



# Western Australian Heavy Vehicle Accreditation

# Maintenance Management Module Standards

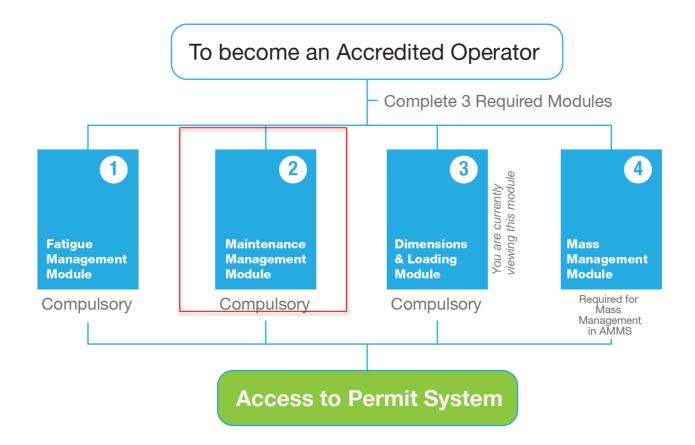
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This document is to be read in conjunction with the "Guidelines for Audit Providers" and the "WA Heavy Vehicle Accreditation Business Rules".

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# Contents

1	MAINTENANCE MANAGEMENT MODULE STANDARDS	3
2	OPERATING STANDARDS	3
APPL	ICATION	4
STAN	IDARD 1: DAILY CHECK	5
STAN	IDARD 2: FAULT RECORDING AND REPORTING	7
STAN	IDARD 3: FAULT REPAIR	8
STAN	IDARD 4: MAINTENANCE SCHEDULES AND METHODS	9
STAN	IDARD 5: RECORDS AND DOCUMENTATION 1	0
STAN	IDARD 6: RESPONSIBILITIES1	2
STAN	IDARD 7: INTERNAL REVIEW1	4
STAN	IDARD 8: TRAINING AND EDUCATION1	7
DOCI	JMENTS THAT MUST BE KEPT1	8
DEFI	NITIONS	D
FURT	HER ENQUIRIES	1

# 1 MAINTENANCE MANAGEMENT MODULE STANDARDS

This document details the requirements of the Maintenance Management Module Standards. It details what an operator must do in order to qualify for and maintain accreditation. It also explains where to find other important information about the process. The audit is to be conducted in accordance with the requirements of this document and the Western Australian Heavy Vehicle Accreditation Business Rules.

Maintenance management encourages heavy vehicle operators to take responsibility for servicing their vehicles (includes trailing equipment) regularly and ensuring their vehicles are safe at all times. It helps operators manage their business more efficiently with clear procedures for ensuring vehicles are well maintained, resulting in reduced down time associated with breakdowns and greater road safety. The standards for this module are aligned to the nationally endorsed National Heavy Vehicle Accreditation Scheme (NHVAS).

Accredited operators must ensure their vehicles are maintained and meet all relevant safety standards. A record of the maintenance and servicing work done to each vehicle must be kept to prove the vehicles are safe at all times.

Accredited operators must ensure all accredited vehicles comply with the *Road Traffic (Vehicle) Regulations 2014* and the relevant Australian Design Rules (ADRs). These contain mandatory requirements for the safe design, construction and maintenance of heavy vehicles.

It is the responsibility of the accredited operator to decide how they are going to maintain their vehicles and prove adherence to the standards. The important thing is that operator's document and record the method used and explain how it works. This will be their Maintenance Management System. To stay accredited, the operator needs to have documents and records that prove their method works and all vehicles are well maintained. The operator must also be able to prove their written procedures are always followed.

Performance standards have been developed to ensure that everyone achieves the same minimum level standard of compliance. The operator's Maintenance Management System must comply with these standards.

# 2 OPERATING STANDARDS

There are eight maintenance management standards operators need to comply with. This section lists what they are and what they mean in practical terms. It also explains what is required in order to comply with the standards and how an operator can demonstrate they are complying. There are checklists at the end of the explanations to assist operators in determining if they are complying with the standards.

