

OHSAS 18001

*International Occupational Health & Safety
Management Systems Specification*

AN EXECUTIVE OVERVIEW



OHSAS 18001

International Occupational Health & Safety Management Systems Specification

An Executive Overview

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FOREWORD

Following in the footsteps of the ISO 9000 Quality Management Systems (QMS) and ISO 14000 Environmental Management Systems (EMS) standards, a movement is underway to develop an international Occupational Health and Safety Management Systems (OHSMS) standard.

Proponents assert that such a standard could improve global health and safety, enhance business performance, integrate occupational health and safety (OH&S) into quality and environmental management systems, and improve conditions in countries where OH&S regulations don't exist, are not enforced or have been insufficiently developed. Other possible benefits include the ability for organizations to demonstrate sound OH&S performance in a manner consistent with their OH&S policy and objectives, improved risk management, fewer injuries and illnesses on the job, healthier and more productive employees, and less money spent on insurance.



Proposals to develop an international OHSMS standard were rejected by the International Organization for Standardization (ISO) Technical Management Board (TMB) in 1997 and 2000, but the issue remains very much alive. With growing international support to develop a standard, the ISO TMB is expected to reconsider the matter.

In the meantime, several OHSMS specifications have been developed around the world. The British Standards Institution (BSI), which previously developed BS 5750 as a precursor to ISO 9000 and BS 7750 as a model for ISO 14000, issued BS 8800, *Guide to occupational health and safety management systems*, in 1996. After other OHSMS specifications were published by national standards bodies and registrars, sponsors of these specifications worked to reach a consensus on an international specification. The result is BSI-Occupational Health and Safety Assessment Series (OHSAS) 18001, *Occupational health and safety requirements – Specification*, released in 1999.

OHSAS 18001 may prove to be a model for an ISO OHSMS standard, but organizations concerned about occupational health and safety don't have to wait for this development to take place.

This guide was created for organizations interested in implementing an OHSMS based on OHSAS 18001. It outlines OHSAS 18001 requirements and discusses OHSMS developments. As OHSAS 18001 implementation can be a complex and detailed process, especially when integrating it with existing QMS and/or EMS programs, it is strongly suggested that organizations retain the services of a reputable consulting firm.

PERRY JOHNSON CONSULTING, INC.

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THE USERS OF THIS GUIDE

This guide will be useful to all companies that either have or want to implement an occupational health and safety management system (OHSMS). This includes organizations that:

- Want to gain a competitive advantage in the marketplace.
- Must meet corporate, legal or regulatory requirements for occupational health and safety.
- Seek to make occupational health and safety a top priority.
- Want to implement, maintain and continually improve an occupational health and safety management system.
- Care about employee health and safety on the job.
- Desire to reduce costs of liability, workers compensation insurance and medical treatment.
- Wish to eliminate or reduce as much as possible the incidences of accidents, fatalities, near-misses, injuries and other hazards that contribute to ill health in their workplaces.
- Want to increase employee productivity, and decrease absenteeism and lost work hours by preventing injuries, accidents and incidences of ill health.
- Seek to demonstrate conformity to their occupational health and safety management system to themselves and others.
- Desire to monitor conformance with occupational health and safety requirements, and compliance with occupational health and safety laws and regulations.
- Wish to pursue registration to an occupational health and safety management systems standard, now unaccredited, but which may become formally accredited in the near future.
- Make a self-determination and declaration of conformity to OHSAS 18001.
- Want to establish occupational health and safety as a unique system or integrate it with existing programs, such as quality and/or environmental management systems.



WHAT IS OHSAS 18001?

The History of OHSAS 18001

In highly industrialized countries, occupational health and safety (OHS) has long been subject to government regulation. Following the development of the ISO 9000 Quality Management Systems (QMS) standards, issued in 1987, and the ISO 14000 Environmental Management Systems (EMS) standards, issued in 1996, a demand arose for development of an international Occupational Health and Safety Management Systems (OHSMS) standard. Many organizations have opted to perform “self-reviews” or “self-audits”. The effectiveness of these activities is difficult to assess where there is no structured approach to support consistency.

Proponents of an OHSMS standard argued that it could allow non-government entities, such as registrars and accreditation bodies, to provide oversight on companies and facilities generally in compliance, thereby freeing regulators to focus on recalcitrants and tough cases, and reducing their caseloads; and improve global trade by leveling the playing field for regulated businesses. In addition, an OHSMS could be integrated with a QMS and EMS for more efficient management, particularly in companies that already combine environmental, health and safety (EHS) operations.

In 1994, before the first series of ISO 14000 standards were even published, International Organization for Standardization (ISO) Technical Committee (TC) 207, Environmental Management, which was developing these standards, passed a resolution requesting that ISO explore the possibility of developing an OHSMS standard.

To help push this proposal along, the British Standards Institution (BSI), which issued BS 5750 as a model for ISO 9000 and BS 7750 as a model for ISO 14000, published BS 8800, *Guide to occupational health and safety management systems*, in 1996. BS 8800 provided guidance and goals for designing and implementing an OHSMS, but did not offer a process for registration.

During 1996, ISO held international and national workshops on developing an OHSMS standard, in which stakeholders from business, industry, government, labor, standards developing organizations and the insurance industry participated. No consensus on developing a standard was achieved at these workshops, with the largest proportion of participants concluding that standards development was premature at that time. Again, in highly industrialized countries, many companies had already developed their own unique OHSMS.

Following these workshops, the ISO Technical Management Board (TMB), which oversees standards development, rejected the OHSMS proposal in 1997, noting the lack of stakeholder support.

