### **DNV-GL**

# Helping Manage Workplace Safety Are You In?

### 9 April 2019

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### **Webinar Agenda**

- Introduction to the ISO 45001 Standard Expected Schedule
- Why ISO 45001 Model? Benefits
- Key changes in ISO 45001 compared with OHSAS 18001 3.
  - Leadership- Participation of Workers
  - Risk-Based Thinking with Strategic Planning
  - Operational Control
  - Performance Evaluation
- Implementing with a 3 step process Identify, Insure, Improve
- 5. Q&A

#### **OUR PURPOSE**

# TO SAFEGUARD LIFE, PROPERTY AND THE ENVIRONMENT

## **DNV GL - Global reach - local competence**



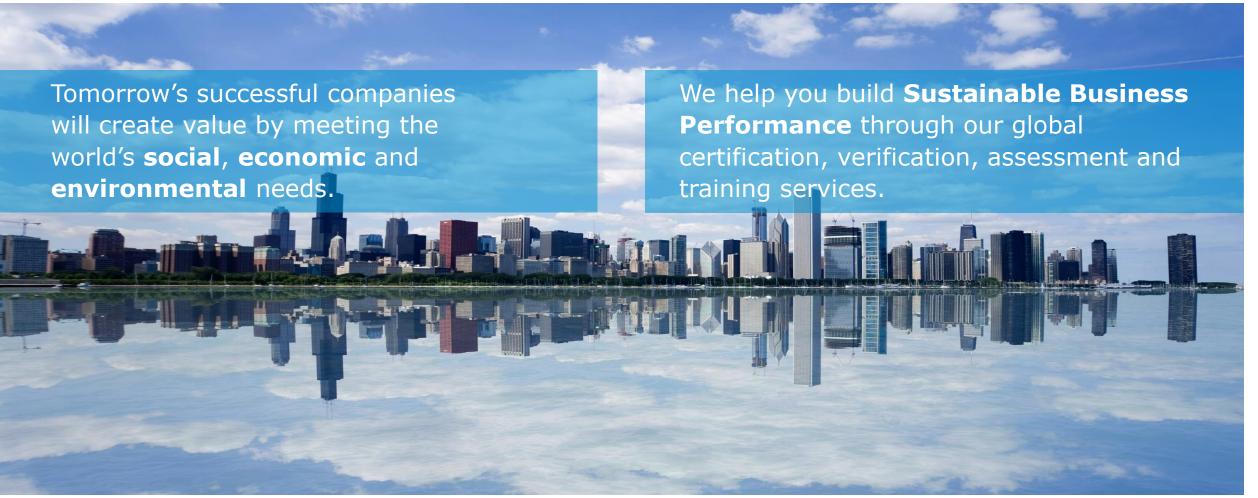
150+ years

300+ offices

100 countries

12,500 employees

## **DNV GL: Focused on your future**



SUSTAINABLE VALUE and STAKEHOLDER TRUST

### The standard - ISO 45001

# "Occupational health and safety management systems — Requirements with guidance for use"

- The overall aim of the standard is to enable organizations to provide a safe and healthy workplace, by preventing work-related injury and ill health, as well as proactively improving the OH&S performance
- The standard is applicable to any organization regardless of size, type, and activity
- The standard does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system



### From OHSAS 18001 to ISO 45001 – DNV GLs contribution

- OHSAS 18001 and 18002 (quideline) was developed and maintained by the OHSAS Project Group
- Since its foundation (late 1990s) DNV GL was an active member of the Project Group and a coauthor and contributor to the content of the standards (also acknowledged in the documents).
- The primary aim of the Group was to seek the development of a OH&S management system. standard by ISO.
- ISO accepted mid-2013 a New Work Item Proposal from the Project Group to develop such standard
- DNV GL has actively participated in the ISO Working Group to develop the new ISO 45001, representing IIOC as Liaison Member



### Migration from OHSAS 18001 to ISO 45001 - Timeline

- OHSAS 18001 ceases to be valid 3 years after publication of ISO 45001 (March 2018). OHSAS certificates therefore need to be migrated to ISO 45001 within these 3 years, as all OHSAS certificates will cease to be valid after March 2021.
- DNV GL will only be allowed to issue only accredited ISO 45001 certificates, e.g. RvA, UKAS, ANAB, ACCREDIA, DAKKS, etc.
- Accredited OHSAS certificates can be migrated to ISO 45001 during a scheduled OHSAS periodic or recertification audit in the 3 year period.
- A draft document from The International Accreditation Forum (IAF) indicates a minimum of 1 auditor man-day to be added when migration audit is done in conjunction with a scheduled periodic or recertification audit. Additional time is to cover existing and new requirements implied by ISO 45001
- If you currently hold a DNV GL non-accredited OHSAS certificate the best approach is probably to transfer to an accredited OHSAS certificate before migrating to ISO 45001. Your local DNV GL office will inform you with more details on this process.

### **DNV-GL**

Why ISO 45001 Model?

