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WA Performance
Based Standards (PBS)
Scheme
Vehicle Certification Rules

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# **Amendments**

Revision Number	Revision Date	Description of Key Changes	Section / Page No.
1	15/06/2022	Clarified Braking and Stability System requirements. Removed appendices. Referred to relevant declaration template titles within the relevant sections. Clarified manufacturer accepted declarations.	cl.4.3 cl.5.1 cl.5.6
2	12/09/2022	Added reference to WA Performance Based Standards (PBS) - Road Train TEBS Voltage Test Procedure.	cl.5.6
3	4/12/2023	Updated to meet current practice of inspecting and approving vehicle models.	All

# REFERENCES AND RELATED DOCUMENTS

The following documents are related to the WA PBS Scheme and the vehicle certification process. These documents are available on the Performance Based Standards (PBS) page on the Main Roads website.

Document Name	Location
WA Performance Based Standards (PBS) Scheme – Access Levels and Principles	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-performance-based-standards-pbs-scheme-access-levels.pdf?v=48f8d9
WA Performance Based Standards (PBS) Scheme – Application and Approval Process	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-performance-based-standards-pbs-scheme-application-and-approval-process-as-at-5-november-2020.pdf?v=4928b3
WA Performance Based Standards (PBS) Scheme – Assessment Results (Part A)	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/
WA Performance Based Standards (PBS) Scheme – Audit Framework	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-performance-based-standards-pbs-scheme-audit-framework.pdf?v=4928cb
WA Performance Based Standards (PBS) Scheme - Manufacturer's Declaration - Duplicate Vehicles	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/
WA Performance Based Standards (PBS) Scheme - Manufacturer's Declaration - Towing Vehicle	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/
WA Performance Based Standards (PBS) Scheme - Manufacturer's Declaration – Trailer	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/
WA Performance Based Standards (PBS) Scheme - Road Train TEBS Voltage Test Procedure	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-pbs-scheme-road-train-tebs-voltage-test-procedure.pdf?v=4a65ab

Document Name	Location
WA Performance Based Standards (PBS) Scheme – Standards and Vehicle Assessment Rules	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-performance-based-standards-pbs-scheme-standards-and-vehicle-assessment-rules.pdf?v=49a411
WA Performance Based Standards (PBS) Scheme - Trailer Manufacturer's Checklist	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/
WA Performance Based Standards (PBS) Scheme – Vehicle Certification Application	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/pbs/wa-performance-based-standard-scheme-vehicle-certification-application.pdf?v=48ecd9
WA Performance Based Standards (PBS) Scheme – Vehicle Specifications (Part B)	https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/PBS/

## 1 PURPOSE

The purpose of these rules is to outline the process and requirements when certifying a vehicle in accordance with a Vehicle Design Approval issued under the WA Performance Based Standards (PBS) Scheme.

### 2 SCOPE

These rules apply to the WA Performance Based Standards (PBS) Scheme only. They do not apply to PBS vehicles certified under the National PBS Scheme.

## 3 CONDUCTING CERTIFICATION INSPECTIONS

#### 3.1 WA PBS Certifiers

- **3.1.1** All certifications will be undertaken by a minimum of two (2) HVS personnel with appropriate expertise.
- **3.1.2** HVS may engage an independent third party to conduct a certification inspection.

## 3.2 When Certification Inspections are Conducted

- **3.2.1** HVS will conduct onsite certification inspections of new vehicle models that form part of a vehicle combination that has been issued with a WA PBS Vehicle Design Approval, which will then be added as an approved vehicle model to a WA Performance Based Standards (PBS) Scheme Manufacturer's Approved Vehicle Models list.
- **3.2.2** HVS will conduct onsite certification inspections of approved vehicle models that have been modified in accordance with an updated *WA PBS Vehicle Design Approval*.
- **3.2.3** HVS will conduct random onsite certification inspections of approved vehicle models to ensure vehicles are continuing to meet the required specifications.

#### 3.3 Applying for a Certification Inspection

- **3.3.1** Once the vehicle has been built, the applicant will need to submit a *WA Performance Based Standards (PBS) Scheme Vehicle Certification Application* to HVS, to arrange for a vehicle certification inspection to be conducted.
- 3.3.2 The WA Performance Based Standards (PBS) Scheme Vehicle Certification Application must be submitted to HVS at least 4 weeks prior to the requested inspection date, once all the matters outlined in the following sections have been addressed.

