

Appendix 4

Source: *Electrotechnology Training Package (UEE07), Volume 2 – Part 1*

Definitions & OHS Glossary

The definitions and glossary is included to provide further elaboration of the meaning of particular words, phrases and norms used in the Training Package, and in particular the competency standards units.

Scope

The Competency Standard Units in this Part of the Training Package cover the Electrotechnology Industry. The definitions provided in the Definitions/ Glossary are those that are to apply to the use of those terms within the Training Package. They are included to provide added clarity of the term and are the meanings generally understood and used by Industry; the regulators, and the community of practitioners.

Application

The information contained in each competency standard unit includes the intended use of the unit for assessment and a training program(s).

References

Regulations

The work functions described by competency standard units in this Training Package may be subject to statutory regulations. Where this is the case the particular regulations will depend on local jurisdictions and knowledge and application of such regulations within the scope of the unit shall be an aspect of evidence in deeming a person competent. Refer to definitions below.

Reference documents

Each part of the Training Package will include a list of reference documents. There is a component of competency which assist in developing training programs and assessing competency, which include relevant legislation, regulation, industrial instruments, codes of practice, guidelines and advisory standards and policies. Examples may include industry preferred training and assessment models, anti-discrimination and equal employment opportunity statutes encompassing application of access, equity and cultural diversity principles associated with under-represented groups. They should be used wherever required and currency is to be assured in their application.

Definitions – Electrotechnology

The definition of terms below form an integral part of the Training Package.

Access permits

A form type document giving formal permission to enter a specified work area when it is safe to do so and is part of the risk control measures for the area.

Accessories

Devices forming part of an electrotechnology system or installation but not including those defined as apparatus

Apparatus

Any device used to convert energy from one form to another and any device used for control or protection of a persons, environment or a system.

Appliance

An energy using device, other than a lamp, in which electricity and/or gas is converted to any other form of energy.

Appropriate person

Individuals with responsibilities for design, installation, maintenance, production or servicing activities or a customer or a person of higher authority.

Note: Examples of an appropriate person is a site manager, a project manager, a line manager, a supervisor, a team leader and a customer's representative.

Approved

Acceptable to an authority having jurisdiction

Assessment of competence

The process of checking and confirming demonstrated performance in carrying out specified work activities and/or functions based on evidence that shows a person has carried out such work safely and to requirements.

Australian Qualifications Framework (AQF)

Australian Qualifications Framework Qualifications described in terms of levels characterised by the outcomes of vocational education and training. The Australian Qualifications Framework is intended to provide a comprehensive, nationally consistent, flexible framework for all qualifications in post-compulsory education and training.

Australian Quality Training Framework (AQTF)

A set of nationally agreed Standards to ensure the quality of vocational education and training services throughout Australia. The AQTF includes two sets of Standards:

1. Standards for Registered Training Organisation
2. Standards for State and Territory Registering/Course Accrediting Bodies.

Authorised

Permission granted by a relevant higher authority to use particular equipment or to carry out specified work.

Authority

Agency representing the interest of another party and with the responsibility to make decisions on their behalf.

Note. Examples are a customer's representative and agencies responsible for implementation of legislation

Cardiopulmonary Resuscitation (CPR)

An emergency life-support procedure using a combination of expired air resuscitation and external cardiac compression.

Checks, functional

The process of verifying that items of equipment operate as intended. Functional checking is used confined to basic systems.

Checks, visual

The process of identifying defects that are apparent to the eye. Visual checking is used confined to basic systems.

Competency

Competency comprises the specification of knowledge and skills and the application of that knowledge and skill to the Standards of performance required in the workplace.

Competency includes all aspects of work performance and not only narrow skills. The four components of competency are: task skills; task management skills; contingency management skills and job/role environment skills.

Competency Standard Unit(s) *See also units of competency*

A competency standard unit is the group of skills and knowledge required by an individual to carry out a useful work function.

A single Competency Standard Unit is not to be confused with a job description that will invariably comprise of a number of competency standard units.

Competency standards are made up of a number of Competency Standard Units. These units describe a key function or role in a particular job function or occupation. Each unit identifies a discrete workplace requirement and includes the knowledge and skills that underpin competency, as well as language, literacy and numeracy and Occupational Health and Safety requirements. A competency standard unit is usually linked to one or more AQF qualifications.

The fields in each competency standard unit and the types of information they contain are given in the following table.

Field Titles in a Competency Standard Unit and the types of information they contain

Field Title	Type of information
Unit code	Unit title
Unit Descriptor	<p>Scope</p> <p>General description of the scope of the work function to which the competency applies and the general abilities needed.</p> <p>License to Practice</p> <p>Indicates how technical standards, codes of practice and regulatory requirements apply to the unit and whether a licence to practice is required.</p>
Prerequisite Units	<p>Competency standard units</p> <p>Specific and general competencies expected to have been achieved prior to undertaking training in the unit.</p> <p>Literacy and numeracy skills</p> <p>Informs the reading, writing and maths skill level needed to achieve competence in the unit (see <i>Appendix 1</i> of this Syllabus).</p>
Employability Skills	<p>Employability Skills</p> <p>Generic competencies related to enabling skills for workplace employment activities</p>
Application of the unit	<p>Application</p> <p>The way in which the unit is intended to be used in a learning program or qualification.</p>
Competency field	<p>Discipline</p> <p>The sector of the electrotechnology industry to which the unit mainly applies.</p>
Elements and Performance Criteria	<p>Elements</p> <p>Outcomes that contribute to a unit.</p> <p>Performance criteria</p> <p>Specify the required levels of performance for each element.</p>
Required skills and knowledge	<p>Essential knowledge and associated skills</p> <p>Knowledge that is either explicit or implicit to effective performance.</p>
Range Statement	<p>Range</p> <p>Range of context and conditions to which performance criteria apply.</p>
Evidence Guide	<p>Evidence guide</p> <p>Assists with the interpretation and assessment of the unit.</p>

Field Title	Type of information
Overview of assessment	<p>Overview</p> <p>Provides a summary of appropriate assessment methods and what they encompass.</p>
Critical aspects of evidence required to demonstrate competency in this unit	<p>Critical Aspects of Evidence</p> <p>Particular knowledge and skills essential to effective performance.</p>
Context and specific resources for assessment	<p>Context</p> <p>Environment and resources acceptable for assessing achievement of competency.</p> <p>Informs of the resources needed when simulating the real work place is considered and indicates when simulation of the workplace may be a viable or necessary.</p>
Methods of assessment	<p>Assessment methods</p> <p>Indicates the acceptable methods of assessment which are specified in the UEE07 Electrotechnology Training Package.</p>
Concurrent assessment and relationship with other units	<p>Concurrency</p> <p>Identifies where benefits may be derived by assessing two or more units concurrently or sequentially.</p>

Competency Standards

Competency Standards are the collection of competency standard units for a particular industry sector and are an integral part of a Training Package.

