



Government of South Australia

Department for Transport,
Energy and Infrastructure

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**Operating conditions
when driving on roads in South Australia**

CODE OF PRACTICE FOR OVERMASS LOW LOADER VEHICLES

**GCM – 49.5t ; WIDTH – 3.5m
HEIGHT – 4.9m; LENGTH – 25.0m**

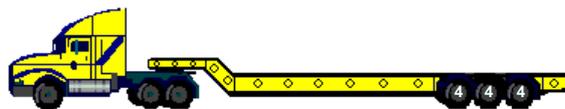


Illustration: Prime mover with tandem drive axle hauling a triaxle low loader trailer (3 rows of 4 tyres).

May 2005

This booklet is a legal document. You must comply with the conditions contained in it when operating Low Loader Vehicles.

You must also carry this document, or a legible copy and must also produce it when requested by an Inspector or a Police Officer.

OVERMASS LOW LOADER VEHICLES

(OPERATING AT MORE THAN 42.5 TONNES BUT NOT MORE THAN 49.5 TONNES COMBINATION MASS)

IN SOUTH AUSTRALIA

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Introduction

What the terms mean

Approved Route Network for 49.5 tonne Low Loader Vehicles is a booklet of maps issued by DTUP showing the approved routes that can be used.

DTUP is the Department of Transport and Urban Planning

Explanatory Note contains information that does not form part of the conditions of this Code of Practice and is provided for explanation purposes only.

Indivisible item is a load that cannot be divided without great difficulty, expense or risk of damage; and cannot be carried on any vehicle or combination of vehicles without exceeding any of the general access dimension limits for length, width and height.

Low Loader means a gooseneck semi-trailer with a loading deck no more than 1.0 metre above the ground.

Rear Overhang means the distance from the centre of the low loader triaxle group to the back of the low loader or the rearmost extremity of the load, whichever is the greater.

Single axle means an axle not forming part of an axle group and includes a single steer axle.

Tandem axle group means a group of at least 2 axles, in which the horizontal distance between the centre lines of the outermost axles is at least 1.0 metre, but not more than 2.0 metres.

Triaxle group means a group of at least 3 axles, in which the horizontal distance, between the centre lines of the outermost axles is more than 2.0 metres, but not more than 3.2 metres.

1. What is a Code of Practice?

- 1.1 This Code of Practice is a legal document issued by DTUP under a Notice in the South Australian Government Gazette titled "Operation of 49.5 tonne Prime Mover and Low Loader Combination Vehicles in South Australia". It sets out the conditions under which you can drive a tandem drive prime mover towing a triaxle low loader that, as an overmass combination vehicle, is not allowed general access to roads.
- 1.2 This Code replaces the requirements of the Standard Form Conditions of the *Road Traffic (Oversize or Overmass Vehicle Exemptions) Regulations 1999* when you are operating a low loader combination vehicle at a total mass of more than 42.5 tonnes but not more than 49.5 tonnes.

Explanatory Note

If the total mass of your prime mover and low loader combination and any indivisible load is not more than 42.5 tonnes, this Code need not apply to you and you may more effectively operate under the Gazette Notice titled "Transport of Indivisible Items" and associated "Code of Practice for the Transport of Indivisible Items in South Australia". If operating at a mass of not more than 42.5 tonnes, you are allowed far greater access to the road network under that Gazette Notice.

However, you may choose to continue to operate under this Code of Practice. If you do, you must travel only on the routes approved for Overmass Low Loaders.

- 1.3 This Code enables you to know what you can do, how you can do it, and what the law requires of you.

- 1.4 You must comply with all applicable conditions of this Code when driving an oversize or overmass low loader vehicle on the road; otherwise you commit an offence.

2. What vehicles are covered?

- 2.1 You must operate under this Code if your low loader is carrying an indivisible item; and
- 2.2 your prime mover and low loader combination vehicle, together with the indivisible load, exceeds these limits:
- 2.2.1 Total Mass 42.5 tonnes; and
- any, none or all of the following:
- 2.2.2 Width 2.5 metres
- 2.2.3 Height 4.3 metres
- 2.2.4 Length 19.0 metres
- 2.2.5 Rear Overhang the lesser of 3.7 metres; and 60% of the distance between the point of articulation at the front of the low loader and the centre of the low loader triaxle group.