In the explanation of the standards on the following pages, the term "Maintenance Management System" means the procedures developed, documented and recorded in order to qualify for accreditation. For ease of explanation, we will call the written Maintenance Management System procedures the Maintenance Management System Manual. The manual should contain all the relevant documentation which supports the Maintenance Management System. The value of this approach is that it will assist an auditor and others to gain a good understanding of the system. This should reduce the time an audit takes and consequently its costs.

At its simplest, the manual could be a list of procedures in a folder. Or, if the company has ISO certification, the Maintenance Management System Manual could be a computer produced manual similar to a company's Quality Assurance Manual.

### APPLICATION

The Maintenance Management Module Standards must be read in conjunction with the WAHVA Business Rules.

The Maintenance Management Module applies to all WA accredited operators. Refer to the legislation and WAHVA Business Rules for full details.

All WAHVA documentation is available on the Main Roads Western Australia (MRWA) website: http://www.mainroads.wa.gov.au/UsingRoads/HeavyVehicles/Accreditation/Pages/Accreditation.aspx.

# STANDARD 1: DAILY CHECK

**Standard:** The maintenance management system must include a daily check for each vehicle (includes trailing equipment) when it is in use.

The daily check is a documented instruction of simple roadworthiness checks. The operator shall define when the inspection is carried out, by whom and how it is recorded. The individual completing the daily check shall acknowledge the vehicle to be roadworthy to limits of the inspection.

Criteria: An operator's maintenance management system:

- 1.1. Must include a documented instruction detailing when the daily check is carried out, who carries it out, and how the check is recorded.
- 1.2. The daily check must cover as a minimum the inspection of:

### Wheels and tyres

- Tyres for pressure (visual check) and tread integrity.
- Wheel security.

### Lights and reflectors

- All lights, including clearance lights.
- All reflectors and lenses.

### Windscreen, mirrors and wipers

- Windows and mirrors for security, damage and grime.
- Wipers and windscreen washers for ensuring clear forward vision.

### Structure and bodywork

- All panels and readily visible structural members secure.
- Leaks of any fluid (oil, fuel, air, water, refrigerant/coolant, hydraulic fluid, brake fluid or other).

### Brakes

- Brake failure indicators.
- Pressure/vacuum gauges.
- Drain air tanks (full air and air-over-hydraulic systems only on rigid and articulated combinations).

### **On-Road Vehicle Fault Report**

- Any faults found during the Daily Check are to be recorded within the On-Road Vehicle Fault Report.
- 1.3. The individual who carries out the check must understand they are certifying the vehicle is safe to the limits of the inspection when the vehicle leaves the yard or depot.

- Do you have a documented instruction detailing when the daily check is to be carried out, who will do it and how it is to be recorded?
- Does the daily check cover all of the minimum inspection requirements?
- □ Is an appropriate on road vehicle fault report log available to drivers and maintenance personnel?
- □ Is there a procedure in the maintenance management system manual which describes the full responsibilities of the person/people carrying out the checks?
- Do the relevant staff understand their responsibilities when conducting daily checks, and are they aware that when signing off the check sheet, they are certifying that the vehicle is roadworthy to the limits of the inspection?

# **STANDARD 2: FAULT RECORDING AND REPORTING**

**Standard:** The maintenance management system must ensure that provision is made to record and report vehicle faults on both the hauling and the trailing equipment.

The driver must be able to record and report any recognisable fault occurring during the course of a journey so it may be assessed and rectified.

Criteria: An operator's maintenance management system:

- 2.1. Needs to provide for a means which can be retained in the vehicle to record faults occurring during a journey to both trailing and hauling equipment.
- 2.2. Must include documented instruction which details how a driver records faults occurring during a journey and how the faults are reported to the maintenance provider, as soon as possible.
- 2.3. Must include documented instruction which provides for faults occurring at any other time to be reported to the maintenance provider as soon as possible.
- 2.4. Must include written instructions that explain how to find a major or serious fault, as soon as possible, even if that vehicle is away from home base.

