40034 Apply health and safety practices in an engineering environment

Kaupae | Level	3
Whiwhinga | Credit	5
Whāinga | Purpose	This skill standard is for people who are required to work safely in an engineering environment. It is intended for workers or learners to complete tasks safely under supervision in a workplace. This skill standard can be used in any engineering programme leading to qualifications and micro-credentials at level 3 and above.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako | Learning outcomes	**Paearu aromatawai |** Assessment criteria
1. Identify and assess all potential hazards for a given task or project, covering the entire duration from project initiation to completion.	a. Identify potential hazards before, during, and after a given task or project.
	b. Communicate identified hazards to relevant stakeholders as per workplace procedures and policies.
	c. Collaborate with others to identify and assess hazards collectively.
2. Assess risks and apply effective controls based on the outcomes of the risk assessment.	a. Conduct risk assessments, recognising the potential consequence and the likelihood of the hazard happening to inform potential control methods required.
	b. Apply control measures based on identified hazards and the risks they pose.
	c. Communicate the results of the hazard and risk assessment and the control methods required to the supervisor.
	d. Perform regular checks on applied controls, adjusting as necessary, and document before and after adjustments, notifying all affected parties.

3. Apply ergonomics to enhance safety and well-being when performing tasks.	a. Identify ergonomic factors that contribute to safety and well-being.
	b. Apply fundamental ergonomic principles to enhance overall safety and well-being during task execution.
4. Apply knowledge of workplace and legislative health and safety documentation to ensure compliance and promote a safe working environment.	a. Identify the different types of health and safety documentation commonly used in the workplace.
	b. Follow established workplace safety and emergency procedures.
	c. Explain why permits and legislative health and safety requirements are essential for ensuring a safe work environment.
	d. Read, follow, and participate in creating Job Safety Analysis (JSA) documentation or equivalent such as Site-Specific Safety Plan (SSSP) or Risk/Hazard Identification and Risk Assessment (HIRA).
	e. Identify and follow workplace accident procedures, protocols, and complete required documentation.
5. Identify and explain roles and responsibilities as per the Health and Safety at Work Act 2015 and maintain a safety culture within the workplace.	a. Identify and carry out your own roles and responsibilities as outlined in the Health and Safety at Work Act 2015.
	b. Explain the roles and responsibilities of the PCBU as outlined in the Health and Safety at Work Act 2015.
	c. Explain the importance of maintaining and promoting a safety culture within the workplace.
	d. Actively engage in health and safety meetings and raise safety concerns with appropriate people and stakeholders at appropriate times.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications

- Evidence presented for assessment against this skill standard must be consistent with safe work practices and be in accordance with applicable industry standards, workplace procedures and legislative requirements.
- Evidence must demonstrate the learner's competence to undertake the skills and knowledge under limited supervision detailed in this skill standard.

- A variety of forms of evidence is accepted, such as photos, signed observation sheets, video recordings, written reports, oral presentations, etc.
- Appropriate, safe facilities, equipment, and resources must be made available to undertake assessment tasks effectively and safely.
- Practical assessment tasks must be verified and signed by a verifier who has relevant current industry expertise.

Definitions

- *Engineering environment* refers to the encompassing conditions, both physical and contextual, wherein engineering tasks or activities occur, directly or indirectly influencing and being influenced by its surroundings.
- *Industry standards* refer to adherence to guidelines set by professional bodies to ensure consistency, quality, and safety, complying with industry regulations and best practices.
- *Legislative requirements* refer to laws enacted by government bodies to ensure worker safety, rights, and welfare, covering areas such as health and safety, employment rights, and environmental protection, with compliance avoiding legal consequences and penalties.
- *Person Conducting a Business or Undertaking (PCBU)* refers to any entity or individual that conducts a business or undertaking, regardless of whether they are a sole trader, partnership, company, association, or government department. PCBU has the primary duty of ensuring health and safety in the workplace, including the health and safety of workers, visitors, and anyone else affected by the work carried out by the business or undertaking.
- *Safe work practices* refer to practices that minimize risks to workers' health and safety, following government WorkSafe legislation. This includes identifying and mitigating risks, providing protective gear and training, and fostering a safety-conscious culture.
- *Workplace procedures* refer to established protocols for smooth operations, dictating task performance and safety measures, promoting consistency and productivity in a safe work environment.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Hazard Identification

- Hazard identification
- Collaborative hazard assessment
- Continuous monitoring of risks and hazards.

Risk Assessment

- Risk assessment
- Job Safety Analysis (JSA) documentation or equivalent such as Site-Specific Safety Plan (SSSP) or Risk/Hazard Identification and Risk Assessment (HIRA).

Control Methods and Application

- Control method types and application
- Workplace safety procedures
- Permits and protocols and documentation importance.

Health and Safety

- Ergonomic application
- Health and safety documentation
- Governmental health and safety compliance
- Health and Safety at Work Act 2015.

Roles and Responsibilities

- Roles and responsibilities as per Health and Safety Act 2015
- Safety culture promotion
- Well-being prioritisation
- Collaborative workplace practices
- Active safety contribution and engagement in meetings.

Communication

- Communication skills.

Incident Management

- Accident reporting
- Workplace accident procedures, protocols, and documentation
- Notifiable event
- Project safety review procedures or Tool-Box meetings.

Rauemi | Resources

- Health and Safety at Work Act 2015 and supporting Regulations. https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html
- WorkSafe New Zealand (2014). The Best Practice Guidelines for the Safe Use of Machinery. Available from https://www.worksafe.govt.nz/topic-and-industry/manufacturing/safe-use-of-machinery/
- Managing health and safety WorkSafe NZ. Available from https://www.worksafe.govt.nz/managing-health-and-safety/
- Ergonomics | WorkSafe

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa | Standard Setting Body	Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai | DASS classification	Engineering and Technology > Mechanical Engineering > Engineering Core Skills
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga | CMR	0013

Hātepe | Process	**Putanga |** Version	**Rā whakaputa |** Review Date	**Rā whakamutunga mō te aromatawai |** Last date for assessment
Rēhitatanga | Registration	1	30 May 2024	N/A
Kōrero whakakapinga | Replacement information	N/A		
Rā arotake | Planned review date	31 December 2029		

Please contact Hanga-Aro-Rau Manufacturing, Engineering, and Logistics Workforce Development Council qualifications@hangaarorau.nz to suggest changes to the content of this skill standard.