



Australian Government

Department of Education, Employment and Workplace Relations

CPCCCO3034A Conduct concrete agitator truck operations

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to conduct concrete agitator truck operations in support of construction projects.

The unit covers planning and preparing for work, conducting operational checks, the safe and effective operation of the concrete agitator truck and associated equipment for a range of mandatory tasks, and the conduct of operator maintenance and work finalisation activities.

Application of the Unit

Application of the unit

This unit of competency supports the attainment of the understanding and skills to conduct concrete agitator truck operations, which may include working with others and as a member of a team.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units

CPCCOHS2001A

Apply OHS requirements, policies and procedures in the construction industry

Employability Skills Information

Employability skills 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

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare.	<p>1.1. Work instructions and operational details are obtained using relevant <i>information</i>, confirmed and applied for <i>planning and preparation</i> purposes.</p> <p>1.2. <i>Safety (OHS)</i> requirements are followed in accordance with safety plans and policies.</p> <p>1.3. Signage and barricade requirements are identified and implemented.</p> <p>1.4. <i>Tools and equipment</i> selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement.</p> <p>1.5. Materials quantity requirements are calculated in accordance with plans, specifications and <i>quality requirements</i>.</p> <p>1.6. Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.</p> <p>1.7. <i>Environmental requirements</i> are identified for the project in accordance with environmental plans and regulatory obligations and applied.</p>
2. Conduct machine pre-operational checks.	<p>2.1. Pre-start, start up, park and shut-down procedures are carried out in accordance with manufacturer and site specific requirements.</p> <p>2.2. Vehicle controls and functions, including steering, brakes and manoeuvrability, are checked for serviceability and any faults are rectified or reported.</p> <p>2.3. <i>Agitator controls</i> and functions are checked for serviceability and any faults are rectified or reported.</p>
3. Operate the agitator truck.	<p>3.1. Site hazards associated with truck operations are identified and safe operating techniques are used to minimise risk.</p> <p>3.2. Engine power is managed to ensure efficiency of concrete agitator truck movements and to minimise damage to the engine and gears.</p> <p>3.3. Engine power is coordinated with gear selection ensuring smooth transition and operation within torque range.</p> <p>3.4. Truck is operated to work instructions in accordance with company operating procedures.</p> <p>3.5. Road and traffic conditions are constantly monitored taking into account road standards, traffic flow,</p>

ELEMENT	PERFORMANCE CRITERIA
4. Load, transport and discharge concrete.	<p>distance and load, ensuring no injury to people or damage to property, equipment, loads and facilities.</p> <p>3.6. Truck is brought to a halt smoothly, minimising the wear and tear on vehicle using the engine retarder, gears and brakes.</p> <p>4.1. Concrete agitator truck is positioned at load and discharge points with a minimum of manoeuvres.</p> <p>4.2. Concrete agitator truck is loaded to within authorised carrying capacity of concrete mixes to suit the site and task conditions.</p> <p>4.3. Concrete agitator truck is moved from loading to discharge point safely and smoothly avoiding surge and sway.</p> <p>4.4. Concrete is discharged in accordance with task specifications.</p> <p>4.5. Discharge systems, including chutes and adaptors, are monitored and maintained throughout the operations.</p>
5. Carry out driver maintenance.	<p>5.1. Concrete agitator truck is safely parked, prepared for maintenance and shut down as per manufacturers' manual and organisational requirements.</p> <p>5.2. Inspection and fault finding are conducted in accordance with manufacturer specifications and organisational requirements.</p> <p>5.3. Defective parts are removed and replaced safely and effectively according to manufacturers' manual and organisational requirements.</p> <p>5.4. Regular programmed maintenance tasks are carried out in accordance with manufacturer and organisational requirements.</p>
6. Clean up.	<p>6.1. Work area is cleared and materials disposed of, reused or recycled in accordance with project environmental management plan.</p> <p>6.2. Vehicle, bowl, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills for this unit are:

- communication skills to:
 - determine requirements
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - follow instructions
 - read and interpret:
 - documentation from a variety of sources
 - drawings and specifications
 - report faults
 - use language and concepts appropriate to cultural differences
 - use and interpret non-verbal communication, such as hand signals
- evaluating own actions and making judgments about performance and necessary improvements
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- organisational skills, including the ability to plan and set out work
- recognising procedures, following instructions, responding to change and contributing to workplace responsibilities, such as current work site environmental and sustainability frameworks or management systems
- teamwork skills to coordinate own work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
 - use a range of mobile technology, such as two-way radio and mobile phones
 - voice and hand signals to access and understand site-specific instructions.

