

## Using the Hazard Register

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

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.

Assess the potential hazards in the workplace to determine:

- The level of risk of the hazard;
- Whether the hazard is considered moderate or major;
- The priority level for establishing controls.

Hazard assessment is determined by looking at the documentation, history, potential for injury, exposure of workers and severity, of the identified hazard.

Begin by selecting a work process, work area or job, to assess for hazards.

- Review documentation such as inspection reports, illness/injury reports, Health and Safety Committee minutes, policy and procedures, reports, safe operating procedures, checklists, job descriptions and/or routines, etc.
- Walk through the work area. Talk to employees who do the job or work in the area.
- List the potential hazards or accidents that could happen while doing this process or job. A hazard is something with the potential to cause harm or injury.
- Determine the groups of people that may present a different level of risk such as young or inexperienced workers, persons with disabilities, or new or expectant mothers.
- List the current controls in place, if any. controls are the things which control, eliminate or reduce the exposure to the hazard – such as guards, procedures, checklists, training, signs, personal protective equipment, etc.
- Assess the **severity** and select the description that best matches the potential consequences, if an accident should happen involving the hazard
- Assess the **likelihood** of occurrence and select the description that best matches the likelihood that the hazard would occur in the process.

The initial risk rating is the combination of the Probability of a specific unwanted event happening and the Consequences if it should occur. All hazards rated “Moderate” or “Major” must be prioritized for control and/or elimination.

Risk assessments should be undertaken with varying degrees of detail depending on the type of moderate or major hazard and the information, data and resources available. It can be as simple as a discussion with your workers or involve specific risk analysis tools and techniques developed for specific risks or recommended by safety professionals.

### Hazard Register

Select a work process, work area or specific activity and identify hazards. Review documentation such as inspection reports, illness/injury reports, Health and Safety Committee minutes, policies and procedures, inventory reports, safe operating procedures, checklists, job descriptions and routines, etc. Walk through the work area and observe the practice and talk to the workers who do the job in the area.

List the potential hazards or incidents that could happen while doing a task or job. A hazard is something with the potential to cause harm or injury. All hazards rated as 'Moderate' and 'Major' scores must be considered significant and prioritized for risk assessment in order to determine appropriate controls.

Ref.	Date Raised	Process or Activity	Parties Affected	Hazard Description	Consequences	Current Controls	Pre-control Score			Suggested Control Measure	Actual Control Measure	Objectives	Opportunities	Process Owner	Post-control Score			Date Implemented	Comments
							Severity	Likelihood	Initial Risk Rating						Severity	Likelihood	Residual Risk Rating		
H1	02-Feb-24	Process 1					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable				Name1	Minor	Unlikely	Minor	13-Mar-24	
H2	03-Feb-24	Process 2					Minor	Likely	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Negligible	Remote	Minor		
H3	04-Feb-24	Process 3			None		Major	Almost Certain	Major	Eliminate or reduce the risk by introducing engineering controls, formal risk assessment is required					Minor	Likely	Moderate		
H4	05-Feb-24	Process 6					Minor	Remote	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Major	Unlikely	Moderate		
H5	06-Feb-24	Process 5					Minor	Almost Certain	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Major	Remote	Minor		
H6	07-Feb-24	Process 3					Minor	Highly Likely	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Minor	Unlikely	Minor		
H7	08-Feb-24	Process 7					Minor	Likely	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Minor	Remote	Minor		
H8	09-Feb-24	Process 8			None		Catastrophic	Unlikely	Major	Eliminate or reduce the risk by introducing engineering controls, formal risk assessment is required					Major	Unlikely	Moderate		
H9	10-Feb-24	Process 3					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Minor	Unlikely	Minor		
H10	11-Feb-24	Process 2					Serious	Remote	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Serious	Remote	Minor		
H11	12-Feb-24	Process 9					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Minor	Unlikely	Minor		
H12	13-Feb-24	Process 10					Minor	Likely	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Major	Unlikely	Moderate		
H13	14-Feb-24	Process 11			None		Catastrophic	Unlikely	Major	Eliminate or reduce the risk by introducing engineering controls, formal risk assessment is required					Minor	Unlikely	Minor		
H14	15-Feb-24	Process 12					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Serious	Remote	Minor		
H15	16-Feb-24	Process 13					Serious	Remote	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Minor	Unlikely	Minor		
H16	17-Feb-24	Process 14					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Major	Unlikely	Moderate		
H17	18-Feb-24	Process 15					Minor	Likely	Moderate	Use administrative controls to reduce the risk, develop a SSoW, formal risk assessment is required					Minor	Unlikely	Minor		
H18	19-Feb-24	Process 1			None		Catastrophic	Unlikely	Major	Eliminate or reduce the risk by introducing engineering controls, formal risk assessment is required					Serious	Remote	Minor		
H19	20-Feb-24	Process 4					Minor	Unlikely	Minor	Continue to review and reduce the risks wherever it is reasonably practicable					Minor	Unlikely	Minor		
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## Hazard Assessment Scoring

