GRADER

Learner Workbook

(Formative assessment)

TRAINER'S MARKING GUIDE

RIIMPO324F – Conduct civil construction grader operations



Learner Name:		
Student Number:	Date:	

This resource was developed by:





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Training support materials

Training package: Resources and Infrastructure Industry Training Package

Unit of competency: RIIMPO324F - Conduct civil construction grader operations

Application / Context of Assessment

This unit describes the skills and knowledge required to conduct Grader operations.

This unit applies to those working in site based roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors, and must be sourced from state jurisdictions prior to applying this unit.

This unit alone does not provide sufficient skill to independently load and unload equipment. To perform this activity safely, personnel must either complete or be assisting someone who has completed RIIHAN308F Load and unload plant or equivalent.

Notes to Candidate:



Practical components of this assessment may be filmed on grader operations that safely, effectively and efficiently follows workplace procedures to carry out work activity on at least two occasions, along with handling at least two different material types.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

Include access to:

- grader
- materials to be shifted
- personal protective equipment
- equipment attachments
- be conducted in a safe environment; and,
- be assessed in context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Knowledge Assessment - Introduction



The assessor must be satisfied the candidate has successfully demonstrated each element and performance criteria contained in the Unit of Competency.

Knowledge Assessment Instructions



- 1. This assessment should be completed in writing (pen not pencil). However, where necessary it may be undertaken verbally. If verbal assessment is undertaken the candidates' responses must be clearly recorded by the assessor. The assessor must clearly note on the assessment that it was undertaken verbally.
- 2. Candidates should be allowed 10 minutes reading time before commencing the assessment and a further 180 minutes to complete the assessment.
- 3. The assessment should be completed in a quiet area free from distraction.
- 4. The assessment is to be completed without the assistance of learning resources. Students may ask the assessor for assistance to clarify questions they do not understand.
- 5. A pass mark of 90% (47/52) must be achieved for a satisfactory result. The assessor must provide feedback to the candidate to clarify any answers deemed to be incorrect.
- 6. Reasonable adjustment to the assessment is to be made by the assessor where deemed necessary.



Knowledge Assessment



Question 1-A

(PC1.1)

Give three (3) examples of compliance documentation you should read before using a grader. Compliance documentation tells you the rules and regulations you need to follow.

Answer may include:

- Codes of practice
- Occupational Health and Safety Acts (OHS)
- Regulations
- Operator's manual
- Site procedures



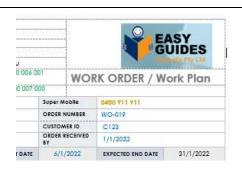
(PC1.2)

Question 1-B

What are work instructions and what do they explain?

Answer may include:

Work instructions tell you about the job. They include: what the job is, where you will do the job, how to do the job, how long the job will take, equipment and tools you need and what you should do if an unexpected situation arises.



Question 1-C

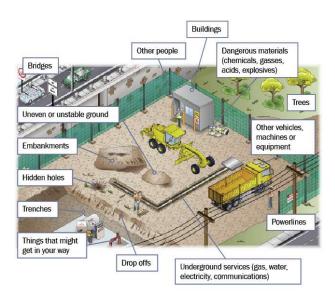
(PC1.3)

List three (3) common hazards you might need to plan for before starting work?



Answer may include:

uneven or unstable ground, other people in the work area, other vehicles, machines or
equipment in the work area, powerlines, trees, overhead lines, bridges, buildings, things
that might get in your way, dangerous materials (chemicals, gasses, acids, explosives),
underground services (gas, water, electricity, communications), trenches



Question 1-D

(PC1.3)

What does the environmental management plan explain? Give at least four (4) examples.

Answer may include:

The environmental management plan tells you how to:

- manage waste and recycling
- lower air pollution
- lower erosion and damage to soil
- stop damage to underground services
- control fire
- work more safely in confined spaces
- lower damage to nature (trees, plants, etc)



Question 1-E (PC1.4)

List three (3) examples of personal protective equipment (PPE) you may need to wear while operating your machine.

Answer may include:

- helmet
- safety boots
- gloves
- safety glasses
- dust mask
- hearing protection



Question 1-F (PC1.4)

What footwear must you wear when doing earthmoving work?

Answer may include:

Non-slip shoes that cover your whole foot. Some sites require steel-capped boots.



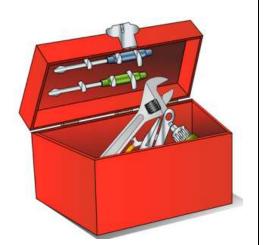
Question 1-H

(PC1.6)

What tools and equipment can you use to help you with earthmoving work? Give five (5) examples.

Answer may include:

- grease gun
- shovels
- wheel chocks
- ratchets
- sockets
- wrenches
- spanners
- hammers
- screwdrivers
- wire brush
- portable lights



Question 1-I

(PC1.6)

If you find ANY fault with the machine including attachments, what do you do?

