



Australian Government

Department of Education, Employment and Workplace Relations

CPPCLO3014A Maintain 'clean room' environments

Release: 1

CPPCLO3014A Maintain 'clean room' environments

Modification History

Revised unit

Unit updated and equivalent to PRMCL14B Maintain a 'clean room' environment

Unit Descriptor

This unit of competency specifies the outcomes required to maintain 'clean room' environments. Cleaning in a 'clean room' environment is a specialised field of cleaning. The unit is an introduction to this type of cleaning and focuses on the need to exercise caution when selecting cleaning methods to ensure safety of personnel and equipment. The unit requires the ability to assess the extent of the cleaning task through knowledge of the characteristics of a 'clean room' environment and by applying and understanding client requirements and company policies and procedures in order to perform the task. Selecting the appropriate equipment, chemicals and methods is essential to performing the task safely and efficiently.

Application of the Unit

This unit of competency supports employees without managerial or supervisory responsibilities. Performance would usually be carried out under routine supervision and within company guidelines.

Clean rooms are specialist facilities where dust presents a hazard to the safe and efficient operation of electronic and other sensitive equipment. Some clean rooms may be pressurised to reduce the amount of dust entering the room. Clean rooms may be used for specialised computer installations, computer equipment repairs, PABX units, manufacturing electronic components, laboratories and sterile rooms for food manufacturing.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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| 1 | Assess area to be cleaned. | <p>1.1 Area to be cleaned is assessed, <i>work order</i> is reviewed according to <i>company requirements</i>, and issues are clarified with <i>appropriate persons</i>.</p> <p>1.2 <i>Hazards</i> are identified and risks controlled in work site according to <i>legislative, occupational health and safety</i> (OHS) and company <i>requirements</i>.</p> <p>1.3 Types of <i>clean room surfaces</i> to be cleaned are identified by observation, and potential for <i>damage to clean room equipment</i> is assessed according to <i>manufacturer specifications</i>, work order and company requirements.</p> <p>1.4 <i>Soil types</i> are identified on surfaces by observation according to work order and company requirements.</p> <p>1.5 Size and usage pattern of work site are determined to ensure safety of <i>personnel</i> and efficient use of <i>equipment</i> and <i>chemicals</i>.</p> <p>1.6 Pre-existing damage is identified and reported to appropriate persons according to company requirements.</p> |
| 2 | Select equipment and chemicals. | <p>2.1 <i>Personal protective equipment</i> (PPE) is selected and used according to manufacturer specifications, and OHS and company requirements.</p> <p>2.2 Equipment and chemicals are selected for work order according to OHS and company requirements.</p> <p>2.3 Operational effectiveness of equipment is checked according to manufacturer specifications and company requirements.</p> |

- 2.4 Equipment is adjusted to suit operator's requirements according to manufacturer specifications and OHS requirements.
 - 2.5 Chemicals are prepared according to manufacturer specifications, and OHS and company requirements.
- 3 Prepare work site.
 - 3.1 Hazards in work site are confirmed and risks are controlled and reassessed according to legislative, OHS and company requirements.
 - 3.2 **Signage and barriers** are installed as required according to work order, and OHS and company requirements.
 - 3.3 Furniture and fittings that impede the cleaning operation are removed according to work order and company requirements.
 - 3.4 Cleaning procedures are planned and move from highest to lowest point in work site according to work order, and OHS and company requirements.
 - 3.5 Client-approved power outlets for electrical cleaning equipment are located prior to use according to work order and company requirements.
 - 3.6 **Work restrictions** affecting completion of work order are identified and appropriate persons are notified.
- 4 Clean work site.
 - 4.1 Soil is removed and surfaces are cleaned using equipment, PPE, chemicals and **cleaning techniques** according to work order, manufacturer specifications and OHS and company requirements.
 - 4.2 Work is performed according to work order, manufacturer specifications and legislative, OHS and company requirements.
- 5 Tidy work site.
 - 5.1 Signage and barriers are removed according to work order, and OHS and company requirements.
 - 5.2 Collected soil and **waste** are disposed of according to client specifications, work order, manufacturer specifications and legislative, OHS, company and

environmental requirements.

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| 6 | Clean and safety check equipment, and store equipment and chemicals. | 6.1 | Equipment and PPE are cleaned according to manufacturer specifications and environmental, OHS and company requirements. |
| | | 6.2 | Equipment and PPE are safety checked according to manufacturer specifications and OHS requirements and required maintenance is recorded according to company requirements. |
| | | 6.3 | Equipment and PPE are stored and maintained to allow ready access according to manufacturer specifications, and OHS and company requirements. |
| | | 6.4 | Chemicals are stored according to manufacturer specifications, and OHS and company requirements. |

