge, NJ, 1988, ISBN 0-8155-1158-2, 753 pp., US \$64.

Section 3004 of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) prohibits the continued placement of US EPA-regulated wastes on or onto the land. Solvents such as acetone, methanol, xylenes, etc., are a class of materials falling under this "land-ban" regulation. As a result, the US EPA mandated a study of the treatment of solvent-bearing wastes and the contractor's report of that study became this book.

The book contains, in its several chapters: (1) a review of the regulatory background leading to the study, (2) a review of the current hazardous waste management data regarding sources of solvent wastes and existing management practices of those solvents, (3) a section on management practices, and (4) an evaluation of the range of treatment/recovery processes including:

- Pretreatment
- Physical Treatment Processes
- Chemical Treatment Processes
- Biological Treatment Methods
- Incineration
- Emerging Thermal Treatment Technologies
- Use of Solvents as a Fuel
- Land Disposal of Residues

The range of technologies selected for discussion is excellent with most technologies receiving the full treatment of: (1) process description, (2) demonstrated performance, (3) cost of treatment and (4) status of development.

A final chapter deals with potential approaches to the selection of treatment/recovery option for the mentioned solvent wastes.

An appendix of some 20 pages contains data on physical/chemical properties of the solvents discussed. I have seen these data so often in other books that, although they do add completeness to government report, they are probably an unneeded appendage in the published book. The same can be said for the waste management section. That topic is covered elsewhere more fully than in this book. Having said this, I find the "meat" of the book in the treatment section, which presents a good review of the available, useful and applicable technologies.

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