



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **RIIMPO315A Conduct tractor operations**

**Release: 1**

## RIIMPO315A Conduct tractor operations

### Modification History

Not applicable.

### Unit Descriptor

This unit covers conducting tractor operations in the civil construction industry. It includes: planning and preparing; conducting machine pre-operational checks; operating the tractor; selecting, removing and fitting attachments; relocating the tractor; and carrying out machine operator maintenance and cleaning up.

### Application of the Unit

This unit is appropriate for those working in mobile plant operator roles, at worksites within:

- Civil construction

Tractors must be registered to drive and operate on public roads.

### Licensing/Regulatory Information

Refer to Unit Descriptor.

### 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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for operations	<p>1.1. Access, interpret and apply <b><i>compliance documentation</i></b> relevant to conducting <b><i>tractor operations</i></b></p> <p>1.2. Obtain, confirm and apply <b><i>work instructions</i></b> to the allotted task</p> <p>1.3. Obtain, confirm and apply <b><i>safety requirements</i></b> to the allotted task</p> <p>1.4. Identify, obtain and implement signage requirements from the project traffic management plan</p> <p>1.5. Select plant, tools and equipment to carry out tasks that are consistent with the requirements of the job and check them for serviceability and rectify or report any faults</p> <p>1.6. Identify, confirm and apply <b><i>environmental</i></b> protection requirements from the project environmental management plan to the allotted task</p>
2. Conduct machine pre-operational checks	<p>2.1. Carry out pre-start, start-up, park and shutdown procedures</p> <p>2.2. Check <b><i>tractor controls and functions</i></b> for serviceability and rectify or report any faults</p>
3. Operate tractor	<p>3.1. Identify site hazards associated with tractor operations and use safe operating techniques to minimise risk</p> <p>3.2. Identify and apply operating techniques for tractor to achieve optimum output while achieving specified tolerances</p> <p>3.3. Operate tractor to work instructions</p>
4. Select, remove and fit attachments	<p>4.1. Select <b><i>attachment</i></b> for the task</p> <p>4.2. Remove and fit attachment</p> <p>4.3. Test attachment to ensure correct fitting and operation</p> <p>4.4. Use attachment in accordance with recommendations and design limits</p> <p>4.5. Clean and store removed attachments in designated location</p>
5. Relocate tractor	<p>5.1. Move tractor safely between worksites,</p>

	observing relevant codes and traffic management requirements 5.2.Prepare tractor for relocation
6. Carry out machine operator maintenance	6.1. <b><i>Safely park</i></b> , shutdown and prepare tractor for maintenance 6.2.Conduct inspection and fault finding 6.3.Remove and replace defective parts safely and in accordance with instructions 6.4.Carry out regular <b><i>programmed maintenance</i></b> tasks
7. Clean up	7.1.Clear work area and dispose of or recycle <b><i>materials</i></b> 7.2.Clean, check, maintain and store plant, <b><i>tools and equipment</i></b>

## Required Skills and Knowledge

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

### Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to conduct tractor operations:

- apply legislative, organisation and site requirements and procedures
- apply site and equipment safety requirements
- apply tractor and attachment operating techniques
- interpret drawings and sketches
- apply machine attachments changing procedures

### Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to conduct tractor operations:

- tractor types, characteristics, technical capabilities and limitations
- site and equipment safety requirements
- tractor and attachment operating techniques related to essential tasks
- operational, maintenance and basic diagnostic procedures
- site isolation and traffic control responsibilities and authorities
- materials characteristics
- materials safety data sheet and materials handling methods
- project quality requirements
- civil construction terminology
- methods of changing machine attachments
- safe operating techniques in all terrain
- JSAs/Safe work method statement

## 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.

<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:</p> <ul style="list-style-type: none"> <li>• knowledge of the requirements, procedures and instructions for conducting tractor operations</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient completion of tractor operations, which are to include: <ul style="list-style-type: none"> <li>• the minimum of three of the operations listed in the Range Statement, and</li> <li>• the fitting and removal of at least one attachment</li> </ul> </li> <li>• working with others to undertake and complete tractor operations that meet all of the required outcomes</li> <li>• consistent timely completion of tractor operations that safely, effectively and efficiently meet the required outcomes</li> </ul>
<b>Context of and specific resources for assessment</b>	<ul style="list-style-type: none"> <li>• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.</li> <li>• The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.</li> <li>• Customisation of assessment and delivery</li> </ul>

