



Australian Government

Department of Education, Employment and Workplace Relations

PRMCL21B Clean industrial machinery

Release: 1

PRMCL21B Clean industrial machinery

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency covers the skills and knowledge required to clean industrial machinery. This is usually performed on a planned or rostered basis with the machinery being taken out of operation for cleaning. Machinery cleaning usually occurs in an industrial, food manufacturing or processing or mining environment. Cleaners are not usually involved in the routine cleaning of operational machinery for safety and production reasons.

The unit requires the ability to assess the extent of the cleaning task through a knowledge of the characteristics of the surface area and the type of surface soiling, and through understanding client requirements and applying company policies and procedures in order to perform the task. The work may be performed in teams or individually. The selection of appropriate equipment, chemicals and cleaning methods is essential for performing the task safely and efficiently.

Application of the Unit

Not Applicable

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Not Applicable

Employability Skills Information

Not Applicable

Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | |
|---|--|
| 1 Assess suitability of industrial machinery for cleaning | 1.1 Assess the industrial <i>machinery</i> to be cleaned and review <i>work order</i> in accordance with <i>company requirements</i> and clarify any issues with <i>appropriate person(s)</i>
1.2 Identify <i>hazards</i> and control risks in the work site in accordance with <i>legislative, occupational health and safety (OHS)</i> and <i>company requirements</i>
1.3 Identify <i>machinery</i> surfaces and <i>soil</i> type(s) through observation in accordance with <i>work order</i> and <i>company requirements</i>
1.4 Assess <i>machinery cleaning hazards</i> in accordance with <i>work order</i> and <i>legislation, OHS</i> and <i>company requirements</i>
1.5 Select <i>cleaning technique(s)</i> in accordance with <i>work order, manufacturers' specifications</i> and <i>environmental, legislative, OHS</i> and <i>company requirements</i>
1.6 Identify and report any pre-existing damage at the work site to the <i>appropriate person(s)</i> in accordance with <i>company requirements</i> |
| 2 Select equipment and chemicals | 2.1 Select and use suitable <i>personal protective equipment (PPE)</i> in accordance with <i>manufacturers' specifications, OHS</i> and <i>company requirements</i>
<hr/> 2.2 Select <i>equipment</i> and <i>chemicals</i> appropriate for the <i>work order</i> in accordance with <i>OHS</i> and <i>company requirements</i>
2.3 Check operational effectiveness of <i>equipment</i> in accordance with <i>manufacturers' specifications</i> and <i>company requirements</i>
2.4 Adjust mechanical <i>equipment</i> to suit operator's requirements in accordance with <i>manufacturers' specifications</i> and <i>OHS requirements</i>
2.5 Prepare <i>chemicals</i> in accordance with <i>manufacturers' specifications, OHS</i> and <i>company requirements</i> |
| 3 Prepare machinery and site | 3.1 Confirm and reassess <i>hazards</i> and control risks in the work site in accordance with <i>legislative, OHS</i> and <i>company requirements</i>
3.2 Install appropriate <i>signage and barriers</i> to |

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	maximise public safety during the cleaning operation in accordance with <i>OHS</i> and <i>company requirements</i> 3.3 Utilise existing access platforms in accordance with <i>manufacturers' specifications</i> and <i>OHS</i> and <i>company requirements</i> 3.4 Cover and secure items or areas requiring protection from <i>damage</i> in accordance with <i>work order</i>, <i>manufacturers' specifications</i> and <i>company requirements</i> 3.5 Identify any <i>work restrictions</i> affecting the completion of the <i>work order</i> instructions and advise promptly the <i>appropriate person(s)</i>
4 Clean machinery	4.1 Prepare heavily soiled areas in accordance with <i>manufacturers' specifications</i> and <i>company requirements</i> 4.2 Clean <i>machinery</i> using appropriate <i>equipment</i>, <i>PPE</i>, <i>chemicals</i> and <i>cleaning technique(s)</i> in accordance with client requirements, <i>work order</i>, <i>manufacturers' specifications</i> and <i>company requirements</i>
	4.3 Inspect <i>machinery</i> for residual spots, marks and <i>soil</i> and spot clean as required in accordance with <i>work order</i> and <i>company requirements</i> 4.4 Conduct all work in accordance with <i>manufacturers' specifications</i> and <i>legislative</i>, <i>OHS</i> and <i>company requirements</i>
5 Tidy work site	5.1 Dispose of all collected <i>soil</i> and <i>waste</i> in accordance with client specifications, <i>work order</i>, <i>manufacturers' specifications</i> and <i>environmental</i>, <i>legislative</i>, <i>OHS</i> and <i>company requirements</i> 5.2 Remove <i>signage and barriers</i> in accordance with <i>work order</i> and <i>OHS</i> and <i>company requirements</i>
6 Clean, safety-check and store equipment and chemicals	6.1 Clean <i>equipment</i> and <i>PPE</i> in accordance with <i>manufacturers' specifications</i> and <i>environmental</i>, <i>OHS</i> and <i>company requirements</i> 6.2 Safety-check <i>equipment</i> and <i>PPE</i> in accordance with <i>manufacturers' specifications</i> and <i>OHS requirements</i> and record any required

