

NSW Quad-Axle Semi-Trailer Pilot Scheme

Scheme duration

- The NSW quad-axle semi-trailer Pilot Scheme will operate for 3 years from the date the first permit is issued for the operation of a combination under the scheme.
- Should it be decided at the end of this period not to allow the continued operation of quad-axle semi-trailers at the axle group loads allowed under the scheme, operators in the scheme will be allowed an additional period of operation of the vehicles, subject to negotiation but not less than 6 months, to facilitate the phasing-out of their use.

Enabling legal mechanism

- Performance Based Standards (PBS) Permit issued under Section 27 of the Road Transport (General) Act 2005. A PBS Vehicle Approval will also be issued to the vehicle.

Permit Operating Conditions

Compliance with Performance-Based Standards (PBS) Level I safety standards

- The combination must be endorsed by the national PBS Review Panel (PRP) as meeting all the PBS Level I Safety Performance Measures.
- Written confirmation, from the PRP, of the combination's PRP endorsement must be provided to the RTA when applying for a permit.

Maximum length

- The combination must not exceed the 20-metre length limit for Level I PBS vehicles.

Maximum height

- The combination, together with its load, must not exceed 4.3m in height unless specifically approved by the RTA.

Quad-axle group dimensions

- A quad-axle group means a group of 4 axles, in which the horizontal distance between the centre-lines of the outermost axles is more than 3.2 m but not more than 4.9 m.

Axle and axle group mass limits

- All axles, other than the steer axle, must be fitted with dual tyres.

Table I - Mass limits for single axles and axle groups

Description of single axle or axle group	Mass Limit (tonnes)
STEER AXLE	
Single steer axle Single steer axle	6.0*
NON-STEER AXLE GROUPS	
Tandem axle groups	
Tandem axle group fitted with dual tyres	17.0
Quad-axle groups	
Quad-axle group fitted with dual tyres.	27.0

[* - prime movers (GVM 15t or more) meeting Front Under-run Protection Systems (FUPS), cabin strength and ADR80/01 (engine emissions standards) can operate at 6.5 tonnes on the steer axle.]

Gross Mass limit

- The total mass of the combination must not exceed the lowest of the following:
 - the sum of the axle and axle group mass limits in Table 1, or
 - the Gross Combination Mass (GCM) limit specified by the prime mover manufacturer, or
 - the sum of the manufacturer's mass limits for the prime mover (Gross Vehicle Mass (GVM)) and the trailer (Gross Trailer Mass (GTM)) it is towing, or
 - 50.0 tonnes*.

[* - prime movers meeting Front Under-run Protection Systems (FUPS), cabin strength and ADR80/01 (engine emissions standards) can operate at 6.5 tonnes on the steer axle. The extra 500kg allowed on the steer axle is added to the gross mass of the combination i.e. 50.5 tonnes]

Concessional Mass Limits (CML) not applicable

- The Concessional Mass Limits Notice 2006 does not apply to vehicles operating as part of the scheme.

Suspension

- All axle groups, except the steer axle of the prime mover, must be fitted with air-bag road friendly suspension complying with Commonwealth Vehicle Standards Bulletin– VSB 11
- The certification of Road Friendly Suspensions used in quad axle groups must be undertaken using the Vehicle Standards Bulletin 11 certification procedures at a quad axle group load of 27 tonnes \pm 5% or a single axle load of 6.75 tonnes \pm 5%.

Lift and steerable axles

- If the quad axle group is fitted with a retractable axle, the retractable axle must operate in accordance with Australian Design Rule (ADR) 43/04, Vehicle configuration and dimensions, Section 9, with a prescribed transition mass (from three to four axles) of 15 tonnes.
- The quad axle group must be fitted with a steerable rear axle with no less than \pm 12 degrees of steering articulation and an effective automatic centring mechanism.

Roadworthiness, Australian Design Rule (ADR), Australian Vehicle Standards Rules (AVSRs)

- Vehicles must comply with applicable roadworthiness, Australian Design Rule (ADR), and Australian Vehicle Standards Rules (AVSRs) requirements.

National Heavy Vehicle Accreditation Scheme (NHVAS) Accreditation

- The vehicle must be accredited under the National Heavy Vehicle Accreditation Scheme (NHVAS) Maintenance Management and Mass Management Accreditation modules and have the required labels prominently displayed in the position required by these Accreditation modules.

Vehicle monitoring

- The vehicle must be either pre-enrolled or fully enrolled in the Intelligent Access Program (IAP).

Compliance with specified PBS operating conditions

- The combination must be operated in accordance with any conditions set by the PBS Review Panel (PRP) when endorsing the combination as a complying PBS Level 1 vehicle.
- Details of any such additional operating conditions set by the PRP must be provided to the RTA when applying for a permit and will be listed on either the PBS permit or vehicle approval issued by the RTA.

Travel restrictions

- The combination must only travel on roads approved by the RTA.
- Where travel is required on a road managed by a road owner other than the RTA (e.g. a council or port authority), the RTA will require written approval of access for the combination from the relevant road owner(s) before issuing a permit.

Route access assessments

- Vehicle combinations will be assessed, and, if appropriate, approved for operation on the road(s) identified by the applicant, on a case-by-case basis.
- The cost of undertaking any structural assessments (e.g. bridge assessment) required with respect to the road(s) identified by the applicant will be borne by the applicant unless an exception is made by the relevant road owner e.g. an exception is made for the first route assessment sought by an applicant.
- Payment of the fee is required before an assessment is undertaken.
- The RTA will fund an agreed number of assessments each year, during the course of the pilot.
- Applicants are advised that an assessment of the structures on the road(s) identified by the applicant, may determine that access for the applicant's vehicle combination is not approved.

Trailer testing requirements

- During the Quad-Axle Semi-Trailer Pilot Scheme
 - Vehicles must be operated under the conditions established for the scheme (above); and
 - The operator must, on request from the RTA, provide access to one quad-axle trailer with air-bag road friendly suspension and one quad-axle trailer with steel-sprung road friendly suspension (if they have a trailer with such suspension) for use in the assessment of the load sharing performance of quad-axle groups at normal traffic and highway speeds in accordance with the established peer group methodology.

Concessional road pricing

- From the second year of the pilot, when the initial results of the impact of quad-axles on pavements are available, the RTA may levy a fee for the operation of quad-axle semi-trailer combinations operating under the scheme to recover the cost of pavement wear caused.