The TMB rejection did not stop demand for an OHSMS standard, with several national standards bodies and management systems registrars from the European Union, North America and Asia publishing their own standards. These OHSMS standards and guidance documents included:

- NSAI SR 320, *Recommendation for an Occupational Health and Safety (OH and S) Management System* – National Standards Authority of Ireland (NSAI).
- AS/NZ 4801, *Occupational health and safety management systems – Specification with guidance for use* – Standards Australia (SAA).
- *Occupational Health and Safety Management System: An AIHA Guidance Document* – American Industrial Hygiene Association (AIHA).
- OHSMS:1997, *Standard for Certification of Occupational Health and Safety Management Systems* – Det Norske Veritas (DNV) of Norway.
- SafetyCert, *Occupational Safety and Health Management Standard* – Bureau Veritas Quality International (BVQI).
- SGS & ISMOL ISA 2000:1997, *Requirements for Safety and Health Management Systems* – SGS Yarsley International Certification Services and International Safety Management Organisation Ltd. (ISMOL) of Great Britain.
- LRQA SMS 8800, *Health & safety management systems assessment criteria* – Lloyds Register Quality Assurance (LRQA).
- NPR 5001:1997, *Guide to an occupational health and safety management system* – Nederlands Normalisatie-instituut (NNI) of the Netherlands.
- BSI PAS 088, *Occupational health and safety management systems* – BSI.
- UNE 81900, *Standards on the prevention of occupational risks* – Asociación Española de Normalización y Certificación (AENOR) of Spain.
- *Management Principles for Enhancing Quality of Products, Occupational Health & Safety and the Environment* – Norges Standardiseringsforbund (NSF) of Norway.

Other organizations involved in developing OHSMS standards included the South African Bureau of Standards (SABS), National Quality Assurance (NQA), SFS Certification, Standards and Industry Research Institute of Malaysia (SIRIM), and International Certification Services.

This proliferation of OHSMS specifications and standards, each of which was proprietary and unique to a standards body or registrar, created confusion in the marketplace. While each of these specifications or standards enjoyed modest success, they all lacked international credibility, with companies continuing to demand a universal standard similar to ISO 9001 and ISO 14001. To resolve this confusion, the sponsors of these specifications and standards worked to reach a consensus on an international OHSMS standard.

BSI, with input from many of these standards organizations and registrars, spent just nine months working on BSI-Occupational Health and Safety Assessment Series (OHSAS) 18001, *Occupational health and safety requirements – Specification*, released in 1999. This specification was based on BS 8800 and several other proprietary OHSMS standards, and uses the same structure as ISO 14001.

The OHSAS 18000 series of standards was created by the OHSAS Project Group. The OHSAS Project Group was comprised of representatives from various national standards, academic, accreditation, and certification bodies with additional participation from OSH institutions. The UK's national standards body, British Standards Institution (BSI) Group, functioned as the secretariat.

OHSAS 18001 was not produced through the formal ISO standards development process. In 2000, a proposal to convert OHSAS 18001 into an ISO OHSMS standard was rejected by the TMB by a 29 to 20 vote, falling short of the two-thirds needed for approval. The TMB can revisit the issue every three years. No formal ISO standard for OHSMS has been implemented as of yet.

BSI released an accompanying publication, OHSAS 18002, *Guidelines for the implementation of OHSAS 18001*, in 2000.

In the meantime, other proposals have surfaced. The American National Standards Institute (ANSI) is drafting a U.S. occupational health and safety standard for internal corporate use. It would integrate an OHSMS into overall business management systems, and not be used as a registration standard.

The International Labor Organization (ILO) released its own safety and health management system standard, ILO-OSH:2001, *Guidelines on Occupational Safety and Health Management Systems*.

OHSAS 18001 was revised in 2007. Shortly after the revised version of the BS OHSAS standard was released in 2007, the BSI Group elected to adopt OHSAS 18001 as a British standard, hence the name BS OHSAS 18001:2007, *Occupational Health and Safety Management System Requirements*. The standard was revised to support better alignment with ISO 14001:2004 as well as the ILO-OSH:2001 standards. While there are apparent differences between OHSAS 18001 and ILO-OSH:2001, an organization that is certified to the requirements of BS OHSAS 18001:2007 is generally accepted to be in conformance with ILO-OSH:2001 requirements as well. The OHSAS 18002 guidance specification was later revised, similarly adopted by the BSI Group and was published as BS OHSAS 18002:2008.

OHSAS 18001 Overview

OHSAS 18001 sets forth OHSMS requirements that enable an organization to control its occupational health and safety risks, and improve its performance. The specification does not state specific occupational health and safety criteria, nor does it present detailed specifications for designing an OHSMS. Companies that have implemented an OHSMS based on OHSAS 18001 have enjoyed reductions in both accidents and workers' compensation costs.



OHSAS 18001 applies to organizations that want to establish occupational health and safety as a unique system or integrate it with existing management systems. As such, it was developed to be compatible with ISO 9001 and especially ISO 14001, thereby allowing a company to integrate its quality, environmental, and occupational health and safety management systems. The standard is also complimentary to the requirements (if not the structure) of the International Labor Organization's ILO-OSH:2001 standard. Comparisons between BS OHSAS 18001:2007, ISO 14001:2004, ISO 9001:2008 and ILO-OSH:2001 are included within Appendix A at the back of this overview manual.