- Does an appropriate log exist for drivers to record the details of any faults occurring during the journey in relation to the trailing and/or hauling equipment?
- □ Is there a procedure in the maintenance management system manual which details the requirements of drivers in relation to recording faults?
- □ Is there a procedure in the maintenance management system for ensuring that drivers all know what their fault recording and reporting requirements are?
- □ Is there a documented procedure in the maintenance management system which details how faults occurring at a time other than during a journey are to be reported to the maintenance provider?

# **STANDARD 3: FAULT REPAIR**

**Standard:** The maintenance management system provides for the identification, assessment and action on reported faults.

The system has a method of identifying, assessing and taking action on reported faults from any source (i.e. driver, maintenance provider, manager) and determining the priority placed upon repair of the fault.

Criteria: An operator's maintenance management system:

- 3.1. Must have a method in place to identify and assess the nature of a fault and place priority on its repair.
- 3.2. Must identify on the record the person making the decision if a decision is made to defer working on a fault.
- 3.3. Must record where a decision is made to monitor the condition of a fault. The system must also set the upper limits for when a monitored condition is repaired (i.e. every 1000 km, when parts are received, etc). The identity of the person who makes the decision to monitor a fault must be recorded.
- 3.4. At the completion of repair, records must show the fault has been rectified and tested.

- □ Is there a procedure for recording fault repairs and testing?
- □ Is there a procedure in the maintenance management system which outlines how to identify and assess the nature of a fault in order to place a priority on its repair?
- Does the procedure outline the process for deferring a fault and that a decision to monitor/defer a fault must be recorded?
- Does the procedure outline the requirement that the person who makes the decision to monitor/defer a fault must record their name on the fault record?
- Does the maintenance management system identify the upper limits for when a monitored fault is repaired (eg every 1000 km, when parts are received, etc)?

## **STANDARD 4: MAINTENANCE SCHEDULES AND METHODS**

**Standard:** The maintenance management system must include periodic maintenance schedules with identified service periods that describe the tasks to be completed.

This standard provides evidence that the vehicle is being systematically maintained. This will be through a series of work schedules pertinent to various vehicle and system components. Within the maintenance schedules, or available to the maintenance provider, will be a description of the tasks for the inspection, service, repair or replacement of components utilised within the vehicle.

Criteria: An operator's maintenance management system:

- 4.1 Must include evidence that at the time of entry or re-entry into the scheme, the nominated fleet had been certified roadworthy by a qualified person experienced in the inspection of heavy vehicles in accordance with the National Roadworthiness Guidelines (Vehicle Standards) and the Australian Design Rules (ADRs). The evidence cannot be more than six months old. This must include a recent statement from the operator or designated responsible person verifying that the nominated fleet is roadworthy. A copy to be provided as per the requirements of the Western Australian Heavy Vehicle Accreditation Business Rules.
- 4.2 Must include maintenance schedules which provide for the periodic maintenance of vehicles at defined intervals of time, distance, or hours of use. Schedules must include a description of the tasks to be completed during the service.
- 4.3 Must include evidence that maintenance and repairs are only undertaken by persons having suitable qualifications or experience to competently complete any maintenance or repair tasks, or to do so under suitable supervision.
- 4.4 Must include table of tolerances and wear limits for major components and it must comply with at least the national vehicle standards.

- Does the operator have evidence, which is less than six months old, that the nominated fleet has been certified roadworthy by a qualified person?
- Does the maintenance management system detail the frequency at which periodic maintenance is to take place?
- Does the maintenance management schedule detail the tasks which need to be completed during the service?
- □ Is there a table of tolerances and wear limits for major components?
- Does this table comply with at least the national vehicle standards?
- Are those personnel involved with maintenance in the company aware of the contents of this table and how to access it?

# **STANDARD 5: RECORDS AND DOCUMENTATION**

### Standard:

**Standard:** Documented evidence must be maintained to demonstrate the effective operation of the maintenance management system.

Essential to the maintenance system is the keeping and preservation of pertinent records.

