

charged with the responsibility for safe operation of laboratories charged with the responsibility for safe operation of laboratories.

Specific sections were written on:

- organization for safety
- hazards – chemical, physical
- laboratory design including fire prevention, chemical storage and provision of utilities
- operation – personnel protection, emergency procedures

As a policy manual, this is a good book but I seriously question the cost – almost 40 \$¢ (US) per page!

GARY F. BENNETT

Drum Handling Manual for Hazardous Waste Sites, by K. Wagner, R. Wetzel, H. Bryson, C. Furnam, A. Wickline and V. Hodge, Noyes Data Corp., Park Ridge, NJ, 1987, ISBN 0-8155-1121-3, 178 pages, \$36.00.

The ubiquitous resident of uncontrolled hazardous waste sites in the 55 gal. unmarked steel drum containing mixed chemicals wastes and presenting unknown hazards. Drum retrieval, sampling analysis and removal is a major problem facing cleanup crews. This problem was addressed through an U.S. Environmental Protection Agency contract that resulted in this manual. The manual provides detailed technical guidance on methods, procedures and equipment suitable for removing drummed wastes. Information is included on locating buried drums; ecavation and on-site transfer; staging, opening and sampling; waste consolidation; and temporary storage and shipping.

Each of these operations is discussed in terms of the equipment and procedures used in carrying out specific activities, health and safety procedures, measures for protecting the environment and public welfare and factors affecting costs. Information is also included on the application and limitation of several remedial measures for controlling or containing migration of wastes; surface capping, surface water control, groundwater pumping, subsurface drains, slurring walls and in-situ treatment techniques. In addition to the text, the authors have included numerous excellent explanatory diagrams and photographs.

Specific chapter titles include:

- selection of drum handling methods
- location, detection and inventory of drums
- site preparation
- air monitoring and inspection of determining drum integrity
- excavation, removal and on-site handling of drums
- drum staging, opening and sampling

- waste consolidation and containerization
- interim storage and recontainerization
- on-site containment options for buried drums

GARY F. BENNETT

Toxic Hazard Assessment of Chemicals, by M. Richardson (Ed.), The Royal Society of Chemistry, 1986, ISBN 0-85186-897-5, 362 pages, £47.50 (approx. \$85.00).

The purpose of this book is to provide basic guidance on the retrieval, validation and interpretation of data to make a toxicological hazard assessment of a chemical. To this end, the Royal Society combined 23 papers, selected from papers presented at five meetings, held from 1984 to 1986.

The book is divided into six major sections:

- work of the Royal Society in the area
- data sources, retrieval and use
- problems of information selection, sources of error and verification of data
- interpretation of data
- risk assessment and case histories
- legislation of chemicals

As workers become more concerned about the chemicals they work with and are exposed to this, the book would appear to be a very timely resource for those chemists and engineers who must control and explain the chemical environment to those exposed to it.

GARY F. BENNETT