Explanatory Note

Examples of indivisible items covered by this Code include:

- A bull dozer with its blade, either attached or detached to minimise width;
- A road roller and towing tractor where these are essentially a functional unit;
- A single heavy steel fabrication.

- 2.3 Your vehicles operating under this code must comply with the following requirements:
- 2.3.1 The prime mover you are using to haul the low loader must have a rated capacity of not less than 49.5 tonnes and a tandem drive axle with a rated capacity of not less than 18.5 tonnes.
- 2.3.2 The rated capacity of the triaxle group on the low loader must be not less than 25.0 tonnes.
- 2.3.3 The overall width of the prime mover drive axle group and the low loader axle group, measured between the outer edges of the tyres, must not be less than 2.1 metres.
- 2.3.4 When an extendable vehicle is loaded, the distance between the point of articulation at the front of the low loader and the centre of the low loader triaxle group must not be more than 12.5 metres.
- 2.3.5 When an extendable vehicle is loaded, the distance between the point of articulation at the front of the low loader and the rear of the low loader must not be more than 15.3 metres.
- 2.3.6 The distance between the centre of the last axle of the prime mover and the centre of the first axle of the low loader triaxle group must not be less than 6.0 metres.

Explanatory Note

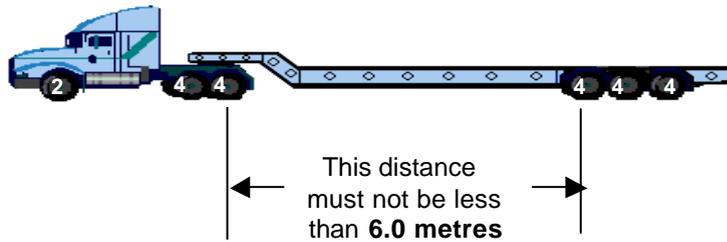


Illustration: Showing the distance between the centre of the last axle of the towing vehicle and the centre of the first axle in the low loader axle group

3 What vehicles are not covered?

- 3.1 You cannot use this Code if your prime mover and low loader combination vehicle, together with any load, exceeds any of these limits:
- | | | |
|-------|---------------|---|
| 3.1.1 | Total Mass | 49.5 tonnes |
| 3.1.2 | Width | 3.5 metres |
| 3.1.3 | Height | 4.9 metres |
| 3.1.4 | Length | 25.0 metres |
| 3.1.5 | Rear Overhang | the lesser of 5.5 metres; or 25% of the overall length of the entire vehicle, including the load. |
- 3.2 You cannot use this Code for the transport of containers or crates.
- 3.3 You cannot use this Code when your vehicle permanently exceeds 2.5 metres width, and/or 4.3 metres height, and/or 19 metres length.
- 3.4 You cannot use this Code when your vehicle is of variable size that cannot be restored to 2.5 metres or less in width, 4.3 metres or less in height, and 19 metres or less in length.

Explanatory Note

If your proposed haulage operation does not comply with this Code of Practice, you must apply for a separate, individually-issued approval and exemption (known as a permit). Applications for permits are assessed by DTUP Vehicle Permits at Regency Park, who will assess your proposed operation using the guidelines for oversize and overmass vehicle operations. Note that your application may not necessarily result in an approval.

General Conditions

4 Road Rules

- 4.1 When operating under this Code, you must comply with all other provisions of the *Road Traffic Act 1961* and Regulations, and the *Motor Vehicles Act 1959* and Regulations.
- 4.2 If there is not a separate lane available for overtaking, you must, at regular intervals when it is practicable to do so, move off the road to allow other vehicles to overtake.
- 4.3 You must be able to see to the sides and rear of the vehicle with the use of rear vision mirrors.

5 Road Damage

- 5.1 You must ensure that there is sufficient side and overhead clearance available on routes you intend to use.
- 5.2 If any damage is caused to a road or property as a result of the passage of your low loader vehicle:
- 5.2.1 The driver must ensure that the damage is reported to the owner or authority responsible for the maintenance of the road or property as soon as is reasonably practicable; and
- 5.2.2 The owner of the vehicle or prime mover must compensate the owner or authority for the reasonable costs of making good the damage.
- 5.3 No warranty is given that the approved routes, or the bridges, culverts or causeways thereon are capable of carrying the vehicle or loading stated and it shall be a condition of approval that any journey shall be made at your own risk absolutely.

Explanatory Note

Some parts of the road system, such as bridges, overhead services and wires, roadside furniture (signs, traffic lights etc) and vegetation, may not provide sufficient clearance for a vehicle and load travelling under this Code.