Criteria: An operator's maintenance management system:

- 5.1. Must keep as a minimum the following documented evidence:
  - that the daily check is being completed in accordance with the instruction;
  - that the faults occurring on the road are being recorded and reported in accordance with the procedures;
  - that reported faults are being repaired in accordance with the set method;
  - that vehicles are maintained in accordance with the set periodic schedules;
  - that the persons maintaining vehicles under the maintenance management system are suitably qualified or experienced to do so; and
  - that records, procedures, and methods in place under the system are regularly reviewed in accordance with the procedures.
- 5.2. Must ensure that procedures include steps for making maintenance management procedures available to all relevant staff.

### EXAMPLE:

You could issue specific work instructions to drivers and maintenance personnel.

You could have a distribution list for maintenance management system manuals.

You could provide training courses to staff.

- 5.3. A record of nominated vehicles must be kept and regularly updated. The format should be able to record the following details for each nominated vehicle:
- Type of unit
- Manufacturer
- Date of construction
- Registration number and
- Unique identifier

### YOUR CHECKLIST FOR STANDARD 5

□ For each vehicle:

- Is there documentary evidence that the daily check is being completed in accordance with the instruction?
- Is there documentary evidence that the faults occurring on the road are being recorded and reported in accordance with the procedures?
- Is there documentary evidence that reported faults are being repaired in accordance with the set method?
- Is there documentary evidence that the vehicle is maintained in accordance with the set periodic schedules?
- Are those responsible for maintaining vehicles under the maintenance management system suitably qualified or experienced to do so?
- □ Is there documentary evidence that the records, procedures and methods in place under the system are regularly reviewed in accordance with the procedures?
- Does the maintenance management system manual have procedures for ensuring all relevant staff can access or know how to access the maintenance management system manual and other relevant documents?
- □ Is there documentary evidence that a record of nominated vehicles is kept and regularly updated, which contains the following information:
- Type of unit;
- Manufacturer;
- Date of construction;
- Registration number; and
- Unique identifier.

# **STANDARD 6: RESPONSIBILITIES**

**Standard:** The authorities, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of the maintenance management system are current, clearly defined and documented.

Responsibility for each operation of the maintenance management system is to rest with appropriate people within the road transport operation as nominated by the operator.

Criteria: An operator's maintenance management system:

- 6.1 Must clearly identify:
- What the tasks in the maintenance management system are; and
- Who is responsible for carrying out each task listed in the maintenance management system manual?

The people assigned to the listed tasks must be appropriate for those tasks.

# EXAMPLE: An owner-driver may be responsible for almost all tasks in their maintenance management system. In a larger firm: A workshop manager may be responsible for ensuring the periodic maintenance schedule is followed and all faults are repaired; A mechanic may be responsible for carrying out maintenance checks and acting on fault reports; A truck driver may be responsible for conducting the daily check and reporting any faults

- A truck driver may be responsible for conducting the daily check and reporting any faults discovered during the check or on-road; and
- The depot manager may be responsible for ensuring the firm's maintenance management system procedures are followed at their depot.

An operator could choose to have a separate list of all the people involved in their maintenance management system and what they are responsible for, alternatively could simply name the positions or people responsible for the tasks, as described in the procedures manual.

It is important that the tasks to be carried out and who is responsible for performing each task is clearly identified.

There may well be overlaps. Some people may be responsible for several (or almost all) tasks, depending on the size of the firm and the way work is allocated.

- Have the maintenance management system tasks been fully documented in the maintenance management system manual?
- Are the tasks clearly described? (Could another reasonably competent person follow the steps to do the work?)
- Have responsibilities for the tasks been allocated, documented and recorded?
- Have all relevant staff been informed of what their responsibilities are?
- Do all relevant staff know how to access the written record of what their responsibilities are?
- Does the manual include procedures for ensuring that the standards are met and correct procedures followed?
- □ Is there a nominated person (or people) to ensure that the maintenance management system is followed?

# STANDARD 7: INTERNAL REVIEW

**Standard:** The maintenance management system must be subject to an annual internal review to verify that all results and activities comply with the system's policies, procedures and instructions.

An internal review of the Maintenance Management System is a regular look at the system against the standards to see that it complies. An effective review will pick up problem areas in the basic requirements, show failures to comply with procedures, and identify non-compliances (including vehicle defect notices) that should be fixed as soon as possible.