#### 3.4 Certification Inspection Locations

- **3.4.1** Vehicle certification inspections will be conducted at a suitable location within the Perth Metropolitan Area, wherever practicable.
- **3.4.2** Where it is not practicable to conduct a vehicle certification inspection within the Perth Metropolitan Area, the inspection may be conducted at an agreed suitable location outside the Perth Metropolitan Area, within Western Australia.
- 3.4.3 Where a vehicle certification inspection is conducted outside the Perth Metropolitan Area, the applicant may be liable for the HVS personnel's travel and accommodation expenses. HVS will provide a cost estimate prior to the vehicle certification inspection, which must be agreed to by the applicant prior to the inspection being conducted. The applicant will be invoiced for the actual costs once the vehicle certification has been completed.

**3.4.4** A suitable location is one that is safe, clean, well-lit and has suitable facilities for the inspection of heavy vehicles. The vehicle must not be over an inspection pit.

### 3.5 Responsibilities of the Applicant Prior to the Certification Inspection

- **3.5.1** The applicant must ensure the vehicle is ready for inspection prior to booking the certification inspection, as outlined in the following sections, including:
  - (a) All required documentation, including the Manufacturer's Declarations have all been submitted to HVS and all the information on the Manufacturer's Declarations aligns to the requirements specified in the relevant WA PBS Vehicle Specifications (Part B) form.
  - (b) Ensuring a preliminary check of the vehicle has been conducted to ensure it meets all the requirements specified in the relevant WA PBS Vehicle Specifications (Part B) form and measurements comply with the schematic.
  - (c) All vehicles must be presented in a clean manner to enable HVS to inspect all the necessary components.
  - (d) All compliance plates must be individually cleaned, so that the vehicle identification numbers and vehicle ratings can be clearly read.
  - (e) All component ratings plates must be individually cleaned so the rating can be clearly read. Where a plate has been spray painted over, the paint needs to be scraped off, so the information on the plate can be clearly read. If the rating plates are not legible, they must be replaced before the inspection.
- **3.5.2** Where anomalies are identified as part of the preliminary inspection, these must be rectified by the PBS Assessor prior to submitting the certification application.

# 4 CERTIFICATION PROCESS & EVIDENCE

# 4.1 Completing a Certification Approval

- **4.1.1** HVS will collate the information outlined in this section to verify the vehicle meets the required specifications in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form, provided by the PBS Assessor.
- **4.1.2** The evidence outlined in this section will be required for HVS to complete the certification and certify the vehicle as a Manufacturer's Approved Vehicle Model and issue the operator with a Certification Approval.

# 4.2 Engine, Driveline, Suspension and Tare Mass Details

- **4.2.1** The applicant must provide a manufacturer's declaration clearly stating the following specifications that are unable to be visually inspected:
  - (a) Engine power and torque;
  - (b) Clutch engagement torque;
  - (c) Gearbox ratios:
  - (d) Differential final drive ratios;
  - (e) Differential torque distribution;
  - (f) Suspension;
  - (g) Vehicle tare mass.

- **4.2.2** All manufacturer declarations must be submitted prior to HVS conducting a certification inspection of the vehicle and must be submitted using the relevant template listed below:
  - (a) WA Performance Based Standards (PBS) Scheme Manufacturer's Declaration Towing Vehicle
  - (b) WA Performance Based Standards (PBS) Scheme Manufacturer's Declaration Trailer
- **4.2.3** HVS will accept declarations from motor vehicle dealers on behalf of the motor vehicle manufacturer.
- **4.2.4** The manufacturer's declaration should not be submitted unless the declared specifications meet the requirements stipulated in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form. Where the declared specifications do not meet the requirements, the applicant must replace the relevant components or arrange for the PBS Assessment to be updated to reflect the actual specifications, prior to submitting the vehicle certification application.

#### 4.3 Tyres

- **4.3.1** HVS will physically inspect and record the tyre size and load index.
- **4.3.2** For Duplicate Vehicle Certifications, the applicant must submit a Manufacturer's Declaration or provide video evidence if the tyres are not the same as previously certified or have been fitted aftermarket.
- **4.3.3** An application for vehicle certification should not be submitted unless the tyres fitted to the vehicle match those stipulated in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form. Where the tyres do not match those stipulated, the applicant must replace the tyres or arrange for the PBS Assessment to be updated to reflect the tyres that are fitted, prior to submitting the vehicle certification application.