The competency standard units described in this document are part of the Electrotechnology Industry Training Package UEE07.

Complex

Made up of many interrelated parts the behaviour or performance of which effect the behaviour or performance of the whole.

Note. Example in the context of electrotechnology are systems with many interworking subsystems, complex work activities such as some testing procedures and aspects of some essential knowledge.

Compliance

An installation or equipment that conforms to relevant regulations which may include technical standards, codes or practice and the like.

Computer system

Computer hardware, software and connectivity components that make up a system to operate, control or analyse a process.

Consistent performance

Relates to sufficient evidence being present. This requires evidence that competence has been demonstrated for each element of each unit having been achieved at least twice; autonomously and to requirements.

Defects

Physical or performance aspects of an installation or equipment that do not comply with the relevant regulations, standards or job specifications.

Documentation

Written information, either hard or soft copy, related to a work function.

Note: Examples of documentation are forms, work instructions, specifications, drawings, reports.

Electrical installation, general

All parts of an electrical installation in a building, structure and premises that are not designated as special electrical installations or those related to hazardous areas.

Electrical installation, special

Electrical installation related to moveable premises and caravan parks, shows and carnivals, boating marinas, medical treatment areas, cranes, and hoists, lifts, electric fences and construction and demolition sites.

Electronic sub assemblies

An assembly of connected electronic components designed for a particular function that forms part of electronic apparatus or system.

Enterprise standards

Standards of management, performance, service or product established by an enterprise.

Endorsement

The variations in equipment or function in which an individual demonstrates competence relevant to a competency standard unit. An endorsement applies to competency standard unit in the disciplines of 'Hazardous areas' and 'Restricted and special electrical work' and is shown by a suffix to the unit title. Details of endorsements are given in the competency standard units where they apply.

Equipment

Any component part or apparatus accessory of an electrotechnology system or installation.

Established procedures

Formal arrangements of an organisation, enterprise or statutory authority of how work is to be done and by whom.

Note: Examples of established procedures are documented in quality management systems, safety management systems, work clearance systems, work instructions, work procedures, standard operating procedures, reporting systems and arrangements for dealing with emergencies.

Essential knowledge and associated skills (EKAS) learning specification (LS)

Provide specific advice in facilitating consistency and reliability in resource development and delivery. The learning specifications are premised on the separate content of the essential knowledge and associated skills section, which are referred to in each competency standard unit.

The specifications are designed to:

- provide the depth and breadth of essential knowledge and associated skills to be learned
- ensure they support the needs of the workplace
- contain assessment strategies, including a table of specifications, to increase validity, reliability and fairness
- detail the resources required for satisfactory delivery in the learning environment
- provide clarification regarding the type and quantity of evidence needed for assessment purposes
- support a variety of delivery modes, eg face-to-face, distance or computer-assisted learning
- provide content and structure that maximises learning retention
- provide a clear purpose statement about their relationship to the overall educational program.

Established routines

Strict procedures for carrying out a work activity or task often formalised in the form of work instructions.

Explosion protection

Techniques applied to the design of electrical equipment, components and systems to prevent the electrical energy from becoming an ignition source in the presence of flammable vapours and gases or combustible dusts in hazardous areas.

Fall prevention

Safe working practices intended to prevent persons or objects from falling from a height regarded as hazardous.

Hazard

Something with the potential to cause injury or disease to persons, damage property or disrupt productivity.

Hazardous area

Area in which an explosive atmosphere is present or may be expected to be present in quantities such as to require special precautions for the construction, installation and use of electrical equipment. Hazardous areas may include a variety of adverse environmental conditions such as those encountered in coal mines, shipping, oil/gas platforms and the like, which commonly require further specifications stated in legislation or regulatory requirements.

Hazardous area records

Records that show a hazardous area has been appropriately classified and the electrical equipment comply with the appropriate certification and other relevant requirements specific to the site. Generally referred to as a 'Verification Dossier'.

Industry standards

Standards of management, performance, service or product established by a representative Industry Body. This Training Package is an example of an industry standard.

Inspection, actions taken

Actions taken by an inspector in relation to defects in an installation

Note: Examples of such actions are disconnection or non-connection of supply until a defect is rectified, notice of period in which it has to be rectified, other actions within the scope of inspection authority.

Inspection, audit

An inspection that reviews the regulatory obligations of enterprise. Audit inspections may involve reviewing records of work, inspection of safety equipment and inspection of recently completed work.

Inspection, close

An inspection which encompasses those aspects covered by a visual inspection and, in addition, identifies those defects, eg loose fasteners, which will become apparent when access equipment, eg steps, and tools are used. Close inspections do not normally require an enclosure to be opened or equipment de-energised.

Inspection, detailed

An inspection that encompasses those aspects covered by a close inspection and, in addition, identifies those defects that only become apparent when an enclosure is opened up, or by use of tools and test equipment.

Inspection, visual

An inspection that identifies, without the use of access equipment or tools, those defects that are apparent to the eye.

Install

1. The act of placing and permanently fixing equipment in place in a building or premises.
2. Placing and setting up an operating system and application software on a computer or network.

Installation

Installation includes all equipment and component parts or a system as they are fixed in place and connected as necessary, to operate as intended.

Note: Examples of installations are antenna installations, electrical installation, home entertainment installations and refrigeration installation.

Learning Specification (LS)

See Essential Knowledge and Associated Skills (EKAS).

Maintain

Ensuring systems, equipment or apparatus continue to work properly by checking, repairing faults, rectifying malfunction and making adjustments as required.