**Benefits** 

### Jayne Pilot, Pilot Performance Resource Management Inc.

- Certified Auditor
- Consultant/Speaker/Author/Trainer in Management Systems.
- Author: "Driving Sustainability to Business Success-DS Factor", Wiley & "ISO 9001" Quality Management System
   Implementation & Integration Guide - Specialty Technical Publishers
- 30+ years Health & Safety (EHS), Quality, Environmental, Management. Work Experience, 35 years in business improvement.
- Awards: Top 50 Eligible Board of Director Candidates,
   Top 100 Women in Canada, Awards of Merit Outstanding
   Business City of Brampton & Board of Trade 2006, 2002



Jayne Pilot, EP(CEA), EP(EMSLA), CPEA, President Pilot Performance Resources Management Inc. www.pilotims.com



# Safety and health at work

Every 15 seconds, a worker dies from a work-related accident or disease.

Every 15 seconds, 153 workers have a work-related accident.

Every day, 6,300 people die as a result of occupational accidents or workrelated diseases – more than 2.3 million deaths per year. 317 million accidents occur on the job annually; many of these resulting in extended absences from work. The human cost of this daily adversity is vast and the economic burden of poor occupational safety and health practices is estimated at 4 per cent of global Gross Domestic Product each year.

The ILO aims to create worldwide awareness of the dimensions and consequences of work-related accidents, injuries and diseases and to place the health and safety of all workers on the international agenda and to stimulate and support practical action at all levels.

Decent work is safe work.

www.ilo.org



# Key Changes



### New/Updated Changes ISO 45001 - OHSAS 18001

### 1. Enhancements:

- Integrated approach clarity & compatibility with other management system standards. Running a sustainable organization
- Use of a Common structure: Annex SL and terms
- Process based not procedure based
- Management System Model changed
- Terminology

### **Management Systems**



# Universal High Level Structure follow ISO Guide 83 "Annex SL"

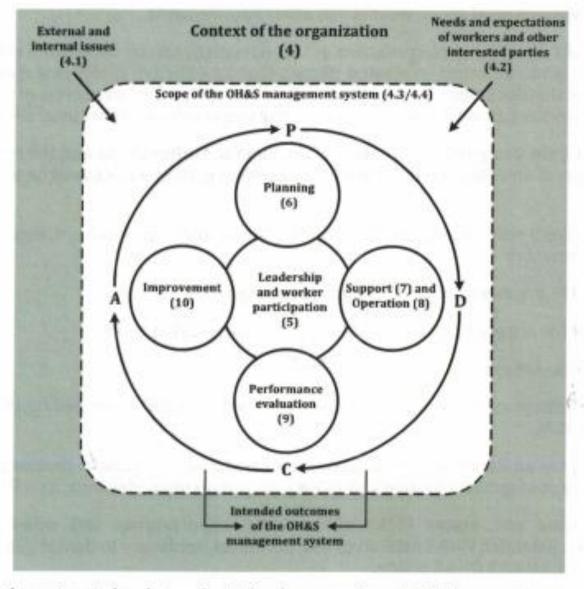
Clause 1	Scope
Clause 2	Normative References
Clause 3	Terms and Definitions
Clause 4	Context of the Organization
Clause 5	Leadership
Clause 6	Planning
Clause 7	Support
Clause 8	Operation
Clause 9	Performance Evaluation
Clause 10	Improvement



Occupational Health
& Safety
Management System
(MS) Model
ISO 45001:2018

**OHSAS 18001:2007** 





The numbers given in brackets refer to the clause numbers in this document.

# ISO 45001 Clauses Sub-clauses

- 1. Scope
- 2. Normative References
- 3. Terms & Definitions

### 4. Context of Organization

- 4.1 Understanding Organization & Context
- 4.2 Understanding Needs & Expectations of Workers & Other Interested Parties
- 4.3 Determining Scope of OH&S MS
- 4.4 OH&S MS

#### Leadership & Worker Participation

- 5.1 Leadership & Commitment
- 5.2 OH&S Policy
- 5.3 Organizational Roles, Responsibilities & Authorities
- 5.4 Consultation & Participation of Workers

### 6. Planning

- 6.1 Actions to Address Risks & Opportunities
  - 6.1.1 General
  - 6.1.2 Hazard Identification & Assessment of Risks & Opportunities
  - 6.1.3 Determine Legal & Other Requirements
  - 6.1.4 Planning Action
- 6.2 OH&S Objectives & Planning
  - 6. 2.1 OH&S Objectives
  - 6.2.2 Planning to Achieve OH&S Objectives

### ISO 45001:2018 Clauses & Sub-clauses

### 10. Improvement

- 10.1 General
- 10.2 Incident, Non-conformity & Corrective Action
- 10.3 Continual Improvement

#### 9. Performance Evaluation

- Monitoring, Measurement, Analysis & Performance Evaluation
  - 9.1.1 General
  - 9.1.2 Evaluation of Compliance
- 9.2 Internal Audit
  - 9.2.1 General
  - 9.2.2 Internal Audit Program
- 9.3 Management review

