Dioxin-Containing Wastes

Treatment Technologies

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Foreword

This book provides descriptions of treatment technologies for dioxin-containing wastes. It covers proven technology on waste management options and should be a useful tool for those involved in decision making on dioxin-containing wastes. Information is included on processes that have been evaluated with actual dioxin waste streams, and processes that have been tested using similar waste streams. In addition to process-specific details, extensive data are included on the characterization of dioxin wastes in general.

The 1984 Hazardous and Solid Waste Act Amendments to the Resource Conservation and Recovery Act (RCRA) directed EPA to ban certain dioxin-containing wastes from land disposal, unless EPA determines that restrictions on land disposal of these wastes are not needed to protect human health and the environment. An important aspect of the land disposal restrictions is the identification and evaluation of alternative technologies that can be used to treat the listed wastes in such a way as to meet proposed treatment levels which EPA has determined are protective of human health and the environment. The purpose of this book is to identify and evaluate the alternative technologies that remove and/or destroy dioxin and related compounds from listed dioxin wastes in order to achieve constituent levels that allow the safe land disposal of the treated residues.

Technologies evaluated are those that destroy or somehow change the form of dioxin so that it is less toxic. The majority of the technologies described are those whose performance has been tested on dioxin-containing wastes. Those that have not been tested on dioxin-containing wastes have, at least, been tested on PCB-containing wastes. Because of the similarity of PCBs and dioxins, these technologies should also be applicable to dioxin wastes. Technologies that have been developed to full scale as well as those only investigated in the laboratory are included.

The information in the book is from *Technical Resource Document: Treatment Technologies for Dioxin-Containing Wastes,* prepared by M. Arienti, L. Wilk, M. Jasinski, and N. Prominski of Alliance Technologies Corporation for the U.S. Environmental Protection Agency, October 1986.

The table of contents is organized in such a way as to serve as a subject index and provides easy access to the information contained in the book.

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