



ANSI/AIHA Z10-2005

American  
National  
Standard  
for

**Occupational  
Health and  
Safety  
Management  
Systems**



*A Publication by*  
**American Industrial Hygiene Association**

**ANSI/AIHA Z10–2005**

# American National Standard — Occupational Health and Safety Management Systems

Secretariat

**American Industrial Hygiene Association**

Approved July 25, 2005

**American National Standards Institute, Inc.**

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## Table of Contents

	Page
<b>Foreword</b> .....	iii
<b>1 Scope, Purpose, and Application</b> .....	1
1.1 Scope .....	1
1.2 Purpose .....	2
1.3 Application .....	2
<b>2 Definitions</b> .....	2
<b>3 Management Leadership and Employee Participation</b> .....	4
3.1 Management Leadership .....	4
3.1.1 Occupational Health and Safety Management System .....	4
3.1.2 Policy .....	4
3.1.3 Responsibility and Authority .....	5
3.2 Employee Participation .....	5
<b>4 Planning</b> .....	7
4.1 Initial and Ongoing Reviews .....	7
4.1.1 Initial Review .....	8
4.1.2 Ongoing Review .....	9
4.2 Assessment and Prioritization .....	9
4.3 Objectives .....	9
4.4 Implementation Plans and Allocation of Resources .....	10
<b>5 Implementation and Operation</b> .....	10
5.1 OHSMS Operational Elements .....	11
5.1.1 Hierarchy of Controls .....	11
5.1.2 Design Review and Management of Change .....	12
5.1.3 Procurement .....	13
5.1.4 Contractors .....	13
5.1.5 Emergency Preparedness .....	14
5.2 Education, Training, and Awareness .....	15
5.3 Communication .....	16
5.4 Document and Record Control Process .....	16
<b>6 Evaluation and Corrective Action</b> .....	17
6.1 Monitoring and Measurement .....	18
6.2 Incident Investigation .....	19
6.3 Audits .....	20
6.4 Corrective and Preventive Actions .....	20
6.5 Feedback to the Planning Process .....	21
<b>7 Management Review</b> .....	22
7.1 Management Review Process .....	22
7.2 Management Review Outcomes and Follow Up .....	23
<b>Appendices</b> .....	25
Appendix A — Policy Statements (Section 3.1.2) .....	26
Appendix B — Roles and Responsibilities (Section 3.1.3) .....	27
Appendix C — Employee Participation (Section 3.2) .....	29
Appendix D — Initial/Ongoing Review (Section 4.1) .....	32
Appendix E — Assessment and Prioritization (Section 4.2) .....	33
Appendix F — Objectives/Implementation Plans (Section 4.3 and 4.4) .....	36

Appendix G — Hierarchy of Control (Section 5.1.1) . . . . .	41
Appendix H — Incident Investigation Guidelines (Section 6.2) . . . . .	42
Appendix I — Audit (Section 6.3) . . . . .	46
Appendix J — Management Review Process (Section 7.1 and 7.2) . . . . .	51
Appendix K — Bibliography and References . . . . .	53

## Foreword

Quality, environmental, and occupational health and safety (OHS) management systems are used by many organizations in the U.S. and around the world. Quality and environmental systems are frequently in conformance to international voluntary consensus standards, or they share many basic concepts and principles with them. The development of international OHS standards and guidelines is a more recent phenomenon. Many organizations operate their own occupational health and safety management systems (OHSMS), while others use systems that conform to available guidelines. Until the development of this voluntary consensus standard, there was no U.S. OHSMS consensus standard.

There is widespread agreement that the use of management systems can improve organizational performance, including performance in the occupational health and safety arena. The Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP) relies on management system principles and has reported success in improving occupational health and safety performance among participating companies. In addition, the American Chemistry Council (ACC) reports success in improving environmental performance of participating organizations. The major professional health and safety organizations are also on record in support of management systems as effective tools for improving health and safety performance, as well as for contributing to the overall success of the business. Finally, the fact that many organizations in the U.S. and abroad are implementing management systems in occupational health and safety is evidence that these systems add value to their businesses.

In 1999, the American National Standards Institute officially approved the ANSI Accredited Standards Committee Z10, with the American Industrial Hygiene Association as its Secretariat, to begin work on a U.S. standard. A committee was formed with broadly representative members from industry, labor, government, professional organizations and general interest participants. The committee examined current national and international standards, guidelines and practices in the occupational, environmental and quality systems arenas. Based on extensive deliberations, they adapted the principles most relevant from these approaches into a standard that is compatible with the principal international standards as well as with management system approaches currently in use in the United States. The process of developing and issuing a national consensus standard is expected to encourage the use of management system principles and guidelines for occupational health and safety among American organizations. It may also yield widespread benefits in health and safety, as well as in productivity, financial performance, quality and other business goals.