### 8. Operation

- 8.1 Operational Planning & Control
  - 8.1.1 General
  - 8.1.2 Eliminating hazards & reducing OH&S risks
  - 8.1.3 Management of Change
  - 8.1.4 Procurement
- 8.2 Emergency Preparedness & Response

### 7. Support

- 7.1 Resources
- 7.2 Competence
- 7.3 Awareness
- 7.4 Communication
  - 7.4.1 General
  - 7.4.2 Internal Communication
  - 7.4.3 External Communication
- 7.5 Documented information
  - 7.5.1 General
  - 7.5.2 Creating & Updating
  - 7.5.3 Control of Documented Information

## **Terminology**

Hazard	Source with a potential to cause injury & ill health	
Risk	Effect of Uncertainty (+ or -)	
OH&S Risk	Combination of the likelihood of occurrence of a work-related hazardous event(s) or exposure(s) & severity of injury & ill health that can be caused by the event(s) or exposure(s)	
OH&S Opportunity	Circumstance or set of circumstances that can lead to improvement of OH&S performance	
Injury & ill health	Adverse effect on the physical, mental or cognitive condition of a person	Note: adverse effects include occupational disease, illness & death.

Ref: ISO 45001:2018

## **Terminology**

Documented information	Information required to be controlled & maintained by an organization & the medium on which it is contained. Note 1: can be in any format & media, & from any source. Note 2: Can refer to: a) MS, including processes b) Information created (documentation) c) Evidence of results (records)	Term used now for documentation, documented procedures, records "retain documented information as evidence of meaning to retain "records"; "shall be maintained as documented information – means documents, procedures.
Preventive Action		Not used

Ref: ISO 45001:2018

### New/Updated changes ISO 45001 - OHSAS 18001



### 2. Context of Organization

2. Understanding of external & internal issues

### 3. Workers & Other Interested parties

- Focus on involvement of workers (consultation & participation).
- Identification of who your interested parties are & their needs/expectations
- Understanding their needs & expectations

# Understand the Context of Your Organization (4.1)

Internal Influences



External Influences

Corporate Influences

Top Management
Managers
Supervisors
OH&S Representative
IMS Co-ordinator
Workers – Employees
Worker Representatives

Internal

Customers, End Users
Regulators for Government
Legislation/Enforcement
Suppliers
Contractors, Sub-contractors
Services - medical
Agencies/Associations
Unions
Stakeholders - Insurance
Industry Watchdogs
Society - Social Media, news media
Neighbours, Community, Visitors
Emergency Services, Healthcare Professionals
Media, Business Affiliates, NGOs

Who Are Your Interested Parties?

"person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity"



Corporate

Owners, Parent Co.
Competitors
Investors, Shareholders
Business Partners
Boards of Directors

# **Interested Parties Needs & Expectations** (4.2)

Responsibility: customers, corporate office, investors

Influence: pressure groups, competitors

• Dependency: workers, employees

Representation: OH&S Representative, trade unions

Authority: regulators

## **Interested Parties**

1. Identify relevant interested parties – spreadsheet, (column for Interested parties, needs & expectations). Prioritize their relevance – PI Rank: power/interest, Determine objectives and their priority.

Interested	Needs &	PI	Objectives	<b>Priority</b>
Party	<b>Expectations</b>	Rank		

### **Examples of requirements of relevant interested parties are:**

- industry codes & standards
- agreements with community, government groups
- statutory and regulatory product requirements
- memoranda of understanding
- permits & licenses
- order issued by regulatory bodies
- treaties, conventions, protocols
- voluntary principles or codes of practice
- labeling & health & safety commitments
- policies for employees

## **Consultation & Participation (5.4)**

### **Emphasis:**

- What is mechanism or process for participation & consultation in the development, planning, implementation, performance evaluation & actions for improvement of OH&S MS?
  - Worker involvement in risk identification & assessment, actions to control hazards & risk, investigating incidents, nonconformities & involved in corrective actions
- Information (what & how) to be communicated to workers.
  - Provide timely access to clear, understandable & relevant information about the OH&S MS, training, resources necessary to be consulted in – i.e. Policy
- Determine & remove obstacles or barriers to participation

# Copies of Consultation & Worker Participation outlined in the standard are available from jpilot@pilotims.com



### Consultation (5.4)

### **Emphasize consultation on following:**

- 1. Determine needs & expectations of interested parties (4.2)
- 2. OH&S Policy (5.2)
- 3. Assigning Organizational roles, responsibilities & authorities (as applicable) (5.3)
- 4. Determining "how" to fulfil legal & other requirements
- 5. Establishing OH&S objective & planning to achieve
- 6. Determining applicable controls for outsourcing, procurement & contractors (8.1.4)
- 7. Determining what needs to be monitored, measured & evaluated (9.1)
- 8. Planning, establishing, implementing & maintaining audit program (9.2.2(
- 9. Ensuring Continual Improvement (10.3)