Many professionals agree that a systematic method is essential for an effective occupational health and safety program. The use of OHSAS 18001 can also aid organizations in adhering to government regulations until an ISO OHSMS standard is approved. For this reason, OHSAS 18001 can be used in conjunction with governmental occupational health and safety programs, such as the U.S. Occupational Safety and Health Administration (OSHA)'s Safety & Health Program or Australia's WorkSafe Plan.

The standard's general requirements are:

- *General Requirements* – The organization must establish, document, implement and maintain its OH&S management system in accordance with the requirements of the OHSAS 18001 standard and other requirements to which the organization subscribes and determine how it will fulfill the requirements.
- *Determining and OH&S Policy and Setting Objectives* – Management must take the initiative by establishing goals, the organization's occupational health and safety policy, and plans for meeting requirements.
- *Planning* – The organization must determine its current position and thoroughly analyze its operations to identify hazards and reduce risks. Once these hazards and risks have been identified, controls to eliminate or minimize them must be established.
- *Competence, Training and Awareness* – Personnel must be competent to perform tasks affecting occupational health and safety management. Any necessary training to ensure this competence must be provided.

- *Communication, Participation and Consultation* – Employees must be informed about all aspects of the OHSMS and relevant occupational health and safety information in order to support their participation and provide adequate consultation.
- *Operational Control* – Controls to eliminate or reduce risks and hazards must be implemented. These controls include documented procedures for worker duties, and equipment operation and maintenance.
- *Emergency Preparedness and Response* – Plans and procedures for handling emergencies must be drafted and implemented.
- *Performance Measuring and Monitoring* – Once the OHSMS is in place, it must be constantly monitored for effectiveness and achievement of goals. Corrective action must address any flaws or shortcomings. Follow-up audits are necessary after corrective action is taken.
- *Records* – As with quality and environmental management systems, documentation, including records, must be prepared and stored to demonstrate conformity to the specification.
- *Evaluations of Compliance* – The organization must assess the extent to which it complies with applicable legal requirements and other requirements to which it subscribes and take prompt action including corrective actions as necessary to respond to incidences of noncompliance.
- *Audits* – Regular audits, both internal by the organization and external by a registrar, must be performed to examine OHSMS conformity and proper effectiveness.
- *Management Review* – Top management must review the OHSMS at regular intervals to determine the system’s suitability, adequacy and effectiveness.
- *Incident Investigation, Nonconformity, Corrective and Preventive Action* – The standard requires that the organization respond to identified incidents including “near hits” or “near misses” in a timely manner and takes actions appropriate to the affects of any identified concerns. Where corrective actions are taken, requirements are imposed to ensure residual hazards are identified and corresponding risks are eliminated or mitigated.

Making Occupational Health and Safety a Priority

Every year in the United States, roughly between 4,500 and 6,000 workers are killed on the job (1998 – 2010) and over 4,500 workers died from events or exposure in 2010. In 2010, over five million U.S. workers suffered from non-fatal workplace injuries, costing U.S. companies over \$176 billion in 2010. That is a pace of one work place injury occurring every 6 seconds in the United States.

To put it into proper perspective, in 2010, work place injury costs to industry had the following impacts on industry costing:

- 24 cents of every dollar of corporate dividends to stockholders;
- 10 cents of every dollar of pre-tax corporate profits; or
- More than the combined profits reported by the 18 largest Fortune 500 companies.

Work and Injury deaths statistics for 2010

- Total Cost - \$176 Billion
- Cost per worker - \$1,330
- Cost per medically consulted injury - \$37,000
- Cost per worker death - \$1,350,000
- Days lost due to injury – 60,000,000

(Source: National Safety Council – Injury Facts: 2012 Edition).

Financial margins can be wiped out through compensation claims resulting from unsafe work practices. An organization's financial survival frequently can depend on a single catastrophic accident or even a series of small accidents.

There are numerous indirect costs related to injuries, such as defending against a lawsuit, training replacement workers, increased insurance premiums, production interruptions and poor morale among employees. According to the National Safety Council, direct compensation costs are between four and 15 times the cost of the injury itself.

These numbers are too high, considering that nearly half of workplace hazards can be avoided. As such, there are sound economic, ethical and regulatory reasons for reducing work-related accidents and illness by implementing an occupational health and safety management system (OHSMS).

In addition to reducing costs, an effective OHSMS promotes business efficiency. Productivity becomes stifled when workers are ill or injured. Businesses around the world must dramatically increase productivity if they are to meet the challenges of market globalization.

- **4,690 U.S. workers were killed while on the job in 2010 (down from 19,000 in 1928 – the first year for which statistics are maintained)**
- **4,500 workers died from events or exposure in the workplace in 2010**
- **Over 3 million workers suffered non-fatal injuries while at work in 2010**
- **The cost to U.S. companies = \$176 billion in 2010**

What Are Workplace Hazards?

A workplace hazard is anything that can cause injury or illness to employees. A hazard can be as visible as a hammer lying on the floor of a production area, or as invisible as a non-odorous toxic chemical that permeates the air.

Some examples of hazards include:

- Objects lying on the floor.
- The failure of employees to follow work instructions. For example, they may use shortcuts instead of following step-by-step instructions.
- Improperly stored chemicals, which may cause illness if toxic.
- Employees who do not wear personal protection equipment.
- Employees who wear jewelry or other items that can get caught in machinery.
- Employees who are not properly trained for their jobs.
- Employees who are not made aware of changes in job procedures.
- Equipment that is in poor condition.
- Failure to display hazard signs in appropriate areas.
- Missing machine guards, errant or frayed electrical cords, or insufficient lighting.
- Poor ventilation in work areas, especially where chemicals are used.
- Angry employees who may harm others.
- Falling object hazards.



