Hazard Identification & Assessment

ISO 9001:2015 & ISO 45001:2018

Contents

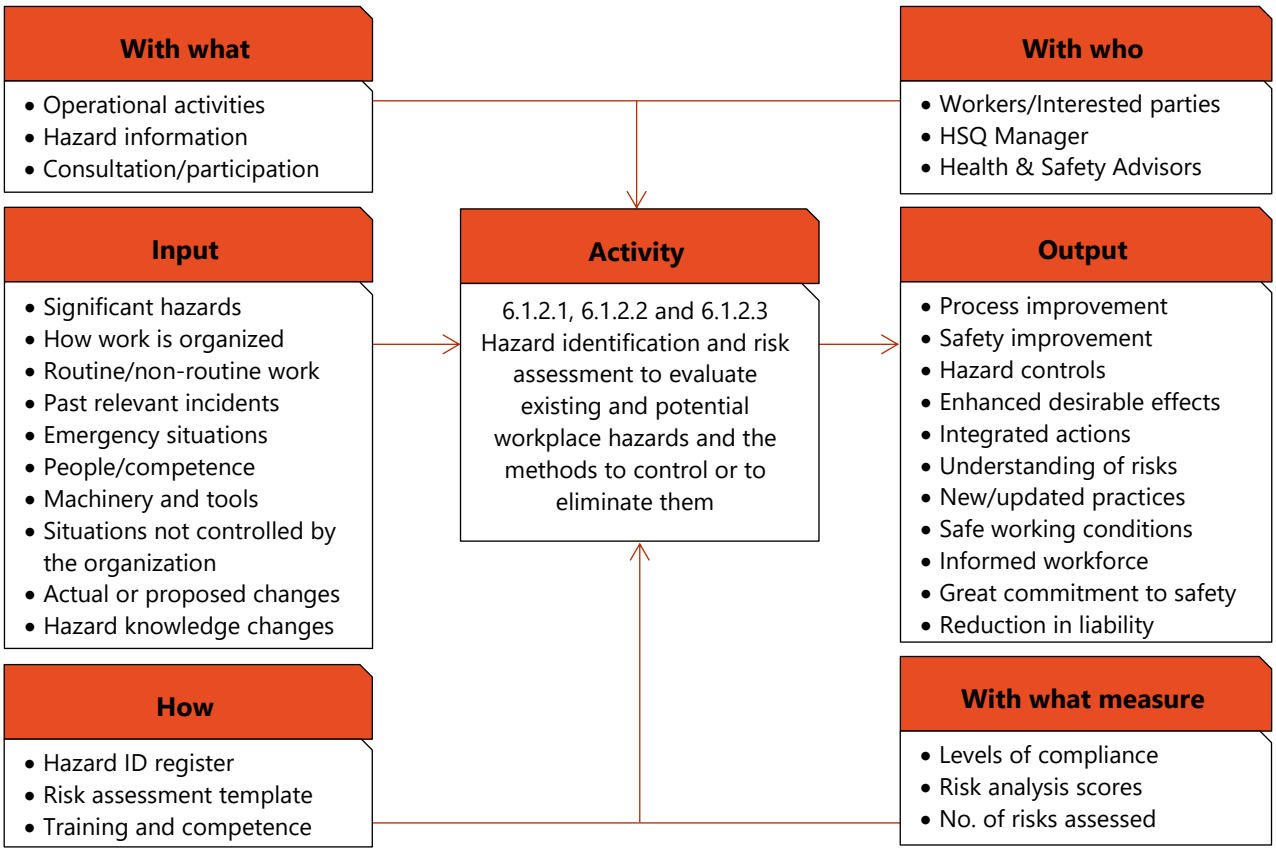
1 Procedure

1.1 Introduction & Purpose

The purpose of this procedure is to outline your organization's ongoing and proactive methodology for the identification of operational hazards and the assessment of perceived risks to evaluate both existing and potential workplace hazards, and to determine the methods required to mitigate or eliminate the risks arising.

1.1.1 Process Overview

The process overview (turtle diagram) provides internal and external auditors, process owners, and participants an overview of the elements that are required by the hazard identification and assessment process:



1.1.2 References

Standard	Title	Description
BS EN ISO 9000:2015	Quality management systems	Fundamentals and vocabulary
BS EN ISO 9001:2015	Quality management systems	Requirements
BS EN ISO 45001:2018	OH&S management systems	Requirements
BS EN ISO 19011:2018	Auditing management systems	Guidelines for auditing

1.1.3 Terms & Definitions

Term	Definition
Hazard	A source of potential harm or a situation with a potential to cause loss or harm
Hazard Identification	The process of examining each work area and task to identify hazards inherent to work
Hazard ID Register	A formal record that captures all known hazards and potential risks to be assessed
Worksite inspection	Regular inspection of work areas to assist with the monitoring/identification of hazards
Risk Assessment	Determining the risk of a hazard in combination with its likelihood and severity

7. Conducting work area inspections.

1.3.1.3 Health & Safety Advisor

The Health & Safety Advisor/Coordinator are responsible for:

1. Ensuring the areas under their control comply with legislative requirements;
2. Understanding the hazards and risks associated with operations;
3. Undertaking risk assessments, job hazard analysis, manual handling assessments, etc.;
4. Updating the Hazard Register to ensure continued relevance;
5. Conducting work area inspections;
6. Ensuring that appropriate resources and processes are in place to eliminate or minimise these risks.

