Title	Operate an articulated dump truck safely for surface work at an extractive site			
Level	3	Credits	8	

Purpose	This unit standard is for people operating articulated dump trucks for surface work at an extractive site.	
	People credited with this unit standard are, for surface work at an extractive site, able to: describe safe work practices, environmental issues, and emergency procedures for operating an articulated dump truck; describe planning and preparing for operation of an articulated dump truck; operate and load an articulated dump truck; and operate an articulated dump truck to haul and dump.	

Classification	Extractive Industries > Surface Extraction
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Available grade	Achieved

Prerequisites	Unit 8922, Conduct safety checks before and after equipment
	use at an extractive site, or demonstrate equivalent knowledge
	and skills.

Guidance Information

1 Performance of the outcomes of this unit standard must comply with the following: Resource Management Act 1991;

Health and Safety at Work Act 2015 (HSW);

Health and Safety at Work (General Risk and Workplace Management) Regulations 2016;

Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;

Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016;

approved codes of practice issued pursuant to the HSW Act.

2 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

3 Definitions

Company procedures mean the documented methods for performing work activities and include health and safety, operational, environmental, and quality management

requirements. They may refer to legislation, regulations, guidelines, standard operating procedures, manuals, codes of practice, or policy statements. *Dry* means the surface is dry to touch and no rain falls during the task. *Industry best practice* may be documented in management plans, control plans, company procedures, managers' rules, occupational health and safety policy, industry guidelines, codes of practice, manufacturers' instructions, and safe working and/or job procedures (or equivalent).

Job instructions are those given to the operator before undertaking a job. They may include site safety instructions, contract drawings, and written memos. *Wet* means it has been raining for more than one hour before starting and is still raining during and on completion of the task.

- 4 Personal protective equipment must be used throughout operations in accordance with industry best practice and/or company procedures.
- 5 Assessment against this unit standard must be based on evidence from an extractives industry site.
- 6 It is recommended that people seeking credit for this unit standard first hold credit for Unit 16701, *Demonstrate knowledge and skills for driving on a road for endorsement W* (*wheels*), or demonstrate equivalent knowledge and skills; and class of driver licence required for the vehicle being driven.

Outcomes and performance criteria

Outcome 1

Describe safe work practices, environmental issues, and emergency procedures for operating an articulated dump truck at an extractive site.

Performance criteria

- 1.1 Safe work practices for articulated dump truck operation are described in accordance with industry best practice and/or company procedures.
 - Range includes but is not limited to vehicle interactions, pedestrians, edge protection, overhead lines.
- 1.2 Emergency procedures for operating an articulated dump truck are described in accordance with industry best practice and/or company procedures.
 - Range operation and maintenance manuals (safety section), warning systems, isolating systems, extinguishers, site safety plan; may include two-way radio procedures.
- 1.3 Environmental issues related to the work site are described in terms of impact of articulated dump truck operations.
- 1.4 The methods for controlling and monitoring adverse effects on the environment during articulated dump truck operations are described in accordance with legislative requirements, industry best practice, and/or company procedures.

Outcome 2

Describe planning and preparing for operation of an articulated dump truck.

Performance criteria

- 2.1 Planning and preparation for operating an articulated dump truck are described in terms of licensing and production requirements, quality assurance, and the HSE Act.
- 2.2 The maximisation of productivity for articulated dump truck cycles is described in accordance with industry best practice.

Outcome 3

Operate and load an articulated dump truck at an extractive site.

Range wet or dry conditions, day or night shift; may include – use of two-way radios.