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- correct working skills to:
 - clean glass
 - maintain ceiling surfaces and fittings
 - maintain hard floor surfaces
 - maintain soft floor surfaces
 - use spot cleaning
- customer service skills to:
 - establish rapport with clients
 - gain clients' trust
 - identify client expectations
- interpersonal skills to relate to people from a range of backgrounds
- language, literacy and numeracy skills to:
 - communicate clearly and concisely verbally and in writing
 - perform mathematical calculations required for diluting and mixing chemicals as specified on product labels
 - read and interpret directions and safety instructions, including:
 - chemical labels
 - equipment manuals
 - material safety data sheets (MSDS)
 - request advice or further information
 - seek and receive feedback
 - source, organise and record information
- organisational skills to plan and organise work
- problem-solving skills to manage contingencies
- skills to work safely when:
 - handling and disposing of chemicals
 - handling and disposing of contaminated and toxic waste
 - identifying hazards and controlling risks
 - manual handling
 - using equipment for cleaning
- self-management skills to work alone and in a team

Required knowledge

- cleaning chemicals and equipment suitable for using with sensitive equipment
- cleaning methods for 'clean room' environments, including:
 - low-water cleaning
 - use of microfibre techniques
 - vacuuming hard to access spaces
- company management structure and procedures, including:
 - biological and viral control
 - emergency response and evacuation procedures
 - environmental protection procedures
 - injury, dangerous occurrence and incident reporting
 - OHS procedures
 - quality systems
- impact of dust, moisture, electrical current and magnetic fields on sensitive electronic equipment
- legislation, regulations, codes of practice and industry advisory standards that apply to maintaining a 'clean room' environment, including OHS legislation
- routes of entry and potential symptoms of exposure to chemicals
- safe work practices for using:
 - chemicals
 - equipment, including PPE

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	This unit of competency could be assessed by observing practical demonstrations of maintaining a 'clean room' environment involving at least two different work site environments. It is also recognised that gaining access to a clean room for both the candidate and assessor can be, given the nature of clean rooms, problematic. A properly constructed simulation of the cleaning process is therefore an appropriate assessment strategy.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the required skills and knowledge specified in this unit. In particular the person should demonstrate the ability to: • identify types of surfaces and fittings • use safe and efficient cleaning methods • select cleaning equipment and chemicals • comply with company and legislative requirements • achieve outcomes in relation to customer work order and company requirements.
Context of and specific resources for assessment	Assessment of essential underpinning knowledge may be conducted in an off-site context. It is to comply with relevant regulatory or Australian standards' requirements. Resource implications for assessment include access to: • suitable work site venue • suitable equipment and chemicals • PPE • equipment operating manuals and MSDS • work order instructions, work plans and schedules, and policy documents • assessment instruments, including personal planner and assessment record book.
Method of assessment	Assessment methods must: • satisfy the endorsed Assessment Guidelines of the Property Services Training Package • include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application • reinforce the integration of employability skills with workplace

	tasks and job roles • confirm that competency is verified and able to be transferred to other circumstances and environments.
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Guidance information for assessment	Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support. Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed. This unit could be assessed on its own or in combination with other units relevant to the job function.
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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Work order information may include:	• access to work site, including: • access and egress points • timing of access • budget allocations • completion times and dates • human resource requirements to complete the work tasks • job requirements and tasks • legislative and local government requirements • OHS requirements and emergency response procedures • requirements for working in isolated and remote locations • resource requirements, such as equipment and materials • specific client requirements, such as: • dress and presentation requirements • relationships with other activities • use of signage and barriers • work schedules • work site contact persons • work site requirements for specific industries, such as: • hospitals • electronic manufacturing • laboratories.
Company requirements may include:	• business and performance plans • client communication procedures

	• client confidentiality procedures • client service standards • communication channels and reporting procedures • company goals, objectives, plans, systems and processes • company issued identification badges, cards or passes • company policies and procedures, including: • access and equity policy, principles and practice • OHS policies and procedures, including control procedures • maintenance procedures for equipment and PPE • those relating to own role, responsibility and delegation • work site access security clearance procedures • company service standards • dress and presentation requirements • duty of care, code of conduct, and code of ethics • emergency response and evacuation procedures • employer and employee rights and responsibilities • environmental protection procedures • personnel practices and guidelines • quality and continuous improvement processes and standards • records and information systems and processes • training materials (induction, refresher and new skills) • use of contractors.
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Appropriate persons may include:	• clients • colleagues • managers • persons in control of work sites • supervisors.
Hazards may include:	• allergic reactions to chemicals or equipment, including latex allergies • biological and animal waste • bites and stings • blood and blood-stained products • confined or restricted spaces • contaminated clothing, materials or equipment • damaged or inappropriate equipment • dust and fibres • electrical hazards arising from: • cables • electrical fittings: • switches • lights • untested electrical equipment • fatigue • fire • gas • heights • inadequate lighting and ventilation • infectious and zoonotic diseases, such as: • Q fever • scabies • mobile equipment and vehicle hazards around plant and vehicles • moving or unguarded parts • noise • occupational violence and bullying • poor personal hygiene practices • spill, splash and spray • release of substances with negative environmental impact • synergistic chemical reactions, such as: • hazardous incompatibility • reactivity • syringes or other sharps • temperature extremes • ultraviolet light

