

41153 Identify common hazardous substances and safety controls in a construction environment

Kaupae Level	2
Whiwhinga Credit	2
Whāinga Purpose	<p>This skill standard is for people intending to complete qualifications and credentials in construction trades.</p> <p>People with this skill standard have the skills to identify hazardous substances and safety controls in a construction environment.</p> <p>This skill standard contributes to qualifications designed for the construction environment.</p>

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Identify common hazardous substances and safety controls in a construction environment.	a. Common hazardous substances and their likely source are identified.
	b. Potential health risks associated with these substances are described.
	c. The appropriate person or authority to notify when a hazardous substance is found on site is identified.
	d. The use of ventilation and dust suppression systems are demonstrated to control air borne hazards.
	e. Correct personal protective equipment (PPE) is demonstrated to control hazardous substances.

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

Assessment specifications:

Candidates must be capable of identifying and use of standard control measures for hazardous substances commonly found in a construction environment.

Evidence for this skill standard may be scenario based or simulated. Learners may demonstrate the use of control methods without the hazardous substances being physically present.

Common hazardous substances may include silica dust, lead, asbestos, dust, solvent and adhesive, cement dust, diesel exhaust, isocyanates.

Definition:

A *construction environment* is any environment where construction, modification, or maintenance of buildings, structures, or infrastructure assets takes place.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Types of hazardous substances

- Asbestos, silica dust, lead-based paint, solvents, adhesives, glues, oils, paints, chemicals used in construction or renovation.
- Recognition through labels, Safety Data Sheets (SDS), or common knowledge of materials.

Health risks associated with hazardous substances

- Short-term effects: irritation to skin, eyes, respiratory tract; dizziness; nausea.
- Long-term effects: respiratory disease, cancer, neurological damage, organ damage.
- Importance of risk awareness and minimising exposure.

Routine control methods

- Personal protective equipment (PPE) appropriate to the substance (e.g., masks/respirators, gloves, protective clothing, eye protection).
- Handling precautions: avoiding dust inhalation, not eating or drinking near substances.
- Storage: secure, labelled containers; segregation of incompatible substances.
- Disposal: following site rules and local regulations; avoiding environmental contamination.
- Industry best practice guidance.

Reporting and communication procedures

- Correct person/authority on site (e.g., supervisor, health and safety officer).
- Procedures for alerting others: verbal communication, signage, written documentation, incident reporting systems.
- Importance of prompt reporting and following site safety protocols.
- Emergency responses.

Rauemi | Resources

Programme Guidance information available from info@cstisb.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Construction and Specialist Trades Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Planning and Construction > Construction Trades > Core Construction
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	26 February 2026	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2030		

Please contact Construction and Specialist Trades Industry Skills Board at info@cstisb.nz to suggest changes to the content of this skill standard.