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maintenance in accordance with *company requirements*

6.3 Store and maintain *equipment* and *PPE* to allow ready access in accordance with *manufacturers' specifications* and *OHS* and *company requirements*

6.4 Store *chemicals* in accordance with *manufacturers' specifications* and *OHS* and *company requirements*

Required Skills and Knowledge

Refer to Evidence Guide

Evidence Guide

EVIDENCE GUIDE

The evidence guide identifies the requirements to be demonstrated to confirm competence for this unit. Assessment must confirm sufficient ability to use appropriate skills and knowledge to clean industrial machinery. Assessment of performance should be over a period of time covering all categories within the range statement that are applicable in the working environment.

Critical aspects of competency

- Accurate identification of the surface and soil types.
- Awareness of hazards.
- Compliance with company and legislative requirements.
- Outcomes achieved in relation to customer work order and company requirements.
- Safe and efficient cleaning methods.
- Selection of appropriate cleaning equipment and chemicals.

Knowledge needed to achieve the performance criteria

Knowledge and understanding are essential to apply this unit in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below.

- Knowledge of the range of cleaning equipment and chemicals.
- Restrictions or limitations on surfaces that can be pressure washed.
- Knowledge of cleaning methods for electrical equipment.
- Pressure-washing equipment and functions of the various lances.
- Machinery manufacturers' cleaning specifications.
- Enterprise maintenance and servicing procedures.
- Awareness of applicable legislation, regulations, codes of practice and industry advisory standards.
- Communication and negotiation techniques.
- Company management structure and reporting procedures.
- Company procedures and practices.
- Company structure and reporting channels.
- Emergency response and evacuation procedures.
- Injury, dangerous occurrence and incident reporting.
- Knowledge of biological and viral control procedures.
- OHS legislation and procedures.
- Routes of entry and potential symptoms of exposure from chemicals.

Specific skills needed to achieve the performance criteria

To achieve the performance criteria, some complementary skills are required. These are:

- accurate identification of soil types and surface types
- selection of appropriate equipment and chemicals
- electrical isolation and use of machinery safety 'lock-out systems'
- applying correct manual handling techniques
- communicating clearly and concisely using written and verbal modes
- customer service
- handling and disposal of chemicals safely
- handling and disposal of contaminated and toxic waste

- performing the mathematical calculations required for the dilution and mixing of chemicals as specified on MSDS
- planning and organising work
- problem solving and critical analysis
- reading, interpreting and responding appropriately to directions and safety instructions in equipment manuals and MSDS and on chemical labels
- requesting advice or further information
- scheduling and rostering
- seeking and receiving feedback
- sourcing, organising and recording information
- working on an individual basis or as part of a team.

Other units of competency that could be assessed with this unit

Competence in this unit may be assessed in conjunction with:

- PRMCL20B Clean using pressure washing
- PRMCL36B Clean at high levels.

Resources required to assess this unit

The following resources should be available:

- access to suitable machinery with a variety of surface types and soil types
- access to suitable equipment and chemicals
- access to personal protective equipment
- access to equipment operating manuals and MSDS
- work order instructions, work plans and schedules and policy documents
- assessment instruments, including personal planner and assessment record book.

Gaining evidence to assess this unit

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and be observed by the assessor.

The competency is to be demonstrated in a range of situations that may include customer/workplace interruptions and involvement in related activities normally experienced in the workplace.

Assessment of competency may be made through practical demonstration in the work environment or in a simulated work environment.

Key competency levels

There are a number of processes that are learnt throughout work and life that are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. Information below highlights how these processes are applied in this unit of competency.