Maintenance, scheduled

A formal process of periodically checking, overhauling and replacing equipment and/or components based on the assessment of risk associated with their failure during operation.

Non-compliance

Aspects of an installation or equipment that do not satisfy the applicable regulations, standards or requirements.

OHS policies and procedures

Arrangements of an organisation or enterprise to meet its legal and ethical obligations of ensuring the workplace is safe and without risk to health (*see also Glossary of OHS terms*).

Note: Ensuring a workplace is safe will include hazards identification and risk assessment mechanisms, implementation of safety regulations, safety training, safety systems incorporating work clearance procedures, isolation procedures, use of protective equipment and clothing and use of codes of practice.

Permit, clearance to work

A system that authorises, in writing, specified work activities to be carried out in specified work location at a specified time as part of the risk control measures. The system includes safety procedures that shall be followed before authorisation is given.

Note: Examples include work permit systems operate in the electricity supply sector, in petrochemical plants, in refineries, in heavy manufacturing and in rail networks.

Process control

Control of actions used in the manufacture, analysis and modification of materials.

Process control system

System used to control processes.

Regulated environment

Are those requirements that are to be met for regulated purposes including but not limited to licensing regimes; registration regimes; industrial instruments and/or arrangements; standards; codes of practice; industry wide preferred approaches encompassing industry polices and guidelines advised for respective Training Package non-endorsed implementation.

Reporting

Formally written or computer entered and stored document detailing the outcomes of a work activity (See *Documentation*).

Requirements

That to which equipment and procedures and their outcomes shall conform and includes statutory obligations and regulations and Standards called-up by legislation or regulations; or manufacturer's, regulatory or industry requirements.

Requirements may include codes of practice, industry policies, job specifications, Australian/New Zealand or International Standards called up in specifications be they - conformity notices, procedures and work instructions, and quality management systems, as well as transport documentation, manufacturers' specifications, maintenance manuals, schedules and specifications/standards, circuit/cable schedules, design specifications, customer/client requirements and specifications and national and state guidelines, policies and imperatives relating to the environment.

Representative range

That which requires a sufficient body of evidence undertaken across a range of activities and work functions to be present in order that a valid, reliable, fair and timely judgement about an individual's performance for attributing competence can be made. The range of systems, apparatus, equipment, accessories, applications, processes, and/or techniques referred to in the unit should be such that a peer group of industry practitioners would readily conclude competency has been demonstrated. See competency standard unit for more information and in relation to the body of evidence required refer to the Assessment Guidelines of UEE07.

Risk assessment

Process of evaluating the likelihood and consequences of occurrences that would have an adverse affect on safety, health and the environment of a work area and the operation and viability of an enterprise.

Risk control measures

Methods and equipment for preventing risk of injury or damage from a hazard. Many risk control measures have been established and formalised in standards and codes of practice.

Safe design principles

Principles applied in the design of a product that take into account means to reduce harmful effects to both persons and the environment during its manufacture, its use and its disposal at the end of the life of the product.

Safe working

System of procedures used to ensure safety in work and operation related to rail systems.

Servicing

Maintaining, fault finding/troubleshooting and repair of equipment, plant machinery and/or installations.

Set-up

Place in operation equipment that requires certain procedures to be followed before it can be used. Typical items of equipment that require setting up are appliance, computers and home entertainment equipment.

Simulation

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy.

Note: Six principles have been developed to govern the conduct of assessment in simulated environments; however, the underpinning principle in relation to off-the-job workplace simulation is that 'actual tasks, activities and conditions are as close as possible to real life situations': 1. Reflect workplace conditions, 2. Reflect the intent of the Electrotechnology Training Package, 3. Involve realistic and authentic activities, 4. Facilitate profiling, 5. Support holistic judgements, and 6. Undergo quality assurance processes.

Skills enabling employment

A range of generic employment based skills that are expected of individuals in a workplace.

Specifications

All those attributes that define accurately the nature of the involved hazards, materials/products, processes, equipment and installation design.

Note: Examples of specifications are design and manufacturer specifications defining all the necessary parameters and tolerances, process flow diagrams, explosive characteristics and technical data sheets for hazardous materials and products.

Standard, deemed to comply

A guide setting out methods and materials that if applied in the prescribed way will satisfy the requirements of a performance-based technical standard.

Standards, technical

Technical documents which set out specifications and other criteria for equipment, materials and methods, to ensure they consistently perform as intended. The Standards referred to in this Standard are those published by Standards Australia or an industry association.

Sustainable energy practices

Working in a way that eliminates unnecessary energy use and material waste and disposes of the necessary waste with minimal effect on the environment and in compliance with regulation.

Training Package

A Training Package is a set of nationally endorsed Standards and qualification for recognising and assessing peoples skills. A training package specifies the outcome of training and is not a prescription of how an individual should be trained.

Unit of competency

See competency standard unit.

Vocational standard

See competency standard unit.

Voltage, extra-low

Not exceeding 50 V a.c. or 120 V d.c.

Voltage, high

Exceeding low voltage.

Voltage, low

Exceeding extra-low voltage, but not exceeding 1000 V a.c. or 1500 V d.c.

Work instructions

Strict and formal instruction on how a work activity or task is to be carried out.

Work platform

Equipment specifically designed to access a work area out of normal reach above the ground or floor level.

Note. Examples are step ladders, extension ladders, scaffolding, pole platforms, 'cherry pickers' and the like.

Workplace procedures

See *Established procedures*.

Work site protection

Processes and procedure to manage or prevent the passage of trains over a section of (rail) track for which possession has been acquired so that maintenance or repair work can be carried out.

Additional Glossary terms for Occupational Health and Safety

Introduction

This Glossary of Occupational Health and Safety (OHS) Terms has been developed to assist competency developers and writers, reviewers of training packages and those developing any training specification or learning materials for the Vocational Education and Training environment.

In Australia we consider that the rate of workplace fatality, injury and ill-health is far too high. To reduce this toll we need to make some changes in the work place and this requires training to enable business and workers to effectively manage safety.

We must get OHS right in the competency so that the resultant learning contributes to improving the capacity of those in the workplace to manage safety. This applies not only to the 'designated' OHS units but to the integration of OHS, as appropriate, into all competencies, learning programs and learning resources.