Section 106 of the Road Traffic Act, *Damage to roads and works*, requires you to notify the Police, or DTUP if you cause damage to roads, bridges and culverts, or interfere with roadside furniture.

If you have caused anything to fall on to the road that may obstruct, damage or cause injury to people or vehicles, Australian Road Rule 293 requires you to remove it or take action to have it removed. Examples include tree branches or damaged traffic signs.

Dimensions

6 Width

- 6.1 The overall width of the vehicle, including the load and/or cross-members or framework used to support the load shall not exceed **3.5 metres**.
- 6.2 The load shall be carried so as to minimise the amount by which it exceeds 2.5 metres in width.
- 6.3 The side projection of a load must be equal either side of the low loader.
- 6.4 Any cross member, supporting frame or outrigger fitted to support the load must not project beyond the load by more than **50 millimetres**.

Explanatory Note

Legal conditions of operation vary with vehicle width – see Sections in “Warning Other Road Users” and in “Travel Restrictions”.

The width of the vehicle is measured without taking into account any anti-skid device mounted on the wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

7 Length

- 7.1 The overall length of the vehicle, including the load shall not exceed **25.0 metres**
- 7.2 The rear overhang of the low loader, including the load, must not exceed the lesser of:
- 7.2.1 5.5 metres; or
 - 7.2.2 25% of the overall length of the entire vehicle, including the load.
- 7.3 The length of any adjustable vehicle must be minimised when travelling empty or when additional length is not needed for the transport task.

Explanatory Note

Low Loader internal length dimension limits are included in Section 2 “What Vehicles are Covered?”

Legal conditions of operation vary with vehicle length – see Sections in “Warning Other Road Users” and in “Travel Restrictions”.

8 Height

- 8.1 The overall height of the vehicle, including the load shall not exceed **4.9 metres**.

Explanatory Note

Legal conditions of operation vary with vehicle height – see in Section 9 “Height Restrictions” below and in “Warning Other Road Users” and in “Travel Restrictions”.

9 Height Restrictions

- 9.1 If the height of the vehicle and any load is more than 4.3 metres high, before starting your journey, you must:
- 9.1.1 ask ETSA Utilities about height clearances under power lines along your route;
 - 9.1.2 ask Telstra about height clearances under telecommunication lines along your route;
 - 9.1.3 obtain a high load clearance from Optus for travel within the Optus Clearance Zone (see Optus Clearance Zone Map in “Approved Route Network for 49.5 tonne Low Loader Vehicles” issued by DTUP). Details of your proposed route, times of travel, load and height must be provided to obtain a clearance. If your journey has to be made at short notice, a clearance number can be obtained. You must carry your Optus clearance (or the clearance number) during the trip and produce it when requested by a DTUP Inspector or Police Officer.
- 9.2 You must not travel under the following bridges if the overall height of your vehicle or vehicle combination and load exceeds the clearance height specified for the corresponding bridge in Table 1 below:

Table 1: BRIDGE CLEARANCES		
Structure		Clearance Height (metres)
(a)	Road bridge over Mount Barker Road, Devil's Elbow	4.6
(b)	Railway bridge (Millswood Subway) over Goodwood Road, Millswood	4.6
(c)	Road bridge (Jervois Bridge) over Causeway Road and Refinery Road, Port Adelaide	4.6
(d)	Railway bridge over Daws Road, Park Holme	4.8

Explanatory Note

You should also verify with ETSA Utilities and Telstra that the required clearance is available when travelling off the approved road network and onto private property, such as an industrial site, a farm track or paddock.

Contact Details

Contact details for ETSA, Telstra and Optus can be obtained from DTUP's Vehicle Permits, by calling 1300 882 249.

Loading and Mass

10 Loading Requirements

- 10.1 The load must not consist of more than one indivisible item; unless
- 10.2 the load consists of an agricultural vehicle or a special purpose vehicle, in which case any equipment, tools, substances or detached parts, to be used in conjunction with the vehicle may be carried; or
- 10.3 the load is an implement that requires a tractor to provide motive power in which case the tractor and implement is regarded as an indivisible item.
- 10.4 "Equipment, tools, substances or detached parts, to be used in conjunction with the vehicle" does not include the carriage of fuel other than the fuel that is contained in the fuel tank of the vehicle being carried.
- 10.5 "Equipment, tools, substances or detached parts, to be used in conjunction with the vehicle" does not include substances that will be spread by the vehicle being carried.
- 10.6 When loaded, the load must be located on the low loader such that the mass loading on the prime mover's tandem drive axle group is at least 14.0 tonnes.