Required knowledge

Required knowledge for this unit is:

- concrete agitator truck systems, characteristics, technical capabilities and limitations
- construction activity sequences related to concreting operations
- general construction terminology
- job safety analysis (JSA) and safe work method statements
- levelling techniques
- material safety data sheets (MSDS)

REQUIRED SKILLS AND KNOWLEDGE

- materials handling methods
- operational, maintenance and basic diagnostic procedures
- processes for interpreting engineering drawings and sketches
- quality requirements
- safe operating techniques in all terrain
- site and equipment safety requirements
- site isolation and traffic control responsibilities and authorities
- state or territory regulatory requirements related to concrete agitator truck operations.

Evidence Guide

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 in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

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 ability to:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures including quality requirements
- communicate and work effectively and safely with others
- conduct concrete agitator truck operations, to be performed over not less than three shifts and two different sites and are to include the tasks of:
 - positioning vehicle at the load point
 - loading and transporting concrete
 - discharging concrete at work site to specification
 - discharging directly to site
 - discharging to wheelbarrow and hopper
 - applying emergency procedures
 - conducting authorised operator maintenance.

Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge

EVIDENCE GUIDE

will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the mandatory task requirements
- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe work practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

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.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and 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.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the

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workplace

- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

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.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Range Statement

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.

Information includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions, where specified
- MSDS
- memos

RANGE STATEMENT

Planning and preparation include:

Safety (OHS) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

- regulatory and legislative requirements pertaining to operation of concrete agitator trucks on construction sites
- relevant Australian standards
- safe work procedures relating to operation of concrete agitator trucks on construction sites
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.
- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling activities that may require the assistance of others or the use of manual or mechanical lifting devices where size, weight or other issues, such as a disability are a factor
- hazard control
- hazardous materials and substances
- hazards and risks including uneven/unstable terrain, trees, fires, overhead services, bridges, buildings, excavations, traffic, embankments, structures and hazardous materials
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
 - earth leakage boxes
 - lighting
 - power cables, including overhead service trays, cables and conduits
 - restricted access barriers
 - surrounding structures
 - traffic control
 - trip hazards

RANGE STATEMENT

- work site visitors and the public
 - working at heights
 - working in confined spaces
 - working in proximity to others
 - safe parking practices, including ensuring access ways are clear, equipment/ machinery is away from overhangs and refuelling sites, safe distance from excavations, and secured from unauthorised access or movement
 - use of firefighting equipment
 - use of tools and equipment
 - workplace environmental requirements and safety.
- Tools and equipment*** include:
- hand tools and maintenance equipment associated with the particular concrete agitator truck.
- Quality requirements*** include:
- internal company quality policy and standards
 - manufacturer specifications, where specified
 - relevant regulations, including Australian standards
 - workplace operations and procedures.
- Environmental requirements*** include:
- clean-up management
 - dust and noise
 - stormwater management
 - vibration
 - waste management.
- Agitator controls:***
- are related to speed, revolutions, forward and return
 - may be air, mechanical or electrically actuated.
- Discharge points:***
- include:
 - directly to site
 - into a wheelbarrow and hopper
 - may include into a kibble.
- Concrete mixes:***
- may be relatively dry or increasingly wet
 - in order, from wet to dry
 - will include block-fill, pool mix, topping, slab, footing and kerb and guttering.
- Discharging concrete*** means:
- movement of concrete from the agitator truck by mechanical/gravity feed through chutes and adaptors of varying sizes.

RANGE STATEMENT

Maintenance:

- includes:
 - authorised servicing
 - cleaning
 - monitoring, recording and reporting faults
- may include:
 - conducting authorised minor replacements
 - providing assistance to maintenance personnel during maintenance and repair activities.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area