The Purpose of an Occupational Health and Safety Management System

An occupational health and safety management system (OHSMS) helps organizations prevent workplace accidents, which can result in illness and injury, while increasing productivity. Increased productivity reduces costs associated with workplace accidents, while increasing the quality of manufactured products and services. An OHSMS also enables a company to meet internal, statutory and regulatory requirements.

Implementation of this system will depend on the size, resources and the type of organization, for example, industrial, governmental, commercial or educational.

To achieve top-notch occupational health and safety performance, an OHSMS must follow modern management trends. It must make a commitment to quality and to the customer or client, implement work center teaming, empower employees as process and risk managers, and be part of a values-based organizational culture.

In summary, an OHSMS can:

- Minimize risk, injuries and death to employees and others.
- Improve business performance.
- Assist organizations in establishing a responsible image within the marketplace.
- Help meet legal and regulatory requirements.



OHSAS 18001 REGISTRATION

After OHSAS 18001 was released, some parts of American and European industry began pushing for an auditing and registration system, similar to those for ISO 9001 and ISO 14001.

Registration to OHSAS 18001, which is not currently accredited, is a tangible expression of an organization's commitment to occupational health and safety that is internationally understood and accepted. Registered organizations almost universally realize major increases in customer acceptance, as well as reductions in costs.

Registration is carried out by registrars, organizations that review the OHSMS documentation to ensure that it meets the standard, and audit the processes to ensure that the OHSMS described in the documentation is in place and is effective. Once registration is obtained, the registrar conducts regular surveillance audits to determine if the OHSMS continues to meet OHSAS 18001 requirements.

The United Kingdom Accreditation Service (UKAS) and the Raad voor Accreditatie (RvA) of the Netherlands have worked on criteria for pilot accreditation systems for OHSAS 18001 registrars.

In the United States, the Registrar Accreditation Board (RAB), which jointly operates the National Accreditation Program (NAP) with the American National Standards Institute (ANSI) to accredit ISO 9000 and ISO 14000 registrars, proposed a NAP OHSAS 18001 pilot registrar accreditation program.

This proposal was dropped, at least for the time being, after the Information Technology Industry Council (ITI) challenged the plan. The ITI claimed that there was a lack of proper approval for the plan, OHSAS 18001 is not a recognized international standard because it hasn't gone through the defined ISO standard development process, and it would be inappropriate for ANSI to recognize such a document as a standard. In response, the ANSI Board Committee on Conformity Assessment (BCCA) rejected the proposal.

In the meantime, several registrars offer unaccredited OHSAS 18001 registration. These registrars are implementing and testing auditing and registration methods for OHSAS 18001, in advance of an accredited system. Much of the registration demand comes from Japan and Europe, with some interest in the U.S. and other countries.

OHSAS 18001 Requirements

Scope of the Specification

OHSAS 18001 addresses occupational health and safety, not product and services safety. Its requirements are, like those of ISO 9001 and ISO 14001, quite general to give organizations flexibility in implementation. It does not state specific occupational health and safety performance criteria, nor does it give detailed specifications for the design of an OHSMS.

The standard is designed for any organization that wants to:

- a) Establish an occupational health and safety management system (OHSMS) to eliminate or minimize risk to employees and other interested persons who may be exposed to occupational health and safety (OH&S) risks associated with its activities.
- b) Implement, maintain, and continually improve an OHSMS.
- c) Ensure itself of its conformity with its stated OH&S policy.
- d) Demonstrate this conformity to others.
- e) Seek registration of its OHSMS by an external organization.
- f) Make a self-determination and declaration of conformity to OHSAS 18001.



All OHSAS 18001 requirements are intended to be incorporated into any OHSMS. The extent of the application depends on such factors as the organization's OH&S policy, the nature of its activities, and the risks and complexity of its operations.

NOTE: Requirements are paraphrased to avoid issues associated with potential copyright infringements.

4.1 General Requirements

The organization shall establish, document, implement, maintain and continually improve an Occupational Health and Safety Management System (OHSMS) in accordance with the requirements of BS OHSAS 18001:2007 and determine how it will fulfill these requirements. The organization shall define and document the scope of the OH&S management system.

4.2 OH&S Policy

Top management shall define and authorize an occupational health and safety (OH&S) policy and ensure that within the defined scope of its OH&S management system it:

- a) Is appropriate to the nature and extent of OH&S risks.
- b) Includes a commitment to the prevention of injury, ill health and continual improvement in OH&S management and performance.
- c) Includes a commitment to with applicable legal requirements, and with other requirements to which the organization subscribes that relate to its OH&S hazards.
- d) Provides the framework for determining and reviewing OH&S objectives.
- e) Is documented, implemented and maintained.
- f) Is communicated to persons working under control of the organization to make them aware of their individual OH&S obligations.
- g) Is available to internal and external interested parties.
- h) Is periodically reviewed to ensure it remains relevant and appropriate to the organization.

4.3 Planning

4.3.1 Hazard Identification, Risk Assessment and Determining Controls

The organization shall establish, implement and maintain procedures for ongoing hazard identification, risk assessment, and determination of necessary controls. The procedure for hazard identification and risk assessment shall take into account:

- a) Routine and temporary activities.
- b) Activities of all personnel having access to the workplace, (including subcontractors and visitors).
- c) Human behavior, capabilities and other related factors.
- d) Identified hazards originating external to the workplace capable of having adverse affects on the health and safety of personnel under the control of the organization or the workplace.
- e) Hazards created in close proximity to the workplace by work related activities under the control of the organization (in some cases such hazards may be assessed as environmental impacts).

