

Chapter 1

The Safety and Health Manager

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Introduction

- Management Responsibility, Commitment, and Support to Safety and Health
- Plant Nurse (first aid/after the fact), Safety director, Safety Manager
- Duties include:
 - Posting motivational signs
 - Compiling statistics
 - **Analysis of hazards**
 - **Compliance with standards**
 - Capital investment planning

Introduction (Cont.)

- In 1970, the Occupational Safety and Health Administration (OSHA) was created.
- OSHA was given the authority to establish the Safety and Health mandatory standards.
- Only 10% of the standards generate 90% of the activity.
- Safety and Health Managers need to know the “why” behind the standards to persuade management and employees that a given situation needs correction.

A Reasonable Objective

- Is it wise to try to eliminate all workplace hazards?
- There are three types of hazards that exist in the real world:
 - *Hazards which are physically infeasible to correct*
 - *Hazards which are physically feasible, but economically infeasible to correct*
 - *Hazards which are physically and economically feasible to correct*

A Reasonable Objective (cont.)

- Examples:
 - *Hazards which are physically infeasible to correct (bird entry into jet engines and exposure to radiation during x-ray procedures)*
 - *Hazards which are physically feasible, but economically infeasible to correct (crosswalks on university campuses)*
 - *Hazards which are physically and economically feasible to correct (airbags and anti-lock brakes)*
- Once again, is it wise to try to eliminate all workplace hazards?

Safety versus Health

- Safety deals with **acute** (sudden reaction to a severe conditions) hazards, whereas health deals with **chronic** (long-term) hazards
- Examples:
 - Acute Hazards: Risk of amputation in a power press
 - Chronic Hazards: Asbestosis
- Another examples:
 - Machine guarding is a _____ consideration.
 - Airborne asbestos is a _____ consideration.
 - Paint spray area, welding operations, and Industrial Noise?
- Which, in your opinion, is more important?

Safety versus Health (cont.)

- **Industrial Hygienist** concentrates on health hazards.
- **Safety Specialist** concentrates on Safety hazards.

Industrial Hygienist	Safety Specialist
Sophisticated Instruments	Industrial Process experience & practical on-the-job Knowledge
Scientific Expertise	
Young / new	Old
Education	Experience

Role in the Corporate Structure

- Responsibility may includes:
 - Security
 - Personnel Management (or reporting to)
 - Worker Training
 - Statistics
 - Job Placement
- Purchasing Department:
 - *When purchases of equipment at bargain prices, the equipment may not be in compliance with current standards.*

Role in the Corporate Structure (Cont.)

- Dealing with government agencies
- Compliance with environment protection (inside and outside the plant)
- Energy consumption

Resources at Hand (Cont.)

- **Professional Certification**
- **Professional Societies**
- **System Safety**
- **National Safety Council**
- **Standards Institutes**
- **Trade Associations**
- **Government Agencies**

Resources at Hand

- **Professional Certification:**

- Board of Certified Safety Professionals of America
(www.bcsp.org)

CSP Certified Safety Professional

- American Board of Industrial Hygiene
(www.abih.org)

CIH Certified Industrial Hygiene

Resources at Hand (Cont.)

- **Professional Societies:**

- American Society of Safety Engineers (ASSE)

- (www.asse.org)

- American Industrial Hygiene Association (AIHA)

- (www.aiha.org)

Resources at Hand (Cont.)

- **System Safety**

- In the mid-1950s, safety received emphasis as a system to be planned for and considered in every step in the production process.
- System Safety is considered essential in fields where an accident can be catastrophic, such as airlines, aerospace, and hospitals.

System Safety Society

(www.system-safety.org)

- **National Safety Council**

- ***Broad in scope*** than Occupational Safety
- Principle source for information about safety hazards
- The library of the National Safety Council is open to the public
- Publishes comprehensive summaries of accident statistics (Injury Facts)

(www.nsc.org)

Resources at Hand (Cont.)

- **Standards Institutes**
- **Top 4:**
 - *American National Standards Institute (ANSI)* www.ansi.org
 - *National Fire Protection Association (NFPA)* www.nfpa.org
 - American Society of Mechanical Engineers (ASME) www.asme.org
 - American Society for Testing and Materials (ASTM) www.astm.org
- **Trade Associations**
 - Industry/Equipment Specific
 - Provide Safety and Health Data.
 - Sometimes accused of presenting biased data on safety and health
 - See list in the book.

Resources at Hand (Cont.)

- **Government Agencies**

The consultation function is kept separate from the enforcement function in state agencies

- **The Occupational Safety and Health Administration (OSHA)**

Beside being the main source for occupational safety and health standards, it answers question without identify the caller identity.

- OSHA maintains a training institute for training the general public in voluntary compliance.

- **The National Institute for Occupational Safety and Health (NIOSH)**

Acts as a principal source of technical information for questions about occupational safety and health.

- **The Consumer Product Safety Commission (CPSC)**

Ensures the safety of products going to the end consumer