## Worker Participation (5.4)

- 1. Determine mechanisms for consultation & participation
- 2. Identify hazards & assessing risks & opportunities (6.1.1, 6.1.2)
- 3. Determine actions to eliminate hazards and reduce OH&S risks (6.1.4)
- 4. Determine competence requirements, training needs, training & evaluating training (7.2)
- 5. Determine what needs to be communicated and how this will be done (7.4)
- 6. Determine control measures & their effective implementation & use (8.1, 8.1.3, 8.2)
- 7. Investigating incidents & nonconformities & determining corrective actions (10.2)

### New/Updated changes | Leadership - Planning

### 4. Leadership & Management Commitment

- greater emphasis for involvement in MS, ensures motivation towards goals.
- Ensure communication & understanding by all parties
- Achieve intended outcomes.

### 5. Planning - Objectives & Performance based

- Align policy, objectives with planning strategy of organization
- Measurable
- Achievement evaluated during performance reviews
- Documented information retained about objectives & plans.

### **Planning Emphasis (6)**

### When planning OH&S management system (MS)

- Refer to "Context of Organization" (4)
- "Understand Needs & Expectations of Workers & interested parties (4.2)
- Determine Scope of your MS (4.3)
- Identify risks & opportunities (6.1.2)

### **Policy Statement (5.2):**

Commitment to provide

### **Set OH&S objectives (6.2)**

### Leadership

Setting of objectives & action plans for business strategies of organization to grow & improve business operations.



Ref: 1

Overall Responsibility & Accountability

- 1. Policy, Objectives
- 2. Legal & Other, Risk Management, Operational controls
- 3. Resources
- 4. Communication, Roles, Responsibilities
- 5. Consultation & Participation (workers) needs, provide training
- 6. Monitoring & measurement continual improvement
- 7. OH&S culture
- 8. Protection
- 9. Audits, Management Review

### "Leadership" | Driving Success

"Top management recognize the priority of occupational health & safety management – an integral part of its business success.

Management leads by establishing vision, policy, objectives, programs and practices to ensure its commitment to prevention of injury and ill health, by minimizing and controlling its risks and improving its OH&S performance."

Consultation/participation of workers can be key factors of success of OH&S MS (2 way communication). Workers contribute to decision-making process on OH&S performance measures and proposed changes. (reporting hazardous situations – preventive measures.

Legal emphasis has been on worker's right to know, to participate in health & safety activities and worker-management committees, and to refuse hazardous work.

Referenced from "Driving Sustainability to Business Success", The DS Factor. Occupational Health & Safety Principles for Driving Business Success. Chapter 8.

### "Driving Sustainability to Business Success" **Assess & Reflect**



- 1. As a leader, what questions do you ask your people in order to look at new opportunities, new solutions, performance tied with Occupational Health & Safety?
- Do you ask "what is missing", from your OH&S MS in order to improve?
- Do you ask your management team for input to your biggest challenges?
- Do you stand up for what is best for your employees?
- 5. Are you unafraid to put your job on the line when the Board of Directors are of the opposite mindset?
- 6. What innovations have you put in place?

### Planning - Objectives & Measurement (6.2)



Take into account requirements, risks & opportunities, results of consultation with workers.

Objectives can be strategic, tactical or operational. Set at facility, project or process level & operational objectives at activity level (ex. Enclosure of machine area to reduce noise)

### **Objectives need plans**

Be communicated. Retain documented information.



# **New/Updated changes Risk - Preventive Action**

### 6. Risk & Opportunity management - Planning

- Identify organization's risks & opportunities that
  - contribute to enhancement of health & safety of employees & performance improvements.
  - review your Legal & Other requirements
- 7. Preventive action removed from Improvement no longer Corrective/Preventive Actions. Now preventive action undertaken in risk process.

## **Opportunities (6)**

### **Opportunities address:**

- identification of hazards
- system improvement strategies
- integration of OH&S requirements at earliest stage in life cycle
- new technologies to improve OH&S performance
- improving visibility of top management's support
- benchmarking

### Focus on: Risk- Based Thinking



Risk based thinking. Use of Control Plans

**Participation of workers** in the planning process when determining risks & opportunities (6.1.1)

Before changes (permanent or temporary) take place,

Maintain documented information. Achieve continual improvement.

**Assess risks** from the **identified hazards**, taking into account **legal** & other requirements.

# **Changes Ahead What risks might these changes Introduce?**

- 1. Grey Tsunami aging population
- 2. Immigration movement of people
- 3. Globalization
- 4. Non standard patterns of Employment
- 5. Information & Communication Technologies
- 6. Social Expectations

**Are you Engaging Stakeholders? How?** 

## Hazard Identification/ Assessment of Risks



- Are you observing & discussing hazards with workers?
   Consultation
- Are you considering those in vicinity of workplace who could be affected by activities (contractors, neighbours, transport drivers or service personnel)?
- Do you provide training, ensure resources meet existing or changing needs?
- Consider risks tied with procurement of new or improved equipment or supplies?
- Monitoring & communication of new legal requirements
- Training new requirements, meeting legal requirements.