- f) Infrastructure, equipment and materials located at the workplace, whether these are provided by the organization or others.
- g) Changes or pending changes in the organization, its scope of work or materials.
- h) Changes to the OH&S management system, including temporary changes and their impacts on the organization's operations, processes and activities.
- i) Any applicable legal obligations related to risk assessment and implementation of related controls.
- j) The design of work areas, processes, installations, physical resources, operating procedures and work organization, including their adaptation to human capabilities.

The organization's methods adopted for hazard identification and risk assessment shall:

- a) Be defined with respect to its scope, nature and timing to ensure it is proactive, as opposed to reactive.
- b) Provide for the identification, prioritization and documentation of risks, and necessary controls, as appropriate.

For the management of change, the organization shall identify the OH&S hazards and risks associated with changes in the organization, the OH&S management system or related activities prior to introducing such changes.

The organization shall ensure that the results of these assessments are given consideration when determining controls.

When determining controls or considering changes to existing controls, the organization shall consider reducing risks according to the following hierarchy:

- a) elimination;
- b) substitution;
- c) engineering controls;
- d) signs, warnings and/or administrative controls; and
- e) personal protective equipment.

The organization shall document and retain results of identification of hazards, risk assessments and determined controls current.

The organization shall ensure that OH&S risks and determined controls are taken into consideration when establishing, implementing and maintaining its OH&S management system.

NOTE: For further guidance on hazard identification, risk assessment and risk control, see OHSAS 18002.

4.3.2 Legal and Other Requirements

The organization shall establish, implement and maintain a procedure to identify and accessing applicable legal and other OH&S requirements.

The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are given consideration when implementing and maintaining its OH&S management system.

The organization shall ensure that this information remains current.

The organization shall communicate relevant information on legal and other requirements to personnel working under the control of the organization and other relevant interested parties.

4.3.3 Objectives and Programs

The organization shall establish, implement and maintain documented OH&S objectives at relevant functions and levels.

When establishing and reviewing its objectives, an organization shall consider its legal and other requirements to which it subscribes and its OH&S risks. It shall also give consideration to its technological options; financial, operational and business requirements and the views of relevant interested parties.

The organization shall establish, implement and maintain a program for achieving the determined objectives. Programs shall include at least the following:

- a) Designated responsibilities and authorities for achieving the objectives.
- b) Strategies and time frames by which objectives are to e achieved.

The program shall be reviewed at defined intervals and adjusted as necessary, to ensure the objectives can be achieved.

4.4 Implementation and Operation

4.4.1 Resources, Roles, Responsibility, Accountability and Authority

Top management shall assume responsibility for OH&S and the OH&S management system.

Top management shall demonstrate evidence of its commitment by:

- a) Ensuring resources essential to establish, implement, maintain and improve the OH&S management system are made available.

NOTE 1: Resources include human resources and specialized skills, technology and financial resources.

- b) Ensuring that roles, designating responsibilities and accountabilities and delegating authorities, to facilitate effective OH&S management; roles, responsibilities, accountabilities and authorities shall be documented and communicated.

The organization shall appoint a member of top management with particular responsibility for OH&S, irrespective of other responsibilities and with designated roles and authority for:

- a) Ensuring that the OH&S management system is established, implemented and maintained in a manner consistent with the requirements of BS OHSAS 18001:2007.
- b) Ensuring that reports on the performance of the OH&S management system are made available to top management for review and are used as a basis for improvement of the OH&S management system.

NOTE 2: The top management appointee (e.g. in a large organization, a board or executive committee member) may delegate some of their duties to a subordinate management representative(s) while still retaining accountability.

The identity of the top management representative shall be made known to all persons working under the control of the organization.

All personnel possessing management responsibility shall demonstrate their commitment to the continual improvement of the OH&S performance.

The organization shall ensure that personnel within the workplace assume responsibility for aspects of OH&S over which they have control, including adherence to the organization's designated OH&S requirements.

4.4.2 Competence, Training and Awareness

The organizations shall ensure that any personnel under its control performing tasks that may have an impact on OH&S are competent for functions performed based on appropriate education, training or experience and shall retain associated records.

The organization shall identify training needs related to its OH&S risks and its OH&S management system. It shall provide training or take other action to meet these needs, evaluate the effectiveness of the action taken and retain any related records.

The organization shall establish, implement and maintain a procedure to make any personnel working under its control aware of:

- a) The actual or potential OH&S consequences of their work activities their behavior and the OH&S benefits of improved personal performance.
- b) Their roles and responsibilities and importance required for conformity to the OH&S policy and procedures, and to OH&S management system requirements, including emergency preparedness and response requirements.
- c) The potential consequences of departing from specified operating procedures.

Training procedures shall take into account various levels of:

- a) Responsibility, competency, language and literacy.
- b) Risk.

4.4.3 Communication, Participation and Consultation

4.4.3.1 Communication

With regard to its OH&S hazards and OH&S management system, the organization shall establish, implement and maintain a procedure for:

- a) Internal communication among the various functions and levels within the organization.
- b) Communication with contractors and visitors.
- c) Receiving, documenting and responding to pertinent communications from external interested parties.