The competency, TAADES505A Research and develop competency standards, specifies the outcomes and the knowledge and skills required to research and develop documents which outline competency requirements for a particular job function, work process, work role or specific vocational outcome. This competency cites four phases in developing a competency:

1. Research the competency area
2. Formulate competency specifications
3. Validate competency specifications
4. Finalise competency specifications.

OHS is a critical aspect of research into the competency area, and also an important aspect of work performance to be integrated within a competency.

As in many technical areas, OHS has, to some extent, its own language. OHS is 'owned' by many people as it impacts on all of us, however key words and terms are not always used in a consistent manner and this can lead to confusion. To maximise the effectiveness of our training and education we need to ensure that our use of the OHS language is as consistent and clear as possible.

This glossary is not intended as a definitive dictionary of OHS terms but is designed to be used in the second phase of competency development, formulate the competency specifications. It is also an invaluable tool for those involved in the design and development of learning resources.

Further information on OHS hazards, practical guidance material, standards and codes of practice is available at the National Occupational Health and Safety Commission website at www.nohsc.gov.au

The glossary is intended to be an evolving and dynamic document and those wishing to comment on the terms or suggest additions or modifications should email the Team Leader of the OHS Skills Development Team at NOHSC.

NOHSC Glossary	Explanation
Accident	A term that is now considered out of date. Preferred term is 'incident'.
Accountability	The process by which a person with OHS responsibilities is answerable to a higher authority.
Action level	The level at which a risk is considered to be unacceptable and action is required to reduce the level of risk. May be specific such as a noise level at which hearing protection must be worn, a concentration of chemical or more generic.
(OHS) Action plans	Documented plans developed within the workplace to implement OHS management, which include allocated responsibilities and time frames.
Administrative controls	Management practices that aim to control employees' exposure to specific hazards, and generally improve health and safety – examples include the use of job rotation, job enlargement.
ALARA (As Low As Reasonably Achievable)	A basic concept where risks are kept as low as is reasonably achievable. ALARA is determined by reference to established codes and standards and consultation with groups impacted by the decision outcomes including those exposed to the risk.

NOHSC Glossary	Explanation
Anthropometry	The science dealing with the comparative measurement of the size and proportions of the human body, the range of movement of limbs, as used in ergonomics.
(OHS) Audit	A systematic examination against an agreed benchmark of the approach to managing safety to evaluate an organisation's arrangements for identifying hazards, assessing and controlling risks, and monitoring and improving the effectiveness of the management of OHS and compliance. (Note a workplace inspection is NOT an audit.)
Audit tools	<p>The instruments for collecting evidence and conducting the analysis and evaluation (they are not the same as the audit criteria or benchmark), they may be:</p> <ul style="list-style-type: none"> • developed specifically for the purpose • adapted from existing tools • purchased or accessed from existing tools and include: <ul style="list-style-type: none"> – performance checklists – sets of questions to be asked – descriptions of required characteristics to be checked – limitations for and instructions for use.
Authorisation of permit	Signing of permit by competent person.
Biomechanics	The application of mechanics (forces and motion) to analyse body movement and the stresses involved in body posture during movement.
Causative event	Key event that resulted in the particular outcome(s) of injury or damage.
Circumstance	Short-term situation that is relatively unusual, such as a storm or when a key person is absent.
Certification	Refer 'operator certification'.
Common law	Law that is derived from the English legal system and has evolved through judicial decision and practice (case law) that establishes and follows precedent. Note difference to 'statute law'.
Condition	Permanent situation such as type of equipment, work practice, design of work environment (often different to detect or identify) that may contribute to risk.
Consequence	The injury or damage outcome of an event, which may be expressed quantitatively or qualitatively; there may be a range of possible outcomes for a specific event or scenario.
Confined space	<p>An enclosed or partially enclosed space which:</p> <ul style="list-style-type: none"> • is at atmospheric pressure during occupancy • is not intended or designed primarily as a place of work, and is liable at any time to: <ul style="list-style-type: none"> – have an atmosphere which contains potentially harmful levels of contaminant – not have a safe oxygen level or – cause engulfment, and • may have restricted means for entry and exit. <p>A confined space is determined in part by the hazards associated with a defined set of circumstances (restricted entry or hazardous atmosphere, risk of engulfment) and not just with work performed in a restricted space. Examples include but may not be limited to:</p>

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> • storage tanks, tank cars, process vessels, boilers, pressure vessels, silos and other tank-like compartments • open-topped spaces such as pits or degreasers • pipes, sewers, shafts, ducts and similar structures • shipboard spaces entered through a small hatchway or access point, cargo tanks, cellular double bottom tanks, duct keels, ballast and oil tanks and void spaces (but not including dry cargo holds). <p>A person is deemed to have entered a confined space when their head (ie. the breathing zone) or upper part of the body is within the boundary of the confined space. (Note that inserting an arm for atmospheric testing is not considered an entry to a confined space).</p> <p>References:</p> <ul style="list-style-type: none"> • AS/NZS 2865:2001 Safe working in a confined space • Handbook – HB 213:2003 Guidelines for safe working in a confined space.
Consultative arrangements	<p>State and territory OHS legislation specifies obligations for workplace consultation. The workplace arrangements to meet these obligations may include:</p> <ul style="list-style-type: none"> • OHS and other consultative and planning committees • health and safety and other employee representatives • employee and supervisor involvement in OHS activities such as inspections and audits • procedures for reporting hazards, and raising and addressing OHS issues • employee and workgroup meetings. <p>Factors that should be considered when developing consultative arrangements include:</p> <ul style="list-style-type: none"> • language • shift work and rostering arrangements • timing of information and data provision • literacy and numeracy levels • workers with special needs • workplace organisational structures (for example, size of organisation, geographic, hierarchical) • cultural diversity • management approach • workplace culture and approach to OHS by managers, supervisors and employees.
Controls	<p>The devices and methods of controlling the effect of the hazard so that the risk of injury is minimised. The ‘quality’ of the control is the level and reliability of the control compared with the level of risk. The quality of the controls is determined by:</p> <ul style="list-style-type: none"> • the best available technology or approach should be applied when the most probable outcome is death or serious injury • the best practical technology or approach may be applied where the most probable outcome is less serious <p>Refer also ‘Hierarchy of control’.</p> <p>Workplace factors that impact on the controls selected and the implementation include:</p> <ul style="list-style-type: none"> • language • shift work and rostering arrangements • literacy and numeracy • workplace organisational structures (e.g. geographic, hierarchical) • cultural diversity • training required