When applying for accreditation, an operator will need to review their proposed maintenance management system before it is externally audited to ensure it complies with the required standards.

Accredited operators, need to review their maintenance management system annually (and before an external audit) in order to ensure it is working and complies with the necessary standards. By reviewing the maintenance management system internally first, operators can save the cost of a potentially unsuccessful external audit later.

### EXAMPLE:

An internal review may pick up that some drivers do not have Maintenance Management System procedures or work instructions in their vehicles, or a driver has not had any training in the Maintenance Management System, or the driver has not been recording faults correctly. The reviewer will raise a non-conformance report that describes the non-conformance and what should be done about it, and by when. The reviewer will then check to make sure corrective action has been taken. In the case given as an example above, it could be a matter of ensuring the person responsible for giving drivers their work instructions is counselled, and checking periodically to ensure it is now happening; arranging appropriate training for the driver who has not had any; and counselling the driver who has not been recording faults correctly to ensure he or she understands the importance of this task, and checking periodically that it is now being carried out.

Criteria: An operator's maintenance management system:

- 7.1. Must include procedures for carrying out internal reviews that cover:
  - when the reviews are to take place;
  - who is to conduct them;
  - how the reviews are to be conducted; and
  - checklists to be used for the review.

The checklist of documents and records that operators must retain will be used by the internal

reviewer(s).

7.2. As far as possible an operator must ensure the person or people carrying out the internal reviews is independent of the procedures being reviewed. An owner-operator could ask a trade colleague or a relative to conduct the review. An ISO certified operator can utilise internal auditor(s) to conduct their reviews. It is recognised that for small operators it may be hard to find somebody completely independent of the process.

7.3. Separate from the annual internal review, an operator must have written procedures to ensure all non-compliances identified at any time during the year are corrected. This means identifying the people who are to be responsible for taking action so instances of non-compliance are not repeated.

The procedures for handling non-compliances should include:

- How non-compliances can be detected;
- Who is responsible for detecting them;
- Who else should be told about them;
- Corrective action to be taken;
- Timeframes for reporting identified non-compliances; and
- How the responsible person is to document the process so the non-compliance does not recur.

Evidence of non-conformances and the action taken to correct them must be retained. This is done in the form of a non-conformance register.

- 7.4. Must write a quarterly compliance report that lists:
  - the number of vehicles in the accredited fleet;
  - the total number of daily checks conducted over the period and the total number of incidences where the check was not done;
  - the total number of services and total number of incidences where services were not carried out at the recorded intervals; and
  - the total number of fault repairs and total incidences when faults were not closed out.

### Important note:

If the quarterly compliance reports are accurate, they give a good indication of how well the system is working and where corrective action may need to be taken. . Inevitably an external audit will find evidence of inaccuracies, so it is best to prepare accurate reports and act on them. That way operators will be able to demonstrate an improvement in their next quarterly report.

- 7.5. Where changes to procedures are required in order to correct non-compliances, appropriate staff must be named to update the procedures.
- 7.6. Must retain copies of superseded procedures, along with all other documentation relevant to the review, for later audit.

- Does the maintenance management system manual include procedures for carrying out internal reviews which cover:
  - when the reviews are to take place;
  - who is to conduct them; and
  - how the reviews are to be conducted?
- Are internal reviews carried out by an independent person/people?
- □ Is there written procedures for ensuring that all non-compliances identified at any time during the year are corrected?
- Have staff been identified for taking action so instances of non-compliance are not repeated?
- Does the operator produce a quarterly compliance report?
- Has the operator identified the person/people responsible for updating the maintenance management system procedures when necessary?

# **STANDARD 8: TRAINING AND EDUCATION**

**Standard:** The persons who hold a position of responsibility under the maintenance management system are trained in and are familiar with the specific policy, procedures and instructions they are to carry out.

Training and education is essential to ensure all employees, including managers, understand the maintenance management system and have the appropriate knowledge and skills to carry out the tasks given to them.

Criteria: An operator's maintenance management system:

8.1 Must keep evidence of relevant maintenance management system training provided to staff.

EXAMPLE:

A distribution list for your maintenance management system manuals.

