



**ISO 45001 LEAD AUDITOR
REFRESHER TRAINING
FOR ENVIRONMENTAL SPECIALISTS**

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
ENVIRONMENTAL SPECIALIST CURRICULUM





**OPERATION
FOR ENVIRONMENTAL PROFESSIONALS**

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LEARNING OBJECTIVES





- ISO 45001:2018 clause 8 Operation
- 8.1 Operational Planning and Control
- 8.1.2 Eliminating hazards and reducing OH&S risks
- Hierarchy of controls
- 8.1.3 Management of change
- 8.1.4 Procurement
- 8.1.4.2 Contractors
- 8.1.4.3 Outsourcing
- 8.2 Emergency preparedness and response

ISO 45001:2018 CLAUSE 8 OPERATION

Clause 8: Operation provides guidance on the operational planning and control requirements relating to the OH&S management system. Once it has gained an understanding of its OH&S hazards, the organization should implement the operational controls that are necessary to manage the risks associated with its activities and comply with applicable health and safety legal requirements.

The organization can plan, implement and control its operational processes by establishing operating criteria and control the processes in accordance with these operating criteria.

This clause deals with the execution of the plans and processes that are the subject of previous clauses. Operational planning and controls should be established to meet the requirements of the OH&S management system including controls to reduce OH&S risks to levels as low as reasonably practical.



8.1 OPERATIONAL PLANNING AND CONTROL

The organization must plan, implement, control and maintain the processes needed to meet requirements of the OH&S management system and to implement the actions determined in Clause 6. The organization should establish the criteria for the processes. The organization must implement the control of the processes in accordance with the criteria.

It must maintain and retain documented information to the extent necessary to have confidence that the processes have been carried out as planned. It must adapt its work as per the need of workers. At multi-employer workplaces, the organization shall coordinate the relevant parts of the OH&S management system with the other organizations.

Operational planning and control of the processes need to be established and implemented as necessary to enhance occupational health and safety, by eliminating hazards or, if not practicable, by reducing the OH&S risks to levels as low as reasonably practicable for operational areas and activities.



8.1 OPERATIONAL PLANNING AND CONTROL+

Operational Planning and Control is the method in which the organization determines what is required for each process and the method in which requirements are controlled to ensure workers are protected from harm.

Operational Planning and Control is achieved by identifying the criteria for each process which may include:

- ✓The boundaries of each process and how they interact
- ✓What resources are required to manage the process including leadership, equipment, time, human (competency and training aspects) and financial
- ✓What documented information is required to aid management of the process including procedures and safe systems of work
- ✓The method in which changes to the process are planned and controlled including unintended events
- ✓Application of legal and other requirements or manufacturer's instructions for equipment
- ✓Engineering controls, for example, interlocked guards and exhaust systems



8.1 OPERATIONAL PLANNING AND CONTROL+

The organization must also consider the adaptation of the work environment to ensure it is suitable and sufficient for all workers. Adaptation in broad terms may be the induction of new workers or ergonomically changed processes to protect workers from harm and improve process efficiency.

Life Cycle – Operational Planning and Control



8.1.2 ELIMINATING HAZARDS AND REDUCING OH&S RISKS

The hierarchy of controls is intended to provide a systematic approach to enhance occupational health and safety, eliminate hazards, and reduce or control OH&S risks. Each control is considered less effective than the one before it. It is usual to combine several controls in order to succeed in reducing the OH&S risks to a level that is as low as reasonably practicable. The following examples are given to illustrate measures that can be implemented at each level.

Elimination: removing the hazard; stopping using hazardous chemicals; applying ergonomics approaches when planning new workplaces; eliminating monotonous work or work that causes negative stress; removing fork-lift trucks from an area.

Substitution: replacing the hazardous with less hazardous; changing to answering customer complaints with online guidance; combating OH&S risks at source; adapting to technical progress (e.g. replacing solvent-based paint by water-based paint); changing slippery floor material; lowering voltage requirements for equipment.

8.1.2 ELIMINATING HAZARDS AND REDUCING OH&S RISKS +

Engineering controls, reorganization of work, or both: isolating people from hazard; implementing collective protective measures (e.g. isolation, machine guarding, ventilation systems); addressing mechanical handling; reducing noise; protecting against falls from height by using guard rails; reorganizing work to avoid people working alone, unhealthy work hours and workload, or to prevent victimization.

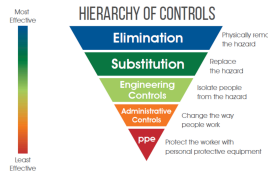
Administrative controls including training: conducting periodical safety equipment inspections; conducting training to prevent bullying and harassment; managing health and safety coordination with subcontractors' activities; conducting induction training; administrating forklift driving licences; providing instructions on how to report incidents, nonconformities and victimization without fear of retribution; changing the work patterns

Personal protective equipment (PPE): providing adequate PPE, including clothing and instructions for PPE utilization and maintenance (e.g. safety shoes, safety glasses, hearing protection, gloves).

