

Title	Operate wheeled loader in asphalt production, pavement surfacing, or extractive industry environment		
Level	3	Credits	12

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – describe wheeled loaders; – identify, assess, control, and monitor health and safety hazards and adverse effects on the environment of wheeled loader operations at an asphalt production, pavement surfacing, or extractive industry workplace; – perform operator servicing and maintenance on a wheeled loader; – start, manoeuvre, stop, and park a wheeled loader; and – load materials to truck using a wheeled loader at an asphalt production, pavement surfacing, or extractive industry workplace.
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Classification	Infrastructure Works > Civil Plant Operation
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Available grade	Achieved
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant legislative and industry requirements.
- 2 Legislation relevant to this unit standard includes:
 - Health and Safety at Work Act 2015;
 - Land Transport Act 1998;
 - Resource Management Act 1991;
 - Traffic Regulations 1976; available from www.legislation.govt.nz;
 - and all subsequent amendments and replacements.
- 3 Definitions

Industry requirements refer to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents. Waka Kotahi New Zealand Transport Agency specifications and guidelines.

Materials for this unit standard refer to asphaltic concrete, sealing chip, or graded aggregate as appropriate for the task.

Outcomes and performance criteria

Outcome 1

Describe wheeled loaders.

Performance criteria

1.1 Types of wheeled loader are described in terms of their operational differences.

Range types include – two-wheel drive, four-wheel drive, skid steer, rubber-tyred, articulated frame.

1.2 Wheeled loader components are described in terms of purpose.

Range components include – operator access, cab, and controls; operator protection equipment; grab handles; access to engine compartment; engine and transmission; wheels and tyres; bucket; tilt and lift arms and rams; and pivot link and rams.

1.3 Wheeled loaders are described in terms of matching machine capacity with job requirements.

Outcome 2

Identify, assess, control, and monitor health and safety hazards and adverse effects on the environment of wheeled loader operations at an asphalt production, pavement surfacing, or extractive industry workplace.

Performance criteria

2.1 Health hazards are identified, and the procedures and equipment for controlling them are described.

2.2 Safety hazards are identified, and the procedures and equipment for controlling them are described.

2.3 Adverse effects on the environment are identified, and the procedures and equipment for controlling them are described.

2.4 Health and safety hazards and adverse effects on the environment are assessed, controlled, and monitored.

2.5 Adverse effects on the environment are assessed, controlled, and monitored.

Outcome 3

Perform operator servicing and maintenance on a wheeled loader.

Performance criteria

- 3.1 Machinery is checked for operator servicing requirements, and minor adjustments are made.
- Range checks and adjustments may include but are not limited to – fuel, lubricants, water levels, hydraulic fluid level, cleanliness, nuts and bolts, attachment couplings, machine controls and gauges; evidence of three minor adjustments is required.
- 3.2 Where routine servicing indicates special maintenance is required, it is reported to specialist mechanic or supervisor.
- Range specialist maintenance may include but is not limited to – tyres, batteries, fuel lines, coolants, hydraulic pressure; evidence of two reports is required.
- 3.3 Routine servicing and maintenance are documented.

Outcome 4

Start, manoeuvre, stop, and park a wheeled loader.

Performance criteria

- 4.1 Machine is mounted and dismounted in accordance with the principle of three points of contact.
- 4.2 Prestart safety and operational checks are carried out.
- Range checks include – walk round, startup, check gauges and controls, cleanliness of windows.
- 4.3 Start-up checks and procedures are followed.
- 4.4 Machine is manoeuvred.
- Range manoeuvres include – safe travel speed, turning, reversing, travelling on sloping ground.
- 4.5 Shutdown procedures are followed.
- 4.6 Machine is parked.
- Range parking includes – locking, blocking of wheels, and securing machine; on ground or on transporter.

Outcome 5

Load materials to truck using a wheeled loader at an asphalt production, pavement surfacing, or extractive industry workplace.

Performance criteria

- 5.1 Material is loaded to truck with minimal spillage.
- 5.2 Material is loaded to hopper with minimal spillage in accordance with contract specifications.
- 5.3 Material is carried with minimal spillage.
- Range carrying techniques may include but are not limited to – maintaining visual awareness, selecting a clear route, reversing, keeping load low; evidence of three carrying techniques is required.
- 5.4 Material is dumped.
- 5.5 Material is stockpiled without contamination in accordance with contract specifications.
- 5.6 Materials are mixed in stockpiles in accordance with contract specifications.
- 5.7 Materials are mixed and spread in accordance with specifications.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 March 1999	31 December 2023
Review	2	27 October 2005	31 December 2023
Review	3	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.