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> workplace culture related to OHS, including commitment by managers and supervisors and compliance with procedures and training.
Control measures	Devices, systems (including work methods) or approaches that reduce exposure to workplace hazards.
Crisis management plan	<p>A flexible document that can cope with a broad range of crisis types and:</p> <ul style="list-style-type: none"> is approved at the highest levels of the organisation focuses on management control identifies responsibilities for decision making details communication processes and psychological support addresses arrangements with any contractors or shared tenancy integrates the emergency response plans as well as recovery incorporates dealing with external agencies and support addresses planning for recovery before crisis occurs. <p>Documentation for crisis management plan may include</p> <ul style="list-style-type: none"> policy, emergency response structure, initial response instructions for various roles/areas, responsibility and authority of individual roles, warning systems, training requirements, resource inventory for response and recovery, program review and monitoring processes; and crisis risk management documentation, such as risk management team lists, communications strategies, identification of issues, risk assessments/evaluations, vulnerability profiles, risk registers and treatment strategies. <p>The term ‘emergency management’ may also apply but ‘crisis management’ infers a more holistic approach encompassing the full range of business affairs.</p>
Dangerous Goods (DG)	<p>Those gases, liquids and solids identified and classified under the internationally agreed system which is followed in Australia and that are subject to so called ‘dangerous goods’ standards and legislation.</p> <p>The objective of the Dangerous Goods legislation is to control the storage, handling and transport of DGs to protect the safety of workers, the public, property and the environment. While dangerous goods may also be hazardous the terms should not be confused.</p>
Dangerous parts of plant	<p>Potential contact or entrapment points to which the operator may be exposed during:</p> <ul style="list-style-type: none"> operation examination lubrication adjustment maintenance.
Design	<p>The process of bringing together innovation, aesthetics, and functionality to plan and create a product, process or system to meet the artistic, industrial or performance requirement of an individual or group. The design process involves a series of activities where an idea is conceived, shaped, developed, produced and then acted upon to produce a designed-product. It also includes any subsequent alteration of a designed-product (redesign or retrofit).</p>
Design process	<p>The stages of the design process include:</p> <p>The concept design phase considers preliminary design options, which are assessed against product specifications to determine the best</p>

NOHSC Glossary	Explanation
	<p>preliminary design to be developed. This phase includes concept design, research and development, feasibility and risk management (including OHS risks).</p> <p>The detailed design phase develops the selected design to its final state. It includes research and development, feasibility studies, concept and detail design, technical and functional specifications, plans and drawings, operational systems, construct/manufacture options and detailed quantities, cost and risk analysis (including analysis of OHS risks).</p>
Designed-product	<p>The item to be designed, including a built environment, structure, an item of plant or equipment, chemical, work system or process; or any other physical attribute or system associated with either the work or its interface with people.</p>
Duty of care	<p>Arises from common law but is enshrined in OHS statute law and / that places into a legal form a moral duty to anticipate possible causes of injury and illness and to do everything reasonably practicable to remove or minimise these possible causes of harm.</p> <p>The key factors relating to duty of care are that:</p> <ul style="list-style-type: none"> • duty of care applies wherever there is special relationship (employer – employee, employer-contractor, supervisor – work team member, tradesperson-apprentice) • duty of care applies to all circumstances of the relationship • individual duty of care cannot be delegated (but roles and functions may be delegated) • applies personally to individuals • applies to all risks that are foreseeable and preventable • includes the concept of ‘reasonable’.
Elements of systematic approaches to managing OHS including OHSMSs	<p>A list of key requirements or major principles that are combined in a methodical and ordered manner to minimise the risk of injury or ill health in the workplace; and may include processes of OHS planning, allocation of resources, communication and consultation, hazard management, record keeping and reporting, training and competency, and review and evaluation for ongoing improvement of OHS.</p>
Emergency	<p>Events such as:</p> <ul style="list-style-type: none"> • serious injury events • emergencies requiring evacuation • fires and explosions • hazardous substance and chemical spills • explosion and bomb alerts • security emergencies, such as armed robberies, intruders and disturbed persons • internal emergencies, such as loss of power or water supply and structural collapse • external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation. <p>May also be referred to ‘hazardous event’.</p>
Emergency agency	<p>Includes fire, police, ambulance, relevant government departments, hazardous materials response teams (HAZMAT) and OHS authorities.</p>
Emergency control organisation (ECO)	<p>Structured group within the organisation that includes roles such as emergency controller, communications recorder, media liaison and employee support.</p>
Emergency equipment	<p>Includes:</p> <ul style="list-style-type: none"> • first aid equipment

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> • eye wash shower or portable eye washes • fire extinguishers and equipment • communication equipment • evacuation alarms • evacuation equipment, especially that for disabled persons • torches • clothing items such as coloured hats and vests.
Emergency stops and warning devices	<p>Are fitted to plant and equipment that have a risk of entrapment or other hazard and must be:</p> <ul style="list-style-type: none"> • prominently, clearly and durably marked • coloured red (push buttons, bars or handles) • unable to be affected by electrical or electronic circuit malfunction • fitted where risk assessment identifies a need.
Enforcement	<p>Processes and instruments available to the OHS regulator under legislation may include:</p> <ul style="list-style-type: none"> • prosecution • prohibition notices • improvement notices • on-the-spot fines • provisional improvement notices.
Epidemiology	<p>The study of the distribution and determinants of disease within human populations. Patterns of injury or illness in groups of people are studied to determine causes, identify groups at risk and to identify and evaluate methods of treatment and prevention.</p>
Ergonomics	<p>The study of the relationship between people, the equipment they use and their physical and social work environment.</p>
Ergonomic interventions	<p>Includes:</p> <ul style="list-style-type: none"> • design of tools • design of workplaces • design of products • design of equipment • design of work systems, processes or organisation including work flow, planning and control • job design • development of new decision making processes • new forms and organisations of work.
Ergonomic tools and databases	<p>May include:</p> <ul style="list-style-type: none"> • engineering models • Australian and International Standards • Australian and International anthropometric databases.
Explosive substance	<p>Substance that explodes if it comes into contact with heat, flame, an ignition source or incompatible substance.</p>
Fail-to-safe	<p>Design feature of equipment that ensures if there is a failure or defect in the product, or another factor such as loss of power, then the product is left in a safe condition.</p>
Functional areas and management systems	<p>Other than OHS but that impact on the management of OHS may include:</p> <ul style="list-style-type: none"> • strategic planning • purchasing, procurement and contracting • logistics • HR, IR and personnel management, including payroll