4.4.3.2 Participation and Consultation

The organization shall establish, implement and maintain a procedure for:

- a) The involvement of persons working under the control of the organization by their:
 - Appropriate participation in hazard identification, risk assessments and determining controls.
 - Appropriate participation in incident investigation.
 - Participation in the development and review of OH&S policies and objectives.
 - Consultation where changes that affect the OH&S occur.
 - Represented on matters related to OH&S.

Workers shall be informed about their participation arrangements, including who is their representative(s) on matters related to OH&S.

- b) Consultation with contractors where changes occur that affect the OH&S.

The organization shall ensure that where appropriate, relevant external interested parties are consulted about relevant matters pertaining to the OH&S.

4.4.4 Documentation

OH&S management system documentation shall be maintained including:

- a) The OH&S policy and objectives.
- b) A description of the scope of the OH&S management system.
- c) A description of the main elements of the OH&S management system, including their sequence and interaction and reference to any other related documents.
- d) Documents, including records required by OHSAS 18001:2007.
- e) Documents, including records, determined by the organization to be necessary for the effective planning, operation and control of processes that relate to the management of its OH&S risks.

NOTE: It is important that documentation is proportional to the level of complexity, hazards and risks concerned and is kept to a minimum necessary for effectiveness and efficiency.

4.4.5 Document and Data Control

Documents required by the OH&S management system and by OHSAS 18001 shall be controlled. Records are a special type of document and shall be controlled in accordance with requirements established for the control of records (see 4.5.4).

The organization shall establish, implement and maintain a procedure for:

- a) Approving documents for adequacy prior to release.
- b) Reviewing and updating as necessary and re-approving documents where changes are made.
- c) Ensuring revisions and the current versions of are suitably identified.
- d) Ensuring relevant versions of OH&S documents are available at points of use.
- e) Ensuring that documents remain legible and readily identifiable.
- f) Ensuring that documents of external origin required by the OH&S management system are identified and their distribution controlled.
- g) Preventing the use of obsolete documents and ensuring they are suitably identified where they are retained for historical or reference purposes.

4.4.6 Operational Control

The organization shall identify those operations and activities that are associated with identified hazards where controls need to be implemented to manage OH&S Risks. This shall include the management of change.

For those operations and activities, the organization shall implement and maintain:

- a) Operational controls, appropriate for the organization and its activities; the organization shall integrate those operational controls into the OH&S management system.
- b) Controls related to purchased resources and services.
- c) Controls related to contractors and visitors.
- d) Documented procedures to cover situations where their absence could result in deviations from the OH&S policy and objectives.
- e) Stipulated operating criteria where their absence could result in deviations from the OH&S policy and objectives

4.4.7 Emergency Preparedness and Response

The organization shall establish, implement and maintain a procedure:

- a) To identify potential emergency situations.
- b) To respond to emergency situations.

The organization shall respond to actual emergency situations and prevent or mitigate adverse OH&S consequences associated with them.

In planning its emergency and response the organization consider the needs of relevant interested parties, such as emergency services and neighbors.

The organization shall also periodically test its procedure(s) with participation from relevant interested parties as appropriate to respond to emergency situations, where practical.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedure(s), in particular, after testing and after the occurrence of emergency situations (see 4.5.3).

4.5 Checking

4.5.1 Performance Measurement and Monitoring

The organization shall establish, implement, and maintain a procedure(s) to monitor and measure OH&S performance on a regular basis. This procedure(s) shall provide for:

- a) Both qualitative and quantitative measures, suitable for the needs of the organization.
- b) Monitoring the extent to which OH&S objectives are met.
- c) Monitoring the effectiveness of implemented controls (for health as well as safety).
- d) Proactive performance measures that monitor conformity with the OH&S program(s), controls and operational criteria.
- e) Reactive performance measures that monitor ill health, incidents (including accidents, near-misses, etc.), and other previous evidence of deficient OH&S performance.
- f) Recording of data and results of monitoring and measurement to enable subsequent corrective action and preventive action analysis.

The organization shall establish and maintain procedures for the calibration and maintenance of monitoring and measuring equipment, as appropriate. Calibration and maintenance activities shall be performed and records maintained.

4.5.2 Evaluation of Compliance

4.5.2.1 Consistent with its commitment to compliance, the organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with relevant legal requirements.

The organization shall keep records of the results of the periodic evaluations.

NOTE: The frequency of periodic evaluation may vary for differing legal requirements.

4.5.2.2 The organization shall evaluate compliance with other requirements to which it subscribes. The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or to establish a separate procedure(s).

The organization shall keep records of the results of the periodic evaluations.

NOTE: The frequency of periodic evaluation may vary for differing other requirements to which the organization subscribes.

4.5.3 Incident Investigation, Nonconformity, Corrective Action and Preventive Action

4.5.3.1 Incident Investigation

The organization shall establish implement and maintain a procedure(s) to record, investigate and perform analysis of incidents in order to:

- a) Determine underlying OH&S deficiencies and other factors that might be causing or resulting in the occurrence of incidents.
- b) Identify opportunities for corrective action.
- c) Identify opportunities for preventive action.
- d) Identify opportunities for continual improvement.
- e) Communicate the results and details of investigations.

Investigations shall be performed in a timely manner.

Any needs for corrective actions or opportunities for preventive actions shall be determined and dealt with in accordance with the relevant parts of 4.5.3.2.

The results of incident investigations shall be documented and maintained.

4.5.3.2 Nonconformity, Corrective Action and Preventive Action

The organization shall establish implement and maintain a procedure(s) for taking appropriate actions in response to actual and potential nonconformities and for taking corrective action and preventive action. The procedure shall define the requirements for:

- a) Identifying and correcting nonconformities and initiating appropriate action(s) to mitigate their OH&S consequences.
- b) Investigating nonconformities, performing cause analysis and taking actions in order to avoid their recurrence.