- | | | |
|------------------------------|---|---|
| 1 Perform the process | 2 Perform and administer the process | 3 Perform, administer and design the process |
|------------------------------|---|---|

How can communication of ideas and information be applied?	1	Confirm own role and responsibilities with colleagues and supervisors to ensure compliance with work order and company requirements such as OHS.
How can information be collected, analysed and organised ?	1	Collect and analyse information regarding work site in line with company procedures.
How are activities planned and organised ?	1	Organise and prioritise work tasks to meet work order and company requirements.
How can teamwork be applied?	1	Provide support and assistance to team members to complete work tasks within designated timelines and to meet company requirements.
How can the use of mathematical ideas and techniques be applied?	1	Calculate volume of waste to be cleared and measure and carry out chemical applications.
How can problem-solving skills be applied?	1	Discuss with management/clients/site managers, supervisors and team members how to help solve problems that may arise.
How can the use of technology be applied?	1	Record data for future use such as stock control.

Range Statement

RANGE STATEMENT

The range statement links the required knowledge and organisational and technical requirements to the workplace context. It describes any contextual variables that will be used or encountered when applying the competency in work situations. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables are listed in alphabetical order and may be present for this particular unit.

Appropriate person(s) may include:

- clients
- colleagues
- managers
- person(s) in control of work site(s)
- supervisors.

Chemicals may include:

- acid cleaners
- alkaline cleaners

- neutral cleaners
- solvent cleaners.

Cleaning technique(s) may include:

- air blowing
- dry wiping
- hosing down
- pre-spraying
- pressure washing
- rinsing
- scrub and wipe
- spot cleaning
- wash and wipe
- wet wiping.

Company requirements may include:

- access and equity policy, principles and practice
- 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 badge/card/pass
- company policy and procedures
- company service standards
- defined resource parameters
- dress and presentation requirements
- duty of care, code of conduct, code of ethics
- emergency response and evacuation procedures
- maintenance procedures for equipment and PPE
- OHS control procedures (e.g. health and safety plans, job plans, job safety analysis, risk assessments, safe operating practices/procedures, safe work instructions, work method statements, safe system of work statements)
- OHS policies and procedures
- personnel practices and guidelines
- policies and procedures relating to own role, responsibility and delegation
- quality and continuous improvement processes and standards
- records and information systems and processes
- rights and responsibilities of employees and employers
- training (induction, refresher and new skills) materials
- use of contractors
- work site access security clearance procedures.

Damage may be caused by:

- discolouration
- electrical dampness
- filter damage
- instigation of rust

- paint removal.

Environmental requirements may include:

- clean-up, containment and/or isolation
- company policies and guidelines
- environmental protection agency and government department regulations and guidelines
- hazardous materials handling
- local government regulations/bylaws.

Equipment may include:

- air blower
- broom
- cloths
- high-pressure water cleaning unit
- hoses
- squeegee.

Hazards may include:

- allergic reactions to chemicals and/or equipment, including latex allergies
- biological waste
- bites and stings
- blood and blood-stained products
- broken glass and other sharp surfaces
- chemical containers and/or decanted chemical storage containers labelled incorrectly
- confined/restricted spaces
- contaminated clothing, chemicals and/or equipment
- damaged or inappropriate equipment
- dust and fibres
- electrical hazards arising from cables, electrical fittings (switches and lights) and untested electrical equipment
- environmental impact
- extremes of heat and temperature
- fatigue
- fire
- gas
- heights
- human waste (faeces, urine, vomit)
- inadequate lighting and ventilation
- infectious and zoonotic diseases e.g. scabies/Q fever
- inhaling chemical fumes
- leaks, spill, splash and spray
- manual handling techniques including awkward and repetitive postures
- mobile/vehicle hazards around plant and vehicles
- moving and/or unguarded machinery and equipment
- noise
- occupational violence and bullying
- poor manual handling techniques
- poor personal hygiene practices
- repetitive motion, force and vibration

- synergistic chemical reactions (hazardous incompatibility or reactivity)
- syringes or other sharps
- ultraviolet light
- underfoot conditions e.g. slippery, uneven and rough surfaces
- unrestricted people access
- waste and waste disposal
- work in isolated/remote environments.

Legislative requirements may include:

- Australian Standards, quality assurance and certification requirements
- award and enterprise agreements
- codes of practice
- national industry standards
- relevant Commonwealth/state/territory legislation and local government regulations that affect company operation:
 - anti-discrimination and diversity
 - availability of chemical registers/manifests
 - chemical controls
 - consumer protection
 - environmental protection issues
 - equal employment opportunity
 - freedom of information
 - industrial equipment certificates of competency or licences
 - industrial relations
 - OHS Acts and regulations
 - privacy
 - trade practices
 - workplace consultative arrangements.

Machinery may include:

- bottle making machines
- concrete making machines
- earth moving equipment
- food processing machines and equipment
- mining industry equipment
- trucks
- welders.