Performance criteria

- 3.1 Pre-start checks are carried out in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
 - Range includes walk-around inspection, fuel, lubricants, water levels, hydraulic fluid level; may include but is not limited to – cleanliness of windows, battery isolated, machine not tagged out, seatbelt.
- 3.2 The articulated dump truck is mounted and dismounted in accordance with the principle of three points of contact.
- 3.3 Post-start checks are carried out in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
 - Range includes but is not limited to warning systems, park brake, service brake, retarder, emergency brake, steering, secondary steering, lights, leaks, gauges, operating controls.
- 3.4 Identified health and safety hazards are controlled and monitored in accordance with legislative requirements and company procedures.
- 3.5 The articulated dump truck is operated in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to operating techniques, adjustment of engine revolutions, travel speeds for maximum safe productivity.
- 3.6 Articulated dump truck controls and functions are operated in accordance with industry best practice and/or company procedures.

3.7 The articulated dump truck is set for site and road travel in accordance with industry best practice and/or company procedures.

Range may include but is not limited to – hoist in float position, sounding horn, correct gear selection, retarder set, seatbelt, diff-locks, mirrors, clear vision.

- 3.8 The articulated dump truck is manoeuvred in confined areas in a loaded and unloaded state in accordance with industry best practice and/or company procedures.
 - Range using forward and reverse direction; may include but is not limited to – spotter, mirrors.
- 3.9 The articulated dump truck is positioned to enable loading to take place in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to service brake, park brake, gear selector in neutral, operator in view of load controller.
- 3.10 The articulated dump truck is moved away from the loading tool in accordance with industry best practice and/or company procedures.
- 3.11 The articulated dump truck is parked, shut down, and maintained in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
- 3.12 Documentation is completed in accordance with company procedures.

Outcome 4

Operate an articulated dump truck to haul and dump at an extractive site.

Range wet or dry conditions, day or night shift; may include – use of two-way radios.

Performance criteria

- 4.1 Pre-start checks are carried out in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
 - Range includes walk-around inspection, fuel, lubricants, water levels, hydraulic fluid level; may include but is not limited to – cleanliness of windows, battery isolated, machine not tagged out, seatbelt.
- 4.2 The articulated dump truck is mounted and dismounted in accordance with the principle of three points of contact.

- 4.3 Post-start checks are carried out in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
 - Range includes but is not limited to warning systems, park brake, service brake, retarder, emergency brake, steering, secondary steering, lights, leaks, gauges, operating controls.
- 4.4 Identified health and safety hazards are controlled and monitored in accordance with legislative requirements and company procedures.
- 4.5 The articulated dump truck is driven at steady speed in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to operating techniques, adjustment of engine revolutions, travel speeds for maximum safe productivity, site safety plan, cornering, control, straddling wheel ruts.
- 4.6 The articulated dump truck is driven up and down substantial inclines in a loaded and unloaded state in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to difflocks, retarder, preventing engine over speed, control, gear selection.
- 4.7 The articulated dump truck is positioned safely at uncontrolled tip heads in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to straddle wheel ruts, reverse square to windrow, dump short of windrow if ground unstable.
- 4.8 The articulated dump truck is parked ready to dump load at tip head in accordance with industry best practice and/or company procedures.
 - Range may include but is not limited to level ground, park brake applied, transmission neutralised.
- 4.9 The articulated dump truck hoist is lowered before moving from tip head in accordance with industry best practice and/or company procedures.

Range may include but is not limited to – hoist in float.

4.10 Materials are dumped in accordance with job instructions and company procedures.

Range may include but is not limited to – no material contamination.

- 4.11 Articulated dump truck is parked, shut down, and maintained in accordance with industry best practice, company procedures, and/or manufacturer's instructions.
- 4.12 Documentation is completed in accordance with company procedures.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 June 2006	31 December 2012
Review	2	15 April 2011	31 December 2017
Review	3	18 June 2015	N/A
Rollover and Revision	4	25 January 2018	N/A

Consent and Moderation Requirements (CMR) reference	0114	
This CMP can be accessed at http://www.pzga.govt.pz/framowork/accesh/index.do		

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact MITO New Zealand Incorporated <u>info@mito.org.nz</u> if you wish to suggest changes to the content of this unit standard.