## INTRODUCTION

This is a voluntary consensus standard on occupational health and safety management systems. It uses recognized management system principles in order to be compatible with quality and environmental management system standards such as the ISO 9000 and ISO 14000 series. The standard also draws from approaches used by the International Labor Organization's (ILO) guidelines on Occupational Health and Safety Management Systems and from systems in use in organizations in the United States. This compatibility encourages integration of the standard's requirements into other business management systems in order to enhance overall organizational performance. Each organization electing to conform to this standard will determine how it will evaluate its conformance to this standard.

The purpose of the standard is to provide organizations an effective tool for continual improvement of their occupational health and safety performance. An OHSMS implemented in conformance with this standard can help organizations minimize workplace risks and reduce the occurrence and cost of occupational injuries, illnesses and fatalities. Some organizations already have developed an effective OHSMS appropriate to their needs but that may not conform precisely to this standard. In those instances, the standard may serve as a voluntary tool to identify possible opportunities to improve their systems.

Management systems typically include multiple levels of implementation, an example of which is shown in Figure 1.

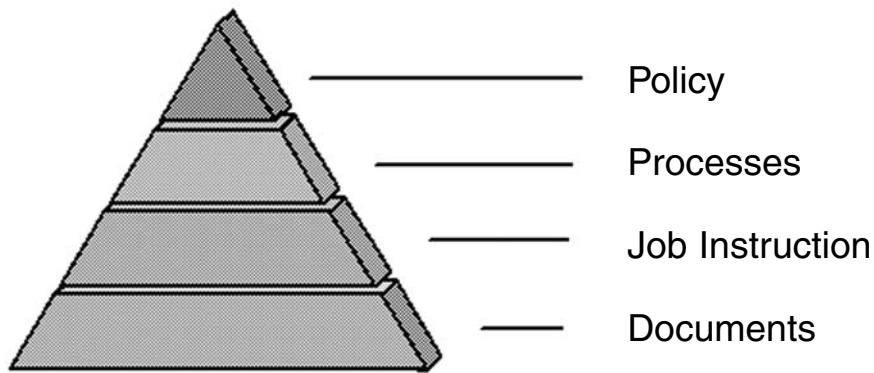


Figure 1 — Layers of Management System Implementation

ANSI Z10 focuses primarily on the strategic levels of policy and the processes to ensure that the policy is effectively carried out. The standard does not provide detailed procedures, job instructions or documentation mechanisms. Each organization must design these according to their needs.

Figure 2 illustrates how the OHSMS requirements, described in this standard, can enhance the approach to managing health and safety program activities (e.g., hazard identification and risk reduction). The circle in the middle of the diagram shows the OHSMS continual improvement cycle based on the recognized quality concept of “Plan-Do-Check-Act”.