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> • engineering and maintenance • information, data and records management • finance and auditing • environmental management • quality management.
Guarding	<p>Devices fitted to machinery to separate the operator from dangerous parts of the machine. Devices may include:</p> <ul style="list-style-type: none"> • permanently fixed physical barriers where no access of any part of a person is required • interlocking physical barriers where access to dangerous areas is required during operation • physical barriers securely fixed by means of fasteners or devices • presence-sensing safeguarding systems.
Hazard	<p>A source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.</p>
Hazards of long latency	<p>Conditions, illnesses and other health risks that result from longer term exposure to specific triggers such as chemicals, noise, radiation and psychosocial factors.</p>
Hazards of low frequency/high consequence	<p>High impact events that occur rarely such as explosions, fires and building collapses but may result in very serious injury, death or multiple death situations.</p>
Hazard identification	<p>The process of identifying sources of harm. Hazard identification may be required:</p> <ul style="list-style-type: none"> • at design or pre purchase of buildings, equipment and materials • at commissioning or pre-implementation of new processes or practices • before new forms of work and organisation of work are implemented • before changes are made to workplace, equipment, work processes or work arrangements • as part of planning major tasks or activities, such as equipment shutdowns • following an incident report • when new knowledge becomes available • at regular intervals during normal operations • prior to disposal of equipment, buildings or materials. <p>Different methods may be used to identify hazards including observation; consultation with workers, clients or other users; trial of models or prototypes; review of technical standards and other information sources; monitoring and measurement.</p>
Hazard identification tools and processes	<p>Include:</p> <ul style="list-style-type: none"> • analysis of incident investigations • analysis of incident, injury and claims statistics • workplace inspections • job safety analysis (JSA) • audits • cause and effect diagrams • surveys • review of research and industry literature.
Hazardous event	<p>Includes incidents with the potential to seriously harm life, health, property, the environment or a combination. May also be referred to as 'emergencies'.</p>

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Hazardous substance	A substance that is listed on the National Commission's <i>List of Designated Hazardous Substances</i> (NOHSC:10005) or has been classified as a hazardous substance by the manufacturer or importer in accordance with the National Commission's <i>Approved Criteria for Classifying Hazardous Substances</i> (NOHSC:1008).
Hazardous substance register	Listing of all the hazardous substances that are used or produced in a workplace together with a current Material Safety Data Sheet for each substance. May also contain risk assessments for individual hazardous substances.
HAZCHEM	An initial response emergency action code that provides information vital to emergency services to enable them to stabilise the incident scene during the early stages of a HAZMAT incident. The Code is displayed on emergency information panels on transport vehicles and on signs on buildings. HAZCHEM codes are assigned to chemicals on the basis of their flammability, toxicity, reactivity and other relevant chemical and physical properties.
HAZMAT	A contraction of the words 'hazardous materials' and may be used in a range of circumstances including HAZMAT emergency response units, HAMAT emergency response equipment and HAZMAT registers of hazardous substances.
HAZOP (Hazard and Operability Study)	An advanced risk analysis technique that involves a systematic review of a process to determine risks and risk minimisation strategies.
Health and safety representative	An employee, elected by the workgroup, who represents the OHS interests of the people with whom they work. The function is carried out in addition to the normal work role. Processes for election of health and safety representatives, their role and rights are specified in state and territory legislation.
Health promotion	The promotion of health, especially as a workplace program, designed to improve and enhance employee health undertaken as a complementary activity to the prevention of work-related injury and disease. Also called wellness.
Health surveillance	Monitoring or checking individuals for the purpose of identifying changes due to exposure to hazards in the workplace. May include biological monitoring.
Hierarchy of control	<p>The priority order in which hazard and risk controls should be considered with the eventual outcome often being a combination of measures. The prime emphasis is on:</p> <ul style="list-style-type: none"> • elimination, and where this is not practicable, minimisation of risk by: <ul style="list-style-type: none"> – substitution – isolating the hazard from personnel – engineering controls – administrative controls (e.g. procedures, training) – personal protective equipment (PPE).
Hot work	<p>Involves using equipment that generates heat, sparks, flames or any other sources of ignition in an atmosphere that may be flammable. Includes work with welders, cutters including oxygen cutters, power tools, grinding, mobile phones.</p> <p>Hot work can also include breaking into 'live' equipment or performing work on live equipment that has the potential to release its contents (eg hot tap in chemical plants).</p>

NOHSC Glossary	Explanation
Housekeeping	Describes workplace and personal routines designed to improve hygiene and safety, for example, cleaning up spills and keeping walkways, exits and traffic areas clear.
Incident	An event that has caused or has the potential for injury, ill-health or damage ('Incident' is the preferred term rather than 'accident').
(Sources of OHS) Information:	<p>May be internal and include:</p> <ul style="list-style-type: none"> • hazard, incident and investigation reports • workplace inspections • incident investigations • minutes of meetings • Job Safety Analyses (JSA's) and risk assessments • organisational data such as insurance records, enforcement notices and actions, workers compensation data, OHS performance data • reports and audits • material safety data sheets (MSDSs) and registers • employees handbooks • employees including questionnaire results • OHS advisors • manufacturers' manuals and specifications. <p>Or external, including:</p> <ul style="list-style-type: none"> • regulatory bodies and OHS Acts regulations, codes and guidance material • other relevant legislation • National Occupational Health and Safety Commission (NOHSC) and Australian Bureau of Statistics • databases such as national and state injury data and NICNAS (National Industrial Chemicals Notification and Assessment Scheme) • OHS specialists and consultants • newspapers and journals, trade/industry publications • internet sites • industry networks and associations including unions and employer groups • OHS professional bodies • research information.
Isolation	<p>A safety device system that includes devices such as isolating switches, locks, safety bars, shields, full pressure blanks, spectacle blanks to lock controls, especially moving parts, equipment, systems or devices with stored energy, to an 'off' position while a worker is in a vulnerable position such as carrying out maintenance on rotating equipment, and electrical and hydraulic systems.</p> <p>Isolation systems generally use locking switches that need keys to open the lock and are used in conjunction with a danger tag system that promotes greater safety consciousness amongst the workforce for all situations in which danger to persons could arise from:</p> <ul style="list-style-type: none"> • the operation of machinery, plant or equipment • the flow of steam, electricity, gases or liquids • the use of faulty or unsafe plant and equipment • include multiple locking systems and involve written authorisation by a competent person. <p>Also called 'lock-out' and 'tag-out'.</p>
Job Safety Analysis (JSA)	Process of examining all aspects of a task to identify hazards and conditions with a potential for injury or ill health with the objective of developing risk controls including written job instructions.