Explanatory Note

Examples of indivisible items allowed as loads are given in the Explanatory Note provided with Section 2 "What vehicles are covered?"

11 Axle Load Limits

- 11.1 The load on the axles of the prime mover and low loader combination must not be more than the limits in Table 2 below:

Table 2: AXLE MASS LIMITS		
Axle/vehicle unit	Number of tyres on axle	Mass Limit (tonnes)
Single steer axle/Prime mover	2	6.0
Tandem axle group/Prime mover	8	18.5
Tri- axle group/Low loader	12	25.0

12 Total Mass Limit

- 12.1 The maximum total mass of the prime mover and low loader combination is **49.5 tonnes**.

Warning Other Road Users

13 Pilot Vehicles

- 13.1 You must be accompanied by **2 pilot vehicles** if:
- 13.1.1 the overall length of the low loader combination measures more than 23.0 metres and up to and including 25.0 metres; and
 - 13.1.2 you are travelling in the Adelaide Zone (Adelaide Zone Map in “Approved Route Network for 49.5 tonne Low Loader Vehicles” issued by DTUP), except on the Port Wakefield Rd between the South Road Connector/Salisbury Highway intersection and the Gawler River Bridge.
- 13.2 Both pilot vehicle drivers must operate in accordance with, and carry a copy of, the booklet titled “Escorting Guidelines for Oversize and Overmass Vehicles and Loads” October 2004, published by Transport SA.

14 Warning Signs

- 14.1 You must display an OVERSIZE warning sign at both the front and rear of the vehicle or load, if the vehicle is wider than 2.5 metres or longer than 19.0 metres.
- 14.2 The rear OVERSIZE warning sign must be at the rear of the load if it overhangs the low loader vehicle.
- 14.3 You must keep the OVERSIZE warning signs clean so that other road users can read them.
- 14.4 You must not display a warning sign when the vehicle or combination is not oversize.
- 14.5 Specifications for warning signs

14.5.1 Face of a warning sign

The sign must:

- (a) Have a yellow surface complying with Class 1 or 2 of Australian/New Zealand Standard AS/NZS1906.1, 'Retro-reflective Materials and Devices for Road Traffic Control Purposes' Part 1: Retro-reflective Materials;
- (b) Have a black border at least 20 mm wide. The outermost edge of the border must be set at least 10 mm in from the edge of the sign, unless the sign has been made with a box edge;
- (c) Show the word "OVERSIZE" in black capital letters at least 200 mm high conforming with Australian Standard AS1744, 'Forms of Letters and Numerals for Road Signs', in typeface Series 200C(N);
- (d) Have the manufacturer's name or trademark permanently marked in letters at least 3 mm but not more than 10 mm high;
- (e) Comply with the following specifications and minimum dimensions:



14.5.2 Material for a warning sign

The warning sign must be made of either:

- (a) Stiff, flat, weatherproof material, such as Zinalume at least 0.8 mm thick or aluminium at least 1.6 mm thick; or
- (b) Flexible material provided it is:
 - held taut;
 - positioned and secured in a manner that it is clearly seen; and
 - maintained in a condition that is easily read.

14.5.3 A flexible sign must comply with all other requirements relating to warning signs as if it were a stiff sign.

14.6 Mounting of warning signs

14.6.1 Warning signs must be mounted in an upright position at the front and rear of the vehicle or combination.

14.6.2 The lower edge of the warning sign must be:

- (a) Above the bottom of the bumper bar; or
- (b) If there is no bumper bar fitted, at least 500 mm from ground level.

14.6.3 Warning signs can be split into 2 parts, provided:

- (a) The left-hand displays the word OVER and the right-hand displays the word SIZE;
- (b) There is no border between the adjacent edges of the two parts;
- (c) The two parts are fitted at the same height.