# **Significant OH&S Hazard Diagram**

#### Chemical

Mists/aerosols, gases, vapors, fumes, smokes, dust/fibers

Toxic, corrosive, explosive, reactive, unstable, carcinogenic, reproductive hazard, irritant, sensitizing, nerve or tissue damage

#### **Mechanical**

Machine parts – unguarded, moving parts, falling objects or products, moving objects – forklifts, equipment parts, motor vehicles

## Special

air supply, unfamiliar worksites, trenching, electrical

# Emergencies -Safety

Explosions, Fires Natural Disaster, weather Spills, Clean-Ups

# Company

## **Physical**

Noise, temperature heat/cold, Illumination, vibration, pressure, radiation

# **Psychosocial**

Place of work, violence, harassment

## Ergonomics

Repetitive motion injury (RMI)poor posture, lifting – back
ache/strain-heavy loads, improper
manual material handling: fatigue,
incorrect seating or work
equipment; Perceptual confusion or
overload. Eyestrain/headachespoor lighting, glare/flicker on
computer screen; perceptual
confusion or overload

## Biological

Bacteria, viruses, fungi, molds, mites, insects, parasites, plant, animal, blood

#### Other

Working at heights, confined space, uneven or slippery surfaces, heavy loads, vehicle hazards, falls

## New/Updated changes - Support Communication - Documented Information - Resources

- 8. Communication determine what, when, with whom and how
- 9. Documented information vs. documented procedure.
- **10.** Resources Knowledge Competence

# **Support - Communication (7.4)**



Ref:

Communication is important for internal/**external** stakeholders, before it was to internal communication for effectiveness of MS Is relevant information provided, received, understood?

#### Now:

The organization needs to decide **what** it will communicate to **whom** (internally, contractors, visitors), **when, how & by whom**, ensuring that they have the authority, knowledge & competency.

Take into account legal & other requirements. Respond to relevant communication on its OH&S MS

What can Managers consult with workers on?

# **Documented Information (7.5)**

Replaces documents and records

Organizations can choose to use terms that suit their operations (i.e. records, documentation, protocols rather than "documented information"

Ensure unintended use of obsolete documented information



#### Standard documented information required:

9001, 14001, 45001	Documented I		•	available from
4.3	Scope of the management sys		efined outlin	ning
	products/services, any exclusion	ons		
4.4.2	MS process document information	ation to supp	ort operation	on of its
	processes and processes bei	ISO 9001	14001	Documented Information Required
5.2	Policy Statement	Clause	45001	
5.1.2 & 9.1.2	Customer Focus – custome	7.1.5.1		Monitoring & Measuring Resources
5.3	Organizational Roles, Respor	7.1.5.2		Calibration – Measurement traceability
6.1	Actions to Address Risks & O	8.1	8.1	Operational planning & controls. Processes carried out
6.1.3	Compliance Obligations (Lega	0.1	0.1	
6.2	Objectives & Plans			as planned and to demonstrate conformity of
7.2	Competence (education, trail			product/service requirements. Outsourcing, Contractors,
7.4	to identify hazards.  Communication & Informati			Life Cycle
7.4	internal/external communicati		6.1.1	Risks & Opportunities
	and how to communicate. ie.			Processes needed for risks, compliance, planning action
	appropriate		6.1.2	Document up to date significant environmental aspects
7.5	Documented Information -		0.1.2	Documentation of <b>hazards</b> , classification, prioritization,
7.5.1	Necessary for effectiveness o			
7.5.2	Creating & Updating Docum			applicable controls – keep up to date
7.0.2	When creating and updating		6.1.3	Compliance Obligation Legal and Other requirements –
	organization shall ensure app			identify and determine how these apply – keep up to date
	Identification & description		9.1.2	Evaluation of Compliance – records of evaluations
	number);		8.2	Emergency Preparedness & Response
	Format (e.g. language, so			Processes carried out as planned
	(e.g. paper, electronic);	8.2.3.1		Requirements for Products/Services
	. Review and approval for s	0.2.3.1		•
7.5.3	Control of Documented Info			Documented information (records) on results of the review
	It is available and suitable			of requirements related to the products/services and actions
	It is adequately protected (e.g			arising from the review. Any new requirements for
	use, or loss of integrity).			products/services.

