Book (3) is designed to reassure US EPA that chemical laboratories are "under control" insofar as chemical handling and disposal is concerned (which are estimated to be only 1% or less of the overall hazardous waste problem). The book reviews the management of a proposed system which laboratory management and supervision should institute to bring wastes under control, and recommends simpler, more uniform regulations for disposal of hazardous lab wastes. The book asks that laboratories be relieved from large reporting and recording requirements. Alternate disposal methods, including incineration and chemical de-activation, are noted. We are not sure how seriously these methods will be taken, or that they will be conducted in a proper manner by all chemists, but it should be required reading.

H.H. FAWCETT

Handbook of Plastics Flammability and Combustion Toxicology, by A.H. Landrock, Noyes Data Corporation, Park Ridge, NJ, 1983, 308 pages, $36.

This intriguing interdisciplinary book arrived at my office the same week in which 23 people died from exposure to combustion products in an Air Canada plane fire. To say the book is timely is a gross understatement.

In the objectives of the book, the author outlines what the reader should gain:

- Awareness of legal action of regulatory agencies.
- Knowledge of test methods used to evaluate the flammability of plastics and their combustion products (Chapter 7).
- Knowledge of how plastics burn and what stages they go through when they burn (Chapter 3).
- An understanding of how fire retardants work (Chapter 4).
- Knowledge of toxic products of burning plastics (Chapters 5 and 6).
- Information sources (Chapter 9).
- Knowledge of current research and development.

The three key chapters are the middle ones (5, 6 and 7). In chapter 5, the author considers the general fire safety aspects of currently available plastics including molded and cast solids, foams, films and sheets and composites/laminates.

The chapter of most interest to me was the sixth, in which Landrock discusses the effect of toxic gas emission and smoke. He notes that more than 80% of all fire fatalities are caused by the inhalation of toxic gases (which was certainly the case with the recent airplane fire) due to CO, HCN, SO_2 and/or phosgenes, as well as other toxic emissions of burning or hot synthetic materials. Chapter 7 is a lengthy chapter giving considerable details on the test methods commonly used in combustion studies involving plastics, including all ASTM, UL, DOT and FAA tests.

GARY F. BENNETT