NOHSC Glossary	Explanation
Legislation relevant to OHS	Includes Commonwealth and relevant State / Territory OHS specific acts and regulations as well as: <ul style="list-style-type: none"> • workers compensation • privacy legislation • contract law • trade practices • criminal law • common law • industrial relations law • equal employment opportunity and anti- discrimination law
Life-cycle	All phases in the life of a product. Specific phases depend on the type of product but may include design, development, manufacture, construction, assembly, import, supply, distribution, sale, hire, lease, storage, transport, installation, erection, commissioning, use or operation, consumption, maintenance, servicing, cleaning, adjustment, inspection, repair, modification, refurbishment, renovation, recycling, resale, decommissioning, dismantling, demolition, discontinuance, disposal.
Likelihood	The likelihood of the occurrence of the consequence, not the likelihood of the hazard or the particular scenario.
Locked out	Equipment, which is not to be operated for any reason, may be pad-locked, or otherwise prevented from operation using a keyed lock. A lockout may be accompanied by a tag out, or a lock out system may incorporate a tag. Lockout means the isolation by a mechanical device, generally a lock, which, when applied at the source, physically prevents the control to any electrical or mechanical equipment being turned on. Refer also to 'Isolation'.
Manual handling	The use of force applied by a person to lift, move, carry, push, pull or otherwise move or restrain an animate inanimate object.
Material Safety Data Sheet (MSDS)	Document describing the properties and hazards of a material or substance including statements about its chemical and physical properties, health hazards, precautions for use and safe handling instructions. All manufacturers and suppliers of chemicals are obliged to produce an MSDS for each hazardous chemical.
Monitoring	Involves the use of valid and suitable techniques to estimate the exposure of employees to a hazard.
Musculoskeletal disorder (MSD)	An injury, illness or disease that arises in whole or part from manual handling in the workplace, whether occurring suddenly or over a prolonged period of time. (Does not include injuries caused by crushing, entrapment or cut resulting primarily from the mechanical operation of plant.
Occupational Overuse Syndrome (OOS)	Previously called RSI and refers to arrange of conditions characterised by persistent discomfort and pain in and around joints and associated with repeated movement of the joint. Recent state and territory legislation tends to group these conditions with those arising from manual handling as Musculoskeletal Disorders.
OHS inspection	The process of physically examining and evaluating the extent to which hazards and risks exists, and /or particular OHS requirements, procedures or standards are being met. Refer also to 'workplace inspection'.

NOHSC Glossary	Explanation
OHS specialists	Include: <ul style="list-style-type: none"> • safety professionals • ergonomists • occupational hygienists • safety engineers • injury management advisors • health professionals.
Operator certification	The process by which a certificate to use or operate industrial equipment is issued by a certifying authority.
OHS management system (OHSMS)	That part of the organisation’s overall management system that covers developing, implementing, reviewing and maintaining the activities for managing OHS. It is NOT a standard, a commercial package or folders on the shelf; however it may involve use of OHS management systems developed in the workplace to meet the OHS situation in that particular workplace. Also referred to in broader context as systematic approaches to managing OHS.
Operational controls for plant and equipment	Should: <ul style="list-style-type: none"> • be suitability identified • have nature and function clearly indicated • be readily and conveniently located • be guarded to prevent unintentional activation • be capable of locking in ‘off’ position to enable disconnection of all motive power and forces • be of ‘fail safe’ type.
Participative arrangements	Are those arrangements that inform employees and other stakeholders of OHS matters, seek their input and offer opportunity for stakeholders to participate in decisions that may impact on their OHS. May also be referred to as ‘consultative arrangements’, however ‘participation’ implies a higher level of involvement.
Permit to work	A written authority document such as hot work and confined space entry that: <ul style="list-style-type: none"> • includes approval to undertake work and activities including tests, measurements and monitoring • is authorised by a responsible or designated person directly in control of the work • certifies appropriate precautions and controls to be followed • incorporates checklists, conditions and actions such as the frequency and duration of the work and atmospheric tests • follows recognised industry standard recording practices.
Plant	As defined in National Standard for Plant includes: <ul style="list-style-type: none"> • machinery, equipment (including scaffolding), appliance, implement or tool and any other component, fitting or accessory • fixed and or specified plant as cited in commonwealth, state and territory OHS legislation • mobile plant and load shifting equipment • pressure equipment such as boilers, pressure vessels and pressure piping • electrical installation and plant such as wiring, accessories, fittings, consuming devices, control and protective gear, converters and generators.
Plant Registration	The administrative process by which a certifying authority or state OHS regulator requires an organisation or industry to register plant, machinery and equipment.