# Copies of documented information required available from jpilot@pilotims.com

ISO 9001	14001	Documented Information Required
Clause	45001	
9.1.1		Monitoring & Measurement, analysis &
		evaluation
		What needs to be monitored, measured, methods,
		when performed, results analysed, evaluated.
		Ensure that monitoring, measurement activities are
		implemented in accordance with the determined
		requirements and shall retain appropriate
		documented information as evidence of the results
		Calibration, Maintenance, Performance for EHS.
	9.1.2	Evaluation of Compliance
	9.1	Performance Evaluation – Monitoring,
		Measurement & Monitoring- recording of data and
		results of monitoring and measurement sufficient to
		facilitate corrective analysis.
9.2	9.2	Internal audit
		Retain documented information as evidence of the
		implementation of the audit programme and the
		audit results
9.3	9.3	Management Review
10.1	1.5.	Results of Management Reviews
10.1	10.1	Improvement
		(monitoring, measurement, analysis, evaluation,
		corrective action, continual improvement, change
		management, innovation, re-organization, internal
10.00	40.0	audit, performance evaluation
10.2.2	10.2	Nonconformity and Corrective Actions
		Shall retain documented information as evidence of
		the nature of the nonconformities and any
		subsequent actions taken, the results of any
	40.0	corrective action
	10.2	Incidents
	10.3	Continual Improvement – H&S enhancing
		performance, culture, participation of workers,
		continual improvement – communication to workers

#### Example for Creating Document Identification - at footer of page

Example for creat	ing bootinent tuentineation - at rooter or page		h	g from D&D
Original Date: M/D/Yr		File name:  PD/WISOP Document Name  Revision date M/D/Yr	-	
	Control Type: Electronic – Expires 24 hrs after this date: Sep. 25, 18 Printed copies are uncontrolled	Page 80 of <u>155</u>		

Product/service changes - ensure relevant documented

information amended

Design & Development (D&D)

#### Revision History

		Revision History			
Date	Affected Page	Change Descriptions	Reviewed By		

# **Resources (7)**



New to resources are:

People (human), infrastructure, technology, financial

Monitoring & Measuring resources

Organizational Knowledge



# Competence (7.2)

Competence of workers – knowledge & skills needed to identify hazards, deal with risks associated with work & workplace.

#### **Determine competence – consider:**

- 1. Education, training, qualification or experience. There is no mention of "skills"
- 2. Duties & responsibilities associated with roles
- 3. Individual capabilities experience, language, literacy, diversity
- 4. Work environment
- 5. Risk assessment preventive & control measures
- 6. Legal requirements, Policy
- 7. Potential consequences of compliance, including impact on worker's H&S

# Awareness of What? (7.3)

- 1. Policy
- 2. Objectives relevant
- 3. OH&S hazards (diagram) at site or process area
- 4. Understanding their contribution to effectiveness of MS, including:
  - benefits of improved performance
  - implications of not conforming to requirements.
- 5. Incidents outcomes of relevant investigations
- 6. Removal from imminent & serious danger to their life or health

# **New/Updated changes - Operation Operations**

## 11. Operational Planning & Control - Support

- Hierarchy of controls is specified order of preference
- Management of change (MOC) working conditions, work force, equipment, changes tied with risks/hazards
- Outsourcing, procurement & contractors.



# **Reduction of Risks - Use Hierarchy of Controls**

Hierarchy of Controls

Elimination

Substitution

Engineering

Controls

Administrative

Controls

PPE

Physically remove

the hazard

Replace

Isolate people from the hazard

Change the way

people work

Protect the worker with Personal Protective Equipment

the hazard

Organization shall establish a process & determine controls for achieving reduction in OH&S risks using following hierarchy:

effective

- Hazard Elimination: avoiding risks, adapting work to workers, (integrate health safety and ergonomics when planning new work places; create physical separation of traffic between pedestrians and vehicles
- Substitution: replacing the dangerous by nondangerous or less dangerous (replacing solvent based paint with water based paint)
- Engineering Controls:
  Implement collective protective measures
  (isolation; machine guarding; ventilation; noise reduction etc.)
- Administrative Controls: Giving appropriate instructions to workers (lock out processes; induction; forklift driving licenses, etc.)
- Personal Protective Equipment (PPE): Provide PPE and instructions for PPE
  utilization/maintenance, i.e. safety shoes, safety glasses, hearing protection, chemical &
  liquid resistant gloves; electrical protection gloves, etc.)

# Operation (8)

More detailed requirements related to:

- Planning & Control
- Eliminating Hazards & Reducing OH&S Risks following Hierarchy of controls
- Management of Change
- Procurement: Contractors, Outsourcing

# New/Updated changes - Operation Management of Change - Procurement

## **12. Management of Change** (risks & opportunities)

- Minimize introduction of new hazards & risks into work environment as changes occur
- Assessment done prior to implementing change

#### **13. Procurement** - Safe for use by workers

- Minimize risks associated with products, hazardous materials, equipment or services before introduction into workplace.
- Any usage requirements, precautions, protective measures are communicated and made available.

# **Procurement Outsourcing, Contractors (clause 8)**

Ensure outsourced processes affecting OH&S systems are controlled.

- Procurement of goods (products, hazardous materials or substances, raw materials, equipment & services)
  - Identify OH&S risks

# **New/Updated changes Performance Evaluation**

#### 14. Monitoring, Measurement, Analysis & Performance Evaluation

measurement of OH&S operations – that can impact operational controls, risks & opportunities, legal, procurement – outsourcing, contractors.