Machinery cleaning hazards may include:

- exposed and/or damaged electrical components and/or wiring and cabling
- faulty pressure hoses or pressure relieve valves
- overriding, removal and/or interference with machinery safety devices
- over-spraying and/or exposure to machinery electrical components from conductive and/or flammable substances.

Manufacturers' specifications may include:

- equipment operational manuals
- instructional guides

- material safety data sheets
- other resources supplied by the manufacturer (such as laminated cards notices, wall posters)
- product labels
- safety instructions pre-printed on equipment.

Occupational health and safety* (OHS) requirements may relate to:

- allergic reactions (contact dermatitis, etc)
- communication devices for remote and isolated locations e.g. mobile phone, two-way radio, etc
- dermatotoxicological control and prevention measures
- emergency procedures for eye and skin contact, inhalation and ingestion of toxic substances
- hazard identification and risk assessment mechanisms
- hazard reporting
- health surveillance and monitoring (including blood testing)
- hierarchy of hazard control procedures
- injury, dangerous occurrence and incident reporting requirements
- keeping access ways clear from obstruction
- maintaining clear access ways
- maintenance procedures for equipment and PPE
- national industry standards/codes of practice
- OHS control procedures (e.g. health and safety plans, job plans, job safety analysis, risk assessments, safe operating practices/procedures, safe work instructions, work method statements, safe system of work statements)
- protection from hazardous substances, noise and dust
- protection of people in the workplace
- routes of entry and potential symptoms of exposure from chemicals
- safety training (induction and refresher)
- ultraviolet light
- up-to-date electrical test and tag compliance
- use of chemicals in accordance with labels
- use, storage and maintenance of equipment in accordance with manufacturers' specifications and equipment operating manuals
- use, storage and maintenance of personal protective equipment and clothing.

** Also known as occupational safety and health or workplace health and safety*

Personal protective equipment (PPE) may include:

- ear muffs/plugs
- gloves - non-permeable
- goggles
- high-visibility vests/clothing
- overalls and other protective clothing
- respirator
- safety glasses
- safety shoes
- splash-proof face masks
- sun protection

- tongs
- ultraviolet protection
- wet-work clothing.

Personnel may include:

- client's staff
- fellow workers (colleagues)
- general public
- venue/facility/building/shopping centre staff/management.

Rights and responsibilities of employees may relate to:

- confidentiality and privacy rights
- duty of care
- knowing the appropriate personnel for reporting purposes
- knowing the location of manuals and/or related documents
- knowing the terms and conditions of own employment
- knowing the workplace procedures
- protection from discrimination and sexual harassment.

Rights and responsibilities of employers may relate to:

- duty of care
- providing a safe environment free from discrimination and sexual harassment (see relevant state and Commonwealth anti-discrimination legislation)
- providing a safe workplace in accordance with OHS legislation, codes of practice, regulations and standards
- providing information and training in work tasks, OHS and other employment related matters
- the right to dismiss you if you (see the *Commonwealth Workplace Relations Act 1996*):
 - are negligent, careless or cause an accident
 - commit a criminal offence
 - commit acts of disloyalty such as revealing confidential information
 - use abusive language.

Signage and barriers may include:

- physical barriers and restraints erected to restrict access to a site
- signs complying with legislative requirements and/or Australian Standards warning of danger and/or adverse conditions including cleaning in progress and hazardous chemicals are in use or present in the work area.

Soil types may include:

- dust
- exhaust and soot
- food and food scraps
- graffiti (ink, texta, paint)
- grease
- oil
- paint.

Waste may be either solid or liquid and include:

- chemicals past the expiry date
- hair nets
- obsolete cleaning equipment
- packaging
- removed soil
- used cleaning cloths
- used containers
- used or unused chemicals
- used/contaminated personal protective equipment
- water or water and chemical residue.

Work order information may include:

- access to work site and egress points
- budget allocations
- completion times/dates
- insufficient people to complete the work task(s)
- job requirements and tasks
- legislative requirements and local government
- OHS requirements and emergency response procedures
- resource requirements - equipment and chemicals
- specific client requirements e.g. relationships with other activities, dress and presentation requirements
- use of signage and barriers
- work schedules
- working in isolated and remote locations
- work site contact person(s).

Work restrictions may include:

- amount of cleaning anticipated
- client activity
- employee(s) level of literacy and/or communication skills
- faulty or inappropriate equipment
- site hazards
- skills of the work unit/team
- staffing resources
- time limitations.
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Unit Sector(s)

Not Applicable

Functional Area:

Functional Area: Elective. Cleaning Operations