This is the third book (that should be obvious from the Volume 3 designation) in this most excellent series. I look forward with anticipation to each new volume, and when the series is completed, I will have a superb library with physical property and safety and health information on a wide variety of chemicals.

This volume contains data on 77 chemicals that, as the title suggests, are corrosive or irritant. Not unexpectedly one finds data on inorganic acids such as nitric and sulphuric acids, and bases on such a sodium and potassium hydroxide. I was surprised however, to see included acetaldehyde, ethyl acrylate and glutaraldehyde which are clearly not acids, but of course are irritants. Yet still a strange grouping.

The data given for each chemical are as follows:

- Risk and safety precautions
- Identifiers: CAS number, NIOSH number
- Threshold limit value
- Physical properties
- Packaging and transportation
- Manufacturer/Use
- First aid
- Handling, storage and disposal
- Fire precautions
- Further reading/references

As I have said before, in responding to chemical incidents/accidents, it is rarely possible to have too much chemical information. Too often, good chemical data are lacking. This series of books fills a vital function and supplies those much-needed data.

GARY F. BENNETT

International Chemical Safety Cards, by Commission of the European Communities and International Programme on Chemical Safety, World Health Organization, Geneva, Switzerland, 1990, ISBN 92-826-1331-3, approx. 160 pp., no price given.

This 'first series' of Safety Cards contains excellent information on 78 differently widely divergent chemicals, among them, aceteldehyde, arsenic, benzene, ethanol, mercury, phenol and xylenes. Each $11^{3/4}X8^{1/4}$ in. card, printed on both sides, contains a plethora of data; these cards contain data as good as one of the best chemical information books I have on my shelf: *Handling Chemicals Safety* which was published by the Dutch Association of Chemical Experts in 1980.

Data given for each chemical are:

- Identification numbers: CAS, RTECS, ICSC, UN, EC
- Synonyms
- Type of hazard: fire, explosion
- Types of exposures: skin, eyes, inhalation, ingestion
- Spillage disposal
- Packaging and labeling
- Storage
- Physical properties
- Dangers: physical, chemical, exposure limits, exposure risk
- Environment data

GARY F. BENNETT

Treatment Technologies, by US Environmental Protection Agency, Office of Solid Waste, republished by Government Institutes, Rockville, MD, 1990, ISBN 0-86587-220-1, 238 pp., \$ 59.00.

This background document on treatment technologies was issued by the US EPA in 1990, and republished in August by Government Institutes. Why, I do not understand?

Government Institutes states that they 'determined that it [the US EPA report] contained information of interest to the regulated community outside of [the US] EPA'. Of interest it may be, of applicability the technologies are, but of discussion in depth, it is not.

In 238 double-spaced typewritten pages, 26 technologies for the treatment of wastewater and hazardous wastes are covered, starting with Aerobic Biological Treatment and ending with Chemical Reduction. What is written is fine, but of so limited in nature as to be trivial-almost an encyclopedic capsule rather than a textbook treatise. I am of the opinion 99% of the potential readers are well beyond the discussion provided.

Consequently, I cannot recommend this book to the reader of the *Journal of Hazardous Materials* — a surprising statement from me and the first such negative comment on a Government Institutes book which generally range from excellent to superb.

GARY F. BENNETT

Controlling Volatile Organic Compound Emissions From Industrial Wastewaters, by J. Elliot and S. Watkins, Noyes Data Corp., Park Ridge, NJ, 1990, ISBN 0-8155-1261-9, 363 pp., \$ 48.00.