#### 15. Evaluation of Compliance

- maintaining knowledge & understanding of status of compliance

## 16. Management Review

# **OH&S Performance Evaluation (9)**



Ref:

#### **Clause addresses:**

- Monitoring, measurement, analysis & performance evaluation
   (9.1) ensuring valid results
- When is monitoring & measurement (M&M) performed? On What? How?
  - Meeting objectives, work related incidents, injuries, complaints, emergency exercises, competence, nonconformances/non-compliances
- Results from M&M are analyzed, evaluated & communicated?

# OH&S Performance Evaluation (9)

- 1. Legal & Other requirements fulfilled
- 2. Risk measurements, hazards to its activities & operations
- Achievement of OH&S objectives. Top management under review to determine extent policy and objectives have been met
- 4. Effectiveness of operational & other controls
- 5. Timeline for measuring established
- Plan for analysis, evaluation, communication of monitoring results
- 7. Equipment used for monitoring calibrated & verified
- Documented information as evidence of monitoring retained.

# Copies of Performance Evaluation available from jpilot@pilotims.com

# OH&S Performance Evaluation (9)

- 9. Internal audit planned frequency changes, performance improvements, risks, opportunities
- 10. Audit findings communicated to management, workers & worker representatives
- 11. Nonconformities appropriate action(s) taken
- 12. Top management review audit findings, follow up on corrective actions from previous audits
- 13. Evaluate incidents, corrective actions, worker engagement, opportunities for continual improvement.

# **Management Review (9.3)**



#### Areas added to this clause include:

- taking into account strategic direction of organization
- including trends & indicators
- issues concerning external providers & interested parties
- adequacy of resources
- effectiveness of actions to address risks & opportunities



Ref:

# New/Updated changes Improvement

## Improving Performance

 Review results from analysis & evaluation, internal audits and management reviews when taking actions to improve performance.

## 17. Incidents, Nonconformity & Corrective Action

No reference to "preventive action"

#### 18. Continual Improvement

- Suitability, adequacy & effectiveness
- Communicate with workers on improvements

# Safety at Work..... Not here



Maintenance Team



Car mechanics

#### **Incidents**



Evaluate incidents with the **participation of workers** & other relevant interested parties.

**Determine & implement any actions needed**, including corrective action, in accordance with the "hierarchy of controls" and the "management of change".

**Assess** OH&S risks related to new or changed hazards, **prior to taking action**.

**Communicate** the documented information on the incident to relevant **workers & worker representatives** (applicable

# **ISO 45001 Standard Framework for Managing**

## **Performance depends on what?**

# Key factors assist in effectiveness & ability to achieve objectives:

- Integration with other MS i.e. Quality, Environment
- Top management leadership, commitment
- Consultation & participation of workers
- Effective processes for identification of hazards, risk & taking advantage of opportunities
- Understanding Requirements Context of organization, needs of workers, legal & other requirements
- Clear Policy, strategic objectives for OH&S
- Processes for communication, consultation
- Allocation of resources for its sustainability
- Continual evaluation, monitoring to improve performance



#### **DNV-GL**

# Correspondence ISO 45001 & OHSAS 18001

#### OHSAS 18001:2007 to ISO 45001:2018 Correspondence Yellow indicates differences

OHSAS 18001:2007 ISO 45001:2018

# Copies of correspondence available from jpilot@pilotims.com

OHSAS 18001:2007 to ISO 45001:2018 Correspondence Yellow indicates differences

OHSAS 18001:2007	ISO 45001:2018

0	Introduction	0	In	troduc	ction
1	Scope	1	Scope		
2	Normative References	2	Normative References		
3	Terms & definitions	3	Te	erms 8	definitions
4	EMS Requirements	4	С	ontext	of Organization
		4.1	Co	ontext	nding Organization & its
		4.2	Ur	nderstar	nding Needs &
			l		OHSAS 18001:20
4.1	General Requirements	4.3 4.4	C		Ye
		5	L		0110404004-00
		5.1	L		OHSAS 18001:20
4.2	OH&S Policy	5.2	C		
	4.4.1 Resources, roles, responsibility & authority	5.3	C F		
			(:	4.5	Checking
	4.4.3.1 Communication 4.4.3.2 Participation & Consultation	5.4	٧	4.5.1	Performance Measurer Monitoring
4.3	Planning	6	F		
		6.1	A	4.5.2	
		6.1.1	C	4.5.3	Incident Investigation,
4.3.1	Hazard Identification, Risk Assessment & Determining Controls	6.1.2	F ₽		Nonconformity, Correct  & Preventive Action  4.5.3.1 Incident Investion
4.3.2	Legal & Other Requirements	6.1.3	E n		4.5.3.2 Nonconformity, action & preventive acti
	0	6.1.4	F	4.5.4	Control of Records
4.3.3	Objectives & <u>Programme(s)</u>	6.2 6.2.1 6.2.2	(		
		0.2.2	Ċ	4.5.5	Internal Audit