Answer may include:

- 1. Tag out the equipment and DO NOT USE IT.
- 2. **Remove** the key.
- 3. **Record** the problem in the logbook.
- 4. **Report** the problem to a supervisor.



Question 1-J

(PC1.7)

What is the purpose of the site safety plan?

Answer may include:

The site safety plan tells you what to do if there is a fire, emergency or accident on the site.



Question 1-K

(PC1.7)

Where could you find the location of the first aid station or emergency evacuation assembly area?

Answer may include:

Look at the site safety plan.



Question 2-A

(PC2.1)

List at least five (5) pre-operational checks you should do on a grader.

Answer may include:

- fuel gauge
- transmission oil
- oil, fluid and water leaks
- engine oil
- coolant level
- battery electrolyte levels
- air tank
- air filter indicator
- drive tyre pressures
- blade condition
- blade circle conditions
- warning devices



Question 2-B

(PC2.1)

How do you test the grader to make sure it's safe to use? Give two (2) examples.

Answer may include:

- test the brakes
- test all controls
- test the steering
- test the attachment and its movements
- check decelerator pedal
- go for a short drive and make sure everything works



Score for knowledge assessment

Knowledge Assessment		
Correct answers:		_ / 52
Percentage:		
Result (circle):	Satisfactory	Not satisfactory
Assessor feedback:		

If you have any questions about your results, speak to your trainer/supervisor.

Practical Assessment



The assessor must be satisfied the candidate has successfully demonstrated each element and performance criteria contained in the Unit of Competency.

It is the assessor's responsibility to decide if the candidate has competently demonstrated a skill. The assessor may question a candidate further if their demonstration needs clarification.



Practical assessment instructions



Practical assessment should be performed in a normal working environment where possible. However, under some circumstances may occur in a simulated work environment (refer to assessment conditions for further information).

The Assessor must:

- Clearly explain to the candidate what is expected of them
- Check that the candidate has been provided with the necessary tools and equipment
- Complete checklists as the candidate goes through the tasks
- Only question a candidate during a practical task if it is safe to do so
- Stop the assessment immediately if the candidate is doing something dangerous
- Stop the assessment immediately if the machine or objects are likely to be damaged
- Inform the candidate of the result of the assessment
- Provide the candidate with a **work order or job plan** that outline the task to demonstrate, if one is not provided then use the sample contained within this document or one of your own.

If an assessor needs to stop the assessment because of danger or possible damage, the candidate must be marked as not yet competent. If the assessment is stopped, further training would need to take place before a re-assessment can be undertaken.

Tasks in the assessment do not have to be assessed in isolation, they may be done as one continual task, a simple example of this might be to:

Ask the candidate to perform the **pre-start** requirements, when complete they should **drive** the grader to an area where they can **operate** it to **cut**, **level**, **fill**, **spread and compact** to predetermined **specifications** and **use a number of attachments on different material types**. Now the candidate will be required to complete any **housekeeping** requirements then **prepare the grader for relocation** and **assist in loading the grader** onto a float or trailer. If the scenario above was completed twice it should meet the requirements as long as two different material types are used.

Note: Performing the actual practical task may be filmed and noted of where the video file is stored.

Note: See appendix for guidelines on what to look out for when candidate is performing practical tasks. Use the Appendix topic steps as basic benchmark guides.

Practical Assessment 6 – Housekeeping checklist



Candidate must demonstrate the ability to;

Clear a work area and dispose of or recycle any material according to workplace procedures

Manage and/or report hazards to maintain a safe working environment

Complete and file or distribute documentation in a manner that complies with workplace practices.

Observation performed when performing Practical Task 6 from work order provided (Job 1, Job 2) Candidate:		No	N/A	Job 1	Job 2		
Cleared work area and disposed of or recycle materials according to workplace procedures							
Candidate must ensure the work area is clear of any rubbish and debris. This should occur before during and after operation.							
☐ Materials must be disposed of as per policies and procedures and/or environmental management requirements. This should include recycling of materials where possible and the correct disposal of environmentally sensitive materials and substances.							
Managed and/or reported hazards to maintain a safe working environment							
Housekeeping hazards must be managed in line with workplace policies and procedures and the hierarchy of hazard control.							
Housekeeping hazards must be reported and documented in line with workplace policies and procedures.							
Complete and file or distribute documentation in a manner that complies with workplace practices							
All required documentation is completed and filed or distributed to the appropriate people in line with workplace policies and procedures. This Answer may include but is not limited to:							
Checklists							
☐ Reports							
☐ Site specific forms							
☐ SWMS/JSEA.							
The applicants' performance in Practical Assessment 6 – Housekeeping activity was deemed to be:							
☐ Satisfactory ☐	Not yet	satisf	actory				
Applicant signature:		D	ate:				
Trainer/assessor signature:		D	ate:				