Records of date of training, type of training and who attended.

Work instructions issued to drivers.

- □ Is training provided to all relevant staff who are involved in the Maintenance Management System?
- □ Is there evidence of this?
- □ Is refresher training provided when identified non-compliances highlight the need?

### DOCUMENTS THAT MUST BE KEPT

The items with a solid coloured square could be included in the maintenance management system manual in order to consolidate all procedures for meeting the standards.

All documents must be kept for a minimum of three years for audit purposes. This includes superseded procedures. The manual must be kept (and updated) for as long as the operator is participating in the scheme.



Procedures detailing when a daily check is to be carried out, who carries it out, and how the check is recorded.

See Standard 1: Daily Check.

□ A daily check list.

Procedures for how faults are recorded and reported.

See Standard 2: Fault Recording and Reporting

□ A fault recording log/book.

Procedures for dealing with faults and their repair.

See Standard 3: Fault Repair

- Evidence, less than six months old, that the fleet was certified roadworthy upon entry to the scheme. (See Standard 4: Maintenance schedules and methods.)
- Procedures which detail the frequency of periodic maintenance schedules and the tasks which need to be undertaken during each service.

See Standard 4: Maintenance Schedules and Methods

- Evidence of the qualifications and experience of those undertaking maintenance tasks.
- A table of tolerances and wear limits for major components.
- A list of vehicles an operator wants to get or maintain accreditation for. (See Standard 5: Records and Documentation.)
- Procedures for ensuring all relevant staff can access and know how to access maintenance management system procedures.

See Standard 5: Records and Documentation.

A list of all tasks in the maintenance management system and the names (or position titles) of those responsible for carrying out the tasks.

See Standard 6: Responsibilities.

Procedures for carrying out internal reviews.

See Standard 7: Internal Review.

- □ Internal review reports.
- Procedures for ensuring all non-compliances identified at any time during the year are corrected.

See Standard 7: Internal Review

- □ Non-conformance register.
- Copies of superseded procedures the internal review has identified for updating.
- **Quarterly compliance reports.**
- Evidence of training provided to staff involved in the maintenance management system. (See Standard 8: Training and Education.)

### DEFINITIONS

### Accreditation

This has the meaning as defined in the Road Traffic (Vehicle Standards) Regulations 2002.

### **Accredited Operator**

A transport company that is recognised as meeting the standards for maintenance and fatigue management, as defined by Main Roads.

### Audit

A systematic and documented review by an external, accredited auditor of an operator's maintenance and fatigue management system. There are two main types of audit: system accreditation audits and compliance audits. Compliance audits can be scheduled or triggered.

A system audit is conducted after an operator has developed a maintenance or fatigue management system, conducted an internal review and applied for accreditation. The result of this audit determines whether or not the operator receives accreditation.

A compliance audit is conducted before an operator's accreditation can be renewed. Scheduled compliance audits are conducted annually before an operator's accreditation period expires. An operator must conduct an internal review before arranging a compliance audit.

A triggered compliance audit can be conducted at any time by an auditor engaged by Main Roads. For example, if there is reason to believe that an operator is no longer complying with the maintenance or fatigue management standards, a triggered compliance audit may be required.

### **Corrective Action**

Action taken to eliminate the causes of an existing non-conformity, defect, or other undesirable situation in order to prevent a recurrence.

### Fatigue Management System

An operator's procedures for ensuring they comply with the fatigue management standards.

### **Internal Review**

A review arranged by an operator to ensure they continue to comply with the standards. Internal reviews must be conducted annually and corrective action taken if necessary. An internal review should be conducted before a compliance audit.

### Maintenance Management System

An operator's procedures for ensuring his or her firm complies with the maintenance management standards.

### Non-Conformance

A deficiency in the characteristics, documentation or implementation process of an operator's maintenance or fatigue management system which means it does not fulfil a specified requirement of the Western Australian accreditation process.

### Register

A list of nominated vehicles for which an operator is seeking or has been granted accreditation.

### Vehicle

A vehicle is both the hauling and trailing equipment

## **FURTHER ENQUIRIES**

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