4.5	Checking	9	Performance Evaluation
4.5.1	Performance Measurement & Monitoring	9.1	Monitoring, Measurement, Analysis & Performance Evaluation
		9.1.1	General
4.5.2		9.1.2	Evaluation of Compliance
4.5.0	Incident Investigation, Nonconformity, Corrective Action  & Preventive Action  4.5.3.1 Incident Investigation  4.5.3.2 Nonconformity, corrective action & preventive action		10.1 Incident, Nonconformity & Corrective Actions (see 10)
4.5.4	Control of Records		7.5.2 Creating & Updating 7.5.3 Control of Documented Information
4.5.5	Internal Audit	9.2	Internal Audit
		9.2.1	General
		9.2.2	Internal Audit Program
4.6	Management review	9.3	Management Review
		10	Improvement
		10.1	General
		10.2	Incident, non-conformity &

OHSAS 18001:2007 to ISO 45001:2018 Correspondence Yellow indicates differences

ISO 45001:2018

10.3 Continual Improvement

OHSAS 18001:2007

4	Implementation & Operation	7	Support
4.1	Responsibility Accountability & Authority		Resources (5.3 Organizational Roles, Responsibilities & Authorities)
4.2	Competence, Training & Awareness	7.2 7.3	Competence Awareness
4.3	Communication, Participation & Consultation 4.4.3.1 Communication 4.4.3.2 Participation & Consultation	7.4 7.4.1 7.4.2 7.4.3	Communication General Internal communication External communication
4.4	Documentation	7.5 7.5.1	Documented Information General
4.5 5.4	Control of Documentation Control of Records	7.5.2 7.5.3	Creating & Updating Control of Documented Information
4	Implementation & Operation	8	Operation
4.6	Operational Control	8.1 8.1.1 8.1.2	Operational Planning & Control General Eliminating hazards & reducing OH&S risks
		8.1.3	Management of Change
4.7	Emergency Preparedness & Response	8.1.4 8.6	Procurement Emergency Preparedness & Response

#### **DNV-GL**

# Pilot's Three I's "Identify, Insure, Improve" ™

# **Implementing OH&S MS**

3 I's can apply to MS & each element to improve OH&S performance to achieve intended outcomes.

Information

Updating

7.5.1 General

7.5.2 Creating &

7.5.3 Control of

Consultation &

Participation of

workers

them

6.2.1 Objectives

6.2.2 Planning

8.2 Emergency

Response

Preparedness &

9.3 Management

Review

# Step 1: IDENTIFY

- 1. Scope
- 2. References
- 3. Terms & Definitions

## Identify

- 4. Context of Organisation
- 5. Leadership & Worker Participation
- 4.1 Understanding Organisation & Its Context
- 5.1 Leadership & Commitment

5.2 OH&S

Organizational

Responsibilities

& Authorities

Policy

5.3

Roles.

- 4.2 Understanding Needs & Expectations of Workers & Interested Parties
- 4.3 Scope

4.4 OH&S MS

5.4 Consultation & Participation of workers

#### 6. Planning

- 6.1 Actions to Address Risks & Opportunities
- 6.1.1 General
- 6.1.2 Hazard Identification & Assessment of Risks & Opportunities
- 6.1.3 Legal & Other Requirements
- 6.1.4 Planning action
- 6.2 OH&S Objectives & Planning to achieve them
- 6.2.1 Objectives
- 6.2.2 Planning

Step 2: INSURE



Step 3: IMPROVE



# **Polling Questions**

# **Polling Question:**

What type of guidance do you feel you needed?

- Integration help
- Implementation help
- Training
- Certification

# **Contact Us**

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#### **Resources:**







## References | Documents & Pictures

#### **Excerpts & references:**

- 1. ISO International Standard, ISO 45001:2018, ISO copyright, Geneva
- 2. Pilot Performance Resources Management Inc., ISO 45001:2018 Training. Pilot's "Three I's Identify, Insure, Improve" TM.
- 3. "Driving Sustainability to Business Success", Jayne Pilot, publisher, Wiley.
- 4. Pictures: "no copyright infringement is intended"

Objectives & Measurement <a href="https://infinitymgtgroup.files.wordpress.com/2013/12/success1.jpg">https://infinitymgtgroup.files.wordpress.com/2013/12/success1.jpg</a>

Knowledge <a href="http://14.139.121.106/OKGW/images/Knowledge.png">http://14.139.121.106/OKGW/images/Knowledge.png</a>

Competence <a href="http://2012books.lardbucket.org/books/a-primer-on-communication">http://2012books.lardbucket.org/books/a-primer-on-communication</a>

studies/section 01/d77ca5c5eca1dfe8ed95fc5fee401467.jpg

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http://rapidcommunicationsltd.wordpress.com/

Performance <a href="http://www.resiliencengine.com/performance-image/">http://www.resiliencengine.com/performance-image/</a>

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Performance http://www.evaluationforms.org/wp-content/uploads/Performance-Evaluation-Process-z.jpg

Management Review <a href="http://isorequirements.com/iso-9001-5.6.2">http://isorequirements.com/iso-9001-5.6.2</a> review input.html;

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