

# Heavy vehicle mass assessment

## Compliance and Enforcement bulletin 2

This bulletin provides:

- practical advice to help heavy vehicle drivers and other relevant parties comply with the requirements of the Heavy Vehicle National Law (HVNL) as it relates to heavy vehicle mass, and
- information about methods used to assess compliance with mass requirements.

This bulletin does not provide comprehensive information about mass limits for heavy vehicles. For more detail, visit: [www.nhvr.gov.au/road-access/mass-dimension-and-loading](http://www.nhvr.gov.au/road-access/mass-dimension-and-loading)

### What are mass requirements?

The prescribed mass limits for heavy vehicles are set out in the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2013* (the Regulation). Other instruments, such as exemption notices, permits or Performance-Based Standards (PBS) vehicle approvals, can also prescribe certain mass limits related to particular vehicles.

### How are heavy vehicle mass offences categorised?

Under the HVNL, mass offences are categorised as minor, substantial or severe. The offence category is proportionate to the level of risk to road and public safety, and the potential damage to road infrastructure, all of which increase with the severity of the offence.

For more information on risk-based offence categorisation, visit: [www.nhvr.gov.au/risk-based-categorisation-of-offences](http://www.nhvr.gov.au/risk-based-categorisation-of-offences)

### Categories of mass offences

#### Minor

A minor risk breach occurs if the breach is less than the substantial risk breach lower limit.

#### Substantial

The lower limit of a substantial risk breach is the higher of the following:

- a) a mass equalling 105% of the maximum mass (rounded up to the nearest 0.1t); or
- b) 0.5t

The upper limit of a substantial risk breach is less than 120% of the maximum mass.



#### Severe

The lower limit of a severe risk breach is defined as the mass equalling 120% of the maximum mass rounded up to the nearest 0.1t).

### What is measurement adjustment?

Measurement adjustment is a nationally agreed process that applies when a heavy vehicle is being weighed for compliance purposes.

Measurement adjustment recognises that a mass assessment outcome may potentially vary from time-to-time, due to:

- weighing and measuring equipment used
- the inspection site characteristics
- measuring methods
- the conditions under which the measurements are taken.

For example, the measured mass of an axle (or axle group) as indicated on weighing equipment at an inspection site may be slightly higher or lower than the true mass of the axle (or axle group). These slight variations are the result of the factors listed above.

Applying the agreed adjustments to account for possible variations provides fairness to the outcome of the weighing process and ensures the results can be legally relied upon in considering possible enforcement action.

## How is mass measurement adjustment (MMA) applied?

MMA relies on two key concepts:

- measured mass (MM) - the reading obtained from the weighing equipment.
- assessed mass (AM) - the measured mass minus the relevant MMA.

$$MM - MMA = AM$$

The relevant MMA for each axle (or axle group) mass and gross mass is calculated based on:

- the number of axles in the axle group, including the number of tyres
- the inspection site category
- the number of vehicle movements required to weigh the vehicle.

The assessed mass is compared with the applicable mass limit and risk breach breakpoints to determine the severity of any offence that may have occurred.

## Mass measurement adjustments

Axle group	Site category		
	1	2	3
Single axle with single tyres	0.3t	0.3t	0.4t
Twin-steer or tandem axle with single tyres or a combination of single and dual tyres	0.3t	0.4t	0.5t
Single axle with dual tyres	0.4t	0.4t	0.5t
Tandem axle with dual tyres	0.5t	0.5t	1.0t
Tri-axle, quad axle or grouped axle*	0.5t	0.5t	1.0t
Gross mass	0.25t	0.5t	1.0t

\*A grouped axle configuration refers to more than four axles in a group fitted to a trailer that is not a dog trailer.

## What other actions can be taken?

This section describes the types of actions that can be taken by an authorised officer for HVNL mass breaches.

### Minor risk breach:

When a minor breach of a mass requirement is detected the driver or operator may be directed to:

- rectify the breach immediately; or
- move the vehicle (with or without conditions) to a stated place, within a 30km radius from where the vehicle is located, or any point along the forward part of the journey and not move the vehicle until the breach is rectified.

### Substantial risk breach

When a substantial breach of a mass requirement is detected, the driver or operator will be issued a written notice, directing them to:

- not move the vehicle until the breach is rectified, or
- move the vehicle to a stated reasonable place and not to move it until the breach is rectified.

Examples of reasonable place include:

- a place where the heavy vehicle can be loaded or unloaded
- a depot of the heavy vehicle
- a weighbridge
- a rest area
- the intended destination of the heavy vehicle's journey, if appropriate.

### Severe risk breach

When a severe breach of a mass requirement is detected, the driver or operator will be issued a written notice, directing them to:

- not move the vehicle until the breach is rectified, or
- if there is a risk of harm to public safety or an appreciable risk of harm to the environment, road infrastructure or public amenity, move the vehicle to the nearest stated safe location and not move it until the breach is rectified.

Examples of a safe location include:

- a place where the heavy vehicle can be loaded or unloaded
- a depot of the heavy vehicle
- a weighbridge
- a rest area

A direction given by an authorised officer will be in writing unless the moving of the vehicle is carried out in the presence of, or under the supervision of an authorised officer, in which case the direction can be given verbally.

## What is a mass exception?

A mass exception is a concession to the general mass limits set out in the Regulation, available for certain heavy vehicles under the HVNL when specific conditions are met. The following mass exceptions are available under the HVNL:

- concessional mass limits (CML)
- quad axle group mass exception limits
- higher mass limits (HML)
- one-tonne tri-axle mass transfer allowance.

### What happens if a condition of a mass exception is breached?

If a vehicle operating under a mass exception breaches a condition of that exception, the mass exception does not apply and the vehicle will be assessed against the relevant prescribed mass limits set out in the Regulation.

## What happens if a mass requirement of a mass exception is breached?

If a vehicle operating under a mass exception breaches a mass requirement of the mass exception, this is not a condition offence. The vehicle will be assessed against the mass exception limits – refer Schedules 2 to 5A of the Regulation.

For example, if a driver or operator is claiming to be operating under CML and is compliant with all the conditions of CML, but the vehicle is exceeding a CML mass limit, this is not a condition offence. The vehicle will be assessed against CML mass limits.

*Note: “mass exceptions”, as described in this section, should not be confused with “mass exemptions”, which are provided by a notice or permit.*

## Driver responsibilities

Before commencing a journey, drivers should ensure:

- the vehicle they are driving complies with the relevant mass requirements
- if the vehicle they are driving is operating under a notice or permit, the vehicle and the operation of the vehicle complies with any conditions specified, including carrying a copy (if required)
- the journey follows the route as approved under the relevant notice or permit, noting any relevant bridge, tunnel or other restrictions.

## Operator responsibilities

Vehicle operators should ensure:

- the vehicle and load complies with the relevant mass requirements
- the driver is provided with the appropriate documents required to operate the heavy vehicle in compliance with the HVNL, any instrument or accreditation
- the driver is aware of their responsibilities in regard to the safe operation of the vehicle, including any conditions imposed by a notice or permit under which the vehicle may operate
- the route is approved for travel under the relevant notice or permit noting any relevant bridge, tunnel or other restrictions.

### For more information

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