### Risk Rating

Likelihood	Severity of Impact				
	Negligible	Minor	Serious	Major	Catastrophic
Remote	1	2	3	4	5
Unlikely	2	4	6	8	10
Likely	3	6	9	12	15
Highly likely	4	8	12	16	20
Almost certain	5	10	15	20	25

### Likelihood

Score	Likelihood	Likelihood Rating		
		Description	Percentage	Probability
1	Remote	May only occur in exceptional circumstances	<0.1%	1 in 1,000
2	Unlikely	Could occur during a specified time period	1%	1 in 100
3	Likely	Might occur within a given time period	10%	1 in 10
4	Highly Likely	Will probably occur in most circumstances	50%	1 in 2
5	Almost Certain	Expected to occur in most circumstances	>95%	1 in 1

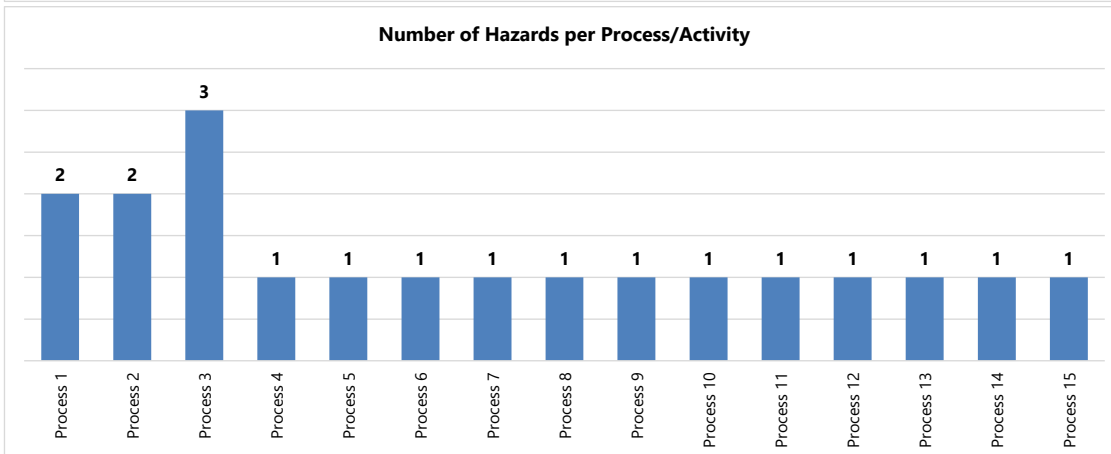
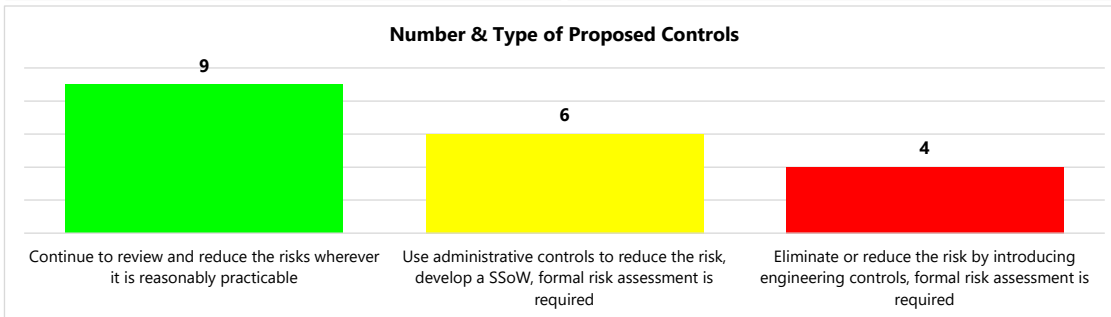
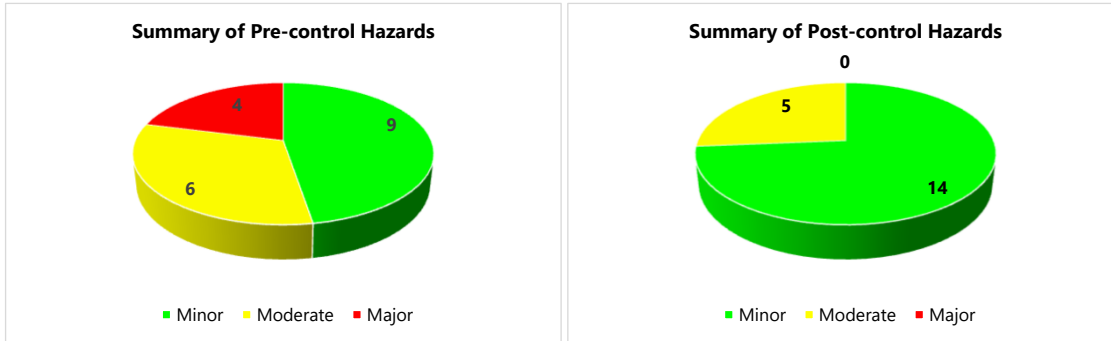
### Severity

