

Using a case study approach, the authors explain the scope of right-to-know requirements and other workers' rights, and examine the legal consequences of injury, or disease for both workers and their employers. The book's authors also explore the opportunities for labor-management cooperation on issues of technological change.

The text begins (Chapter 1) with a discussion of the evolution of technology, work, and health since the turn of the century. The chapter traces the economic and political economic and political forces that spurred the development of modern workplace law. Chapter 2 is an overview of administrative law and limitations of the Occupational Safety and Health Administration, the U.S. EPA, National Labor Relations Board, Equal Employment Opportunity Commission and the Office of Management and Budget.

Chapters 3 and 4 deal with two of the most important laws affecting the workplace: (1) The Occupational Safety and Health Act of 1970, and (2) The Toxic Substance Control Act of 1976. Economic issues are fundamental to an analysis of these two regulatory systems; this topic is discussed in Chapter 5.

Chapter 6, entitled "Regulations of Labor-Management Relations under the National Labor Relations Act", looks at the most important formal structure with which labor/management cooperation occurs.

Chapter 7 addresses the transfer of newer information on the presence (and effect) of toxic chemicals in the workplace.

Finally, Chapters 8 and 9 explore the legal avenues available for worker redress.

Appendices contain the text of the Occupational Safety and Health Act and the Toxic Substance Control Act.

The authors note (in the preface) that this is a text "written for students of business, law, and engineers, because they are likely to be future managers of technological companies". But also, they assert (and I fully agree) that it will be of use to professionals who have the knowledge and opportunity to redesign workplace technology and to ameliorate its effects on working conditions.

GARY F. BENNETT

Indoor Air, Quality and Control, by A.L. Hines, T.K. Ghosh, S.K. Loyalka and R.C. Warder, Jr., PTR Prentice Hall, 113 Gylvan Ave., Englewood Cliffs, NJ 07632, ISBN 0-13-463977-4, 340 pages, 1993, price \$ 60 + postage and tax.

The increasing interest in indoor air quality, according to the authors from the University of Missouri-Columbia, may be caused or at least aggravated by a host of ailments, thousands of deaths, and production losses that have been estimated to approach \$100 billion annually. The intent of the authors is to cover the important topics in sufficient depth, so the reader acquires a basic understanding of the problems and becomes better equipped to solve them. This reviewer feels they have succeeded in large measure.

The nature of the problem of contaminated indoor air is introduced in Chapter 1, by comparing indoor and outdoor concentrations of various pollutants, both chemical and microorganisms. Over 700 organic chemicals are identified, and their role in indoor pollution noted. Many are suspected as contributing to chronic obstructive lung diseases, chronic bronchitis, and emphysema, which are ranked second only to coronary artery disease. In spite of the differing conclusions regarding respirable particulates, such as tobacco smoke and asbestos fibers, studies continue to suggest both as substances to be avoided in respirable air, especially indoors. Radon is another widely publicized substance about which questions remain. (Note Chapter 8 on this subject.)

Chapter 2 discusses risk assessment, a subject which seldom produces solid figures, but the EPA notes that radon, tobacco smoke, and volatile organic compounds (VOCs) are major factors in indoor air quality.

Chapter 3, Volatile Organic Pollutants, illustrates the complex nature of the task; over 800 different chemical compounds have been identified at least once in the air of four office buildings. The U.S. EPA finally has decided on 22 organics, which are listed. This is complicated by the mixtures of various substances often found.

Inorganic Gaseous Pollutants, Chapter 4, compares the emissions of the usual materials, such as CO, CO₂, NO, NO₂, SO₂, formaldehyde, total suspended particles, and respirable suspended particles in wood and gas stoves and ovens, gas water heaters, and inadequate venting — all of which can contribute to the picture. Measurement of the air pollutants can be easily carried out with existing devices; even an odor monitor is on the market, along with many combinations of objectives.

Heavy Metals, Chapter 5, deals with the role of heavy metals such as lead, mercury, cadmium and chromium by inhalation or ingestion, in health. Respirable Particles, Chapter 6, notes the circumstances and mechanism by which particles are deposited in the lungs, and the results, from smoke, as well as aerosols.

Bioaerosols, Chapter 7, discusses viruses, bacteria, fungi, amoebae, algae, mites, protozoa, pollen and arthropods. Sampling and measurements, as well as proper ventilation measures, are given.

Radon, Chapter 8, as noted previously, attempts to make clear the complex nature of this radioactive gas, especially Radon-222 and its daughter products. Testing local conditions, as in your home, taking note of the efficiency of radon detectors recommended by the EPA, is suggested.

Chapter 9, Absorption Applications, discusses various absorbers and their utility, while Chapter 10, Adsorption Methods, reviews the status of methods of application in clearing air.

Appendices and excellent update references enhance the utility of this volume. Without question, it reflects state-of-the-art know-how, and should be widely cited as an excellent source.