Ministerial Declaration (Loaded Silage Trailer) Order 2013

Under the

ROAD TRANSPORT (GENERAL) ACT 2005

I, Duncan Gay, Minister for Roads and Ports, pursuant to section 16 of the Road Transport (General) Act 2005, make the following Order.

Dated this 17th day of June 2013

DUNCAN GAY, MLC
Minister for Roads and Ports

PART 1 - PRELIMINARY

Explanatory note
The object of this Order is to exempt from clause 28 of Schedule 2 to the Road Transport (Mass, Loading and Access) Regulation 2005 (the Regulation) agricultural implements which are used for the carriage of silage. Clause 28 of Schedule 2, which would otherwise apply, prohibits an agricultural implement from carrying a load.

The dimension limits, including the relevant width limits, in clause 24 of Schedule 2 to the Regulation apply to the loaded silage trailers which are the subject of this Order.

1 Name of Order
This Order is the Ministerial Declaration (Loaded Silage Trailer) Order 2013.

2 Commencement
This Order takes effect on 24 June 2013.

3 Effect
This Order remains in force until 24 June 2018 unless earlier revoked.

4 Interpretation
Words and expressions used in this Order have the same meaning as in the Regulation, unless otherwise stated.

5 Definitions
In this Order:
‘GCM’, ‘GVM’ have the meanings given in the Road Transport (Vehicle Registration) Act 1997;


‘ground contact width’, ’load sharing suspension system’, ‘pig trailer’ have the meanings given in the Road Transport (Mass, Loading and Access) Regulation 2005;
‘silage’ means green fodder stored for the purpose of fermentation and intended for the feeding of livestock;

‘silage trailer’ means an agricultural trailer which is an agricultural implement used exclusively for the transport of:
(a) loose cut green grass and loose cut green crops for the production of silage; and (b) loose silage, for the immediate feeding of livestock.
The load cannot include hay or straw.

6 **Exemption from requirements of clause 28 of Schedule 2 to the Regulation**
Clause 28 of Schedule 2 to the Regulation is declared not to apply to a vehicle which is an agricultural implement that is designed to be used and is being used for the carriage of silage.

**PART 2 – DIMENSION AND MASS LIMITS**

7 **Dimension Limits**
A silage trailer must comply with the dimension limits as follows. The maximum:

- **width** for a silage trailer is 3.0 metres. It may only be towed by an agricultural tractor and only as a single tractor trailer combination;
- **rear overhang**:
  - for a dog-trailer, is the lesser of 60% of the distance between the centre of the front axle and the rear overhang line; and 4.3 metres;
  - for a pig trailer, is the lesser of the length of the load carrying area, or body, ahead of the rear overhang line; and 4.3 metres.
- **trailer drawbar length for pig trailer** (the distance between the coupling pivot point on a drawbar and the centre line of the axle group or single axle on a trailer with only 1 axle group or single axle) is not over 8.5 metres;
- **trailer drawbar length for a dog trailer** (the distance between the coupling pivot point on the drawbar of the trailer and the centre line of the front axle group or of the front single axle of the trailer) is not over 5 metres.

The length of the agricultural tractor and silage trailer combination shall not exceed 19 metres.
The height for an agricultural tractor and silage trailer combination shall not exceed 4.3 metres.

8 **Mass Limits for an Agricultural Tractor**
The mass limit for an axle of an agricultural tractor towing a laden or unladen silage trailer must not exceed the lesser of the:

- tractor manufacturer's permissible Gross Vehicle Mass (GVM) or the Gross Combination Mass (GCM); or
- manufacturer's rating for any of the tractor's components such as tow coupling, towbar, tyres, wheels, suspensions and axles; or
- mass limits set out in Table 1:

<table>
<thead>
<tr>
<th>Axle Masses for a Tractor</th>
<th>Number of tyres on a tractor axle</th>
<th>Mass limit (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle fitted with 2 tyres</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Axle fitted with 4 tyres and a ground contact width less than 2.51 m</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Axle fitted with 4 tyres and a ground contact width at least 2.51 m but not more than 3.0 m</td>
<td>10.5</td>
<td></td>
</tr>
</tbody>
</table>
9 Mass Limits for a Silage Trailer
The mass of a silage trailer, including any load, must not exceed the lesser of the:

- trailer manufacturer’s rated Aggregate Trailer Mass (ATM); or
- mass that would cause the tractor and trailer combination to exceed the tractor’s Gross Combination Mass (GCM); or
- mass that would cause the manufacturer's ratings for any of the trailer’s components, such as tow coupling, tyres, drawbar, wheels, suspensions and axles to be exceeded; or
- mass limits set out in Table 2:

Table 2: Axle Masses for a Silage Trailer

<table>
<thead>
<tr>
<th>Description of axle or axle group</th>
<th>Mass Limit (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Axle Group</strong></td>
<td></td>
</tr>
<tr>
<td>Single axle with single tyres with a section width of:</td>
<td></td>
</tr>
<tr>
<td>- less than 375 millimetres</td>
<td>6.0</td>
</tr>
<tr>
<td>- at least 375 millimetres but less than 450 millimetres</td>
<td>6.7</td>
</tr>
<tr>
<td>- at least 450 millimetres</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Tandem Axle Group</strong></td>
<td></td>
</tr>
<tr>
<td>Tandem axle group fitted with single tyres with a section width of:</td>
<td></td>
</tr>
<tr>
<td>- less than 375 millimetres</td>
<td>11.0</td>
</tr>
<tr>
<td>- at least 375 millimetres but less than 450 millimetres</td>
<td>13.3</td>
</tr>
<tr>
<td>- at least 450 millimetres</td>
<td>14.0</td>
</tr>
<tr>
<td>- at least 600 millimetres</td>
<td>16.5</td>
</tr>
<tr>
<td><strong>Tri-Axle Group</strong></td>
<td></td>
</tr>
<tr>
<td>Tri-axle group fitted with single tyres with a section width of:</td>
<td></td>
</tr>
<tr>
<td>- less than 375 millimetres</td>
<td>15.0</td>
</tr>
<tr>
<td>- at least 375 millimetres</td>
<td>18.0</td>
</tr>
<tr>
<td>- at least 600 millimetres</td>
<td>20.0</td>
</tr>
</tbody>
</table>

The total mass of a combination and any load must not exceed 39.0 tonnes.

The loaded mass of a dog trailer or pig trailer must not exceed the loaded mass of the towing vehicle.

PART 3 – OPERATING CONDITIONS

10 Braking
On a dry, smooth, level road surface with no loose material and with one sustained application of the brake, a vehicle combination, whether laden or unladen, must meet the requirements in Table 3:

Table 3: Performance of Service Brakes

<table>
<thead>
<tr>
<th>Performance of Service Brakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination with gross mass of</td>
</tr>
<tr>
<td>At least 4.5 tonnes</td>
</tr>
</tbody>
</table>
### Performance of Emergency Brake

<table>
<thead>
<tr>
<th>Weight</th>
<th>Distance</th>
<th>Braking Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 tonnes</td>
<td>40.5 m</td>
<td>1.1 m per sec per sec when the emergency brake is applied</td>
</tr>
<tr>
<td>1.5 m per sec per sec when the emergency brake is applied</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The parking brake of a vehicle or combination must be able to hold the vehicle or combination stationary on a 12% gradient.

A silage trailer with a GTM exceeding 750kg must have brakes that operate on at least 1 wheel at each end of 1 or more axles of the trailer.

The braking system of a trailer with a GTM over 2.0 tonnes must allow the driver of a tractor towing the trailer to operate the brakes from a normal driving position.

The braking system of a trailer with a GTM exceeding 2.0 tonnes must incorporate a breakaway system that:
- operates automatically and quickly if the trailer breaks away from the towing vehicle; and
- remains in operation for at least 15 minutes after a break-away; and
- holds the trailer on a 12% gradient while in operation after a break-away.

### 11 Speed and Distance of Travel

The laden agricultural combination must not travel at a speed greater than the lesser of:
- 20 km/h less than the posted speed limit applying to the section of road on which the combination is travelling; or
- 50 km/h; or
- the maximum operational speed limit specified by the manufacturer for each of the individual vehicles in the combination.

A laden silage trailer being towed by a registered or conditionally registered agricultural tractor may travel a maximum road distance of 15 kilometres with the starting point for travel being where the silage trailer was parked overnight. (An agricultural tractor with an Unregistered Vehicle Permit may not tow a laden silage trailer).

Where travel in excess of 15 kilometres is necessary, an over dimension permit must be obtained prior to the commencement of travel. The permit will allow a maximum distance of travel of 25 kilometres. (While this Ministerial Declaration Order provides for laden travel up to 25 kilometres, travel in excess of 15 kilometres and up to 25 kilometres while laden requires a permit).

An unladen silage trailer is subject to the Class 1 Agricultural Vehicles Notice. The Notice allows unlimited travel for an unladen silage trailer.