Score	Impact	Severity of Impact	
		Degree of Harm	
1	Negligible	Minor injury not requiring first aid or no apparent injury/adverse outcome, near miss	
2	Minor	Temporary minor injury/illness/first aid treatment needed, referral to A&E or GP	
3	Serious	Semi-permanent injury, over 3 day reportable injury, RIDDOR reportable	
4	Major	Major injuries, or long term incapacity/Semi-permanent injury, Major specified injury RIDDOR. Hospitalization >= 3 day absence	
5	Catastrophic	Death or major permanent incapacity. Multiple fatalities. Multiple permanent disabilities	

### Exposure

Exposure	Impact Exposure	
	Management Control Action (MCA)	Timeframe
1 to 4 Minor	<p>This LoR is generally considered as sufficiently low, insignificant and adequately controlled. Continue to review and reduce the risks wherever it is reasonably practicable, as per cost and legal requirements.</p> <p>Monitor risk controls to ensure that they are maintained at their present level or at a lower level of risk that current day-to-day work practices can effectively manage.</p> <p>Ongoing monitoring and management required by workers and line supervisors using routine procedures.</p>	<p>Manage by routine procedures at operational level.</p> <p>Supervisor review required.</p>
5 to 12 Moderate	<p>Develop a Safe System of Work, prepare Job Safety Analysis. Formal risk assessment is required. The risk must be reduced to ALARP (As-Low-As-Reasonably-Practicable).</p> <p>Proposed risk controls should be implemented if the resources, costs, time or effort are in proportion to the benefits that can be potentially achieved. The following process must be applied:</p> <ol style="list-style-type: none"> <li>Consult hazard register, ensure controls are effectively implemented;</li> <li>Confirm activity, risk assessment and controls with the Supervisor;</li> <li>Seek advice from the H&amp;S Advisors, implement additional controls;</li> <li>Supervisor confirms controls, assess and approve/reject the activity.</li> </ol>	<p>Supervisor review required.</p> <p>H&amp;S Manager review required.</p>
15 to 25 Major	<p>Imperative to eliminate or reduce risk to a lower level by the introduction of controls. Formal risk assessment is required. A LoR that is considered unacceptable regardless of the benefits associated with the activity.</p> <p>Except where there are exceptional reasons or extraordinary circumstances, measures to reduce the risk are essential regardless of the resources, costs, time or effort required.</p>	<p>Top management approval.</p>