- c) Evaluating the need for actions to prevent nonconformities and implementing appropriate actions appropriate for avoiding their occurrence.
- d) Maintaining records and communicating the results of corrective actions and preventive actions taken.
- e) Reviewing the effectiveness of any actions taken.

Where the corrective action and preventive action identifies new or changed hazards or the need for new or changed controls, the procedure shall require that the proposed actions shall be implemented through a risk assessment prior to implementation.

Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformities shall be appropriate to the affects of any identified concerns and commensurate with the OH&S risks encountered.

The organization shall ensure that any necessary changes resulting from corrective and preventive actions are affected to OH&S management system documentation.

4.5.3 Control of Records

The organization shall establish and maintain records needed to demonstrate conformity to the requirements of its OH&S management system and OHSAS 18001 and the results achieved.

The organization shall establish, implement and maintain a procedure(s) for the identification, storage protection, retrieval, retention and disposal of records.

Records retained shall remain legible, identifiable and traceable.

4.5.4 Internal Audit

The organization shall ensure that internal audits of the OH&S management system are conducted at planned intervals to:

- a) Determine whether the OH&S management system:
 - Conforms to planned arrangements for OH&S management, including the requirements of this OHSAS Standard.
 - Is effective and has been properly implemented and maintained.
 - Is effective in achieving the organization's policy and objectives.
- b) Provide information on results of audits to management for review.

Audit programs shall be planned, established, implemented and maintained by the organization, based on the results of risk assessments related to the organization's activities and the results of previous audits.

Audit procedures shall be established, implemented and maintained that address:

- a) Responsibilities, competencies and requirements necessary for planning and conducting audits, reporting results and retaining associated records.
- b) Designated audit criteria, scope, frequency and methods.

Auditors shall not audit their own work.

4.6 Management Review

Top management shall review its OH&S management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the OH&S management system, including the OH&S policy and OH&S objectives. Records of management reviews shall be retained.

Management review inputs shall include:

- a) Results of internal audits and evaluations of compliance to applicable legal and other requirements to which the organizations subscribes.
- b) Results of participation and consultation.
- c) Pertinent communications from external interested parties, including complaints.
- d) OH&S performance of the organization.
- e) The extent to which objectives have been achieved.
- f) Status of incident investigation, corrective and preventive actions.
- g) Follow-up actions from previous management reviews.
- h) Changing circumstances, involving developments in legal and other requirements related to OH&S.
- i) Recommendations for improvement.

The outputs from management reviews shall be consistent with the organization's commitment to continual improvement and shall include decisions and actions related to possible changes to:

- a) OH&S performance;
- b) OH&S policy and objectives;
- c) resources; and
- d) other elements of the OH&S management system.

Relevant outputs from management review shall be made available for communication and consultation (see 4.4.3).

CONCLUSION

Occupational health and safety is an important component in business success. When it is properly handled, employees are more productive, and organizations can save significant amounts of money by preventing on the job accidents, illness, injury and death.

An OH&S management system can have a tremendous impact in ensuring workplace safety. Implementing an OH&S management system based on the requirements specified in OHSAS 18001 can help position an organization ahead of its competitors in dealing with occupational health and safety issues, complying with government regulations and preparing for possible future mandates.

While registration to OHSAS 18001 voluntary, it provides an objective third party confirmation that an effective OH&S management system has been implemented and the registered organization or facility has adopted a logical approach to OH&S management based on a Plan – Do – Check – Act approach that embraces a philosophy of continual improvement.

Implementing an OH&S management system can be time consuming and difficult. For this reason, not to mention the high rate of failure that afflicts organizations seeking registration for the first time, it is a good idea to seek the services of an outside professional consulting firm.

A competent occupational health and safety consultant can walk your organization through the OHSAS 18001 requirements and identify any problems that may halt the implementation and registration process.



Appendix A – Comparison Chart

BS OHSAS 18001:2007/ISO 14001:2004/ISO 9001:2008

OHSAS 18001:2007		ISO 14001:2004		ISO 9001:2008	
-	Introduction	-	Introduction	0.1 0.2 0.3 0.4 0.5	Introduction General Process Approach Relationship with ISO 9004 Compatibility w/ Other Mgmt Systems
1	Scope	1	Scope	1.1 1.2 1.3	Scope General Application
2	Normative References	2	Normative References	2	Normative References
3	Terms and Definitions	3	Terms and Definitions	3	Terms and Definitions
4	OH&S Management System Elements (Title Only)	4	Environmental Management System Requirements (Title Only)	4	Quality Management System (Title Only)
4.1	General Requirements	4.1	General Requirements	4.1 5.5.1	General Requirements Responsibility and Authority
4.2	OH&S Policy	4.2	OH&S Policy	5.1 5.3 8.5.1	Mgmt Commitment Quality Policy Continual Improvement
4.3	Planning (Title Only)	4.3	Planning (Title Only)	5.4	Planning (Title Only)
4.3.1	Hazard ID, Risk Assessment & Determining Controls	4.3.1	Environmental Aspects	5.2 7.2.1 7.2.2	Customer Focus Determination of Rqmts Related to the Product Review of Rqmts Related to the Product
4.3.2	Legal and Other Rqmts	4.3.2	Legal and Other Rqmts	5.2 7.2.1	Customer Focus Determination of Rqmts Related to the Product
4.3.3	Objectives and Programs	4.3.3	Objectives, Targets and Programs	5.4.1 5.4.2 8.5.1	Quality Objectives QMS Planning Continual Improvement
4.4	Implementation and Operation (Title Only)	4.4	Implementation and Operation (Title Only)	7.1	Product Realization (Title Only)
4.4.1	Resources, Roles, Accountability and Authority	4.4.1	Resources, Roles and Authority	5.1 5.5.1 5.5.2 6.1 6.3	Mgmt Commitment Responsibility and Authority Mgmt Representative Provision of Resources Infrastructure