15 Warning Lights for Daytime travel

- 15.1 Your prime mover towing a low loader with any oversize load must have its low-beam headlights on while travelling during the daytime.
- 15.2 If your low loader, and any load, exceeds 23 metres long and/or 3.0 metres in width, you must also display a warning light during the daytime, which is visible from a distance of 500 metres in any direction.
- 15.3 You must also display a warning light if the load being carried is less than 500mm in overall thickness and it projects more than 150mm beyond any side of the vehicle.
- 15.4 Your vehicle's warning light must:
 - 15.4.1 emit a rotating, flashing, yellow-coloured light;
 - 15.4.2 flash at a rate between 120 and 200 times per minute;
 - 15.4.3 have power of at least 55 watts; and
 - 15.4.4 not be a strobe light.
- 15.5 Your vehicle's warning light must also:
 - 15.5.1 be permanently connected to the vehicle's electrical system or use standard automotive connectors to allow easy disconnection and removal when not required;
 - 15.5.2 have an on/off switch within easy reach of the driver.

16 Flags

- 16.1 If your vehicle is more than 2.5 metres wide or longer than 19.0 metres, it must display brightly coloured red, yellow, or red and yellow flags each at least 450 mm wide and 450 mm high.
- 16.2 You must ensure that the flags are attached to each side and at the front and rear of any projecting load, or if there is no projecting load, to the extremities of the vehicle.
- 16.3 The flags must be clearly visible at a distance of 100 metres to a person of normal vision.

17 Delineators

- 17.1 If the load being carried is less than 500mm in overall thickness, and it projects more than 150mm beyond any side of the vehicle, you must also display at least two yellow, rigid pieces of material known as "delineators".
- 17.2 If the load projects beyond both sides of the vehicle, 4 delineators must be used, 2 on each side of the vehicle.
- 17.3 Each delineator must comply with Class 1 or 2 of Australian Standard AS 1906, "Retro-reflective Materials and Devices for Traffic Control Purposes" 1990.
- 17.3 The delineators must each be at least 300 mm wide and 300 mm high, and must be attached at the front and rear of the projection.
- 17.5 If placed at the front of the projection, the delineator must be attached so that the retro-reflective material faces forward of the vehicle.

- 17.6 If placed at the rear of the projection, the delineator must be attached so that the retro-reflective material faces rearward of the vehicle.

Travel Restrictions

18 Times of Travel

- 18.1 You must not travel in the Adelaide Zone (see Map 1 in “Approved Route Network for 49.5 Tonne Low Loader Vehicles” issued by DTUP) between the hours of 7:00 am to 9:00 am and 4:00 pm and 6:00 pm, Monday to Friday inclusive.
- 18.2 You must not travel during periods of low visibility. Low visibility means any time when, due to insufficient daylight or unfavourable weather conditions, people or vehicles on a road are not clearly visible at 250 metres by a person of normal vision.
- 18.3 You are restricted to daylight travel if your vehicle and load exceeds:
- 4.6 metres high; and/or
 - 2.5 metres wide; and/or
 - 19.0 metres long

Explanatory Note

Daylight travel means that you are only permitted to travel between sunrise and sunset. The sunrise and sunset times for all days of the year are published in the South Australian Government Gazette.

19 Approved Routes

- 19.1 If operating under this Code in South Australia, you are restricted to travel on the roads shown in the booklet “Approved Route Network for 49.5 Tonne Low Loader Vehicles” issued by DTUP and updated from time to time, subject to the bridge clearance restrictions detailed under Section 9 “Height Restrictions”.

Explanatory Note

In addition to the approved route network, the booklet “Approved Route Network for 49.5 Tonne Low Loader Vehicles” also includes mapping of the “Adelaide Zone” and the “Optus Clearance Zone” referred to in Sections 9 “Height Restrictions” and 18 “Times of Travel”.

Explanatory Note

If any of your proposed routes of travel are outside the designated roads in this Code of Practice, you must apply for a separate, individually issued approval and exemption (known as a permit). Applications for permits are made to DTUP Vehicle Permits, who will assess your route in terms of its suitability for the dimensions and mass of your low loader and its compliance with safety guidelines. Note that your application may not necessarily result in an approval.

Further Information

For further information please contact the following:

About the

**Code of Practice for Overmass Low Loader Vehicles, and
Information Guide for Overmass Low Loaders:**

DTUP – Vehicle Permits, Regency Park

Telephone: 1300 882 249

Facsimile: (08) 8348 9551

About the

Approved Route Network for 49.5 Tonne Low Loader Vehicles:

DTUP - High Productivity Freight Team

Telephone: (08) 8343 2825

Facsimile: (08) 8343 2875

or visit the Transport SA Internet Site at

http://www.transport.sa.gov.au/freight/road/vehicle_configuration/