## Summary Charts



## Common Safety Hazards

No.	Description of Economic Sector/Activity	Examples of Common OHS Hazards
1	Mining and quarrying	Rock fall, fire, explosion, mobile vehicles, machinery, falls from height, entrapment and electrocution, noise, vibration, exposure to radon, crystalline silica exposure, coal dust, hazardous chemicals, working in confined spaces, etc.
2	Food products, beverages and tobacco	Exposure to pesticide, biologic and chemical hazards, mobile vehicles and equipment, tools, machinery, cold areas (freezer), hot media, repetitive stress, etc.
3	Textiles and textile products	Machinery and equipment, exposure to dyes and chemicals, wool and flock dust, fire, explosion, weight loading and unloading, noise, etc.
4	Leather and leather products	Exposure to chromium and other hazardous chemicals, machinery, pressure equipment, unsafe workplace, weight loading and unloading, noise, etc.
5	Wood and wood products	Exposure to hazardous chemicals, wood dust, various machinery and tools, fire, explosion, etc.
6	Pulp, paper and paper products	Exposure to hazardous chemicals, plant and pressure equipment, machinery, fire, explosion, unsafe workplace (heat radiation, dust), noise, etc.
7	Publishing companies	Video Display Terminal (VDT), body posture, lighting, repetitive stress, etc.
8	Printing companies	Exposure to hazardous chemicals, machinery, noise
9	Manufacture of coke and refined petroleum products	Exposure to hazardous chemicals, machinery, plant and equipment, pressure equipment, fire, explosion, working in confined spaces, working at height, noise, explosion, dust, etc.
10	Nuclear fuel	Exposure to radiation/radioactivity, exposure to hazardous chemicals, plant and equipment, etc.
11	Chemicals, chemical products and fibers	Exposure to hazardous chemicals, machinery, plant and equipment, pressure equipment, fire, explosion, working in confined spaces, working at height, noise, explosion, dust, etc.
12	Pharmaceuticals	Exposure to biological and chemical hazards, exposure to radiations, plant and pressure equipment, fire, explosion, working in confined spaces, etc.
13	Rubber and plastic products	Machinery, plant and pressure equipment, exposure to chemical hazards, fire, explosion, noise etc.
14	Non-metallic mineral products	Machinery, plant and pressure equipment, electricity, fire, explosion, hazardous chemicals, noise, paint and coatings, etc.
15	Concrete, cement, lime, plaster etc.	Ground works and excavations work at height, mobile plant and machinery, manual handling, noise, vibration, dust, electricity, fire, explosion, etc.
16	Basic metals and fabricated metal products	Machinery, plant and equipment, pressure equipment, fire, explosion, hazardous chemicals, working at height, noise, paint and coatings, radiation, etc.
17	Machinery and equipment	Machinery, plant and equipment, pressure equipment, hazardous chemicals, paint and coatings, noise, vibration, manual handling, fire, explosion, etc.
18	Electrical and optical equipment	Electrical equipment, laser light, radiation, machinery, burns, fire and explosion associated with overloads or short circuits, work in confined spaces, work at height, etc.
19	Shipbuilding	Machinery, plant and equipment, pressure equipment, fire, explosion, hazardous chemicals, working at height, noise, paint and coatings, radiation, etc.
20	Aerospace	Machinery, plant and equipment, pressure equipment, fire, explosion, hazardous chemicals, working at height, noise, paint and coatings, radiation, etc.
21	Other transport equipment	Plant and equipment, machinery, exposure to chemical hazards, noise, vibration, work at height, work in confined spaces, legionella, etc.
22	Manufacturing not elsewhere classified	Plant and equipment, machinery, exposure to chemical hazards, noise, vibration, work at height, work in confined spaces, legionella, etc.
23	Recycling	Exposure to hazardous chemicals, machinery, plant and equipment, pressure equipment, fire, explosion, working in confined spaces, working at height, noise, explosion, dust, etc.
24	Electricity supply	LV/HV electrical equipment, machinery, fire and explosion associated with overloads or short circuits, work in confined spaces, work at height, etc.
25	Gas supply	Pressure equipment, machinery, fire and explosion associated with loss of containment of gas, toxicity, noise, vibration, work in confined spaces, work at height, etc.
26	Water supply	Plant and equipment, machinery, exposure to chemical hazards, noise, vibration, work at height, work in confined spaces, legionella, etc.
27	Information technology	Visual display units VDU/VDT, body posture, lighting, repetitive stress, etc.
28	Engineering services	Visual display units VDU/VDT, wide variation in function of the specific service.
29	Public administration	Visual display units VDU/VDT, body posture, lighting, ergonomics, wide variation, etc.