

Laws, per se, are of limited value unless they are actively enforced. To bridge the gap between laws and those whom the laws were intended to protect, these two publications are timely. Starting with the creation of the U.S. Bureau of Mines in 1910, and most recently the Federal Mine Safety and Health Act of 1977, P.L.91-173, federal, as well as states, have tried legislation to create safer conditions in this industry. The Miner's Manual is an attempt to put the initiative for action in the hands of the miners. Coal, metal, nonmetal, and surface, as well as milling operations are analyzed in terms of what the laws intend, and to encourage the miners to initiate appropriate actions if the laws are overlooked or ignored. It is intended to show how to spot hazards, how to protect yourself in a mining operation, and how to use your legal rights by appealing to the inspectors for the Act. Although written as a practical "how-to" book, considerable technical information is included, such as a list of chemicals not permitted in mines, metals and nonmetals covered under the Act, hazards of radon and daughter products, black lung, white lung, details of the two current types of self-rescue devices in use, ventilation standards, and tire prevention and control.

Anyone interested in the hazards of mining and their correction by legal means will find this book very revealing and extremely practical.

H.H. FAWCETT

*Informing Workers of Chemical Hazards: The OSHA Hazard Communication Standard*, prepared by the Task Force on Occupational Health and Safety, Department of Government Relations and Science Policy, American Chemical Society, 1155 16th St., N.W., Washington, DC 20036, April 1985, 14 pages, gratis.

This review of the basic elements in the OSHA Hazard Communication Standard (29 CFR 1910.1200, Federal Register notice November 25, 1983) and scheduled for complete implementation by May 25, 1986, is intended to present the fundamentals necessary to formulate a program of compliance. In general it succeeds, by reviewing the labeling requirements, the content of the required Material Safety Data Sheets (MSDSs), the employee orientation and training, and review of the various state and city Right-To-Know laws. We suggest that future editions could be improved by:

(1) More emphasis on the human aspects, including the person/information/chemical interface. If the required information is simply given lip-service and glossed over to satisfy the letter, but not the spirit of the law, little will be gained, and antagonism may actually arise (the first edition devotes less than half-page to this aspect of the process);

(2) Select a more typical and appropriate sample label than the "Low Sodium MOS electronic grade Nitric Acid". Depending on concentration, mineral acids such as nitric acid vary widely in their hazard potential. The

NFPA hazard diamond (in this case 3 (health), 0 (fire), and 0 (reactivity)) is displayed without any explanation of this symbol. In fact, the NFPA 704-M rates nitric acid as 2-0-1 (a lower rating in health and reactivity than this reviewer feels appropriate). Perhaps an organic solvent, such as benzene, would be more illustrative as a sample label.

(3) Include a sample typical MSDS for a typical chemical, such as benzene, and explain the various terms in more details. To rate all hazards except toxicity as "physical hazards" is a serious oversimplification, in our view. No mention is made of fire, flammability, explosibility, flammable limits, or autoignition temperatures — all important factors in hazard control. Such groups as the National Fire Protection Association, the Underwriters Laboratories, the U.S. Bureau of Mines, the Factory Mutuals and Industrial Risk Insurers should be listed with addresses.

Since a federal court in May 1985 questioned certain aspects of the OSHA standard, especially the confidential information section and the coverage (SIC 20-39), the final chapter has yet to be written on Right-to-Know, but its importance is apparently assured. The reader is urged to check with both OSHA and local authorities for further details.

H.H. FAWCETT

*Compendium of Safety Data Sheets for Research and Industrial Chemicals*, in 3 volumes, by L.H. Keith and D.B. Waiters (Eds.), VCH Publishers, Deerfield Beach, Fl 33442-1705 and P.O. Box 1260/1280, D-6940 Weinheim, Federal Republic of Germany, 1985, 1862 pages, \$270.00 (for the set).

The Hazard Communication regulation of OSHA (Federal Register, November 25, 1983, 29 CFR 1910.1200) requires, among other duties, that U.S. firms in SIC code classes 20-39 prepare and then disseminate to employees material safety data sheets (MSDSs) containing essential information on potential hazards of chemical materials encountered or handled in the workplace. Many substances, of the approximately 50,000 or more in commerce, are not widely used, but still may present significant hazards to researchers and emergency control personnel. This work presents much basic information on 867 relatively uncommon chemicals, most selected from the National Toxicology Program for testing for mutagenic effects and/or incomplete data. The objective of the editors is to present a data base as complete as possible on the physical properties, acute and chronic toxicity, fire aspects, reactivity, and medical monitoring and control aspects for many of these "hard-to-locate" substances. DOT regulations for shipments, and selection of proper impervious material for protection, such as in gloves, are included for each material. One or more references are indicated for the source of the data.