NOHSC Glossary	Explanation
Personal protective equipment (PPE)	<p>Equipment designed to be worn by a person to provide protection from hazards, and may include:</p> <ul style="list-style-type: none"> • head protection • face and eye protection • respiratory protection • hearing protection • hand protection • clothing and footwear. <p>Personal protective equipment is considered the least satisfactory control measure.</p>
Policies and procedures	<p>Relevant to OHS include:</p> <ul style="list-style-type: none"> • policies and procedures underpinning OHS including those for hazard and incident reporting, OHS communication, consultation, issue resolution and risk management • quality system documentation • purchasing and contracting procedures • documents describing how tasks, projects, inspections, jobs and processes are to be undertaken • standard operating procedures, work instructions • job or batch sheets, recipes • operators manuals • employee and contractor handbooks • job/task statements.
Positive performance indicators	<p>Focus on assessing how successfully a workplace is performing through measuring OHS processes.</p>
(OHS) Records	<p>Requirements for OHS record keeping may be defined in:</p> <ul style="list-style-type: none"> • OHS legislation and regulations governing reporting of incidents and maintenance of records related to specific hazards, including chemical registers and material safety data sheets (MSDSs) • privacy legislation • organisational procedures. <p>OHS records may include:</p> <ul style="list-style-type: none"> • hazard and incident reports, first aid records • risk assessments • hazardous substances and dangerous goods registers, MSDSs • risk registers • OHS audit and inspection reports • maintenance and testing records • OHS training records • outcomes of health surveillance and environmental monitoring • workers compensation claims and return to work records. <p>OHS records must be stored taking account of:</p> <ul style="list-style-type: none"> • privacy • confidentiality • enabling access to personal records, within legislative requirements • commercial in confidence issues as appropriate.
(OHS) Reporting requirements	<p>Under legislation include serious injury and serious incident reporting to OHS authorities.</p>
(OHS) Responsibilities	<p>Those with legislated OHS responsibilities include:</p> <ul style="list-style-type: none"> • company director • manager • supervisors • OHS representatives • employees and contractors • designers, manufacturers, installers, suppliers.

NOHSC Glossary	Explanation
Residual risk	That risk that is unable to be designed out of a product or process.
Risk	<p>The chance of something occurring that will result in injury or damage. It is measured in terms of consequences (injury or damage) and likelihood of the consequence.</p> <p>Refer also to 'Consequence' and 'Likelihood'.</p>
Risk analysis	<p>Analysing the risk to:</p> <ul style="list-style-type: none"> • identify factors influencing the risk and the range of potential consequences • effectiveness of existing controls • likelihood of each consequence considering exposure and hazard level • combining these in some way to obtain a level of risk. <p>Factors influencing the risk may be associated with</p> <ul style="list-style-type: none"> • equipment • work environment • work organisation • task • the individual/operator • frequency and duration of exposure • number of people exposed/ involved.
Risk assessment	<p>Risk assessment is a two-step process that involves risk analysis and risk evaluation.</p> <p>Risk assessment as required under various OHS legislation does not necessarily require this second step of evaluation.</p> <p>Refer also to 'Risk Analysis' and 'Risk evaluation'.</p>
Risk evaluation	Comparison of risk with pre-established criteria for tolerance (or as low as reasonably achievable) and the subsequent ranking of risks requiring control. This activity will usually be carried out by or in conjunction with others with advanced OHS skills and knowledge.
Risk management	The whole systematic process directed towards identifying hazards, assessing the risk and developing controls to minimise the risk and monitoring the effectiveness of the controls (and taking further action as required).
Risk ranking	A process of rating risks according to their severity and likelihood. Common systems are based on matrices or nomograms but are usually highly subjective.
Risk register	<p>Includes:</p> <ul style="list-style-type: none"> • a list of hazards, their location and people exposed • a range of possible scenarios or circumstances under which these hazards may cause injury or damage • the results of the risk assessment, and may also include; • possible control measures and dates for implementation. <p>May also be referred to as Hazard Register.</p>
Safe Design	A design process that generates options to eliminate hazards, or minimise potential risk to health and safety of those who make the product and those that use it by involving decision makers and considering OHS risks throughout the life cycle of the designed product.
Stakeholders	<p>In workplace OHS include:</p> <ul style="list-style-type: none"> • managers

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> • supervisors • health and safety and other employee representatives • OHS committees • employees and contractors • the community.
Standards	Relevant to OHS include: <ul style="list-style-type: none"> • OHS regulations and standards developed by OHS regulators • national standards (NOHSC) • Australian standards • International national standards • industry standards • codes of practice • exposure standards • guidance notes.
Statute Law	Law created by legislation passed by government (acts and regulations) as distinct from common law.
(OHS) plan	A document that: <ul style="list-style-type: none"> • is usually developed annually but may be developed for a shorter or longer period • reviewed regularly • has OHS performance indicators (ie objectives and targets that are achievable and practical) reflecting systematic approaches to managing OHS.
System of work	The overall process of work including: <ul style="list-style-type: none"> • method by which the work is carried out • organisation of the work • selection and maintenance of tools and equipment • supervision and training • selection of workers • allocation of tasks and responsibilities.
Systemic approach to managing OHS	Requires: <ul style="list-style-type: none"> • comprehensive processes that are combined in a methodical and ordered manner to minimise the risk of injury or ill health in the workplace • processes of planning, allocation of resources, communication and consultation, hazard management, record keeping and reporting, training and competency, and review and evaluation for ongoing improvement. Factors that may impact on the implementation of a systematic approach to managing OHS may include: <ul style="list-style-type: none"> • barriers to communication, such as language/literacy • workplace culture issues, such as management commitment, supervisors' approach to compliance and general acceptance of the priority of safety • diversity of workers • structural factors, such as multiple locations, shift work and supervisory arrangements.
Tag out	Refer to 'Isolation'.
Technical advisors	To the OHS function may include: <ul style="list-style-type: none"> • legal practitioners • engineers (such as design, acoustic, mechanical, civil) • security and emergency response personnel

NOHSC Glossary	Explanation
	<ul style="list-style-type: none"> • workplace trainers and assessors • maintenance and trade persons.
Wellness	Refer to 'Health promotion'.
Workplace policies	Comprise written statements of employer's intentions and how the employers will action those intentions in the workplace. For example: OHS, access and equity, discrimination and manual handling.
Workplace inspection	Process of examining the workplace, usually with the aid of a checklist, to identify hazards and level of compliance with workplace procedures.

Some terms in the glossary have been taken from, or modified from the *CCH Occupational Health and Safety Glossary*, 1992 and *National Guidelines for Integrating OHS Competencies into National Industry Competency Standards* [NOHSC: 7025 (1998)] 2nd edition.