#### 4.4 Tow Couplings

- **4.4.1** HVS will physically inspect the tow couplings and record the coupling type, position and ratings.
- **4.4.2** If other evidence is required, such as strength testing or angle of lash, HVS will require the manufacturer to provide sufficient evidence in the form of a declaration and / or an Australian Design Rule (ADR) compliance report.
- **4.4.3** An application for vehicle certification should not be submitted if the ratings are not clearly visible. The applicant must either clean or replace the ratings plates, prior to submitting the vehicle certification application.
- **4.4.4** For Duplicate Vehicle Certifications, the applicant must submit a Manufacturer's Declaration or provide video evidence where the fifth wheel coupling is not the same as previously certified or has been fitted aftermarket.
- 4.4.5 An application for vehicle certification should not be submitted unless the coupling ratings are equal to or greater than those stipulated in the *WA Performance Based Standards* (*PBS*) Scheme Vehicle Specifications (*Part B*) form. Where the coupling ratings are not sufficient, the applicant must replace the couplings, prior to submitting the vehicle certification application.

### 4.5 Braking and Stability System

**4.5.1** HVS will physically inspect and record details of the braking system.

- **4.5.2** Plates or stickers must be fitted to each trailer to confirm the vehicle is fitted with EBS.
- **4.5.3** The trailer manufacturer will be required to supply the "End of Line" test results for each unit fitted with EBS.

#### 4.6 Vehicle Measurements

- **4.6.1** HVS will physically measure each part of the vehicle combination in accordance with the vehicle schematic and other dimensions specified in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form.
- **4.6.2** HVS will apply a tolerance of 20mm or 1%, whichever is the lesser. If the dimensions vary by more than this tolerance, the PBS Assessment must be resubmitted with the updated dimensions.
- **4.6.3** Despite sub-clause 4.6.2, a tolerance will not be applied to maximum and minimum dimensions set by HVS, e.g. maximum combination length limits and minimum axle spacing requirements.

#### 4.7 Other Evidence

The manufacturer may be required to provide additional information at the request of HVS, such as but not limited to, specific test results, unladen centre of gravity height and steerable trailer axle specifications.

# 5 NON-COMPLIANT CERTIFICATION INSPECTION

### 5.1 Incomplete Certification

Where anomalies are identified with the vehicle, the vehicle certification will be deemed incomplete until all the anomalies are rectified.

# 5.2 Rectifying Anomalies

- **5.2.1** If the vehicle can be modified to meet the requirements stipulated in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form, it will need to be modified and then re-inspected by HVS.
- **5.2.2** If the vehicle cannot be modified to meet the requirements stipulated in the *WA Performance Based Standards (PBS) Scheme Vehicle Specifications (Part B)* form, an updated PBS Assessment will need to be submitted, addressing all anomalies.

#### 5.3 Re-inspection of the Vehicle Combination

- **5.3.1** If there are major anomalies or an unreasonable number of anomalies, HVS will deem the vehicle unsuitable for certification and the applicant will need to reschedule the certification inspection when the vehicle is ready for certification.
- **5.3.2** If there are major anomalies, an unreasonable number of anomalies, or anomalies that should have been rectified prior to HVS conducting a vehicle certification inspection, HVS may refuse to conduct a re-inspection outside the Perth Metropolitan Area. The applicant will need to relocate the vehicle to the Perth Metropolitan Area for inspection.
- **5.3.3** If the vehicle combination requires re-inspection, the applicant will need to contact HVS to arrange an inspection in accordance with <u>Section 3</u>.

# 6 DUPLICATE VEHICLE DECLARATIONS

# 6.1 Duplicate Vehicles

- **6.1.1** Once a vehicle has been certified, it will be added to the WA Performance Based Standards (PBS) Scheme Manufacturer's Approved Vehicle Models list.
- **6.1.2** The manufacturer, or a dealer on behalf of the manufacturer in the case of a motor vehicle, can then submit a *WA Performance Based Standards (PBS) Scheme Manufacturer's Declaration Duplicate Vehicles* form, declaring a subsequent vehicle has been built with identical physical characteristics as the vehicle that has previously been certified on the Manufacturer's Approved Vehicle Models list.

# 6.2 Operator Declarations

HVS will only accept declarations from transport operators for components that have been fitted post vehicle manufacture, such as aftermarket couplings.