HIERARCHY OF CONTROLS

The organization should apply the hierarchy of control measures for the elimination of hazards and the reduction of OH&S risks. The hierarchy of controls provides a structured approach to eliminating hazards and reducing or controlling OH&S risks. This approach involves prioritizing control actions in a sequential manner. Each control is considered less effective than the one above it. It is customary to combine several controls in order to effectively reduce the OH&S risks to a level that is as low as reasonably practicable.

Having chosen the methodology for risk assessment determined in clause 6.0, the organization will use the 'Hierarchy of Controls' outlined in section 6 to eliminate or reduce hazards to the lowest practicable risk. It is essential that when conducting risk assessment workers, including external providers, are competent. On completion of risk, assessment results should be communicated with those workers directly affected within the operation and to aid the development of control measures.



8.1.4 PROCUREMENT

The procurement processes should be used to determine, assess and eliminate hazards, and reduce OH&S risks associated with, for example, products, hazardous materials or substances, raw materials, equipment, or services before their introduction into the workplace.

The organization's procurement processes should address requirements for, for example, supplies, equipment, raw materials, and other goods and related services purchased by the organization to conform to the organization's OH&S management system. The process should also address any needs for consultation and communication.

The organization should verify that equipment, installations, and materials are safe for use by workers by ensuring:

1. equipment is delivered according to specification and is tested to ensure it works as intended;
2. installations are commissioned to ensure they function as designed;
3. materials are delivered according to their specifications;
4. any usage requirements, precautions or other protective measures are communicated and made available.

8.1.4.2 CONTRACTORS

The need for coordination recognizes that some contractors (i.e. external providers) possess specialized knowledge, skills, methods, and means. Examples of contractor activities and operations include maintenance, construction, operations, security, cleaning and a number of other functions. Contractors can also include consultants or specialists in administrative, accounting and other functions. Assignment of activities to contractors does not eliminate the organization's responsibility for the occupational health and safety of workers.

An organization can achieve coordination of its contractors' activities through the use of contracts that clearly define the responsibilities of the parties involved. An organization can use a variety of tools for ensuring contractors' OH&S performance in the workplace (e.g. contract award mechanisms or pre-qualification criteria which consider past health and safety performance, safety training, or health and safety capabilities, as well as direct contract requirements).

8.1.4.2 CONTRACTORS

When coordinating with contractors, the organization should give consideration to the reporting of hazards between itself and its contractors, controlling worker access to hazardous areas, and procedures to follow in emergencies. The organization should specify how the contractor will coordinate its activities with the organization's own OH&S management system processes (e.g. those used for controlling entry, for confined space entry, exposure assessment, and process safety management) and for the reporting of incidents.

The organization should verify that contractors are capable of performing their tasks before being allowed to proceed with their work; for example, by verifying that:

- 1.OH&S performance records are satisfactory;
- 2.qualification, experience and competence criteria for workers are specified and have been met (e.g. through training
- 3.Resources, equipment, and work preparations are adequate and ready for the work to proceed.

8.1.4.3 OUTSOURCING

When outsourcing the organization needs to have control of the outsourced functions and processes to achieve the intended outcomes of the OH&S management system. In the outsourced functions and processes, the responsibility for conforming to the requirements of this document is retained by the organization.

The organization should establish the extent of control over outsourced function(s) or processes based upon factors such as:

- ✓the ability of the external organization to meet the organization's OH&S management system requirements.
- ✓the technical competence of the organization to define appropriate controls or assess the adequacy of controls.
- ✓the potential effect the outsourced process or function will have on the organization's ability to achieve the intended outcome of its OH&S management system.
- ✓the extent to which the outsourced process or function is shared.
- ✓the capability of the organization to achieve the necessary control through the application of its procurement process.
- ✓opportunities for improvement.

8.2 EMERGENCY PREPAREDNESS AND RESPONSE

Emergency preparedness plans can include natural, technical and man-made events that occur inside and outside normal working hours.

This Clause deals with emergency preparedness and response and is one of the most critical clauses of the standard. Having a defined and efficient process in the event of an incident or accident can be central to ensuring that the effect is mitigated and reduced.

Therefore, while preventing incidents and accidents is the primary concern of an OHSAS system, responding to them and ensuring an emergency response plan is in place is equally important. So, given that most organizations will have employees and contractors, visitors, partners, and neighbours and will have to call on emergency services in the event of an accident, it is clear that there are many stakeholders to consider and make provisions for if your emergency response plan is to be truly effective.

Emergency preparedness and response is a key element in the mitigation of occupational health & safety risk. The standard informs us that it is the responsibility of the organization to be prepared, and a number of elements should be considered and planned for.

8.2 EMERGENCY PREPAREDNESS AND RESPONSE +



Actions to mitigate incidents must be developed, as well as internal and external communication methods and appropriate methods for emergency response. Consideration of varying types of occupational health & safety incidents needs to be made, as do root cause analysis and corrective action procedures to respond to incidents after they occur. Regular emergency response testing and relevant training need to be considered and undertaken, and assembly routes and evacuation procedures defined and communicated.



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