The laden and unladen agricultural combination is subject to travel on the approved routes and areas detailed in Appendix 2 of the Class 1 Agricultural Vehicles Notice. As detailed in Appendix 2, where a tractor or trailer exceeds one or more of the stated dimension limits, a specific permit must be obtained before travelling on or in any of the listed Limited Access Locations.

### 12 Travel Restrictions

Before a vehicle or combination is driven along any route, its driver and owner must be satisfied that the route has been assessed and that the vehicle or combination can be driven along it without causing:
- disruption to telecommunication, electricity, rail, gas, water or sewage services, or
- damage to a road (including a bridge), structure, rail crossing or tree.
A vehicle or combination must not begin to travel if, due to circumstances such as fog, heavy rain, smoke, dust or insect plague: visibility is less than 250 m in the daytime, or the headlights of a vehicle approaching within 250 metres could not be seen at night.

If a vehicle or combination is already travelling when visibility is reduced to the level described, the driver must drive it into the nearest safe parking area, and wait until visibility improves beyond that level before continuing to travel.

13 **Night Travel**
Travel is not permitted between sunset and sunrise for agricultural vehicles or combinations wider than 2.5 metres or longer than 22 metres.

Where the agricultural vehicle or combination is wider than 2.5 m or longer than 22 metres, where travel commenced after sunrise and before sunset on a day, the operator is permitted to continue to travel for a distance not exceeding 10 kilometres for the sole purpose of stopping at a safe parking area.

14 **Warning Devices**
Silage trailers that exceed a width of 2.5 metres must:

- display an OVERSIZE sign on the rear of the silage trailer that must:
  - show the word "OVERSIZE", in black upper-case lettering that conforms with typeface Series C(N) in Australian Standard (AS) 1744 *Forms of letters and numerals for road signs*, of the minimum dimensions as shown in the diagram;

  ![Illustration of a warning sign for an oversize vehicle or combination](image)

  - be made from flat, weatherproof, yellow retro-reflective material that conforms with class 1 or 2 of AS 1906 Retro-reflective materials and devices for road control purposes; and
  - have the manufacturer's name or trademark, and the brand and class of retro-reflective material permanently marked in block letters not more than 10 millimetres high appearing in any visible location on the sign; and
  - have a black border at least 20 millimetres wide, the outermost edge of the border must be set at least 10 millimetres in from the edge of the sign unless the warning sign has been made with a box edge;
  - be mounted vertically such that the lower edge of the sign must be above the bottom of the bumper bar; or if there is no bumper bar, at least 500 millimetres from the ground level;
  - if the sign is split into two parts, each part must be fitted at the same height as the other, but with no border between the two parts;
  - and be kept clean.

- have a warning light fixed to its highest practicable point when it is on a major road. The warning light when switched on, must:
- emit a rotating, flashing, yellow-coloured light;
- flash between 120 and 200 times a minute;
- have a power of at least 55 watts;
- not be a strobe light; and
- be clearly visible at a distance of 500 metres in all directions or else be supplemented by one or more additional warning lights so that light emanating from at least one of them is clearly visible at a distance of 500 metres in all directions.

- for travel during daylight (between sunrise and sunset), the perimeter of the trailer must be distinguished by warning flags which must be coloured red or yellow, or red and yellow and be at least 450mm long and 450mm wide, and must be positioned at each side of the front and rear of the silage trailer.

An oversize sign must be displayed on the front of the towing tractor.

The tractor must have its low-beam headlights on while travelling in the daytime.

15 **Lights and Reflectors**

Rear marking plates must be displayed on a towing vehicle exceeding 12.0 tonnes GVM and on a silage trailer exceeding 10.0 tonnes GTM. A rear marking plate must comply with rule 13.6.101 of third edition Australian Design Rule (ADR) 13/00.

The mandatory light requirements for a silage trailer are:

- a pair of direction indicator lights fitted on, or towards, its rear that face backwards. The direction indicator lights must incorporate a hazard warning signal;
- a pair of brake lights fitted to the rear of the trailer;
- at least one tail light fitted on or towards each side of the rear of the trailer;
- a front-facing white or yellow reflector fitted towards each side of the front of a trailer that is at least 2.2 metres wide;
- a rear-facing red rear reflector towards each side of its rear;
- a pair of side marker lights fitted to each side of a trailer that is at least 2.2 metres wide and not over 7.5 metres long; or at least 3 side marker lights fitted to each side of a trailer that is at least 2.2 metres wide and over 7.5 metres long. When on, a side marker light fitted towards the front of the vehicle must show yellow light, and must show a yellow or red light when fitted towards the rear of the vehicle.
- rear clearance lights on a trailer that is at least 2.2 metres wide that show a red light when switched on.