	• unsafe manual-handling techniques, including awkward and repetitive postures • unsafe underfoot conditions, such as slippery, uneven and rough surfaces • work in unfamiliar isolated or remote environments.
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Legislative requirements may include:	• Australian standards, quality assurance and certification requirements • award and enterprise agreements • industry advisory standards and codes, such as: • building codes • dangerous goods codes • relevant commonwealth, state and territory legislation and local government regulations affecting company operation, including: • anti-discrimination and diversity policies • chemical controls • chemical registers and manifests • consumer protection • energy conservation • environmental protection • equal employment opportunity • freedom of information • industrial equipment certificates of competency or licences • industrial relations • OHS Acts and regulations • privacy • public health • trade practices • water conservation • workplace consultative arrangements.
Occupational health and safety (also known as workplace health and safety) requirements may relate to:	• allergic reactions, such as contact dermatitis • communication devices for remote and isolated locations, such as: • mobile phone • two-way radio • dermatotoxicological control and prevention measures • emergency procedures for eye and skin contact, and inhalation and ingestion of toxic substances • hazard identification and risk assessment mechanisms • health surveillance and monitoring, such as regular blood testing • hierarchy of hazard control procedures • maintaining clear access • national and industry standards and codes of practice • OHS control procedures, such as: • health and safety plans • job plans

	• job safety analyses • risk assessments • safe operating practices and procedures • safe system of work statements • safe work instructions • work method statements • reporting injury and dangerous occurrences • routes of entry and potential symptoms of exposure to chemicals • safe work practices for equipment, PPE and chemical storage, including interpretation of: • MSDS • hazardous substance information, such as long latency periods • safety training, induction and refresher training • selection and use of PPE and clothing appropriate to the hazard • ultraviolet light • up-to-date electrical test and tag compliance • use of chemicals according to MSDS • use of residual current devices • use, storage and maintenance of equipment according to manufacturer specifications and equipment operating manuals.
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Clean room is a specialised facility that may accommodate:	• electronic manufacturing environment • laboratories • PABX equipment • specialised computer installation • sterile food manufacturing environments.
Surfaces may include:	• benchtops and work stations • equipment casings • cabling • ceilings • fittings, such as: • cameras • lights • monitors • skylights • smoke detectors • sprinkler systems • furniture • glass • hard floor surfaces • soft floor surfaces, such as special dust-catching carpets • surfaces encompassing new technologies • vents and grilles.
Damage to clean room equipment may include:	• damage caused by liquids entering or moisture accumulating in: • electrical and other cabling • equipment casings • electrostatic or electromagnetic contamination • falling or airborne dust • loosening of cables or wiring.
Manufacturer specifications may include:	• equipment operating manuals • instructional guides • MSDS • other resources supplied by the manufacturer, such as: • laminated cards • notices • wall posters • product labels • safety instructions pre-printed on equipment.
Soil types may include:	• dust • litter.
Personnel may include:	• client's staff members

	• colleagues • general public • venue, facility, shopping centre staff and management.
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Equipment may include:	• access equipment, such as: • A frame ladders • extension poles • cleaning equipment, such as: • brooms • buckets • buffing machines with brushes and pads • damp mops • dust mops • dust pans • garbage bins • glass cleaning equipment • lint-free and anti-static cleaning cloths • microfibre products • scourers • vacuum cleaners fitted with micron filters and bags • vacuum crevice tools • wheeled cleaning trolleys.
Chemicals may include:	• acid cleaners • alkaline cleaners • low environmental-impact chemicals • neutral cleaners • solvent cleaners.
Personal protective equipment may include:	• ear muffs and plugs • gloves, such as non-permeable • goggles • high-visibility vests and clothing • overalls and other protective clothing • respirators • safety glasses • safety shoes • splash-proof face masks • sun protection • tongs • ultraviolet protection • wet-work clothing.
Signage and barriers may include:	• physical barriers and restraints erected to restrict access to a site • signs complying with legislative requirements and Australian standards warning of danger or adverse conditions, including: • cleaning in progress

	hazardous chemicals in use or present in work area.
Work restrictions may include:	- amount of cleaning anticipated - client activity - employee level of literacy and communication skills - faulty or inappropriate equipment - site accessibility - site hazards - skills of work unit or team - staffing resources - time limitations.
Cleaning techniques may include:	- buffing - damp mopping - dust mopping - spot cleaning - steam cleaning - surface wiping with lint-free or anti-static cloths - low-water cleaning methods, such as using microfibre cleaning products - vacuum cleaning - vacuuming with crevice tool on hard to access surfaces.
Waste may be either solid or liquid and include:	- chemicals past expiry date - obsolete equipment - packaging - used cleaning cloths - used containers - used or contaminated PPE - used or unused chemicals.
Environmental requirements may include:	- clean-up, containment and isolation - company policies and guidelines - emergency chemical spill control measures - environmental protection agency and requirements of government departments, such as: - agriculture - emergency services - hazardous materials handling - local government regulations and by-laws - low-energy cleaning methods - low environmental-impact chemicals - low-moisture cleaning methods - low water-use equipment and water-efficient cleaning methods - non-chemical cleaning methods.

Unit Sector(s)

Cleaning operations

Custom Content Section

Not applicable.