OHSAS 18001:2007		ISO 14001:2004		ISO 9001:2008	
4.4.2	Competence Training and Awareness	4.4.2	Competence Training and Awareness	6.2.1 6.2.2	Human Resources (General) Competence Training and Awareness
4.4.3	Communication, Participation and Consultation	4.4.3	Communication	5.5.3 7.2.3	Internal Communication Customer Communication
4.4.4	Documentation	4.4.4	Documentation	4.2.1	Documentation Rqmts (General)
4.4.5	Control of Documents	4.4.5	Control of Documents	4.2.3	Control of Documents
4.4.6	Operational Control	4.4.6	Operational Control	7.1 7.2 7.3 7.4 7.5	Planning of Product Realization Customer Related Processes Design and Development Purchasing Product Realization
4.4.7	Emergency Preparedness and Response	4.4.7	Emergency Preparedness and Response	8.3	Control of NC Product
4.5	Checking (Title Only)	4.5	Checking (Title Only)	8	Measurement, Analysis and Improvement (Title Only)
4.5.1	Performance Measurement and Monitoring	4.5.1	Monitoring and Measurement	7.6 8.2.3 8.2.4 8.4	Control of MME Monitoring and Meas of Processes Monitoring and Meas of Product Analysis of Data
4.5.2	Evaluation of Compliance	4.5.2	Evaluation of Compliance	8.2.3 8.2.4	Monitoring and Meas of Processes Monitoring and Meas of Product
4.5.3.1	Incident Investigation	-	-	-	-
4.5.3.2	Nonconformity, Corrective and Preventive Action	4.5.3	Nonconformity, Corrective Action and Preventive Action	8.3 8.4 8.5.2 8.5.3	Control of NC Product Analysis of Data Corrective Action Preventive Action
4.5.4	Control of Records	4.5.4	Control of Records	4.2.4	Control of Records
4.5.5	Internal Audit	4.5.5	Internal Audit	8.2.2	Internal Audit
4.6	Management Review	4.6	Management Review	5.1 5.6 8.5.1	Management Commitment Management Review Continual Improvement

Comparison Chart

BS OHSAS 18001:2007 and ILO-OSH:2001 Guidelines On Occupational Health and Safety Management Systems

OHSAS 18001:2007		ILO-OSH:2001	
-	Introduction	- 3.0	Introduction The Occupational Safety and Health Mgmt System in the Organization
-	Foreword	-	The Int'l Labor Organization
1	Scope	1.0	Objective
2	Reference Publications	-	Bibliography
3	Terms and Definitions	-	Glossary
4	OH&S Management System Elements (Title Only)	-	-
4.1	General Requirements	3.0	The Occupational Safety and Health Mgmt System in the Organization
4.2	OH&S Policy	3.1 3.16	Occupational Safety and Health Policy Continual Improvement
4.3	Planning (Title Only)	-	Planning and Implementation (Title Only)
4.3.1	Hazard ID, Risk Assessment & Determining Controls	3.7 3.8 3.10 3.10.1 3.10.2 3.10.5	Initial Review System Planning, Development and Implementation Hazard Prevention Prevention and Control Measures Management of Change Contracting
4.3.2	Legal and Other Rqmts	3.7.2 3.10.1.2	(Initial Review) (Prevention and Control Measures)
4.3.3	Objectives and Programs	3.8 3.9 3.16	System Planning, Development and Implementation Occupational Safety and Health Objectives Continual Improvement
4.4	Implementation and Operation (Title Only)	-	-
4.4.1	Resources, Roles, Accountability and Authority	3.3 3.8 3.16	Responsibility and Accountability System Planning, Development and Implementation Continual Improvement
4.4.2	Competence Training and Awareness	3.4	Competence and Training
4.4.3	Communication, Participation and Consultation	3.2 3.6	Worker Participation Communication
4.4.4	Documentation	3.5	Occupational Safety and Health Mgmt System Documentation

OHSAS 18001:2007		ILO-OSH:2001	
4.4.5	Control of Documents	3.5	Occupational Safety and Health Mgmt System Documentation
4.4.6	Operational Control	3.10.2 3.10.4 3.10.5	Management of Change Procurement Contracting
4.4.7	Emergency Preparedness and Response	3.10.3	Emergency Prevention, Preparedness and Response
4.5	Checking (Title Only)	-	Evaluation (Title Only)
4.5.1	Performance Measurement and Monitoring	3.11	Performance Monitoring and Measurement
4.5.2	Evaluation of Compliance	-	-
4.5.3.1	Incident Investigation	3.12 3.16	Investigation of Work Related Injuries, Ill Health, Diseases and Incidents... Continual Improvement
4.5.3.2	Nonconformity, Corrective and Preventive Action	3.15	Preventive and Corrective Action
4.5.4	Control of Records	3.5	Occupational Safety and Health Mgmt System Documentation
4.5.5	Internal Audit	3.13	Audit
4.6	Management Review	3.14 3.16	Management Review Continual Improvement