Lights that are optional on a silage trailer are:

- reversing lights;
- a pair of rear fog lights; or one rear fog light fitted on, or to the right, of the centre of the trailer.
- front clearance lights on a trailer at least 1.8 metres wide;
- side-facing reflectors. A side facing reflector towards the front of the trailer must be yellow or white; and towards the rear must be yellow or red; and on the central part must be yellow;
- additional front-facing reflectors.

All lights and lenses must be kept clean and in good working order.
Fitment, alignment and performance of lights and reflectors must comply with the requirements of Part 5, Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

16 Tyres

Tyres fitted to a silage trailer must be of sufficient size and capacity to carry the part of the silage trailer’s gross mass transmitted to the ground through the axle, and must be free of any apparent defect that could make the vehicle unsafe. Tyres must be pneumatic and maximum inflation pressure must not exceed the pressure recommended by the manufacturer, and 825 kPa for a radial ply tyre or 700 kPa for another tyre.

Tyres on the same axle must not have differing carcass construction. On a trailer with a GVM in excess of 4.5 tonnes, the tyres must be suitable for road use at the lesser of:

- 100 km/h; and
- the vehicle’s top speed.

17 Tow couplings, Towbars, Drawbars and Safety Chains

The mating parts of a coupling or a towbar must not be used for a load more than the manufacturer’s load rating.

A coupling for attaching a trailer to a towing vehicle must be built and fitted so that the coupling is equipped with a positive locking mechanism (i.e. it cannot come loose from vibrations), and the positive locking mechanism can be released regardless of the angle of the trailer to the towing vehicle.

The trailer coupling must have clearly and permanently stamped, moulded or otherwise branded on its main component a means of identifying its manufacturer, and the maximum GTM of the trailer for which it is designed.

If the trailer is in a combination and is not fitted with break-away brakes, it must be connected to the towing vehicle by at least one chain, cable or other flexible device, as well as the required coupling.

Any safety connection must be as short as practicable and be so connected and affixed that:

- it is not liable to accidental disconnection but is readily detachable from the towing vehicle, and
- it permits all normal angular movements of the coupling without more slack than is necessary, and
- it will prevent the forward end of the drawbar from striking the ground in the event of accidental disconnection of the coupling, and
- if it consists of more than one chain or wire rope, the chains or wire ropes are in a crossed-over position.

Trailer couplings must incorporate safety chains in accordance with Australian Design Rule (ADR) 62/00, as set out in Table 4:

Table 4: Safety Chain Size Selection

<table>
<thead>
<tr>
<th>Aggregate Trailer Mass (ATM) (tonnes)</th>
<th>Chain size (millimetres)</th>
<th>Minimum chain breaking Load (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 3.5 and up to 5.0</td>
<td>6</td>
<td>5.1</td>
</tr>
<tr>
<td>Over 5.0 and up to 8.0</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>Over 8.0 and up to 12.5</td>
<td>10</td>
<td>12.8</td>
</tr>
<tr>
<td>Over 12.5 and up to 21.5</td>
<td>13</td>
<td>21.7</td>
</tr>
</tbody>
</table>
Safety chains must be attached to trailers in a way that if the couplings or parts of couplings fail, the safety chains are still effective.

Note: For any silage trailers with an Aggregate Trailer Mass (ATM) over 3.5 tonnes, the safety chain must be made from a steel of a minimum of 800 MPa breaking stress, conforming to the mechanical properties of Grade T chain.

Towbars and drawbars must meet the requirements of Australian Design Rule (ADR) 62/00.

18 **Suspension**
The axles in an axle group fitted to a trailer with a GVM exceeding 4.5 tonnes must relate to each other through a load-sharing suspension system.

19 **Mudguards**
A silage trailer must be fitted with a mudguard for each wheel or for adjacent wheels, unless the body or part of the body acts as a mudguard, that reduces the danger of a person contacting the moving wheels.

On the rear wheels, the mudguard must:
- cover the overall tyre width of the wheel to which it is fitted; and
- be fitted so the height above ground level of the lowest edge of the rear of the mudguard is not more than one-third of the horizontal distance between the outer edge of the mudguard and the centre of the rearmost axle.

The outside of a rear mudguard that can be seen from the rear of the vehicle must be coloured white or silver if the trailer is at least 2.2 metres wide and is not fitted with rear marking plates.