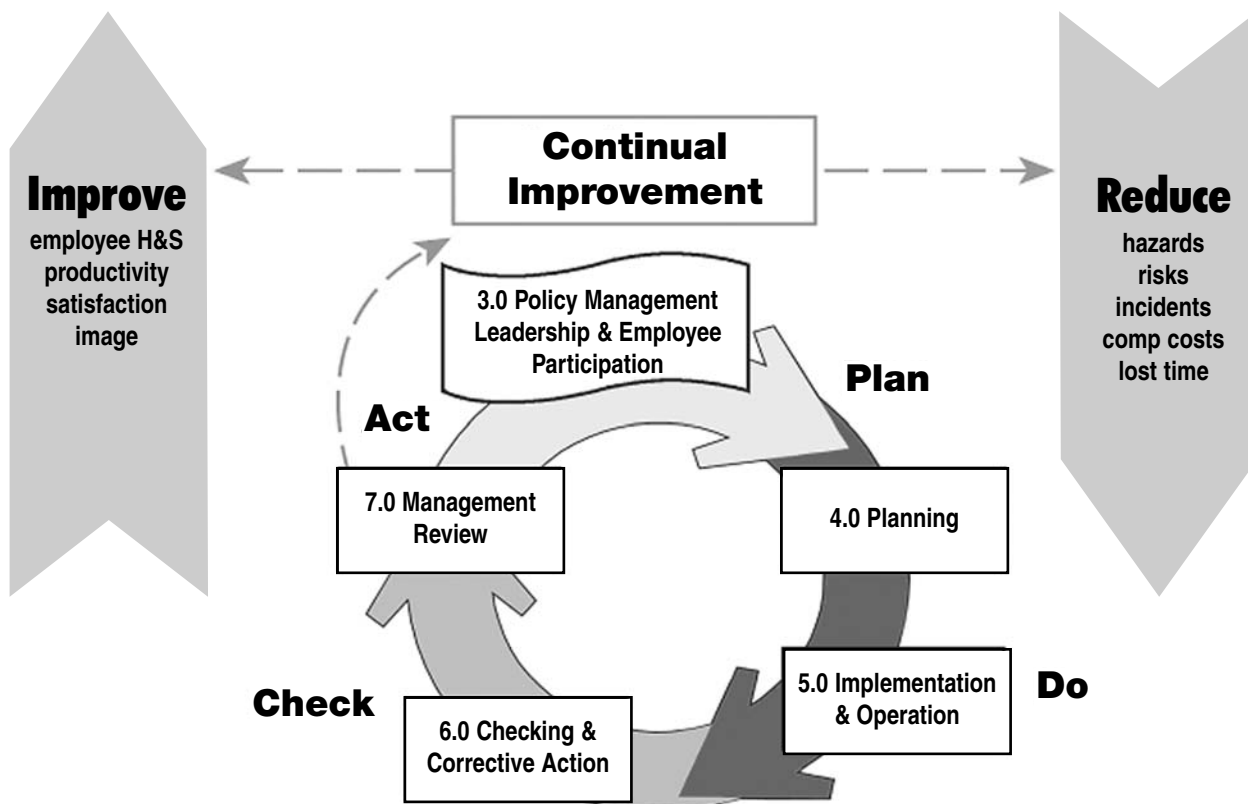


Figure 2 — OHSMS Cycle

The OHSMS cycle entails an initial planning process and implementation of the management system, followed by a process for checking the performance of these activities and taking appropriate corrective actions. The next step involves a management review of the system for suitability, adequacy, and effectiveness against its policy and this standard. The complete cycle is repeated, resulting in ongoing continual improvements in occupational health and safety. Improvements result from reducing hazards and risks in a systematic manner — a goal that is traditionally pursued through independent programs that often are not coordinated through common management principles and processes. In addition to the direct benefits of improved employee health and safety, a management system can also yield positive business outcomes, including enhanced productivity, financial performance, and employee satisfaction.

The management system approach is characterized by its emphasis on continual improvement and systematically eliminating the underlying or root causes of deficiencies. For example, in a systems approach, if an inspection finds an unguarded machine, not only would the unguarded machine be fixed, but there would also be a systematic process in place to discover and eliminate the underlying reason for the deficiency. This process might then lead to the goal of replacing the guards with a more effective design, or to replacement of the machines themselves so that the hazard is eliminated. This systematic approach seeks a long-term solution rather than a one-time fix.

This standard is formatted into two columns to help distinguish requirements from recommended practices and explanatory information. Requirements are in the left column and are identified by the word “shall.” An organization that chooses to conform to this standard is expected to fulfill these requirements. The text in the right hand column uses the word “should” to describe recommended practices, or explanatory notes to the requirements on the left. This use of the terms “shall” and “should” to identify requirements and distinguish them from recommendations and explanatory notes is common practice in ANSI and international standards.

This standard was processed and approved through ANSI by the Z10 Accredited Standards Committee on Occupational Health and Safety Management Systems. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. The ANSI accredited Z10 Secretariat, Committee, or individual committee members accept no legal responsibility for the correctness or completeness of this material or its application to specific factual situations. By publication of this standard, the Z10 Committee does not ensure that adherence to these recommendations will protect the safety or health of any persons, or preserve property.

At the time it approved this standard, the Z10 committee had the following members:

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James Howe, Vice Chair  
Jill Wilson, Secretariat Representative

<i>Organization Represented</i>	<i>Name of Representative</i>
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AFL-CIO	B. Kojola
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Voluntary Protection Programs Participants' Association	vacant

At the time it approved this standard, the Z10 committee had the following alternate members:

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At the time it approved this standard, the Z10 committee had the following technical resource (non-voting) members:

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Chemical Safety Board	M. Gomez

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# American National Standard — Occupational Health and Safety Management Systems

## 1.0 Scope, Purpose, & Application

**1.1 Scope.** This standard defines minimum requirements for occupational health and safety management systems (OHSMS).

**E1.1:** The basic elements of the standard address management leadership and employee participation, planning, implementation, evaluation and corrective action and management review, as described in the corresponding sections. The processes required in this standard are interrelated for continual improvement. This system model goes beyond a simple sum of individual or isolated health and safety programs and activities, such as incident investigation, inspections, and training. The management system in this standard is designed to continually improve safety and health performance, and is aligned with the traditional Plan - Do - Check - Act approach for improving the workplace.

This standard provides basic requirements for occupational health and safety management systems, rather than detailed specifications. This approach is designed to provide flexibility to conform to this standard in a manner appropriate to each organization and commensurate with its occupational health and safety risks. The standard defines *what* has to be accomplished in generic performance terms, but it leaves the *how* to each organization. This standard provides a systems approach intended to complement consensus and other standards that provide safety and health guidance for specific industry sectors, processes, and tasks — some of which are referenced in Appendix K. This is because the risks, organizational structure, culture, and other characteristics of each organization are unique, and each organization has to define its own specific measures of performance.