Process Modifications for Industrial Pollution Source Reduction, by L.L. Tavlarides, Lewis Publications, Chelsea, MI, 1985, ISBN 0-87371-003-7, 150 pages, $24.95.

This is the second book of a series I have seen emanating from a U.S. Environmental Protection Agency sponsored university-operated "Industrial Waste Elimination Research" project.

Given the mandate of the U.S. Resource and Conservation Recovery Act of 1976 and at its 1984 amendments that require industry to show progress in the minimization of the generation of hazardous wastes and reduction of their toxicity, I approached this book with great expectations and interest. Unfortunately, I was greatly disappointed.

There are chapters dealing with eight major industries ranging from electroplating to paper and pulp. Unfortunately, the information given is superficial, the problems pointed out are generally known and the suggestions for improvements are few.

GARY F. BENNETT

Handbook of Hazard Communication and OSHA Requirements; Compliance Guide for the Federal "Right-to-Know" Standard, by G.G. Lowry and Robert C. Lowry, Lewis Publishers, 121 S. Main St., P.O. Drawer 519, Chelsea, MI 48118, 1985, 148 pages, $35.00.

This is the best of several attempts we have reviewed recently for persons who are involved in compliance with the U.S. Occupational Safety and Health Regulation, Hazard Communication (or Right-to-Know), announced November 25, 1983 in the Federal Register and now codified as 29 CFR 1910.1200. The two authors supplement each other, in that one is a chemist and the other a lawyer. Starting with the concept of "need-to-know", the book proceeds to legal responsibilities (to the chemical industry as well as to all manufacturers), hazard identification, physical hazard characterizations, health hazard characterizations, label design and content, material safety data sheets (a sample sheet is included so it will be understood), written hazard communication program, employee training, and the consequences of the training. The full text of the OSHA standard is given in an appendix, as is a list of substances regulated by reference, and lethal dose equivalencies, as well as a complete index. One point stressed is that the material safety data sheets required for compliance with the standard is not exactly the same as the OSHA Form 20, which is inadequate under the new regulation. The book is written in clear language, and should be very helpful to anyone interested in achieving compliance by the deadline of May 25, 1986. Not mentioned in the book is that several states and cities

now have similar or even more significant "right-to-know" laws, and more are expected shortly.

H.H. FAWCETT

The Investigation and Control of Gas Explosions in Buildings and Heating Plant, by R.J. Harris, British Gas, Chapman and Hall, Methuen (attention Valerie Berk), 29 West 35th St., New York, NY 10001, 1983, cloth, 194 pages, $41.00.

This book is a practical, yet technically advanced, treatment of the gas explosions which occasionally occur and are frequently misdiagnosed. The author is principal scientist with the British Gas Midlands Research Station, and has assembled the accumulated wisdom and data from a variety of sources. Most of the data are for natural gas (essentially methane), although other gases and vapors are considered in the introductory section.

Beginning with an introduction to combustion and explosions, subsequent chapters deal with gas accumulation, mixing, and ventilation, with the generation of pressure in confined gas explosions, with the prediction of pressures generated in vented confined gas explosions, with the design of explosion relief panels and their practical application, and with investigation of gas explosion incidents. (This reviewer investigated a very similar explosion to the one detailed some years ago, where a broken gas pipe outside the house had allowed gas to accumulate in a house which did not have gas service.) In the appendices, the author has included calculation of gas flow rates from a broken pipe, derivation of the pressure—time relationship at the onset of a confined gas explosion, a mathematical model of a vented gas explosion, worked examples in the application of empirical equations to the design of explosion relief panels, and investigation of an accidental gas explosion. Excellent color photographs, and 104 references enhance the appeal of the book to a serious reader. Every building engineer who supervises gas furnaces or dryers, and every technical gas utility manager would find the book of real value. It is highly recommended.

H.H. FAWCETT

Superacids, by G.A. Olah, G.K.S. Prakash and J. Sommer, Wiley/Interscience, New York, 1985, 371 pages, $57.95.

Superacids are acid systems stronger than conventional strong Brønsted acids (such as sulfuric acid) or Lewis acids (such as aluminum chloride). The discovery of "Magic Acid", fluoroantimonic acid in the 1960s lead to development of a series of mixtures whose strength, when measured by the