	<p>environment to sensitively accommodate cultural diversity.</p> <ul style="list-style-type: none"> <li>• Aboriginal people and other people from a non English speaking background may have second language issues.</li> <li>• Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances.</li> <li>• Where applicable, physical resources should include equipment modified for people with disabilities.</li> <li>• Access must be provided to appropriate learning and/or assessment support when required.</li> </ul>
<b>Method of assessment</b>	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidate's required knowledge</li> <li>• observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistently achieving the required outcomes</li> <li>• the conducting of a minimum of three of the tasks listed in the Range Statement</li> <li>• fitting and removal of at least one attachment</li> </ul> </li> <li>• first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• working with others to undertake and complete the tractor operations</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>





## 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.

<b>Relevant compliance documentation</b> may include:	<ul style="list-style-type: none"> <li>legislative, organisation and site requirements and procedures</li> <li>manufacturer's guidelines and specifications</li> <li>Australian standards</li> <li>codes of practice</li> <li>Employment and workplace relations legislation</li> <li>Equal Employment Opportunity and Disability Discrimination legislation</li> </ul>
<b>A tractor:</b>	<ul style="list-style-type: none"> <li>is a self propelled, wheeled or tracked, commercial or agricultural machine</li> <li>it may be a rigid or articulated, two wheel or all wheel drive</li> <li>they are normally used for towing and/or providing a power take off (PTO) for specified attachments</li> <li>are to include wheeled and may include tracked types</li> </ul>
<b>Tractor operations</b> may include:	<ul style="list-style-type: none"> <li>post hole digging, spraying of herbicides/fertilisers, mowing/slashing, lifting, sweeping and blade based functions</li> </ul>
<b>Work instructions</b> may include:	<ul style="list-style-type: none"> <li>plans, specifications, quality requirements and operational details</li> <li>quality requirements may include: dimensions, tolerances, standards of work and material standards as detailed in the project drawings, specifications and project documentation to meet client satisfaction</li> </ul>
<b>Safety requirements</b> may be from the site safety plan and organisational policies and procedures and include:	<ul style="list-style-type: none"> <li>protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment, hazard control and hazardous materials and substances</li> <li>safe operating procedures to recognise hazards and prevent risks associated with underground and overhead services, other machines,</li> </ul>

	<p>personnel, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public</p> <ul style="list-style-type: none"> <li>• emergency procedures, including: emergency shutdown and stopping, extinguishing fires, organisational First Aid requirements and evacuation</li> <li>• hazards and risks, which may include: uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials</li> </ul>
<b>Environmental</b> requirements are to include:	<ul style="list-style-type: none"> <li>• organisational/project environmental management plan, waste management, water quality protection, noise, vibration, dust and clean-up management</li> </ul>
<b>Tractor controls and functions</b> include:	<ul style="list-style-type: none"> <li>• implements or other attachments, brakes and manoeuvrability</li> </ul>
<b>Attachments</b> may include:	<ul style="list-style-type: none"> <li>• a front blade, forklift, slasher, mower, auger, drag broom, power broom, loading platform, rotary hoe, concrete mixer, spraying equipment and disc plough</li> </ul>
<b>Safe parking</b> practices is to include:	<ul style="list-style-type: none"> <li>• 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</li> </ul>
<b>Programmed maintenance</b> is to include:	<ul style="list-style-type: none"> <li>• cleaning, authorised servicing and the monitoring, recording and reporting of faults</li> </ul>
<b>Programmed maintenance</b> may include:	<ul style="list-style-type: none"> <li>• authorised minor replacements and the provision of assistance to maintenance personnel during maintenance and repair activities</li> </ul>
<b>Materials</b> may include:	<ul style="list-style-type: none"> <li>• clays, silts, stone, gravel, mud, rock, sand, topsoil, timber, blended materials, organic materials, light scrub, grasses and bituminous mixes</li> </ul>
<b>Tools and equipment</b> are to include:	<ul style="list-style-type: none"> <li>• hand tools and maintenance equipment relevant to the particular tractor</li> </ul>

## **Unit Sector(s)**

Mobile Plant Operations

## **Competency field**

Refer to Unit Sector(s).

## **Co-requisite units**

Not applicable.