

Preface

The fifth edition of this book continues to bind together the traditional examination of time-tested concepts and techniques of safety and health management with a modern perspective on compliance with mandatory standards for workplace safety and health. It is intended to add reason, explanation, and illustration of the hazard mechanisms that form the underlying basis for the volumes of detailed standards for workplace safety and health. Industrial managers know the value of finding relevant and essential material to understand and develop a strategy for bringing their organizations into compliance with standards, reducing Workers' Compensation claims due to injuries and illnesses, improving productivity, and enhancing the overall well-being of their employees and their workstations.

Since the inception of OSHA three decades ago, one of the principal problems facing a safety and health manager has been how to find the relevant and essential information to do the job. OSHA published large volumes of detailed, mandatory standards. What was needed, though, was a strategy or guidance for coming into compliance with the volumes' standards. Also needed was understanding of the hazards so that the rationale behind the standards could justify effective actions to come into compliance. Compliance with the standards often requires analysis, planning, capital investment, and follow-through training. Such a process is better justified by a comprehensive understanding of the benefits of compliance beyond the mere avoidance of OSHA fines. One of these benefits is the reduction in workers' compensation costs—costs that have recently captured more attention from management as a significant component of direct labor costs.

OSHA has made a sincere effort to make information about their standards available to the public by posting it on their website. The website contains the full text of standards, along with public announcements, new standards-development activities, and enforcement summaries. This text further enhances OSHA's efforts by providing readers with a CD-ROM that has detailed enforcement statistics. The CD-ROM contains a proprietary, searchable database from New Century Media (NCM) Corporation that provides readers with the power to determine (1) which standards are actually being cited, (2) the numbers of these citations designated as "serious," (3) the levels of penalties proposed, (4) statistics on contested citations, and (5) other useful details. At the end of some chapters, students using this text are given exercises requiring them to use

the NCM database to obtain answers to questions about standards relevant to the reading material. The objective is not to merely teach information on the various topics of industrial safety and health, but to empower students to readily find their own answers to questions relevant to their mission.

Besides providing access to the powerful NCM database, the accompanying CD-ROM gives answers to selected end-of-chapter exercises.

The 21st century has brought on new challenges and concerns for the safety and health manager. Perhaps the most significant development of such challenges has been ergonomics. Ergonomics is such a controversial issue for a safety and health manager that an entirely new chapter entitled "Ergonomics" has been added to this text, and all remaining chapters have been changed. Reinforcing these changes are new case studies, illustrations, and end-of-chapter exercises. OSHA has changed its recordkeeping forms and procedures, and these new forms and new rules for reporting are included herein. Students can download a hard copy of the forms by using the CD-ROM provided. This fifth edition also has added some humor and historical perspectives that may round out the reader's knowledge and appreciation of the culture of the field of industrial safety and health management.

Instructors using this text are advised to contact their Prentice Hall representatives to obtain the free, comprehensive *Instructor's Manual* and computer disk available to instructors only. These teaching aids include answers to the end-of-chapter exercises, audiovisual suggestions, additional supporting information, and a quiz bank of more than 1000 questions for convenient use in composing comprehensive examinations covering the subject matter. Also available are answer keys for every quiz question and page references to the text to help in settling any debates after examinations. Most of the quiz bank and almost all of the end-of-chapter exercises have been classroom tested. Also on the disk are lecture outlines for each chapter.

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