1.3.1.4 Workers & Contractors

All Workers & Contractors are responsible for:

1. Cooperating and complying with this procedure;
2. Using control measures as required, and any other actions, needed to protect health and safety;
3. Providing effective and constructive information and feedback to aid the risk management process;
4. Knowing how to fit PPE correctly, how to inspect it, how often to replace, maintain and store PPE;
5. Proactively identify and report hazards;
6. Participating in works area inspections;
7. Immediately report unsafe acts or situations to their Manager, Supervisor or Health & Safety Advisor.

1.4 Identifying Hazards

1.4.1 Methodology

Hazards exist at all levels in the organization and are detectable through many sources including reporting systems, inspections, audits, brainstorming sessions and expert judgement. Our goal is to proactively identify hazards and define their key characteristics before they lead to accidents, incidents or other safety-related occurrences.

The two main methodologies by which we identify hazards associated with our activities are:

1. **Lagging/Reactive**. This methodology involves analysis of past outcomes or events. Hazards are identified through an investigation of safety occurrences. Incidents and accidents are an indication of system deficiencies and therefore used to determine which hazard(s) contributed to the event.

   Hazards are also identified through safety data analysis to identify adverse trends and make predictions about emerging hazards, etc. This information is retained in the *Hazard Identification Register*.
2. **Leading/Proactive**. This methodology involves collecting safety data of lower consequence events or process performance and analysing the safety information or frequency of occurrence to determine if a hazard could lead to an incident.

   The safety information for proactive hazard identification primarily comes from job safety analysis reports, active safety monitoring, workplace inspections, observation, discussion, safety reporting systems and via the safety assurance function.

Identified hazards and their potential consequences are documented and feed into the risk assessment processes. The hazard identification process considers all possible hazards that may exist within the scope of our operations and activities, including interfaces with other systems, both within and external to our organization.

2. Failure Mode Effects Analysis (FMEA)
3. Manual Handling Risk Assessment
4. Chemical Use Risk Assessment (COSHH)
5. Display Screen Equipment/Visual Display Unit Assessment
6. Noise Risk Assessment
7. Atmospheric Hygiene Assessment
8. Machinery Risk Assessment
9. Fire Risk Assessment
10. Ergonomic Risk Assessment
11. Legionella Risk Assessment
12. Work at Height Risk Assessment

1.5.2 Likelihood (S1)

There is no one simple or single way to determine the level of risk. Ranking hazards requires the knowledge of workplace activities, the urgency of situations, and objective judgment. Severity and likelihood estimations are established giving due consideration to the effectiveness of existing control measures.

Determine the likelihood of harm occurring. The level of risk will increase as the likelihood of harm and its severity increases. The likelihood of harm occurring may be affected by how often the task is completed, in what conditions, how many people are exposed to the hazard and for what duration.

Score	Likelihood	Likelihood Rating		
		Description	Percentage	Probability
1	**Rare**	Could occur only occur in exceptional circumstances	<0.1%	1 in 1,000
2	**Unlikely**	Could occur at some time but only in unusual circumstances	1%	1 in 100
3	**Possible**	Not expected to occur under normal circumstances	10%	1 in 10
4	**Likely**	Will probably occur in most circumstances	50%	1 in 2
5	**Certain**	Expected to occur in most circumstances	>95%	1 in 1

1.5.3 Severity (S2)

Evaluation of how severe the harm could be. This includes looking at the types of injuries, illnesses, harm or damage that can result from the hazard, the number of people exposed, and the possible chain effects from exposure to the hazard.

Score	Severity	Severity of Risk (Degree of Harm)
1	**Minor**	Single minor injury to one person. Minor reversable injury of minor concern. First aid or no treatment required. No lost time. Record in the Accident Book, review risk assessment, training procedures and processes. Returned to full duties.
2	**Moderate**	Medically treated injury. Reversible injury. Requires treatment but does not lead to restricted duties. May require the use of Emergency Procedures, First Aiders, etc. Inability to complete rest of shift or modified duties.
3	**Serious**	Severe but reversible health effects, lost time, over 3-day reportable injury. Reversible injury or moderate irreversible impairment. Statutory RIDDOR reporting required. Internal incident investigation. HSE informed. One or more entire shift missed as a result.
4	**Major**	Severe irreversible damage to one or more persons. Severe and irreversible health effects or disabling illness. Major injury resulting in long-term incapacity/semi-permanent injury, hospital >/= 3-day absence. Internal incident investigation is required. HSE informed.